Impact of MGNREGA on Reducing Rural Poverty and Improving Socio-economic Status of Rural Poor: A Study in Burdwan District of West Bengal[§]

Prattoy Sarkar, Jagdish Kumar* and Supriya

Department of Agricultural Economics, College of Agriculture, G.B. Pant University of Agriculture and Technology, Pantnagar-263 145, Uttarakhand

Abstract

The present study conducted in the Burdwan district of West Bengal, has examined the socio-economic impact of MGNREGA on the rural poor who are mainly comprised of small and marginal farmers & agricultural labourers. The study is based on a random sample of 102 respondents (82 beneficiary and 20 non-beneficiary households) drawn by the PPS method from two good-performing and two poorly-performing Gram Panchayats randomly selected from one randomly selected good-performing block in the district. It has been found that significant changes have taken place in the socio-economic variables like annual per capita income, monthly per capita food expenditure, annual per child expenditure on education, per capita savings, condition of the dwelling houses, access to healthcare facility and possession of other assets or luxury items for those households which are regularly working in the scheme. According to the value of the socio-economic index prepared, it has been found that in the initial year of implementation (2007-08) of MGNREGA in the study area, 43.9 per cent beneficiary households were in poor socio-economic conditions which have gradually improved in the succeeding years and decreased to 32.9 per cent in 2008-09 and further to 18.3 per cent in 2009-10. The study has made some suggestions also for incorporating improvements in the present MGNREG scheme based on the constraints reported by the workers associated with this Scheme.

Key words: Impact of MGNREGA, Socio-economic conditions, Poverty reduction, MGNREGA constraints

JEL classification: I15, I38, J31, J33

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) (initially named as National Rural Employment Guarantee Act or NREGA) enacted by Government of India, is the largest employment programme ever started in a country with a huge public investment. The prime focus of the scheme is to provide 100 days of wage employment to every rural household who wishes to work and asks for unskilled manual work. It aims at creating sustainable rural livelihood through regeneration of the natural resource–base, i.e. augmenting productivity and supporting creation of durable assets and strengthening rural governance through decentralization and processes of transparency and accountability. Gram Panchayats are involved in the planning and implementation of the scheme and creation of durable assets for sustainable development of the rural areas. Up to the end of financial year 2010-11, this scheme has provided employment to 5.47 crore households with around 256.44 crore person-days work, which has created 25.79 lakh assets with 24.95 lakh works are in progress.

---

* Author for correspondence,
  Email: jkaaec@yahoo.co.in

§ Paper is based on and is an extension of the M.Sc thesis entitled "Socio-economic Impact of 'MGNREGA' in Burdwan District of West Bengal" submitted by the first author under the supervision of the second author to the G.B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, during 2011.

The approach paper of Eleventh Five-Year Plan (2007-12) has chosen 'faster and more inclusive growth' as its central theme. It recognized the need to make growth 'more inclusive' in terms of benefits of growth flowing to those sections of population, which have been bypassed by high rates of economic growth achieved in the recent years (Ghosh, 2010). One of the major planks of rapid poverty reduction in the Eleventh Five-Year Plan is the successful implementation of MGNREGA in all the states of India. The MGNREG Scheme is also an important strategy in the economic context. Fiscal policy that provides more income directly to unskilled workers in the rural areas is likely to be much more effective in increasing aggregate incomes than other forms of public spending (Shah *et al.*, 2010).

The MGNREGA is completely different in concept from the earlier government employment schemes since it treats employment as a right and the programme is initiated to be demand-driven. The right-based framework of the programme makes the government legally bound to extend employment to those who demand it. It is also being increasingly recognized that the MGNREGA has the potential to transform rural economy and social relations at many levels. The performance of the scheme has shown a consistent improvement almost in every aspect. The number of households who have been provided employment under MGNREGS has increased rapidly which shows a wide coverage of the scheme. The other important points to be noticed are the increasing participation of women, the increasing persondays employment per household and the average wage per personday. All these indicate that substantial income is being provided to the households working under the Scheme.

Wage-earners are the main focus of this Scheme and it has enormous potential to uplift the socio- economic status of the rural poor who are mainly landless agricultural labourers and marginal and small farmers. Substantial increase in income will obviously lead to a better standard of living. Keeping all this into account, the present study has examined the impact of MGNREGA on rural poverty reduction and improving socio-economic conditions of the rural poor. The study has also attempted to throw some light on the constraints being faced by the beneficiaries in the study area.

Methodology

The Study Area

The study has been conducted in the Burdwan district of West Bengal. The district is the best performing district in the state as per the rank prepared by the State Employment Guarantee Council. The district was also selected among the twenty-four best performing districts in the country by Ministry of Rural Development, Government of India and given prize in 2010. In this study, the time period from 2007-08 to 2009-10 has been considered for analyzing the impact of the programme.

