

Impact of MGNREGA on employment of beneficiaries in Tamilnadu: A Micro level Study

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Abstract: MGNREGA ranks first among the most powerful initiatives ever undertaken for transformation of rural livelihoods in India. In several ways the NREGA is an imitation of earlier schemes with a legal guarantee. While other programmes are allocation based, MGNREGA is demand drive. Each adult member of the register households under MGNREGA may demand work when he or she is in need and the government is hurdle to give hundred days of assured wage employment to each household who so ever has been register under the scheme. Therefore, this paper makes to assess the impact of MGNREGA on employment of beneficiaries in Villupuram District of Tamilnadu.

Key Words: MGNREG beneficiaries, Panchayats, employment, socio economic factor.

1. INTRODUCTION:

MGNREGA ranks first among the most powerful initiatives ever undertaken for transformation of rural livelihoods in India. In several ways the NREGA is a imitation of previous schemes with a legal guarantee. Even as other programmes are allocation based, MGNREGA is demand-driven. Preliminary from 200 districts on 2nd Feb 2006, the NREGA cover all the districts of India from 1st April 2008. Every adult member of the register households under MGNREGA may demand work when he or she is in need and the government is bound to provide hundred days of assured wage employment to each household who so ever has been register under the scheme.

Thus, MGNREGA is a huge step towards social security mechanism of the rural poor. This is the largest employment programme ever started in the country with a huge public investment. According to the National Report (2013-14), 12.8 crore households have been registered in MGNREGA and 1.05 crore total works being undertaken with total expenditure of Rs 17940.20 crores. The programme has enormous potential to uplift socio-economic conditions and to raise the standard of living of rural poor by guaranteeing 100 days wage employment.

Benefits of MGNREGA to rural poor had been realized through income-consumption effects, intra household effects, and the enhancement of choice and decision making in the family. Introduction of MGNREGA had a clear positive impact on employment, income generation, standard of living, women participation and socio-economic conditions of rural poor while did not found the functioning of MGNREGA very satisfactory and reported people's dissatisfaction about the impact of MGNREGA on their livelihood and the quality of the work done under this scheme. Therefore, the objective of the study makes to assess the impact of MGNREGA on employment of beneficiaries in the study area.

2. LITERATURE REVIEW:

A review of a few studies could justify due consideration as for the present investigation. Kareemulla (2009) find that only about 25 percent of the ponds that were taken up under MGNREGA were being utilized for irrigation; the main reason for such low utilization was that there was no provision of channeling water to the farm plots. Tiwari(2011) reports a significant improvement in ground water level in three out of the six study villages, and an increase in total cropped area where land development works were undertaken through MGNREGA.

Further, Verma and Shah (2012) finds that 80 percent of the assets created recovered their investment in the first year itself. Gupta, and Kumar (2012) evaluation based on a gram panchayat of Ranchi district in Jharkhand, shows that improved irrigation led to multiple cropping and higher yields of crops. Azam (2012) finds a positive impact of the scheme on labour force participation, and also notes that this was driven mainly through an increase in female participation. Imbert and Papp (2014) suggest that private sector employment is being substituted by public works employment in the Dry season. In the Rainy season (defined as being from July to December), they do not find any significant difference in employment in either the private or the public sector.

Moreover, Zimmermann (2013) suggest that MGNREGA has had an insignificant effect on publicworks employment. She also finds evidence that suggests that people moved out of private casual wage employment into self-employment due to the MGNREGA. Rangarajan, Kaul and Seema (2011) reveals since its implementation, concerns have been voiced that MGNREGA is affecting agriculture adversely by bidding up agricultural wages, and causing farmers to switch to less labour intensive crops or to quit agriculture altogether. Gupta (2006) indicates the Phase 1 and 2 districts were characterized by lower agricultural productivity, higher share of Scheduled Castes, SC, and Scheduled Tribes, ST, and lower agricultural wages.

