



A MICRO LEVEL STUDY ON THE IMPACTS OF THE SOCIO ECONOMIC ENVIRONMENT ON EMPLOYMENT AND INCOME OF MGNREGA BENEFICIARIES IN TAMILNADU

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ABSTRACT

MGNREGA is thought to be the answer to ending rural poverty and employment by stimulating the demand for skilled labourers in Indian villages. The MGNREGA programme is the most effective programme ever launched in India to alter rural livelihoods. The NREGA is, in a number of ways, an exact clone of past plans with a legal guarantee. In contrast to previous programmes, MGNREGA is demand-driven. MGNREGA is a significant step towards the rural poor's social security system. The MGNREGA is the nation's largest employment programme that is constantly in operation and has received significant public funding. Because of this, the current study uses primary data from MGNREGA beneficiaries in Tamilnadu to examine the effects of the socioeconomic environment on their employment and income. This assessment is then verified using percentage analysis, paired t-tests, and multiple regression models.

KEYWORDS : employment, income, MGNREGA beneficiaries, labour force, rural poor

1.1 INTRODUCTION

The Millennium Development Goal (MDG) proposes to cut in half, between 1990 and 2015, the percentage of persons whose income is less than \$1 per day. The promise of this objective toward socioeconomic goal for equitable growth is also reaffirmed in India's Eleventh Five-Year Plan [1]. These include creating 70 million new job possibilities, increasing the real wage rate for unskilled employees by 20%, and lowering the top Count Ratio of Poverty by 10%. The National Rural Employment Guarantee Act (NREGA), a paradigm shift from earlier programmes, was created by the Indian government in 2005 as part of a plan to implement wage employment programmes more effectively to combat poverty. The NREGA aspires to provide livelihood stability by providing a least of 100 days of guaranteed wage employment to every farming household whose adult members attempt manual labour for the legal minimum wage thanks to its legal framework and rights-based approach.

Additionally, the minimum wage for MGNREGA work varies from state to state; in some, it is very low, at Rs. 75, while in others, it is Rs. 130 or Rs. 125. Accordingly, the 100 days of employment were expected because the rural season is only assumed to last about 250 days, and incompetent workers have no other source of income during the remaining months of the year. While MGNREGA is seen to be a strategy to end rural poverty and eliminate employment by stimulating the need for skilled labourers in Indian villages. India's rural poverty and unemployment have grown in an astonishing way during the past few decades. There is a growing prevalence of uneducated people, low self-esteem, hungry people, malnourished children, anaemia in pregnant women, farmer suicides, starving deaths, migration brought on by insufficient employment, poverty, and the inability to sustain long-term growth during dry seasons. In order to address these issues and provide livelihood security to rural unemployed people, the Indian government passed the NREGA in 2005. This act is now known as MGNREGA and is the most successful programme in the world to combat poverty. Its initial budget was Rs. 11,300 crore in 2006 and increased to Rs. 40,000 crore in 2011.

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12.8 crore households have registered for the MGNREGA, and 1.05 crore projects totaling Rs. 17940.20 crores are now being carried out. By guaranteeing 100 days of pay employment, the programme has a significant potential to improve socioeconomic conditions and raise the standard of living for rural poor people. The introduction of MGNREGA had a definite positive effect on employment, income generation, living standards, women's participation, and socioeconomic conditions of rural poor people. However, it was not found that MGNREGA was functioning very satisfactorily, and it was reported that people were unhappy with the impact of MGNREGA on their way of life and the calibre of the work carried out under this programme.

1.2 Reviews of existing literature

A summary of the research that has been done on the topics covered in this examination, either directly or indirectly. The key literature has been evaluated keeping in mind the goals of this inquiry.

Only about 25% of the pond that is being used up under MGNREGA is being used for irrigation, according to Kareemulla[2]; the main reason for this low employ was that there was no requirement of channel water to the farm plan, though they do point out that the investment in the pond was used to replenish well water.

