



Voices from the Field: Evaluating Beneficiary Satisfaction in MGNREGS Implementation

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Abstract

MGNREGS is the largest make-work programme ever launched in the world. The Ministry of Rural Development, Government of India is giving priority treatment to MGNREGS, considering the role it has been playing in transforming rural lives. Both Central and State Governments give due consideration to the scheme, rather than any other rural development schemes. Considering the socio-economic and political structure of Kerala, MGNREGS has enormous scope in reaching out to the poor and in executing better quality works appropriate for natural resource management and sustainable development. Better planning of works, time-bound completion and efficiency of works to a large extent depends upon the active participation and involvement of the beneficiaries in various processes of the scheme implementation. Therefore, this paper focuses on the determinants of satisfaction of MGNREGS beneficiaries in different facets of work implementation aspects of MGNREGS in Kerala using primary data collected from different regions of the state through field survey. The study revealed that the satisfaction of beneficiaries is mainly based on the benefit itself and not on the other specifications of MGNREGS.

Keywords: make-work programme, beneficiaries, rural lives, determinants

Introduction

The arena of development planning in India gives due priority to growth with social justice. The wage employment programmes initiated since 1980, focussed mainly on ensuring social justice by addressing the problems of rural poor. Despite these efforts, the issues of poverty and unemployment have been rampant in India. The wage employment and poverty reduction strategies implemented in India suffer from various anomalies such as lack of awareness, diversion of funds, lack of proper monitoring and verification, gender inequality, inadequate capacity of implementing agencies, lack of accountancy and transparency, multiplicity of several other schemes, and most importantly, the deficiency of rural public assets. Corruption, inefficiency and non-accountability tarnished the credibility of these programmes. The presence of local contractors, through whom the most Government programmes have been implemented in India, emerged as major sources of exploitation of the rural poor, especially women (Ambasta et.al, 2008). Hence, these programmes have limited impact on the rural lives and the twin crisis of poverty and unemployment continued to persist in Indian economy. At this juncture, the Government has enacted the National Rural Employment Guarantee Act, later known as the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). This wage employment programme came up with a legal guarantee of work to the

unskilled workers at a minimum wage rate. The element of guarantee in the programme opens up new avenues for the rural poor to change their living conditions, free from the ailments caused by poverty and unemployment.

Unlike the predecessors, MGNREGS has ample scope in a developing country like India suffering from the hardships of employment scarcity. With its legal guarantee of work, the scheme ensures a demand driven, bottom-up approach in employment. The Government has remarked the Act as an “Act of the people, by the people and for the people” (CSE, 2008). MGNREGS has been envisaged as a livelihood-generating programme. Government can provide valuable insurance against the risks faced by India’s rural poor in their daily lives. (Dutta et.al, 2012). This people-centred approach is also expected to foster the process of inclusive growth, the main agenda behind India’s rural development. Studies show that though the scheme has attracted the rich as well as the lower sections of the society, it still reaches the most disadvantaged (Zimmermann, 2014). Thus, this self-targeting scheme is anticipated to change the face of rural India by enhancing the living conditions of the rural poor and to promote pro-poor economic growth.

Literature Review

Since the study exclusively focused on the satisfaction of beneficiaries and the determinants of satisfaction, the review of literature was also done and circumscribed in accordance with the planning, implementation and outcome of MGNREGS from the perspective of its beneficiaries.

Khera (2008) explains the impact of workers’ organisation on employment generation under MGNREGS. Her study was based on a six- State survey covering Bihar, Chhattisgarh, Jharkhand Madhya Pradesh, Rajasthan, and Uttar Pradesh. The coverage of the study was two Districts from Madhya Pradesh and two Blocks from each District. Badwani and Sidhi were the selected Districts. Interviews with 50 randomly selected MGNREGS workers were conducted. The study was primarily meant to assess the Jagrut Adivasi Dalit Sangathan (JADS) – an unregistered workers’ organisation with a membership of 3500 families. Her study revealed innumerable changes and work culture among the workers belonging to this group. These workers were more aware of their rights and entitlements under MGNREGS. JADS has achieved a lot in addressing some of the moot problems associated with the implementation of the scheme. Women workers were more aware of their right to have child care facilities at the work sites. Similarly, the workers would raise their voice when unemployment allowance was denied. They were empowered to take any decision and to question the implementers when they curtailed any of their rights. Another notable impact the author reveals is their concern to use properly the available funds to create more useful assets. In short, through her study on JADS, she portrays a positive effect on MGNREGS and in turn specified the expected impact of MGNREGS on activating GSs, empowering women and developing rural areas.

