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Mgnrega And Its Impacts On Poverty Eradication, Employment Generation And Creation Of Socio-Economic Assets: A Case Study In Two Districts Of Assam.

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Abstract

This Paper aims at investigating into benefits received from the implementation of the MGNREGA in two districts of Assam. The aspects of the study will be undertaken to examine the benefits of creation of Social and Economic assets, Employment generation and Eradication of poverty in the MGNREGA participating households in both the districts of Nagaon and Morigaon, Assam.

Key word(s): MGNREGA, Poverty, Employment generation, Socio-Economic assets.

1. Introduction:

Since independence many rural development schemes came into existence in India with their primary objective of poverty alleviation but due to their supply based nature, could not achieve the main objective up to satisfactory level. The Mahatma Gandhi Rural Employment Guarantee Act (MGNREGA) is an Indian job guarantee scheme that was notified on 7 September, 2005. The Act came into force on 2nd February, 2006. It is the biggest employment providing programme ever started in a country for the development of its rural areas. The main objective of the scheme is to enhance livelihood security in rural areas by providing 100 days of guaranteed wage employment in a financial year to every rural household whose adult members are willing to participate in unskilled manual work. The Act is an important step towards realization of the right to work and aims at arresting emigration of rural household in search of employment simultaneously enhancing people's livelihood on a sustained basis, by developing the economic and social infrastructure in rural areas.

The first phase of MGNREGA was started on February 2, 2006 in 200 districts of the country including seven districts of Assam. In the year 2007, the second phase of NREGA had started where five districts of Assam were also included. The third phase started on April 1, 2008 where remaining 15 districts of Assam came under the purview of the Act. Hence, at present all the districts of Assam are implementing the scheme of MGNREGA. On March 31, 2013 Assam completed seventh year of MGNREGA implementation.

The present work is carried out in the lines of (Ahuja Usha Rani, Chaudhary Khyali Ram, Chauhan Sonia, Tyagi Dushayant (2011), Farooqi Akhtar Saleem, Saleem Dr.Imran (2015).

2. Objective:

Objectives of the study under taken goes:

- a. To investigate the impact of MGNREGA on Eradication of poverty, Employment generation and on creation of Socio –Economic assets over the district separately and pooled districts.
- b. A comparative study would be made in two districts.

3. Source of Data:

The study has been carried out in Nagaon and Morigaon districts of Assam. Data used under this study is primary. Primary data are collected through well-structured questionnaire. There are 18 blocks in Nagaon district, out of 18 blocks a sample of 20%, which account for 4 blocks being chosen as the area of drawing sample. From each of chosen block ,20% GP has been selected randomly which account for 10 GPs .After being selected randomly ,20% households (having Job card) has been selected randomly from the villages within the selected GPs, which account for 1172 households

In Morigaon district there are 5 blocks, out of 5 blocks a sample of 20%, which account for 1(one) block is being chosen as the area of drawing sample. From the chosen block 20% GP, which account for 5 GPs are being selected randomly and selected 20% households (having Job card) randomly from the villages within the selected GP, which account for 1108 households. While for pooled analysis, altogether 2280 households.

4. Methodology:

Implementation of MGNREGA and its impacts on the benefits of creation of Social and Economic assets, Employment generation and Eradication of poverty have been empirically examined. Binary Logistic Regression model has been used in this study.

4.1. Models with Binary Response:

Suppose that the model has the form

$$y_i = x_i' \beta + \varepsilon_i$$

Where $x_i' = [1, x_{i1}, x_{i2}, \dots, x_{ik}]$

$\beta' = [\beta_0, \beta_1 \dots \beta_k]$ and the response variable y_i takes on the values either 0 or 1. We will assume that the response variable y_i is a Bernoulli random variable with probability distribution as follows:

y_i	Probability
1	$P(y_i = 1) = \pi_i$
0	$P(y_i = 0) = 1 - \pi_i$

This implies $E(y_i) = x_i' \beta = \pi_i$, since $E(\varepsilon_i) = 0$

The general form of the Logistic Regression model is

$$y_i = E (y_i) + \varepsilon_i$$

Where the observations y_i are independent Bernoulli random variables with expected values

$$E (y_i) = \pi_i$$

$$= \frac{(exp(x_i' \beta))}{(1+exp(x_i' \beta))}$$

We will use the method of maximum likelihood to estimate the parameters in the linear predictor $x_i' \beta$.

