Impact of MGNREGA on Poverty and Ameliorate Socio-economic Status: A Study in Pauri Garhwal District of Uttarakhand

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Original Research Article

ABSTRACT

India is mostly an agricultural country in which the power of rural unskilled labour is very high and the most people of the rural poor depend mostly on the wages they earn through unskilled, informal, and manual labour. The main effect of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is to improve the livelihood conditions of the rural poor by providing employment. The Act provides an opportunity to work in the lean season, which helps rural poor to keep the consumption level and strengthen the livelihood resource base during this critical period. Only the growth of the economy cannot create social justice and balanced development unless it is attached with poverty improvement and employment generating opportunity for a poor and marginalised section of the society. It was perhaps the largest and most ambitious social security and public works programme in the world. Thus, a study on the impact of MGNREGA in generating employment and increase in income of the selected respondents in selected blocks of the district Pauri Garhwal and linear regression has been used as the statistical tool to measure such impact. The results revealed that there is a significant impact of MGNREGA in generating employment and increase in income of the respondents in the selected village of the district.

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1. INTRODUCTION

In countries where the economy is predominantly, rural with agriculture absorbing the major share of labour force, broad-based rural development programs hold the key to economic progress. Programs to create direct employment opportunities for wageworkers through public works have in the past focused on the generation of supplementary employment opportunities, especially during lean periods. They have been considered as an important component of the anti-poverty strategy. These programs are expected to create durable assets for the community and thus enhance further economic activities [1]. Wage employment program also pushes up demand for labour and thus exert an upward pressure on the market wage rates by attracting people to public works programs thereby reducing supply of cheap labour often at wages that would not even meet their bare basic needs [2,3]. To deal with the unemployment problem, Government of India has launched, from time to time, various employment programs.

As the Table 1, depicts that the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is an Indian job guarantee scheme, enacted by legislation on August 25, 2005. The Act received the assent of the President on September 5, 2005 and was notified in the Gazette of India on September 7, 2005 [4,5]. The law was initially called the National Rural Employment Guarantee Act (NREGA) but was renamed as Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA) on 2 October 2009. The Act was legalized and notified in 200 districts in the first phase with effect from 2 February 2006 and then extended to an additional 130 districts in the financial year 2007-2008 out of it 113 districts were notified with effect from April 1st, 2007, and 17 districts in Uttar Pradesh were notified with effect from May 15th 2007. The remaining districts have been notified under MGNREGA with effect from April 1st 2008. . It was perhaps the largest and most ambitious social security and public works programme in the world.

Uttarakhand, the MGNREGA was initially launched in 3 districts i.e., Chamoli, Champawat and Tehri in 2006-07 (Phase 1). Two additional districts, i.e., Haridwar and Udham Singh Nagar were adopted in phase II (2007-08). In the last phase, all the remaining districts have been notified under the NREGA [6, 7]. MGNREGA was applied to district Pauri Garhwal in the third phase and the implementation of MGNREGA scheme in the district commenced on April 1, 2008 [8].

Table 1. Profile of MGNREGA

Year	Particulars
August 2005	Parliament passed an act called as NREGA
February 2006	Came into force in 200 districts
April 2007	130 more districts included
April 2008	Universalization of the scheme
October 2008	Wage transaction through banks/post offices
February 2009	MOU with the postal department
2nd October 2009	Name changed to MGNREGA

Source: http://www.nrega.net

1.1 Objectives of the Study

1. To assess the socio-economic status of the respondent in the selected block.
2. To examine the impact of MGNREGA in generating employment in the selected block.
3. To examine the impact of MGNREGA on an income of the respondent in the selected block.

2. LITERATURE REVIEW

MGNREGA being the largest public welfare program has drawn a lot of thought of the leading economists and researchers. Therefore, it is necessary to give the findings and recommendations of the most vital experts in this field. [9,10,11,12,13] examine the impact of MGNREGA on reducing rural poverty and improving the socioeconomic status of rural poor and found that MGNREGA has gradually raised the standard of rural livelihood. [14,15,16,17] studied the participation of women in MGNREGA and findings of the study indicate that the constraints limited the rural women accessibility towards achieving the benefits optimally.

3. METHODS AND MATERIALS

3.1 Data Collection

The study is undertaken in rural areas of 9 villages of 3 block namely Kaljikhal, Dugadda and Pokhra. Both primary and secondary data are used. However, major emphasis is laid on Primary data, which is collected from a field

survey in the study area. Secondary data is collected from websites, journals, reports and other documents. The period of data collection is May, 2014 to March, 2016.

3.2 Sampling Method

Convenient sampling is followed. The villages, which are easily accessible, have been chosen for the study. In this way, 9 villages have been selected from Kaljikhal, Dugadda and Pokhra blocks. Table 2 shows the selected block, villages and respondents. The sample size of the study is 150 respondents.

3.3 Statistical Tool

Frequency, Percentage and Linear regression and Pearson correlation coefficient have been used to test the hypotheses. Excel and SPSS software package were used for data analysis.

Table 2. Shows the selected block, villages and respondents

Selected block	Village selected	Total beneficiaries
Kaljikhal	3	52
Pokhra	3	48
Dugadda	3	50

4. RESULTS AND DISCUSSION

4.1 Socio-economic Profile of the Respondents

Table 3 shows a brief demographic profile of the selected respondents. Majority of the respondents were belonging to the age group of 41-50. 43.3 percent respondent were male while 56.7 percent female. These results are in same with the findings of [16]. As far as education of the respondents is concerned, majority were found to be Primary. However, 57 were living in kucca house whereas 14.0 percent were in kacca-pacca houses. These results are in conformity with the findings of [3,9,11].

