Impact Analysis of Mahatma Gandhi National Rural Employment Guarantee Programme in Dhalai district of Tripura

Jayanta Roy¹ and K. Narayana Gowda²

¹Agriculture Officer Animal Resource Development Department Govt. Of Tripura ²Ex-Vice-Chancellor University of Agriculture Sciences G.K.V.K Bangalore E-mail: ¹jayanta19roy@rediffmail.com, ²knarayanagowda@yahoo.co.in

Abstract—The study was carried out in Dhalai District of Tripura State during 2010-2011 to know the impact of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on the standard of living of beneficiaries. The overall mean value of standard of living of beneficiaries before MGNREGA programme was found to be 36.5 as compared to the overall mean value of 60.1 after the implementation of MGNREGA programme. There is an enhancement of mean value in the standard of living of beneficiaries by 65 per cent indicating significant increase due to MGNREGA.

1. INTRODUCTION

The Mahatma Gandhi National Rural Employment Guarantee Programme was notified on 7th September, 2005. The Act came into force on February, 2006 and was implemented in a phased manner. In phase one, it was introduced in 200 most backward districts of the country. It was implemented in an additional 130 districts in phase two during 2007-2008. To bring the whole nation under its safety net and keeping in view of the demand, the Act was extended to the remaining 285 districts of India from April 1st, 2008 in phase three(Anonymous, 2009). MGNREGA marked a paradigm shift from the previous wage employment programmes with its rights-based approach that makes the Government legally accountable for providing employment to those who demand it. The Act aims at enhancing livelihood security of households in rural areas of the country by providing up to one hundred days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. The primary objective is augmenting wage employment. Its auxiliary objective is strengthening natural resource management through works that address causes of chronic poverty by encouraging sustainable development. Against this background, the present study was taken up with the following specific objectives:

- 1. To develop a scale to measure the attitude of beneficiaries towards MGNREGA programme.
- 2. To know the attitude level of beneficiaries towards MGNREGA programme.

- 3. To analyse the standard of living of MGNREGA beneficiaries.
- 4. To understand the association between the selected personal and socio-psychological characteristics of MGNREGA beneficiaries and their attitude towards MGNREGA and standard of living.
- 5. To enlist the problems and suggestions of MGNREGA beneficiaries for effective implementation of the programme.

2. METHODOLOGY

A sample of 50 MGNREGA beneficiaries (who were working in MGNREGA programme since 2006-2007) each from Netajinagar, Ramratan para and Thankurpally villages were randomly selected for the study. Thus, the total sample for the study was 150 MGNREGA beneficiaries from three villages of Kulai gram panchayat in Ambassa Block of Dhalai district in Tripura state.

Based on the mean and standard deviation of annual income, the respondents were classified as follows.

Category	Criteria	Before	After MGNREGA	
		MGNREGA	(Rs.)	
		(Rs.)		
Low	< Mean-	< 4981.70	< 10956.15	
	1/2SD			
Medium	Mean± 1/2SD	4981.70 to	10956.15 to	
		7361.10	14792.71	
High	> Mean +	> 7361.10	> 14792.91	
-	1/2SD			

Annual net income (ANI) was measured using the below formula

ANI= Gross income-total cost of expenditure.

Based on the mean and standard deviation of employment generation, the respondents were classified as follows.

Category	Criteria	Before MGNREGA (man days)	After MGNREGA (man days)
Low	< Mean- 1/2SD	<38.65	<107.23
Medium	$\begin{array}{c} \text{Mean} \\ 1/2\text{SD} \end{array} \pm \\ 1/2\text{SD} \end{array}$	38.65 to 51.39	107.23 to 154.61
High	>Mean + 1/2SD	>51.39	>154.61

Based on the mean and standard deviation of social status, the respondents were classified as follows:

Category	Criteria	Before MGNREGA	After MGNREGA
Low	< Mean – 1/2SD	< 1.00	<7.29
Medium	Mean± 1/2SD	1.00 to 4.40	7.29 to 10.35
High	>Mean +1/2 SD	>4.40	>10.35

Social status index (SSI) was calculated by using

the following formula.