While, Khan, Ullah and Salluja (2007) recorded income and expenditure levels by type of household including large, small and marginal farmers, agricultural labour etc. The survey also recorded production activities undertaken by the inhabitants. Ambasta, Pramathesh, Vijay Shankar, P.V. and Shah, Mihir (2008) reveals MGNREGA and its implementation aspects, such as wage formation processes in the rural labour markets, its finances, its democratic administration and implementation.

Whereas, Haberfeld, Y., Menaria, R.K., Sahoo, B. B. and Vyas R. N (2011) focuses on its socioeconomic impact such as rural poverty alleviation, gender issues, self-esteem, livelihood and food security, and migration, but there has been no study on the comparative assessment of MGNREGA's impact on agriculturally-backward and agriculturally-advanced regions. Ambasta, P (2010) reveals the experience of the MGNREGA to see how its outcomes have fallen short of its potential due to inadequate support structures at the grassroots. It then attempts to spell out a blueprint of reforms that are needed for MGNREGA to realize its true potential.

3. MATERIALS AND METHOD:

The study was carried out in Villupuram District of Tamilnadu confined to three gram panchayats viz., Alathur, Anangoor and Arasamangalam of Koliyanur Block in Villupuram District based on primary data. Using purposive sampling was adopted for selection of study area and random sampling method was adopted for the selection of sample respondents in the study area. A sample of 150 sample beneficiaries was selected from three panchayats (i.e 50 sample from each panchayats). Data Collection Data was collected from primary data through questionnaire surveys. The qualitative data was analysed and interpreted based on the information collected from the field.

4. RESULTS AND DISCUSSION:

This analysis, the data for the study has been collected from three Panchayats of Villupuram district in Tamilnadu. The primary data of the study is collected using a structured interview schedule. The data is analysed using statistical tools such as simple percentage analysis, correlation and regression analysis.

(a) the socio economic characteristics

This analysis seeks to look at the socio economic characteristics of sample beneficiaries of MGNREGA. During the interview with the workers, the researcher got some information about their caste, age, educational qualification, religion, occupation and other information related to the implementation of MGNREGA and collected them through questionnaire method, which is tested by using percentage analysis.

Age: Table 1.1 shows that the age group of different worker and the number of worker involved in the respective work. It is clear that out of 150 respondents, the old age group constitutes 29.34 per cent, the middle age group constitutes 46.00 per cent per cent and the young age group constitutes 24.66 per cent.

Table 1.1 Age group of the respondents

Age group	No. of Respondents	Percentage
Old age(45 years above)	44	29.34
Middle age(30-45 years)	69	46.00
Young age(19-30 years)	37	24.66
Total	150	100

Source: Computed

Gender: Table 1.2 indicates that the male member constitutes 48 members which have 32.00 per cent and female group constitute only 92 members which have 68.00 per cent of the total respondents.

Table 1.2 Gender group of the respondents

Sex categories	No. of Respondents	Percentage
Males	48	32.00
Females	92	68.00
Total	150	100

Source: Computed

The number of days, the beneficiaries worked under MGNREGA was regressed on the factors like age, gender, education, family size and landholding size of the workers to analyse the relationship between the number of days worked under the MGNREGA and the contributing factors. Therefore, the impact of MGNREGA on employment of beneficiaries analyse with the help of primary data, which is tested by correlation and regression model.

Type of Family: Table 1.3 shows the majority of respondents are living in joint families (65.33%), followed by 21.33 per cent of the respondents living in the Nuclear family and others are 13.34 per cent respectively.

Table 1.6 family type of the respondents

Type of family	No. of Respondents	Percentage
Nuclear	32	21.33
joint	98	65.33
Other	20	13.34
Total	150	100

Source: Computed

Education: Table 1.4 shows the educational qualification of the respondents. Educational qualification of the respondents are grouped into the four groups such as the primary educated group groups, secondary educated groups and college educated groups and illiterate group. The respondents who are studied from class 1 to 7th comes under the primary educated group, those who are studied up to 8th to 12th comes under the secondary educated group and those who are 12th to above comes under the college educated group. But those who have not attending school education they are considered as the illiterate people. Further, it is found that the secondary educated group constitute 5.33 per cent of the total respondents, the primary educated group constitute 26.00 per cent but 68.67 per cent of the respondents are belongs to the illiterate categories.

