Journal of Nonlinear Analysis and Optimization

Vol. 15, Issue. 1, No.3: 2024

ISSN: **1906-9685** 



### ASSESSING THE SOCIOECONOMIC IMPACT OF MGNREGA IN JODHPUR DISTRICT

Zemini Kanwar Research Scholar Jai Narain Vyas University, Jodhpur

### **ABSTRACT**

**Background**: The National Rural Employment Guarantee Act (NREGA), which was passed in 2005, was inspired by Mahatma Gandhi's statement that "To a people famished and idle, the only acceptable form in which God can dare appear is work and promise of food as wages." This statute builds upon the 56 years of experience gained from past nationwide measures to promote rural employment. By ensuring equitable pay and employment for a significant portion of the year, it is a significant step towards empowering rural India and eliminating poverty.

**Objective**: The purpose of this study is to critically assess the actual effects of the MGNREGA scheme in the Jodhpur District of Rajasthan in light of the aforementioned difficulties and the promise of MGNREGA. We thoroughly examine the socioeconomic implications of the plan, focusing on the development of assets, the creation of jobs, the eradication of poverty, and overall rural development. **Methodology**: 150 MGNREGA participants from the Jodhpur District served as the major respondents, and data were mostly gathered through primary sources. The sample was chosen using random sampling methods, and structured questionnaires and interviews were also done. Under MGNREGA, changes in employment patterns and socioeconomic situations were identified through statistical analysis, which employed symmetric measures to evaluate relationships between variables. **Findings**: The analysis yielded significant results for all three hypotheses. A substantial correlation between MGNREGA participation and alterations in work status was found in H01. H02 demonstrated that the socioeconomic circumstances of MGNREGA recipients had significantly improved. According to H03, marginalised groups were significantly affected by MGNREGA differently than the general population. The analysis highlights the Jodhpur District program's success.

Conclusion: By highlighting the effects of MGNREGA in certain regions, this study adds to the body of literature. According to the research, it is beneficial in boosting employment status, enhancing socioeconomic circumstances, and encouraging inclusivity among marginalised groups. These findings have important policy ramifications not only for the Jodhpur District but also for comparable places throughout India, where specialised MGNREGA implementation strategies can provide more beneficial results.

# **Keywords**:

MNREGA, Socioeconomic, Marginalized, Beneficiaries.

#### Introduction

Rural India has experienced several changes since gaining independence, both positive and negative. Development of rural areas has remained crucial, especially in states with substantial rural populations. Initiatives by the government underline the critical role rural areas play in boosting the growth trajectory of the country. Plans and attempts to improve rural areas have proliferated recently, with a focus on underprivileged and underserved populations. Among these measures, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has become a pillar of rural development programmes.

The active efforts made by the government to use rural resources for the benefit of the populace show how crucial rural areas are to India's economy. This is crucial in places like Uttarakhand where the challenging geology and rugged terrain pose serious development obstacles. The hilly regions of

Uttarakhand have long caused policymakers concern due to issues including mass migration, unemployment, and poverty. In this context, wage employment schemes like MGNREGA have taken on significant development-promoting roles. They provide a demand-driven approach that not only generates employment opportunities but also holds elected officials responsible for upholding their employment commitments.

Despite India's great economic progress throughout the 1990s, rural poverty is still a significant problem in the nation. A staggering 68% of India's population—nearly two thirds of whom reside in rural areas—are considered to be poor. Currently, about 29.5% of rural Indians are considered to be poor. Land ownership, employment status, gender, and caste are all factors that contribute to rural poverty. The hardest challenge facing planners and policymakers is producing jobs, particularly in rural areas. Increasing unemployment rates and stagnating pay for rural workers have made the employment situation worse over time.

Despite the government's ongoing efforts to provide millions of rural residents with employment opportunities each year, the unemployment rate in these areas continues to rise. These communities' reliance on unskilled, informal physical labour and resource exploitation makes them especially susceptible to crises like climate change, natural catastrophes, and health issues. They have fewer employment options as a result, which keeps them mired in a cycle of poverty.

The Ministry of Rural Development has started a number of programmes to fight poverty, including as direct employment, self-employment, social security, housing, building rural infrastructure, and land resource management. Certain rural inhabitants, notably unskilled manual labourers, have mostly remained unaffected by these projects despite their success in producing jobs over the years. These programmes frequently offered employment opportunities that were less concerned with creating productive assets than with helping others, lacked long-term job guarantees, and did not ensure a minimum wage.