Based on the total score of the respondent on overall reinvestment pattern of MGNREGA beneficiary respondents were classified into three categories viz., low, medium and high using mean and standard of deviation as measure of check.

Category	Criteria	Before MGNREGA (Score)	After MGNREGA (Score)
Low	$<$ Mean $-\frac{1}{2}$ SD	< 9.71	< 14.79
Medium	Mean± 1/2SD	9.71 to 13.29	14.79 to 18.35
High	>Mean + ½ SD	> 13.29	> 18.35

3. COMPUTATION OF STANDARD OF LIVING INDEX

The four components of standard of living (Annual income, employment generation, social status and reinvestment pattern) have been measured and expressed in different units. Hence, all the values were converted into unit values or standard scores by using Thorndike standard score (McCall, 1922) as followed in the case of reinvestment pattern.

Based on the total score of the respondent on overall standard of living of MGNREGA beneficiary respondents were classified into three categories viz., low, medium and high using mean and standard of deviation as measure of check.

Category	Criteria	Before MGNREGA (score)	After MGNREGA (score)	
Low	< Mean - ½ SD	< 36.97	< 57.03	
Medium	Mean± ½ SD	36.97 to 40.77	57.03 to 61.29	
High	>Mean + ½ SD	> 40.77	> 61.29	

4. **RESULTS & DISCUSSION**

It is observed from Table 1 that 31.3 per cent of the respondents were belonging to low level of standard of living before the implementation of MGNREGA programme. It is interesting to note that only 16.0 per cent of the respondents were falling under low level of standard of living after the implementation of MGNREGA programme.

Table 1 also reveals that 40.6 per cent of the respondents were falling under medium level of standard of living before the implementation of MGNREGA programme, while 44.6 per cent of the respondents belong to medium level of standard of living after the implementation of MGNREGA programme.

It is also seen from Table 1 that 28.0 per cent of the respondents were in the categories of high level of standard of living before the implementation of MGNREGA programme. It is heartening to observe that 39.3 per cent of the respondents belonged to high level of standard of living after the implementation of MGNREGA programme.

The results of chi-square test in Table 1 reveals that there exists a positive and significant difference in the standard of living of beneficiaries before and after the implementation of MGNREGA programme.

5. MEAN VALUES OF DIFFERENT DIMENSIONS OF STANDARD OF LIVING DURING BEFORE AND AFTER MGNREGA

It is evident from the finding in Table 2 that employment generation increased (168%) between before and after the implementation of MGNREGA programme. Similar increase is observed in the response between before and after the implementation of MGNREGA programme with respect to dimensions, annual income (149%), food consumption (116%), investment on social functions (96%), investment on savings (91%) investment on assets (81%), social status (28%), value addition in education (20%) and health status (20%). The results also indicate that the overall mean value of before MGNREGA programme found to be 36.55 as compared to 60.16 after the implementation of MGNREGA programme. Hence, the enhancement of mean value was found to be 65 per cent indicating the effectiveness of benefits in MGNREGA programme. The data subjected for statistical test reveals the enhancement in the mean values between before and after the implementation of MGNREGA programme for all dimensions under study was found to be highly significant at one per cent level.

Table 1: Distribution of MGNREGA beneficiaries based on their level of standard of living before and after MGNREGA

Level of Standard of Living	Before MGNREGA (n=150)		After MGNREGA (n=150)	
	No	Per cent	No	Per cent
Low	47	31.3	24	16.0
Medium	61	40.6	67	44.6
High	42	28.0	59	39.3
Total	150	100.0	150	100.0
Mean	38.87	-	59.16	-
Standard deviation	3.810	-	4.265	-
Chi-square test value		10.5	9 **	

**Significant at 1per cent level.

Table 2: Mean values of different dimensions of standard of living before and after MGNREGA

