



AN ANALYTICAL STUDY OF MGNREGP AND POVERTY REDUCTION IN TIRUNELVELI DISTRICT

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Abstract

In a context of poverty and unemployment workfare programs have been important programmes interventions in developed as well as developed countries for many years. These programmes typically provide unskilled manual workers with short-term employment on public works such as irrigation infrastructure soil conservation and road construction. The study shows that, there is a significant increase in income per family after moving to MGNREG program. Income has increased by 14.60 per cent in the study area. The logistic regression is a good fit for the data of the study. Hence, the saving is the main determining variable to cross the poverty line in the study area. It can be concluded from the study that the impact of MGNREGP in Tirunelveli district has brought many positive changes in improving the livelihood of the poor people along with improvement in the infrastructure for sustainable growth.

Key Words: MGNREGP, Poverty, Income, Saving and Debt.

Introduction

Mahatma Gandhi National Rural Employment Guarantee Programme (MGNREGP) 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.

Poverty is wide spread with in our nation to have a third of the world’s poor. Poverty in rural areas declined at a faster pace than in urban cities in 2009-2010 compared 2004-2005 rural poverty has declined by eight per cent to 33.80 per cent from 41.80 per cent and urban poverty by 4.80 per cent from 25.70 per cent to 20.90 per cent. Among the various occupational groups, nearly 50 per cent of agricultural labourers and 40 per cent percent of thers labourers are below the poverty line in rural areas rural poverty is largely a result of low productivity and

unemployment in a rural agrarian labourers surplus economy section of rural population depend on the wages they earn through unskilled, casual, manual labourers.¹

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Review of Literature

Santosh Singh et al., (2014) in their study reveals that the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) to provide for enhanced livelihood security for households in rural areas by providing at least 100 days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work. As a legal right to work, MGNREGS contrast with previous employment-generation schemes in several aspects. The purpose of the study is to analyze the performance of Mahatma Gandhi National Rural Employment Guarantee Act in district Pauri Garhwal of Uttarakhand state. However, the paper finds large women participation under this scheme; highest number of assets is created in the area of rural connectivity and few in drought proofing.

Santosh Singh et al., (2017) in their study reveals that examine the effect of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), a wage for employments plan of the Indian Government, on rural poor the pathways through which MGNREGA affects their poverty. The objective of the paper is MGNREGA could reduce poverty through positive effects on living standard, Poverty and income. The present study is data is based on both primary and secondary data. The primary data were collected from the five village of Jahrikhal Block, Pauri Garhwal district of Uttarakhand. 120 respondents were asked in total selected through purposely-random sampling. The results revealed that MGNREGA plays a key role in order to reduce the poverty of rural poor people. On the further hand it enlarge the community and economic facility by providing the employment opportunity and development of Asset creation. In this way, MGNREGA has steadily raised the standard of rural livelihood as it provides the proper wage disbursement and authentic work facilities.

Statement of Problem

Agriculture plays a vital in the Tirunelveli district economy and majority of the population (55.45%) live in rural areas. There are adequate surplus labour employees in rural areas of India. So many programmes are implemented in rural areas in order to create the capital formation and to generate employment. Key innovations identified in this paper, which are unique to the programme, relate to planning and administration, terms and conditions of employment, quality of assets created, transparency and accountability. These lessons are particularly relevant as the challenge of working-age poverty, under and unemployment and adverse economic incorporation is growing in absolute terms in the global labour market, with particularly acute consequences for low and unskilled workers in developing country like India.

This paves way to develop the standard of living of household. The researcher has studied the details of so many programmes and has enriched knowledge to point out here about the MGNREGP. The standard of living and the income of the workers are very poor in Tirunelveli district. At this juncture has the researcher taken steps to study on an analytical study of MGNREGP and poverty reduction in Tirunelveli District

Objectives of the Study

1. To disuses the income, savings and debt of pre and post MGNREGP work of the respondents in the study area.
2. To analysis the determination of poverty reduction through MGNREGP in the study area.

Methodology

Tirunelveli district of Tamil Nadu has been chosen as the area of study. The period of study was taken for the last financial year i.e. 2020-21. There were 58,891 MGNREGP household beneficiaries among 108 revenue villages identified six blocks in Tirunelveli district. From each revenue village one per cent of the MGNREGP household beneficiaries were selected randomly for the study. Hence, a total of 589 sample households were selected. After the fieldwork, the data was carefully scrutinised and edited in order to ensure accuracy, consistency, and completeness. The data analysis was carried out by using statistical methods like percentage, 't' test and Logistic Regression Hosmer and Lemeshow Test.

Result and Discussion

Distribution of Sample MGNREGP Workers Household Income

The income of the MGNREGP workers is also an important indicator of their economic condition. In this study area the main source of income is from farm sector. Income level reveals the economic status of the family. As the hours of work increase, the income also increases. Distribution of sample MGNREGP workers household income in different income groups is presented in Table 1.