Table 1.4 Educational group of the respondents

Education groups	No. of Respondents	Percentage
College Educated Group	00	00.00
Secondary Educated Group	8	5.33
Primary educated Group	39	26.00
Illiterate Group	103	68.67
Total	150	100

Source: Computed

Farmers Categories: Table 1.5 shows out of 150 respondents, majority of the beneficiaries belongs to landless farmers, 4.77 per cent belongs to small farmer categories and only 2.00 per cent of beneficiaries belong to marginal farmer's categories respectively. It could be inferred that most of the respondents having land less labour categories in the study area.

1.5 farmers Categories of the respondents

Categories of farmers		
Marginal farmers	3	2.00
Small farmers	7	4.67
Semi medium farmers	0	0.00
Medium farmers	0	0.00
Large farmers	0	0.00
Landless farmers	140	93.33
Total	150	100.00

Source: Computed

(b) Impact of MGNREGA on employment

The number of days, the beneficiaries worked under MGNREGA was regressed on the factors like age, gender, education, family size and landholding size of the workers to analyse the relationship between the number of days worked under the MGNREGA and the contributing factors. Therefore, the impact of MGNREGA on employment of beneficiaries analyse with the help of primary data, which is tested by correlation and regression model.

Correlation analysis: The collected primary data is analysed using Karl Pearson correlation coefficient is used to explain the relationship between the dependent and independent variables.

Table 1.6 Correlation matrix

Determinants	correlation coefficient (r)		
	Alathur	Anangoor	Arasamangalam
socio economic variables			
Age	-0.0340 ^{NS}	-0.0221 ^{NS}	-0.0471 ^{NS}
gender	-0.7322*	-0.7122*	-0.7011*
education	-0.6801*	-0.6211*	-0.5911*
Family size	0.0451 ^{NS}	0.0444 ^{NS}	0.0411 ^{NS}
Size of holding	-0.7111*	-0.7745*	-0.6722*

Source: Computed

Note: r is Pearson correlation coefficient

* Significant at the 0.01 level (2-tailed) NS- Not Significant

Table 1.6 depicts analysis of the correlation matrix which indicate that socio economic factor viz., gender, education and size of holding has a significantly negative relationship with employment of beneficiaries under MGNREGA in all the panchayats of Villupuram District [i.e., for example gender Alathur -0.7322, Anangoor r -0.7122 and Arasamangalam r -0.7011 n 500, p<0.01]. While, education [i.e., for example education Alathur -0.6801, Anangoor r -0.6211 and Arasamangalam r -0.5911 n=500, p<0.01] and size of land holding [i.e., for example size of land holding Alathur r = -0.7111, Anangoor r -0.7745 and Arasamangalam -0.6722, n 500, p<0.01]. Among the socio economic attributes viz., age and family size are insignificantly correlated with employment of beneficiaries under MGNREGA in all the panchayats of Villupuram District. Therefore, age and family size are not to be taken for the further analysis in the log-liner model.

Regression Analysis: The collected primary data is analysed using regression equation is used to explain the impact of socio economic factors on employment of beneficiaries under MGNREGA. The dependent variable, Number of days worked under the MGNREGA (Y) is depicted as a function of independent variables: socio economic factors: gender (x1), education (x2) and land holdings (x3); in the following log linear regression equation is: $\text{Log} Y = \alpha_0 + \log\beta_1x_1 + \log\beta_2x_2 + \log\beta_3x_3 + \varepsilon \dots\dots (1)$

Where,

Y = Number of days worked under the MGNREGA

α_0 = intercept

$\log\beta_1x_1$ = gender

$\log\beta_2x_2$ = Education

$\log\beta_3x_3$ = size of holding

ε - error term

The conceptual framework depicts the relationship between the dependent (Number of days worked under the MGNREGA) and independent variables (socio economic factors viz., gender (x1), education (x2) and size of holding (x3) based on the hypotheses for the study. The ‘t’ values are the result of a test of the significance of the relationship, that is, whether the Number of days worked under the MGNREGA variation is due to the effect of the socio economic variables on Number of days worked under the MGNREGA. Of the three explanatory variables viz., gender (x1), education (x2) and size of holding (x3) are determine the variations of Number of days worked under the MGNREGA significantly at 1 per cent level as shown in ‘t’ value in the all four zones of Chennai.