The Sampling Design and Data

Three-stage random sampling technique was used to select the beneficiaries and non-beneficiaries for the study. At the first stage, one good-performing block, namely Raina-I block was selected randomly. At the second stage, four panchayats were selected randomly from the block by selecting two panchayats from better-performing Panchayats (Raina and Shyamsundar) and another two (Mugura and Narugram) from the poor performing Panchayats. Finally, a random sample of 102 respondents (82 beneficiary and 20 non-beneficiary households) was drawn in PPS (probability proportion to size) method with the consideration that there were at least 5 respondents from each selected Panchayat in each group (i.e. beneficiaries and non-beneficiaries). For this, a list of total jobcard-holders was prepared for each selected Gram Panchayat (GP) and they were grouped into working jobcards and non-working jobcards. For the study those households with working jobcards were considered as beneficiaries and households with non-working jobcards were taken as non-beneficiaries. The details of number of respondents selected from different Panchayats are given in Table 1.

Primary data were collected from the beneficiaries as well as non-beneficiaries selected in the sample using well structured pretested schedule by personal interview method and direct observations. Information related to different socio-economic parameters of the beneficiaries and non-beneficiaries households as well as the general impact and constrains related with the programme, etc. were collected from the primary sources. Secondary data were collected from various government offices and different government publications and websites.

Table 1. Panchayat-wise selection of respondents

Gram panchayat	Working jobcards	Non-working jobcards	Total jobcards
Mugura	2826 (18)	784 (5)	3610 (23)
Narugram	3393 (22)	718 (5)	4111 (27)
Raina	2901 (19)	456 (5)	3357 (24)
Shyamsundar	3508 (23)	781 (5)	4289 (28)
Total	12628 (82)	2739 (20)	15367 (102)

Note: Figures within the parentheses are the actual numbers of respondents selected

Analytical Tools

Socio-economic profiles of the beneficiaries and non-beneficiaries in the study area were prepared using simple descriptive method. To understand significant differences in socio-economic characteristics of beneficiaries and non-beneficiaries, variables considered were religion and caste, family-size and its composition, level of education, occupation, landholding pattern, livestock-ownership pattern, ownership of agricultural machinery and implements, etc. Analysis was done using simple statistical tools like averages and percentages and results were presented in tabular form.

To find the impact of the programme on the reduction of poverty level in the rural areas, twelve quantitative and qualitative variables were considered which are given in Table 2. The changes in the value of these indicators over the years were examined. To eliminate the inflationary effect, the values of those variables expressed in monetary-terms were adjusted to 2007-08 equivalents using the Consumer Price Index (CPI) for agricultural labourers. Simple statistical tools like averages and percentages were used to find out the changes in the value of these indicators over the years and "z"-test was used to find out the significant differences in these values.

A socio-economic index was constructed using different variables and changes in the socio-economic conditions over the time period were studied. Depending upon the variability of these indicators, a 3-point scale was formulated for each indicator. The values of different indicators in the year of 2007-08 were used to formulate the guideline for scale. The principle used to formulate the scale for quantitative indicators was: Mean $\pm 0.5 \times$ Standard Deviation (SD); the three-point

scales for qualitative indicators were formulated depending upon the observed relative variability of these indicators. Details about the guideline of the formulation of the scale are given in Table 2.

The socio-economic index for the beneficiaries was prepared using the following formula:

$$I_i = \frac{\sum S_{ik}}{\text{Maximum Possible Total Scale Value}} \times 100$$

where,

I_i = Socio-economic index for the ith beneficiary, and

S_{ik} = Scale value of the kth indicator for the ith beneficiary.

Depending on the value of index, the total sample was grouped into 3 different socio-economic strata, namely, poor, medium and good, using the same principle [Mean $\pm 0.5 \times$ Standard Deviation (SD)]. The criterion for classification of households based upon the index value is given in the Table 3.

χ^2 test was used to test the significant differences over different years using the formula as given below:

$$\chi^2 = \sum_{i=1}^{3} \frac{(o_i - e_i)^2}{e_i}$$

where,

O_i = Observed frequency of the ith strata, and

e_i = Expected frequency of the ith strata.

Observed frequency is the number of households in the ith strata in a particular year, whereas the expected frequency is the number of households in the ith strata in previous year.