The impact of MGNREGA in generating employment in selected blocks of Pauri Garhwal District has been measured by applying linear regression. The independent variable is MGNREGA and the dependent variable is employment status of the respondents. The null hypothesis is that there is no significant impact of MGNREGA in generating employment and the alternate hypothesis states that there is a significant impact of MGNREGA in generating employment in selected blocks.

Table 4 shows the coefficient of correlation between the two variables. The coefficient of correlation between MGNREGA and employment status is 0.773, which indicates a very high and positive relationship between the two variables.

Table 5 exhibits the regression model of MGNREGA and employment status. R square shows the amount of variation in one variable (employment status) that is accounted by independent variable MGNREGA. The above table shows the value of R^2 is 0.598. It means 59.8 percent variation in employment status is explained by MGNREGA and rest of the variation percent in employment status is an unexplained

Table 3. Demographic profile of the respondents

Demographic profile of the respondents	Attributes	Frequency	Percentage
Age of the respondents	18-30	4	2.7
	31-40	23	15.3
	41-50	53	35.3
	51-60	48	32.0
	Above 60	22	14.7
Gender	Male	65	43.3
	Female	85	56.7
Education status	Illiterate	80	53.3
	Primary	53	35.3
	Secondary	11	7.4
	Intermediate	6	4.0
Condition of the house	Pacca	72	48.0
	Kacca	57	38.0
	Kacca/Pacca	21	14.0
Toilet facility	Yes	83	55.3
	No	67	44.7

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variation. Besides, this impact is strong and statistically significant as the value significant value is 0.000, which is less than 0.05 at 95 percent confidence interval. Therefore, the null hypothesis is rejected and it can be said that there is a significant impact of MGNREGA in generating employment in selected blocks.

Table 4. Shows the correlation between MGNREGA and employment status

	Model-1	Employment status	MGNREGA
Pearson correlation	Employment Status	1.000	0.773
	MGNREGA	0.773	1.000

Table 5. Regression model of MGNREGA & employment status

R^2	0.598
Adjusted R^2	0.595
Standard deviation	1.060
Standard error	0.873
Durbin Watson	0.886
Unstandardized coefficients	0.979
Significant value	0.000

Table 6 shows the coefficient of correlation between the two variables. The coefficient of correlation 0.769 is which indicates a positive relationship between the two variables which indicates a very high and positive relationship between the two variables.

Table 6. Correlation between MGNREGA and income

	Model-1	Income	MGNREGA
Pearson correlation	Income	0.901	1.00
	MGNREGA	1.000	0.901

Table 7 exhibits the regression model of MGNREGA and Income. R square shows the amount of variation in one variable (Income) that is accounted by independent variable MGNREGA. The above table shows the value of R square is 0.811. It means 81.1 percent variation in income is explained by MGNREGA and rest of the variation is an unexplained variation. Besides, this impact is strong and statistically significant as the value significant value is 0.000, which is less than 0.05 at 95 percent confidence interval. Therefore, the null hypothesis is rejected and it can be said that there is a significant impact of MGNREGA on income in selected blocks. 0.952. These results are in conformity with the findings of [18].

Table 7. Regression model of MGNREGA & income

R^2	0.811
Adjusted R^2	0.810
Standard deviation	1.032
Standard error	0.500
Durbin Watson	1.412
Unstandardized coefficients	0.952
Significant value	0.000

Table 8 shows the summary of hypothesis tested. All the three hypothesis of the study have been rejected. It means there is a significant impact of MGNREGA in generating employment, and an increase in income of the selected respondents in selected blocks of the district Pauri Garhwal, Uttarakhand.

4.2 Major Findings

1. The study reveals that work under MGNREGA requires hard labour for which the individual has to be physically strong. Overall women outnumber men as beneficiaries and 82.0 of the beneficiaries are in the age group of 40 to above 60. Young age population is not attracted by this scheme.

2. The impact of MGNREGA in generating employment in selected blocks of district Pauri Garhwal has been measured by applying linear regression. The regression model of MGNREGA and employment status shows the value of R^2 is 0.598, which means 59.8 percent variation in employment status is explained by MGNREGA and rest of the variation percent in employment status is an unexplained variation. Further, the value of unstandardized beta coefficients is 0.979 which shows that if MGNREGA increases by one unit, then employment status will increase by 0.979 times.

   The regression model of MGNREGA and income shows the value of R^2 is 0.811, which means 81.1 percent variation in income is explained by MGNREGA and rest of the variation is an unexplained variation. Moreover, the results show that the value of unstandardized beta coefficients is 0.952, which shows that if MGNREGA increases by one unit, then income will increase by times 0.952 times. The significant value is 0.000, which is less than 0.05 at 95 percent confidence interval.

Table 8. Summary of hypothesis tested

S. N.	Hypotheses	R^2	Beta Sig.	Value	Results
1	MGNREGA has no significant impact in generating employment in selected blocks.	0.598	0.79	0.000	Rejected
2	MGNREGA has no significant impact on income in selected blocks.	0.811	0.952	0.000	Rejected

5. CONCLUSION

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is considered as a boon in exterminates rural poverty and unemployment by way of generating demand for productive labour force in. In this backdrop, an effort has been made by the researcher to observe the impact of MGNREGA in generating employment and increase in income of the selected respondents in selected blocks of the district Pauri Garhwal and linear regression has been used as the statistical tool to measure such impact. The results revealed that there is a significant impact of MGNREGA in generating employment and increase in income of the respondents in selected village of the district.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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