

RESEARCH ARTICLE :

Relational analysis of MGNREGA beneficiaries with socio-economic impact of MGNREGA

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SUMMARY : The present study was conducted purposively in Aurangabad, Nanded, Beed and Jalna district of the Marathwada region of Maharashtra state during the year 2017-2018. From this four district eight tahsils were selected purposively. From each selected taluka two villages were selected purposively for the study. Fifteen beneficiaries of MGNREGA were selected randomly from each selected villages. Thus, comprising total 240 beneficiaries were selected from Marathwada region for research study. Majority (52.08%) of the MGNREGA beneficiaries were middle aged, 28.75 per cent educated upto primary school level, (40.84%) were found lower category, more than two third (66.25%) of them having medium family size and 34.16 per cent of them having small size of land holding. It was observed that, more than half (56.67%) of them having farming as main occupation, majority (53.75%) of them having medium annual income, 57.09 per cent were found joint family, nearly half (49.17%) of them having medium social participation, less than half (46.66%) of them having medium source of information, 59.58 per cent of them having medium level of extension contact and 45.41 per cent of them having medium level of economic motivation. It was observed from that the independents variables namely age, education, occupation, annual income, family type, social participation, sources of information, extension contact and economic motivation were positively and significantly related with overall impact of MGNREGA scheme. However, category, family size and land holding could not establish any relationship with overall impact of MGNREGA scheme. It was found that co-efficient of determination (R^2) of the independent variables was 0.685. It means that 68.50 per cent of total variation in the overall impact of MGNREGA on its beneficiaries was explained by the selected 12 independent variables. The unexplained variation may be due to the factors not included in the study.

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BACKGROUND AND OBJECTIVES

Poverty and unemployment are the twin problem faced by the developing countries. According to the planning commission of India nearly 29.8 per cent population is below

poverty line (BPL). Policy makers in India have realized the need for generating employment opportunities on large scale to bring the teeming millions of population above poverty line (APL). While the labour force in India is increasing in numbers at every year.

Majority of population (72.22 %) live in rural areas and many of them suffer owing to seasonal unemployment, under employment and disguised unemployment (Source: Planning Commission). In India, GDP and unemployment rates are going hand in hand, causing fret for any democratic society. Unemployment and poverty are strongly related and hinder the economic growth and development of the country.

In India, these two problems are severe in rural areas, leaving it outside the growth path. Thus, Government of India aiming at balanced growth and to overcome above mentioned weaknesses of past employment programmes, passed National Rural Employment Guarantee Act (NREGA) in 25 August 2005 in order to empower the rural labourers with right to get employment of 100 days per year per household during off-season. In accordance, National Rural Employment Guarantee Act has been launched in Anantapur district of Andhra Pradesh on 2nd February, 2006, with effect from 1st April 2006 in 200 drought prone and backward districts in India. This was extended to additional 130 districts in the financial year 2007-2008. The NREGA coverage has been expanded from 330 districts to 619 districts of India beginning April, 2008. In Maharashtra the NREGA was implemented during the 2006 in 12 districts (Dhule, Nandurbar, Ahmednagar, Aurangabad, Hingoli, Nanded, Amravati, Gadchiroli, Yavatmal, Bhandara, Gondhiya and Chjandrapur) of Maharashtra state. Thus, NREGA covered that entire country with the exception of districts that have a hundred per cent urban population. This programme has been formulated by merging early formulated programmes such as Sampoorna Gramin Rozgar Yojana (SGRY) of 2001 and National Food for Work Programme (NFFWP) of 2004. Again the Government of India on 2nd October, 2009 renamed its flagship rural job guarantee programme- National Rural Employment Guarantee Act (NREGA) as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

RESOURCES AND METHODS

The present study was conducted purposively in Aurangabad, Nanded, Beed and Jalna district of the Marathwada region of Maharashtra state during the year 2017-2018. Selected district eight tahsils were selected purposively. From each selected taluka two villages were selected purposively for the study. Fifteen beneficiaries of MGNREGA were selected randomly from each selected villages. Thus, comprising total 240 beneficiaries were selected from Marathwada region for research study. Ex-post facto research design was adopted in this study. The data were collected with the help of pretested interview schedule. The statistical methods and tests such as frequency, percentage, mean and standard deviation were used for the analysis of data.