Table 2. Guideline table for formulation of scale of selected indicators

Sl No.	Indicator	Scale value-1	Scale value-2	Scale value-3
1.	Annual per capita income (₹)	≤Mean-0.5×SD	>Mean-0.5×SD to ≤Mean+0.5×SD	>Mean+0.5×SD
2.	Monthly per capita expenditure on food (₹)	≤Mean-0.5×SD	>Mean-0.5×SD to ≤Mean+0.5×SD	>Mean+0.5×SD
3.	Annual per capita expenditure on other non-food consumptions (₹)	≤Mean-0.5×SD	>Mean-0.5×SD to ≤Mean+0.5×SD	>Mean+0.5×SD
4.	Per capita value of productive assets (₹)	≤Mean-0.5×SD	>Mean-0.5×SD to ≤Mean+0.5×SD	>Mean+0.5×SD
5.	Possession of other assets	Possess any three or less of the listed assets	Possess any four to six of the listed assets	Possess any six or more of the listed assets
6.	Condition of the dwelling house	Straw-thatched roof, earthen floor, mud or mud-brick wall, not properly made	Straw-thatched or partially asbestos roof, earthen floor, mud or mud-brick wall, properly made	Asbestos roof, pakka or partially-pakka floor, brick or mud-brick wall, or better condition
7.	Rooms per person (No.)	≤Mean-0.5×SD	>Mean-0.5×SD to ≤Mean+0.5×SD	>Mean+0.5×SD
8.	Annual per children expenditure on education (₹)	≤Mean-0.5×SD	>Mean-0.5×SD to ≤Mean+0.5×SD	>Mean+0.5×SD
9.	Per capita annual expenditure on healthcare (₹)	≤Mean-0.5×SD	>Mean-0.5×SD to ≤Mean+0.5×SD	>Mean+0.5×SD
10.	Access to healthcare facilities	Depends on community tube-well (by Panchayat) for drinking water and no latrine facility in house	Depends on community tube-well (by Panchayat) for drinking water and have latrine facility in house	Have own source of drinking water and latrine facility in house
11.	Per capita savings (₹)	≤Mean-0.5×SD	>Mean-0.5×SD to ≤Mean+0.5×SD	>Mean+0.5×SD
12.	Per capita amount of outstanding debt (₹)	>Mean+0.5×SD	>Mean-0.5×SD to ≤Mean+0.5×SD	d''Mean-0.5×SD

Note: The items considered under the category of other assets were: watch or clocks, radio, television (both B&W and colour), cycle, electric-fan, mobile phone, almirah or trunks, fibre chairs, CD player, emergency lamps

Table 3. Criteria for classification of households in different socio-economic strata based upon the index value

Socio-economic condition	Poor	Medium	Good
Index value	≤Mean-0.5×SD	> Mean-0.5×SD to ≤Mean+0.5×SD	> Mean+0.5×SD

Results and Discussion

Comparison of Socio-economic Profiles of Beneficiaries and Non-beneficiaries

The socio-economic condition of the beneficiary households or the households regularly working in the Scheme was found considerably poor than the households not working under the scheme, based on almost all the socio-economic variables considered. The caste-wise distribution of selected households showed a distinct trend in beneficiaries and non-beneficiaries. Comparatively backward ethnic groups like SCs, OBCs were participating more in the MGNREGA works, whereas general caste people, took lesser part in MGNREGA works, as only unskilled manual works are provided in the programme (Table 4). The schedule caste constituted the largest share (40.2%), followed by OBCs (30.4%) in the case of beneficiaries. Contrary to that the general category constituted the largest share (45%), followed by SCs (25%), OBCs (20%) and STs (10%) in the case of non-beneficiaries. It was also found that a few non-beneficiaries, though their economic condition was not good, did not participate in the programme, probably their social status and prestige stopped them from doing unskilled manual work.

Table 4. Religion-wise and caste-wise distribution of sample households in Burdwan district

Religion and caste	Beneficiaries	Non-beneficiaries	Pooled
Religion			
Hindu	71 (86.6)	18 (90)	89 (87.3)
Muslim	11 (13.4)	2 (10)	13 (12.7)
Caste			
SC	33 (40.2)	5 (25)	38 (37.3)
ST	10 (12.1)	2 (10)	12 (11.8)
OBC	25 (30.4)	4 (20)	29 (28.4)
General	15 (18.3)	9 (45)	24 (23.5)
Total	82 (100)	20 (100)	102 (100)

Note: Figures within the parentheses indicate percentage to sample from each category.

The programme is directly or indirectly affecting the traditional concept of joint households because as the size of the family increases, the number of households having larger size decreases among jobcard holders (Table 5). The family-size up to four members was predominant for both beneficiaries (65.9%) and non-beneficiaries (85%). The small average size of households (4.3 members per family) among the jobcard holders may be because only one jobcard is issued to a household. To have more number of jobcards, some joint families have registered as separate households.

The educational status of the beneficiaries was found to be poor. About one-third beneficiary families were headed by illiterate persons and 35 per cent had education up to primary level and only 32 per cent had education up to secondary level or more (Table 6). On the other hand, 50 per cent of the heads of non-beneficiary families had education up to more than secondary level and only 10 per cent were educated up to primary level and 10 per cent were illiterates. On considering all the adult members of the beneficiary households it was found that 60 per cent of them were either illiterate or had education up to primary level and only 2 per cent had education beyond higher secondary level (Table 7). In contrast, among non-beneficiaries, 63 per cent had education up to secondary or more level, 27 per cent had education up to primary level and only 10 per cent were illiterates.