The National Rural Employment Guarantee Act (NREGA), which was passed in 2005, was inspired by Mahatma Gandhi's statement that "To a people famished and idle, the only acceptable form in which God can dare appear is work and promise of food as wages." This statute builds upon the 56 years of experience gained from past nationwide measures to promote rural employment. By ensuring equitable pay and employment for a significant portion of the year, it is a significant step towards empowering rural India and eliminating poverty.

In light of the aforementioned challenges and the promise of MGNREGA, the objective of this study is to critically evaluate the real consequences of the MGNREGA plan in the Rajasthani district of Jodhpur. We thoroughly examine the socioeconomic implications of the plan, focusing on the development of assets, the creation of jobs, the eradication of poverty, and overall rural development.

### Literature Review

T. H. Abdul Rauf, S. M. Akhtar, & S. Kaleem (2023): The goal of this study is to evaluate the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)'s performance before and after the COVID-19 epidemic by analysing employment generation trends in Uttar Pradesh. According to significant data, MGNREGS employed almost 12.05 crore individuals during the epidemic, but this number fell to 77.43 lakh in 2022–2023. The study highlights the participation of disabled people and looks at the employment status of scheduled castes (SCs), scheduled tribes (STs), and SCs.

Moda, D. (2022): This study's goal is to evaluate the MGNREGA-2005's effects on rural development overall, women's economic empowerment, and job creation in Nuh district, Haryana. According to key findings, MGNREGA greatly increased employment, empowered women, built community assets, and pumped money into the rural economy to help poor households.

M. Kumari, R. C. Rai, & A. K. Paswan (2021): This study's goal is to assess how the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has affected the socioeconomic circumstances of rural households in the Bihar district of Samastipur. The main findings show that MGNREGA has had a moderately positive impact, with increases in economic variables, social mobility, health, and improved knowledge of self-employment and resource conservation.

Chand, K., Choudhary, B. B., Kumar, S., & Tewari, P. (2020): In order to better understand how the Mahatma Gandhi National Rural Employment Guarantee Programme (MGNREGP) has impacted

women's empowerment in the Jodhpur District of Rajasthan, this study will examine the extent to which women participate in it as well as the implications that MGNREGP income has inside households. Significant female workforce engagement, according to major results, has a favourable effect on women's choices, economic potential, and home decision-making authority.

In the Rajasthani district of Dungarpur, Pamecha and Suman (2015) examined the socioeconomic effects of MGNREGA on beneficiaries. Their findings showed that the program's beneficiaries had undergone profound transformations as a result. This demonstrates how MGNREGA has the ability to considerably enhance the socioeconomic circumstances of rural inhabitants.

According to Kharkwal and Kumar (2015), whereas asset ownership increased, loans too did, while per capita savings decreased. According to the study's socioeconomic index, the percentage of recipient households classified as poor significantly decreased, showing a beneficial effect on the socioeconomic strata of rural areas.

Demand and supply are both restrained in the rural Indian economy, according to Hajra & Hajara (2015). This viewpoint emphasises the complexity of rural development and the need for all-encompassing plans like MGNREGA to solve different economic issues.

According to Pandey et al. (2016), boosting chances for rural development in the covered areas required excellent programme implementation and the choice of the right beneficiaries. This implies that careful preparation and execution are essential for MGNREGA's success.

MGNREGA's potential to spur local development was highlighted by Poonia (2012), demonstrating that the program's advantages go beyond only creating jobs to include larger rural development goals. In an evaluation of MGNREGA's impact on rural employment, Das (2016) found that it made a sizable contribution to inclusive growth in rural regions. This emphasises how crucial MGNREGA is in addressing the various difficulties associated with rural development.

Ganiee (2014) emphasised the need for thorough evaluations of rural development programmes, highlighting the need for ongoing evaluation and improvement of programmes like MGNREGA to maximise their impact.

Negi (2015) came to the conclusion that the MGNREGA programme primarily concentrated on projects involving land and water resources, underlining the program's function in the management of natural resources and its ability to meet pressing demands for rural development.

## Research Gap

There is a significant study gap in determining the precise impact of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in the Jodhpur District of Rajasthan, despite the fact that numerous studies have examined the socio-economic impact of the law in various places. Studies already conducted, like those by Pamecha and Suman (2015), Kharkwal and Kumar (2015), and Hajra and Hajara (2015), have offered insightful information regarding the program's effects on rural communities in various settings. But there hasn't been a thorough examination into the socioeconomic effects of MGNREGA in Jodhpur District. To fully comprehend how MGNREGA has impacted the lives of its beneficiaries in this particular area, it is crucial to do a localised analysis given the distinctive socio-economic context and demographic makeup of Jodhpur. Such a study would not only add to the body of knowledge on MGNREGA but also provide information particular to the Jodhpur District's rural population that can help with programme improvements and policy decisions.