Mehrotra (2008) examines the key issues in the design and implementation of MGNREGS based on secondary data sources. He also analyses the performance of the programme in the first two years of implementation. His article reveals that despite the lack of awareness among the people about the scheme, the total employment generated under this was much higher than that of earlier employment programmes. An average of 43 days was accomplished in the very first year of implementation. Considering the first phase Districts alone, about 2.1 million households completed 100 days of work. He also noted interstate differences in the performance of the scheme. He remarked Rajasthan as the ‘star performer’ in terms of employment generation. In terms of workers’ participation, an overwhelming proportion belongs to Scheduled Caste (SC) and Scheduled Tribes (ST) which propagates the self-targeting nature of the scheme. His study also highlighted the challenges involved in the scheme implementation. Lack of proper awareness, lack of effective monitoring and evaluation, lack of revision in the Schedule of Rates, lack of convergence with other schemes and delays in release of funds were noted.

Patel (2010) in a discussion paper mentioned the need for capacity building of PRIs to strengthen the implementation of MGNREGS. He commented that the active participation of PRIs can engender millions of sustainable livelihood following the initial rounds of wage employment and asset creation. Being the pivotal implementing authority, the PRIs can ensure participatory democracy and plan for people's development through the increased flow of funds. He revealed that the PRIs functionaries were not aware of the full features of the scheme. On an average, the workers were getting work for only 40 days instead of the stipulated 100 days. His article also shows that the delay in wage payments was the crux issue which emanates from the lack of delays in work measurements, bottleneck in the flow of funds, improper record keeping and hurdles related to bank payments. As opined by the author, capacity building remains the only solution to the above mentioned lacunae. He concludes by saying that the participatory approach accompanied by empowerment and capacity building of Gram Panchayats and Gram Sabhas will certainly result in creating productive assets generating massive employment and improving the productivity of small farms.

Kerala State Planning Board (2011) studied the performance of MGNREGS in the State by taking the districts covered during the first and second phase of implementation. Two Panchayats from two Blocks were used as the sample, one represents the best performance and the other represents low/average performance with the intention to study the strength and weakness of the scheme in the State. In addition to this, this study also looks into analysing the performance of the demand driven aspect of the scheme, the extent of empowerment, the creation of productive assets and the protection of environment possible through the scheme. The study shows that the scheme was successful in meeting its objectives. The poor and the deprived sections of the society have benefitted more from the implementation of MGNREGS. Income, savings, purchasing power, social relationships etc. were enhanced. The works undertaken under the scheme also proves beneficial to the beneficiaries as well as to the society. Overall, the study reveals that MGNREGS was truly successful in its implementation in the State despite some limitations. To improve the functioning of the scheme, the study recommended for dovetailing of the scheme funds and activities with the other local level funds and activities. An increase in wage rate so as to retain and attract more workers to the scheme was also suggested.

Sen (2014) identified the factors which affect the success and failure in the implementation of MGNREGS. Political economy was one of the crucial factors which determine demand-driven nature of the scheme. He identified that it was not demand but supply determines the success of these types of Government schemes. Factors within the political economy such as State capacity and commitment, local power relations, the role of lower-level functionaries and political competition were the factors which determine the supply of work. He cited the example of Chhattisgarh which is a poor State in terms of its economic and organisational capacity, yet is one of the better performers because of the commitment of the State and administration. He also suggested that in order to strengthen the demand driven aspect of MGNREGS, focus should be laid on local level Social Audits and funding and tracking of outcomes should be made mandatory.

Breitkreuz et.al (2017) in their explorative study assessed the extent to which MGNREGS has been able to provide rights based social protection through guaranteed employment for SC, ST and women in Kerala, Tamil Nadu and Odisha. The study shows that MGNREGS usage varies among regions. The guarantee of rights based employment depends on effective governance. The study also reveals gender and class based inequalities prevailing in some parts. The study questioned the long term transformative role of MGNREGS in ensuring food security and generation of income. The study suggested the transformation of rural poor through Self Help Groups (SHG's).

Vij et.al (2017) analysed the impact of MGNREGS on women based on secondary data from the National Sample Survey Office and a household level survey. The study was conducted in four Villages namely, Aurapalle and Dokur in Mahbubnagar District of Telangana and Pamidipadu and Janapalacheruvu in Prakasam District of Andhra Pradesh. In order to understand the issues pertaining to women's participation in the scheme 220 households were selected. Gender and Development (GAD) framework was followed in the study. Along with household survey, Focus Group Discussions (FGD's) and key person interviews were also used. The GAD framework inculcates social and economic status of rural women in terms of their decision making capacity and a critical examination at the place of work as well as in various activities in the household domain. The study revealed that despite the overall negative employment generation under the MGNREGS between 2011-12 and 2014-15, rural women in both the States have shown higher levels of participation under the scheme as compared to men. As per this study, strenuous work and domestic chores were the major reasons which prevent some women from participating in the scheme. The study also remarked that though the declining trend of general work participation rate at the national level, the two selected Southern States have performed effectively. The study has suggested an 'innovative livelihood generation' policy design in order to extent the work opportunities available for women. The study concludes that, despite some of the anomalies, the scheme has benefitted the rural women towards empowering themselves and thus heralds a positive growth. They also mentioned that in Andhra Pradesh and Telangana women's participation in MGNREGS has been encouraging and has certainly benefitted them.