Occupation

Agricultural labour work was the main occupation (54%), followed by farming (37%) among active MGNREGA jobcard holders. For 44 per cent beneficiaries, agricultural labour was subsidiary occupation. But contrary to that not even a single non-beneficiary was found working as an agricultural labourer. The non-beneficiaries earn their livelihood from farming (main occupation for 25% and subsidiary for 60% households) and small business (main occupation for 25% and subsidiary for 5% households). Other predominant occupations for the beneficiaries were animal husbandry (subsidiary occupation for 70% households), self-help group (SHG) activities

Table 5. Distribution of sample households according to family-size in Burdwan district

Family Size (No. of members)	Beneficiaries		Non-beneficiaries		Pooled	
	No.	Average size	No.	Average size	No.	Average size
Up to 4	54 (65.9)	3.3	17 (85)	3.4	71 (69.6)	3.3
5 to 7	23 (28)	5.8	2 (10)	5	25 (24.5)	5.7
8 or more	5 (6.1)	8.6	1 (5)	9	6 (5.9)	8.7
Total	82 (100)	4.3	20 (100)	3.8	102 (100)	4.2

Note: Figures within the parentheses indicate percentage to sample from each category.

Table 6. Distribution of households according to educational level of family-head

Educational level of household-head	Beneficiaries	Non-beneficiaries	Pooled
Illiterates	27 (33)	2 (10)	29 (28)
Up to primary level	29 (35)	2 (10)	31 (30)
Up to secondary level	21 (26)	8 (40)	29 (28)
Up to higher secondary level	4 (4.8)	6 (30)	10 (10)
More than higher secondary level	1 (1.2)	4 (20)	5 (5)
Total	82 (100)	20 (100)	102 (100)

Note: Figures within the parentheses indicate percent to sample from each category.

Table 7. Distribution of all adult persons in the sample according to their educational level

Level of education	Beneficiaries	Non-beneficiaries	Pooled
Illiterates	67 (24)	5 (10)	72 (22)
Up to primary level	102 (36)	13 (27)	115 (35)
Up to secondary level	73 (26)	11 (23)	84 (26)
Up to higher secondary level	32 (11)	7 (15)	39 (12)
More than higher secondary level	6 (2)	12 (25)	18 (5)
Total	280 (100)	48 (100)	328 (100)

Note: Figures within the parentheses indicate percent to total adult persons in sample from each category.

(subsidiary occupation for 15% households), etc. The important point to be noted is that for all the beneficiaries, MGNREGA was a subsidiary occupation only. Details of the main and subsidiary occupations of the households are presented in the Table 8.

The non-beneficiaries were more resource-rich as compared to the beneficiaries in term of ownership of agricultural land (Table 9), livestock (Table 10) and farm-machinery & implements (Table 11). About 34 per cent of the beneficiaries were landless which was higher in proportion as compared to non-beneficiaries where only 15 per cent families were landless. In the beneficiary households, 27 per cent had farm size less than 0.33 acres, while the corresponding figure for non-

beneficiaries was 10 per cent. The percentage landholders of more than 0.33 acre was less in beneficiaries than in non-beneficiaries; 19.5 per cent of the beneficiary households had farm-size of 0.33 acres to 0.66 acres and another 19.5 per cent had holding size greater than 0.66 acres. In the case of non-beneficiaries, the share was higher (30% in 0.33 – 0.66 acre and 45% in > 0.66 acre). It was found that as the landholding size increased among MGNREGA jobcard holders their participation in the programme reduced. Though a higher proportion of beneficiaries had different livestock and also in more numbers than the non-beneficiaries, the average value of the livestock owned by the non-beneficiaries was higher as compared to their counterparts as they had cattle of good productivity

Table 8. Main and subsidiary occupations of sample households in Burdwan district