Table: 1 – Distribution of Sample MGNREGP workers Household Income

Income Group (in Rs.)	No. of Respondents		Increase
	Pre-NREGA	Post-NREGA	
Below 42,500	133	47	-86 (-64.66)
42,500 – 66,500	222	264	42 (18.92)
Above 66,500	234	278	44 (18.80)
Total	589	589	86 (14.60)

Source: Field Survey

Table 1 reveals that only 86 with 14.60 per cent out of 589 households have effect on their income due to work in the MGNREG programme. So a comparison between income before and after MGNREGP has been made to find the degree of inequality in the numerical form.

Savings of the MGNREGP Worker Respondents

Distribution of sample MGNREGP worker household savings is presented in Table 2.

Table: 2 – Savings of the MGNREGP Worker Respondents

Amount (in Rs.)	No. of Respondents		Increase / Decrease
	Pre-NREGA	Post-NREGA	
Below 3,000	151	127	-24 (-15.89)
3,000 – 6,000	94	75	-19 (-20.21)
6,000 – 9,000	113	89	-24 (-21.24)
9,000 – 12,000	108	147	39 (36.11)

12,000 – 15,000	75	80	5 (6.67)
Above 15,000	48	71	23 (47.92)
Total	589	589	67 (8.00)

Source: Filed Survey

Table 2 reveals that only 67 out of 589 households have effect on their savings due to MGNREG program employment. The table shows that the savings from `9,000 to 12,000 catagory, total number of savings before joining the MGNREGP, 108 members had savings but after joining the MGNREGP, 147 members have savings. There is a significant increase in the savings from Rs.12,000 to 15,000 category, which is 48 before joining the MGNREGP which shoots up to 71 after joining the MGNREGP.

Debt of the MGNREGP Worker Respondents

Debt of MGNREGP workers consists of borrowing money from banks, Self Help Groups, money lenders, and friends and relatives. Table 3 shows the borrowings.

Table: 3 – Debt of the MGNREGP Worker Respondents

Amount (in Rs.)	No. of Respondents		Decrease
	Pre- MGNREGP	Post- MGNREGP	
Below 4,000	188	171	17 (10.81)
4,000 – 8,000	90	71	19 (27.78)
8,000 – 12,000	111	104	7 (20.69)
12,000 – 16,000	106	104	2 (13.64)
16,000 – 20,000	56	52	4 (9.09)
Above 20,000	38	33	5 (12.50)
No Debt	0	54	54
Total	589	589	108 (18.34)

Source: Filed Survey

Table 3 reveals that 108 out of 589 households have reduced their loan amount due to join in MGNREGP scheme. The borrowed amount may be utilised for consumption and for other purposes. The workers in general borrowed heavy amount of money irrespective of their income before joining the MGNREGP programme.

Income, Savings and Borrowings of the MGNREGP Workers Respondents Pre and Post MGNREGP Scenario

The present study has proved that there is a significant change in the income, savings and borrowing pattern of the sample respondents after joining MGNREGP. Income is the best index for measuring the economic status of an individual. So, an attempt has been made to compare income, savings and borrowings of respondents before and after joining MGNREGP, ‘t’ test is used and the results are presented in the Table 4.

Table: 4 – Income, Savings and borrowings of the MGNREGP Workers Respondents before and after Joining MGNREGP

Prospects	Before Joining in MGNREGP		After Joining in MGNREGP		Difference in Mean	t	Df	Sig.
	Mean	N	Mean	N				
Income	58,831.07	589	70,463.13	589	11,632.06	47.562	588	0.000
Savings	874.52	589	1,985.26	589	1,110.74	15.416	588	0.000
Borrowings	4,568.59	589	18,489.56	589	13,920.97	24.891	588	0.000

Source: Filed Survey

Note: Figures in Parentheses Indicate the Percentage to Total

Table 4 indicates that there is no significant difference in income and savings between respondents before joining MGNREGP, whereas in borrowing, even though there is significant difference between respondents before joining MGNREGP, the difference in borrowing is much higher (Rs.18,489.56) after joining MGNREGP. In the table 4 the ‘t’ values and corresponding values of significance clearly show that there is significant increase in income, savings and borrowing between respondents before and after joining MGNREGP. Thus the fourth hypothesis “the income, savings, borrowings of the sample respondents before joining MGNREGP do differ significantly from those of the sample respondents after joining MGNREGP” is valid and accepted.

Paired ‘t’ test

This study analyses whether there is a significant change in the income, savings and borrowing pattern of the members after joining MGNREGP using paired ‘t’ test. Accordingly the income, savings and borrowings of respondents are compared before and after joining MGNREGP. The ‘t’ test based on paired observations and the results are presented in Table 4.26 which shows that the income, savings and borrowings of the sample MGNREGP workers increased significantly after joining MGNREGP.

The members can certainly improve upon savings and borrowings as these women regularly save and avail internal credits and they prove that they are successful. So, it is not surprising for such increase in various parameters like, income, savings and borrowings which are significant under the two periods. There is a considerable and significant improvement in the growth of savings and borrowings. Such increase in borrowings has been productively invested by the respondents who tend to show a significant increase in income over the period.