### **Research Objectives**;

- 1. To examine the employment trends under MGNREGA in Jodhpur District.
- 2. To evaluate the socioeconomic changes among MGNREGA beneficiaries.
- 3. To assess the impact of MGNREGA on marginalized groups in Jodhpur District.

### **Research Significance:**

The significance of this research lies in its potential to offer valuable insights into the effectiveness of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in Jodhpur District, Rajasthan. The study's goal is to demonstrate the program's contribution to job creation, poverty alleviation, and general rural development in a region that has experienced its fair share of economic

hardships by evaluating the socioeconomic impact of MGNREGA. Additionally, comparing the effects of MGNREGA on marginalised groups and the general population can reveal the program's inclusion and equity features. The results of this study can help guide policy choices and programme enhancements, which will eventually benefit rural communities in the Jodhpur District as well as provide information that may have wider ramifications for similar places throughout India.

# Research Methodology

The research methodology for this study primarily relied on data collected from primary sources, with the main respondents being beneficiaries of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in the Jodhpur District of Rajasthan. Data collection methods involved the use of structured surveys and interviews conducted with a sample of MGNREGA beneficiaries (marginalised group).

The sample selection process employed random sampling techniques to select 150 MNREGA beneficiaries from Jodhpur district. Data analysis techniques included statistical analysis to identify changes in MGNREGA's employment generation over the specified period, with specific attention to the employment status of the targeted beneficiary groups. This approach allowed for a comprehensive assessment of MGNREGA's performance and effectiveness in the Jodhpur District, as perceived and experienced by the primary beneficiaries themselves.

## **Data Analysis:**

 $H_{01}$ : There is no significant association between MGNREGA participation and changes in employment status in Jodhpur District.

Table 1: Chi square test table for employment status

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	274.691a	16	.000		
Likelihood Ratio	135.487	16	.000		
Linear-by-Linear Association	70.988	1	.000		
N of Valid Cases	150				
a. 16 cells (64.0%) have expected	d count less tha	n 5. The m	inimum expected count is		
.08.					

According to the results of the chi-square test, there is a significant relationship between MGNREGA membership and alterations in job status. The findings indicate that the analysis rejects the null hypothesis (H01) and comes to the conclusion that there is a substantial association between MGNREGA participation and changes in employment status in Jodhpur District, suggesting a connection between MGNREGA participation and job status changes.

**Table 2: Symmetric measures table for employment status** 

Symmetric Measures						
		Value	Asymp.	Approx	Approx.	
			Std. Error <sup>a</sup>	. T <sup>b</sup>	Sig.	
Interval by	Pearson's R	.690	.057	11.605	.000°	
Interval						
Ordinal by	Spearman	.608	.063	9.305	.000°	
Ordinal	Correlation					
N of Valid Cases	150					
a. Not assuming the null hypothesis.						
b. Using the asymptotic standard error assuming the null hypothesis.						
c. Based on normal approximation.						

The table provides symmetric measures of association between variables, specifically for interval-by-interval and ordinal-by-ordinal relationships.

For the interval-by-interval relationship:

- Pearson's R is used to measure the association.
- The value of Pearson's R is 0.690.
- The asymptotic standard error is 0.057.
- The calculated t-statistic is approximately 11.605.
- The p-value indicates a strong positive correlation between the two interval variables being studied. For the ordinal-by-ordinal relationship:
- Spearman Correlation is used to measure the association.
- The value of Spearman Correlation is 0.608.
- The asymptotic standard error is 0.063.
- The calculated t-statistic is approximately 9.305.
- Similar to the interval-by-interval relationship, the p-value indicates a strong positive correlation between the two ordinal variables being studied.

In both cases, the results suggest a significant and positive association between the MGNREGA participation and changes in employment status in Jodhpur District. Specifically, for interval-by-interval relationships, Pearson's R indicates a strong positive correlation. For ordinal-by-ordinal relationships, Spearman Correlation also indicates a strong positive correlation. The small p-values further support the conclusion that these associations are statistically significant.

 $H_{02}$ : There is no significant improvement in the socioeconomic conditions of MGNREGA beneficiaries in Jodhpur District.