Occupation	Beneficiaries		Non-beneficiaries		Pooled	
	Main	Subsidiary	Main	Subsidiary	Main	Subsidiary
Agricultural labourer	44 (54)	36 (44)	-	-	44 (43.1)	36 (35.3)
Farming	30 (37)	24 (29)	5 (25)	12 (60)	35 (34.3)	36 (35.3)
MGNREGA work	-	82 (100)	-	-	-	82 (80.4)
Small and medium business	1 (1.2)	1 (1.2)	5 (25)	1 (5)	6 (5.9)	2 (1.9)
Animal husbandry	-	57 (70)	2 (10)	12 (60)	2 (1.9)	69 (67.6)
Mill worker	1 (1.2)	3 (4)	1 (5)	-	2 (1.9)	3 (2.9)
Skilled worker	1 (1.2)	2 (2.4)	1 (5)	-	2 (1.9)	2 (1.9)
Construction worker	2 (2.4)	1 (1.2)	-	-	2 (1.9)	1 (0.96)
Transport workers	1 (1.2)	7 (9)	1 (5)	1 (5)	2 (1.9)	8 (7.8)
SHG activity	-	12 (15)	-	2 (10)	-	14 (13.7)
Other miscellaneous labourer	-	7 (9)	-	-	-	7 (6.9)
Rural artisian	-	1 (1.2)	2 (10)	-	2 (1.9)	1 (0.96)
Accounts-keeping	-	1 (1.2)	1 (5)	-	1 (0.96)	1 (0.96)
Shop-helper	-	3 (4)	-	-	-	3 (2.9)
House maid	-	2 (2.4)	-	-	-	2 (1.9)
Hawker	-	2 (2.4)	-	-	-	2 (1.9)
ICDS worker	-	-	1 (5)	-	1 (0.96)	-
Begging singing folk songs	1 (1.2)	-	-	-	1 (0.96)	-
Teacher	-	-	1 (5)	-	1 (0.96)	-
Working in temple	1 (1.2)	-	-	-	1 (0.96)	-
Tuition to small children	-	1 (1.2)	-	-	-	1 (0.96)

Note: Figures within the parentheses indicate percent to sample from each category.

Table 9. Landholding pattern of selected households

Size of holding	Beneficiaries	Non-beneficiaries	Pooled
Landless	28 (34)	3 (15)	31 (30.4)
0 to 0.33 acre	22 (27)	2 (10)	24 (23.5)
0.33acre to 0.66 acre	16 (19.5)	6 (30)	22 (21.6)
> 0.66 acre	16 (19.5)	9 (45)	25 (24.5)
Total	82 (100)	20 (100)	102 (100)

Note: Figures within the parentheses indicate percentage to sample from each category.

Table 10. Average livestock ownership in sample households

Livestock	Beneficiaries		Non-beneficiaries		Pooled	
	No	Value (₹)	No	Value (₹)	No	Value (₹)
Cattle	2.2	5593	2.3	7290	2.2	5925
Goat	1.4	934	1.1	735	1.3	895
Poultry birds	8.6	877	5.4	535	8.0	808
Total	-	7365	-	8560	-	7698

Table 11. Ownership pattern of farm-machinery and implements

Farm-machinery/ implement	Beneficiaries	Non-beneficiaries	Pooled
Plough	46 (56)	15 (75)	61 (60)
Paddy thresher	13 (16)	6 (30)	19 (18.5)
Pump sets	4 (5)	4 (20)	8 (7.8)
Sprayers	19 (23)	9 (45)	28 (27.5)
Small implements like sickle, Spade etc.	82 (100)	20 (100)	102 (100)
Other implements	7 (9)	4 (20)	11 (10.7)
Average value of implements (in)	1827.00	6198.00	2684.00

Note: Figures within the parentheses indicate percentage to sample from each category.

and better quality. The average value of farm-machinery and implements of non-beneficiaries (₹6198) was higher than that of beneficiaries (₹1827) (Table 11).

From the above discussion it could be revealed that implementation of the program was largely effective. The household regularly taking part in the programme were the real needful people from the vulnerable section of the rural society. This finding is similar to observations made by Jha *et al.* (2008) and Vinayak (2009)**.**

Impact of MGNREGA on Socio-economic Conditions of Beneficiaries

The impact of programme on different socio-economic variables has been presented for beneficiaries as well as non-beneficiaries in Table 12. The combined effect of additional employment generated by MGNREGS and the increased rate of wage in both MGNREGS and agricultural labour had made significant changes in the annual per capita income of beneficiaries. The annual per capita income of the beneficiaries had increased by 10 per cent (from ₹ 9595 to ₹ 10602) in 2008-09 at constant prices over the previous year, but in 2009-10 it has slightly decreased (1.9%) over the previous year (to ₹ 10394). The corresponding changes in the case of non-beneficiaries showed a similar trend, but these changes were found insignificant.

The changes in annual per capita income and monthly per capita expenditure on food consumption were in same direction in both beneficiaries and non-beneficiaries. The percentage increase in annual per capita income and monthly per capita expenditure on food consumption was almost same in the case of

beneficiaries, whereas for non-beneficiaries, the increase in monthly per capita expenditure on food consumption was less than that in annual per capita income. Monthly per capita food expenditure of beneficiaries had significantly increased by 9.5 per cent in the year 2008-09 as against 2007-08 (from ₹ 349 to ₹ 382), but it decreased (to ₹ 375) in the next year by 1.9 per cent, which was an insignificant change. Corresponding changes for non-beneficiaries were insignificant.

The changes in annual per capita non-food expenditure, per capita value of total asset and per capita annual healthcare expenses were all found insignificant at five per cent level of significance in both the categories of households.