Objective:

- Estimating profile of the beneficiaries of Mahatma Gandhi National Rural Employment Guarantee Act.
- Relationship between profiles of the MGNREGA beneficiaries with socio-economic impact of MGNREGA

OBSERVATIONS AND ANALYSIS

The findings of the present study as well as relevant discussion have been summerized under following heads:

Personal and socio-economic characteristics of the beneficiaries of Mahatma Gandhi National Rural Employment Guarantee Act:

Age:

It was observed from Table 1 that, more than half (52.08%) of the MGNREGA beneficiaries were belongs from middle age group *i.e.* (36 to 50 years). Whereas, 35.00 per cent of MGNREGA beneficiaries were from young age group *i.e.* (upto 35 years) and remaining 12.92 per cent of MGNREGA beneficiaries were old age group *i.e.* (51 and above years). It was observed from below

Sr. No.	Category	Age	Beneficiaries	
			Frequency	Percentage
1.	Young	Upto 35 years	84	35.00
2.	Middle	36 to 50 years	125	52.08
3.	Old	51 and above years	31	12.92
Mean = 40.73			S.D. = 9.46	

table that, most of the MGNREGA beneficiaries belong to middle age category *i.e.* 36 to 50 years.

Education:

It was revealed from Table 2 that, (28.75%) of the MGNREGA beneficiaries were educated upto primary school level, followed by 21.25 per cent of them were educated upto can read and write, while 20.41 per cent of them middle school, 15.84 per cent of them can read only, 8.75 per cent of them were illiterate, 5.00 per cent of them were educated upto high level education. Whereas none of them were educated upto college level education. It was observed from table that, most of the MGNREGA beneficiaries were educated upto primary school education *i.e.* (1st to 4th standard).

Category:

It is clear from Table 3 that, 40.84 per cent of beneficiaries of MGNREGA belonging to lower caste group *i.e.* (SC, ST and NT) followed by (31.25%) middle caste *i.e.* (OBC and Muslim) and (27.91%) of

beneficiaries of MGNREGA from upper cast *i.e.* (Open). It was observed from table that, most of the MGNREGA beneficiaries were having lower cast (SC, ST and NT).

Family size:

The data furnished in Table 4 indicated that, more than half (66.25%) of beneficiaries were belongs from medium family size *i.e.* 5 to 6 members, followed by 17.92 per cent and 15.83 per cent of them were with the big *i.e.* more than 7 members and small size *i.e.* less than 4 members of family, respectively. It was observed from table that, most of the MGNREGA beneficiaries were having medium family size *i.e.* 5 to 6 members.

Land holding:

It was observed from Table 5 that, 34.16 per cent of MGNREGA beneficiaries were having small size of land holding *i.e.* 1.01 to 2.00 ha, followed by 25.00 per cent of them had semi-medium size of land holding *i.e.* 2.01 to 4.00 ha. Whereas, 23.76 per cent and 13.75 per cent of them were having marginal size of land holding

Table 2 : Distribution of the MGNREGA beneficiaries according to their education

Sr. No.	Category	Score	Beneficiaries (n=240)	
			Frequency	Percentage
1.	Illiterate	1	21	08.75
2.	Can read only	2	38	15.84
3.	Can read and write	3	51	21.25
4.	Primary school (1 st to 4 th standard)	4	69	28.75
5.	Middle school (5 th to 7 th standard)	5	49	20.41
6.	High school (8 th to 10 th standard)	6	12	5.00
7.	College level	7	00	0.00

Table 3 : Distribution of the MGNREGA beneficiaries according to their category (n=240)

Sr. No.	Caste	Number	Beneficiaries	
			Percentage	
1.	Lower caste (SC,ST,NT)	98	40.84	
2.	Middle caste (OBC, Muslim)	75	31.25	
3.	Upper caste (Open)	67	27.91	

Table 4 : Distribution of the MGNREGA beneficiaries according to their family size (n=240)

Sr. No.	Category	Score	Beneficiaries	
			Frequency	Percentage
1.	Small	Upto 4 members	38	15.83
2.	Medium	5 to 6 members	159	66.25
3.	Big	7 and above members	43	17.92
		Mean = 5.37	S.D.= 1.60	

and land less beneficiaries, respectively. 3.33 per cent medium size of land holding *i.e.* 4.01 to 10 ha and none of them were belongs from big size of land holding category. It was observed from table that, most of the MGNREGA beneficiaries were having small size of land holding *i.e.* 1.01 to 2.00 ha.

Occupation:

It was observed from Table 6 that, majority (56.67%) of the MGNREGA beneficiaries had farming as their main occupation, followed by 30.00 per cent labourer, 8.75 per cent traditional occupation, 4.58 per cent business and none of the beneficiaries belonged to the service. It was observed from table that, most of the MGNREGA beneficiaries were having farming as main occupation.