In three of the study villages, Tiwari[3] note that well water levels have significantly increased, and total cultivated area has increased where land development mechanisms under MGNREGA were implemented.

Using cost-benefit analysis, Verma and Shah[4] examined the viability of irrigation assets purchased through the MGNREGA in Bihar, Gujarat, Rajasthan, and Kerala for the fiscal year 2009–2010 and discovered that 80% of the assets returned on investment in the first year alone.

Ankita [5] et al research on the expenses, profitability, and cropping intensity of well-formulated MGNREGA projects demonstrates how improved irrigation leads to a variety of cropping patterns and increased crop yields.

Although the breadth of Azam, Mehtabul[6] presentation of an increase in public workings in Phase 1 and 2 areas is modest: In 2004–2005, MGNREGA increased employment opportunities in public sector jobs overall in Phase 1 and 2 districts by 2.5 percent.

In the dry season (defined as being from January to June), Imbert, Clément, and John Papp[7] find a 1.04 percentage

point increase in the portion of days taken up in public works and a drop of 1.23 percentage points in private work.

According to Zimmermann[8], MGNREGA has had an unfavourable impact on the job structure. Because of the MGNREGA, her analysis suggests that people transition from personal informal wage employment to self-employment.

Since the MGNREGA program's introduction, Rangarajan, Kaul, and Seema[9] have revealed that the programme has a depressingly negative impact on agriculture by driving up agricultural wages, which forces farmers to switch to less labor-intensive crops or abandon farming altogether.

It is interesting to take into consideration this non-random selection when estimating the causal effect of the scheme when Gupta[10] studies the districts in Tamilnadu state that are characterised by lower agricultural output, a high share of SC and ST, and lower farming earnings.

According to Ambasta [11] et. al., the MGNREGA programme was started, and its implementation elements, such as the process for setting wages on rural labour marketplaces, its financing, and its self-governing government, were examined. The socioeconomic effects of MGNREGA, such as the reduction of rural poverty, gender issues, self-esteem, livelihood and food security, and migration, are the focus of Habersfeld [12], but no study has compared the effects of the programme on agriculturally advanced and agrarian regions.

1.3 Methodology

The study was conducted in the Villupuram district of Tamil Nadu, although it was only able to include three of the district's blocks: Koliyanur, Mailam, and Mugaiyur. Purposive sampling was used to choose the study region in the first step of the two-stage process for selecting the beneficiaries of the respondents, and random sampling was used in the second stage.

In each of the three blocks—Koliyanur Block, Mailam Block, and Mugaiyur Block—150 homes were randomly chosen as a sample. In the Villupuram District, 50 samples were chosen from 150 sample families, and they were spread over three village panchayats in each block. Both qualitative and quantitative data were analysed using the statistical methods of percentage, descriptive analysis, correlation, and regression model.

1.4 RESULTS AND DISCUSSION

Age, gender, education, family size, and landholding size are considered independent factors in this study, whereas the number of days the beneficiary worked as part of MGNREGA is considered a dependent factor.

[a] Employment and the socioeconomic environment

Furthermore, because agriculture provides them with a stable source of income and MGNREGA recognises their contribution to agriculture, the number of days spent working on one's own farm alone did not dramatically decline. The empirical model that was utilised for estimation has the following form:

$$Y = \alpha + b_1A_1 + b_2F_2 + b_3D_3 + b_4D_4 + b_5S_5 + b_6X_3 + u \dots \dots \dots (1)$$

Where,

Y = Number of days the beneficiary work under MGNREGA,

α = constant,

A1 = Age,

F2 = Family size,

D3 = dummy (1 for male, 0 for female),

D4 = dummy (1 for literate, 0 for illiterate),

S5 = Size of landholding,

b = coefficients'

u = Random disturbance.

The dummy variable was used to adjust the intercept for the pooled data.