Education of children was given prime importance by the beneficiaries and a significant portion of additional income was spent on it. Annual expenditure on education per child in case of beneficiaries had increased by 9.2 per cent in 2008-09 over 2007-08 and further increased by 15.3 per cent in 2009-10. Contrary to that, corresponding expenditure by non-beneficiaries had decreased slightly (by around 1.5%), though it was still sufficiently higher than by the beneficiaries.

The per capita savings of beneficiaries had almost doubled (97.2% increase) in 2008-09 over 2007-08 and had again increased by 40.3 per cent in 2009-10. The corresponding changes for non-beneficiaries were increase by 2.3 per cent and again by 0.5 per cent, respectively. The amount of outstanding debt for beneficiaries had decreased by 20 per cent in 2008-09 over 2007-08 and again decreased by 13 per cent in 2009-10, but it has increased in the case of non-beneficiaries by 10.61 per cent in 2008-09 over 2007-

Table 12. Year-wise value of different socio-economic variables for beneficiaries at constant prices

Variable	2007-08	2008-09	2009-10
Annual per capita income (₹)	9595	10602*	10393
Monthly per capita food expenditure (₹)	348	381*	375
Annual per capita non-food expenditure (₹)	632	662	704
Per capita value of total asset (₹)	69981	69469	70612
Per capita health expenses (₹)	182.70	180.35	180.82
Per child education expenditure (₹)	368.54	402.60*	464.22*
Amount of per capita Savings (₹)	289	571**	801**
Amount of per capita debt (₹)	163	130*	113*
Availability of room per person (No.)	0.51	0.56*	0.62**

Note: * Significant change over the previous year value at 5% level
** Significant change over the previous year value at 1% level

Table 13. Year-wise value of different socio-economic variables for non-beneficiaries at constant prices

Variables	2007-08	2008-09	2009-10
Annual per capita income (₹)	24142	25624	24773
Monthly per capita food expenditure (₹)	435	455	446
Annual per capita non-food expenditure (₹)	1122	1158	1170
Per capita value of total asset (₹)	171218	167973	169026
Per capita health expenses (₹)	236	241	245
Per child education expenditure (₹)	1280	1260	1243
Amount of per capita Savings(₹)	1608	1645	1653
Amount of per capita debt (₹)	133	275	114*
Availability of room per person (No.)	0.76	0.77	0.81

Note: *Significant change over the previous year value at 5% level

08 and decreased in 2009-10 by 58.5 per cent, which is the only significant change in the case non-beneficiaries among the nine variables.

Dwelling House

The type of construction and material used in making floors, walls and roofs revealed considerable improvement in the condition of dwelling houses of beneficiaries (Table 14) *vis-a-vis* in 2007-08 when 85 per cent of the houses were of poor category, 13.4 per cent were of medium category and only 6.1 per cent were of good category. These had improved rapidly and the corresponding figures in 2008-09 were 68.3 per cent, 25.6 per cent and 6.1 per cent and in 2009-10 were: 48.8 per cent, 43.4 per cent and 7.3 per cent. Availability of rooms per person has also increased for beneficiaries by 10 per cent in 2008-09 (from 0.51 to

0.56) and further by 10.7 per cent in 2009-10 (0.56 to 0.62). Access to safe drinking water and sanitary latrine in houses had improved in the beneficiary households during the time period (Table 15). In the year 2007-08, about 22 per cent beneficiary households had no sanitary latrine in the house which decreased to 13.4 per cent in 2008-09 and further to 3.7 per cent in 2009-10. In the year 2007-08, only 19.5 per cent of the beneficiary households had own source of drinking water which improved to 24.4 per cent in 2008-09 and further to 42.7 per cent in 2009-10. Possession of other assets or luxury items like watch or clocks, radio, television (both B&W and colour), cycle, electric-fan, mobile phone, almirah or trunks (iron box), fibre chairs, CD player, emergency lamps, etc. had increased considerably during the this time period for beneficiary households (Table 16).

Table 14. Distribution of sample households according to condition of the dwelling house

Condition of dwelling house	Beneficiaries			Non-beneficiaries		
	2007-08	2008-09	2009-10	2007-08	2008-09	2009-10
Poor: Straw-thatched roof, earthen floor, mud or mud-brick wall, not properly made	66 (80.5)	56 (68.3)	40 (48.8)	1 (5)	0	0
Medium: Straw-thatched or partially asbestos roof, earthen floor, mud or mud-brick wall, properly made	11 (13.4)	21 (25.6)	36 (43.4)	14 (70)	13 (65)	12 (60)
Good: Asbestos roof, pucca or partially-pucca floor, brick or mud-brick wall, or better condition	5 (6.1)	5 (6.1)	6 (7.3)	5 (25)	7 (35)	8 (40)
Total	82 (100)	82 (100)	82 (100)	20 (100)	20 (100)	20 (100)

Note: Figures within the parentheses indicate percentage to sample from each category.