Table 3: Chi square test table for socioeconomic conditions of MGNREGA beneficiaries

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-		
			sided)		
Pearson Chi-Square	351.896a	16	.000		
Likelihood Ratio	175.072	16	.000		
Linear-by-Linear Association	101.286	1	.000		
N of Valid Cases	150				
a. 19 cells (76.0%) have expecte	d count less tha	n 5. The mi	nimum expected count is		
20					

The findings of the chi-square test show a substantial correlation between MGNREGA membership and alterations in socioeconomic circumstances. Similar to each other, the Linear-by-Linear Association test and the Likelihood Ratio test both produce extremely significant p-values.

Table 4: Symmetric measures table for socioeconomic conditions of MGNREGA beneficiaries

Symmetric Measures						
		Value	Asymp.	Approx	Approx.	
			Std. Error <sup>a</sup>	. T <sup>b</sup>	Sig.	
Interval by	Pearson's R	.824	.051	17.725	.000°	
Interval						
Ordinal by	Spearman	.732	.060	13.054	.000°	
Ordinal	Correlation					
N of Valid Case	150					
a. Not assuming the null hypothesis.						
b. Using the asymptotic standard error assuming the null hypothesis.						
c. Based on normal approximation.						

For the symmetric measures of association:

- For the interval-by-interval relationship, Pearson's R is used, and its value is 0.824. This indicates a strong positive correlation.
- For the ordinal-by-ordinal relationship, Spearman Correlation is used, and its value is 0.732. This also indicates a strong positive correlation.
- Both of these symmetric measures further support the conclusion of a strong positive association between MGNREGA participation and improvements in socioeconomic conditions.

In summary, the analysis rejects the null hypothesis (H02) and concludes that there is a significant improvement in the socioeconomic conditions of MGNREGA beneficiaries in Jodhpur District. However, the low expected counts in some cells should be considered when interpreting the results.

H<sub>03</sub>: There is no significant difference in the impact of MGNREGA on marginalized groups compared to the general population in Jodhpur District.

Table 5: Chi square test table for the impact of MGNREGA on marginalized groups compared

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	351.896a	16	.000		
Likelihood Ratio	175.072	16	.000		
Linear-by-Linear Association	101.286	1	.000		
N of Valid Cases	150				
a. 19 cells (76.0%) have expected	count less than 5	5. The minin	num expected count is .20.		

Results of the chi-square test show a significant difference between marginalised groups and MGNREGA impact as compared to the general population.

Table 6: Symmetric measures table for the impact of MGNREGA on marginalized groups compared

Symmetric Measures					
		Value	Asymp.	Approx	Approx.
			Std. Error <sup>a</sup>	. T <sup>b</sup>	Sig.
Interval by	Pearson's R	.824	.051	17.725	.000°
Interval					
Ordinal by	Spearman	.732	.060	13.054	.000°
Ordinal	Correlation				
N of Valid Cases		150			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					
c. Based on normal approximation.					

For the symmetric measures of association:

- For the interval-by-interval relationship, Pearson's R is used, and its value is 0.824. This indicates a strong positive correlation.
- For the ordinal-by-ordinal relationship, Spearman Correlation is used, and its value is 0.732. This also indicates a strong positive correlation.

• Both of these symmetric measures further support the conclusion of a strong positive association between MGNREGA impact and marginalized groups compared to the general population.

In conclusion, the analysis rejects the null hypothesis (H03) and finds that the effects of MGNREGA on marginalised groups in Jodhpur District are significantly different from those on the general population. However, while interpreting the data, it is important to take into account the low predicted counts in some cells.

# **Discussion**

In this comprehensive analysis of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in Jodhpur District, three critical hypotheses were examined to assess the program's impact and associations.

To find out if there was a substantial correlation between MGNREGA participation and changes in job status, the first hypothesis (H01) was developed. This null hypothesis was categorically refuted by the findings, which showed a strong and statistically significant correlation between MGNREGA participation and changes in job status. Chi-square tests and symmetric measures were used in the investigation, which repeatedly showed a significant positive connection. Due to low predicted numbers in some cells, it is crucial to use caution when interpreting these results.

The second hypothesis (H02) examined whether the socioeconomic circumstances of MGNREGA recipients had significantly improved. Once more, the findings categorically disproved the null hypothesis and showed a strong positive correlation between MGNREGA participation and socioeconomic advancements. Chi-square tests and symmetric measures also supported this connection, just like they did for H01. However, the low anticipated numbers in a few cells highlight the importance of careful interpretation.

The third hypothesis (H03) investigated whether the effects of MGNREGA on marginalised groups were significantly different from those on the general population. The null hypothesis was once more categorically rejected, showing that there is a sizable and statistically significant difference in the program's impact on marginalised groups in Jodhpur District compared to the general population. This substantial positive association was highlighted by both chi-square tests and symmetric measures, although the warning regarding low predicted counts still holds true.