5. Results and discussion:

Analytical results are as under:

5.1. Impact on benefit of creation of Social and Economic assets:

The social composition (caste) and classification (APL/BPL) do not have the influence as regarding the benefits like creation of Social and Economic assets received from MGNREGA of pooled observations (Table 5.1.1)

Table: 5.1.1: Impact on benefit of creation of Social and Economic assets over pooled observations

Q37(i)	B	Sig.	Exp(B)	95.0% Confidence Interval for EXP(B)	
				Lower	Upper
Step 1a		0.547			
Caste					
Caste(1)	-0.024	0.886	0.977	0.707	1.35
Caste(2)	0.129	0.478	1.137	0.797	1.623
Caste(3)	0.12	0.547	1.128	0.763	1.668
Caste(4)	0.652	0.138	1.919	0.81	4.544
BPL_APL(1)		0.063	1.285	0.987	1.672
Constant	1.753	0	5.774		

Table: 5.1.2: Impact on benefit of creation of Social and Economic assets in Nagaon District

Q37(i)	B	Sig.	Exp(B)	95.0% Confidence Interval for EXP(B)	
				Lower	Upper
Step 1a		0.303			
Caste					

	Caste(1)	0.217	0.322	0.805	0.524	1.236
	Caste(2)	0.102	0.626	0.903	0.6	1.36
	Caste(3)	0.366	0.168	1.442	0.857	2.428
	Caste(4)	0.337	0.539	1.401	0.478	4.104
	BPL_APL(1)		0.527	1.113	0.799	1.551
	Constant	1.635	0	5.129		

The results based on Table 5.1.2 have revealed that the social composition (caste) and classification (APL/BPL) do not have the influence as regarding the benefits like creation of Social and Economic assets received from MGNREGA in Nagaon district.

Table: 5.1.3: Impact on benefit of creation of Social and Economic assets in Morigaon District

Q37(i)		B	Sig.	Exp(B)	95.0% Confidence Interval for EXP(B)	
					Lower	Upper
Step 1a	Caste		0.059			
	Caste(1)	-0.193	0.495	0.825	0.474	1.436
	Caste(2)	0.694	0.08	2.003	0.921	4.355
	Caste(3)	-0.34	0.297	0.712	0.376	1.348
	Caste(4)	0.816	0.283	2.261	0.51	10.019
	BPL_APL(1)		0.336	1.256	0.789	1.999
	Constant	2.209	0	9.106		

The same observation is witnessed in Morigaon district (Table 5.1.3).

5.2. Impact on Employment Generation:

Considering the benefit of Employment generation it has been observed that the chance of employment generation of BPL category is 1.41 times to that of the APL. The confidence interval indicates that the odds could be a little as 1.07 times or as much as 1.89 times larger with 95% confidence. But the other job card holder belonging to other caste and APL are not influenced by employment generation over pooled observations. The interpretation made based on Table 5.2.1.

Table: 5.2.1: Impact on Employment Generation over pooled observations

Q37(95.0%
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ii)		B	Sig.	Exp(B)	Confidence Interval for EXP(B)	
					Lower	Upper
Step 1a	Caste		0.527			
	Caste(1)	-0.111	0.529	0.895	0.633	1.264
	Caste(2)	0.21	0.299	1.233	0.83	1.832
	Caste(3)	-0.082	0.693	0.922	0.614	1.383
	Caste(4)	0.246	0.554	1.278	0.566	2.885
	BPL_APL(1)		0.015	1.413	1.069	1.868
	Constant	1.915	0	6.786		

Table: 5.2.2: Impact on Employment Generation in Nagaon district

Q37(i)		B	Sig.	Exp(B)	95.0% Confidence Interval for EXP(B)	
					Lower	Upper
Step 1a	Caste		0.53			
	Caste(1)	-0.161	0.484	0.851	0.542	1.337
	Caste(2)	0.239	0.321	1.27	0.792	2.036
	Caste(3)	-0.186	0.456	0.83	0.509	1.355
	Caste(4)	0.137	0.804	1.147	0.389	3.382
	BPL_APL(1)		0.004	1.672	1.18	2.368
	Constant	1.565	0	4.784		

Considering the benefit of employment generation in Nagaon district (Table 5.2.2), it has been observed that the chance of employment generation of BPL job card holder is 1.67 times in comparison to APL job card holders. The odds could be a little as 1.18 times or as much as 2.37 times larger with 95% confidence. The other variables are not all statistically significant. While in Morigaon district all the variables are not influenced by the employment generation (Table 5.2.3).

Table 5.2.3: Impact on Employment Generation in Morigaon district

Q37(ii)		B	Sig.	Exp(B)	95.0% Confidence Interval for EXP(B)	
					Lower	Upper
Step 1a	Caste		0.456			
	Caste(1)	-0.54	0.106	0.582	0.303	1.121
	Caste(2)	-0.14	0.725	0.87	0.399	1.895
	Caste(3)	-0.313	0.441	0.732	0.33	1.62
	Caste(4)	0.022	0.974	1.022	0.279	3.744
	BPL_APL(1)		0.252	0.717	0.406	1.267
	Constant	3.108	0	22.383		