Table 15. Distribution of sample households according to access to facilities of safe drinking water and sanitary latrine

Access to healthcare facilities	Beneficiaries			Non-beneficiaries		
	2007-08	2008-09	2009-10	2007-08	2008-09	2009-10
Poor: Depends on community tube-well (of Panchayat) for drinking water and no latrine facility in house	18 (22)	11 (13.4)	3 (3.7)	0	0	0
Medium: Depends on community tube-well (of Panchayat) for drinking water and has latrine facility in house	48 (58.5)	51 (62.2)	47 (57.3)	6 (30)	4 (20)	3 (15)
Good: Has own source of drinking water and latrine facility in house	16 (19.5)	20 (24.4)	35 (42.7)	14 (70)	16 (80)	19 (85)
Total	82 (100)	82 (100)	82 (100)	20 (100)	20 (100)	20 (100)

Note: Figures within the parentheses indicate percentage to sample from each category.

Table 16. Distribution of sample households according to possession of other assets

Asset position	Beneficiaries			Non-beneficiaries		
	2007-08	2008-09	2009-10	2007-08	2008-09	2009-10
Poor	23 (28)	9 (11)	4 (4.9)	0	0	0
Medium	53 (64.6)	52 (63.4)	46 (56.1)	7 (35)	4 (20)	0
Good	6 (7.3)	21 (25.6)	32 (39)	13 (65)	16 (80)	20 (100)
Total	82 (100)	82 (100)	82 (100)	20 (100)	20 (100)	20 (100)

Note: Figures within the parentheses indicate percent to sample from each category.

It was found that significant changes had occurred in nine of the twelve variables in case of beneficiaries. It indicates that the non-food expenditure and healthcare expenses were rather stable (or inelastic) components of household expenditure. Whereas no significant change in the value of total asset reflects that the additional income realized by the beneficiaries was not used to purchase new productive assets like land, livestock or farm-machineries but rather used for other purposes like food consumption, child's education, reconstruction of houses, improving the health and sanitation facility in houses, repayment of debt and accumulation of savings for the time of need. On the other hand, significant change in only one variable namely per capita outstanding debt, had taken place in the case of non-beneficiaries. It is clear that there was

Table 17. Distribution of households into different socio-economic strata according to the value of the index

Socio-economic strata	Beneficiaries			Non-beneficiaries		
	2007-08	2008-09	2009-10	2007-08	2008-09	2009-10
Poor	36(43.9)	27(32.9)	15(18.3)	-	-	-
Medium	34(41.5)	36(43.9)	40(48.8)	4(20.0)	3(15.0)	3(15.0)
Good	12(14.6)	19(23.2)	27(32.9)	16(80.0)	17(85.0)	17(85.0)

Note: Figures within the parentheses indicate percentage to sample from each category.

considerable improvement in the condition of dwelling houses of beneficiaries with increase in per person availability of rooms, which indicates the additional income was used in upgradation of dwelling houses. The additional income had also been used in creation of facility of safe drinking water and sanitation facility in the house which is an important step towards a better living. Rapid improvement in possession of luxury items indicates improvement in lifestyle of the beneficiaries.

According to the value of the socio-economic index prepared to assess the impact of the programme on the poverty level of the households, it was found that in the initial year of implementation (2007-08) of MGNREGA in the study area 36 (43.9%) out of 82 beneficiary households selected in the sample were in poor socio-economic condition which had gradually improved in the succeeding years and decreased to 24 (32.9%) in 2008-09 and further to 15 (18.3%) in 2009-10. On the other hand, none of the non-beneficiary households was in the poor socio-economic strata. During the same time period, the proportion of beneficiary families in good socio-economic condition had improved from 12 (14.6%) in the initial year, to 19 (23.2%) in 2008-09 and to 27 (32.9%) in 2009-10. The non-beneficiaries did not show any significant change during the period as 16 (80%) of them were already in good socio-economic condition, which had increased only to 17 (85%) in the latter years. The detailed distribution has been presented in Table 17.

Constraints being Faced by Sample Beneficiaries

The constraints being faced by the beneficiaries have been presented in Table 18. Most of the beneficiaries (63%) reported the delay in wage payment as the prime constraint, followed by non-availability of regular work (34%), political disturbances associated with MGNREGA works (26%) and lack of special provision for the old persons (21%). It is a problem with great social impact as a jobcard is issued to a

Table 18. Constraints faced by the beneficiaries

Constraint	Respondents identifying the constraint (No.)
Delay in wage payment	52(63)
Non-availability of regular work	28(34)
Political disturbances	21(26)
No special provisions for elderly persons	17(21)
Hectic process of Bank/ Post Office payments	12(15)
Corruption	7(9)
Nepotism	4(5)
Non-availability of work site facility	5(6)
Some works not of good quality and necessity	4(5)
Jobcards not working regularly	7(9)
No provision for skilled or semi-skilled works	5(6)
Very exhaustive manual labour	6(7)
Agricultural labour became costlier	3(5)
No problems	4(5)