The number of days that beneficiaries worked under MGNREGA was regressed on the socioeconomic environment, including the workers' age, gender, education level, family size, and size of landholding. This relationship between the number of days that beneficiaries worked under MGNREGA and socioeconomic factors was then examined.

Table 1.1 Effect of socio economic socio economic Environment on employment

Dependent variable (Y): Number of days worked under the MGNREGA
N=150

socio economic environment factors	Co efficient Value (b)
Constant (α)	52.925*** (1.66)
Age	0.0215NS (0.05)
Gender	-0.940** (5.63)
Education	-25.955* (3.54)
Family size	-4.6923NS (1.44)
Size of holding	-0.853** (7.42)
Adjusted R2 Value	0.76

Source: Computed

Note: Figures in the parentheses represent t-values
*, ** and *** indicate significance at 1 per cent, 5 per cent and 10 per cent levels, respectively

According to Table 1.1, the age and family size coefficients' values were non-significant, indicating that they were not substantially related to the change in the beneficiary's number of days worked under MGNREGA as a dependent variable. However, other socioeconomic environment coefficients, such as gender, education, and size of land holding, were important. The estimated gender-specific regression coefficient value was - 0.940, which means that the number of workdays would have decreased by 0.94 days if the beneficiary had been a male employee. As for education, the estimated regression coefficient value was - 25.96, showing that the number of MGNREGA workdays decreased by 25.96 days for beneficiaries who were literate. While the coefficient for landholding size was -0.853, this indicates that if the size of the holdings were to increase by one acre of land, the number of working days would reduce by 0.85 days. The model's adjusted R2 score was 0.76, suggesting a decent fit and accounting for 76% of all variability in the dependent variable. [b] Income and the socioeconomic environment

The socioeconomic environment, including the number of days worked, age, gender, education, family size, and size of landholding, is explored in the current study, while the workers' MGNREGA-derived income is considered a dependent variable. To examine how MGNREGA affected beneficiaries' income in the research area, a regression model was used.

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$$Y = \alpha + b_1N_1 + b_2A_2 + b_3F_3 + b_4D_4 + b_5D_5 + b_6S_6 + u \dots \dots \dots (2)$$

Where,

Y = Workers income earn from MGNREGA,

α = constant

N1 = No. of days worked,

A2 = Age

F3 = Family size,

D4 = dummy (1 for male, 0 for female),
 D5 = dummy (1 for literate, 0 for illiterate),
 X4 = Size of landholding, and
 b = coefficients'
 u = Random disturbance.

The dummy variable was used to adjust the intercept for the pooled data.

Age, gender, education, family size, and landholding size of the recipient were examined on the income from MGNREGA employment in order to observe the effects of income and contributing socioeconomic environment factors in the study area. As shown in Table 1.2, there is an inverse correlation between the number of days worked and the gender categories. The coefficient of the gender variable was negative. Because the compensation rate is the same for both male and female labourers, a growing number of female beneficiaries are more interested in the MGNREGA programme than male beneficiaries. Additionally, the market wage rate for men was greater than the MGNREGA rate (for example, 150 for ploughing, 200 for building a house, and 175 for packing and loading tomato boxes). The male employees stood out for the obvious reason that they did not work throughout the year and that the MGNREGA project's construction was less meticulous.

Table 5.32 Effect of socio economic environment on income
 Dependent variable (Y): Workers income earned from MGNREGA N=150

Independent Variable (x)	Co efficient Value (b)
Constant (α)	266.65* (1.98)
No. of days worked	92.68* (17.96)
Age	3.41NS (0.0021)
Gender	-152.55** (14.74)
Education	-12.842*** (3.54)
Family size	-26.14NS (0.0094)
Size of holding	-41.942** (8.45)
Adjusted R2 Value	0.88

Source: Computed

Note: Figures in the parentheses represent t-values
 *, ** and *** indicate significance at 1per cent, 5 per cent and 10 per cent levels, respectively

As a result, the value of the coefficient in education was -12.842, showing that educated workers spent 12.842 fewer days at work than illiterate workers. This is valid given that literate workers have more outside employment opportunities than illiterate workers. The size of the landholding was another factor that had a significant negative coefficient (-0.8721), which meant that for every additional acre of land, the number of working days is reduced by 0.87 days. In this way, the labourers with larger plots of land used more of their time for agricultural pursuits and were unable to use it for other tasks. Because the model's modified R2 value was 0.88, it can be deduced that 88% of the variation in the workers' income came from MGNREGA.