Statement of Problem

MGNREGS beneficiaries, Gram Sabha's and Gram Panchayats are the key elements in MGNREGS implementation and for the success of the scheme. Better planning of works, time-bound completion and efficiency of works to a large extent depends upon the active participation and involvement of the beneficiaries in various processes of the scheme implementation. Unlike other wage employment programmes, the scale, architecture and thrust of the Act is formulated in such a way to optimize its outcome to the stakeholders and to the rural economy. Moreover, they are the key sources for creating productive assets in the economy. In spite of the ability of MGNREGS works to transform rural lives, the performance of these works has been not up to the desired level in Kerala when compared to other States. Studies on MGNREGS in Kerala conducted earlier by experts and researchers and various Government reports exclusively focus on the impact-assessment of the scheme. It is to be pointed out that none of the studies on MGNREGS attempted to analyse different aspects of MGNREGS work execution from the perception of its beneficiaries and the effect of official process on better execution of works. This warrants a need to assess the satisfaction level of workers/beneficiaries in various aspects of the scheme

Objectives of the Study

- To assess the satisfaction level of beneficiaries of MGNREGS in Kerala
- To examine the determinants of satisfaction of MGNREGS beneficiaries.

Conceptual Framework

The economics of MGNREGS is at par with the theory of "Big Push" put forward by P.N Rosenstein Rodan in 1943. The theory contends that a 'big push' is inevitable where the market fails to provide the incentive necessary to individuals to take up any activity which is productive. When there is a slowdown in the process of growth, this will easily reflect in the backward regions of the country where the distress prevails. Hence, Government intervention is essential to give a big push to these regions. In the words of Rodan, 'in order to get out of from the 'low-level equilibrium trap', a big push is needed (Rodan,

1943). The employment guarantee of India assumes great significance as an effort to enrich the backward regions of India where the people are struggling hard to earn a livelihood. The initial public investments for the scheme implementation would spur private investments in the long-run.

(Nurkse, 1952) and (Tinbergen, 1994) accepted the efficacy of employment guarantee programmes as a development paradigm that can promote sustainable employment as well as sustainable development. The surplus labour force can be used for labour intensive works to generate rural assets in the economy. In the long run, these assets can raise the rate of growth of sustainable employment. Investment should be made to create employment initially, but it mandates increasing the productivity of labour in the future. In the words of Nurkse, “the construction of public works such as river dams, irrigation canals and roads can typically make use of masses of unskilled labour with relatively little equipment” (Nurkse, Reflections on India's development Plan., 1957). Thus, these programmes have emerged as a tool that promotes strategic use of surplus man power for promoting pro-poor growth leading to sustainable development (Tinbergen, 1994).

The aforementioned theories and perspectives give an impetus to indulge deeply to an analysis of MGNREGS works, its capability in covering the rural population, its effect on employment generation and on the quality of these works in Kerala. Every theory has its own implications to MGNREGS. Therefore, applying a particular theory to explain the pattern of works implementation and its effects may be inadequate and inappropriate. This combined analytical and/or theoretical framework may be considered appropriate and reasonable for the study.

Methodological and Statistical Framework

The study is descriptive and exploratory in nature. Primary data was used for the analysis of the study. Primary data was collected from the beneficiaries of MGNREGS during 2020-21. Kukeran formula was used to find out the required sample size for the study.

$$n = \frac{\frac{Z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{Z^2 pq}{d^2} - 1 \right)}$$

Z = statistic for a level of confidence (e.g. 1.96 for 95 percent)

p & q = Expected proportion (0.5 used for sample needed)

n = sample size with definite population

d = precision (0.05 used for sample needed)

N = Whole Statistical population

$$\frac{\frac{1.96^2 \times 0.5 \times 0.5}{0.05^2}}{1 + \frac{1}{955976} \left(\frac{1.936^2 \times 0.5 \times 0.5}{0.05^2} - 1 \right)} = 384$$

The sample size was estimated as 384 beneficiaries at margin error of 5 percent and confidence level of 95 percent with response distribution of 50 percent. The sample was selected by multi-stage random sampling technique. The districts selected from North, Central and South Kerala are Kannur, Thrissur and Alappuzha respectively. The required sample size for each region was estimated proportionally as follows.