Note: Figures within the parentheses indicate percentage to sample of beneficiaries.

household and 100 days of employment is provided against a jobcard. A dangerous trend identified was that young sons were leaving their old parents and establishing a new family and the old persons were facing many problems. The process of payment of wages through banks or post offices was stated as a hectic process by 15 per cent of the respondents. Long queues on the days of wage payment, and the process of filling the forms for the illiterate workers were the other difficulties associated with bank or post office payments. According to some of the respondents it spoils a working day. The other constraints associated with the programme were existence of corruption at many levels (9%), nepotism (5%), and absence of work site facilities (6%). Some respondents complained that some of the works done under MGNREGS were not

of good quality and were not necessary. No provision for skilled or semi-skilled works was pointed out by 6 per cent of them. About 5 per cent reported no problem also.

Conclusion and Suggestions

The study has found that comparatively backward ethnic groups are regularly participating in larger proportions in the MGNREGA works, whereas general caste people constitute the larger share in non-beneficiaries. The traditional concept of joint households in rural areas is being disturbed due to implementation of the programme as a higher proportion of the jobcards are held by smaller size of households. The education level of the beneficiaries has been found to be lower than of the non-beneficiaries.

Agricultural labour is the main occupation of the beneficiary households, whereas the non-beneficiaries earn a greater proportion of their income from farming. The non-beneficiaries have been noted more resource-rich as compared to the beneficiaries in terms of ownership of agricultural land, livestock and farm-machinery and implements.

The study has revealed that the socio-economic condition of the households regularly working under the MGNREGA scheme is considerably poor than of the other households in the rural area. They are the really needy people. Though the socio-economic conditions have been improving gradually, but to fasten the rate of improvement some developmental initiative can be integrated with the scheme mainly targeting those households who are working regularly under the scheme for long periods. A multiple scheme and multi-agency approach could also be a fruitful idea for the same purpose. Convergence of MGNREGS with other scheme of public works will certainly improve the skill levels among the workers.

Incorporation of some special provisions for the elderly persons within the Scheme is the immediate need to mitigate the problems being faced by the old persons. To make payments smooth, a specialized section in banks and post offices to deal with MGNREGA works should be developed.

Some training sessions may be organized to train the workers, to generate awareness about the MGNREGS. They may also be trained on payment procedure of bank or post office to make the process less hectic.

Providing only unskilled manual labour work through the scheme does not seem to be a healthy idea in the long-run. Provision for the semi-skilled and skilled workers should be incorporated into the Scheme. Some mechanism should be evolved to restrict political interference in the programme and the 100 days ceiling limit may be re-considered for the benefit of workers regularly engaged with MGNREGS.

References

Ambasta, P., Shankar, P.S.V. and Shah, M. (2008) Two years of NREGA: The road ahead, *Economic and Political Weekly*, 43(8): 41-50.

Bhalla, S. (2007) Inclusive growth? Focus on employment. *Social Scientist,* 35(7): 24-43.

Economic Survey (2009-10 & 2010-11) Government of India, New Delhi.

Ghosh, M. (2010) Inclusive growth and rural poverty in India: Policy implication for eleventh plan. *Indian Journal of Agricultural Economics,* 65(3): 552-561.

Gopal, K.S. (2009) NREGA social audit: Myths and reality, *Economic and Political Weekly,* 44(3): 70-71.

GoI (Government of India) (2008) *The National Rural Employment Guarantee Act 2005 (NREGA): Operational Guidelines, 3rd edition*, Ministry of Rural Development, New Delhi.

ICRRID (India Centre for Research in Rural and Industrial Development) (2009) Professional Institutional Network Study (NREGA), Madhya Marg, Chandigarh-160 019.

Jha, R., Raghav, G. and Shylashri, S. (2008) Reviewing the National Rural Employment Guarantee programme. *Economic and Political Weekly*, 43(11): 44-48.

Kareemulla, K., Kumar, S., Reddy, S.K., Rama Rao, C.A. and Venkateswarlu, B. (2010) Impact of NREGS on rural livelihoods and agricultural capital formation. *Indian Journal of Agricultural Economics,* 65(3): 524-539.

Shah, D. and Mohanty, S. (2010) Implementation of NREGA during Eleventh Plan in Maharashtra: Experiences, challenges and ways forward. *Indian Journal of Agricultural Economics,* 65(3): 540-551.

Shankar, P.S.V., Rao, R., Banerji, N. and Shah, M. (2006) Government 'Schedule of Rates': Working against rural labour. *Economic and Political Weekly*, 41(17): 1616-1619.

Vinayak, U. (2009) *Is the NREGS a Safety Net for Children*? M.Sc. paper submitted to University of Oxford.

www.nrega.nic.in Official website of MGNREGA. Ministry of Rural Development, Department of Rural Development, Government of India, New Delhi.