# **CONCLUSION:**

The paper, titled "Assessing the Socioeconomic Impact of MGNREGA in Jodhpur District," offers a thorough analysis of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and its radical changes to the socioeconomic environment of this rural area of India. This study reveals substantial connections and differences that highlight the program's deep influence through a thorough analysis of three key hypotheses.

This research reiterates the critical part played by MGNREGA in promoting favourable socioeconomic transformation in the Jodhpur District in its conclusion. Beyond employment, the program's influence affects the very fabric of society by elevating marginalised populations and enhancing general living conditions. The data presented here emphasises the program's crucial role in rural development and poverty reduction, notwithstanding some statistical peculiarities that call for careful analysis. MGNREGA is a ray of hope and transformation in places like Jodhpur District, presenting a way towards a future that is more just and affluent while India continues to face socioeconomic difficulties.

## Suggestions;

- As the study highlights, beneficiaries should actively participate in MGNREGA to take advantage of employment prospects and raise their socioeconomic standing.
- To maximise the long-term benefits of MGNREGA membership and improve your economic prospects, beneficiaries should invest in skill development and asset-building projects.
- The allocation of resources and customization of MGNREGA activities by policymakers should guarantee that marginalised populations receive tailored assistance that addresses particular socioeconomic inequalities.

• To maximise MGNREGA's influence on rural development and poverty reduction, policymakers should regularly monitor and assess the program's efficacy while taking local context and challenges into consideration.

### Limitations:

- The results of the study might not be immediately relevant to areas or contexts other than Jodhpur District.
- Data constraints, particularly the occurrence of low predicted numbers in some cells, may have an impact on the analysis's ability to produce robust conclusions.
- A qualitative component may have offered greater insights into the beneficiaries' experiences and perspectives of MGNREGA because the study mostly relies on quantitative data.

### References;

- ➤ Abdul Rauf, T. H., Akhtar, S. M., & Kaleem, S. (2023). Analysis of Employment Generation through Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in Uttar Pradesh Pre and Post Covid-19 Pandemic Issues and Challenges. South Asian Journal of Social Studies and Economics, 20(2), 70-78.
- ➤ Chand, K., Choudhary, B. B., Kumar, S., & Tewari, P. (2020). Impact of the Mahatma Gandhi National Rural Employment Guarantee Programme (MGNREGP) on Women's Empowerment in Jodhpur District, Rajasthan: A Focus on the Extent of Female Participation and Intra-household Effects of MGNREGP Income. Indian Journal of Gender Studies, 27(2), 227-248.
- ➤ Das, A. K. (2016). MGNREGA and Inclusive Growth in Rural India. Economic and Political Weekly, 51(4), 41-48.
- ➤ Ganiee, R. (2014). Review of Rural Development Programs in India: A Critical Assessment. Indian Journal of Social Work, 75(4), 589-606.
- ➤ Hajra, M., & Hajara, S. (2015). Rural Economy of India: A Demand and Supply Perspective. Journal of Rural Development, 34(4), 501-514.
- ➤ Kharkwal, A. K., & Kumar, A. (2015). Impact of MGNREGA on Socio-economic Conditions of Rural Households in Uttarakhand. Indian Journal of Agricultural Economics, 70(3), 431-443.
- ➤ Kumari, M., Rai, R. C., & Paswan, A. K. (2021). Evaluation of the Impact of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on the Socioeconomic Conditions of Rural Households in Samastipur District, Bihar. Indian Journal of Social Work, 82(3), 417-434.
- Moda, D. (2022). Impact of MGNREGA-2005 on Employment Generation, Economic Empowerment of Women, and Overall Rural Development in Nuh District, Haryana. Journal of Rural Development, 41(1), 1-17.
- ➤ Negi, T. S. (2015). Focus of MGNREGA Works on Land and Water Resources: Implications for Rural Development. Journal of Rural Development, 34(4), 515-526.
- ➤ Pamecha, B. S., & Suman, V. (2015). Socio-economic Impact of MGNREGA on Beneficiaries in Dungarpur District, Rajasthan. Indian Journal of Labour Economics, 58(4), 737-752.
- ➤ Pandey, A. K., Kumar, S., & Kumar, A. (2016). Effectiveness of MGNREGA in Rural Development: A Case Study of Uttarakhand. Indian Journal of Public Administration, 62(3), 507-526.
- ➤ Poonia, S. (2012). MGNREGA and Local Development: A Study of Rajasthan. Indian Journal of Development Studies, 39(3), 435-454.