1.5 Inference

From the discussion above, it can be inferred that factors such as age and family size have little to no influence on employment under MGNREGA. As far as the coefficient values are concerned, however, other socioeconomic socio economic environment variables, such as gender, education, and size of landholding, had a substantial impact on the number of days worked under the MGNREGA. Additionally, the multiple regression model's adjusted R2 value was 0.76, showing that the effects of gender, education, and the amount of landholdings in the study area contributed to 76% of the total differences in the time of employment under MGNREGA. Additionally, factors related to the socioeconomic environment, such as age and family size, had little to no

impact on the income of MGNREGA beneficiaries. In contrast, factors like the number of days worked, gender, level of education, and size of the landholding had a significant impact on beneficiaries' income. Furthermore, the corrected R2 value was 0.88, showing that 88% of the overall changes in the workers' MGNREGA income were caused by the impact of the number of days worked, gender, education, and amount of landholdings in the research area. The MGNREGA plan has a significant impact on work quality and the reduction of corruption in the agency responsible for carrying it out. However, improvement and development of living quality heavily depend on strong governance, which requires a multifaceted approach.

REFERENCES

- Gladson, D, (2008), Ploughed cut: Impact of NREGA, *Tehelka Magazine*, 5(37), pp. 12-13.
- Kareemulla, K., K.S. Reddy, C.A.R. Rao, S.Kumar, B.Venkateswarlu (2009), Soil and Water Conservation Works through NREGS in Andhra Pradesh, *Agricultural Economics Research Review*, 22.
- Tiwari, R., Somashekhar, H. I., Parama, V. R., Murthy, I. K., Kumar, M. M., Kumar, B. M., and Sengupta, A. (2011). MGNREGA for environmental service enhancement and vulnerability reduction: rapid appraisal in Chitradurga district, Karnataka. *EPW*, Vol.39(47).
- Verma, S., and T. Shah (2012), *Beyond Digging and Filling Holes: Lessons from Case Studies of Bes performing MGNREGA water assets*, Water Policy Research Highlight: International Water Management Institute (IWMI) - TATA Water Policy Program.
- Ankita, Aggarwal, Kumar Ankit, and Gupta Acashish (2012), Evaluation of NREGA Wells in Jharkhand, *EPW*, Vol. 47(35).
- Azam, Mehtabul. (2011), *The impact of Indian job guarantee scheme on labor market outcomes: Evidence from a natural experiment*, Institute for the Study of Labor, IZA Discussion Paper, Germany.
- Imbert, Clément, and John Papp. (2014), *Equilibrium distributional impacts of government employment programs: Evidence from India's Employment Guarantee*, Paris School of Economics, Paris.
- Zimmermann, Laura. (2013), *Why guarantee employment?, Evidence from a large Indian public-works program*, No. 504, GLO Discussion Paper, 2020.
- Rangarajan, C., Padma Iyer Kaul, and Seema, (2011), Where is the missing labour force?. *EPW*, 68-72.
- Gupta, S. (2006), Were District Choices for NFFWP Appropriate?, *Journal of Indian School of Political of Political Economy*, Vol. 18(4), pp 641-648.
- Ambasta, Pramatshesh, RS Vijay Shankar and Mihir Shah, (2005), Two years of NREGA: The road ahead. *EPW*, 41-50.
- Haberfeld, Yitchak (2011), Seasonal migration of rural labor in India, *Population Research and Policy Review*, 18-5.