GI	D'	Mean values			
Sl. N o.	Dimensions of standard of living	Before MGNREG A	After MGNREG A	Percentag e of Increase	ʻt' value
1.	Annual income (Rs)	6171	15366	149.0	38.61* *
2.	Employmen t generation (Mandays)	45	120.66	168.00	27.05* *
3.	Social status (Score)	3.00	3.84	28.00	30.38* *
4.	Values addition in education (Score)	5.00	6.00	20.00	18.10* *
5.	Food consumptio n pattern (Rs)	5388	11638.00	116.00	22.44* *
6.	Health status (Score)	3.00	3.60	20.00	16.32* *
7.	Investment on assets (Rs)	0	810	81.00	10.15* *
8.	Investment on savings (Rs)	0	910	91.00	11.18* *
9.	Investment on social function (Rs)	410.00	803.60	96.00	98.57* *
	Overall(units)	36.55	60.16	65.00	51.80* *

**significant at 1 per cent level.

Table 1 revealed that significant improvement of standard of living of the respondents, after joining MGNREGA programme. Before joining MGNREGA programme majority (40.6%) had medium level of standard of living followed by low (31.3%) and High (28.0%) but after joining majority of the respondents nearly 44.6 per cent had medium level of stand of living followed by low (16.0%) and high (36.3%) categories, respectively. It is noticed from the findings that before joining MGNREGA programme low categories of standard of living were 31.3 per cent after joining MGNREGA it was decreased to 16.0 per cent. The main reason behind the increase of annual income, employment generation and it was observed the improvement of standard of living categories.

The data subjected for statistical test indicated significant difference in the standard of living of MGNREGA beneficiaries before and after joining programme. It was found highly significant at one per cent level. The probable reason for the above result are timely need based information supported system, better mass media exposure, social participation like village panchayat, co-operative society etc., Cosmopoliteness nature of the beneficiaries and better linkage and establishment of need based local institutions that helped in improving their annual income, employment generation, social status, value addition in education, food consumption pattern, health status, investment on assets, investment of savings and investment of social function, further, close follow up and encouragement have together contributed for improved standard of living. The paired 't' test applied for the data, revealed that a highly significant difference at 1 per cent level before and after MGNREGA on different aforesaid dimensions of standard of living of beneficiaries(Table2).

6. CONCLUSION

About 31.3 per cent of the respondents were belonging to low level of standard of living before the implementation of MGNREGA programme, while only 16.0 per cent of the respondents were falling under low level of standard of living after the implementation of MGNREGA programme. About 28.0 per cent of the respondents were falling in the category of high level of standard of living before the implementation of MGNREGA programme. Whereas, 39.3 per cent of the respondents belonged to high level of standard of living after the implementation of MGNREGA programme. A positive and significant difference was existing between the standard of living of beneficiaries before and after the implementation of MGNREGA programme. The overall mean value of before MGNREGA programme was found to be 36.55 as compared to 60.16 after the implementation of MGNREGA programme indicating an increase of 65 per cent between before and after the implementation of the MGNREGA programme. The enhancement in the mean values of standard of living between before and after the implementation of MGNREGA programme was found to be highly significant at one per cent level.

REFERENCES

- [1] ANONYMOUS, 2007, Eleventh Five years plan on Agriculture and Rural Development, Industry, Services and Physical Infrastructure (2007-2012), Planning Commission, Govt of India, (111): 86-90.
- [2] ANONYMOUS, 2008, *National Rural Employment Guarantee Act (NREGA)*, Design process and impact, Ministry of Rural Development, Govt, of India; 76-116.
- [3] VANITHA, S.M., 2010, An economic analysis of MGNREGA programme in Mysore district of Karnataka, *M.Sc. (Agri) thesis (Unpub)*, UAS, GKVK, Bangalore.
- [4] VINAY KUMAR.R,2008, Impact of rural bio-resource complex on standard of living of its stake holders in Karnataka. *Ph.D* (*Agri*) thesis, UAS, GKVK, Bangalore.