Determination of Poverty Reduction - Logistic Regression Analysis

Logistic Regression Analysis is used to determine the variables that enable the MGNREGP workers to cross the poverty line. The variable ‘poverty’ is taken as the dependent variable (as binary variable). Hence, the dependent variable is recorded as 1 if income > Rs.42,500 and the dependent variable is recorded as 0 if income is ≤ Rs.42,500. The following independent variables considered as: AG- Age Group, WD - Working Days , MS- Marital Status, SF - Size of Family, MF - Number of Male Members in the Family, ED - Education , SL - Savings Level and FF - Number of Female in the Family

AG - Age Group

Age of the respondents is expected to have positive relationship with reduction of

poverty by way of greater experience and better decision making ability than the younger.

WD – Working Days

Working days are expected to have better performance of the MGNREGP workers. Hence, working days and poverty reduction are positively related.

MS - Marital Status

Married MGNREGP workers are expected to have better performance than young unmarried workers. Hence, it is expected that poverty is positively related to married workers and negatively related to young unmarried workers.

SF - Size of Family

It is expected that the greater the family size, more will be the expenses and hence it is expected that reduction of poverty is negatively related to the size of the family.

MF - Number of Male in the Family

It is expected that reduction of poverty is positively related to more number of male in the family.

ED – Education

The highly qualified respondents are expected to have better financial performance. It is expected that education and poverty reduction are positively related.

SL - Saving Level

It is expected that the increased level of savings and poverty reduction are positively related.

FF - Number of Female in the Family

It is expected that reduction of poverty is negatively related to more number of female in the family.

A regression equation is used to know the impact of the independent variables identified on the dependent variable namely poverty. The Hosmer and Lemeshow test is employed in order to fit the significant ones among the independent variables listed. The result of the logistic analysis is furnished in the following functional form and also in the following table:

Table: 5 – Logistic Regression Analysis – Results for Variables in the Equation

Variables	B	S.E.	Wald	df	Sig.	Exp(B)
AG	0.006	0.008	0.510	1	0.475	1.006
WD	0.188	0.105	3.305	1	0.073	1.207
MS	-0.010	0.177	0.003	1	0.956	0.990
SF	-0.174	0.192	0.821	1	0.365	0.840
MF	0.150	0.110	1.886	1	0.170	1.162
ED	0.001	0.023	0.003	1	0.958	1.001
SL	0.003	0.002	1.116	1	0.291	4.003
FF	0.001	0.117	0.000	1	0.992	1.001
Constant	-0.428	0.927	0.213	1	0.644	0.652

a. Variables: AG, BC, MS, SF, MF, ED, SL, FF

Source: Calculated from Field Survey.

The independent variable namely, saving level turns out to be a significant variable. The increased level of savings is found to be significantly (<0.05) influencing variable among

the sample MGNREGP workers to cross the poverty line. The corresponding odd's ratio is 4.003 which means that the saving level is nearly four times more likely to bring the sample MGNREGP workers across the poverty line.

Logistic Regression Equation is given by

$$P = \frac{\exp(a+Bx)}{1+\exp(a+Bx)}$$

$$e^{-0.428+ 0.006AG + 0.188 BC + -0.010MS - 0.174SF + 0.150MF + 0.001ED + 4.003 SL + 0.001FF}$$

where P represents the probability of moving above poverty line and AG - Age Group, WD – Working Days, MS - Marital Status, SF - Size of Family, MF - Number of Males in the Family, ED – Education, SL - Saving Level and FF - Number of Female in the Family.

Results for Logistic Regression Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	8.425	9	0.464

The logistic regression model chosen is a good fit, since the significant value of chi-square is 0.464 which is greater than 0.05. Hence the logistic regression is a good fit for the data of the study. Hence, the hypothesis that 'saving is the main determining variable to cross the poverty line' is found valid and hence accepted.

Suggestions

1. Government has to create awareness about knowledge of MGNREGP with the support of NGOs and mass media.
2. The beneficiaries complain about the lower wage rate compared to the existing market wage rate in society. Hence, Government has to hike the wages of labourers as well as hike the number of working days from time to time for their well-being.
3. Utmost care should be taken that BPL households. Each household members must seek work for their livelihood and survival. So, that the poor people can be helped through the scheme.

Conclusion

The MGNREGP scheme will continue to supplement the income of the beneficiaries create durable assets in rural people. The assets under this scheme has directly provided employment opportunity and indirectly improved livelihood and food security of peoples. Thus it could be drawn that the works of MGNREGP has made positive impact of reduction of poverty directly and indirectly in the study district. The study shows that, there is a significant increase in income per family after moving to MGNREG program. Income has increased by 14.60 per cent in the study area. The logistic regression is a good fit for the data of the study. Hence, the saving is the main determining variable to cross the poverty line in the study area. It can be concluded from the study that the impact of MGNREGP in Tirunelveli district has

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