Annual income :

It was observed from Table 7 that, more than half (53.75%) of the MGNREGA beneficiaries had medium annual income *i.e.* (Rs. 23017 to Rs. 51441), followed

by 40.84 per cent of them were belonged from high annual income *i.e.* (Rs. 51442 and above) and 5.41 per cent of them were belonged from low annual income *i.e.* (Upto Rs. 23016) category. It was observed from table that, most of the MGNREGA beneficiaries were having medium annual income *i.e.* Rs. 23,017 to Rs. 51,441.

Family type:

From the Table 8 it can be revealed that, 57.09 per cent of beneficiaries of MGNREGA were live in joint family and (42.91%) live in nuclear type of family.

Social participation:

It was observed from Table 9 that, near about half (49.17%) of the beneficiaries had medium social participation, followed by 27.91 per cent of them had low social participation and remaining 22.92 per cent of them had high social participation. It was observed from table that, most of the MGNREGA beneficiaries were having medium social participation.

Table 5 : Distribution of the MGNREGA beneficiaries according to their land holding

(n=240)

Sr. No.	Category	Score	Beneficiaries	
			Frequency	Percentage
1.	Land less	No land	33	13.75
2.	Marginal	Upto 1 ha.	57	23.76
3.	Small	1.01 to 2.00 ha.	82	34.16
4.	Semi-medium	2.01 to 4.00 ha.	60	25.00
5.	Medium	4.01 to 10.00 ha.	08	3.33
6.	Big	10.01 ha. and above	00	0.00

Table 6 : Distribution of the MGNREGA beneficiaries according to their occupation

(n=240)

Sr. No.	Category	Beneficiaries	
		Frequency	Percentage
1.	Labourer	72	30.00
2.	Traditional occupation	21	08.75
3.	Business	11	04.58
4.	Farming	136	56.67
5.	Service	00	00.00

Table 7 : Distribution of the MGNREGA beneficiaries according to their annual income

(n=240)

Sr. No.	Category	Score	Beneficiaries	
			Frequency	Percentage
1.	Low	Upto Rs. 23,016	13	05.41
2.	Medium	Rs. 23,017 to Rs. 51,441	129	53.75
3.	High	Rs. 51,442 and above	98	40.84
Mean = 51441.66			S.D. = 28425.57	

Source of information:

It was observed from Table 10 that, near about half (46.66%) of the beneficiaries had medium level of sources of information. Whereas, 33.75 per cent and 19.59 per cent of them were categorized under low level and high level category of sources of information, respectively. It was observed from table that, most of the MGNREGA beneficiaries were having medium sources of information.

Extension contact:

It was observed from Table 11 that, more than half (59.58%) of MGNREGA beneficiaries were having medium level of extension contact. While 24.58 per cent and 15.84 per cent of them were having low and high level of extension contact. It was observed from table that, most of the MGNREGA beneficiaries were having medium extension contact.

Economic motivation:

It is revealed from Table 12 that, less than half (45.41%) of the MGNREGA beneficiaries were having medium economic motivation. While, nearly one third (30.83%) and 23.76 per cent of them had low and high economic motivation, respectively. It was observed from table that, most of the MGNREGA beneficiaries were having medium economic motivation, followed by low and high, respectively.

Relation analysis:

Relationship between profiles of the MGNREGA beneficiaries with socio-economic impact of MGNREGA:

In relation analysis, it was observed from that the independents variables namely age, education, occupation, annual income, family type, social

Table 8 : Distribution of the MGNREGA beneficiaries according to their family type (n=240)

Sr. No.	Type of family	Beneficiaries	
		Number	Percentage
1.	Nuclear family	103	42.91
2.	Joint family	137	57.09

Table 9 : Distribution of the MGNREGA beneficiaries according to their social participation (n=240)

Sr. No.	Category	Score	Beneficiaries	
			Frequency	Percentage
1.	Low	Upto 2	67	27.91
2.	Medium	3 to 5	118	49.17
3.	High	6 and above	55	22.92
Mean = 4.67			S.D. = 2.42	

Table 10 : Distribution of the MGNREGA beneficiaries according to their source of information (n=240)

Sr. No.	Category	Score	Beneficiaries	
			Frequency	Percentage
1.	Low	Upto 65	81	33.75
2.	Medium	66 to 84	112	46.66
3.	High	85 and above	47	19.59
Mean = 83.73			S.D. = 19.22	

Table 11 : Distribution of the MGNREGA beneficiaries according to their impact of MGNREGA on occupational change (n=240)

Sr. No.	Category	Score	Beneficiaries	
			Number	Percentage
1.	Low	Upto 1	21	08.75
2.	Medium	2 to 3	165	68.75
3.	High	4 and above	54	22.50
Mean = 5.01			S.D. = 1.94	

participation, sources of information, extension contact and economic motivation were positively and significantly related with overall impact of MGNREGA scheme. However, category, family size and land holding could not establish any relationship with overall impact of MGNREGA scheme.