Table 1.7 impacts of socio economic factors on employment

(Dependent Variable: Number of days worked under the MGNREGA)

Name of the Variables	Panchayats		
	Alathur	Anangoor	Arasamangalam
gender (X1)	-0.9486* (12.66)	-0.7915* (15.64)	-0.7621* (13.08)
education (X2)	-0.9614* (6.43)	-0.6802* (5.42)	-0.5032* (6.45)
Size of holding (X3)	-0.6541* (6.78)	-0.5815* (11.38)	-0.4218* (9.11)
Constant	19.1104* (18.7)	16.041* (13.2)	13.651* (13.22)
R2	0.7194	0.6999	0.6871

Source: Computed

* Significant at the 1 per cent level (Figure in parentheses represents’ values)

The results for regression analyses table 6.38 show that the coefficient of determination R^2 0.7194 (Alathur) R^2 0.6999 (Anangoor) and R^2 0.6871 (Arasamangalam), it shows that the independent variables accounts for 71.94 per cent in Alathur, 69.99 per cent in Anangoor and 68.71 per cent in Arasamangalam changes in the variation of Number of days worked under the MGNREGA. The value for the R squared is significant at .0001 levels, which shows that the findings are statistically robust.

The value of elasticity co-efficient show that the socio economic factors viz., gender has a co efficient value of -0.9486 Alathur, -0.7915 and Arasamangalam-0.7621 for gender the value of elasticity co efficient -0.9614, Alathur, -0.6802 Anangoor and -5032, while, size of holdings the value of elasticity co efficient -0.6541, Alathur, -0.5815, Anangoor and Arasamangalam, -0.4218 and significant level of 0.000. The standardized coefficient values are relatively negative and low value for coefficient, depicting that increase in gender, education and size of holding leads to decrease in Number of days worked under the MGNREGA respectively in all three Panchayats of Villupuram District of Tamilnadu. Among the four panchayats, the impact of socio economic factors is higher in Alathur followed by Anangoor and Arasamangalam. As Alathur comparatively larger in Villupuram Distinct, the socio economic influence is higher than in the other three Panchayats.

5. CONCLUSION:

It could be concluded from above discussion that the majority of the participants of MGNREGA was relatively poor, based on socio-economic parameters, religious neutrality was found in the participation and caste category showed that backward ethnic groups participated in greater proportion than the general caste people. Educational status of the beneficiaries was low. More than fifty per cent of the families were headed either by illiterates or by people educated only up to primary level. Further, it could be revealed the total number of days worked in a year after implementation of MGNREGA significantly increased to 201 days, reflecting 16 per cent increase. Regression analysis has revealed that number of days worked, income, debt burden, gender, education and land holdings size of the beneficiaries significantly influence the employment, income, expenditure and savings of sample beneficiaries under MGNREGA.

The socio economic factors like age and family size were not significantly impact on employment under MGNREGA. Whereas, other socio economic variables like gender, education and landholding size were significantly impact on Number of days worked under the MGNREGA as co efficient values is concerned. Further, the adjusted R^2 value the coefficient of determination R^2 0.7194 (Alathur) R^2 0.6999 (Anangoor) and R^2 0.6871 (Arasamangalam), it shows that the independent variables accounts for 71.94 per cent in Alathur, 69.99 per cent in Anangoor and 68.71 per cent in Arasamangalam changes in the variation of Number of days worked under the MGNREGA. The value for the R squared is significant at .0001 levels, which shows that the findings are statistically robust

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