5.3. Impact on Eradication of Poverty:

Considering the benefit of eradication of poverty over the two districts it is observed that the chance of eradication of poverty of ST job card holders is 1.78 times in comparison to General caste. The odds could be a little as 1.43 times or as much as 2.22 times larger with 95% confidence. The chance of eradication of poverty of SC job card holders is 1.50 times than General caste. The odds could be a little as 1.19 times or as much as 1.90 times larger with 95% confidence. The chance of eradication of poverty of OBC job card holders is 1.38 times than General caste. The odds could be a little 1.07 times or as much as 1.77 times larger with 95% confidence. The chance of eradication of poverty of MOBC job card holders 2.83 times than the General caste. The odds could be a little as 1.73 times as much as 4.61 times larger with 95% confidence. In comparison to APL job card holders, the chance/risk of reducing of poverty of BPL job card holder is 1.20 times. The odds could be a little as 1.00 times as much as 1.43 times with 95% confidence over pooled observations. The interpretation made is based on Table 5.3.1.

Table: 5.3.1: Impact on eradication of poverty over pooled observations

Q37(iii)		B	Sig.	Exp(B)	95% Confidence interval for EXP(B)	
					Lower	Upper
Step 1a	Caste		0			
	Caste(1)	0.576	0	1.779	1.426	2.219
	Caste(2)	0.407	0.001	1.503	1.191	1.896
	Caste(3)	0.319	0.014	1.375	1.066	1.773
	Caste(4)	1.039	0	2.827	1.732	4.613
	BPL_APL(1)		0.049	1.197	1	1.433
	Constant	-0.268	0.005	0.765		

Table 5.3.2: Impact on eradication of poverty in Nagaon district

		B	Sig.	Exp(B)	95.0% Confidence Interval for EXP(B)	
					Lower	Upper
Step 1a	Caste		0			
	Caste(1)	0.74	0	2.096	1.503	2.922
	Caste(2)	0.613	0	1.846	1.359	2.507
	Caste(3)	0.606	0.001	1.834	1.298	2.591
	Caste(4)	0.75	0.036	2.117	1.051	4.266
	BPL_APL(1)		0.005	1.427	1.113	1.829
	Constant	-0.715	0	0.489		

Referring to the Table 5.3.2 it is noticed that the benefit of eradication of poverty in Nagaon district, the chance of eradication of poverty of ST job card holders is 2.10 times in comparison to General caste. The odds could be a little as 1.50 times or as much as 2.92 times larger with 95% confidence. The chance of reducing of poverty of SC job card holders is 1.85 times to that of General caste. The odds could be a little as 1.36 times or as much as 2.51 times larger with 95% confidence. The chance of eradication of poverty of OBC job card holders is 1.83 times than General caste. The odds could be a little as 1.30 times or as much as 2.59 times larger with 95% confidence. The chance of eradication of poverty of MOBC job card holders is 2.12 times to that of General caste. The odds could be a little as 1.05 times or as much as 4.27 times larger with 95% confidence. In comparison to APL job card holders, the

Table 5.3.3: Impact on eradication of poverty in Morigaon district

		B	Sig.	Exp(B)	95.0% Confidence Interval for EXP(B)	
					Lower	Upper
Step 1a	Caste		0.011			
	Caste(1)	0.121	0.471	1.129	0.812	1.569
	Caste(2)	-0.022	0.908	0.978	0.674	1.42
	Caste(3)	-0.255	0.202	0.775	0.524	1.146
	Caste(4)	1.057	0.005	2.879	1.375	6.027
	BPL_APL(1)		0.123	0.8	0.603	1.062
	Constant	0.612	0	1.845		

Chance of eradication of poverty of BPL job card holders is 1.43 times. The odds could be a little as 1.11 times or as much as 1.83 times larger with 95% confidence in Nagaon district. While in Morigaon district we have seen from the results (Table 5.3.3) that the chance of eradication of poverty of MOBC job card holders is 2.88 times in comparison to General caste. The odds could be a little as 1.34 times or as much as 6.03 times larger with 95% confidence and the other variables are not all statistically significant.

6. Overall Conclusions:

The major revelation of the analysis is as under:

District of Nagaon:

- The different social composition (caste) and classification (APL/BPL) are not influenced by the benefit of creation of social and economic assets, what is revealed by the analysis.
- The chance of employment generation of BPL category is 1.67 times to that of the APL.
- The chance of reducing poverty of ST job card holders is 2.10 times to that of the General caste.
- The chance of reducing poverty of SC job card holders is 1.85 times to that of the General caste.
- The chance of eradication of poverty of OBC job card holders is 1.38 times to that of the General caste.
- The chance of eradication of poverty of MOBC job card holders is 2.12 times to that of the General caste.
- The chance of reducing poverty of BPL category is 1.43times to that of APL.

District of Morigaon:

- The different social composition (caste) and classification (APL/BPL) are not influenced by the benefit of creation of social and economic assets, what is revealed by the analysis.
- The different social composition (caste) and classification (APL/BPL) is not influenced by the benefit of employment generation.
- The chance of reducing poverty of MOBC job card holders is 2.88 times to that of the General.

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