Multiple regression analysis of profile of MGNREGA beneficiaries with overall impact of MGNREGA:

It could be observed from Table 14 that co-efficient of determination (R^2) of the independent variables was 0.685. It means that 68.50 per cent of total variation in the socio-economic impact of MGNREGA on its

Table 12 : Distribution of the MGNREGA beneficiaries according to their economic motivation (n=240)

Sr. No.	Category	Score	Beneficiaries	
			Frequency	Percentage
1.	Low	Upto 8	74	30.83
2.	Medium	9 to 10	109	45.41
3.	High	11 and above	57	23.76
		Mean = 10.10	S.D. = 2.52	

Table 13 : Relationship between profile of MGNREGA beneficiaries overall impact of MGNREGA

Sr. No.	Independent variables	Correlation co-efficient (r)
1.	Age	0.204**
2.	Education	0.465**
3.	Category	0.013 ^{NS}
4.	Family size	0.016 ^{NS}
5.	Land Holding	0.039 ^{NS}
6.	Occupation	0.546**
7.	Annual income	0.459**
8.	Family type	0.365**
9.	Social participation	0.638**
10.	Source of information	0.621**
11.	Extension contact	0.567**
12.	Economic motivation	0.586**

* and ** indicate significance of values at P=0.05 and 0.01, respectively NS= Non-significant

Table 14 : Multiple regression analysis of profile of MGNREGA beneficiaries with overall impact of MGNREGA

Sr. No.	Independent variables	Regression co-efficient (Bi)	Standard error (S.E)	't' value
1.	Age	0.020	0.023	0.903 ^{NS}
2.	Education	0.361	0.161	2.232**
3.	Category	0.219	0.243	0.901 ^{NS}
4.	Family size	0.162	0.141	1.146 ^{NS}
5.	Land holding	0.188	0.120	-1.566
6.	Occupation	0.163	0.096	1.689 ^{NS}
7.	Annual income	1.516	8.028	1.889 ^{NS}
8.	Family type	0.962	0.461	2.085*
9.	Social participation	0.142	0.093	1.517 ^{NS}
10.	Sources of information	0.016	0.012	2.397*
11.	Extension contact	0.022	0.028	3.783**
12.	Economic motivation	0.108	0.093	4.164**

$R^2 = 0.685$ F = 08.40 NS = Non-significant * and ** indicate significance of values at P=0.05 and 0.01, respectively

beneficiaries was explained by the selected 12 independent variables. The unexplained variation may be due to the factors not included in the study.

The value of 't' showed that socio-economic impact of MGNREGA was significantly related with education, family type, sources of information, extension contact and economic motivation.

The regression co-efficients of these variables were 0.020, 0.361, 0.219, 0.162, 0.188, 0.163, 1.516, 0.962, 0.142, 0.016, 0.022 and 0.108, respectively which indicates that one unit change in the variables viz., age, education, category, family type, land holding, occupation, annual income, family type, social participation, sources of information, extension contact and economic motivation would affect 0.020, 0.361, 0.219, 0.162, 0.188, 0.163, 1.516, 0.962, 0.142, 0.016, 0.022 and 0.108 unit change in socio-economic impact. Similar work related to the present investigation was also carried out by Bhandari (2014); Bhosale (2014); Garg *et al.* (2012); Khalache and Gaikwad (2011); Khandave and Suryawanshi (2015) and Mankar *et al.* (2013 and 2014).

Conclusion:

Majority (52.08%) of the MGNREGA beneficiaries were middle aged, 28.75 per cent educated upto primary school level, (40.84%) were found lower category, more than two third (66.25%) of them having medium family size and 34.16 per cent of them having small size of land holding. It was observed that, more than half (56.67%) of them having farming as main occupation, majority (53.75%) of them having medium annual income, 57.09 per cent were found joint family, nearly half (49.17%) of them having medium social participation, less than half (46.66%) of them having medium source of information, 59.58 per cent of them having medium level of extension contact and 45.41 per cent of them having medium level of economic motivation.

It was observed from that the independents variables namely age, education, occupation, annual income, family type, social participation, sources of information, extension contact and economic motivation were positively and significantly related with overall

impact of MGNREGA scheme. However, category, family size and land holding could not establish any relationship with overall impact of MGNREGA scheme.

It was found that co-efficient of determination (R^2) of the independent variables was 0.685. It means that 68.50 per cent of total variation in the overall impact of MGNREGA on its beneficiaries was explained by the selected 12 independent variables. The unexplained variation may be due to the factors not included in the study.

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