Region	Districts	Population	Sample
North	Kannur	54234	106
Centre	Thrissur	60476	119
South	Alappuzha	81345	159

From each Districts, 4 Panchayats were selected at random. The sample size of each District was selected proportionally from the list of beneficiaries provided by Panchayat. The sample beneficiaries were selected from the lists using random number generated in Microsoft excel. Data from the beneficiaries was collected with the help of pre-tested structured interview. The important statistical tools for the analysis of primary data were descriptive statistics, one-sample t test, Chi-Square test and multiple regression analysis.

Data Analysis and Interpretation

The satisfaction level of beneficiaries in various aspects of the scheme is studied by examining various aspects such as satisfaction in wage, satisfaction in the working environment, satisfaction in the involvement of officials, satisfaction in the current working time, satisfaction in the nature of works taken up under the scheme, satisfaction in the quality of work done, satisfaction in the work allocation pattern of Gram Panchayats and satisfaction in the worksite facilities provided by the Gram Panchayats.

Table 1 Satisfaction level of beneficiaries in various aspects under MGNREGS

Aspects		Very Dissatisfied	Dissatisfied	Neither Satisfied Nor Dissatisfied	Satisfied	Very Satisfied	Mean	SD	t	Sig.
Satisfaction in wage	n	72	76	80	79	77	3.03	1.40	0.474	0.636
	%	18.75	19.79	20.83	20.57	20.05				
Satisfaction in the working environment	n	0	0	56	234	94	4.10	0.62	34.851	0.000
	%	0.00	0.00	14.58	60.94	24.48				
Satisfaction in the involvement of officials	n	0	0	91	177	116	4.07	0.73	28.503	0.000
	%	0.00	0.00	23.70	46.09	30.21				
Satisfaction in work time	n	77	230	61	16	0	2.04	0.73	-25.901	0.000
	%	20.05	59.90	15.89	4.17	0.00				
Satisfaction in the nature of works	n	0	0	44	301	39	3.99	0.47	41.563	0.000
	%	0.00	0.00	11.46	78.39	10.16				
Satisfaction in the quality of work	n	0	0	60	324	0	3.84	0.36	45.477	0.000
	%	0.00	0.00	15.63	84.38	0.00				
Satisfaction in work allocation	n	0	0	48	336	0	3.88	0.33	51.778	0.000
	%	0.00	0.00	12.50	87.50	0.00				
Satisfaction in the worksite facilities	n	39	153	93	75	24	2.72	1.08	-5.087	0.000
	%	10.16	39.84	24.22	19.53	6.25				

Source: Primary Survey

From the above table it can be seen that 18.75 percent of beneficiaries is very dissatisfied with wage getting from MGNREGS and 19.79 percent dissatisfied with it. When 20.88 percent neither satisfied nor dissatisfied with the wage, 20.57 percent expressed satisfaction and 20.50 expressed very much satisfaction about wage. The mean satisfaction score is estimated as 3.03 which can be considered as average level of satisfaction because the significance level of one-sample t test with test value 3.00 is greater than 0.05. When the satisfaction from working environment is considered, the mean satisfaction score is 4.10 which can be considered significantly higher level of satisfaction because the significance level of one-sample t test with test value 3.00 is lower than 0.05. Similarly, when considering the satisfaction in the involvement of officials, satisfaction in the nature of works, satisfaction in the quality of work and satisfaction in work allocation, the mean satisfaction score is 4.07, 3.99, 3.84 and 3.88 respectively. In these variables also the beneficiaries expressed significantly higher level of satisfaction. On the other hand, as far as the satisfaction in the work time and satisfaction in the work site facilities is considered, the mean satisfaction score is 2.04 and 2.72 which can be considered as a significantly lower level of satisfaction, since the significance level of one sample t test with test value 3.00 is smaller than 0.05.

Table 2 Weights computed for sources of satisfaction using paired ranking method

Sources of satisfaction	Weights
Wage	0.056
Working environment	0.208
Involvement of officials	0.208
Work time	0.028
Nature of works	0.125
Quality of work	0.139
Work allocation	0.153
Worksite facilities	0.083

Source: Primary Survey

In order to find out a composite variable representing level of satisfaction of beneficiaries on the work undertaken by MGNREGS, weights for each sources of satisfaction was computed using paired ranking method. Two experts in the field of MGNREGS were separately given ranks for the sources of satisfaction and the average of the ranks were assigned as the weight of the sources. Table 6.24 presents the weights of the sources of satisfaction. The highest weight of 0.208 was obtained for working environment and involvement of officials. The result indicates that according to the opinion of experts, the most important source of satisfaction should be derived from the working environment and involvement of officials in the implementation of works for the success of the MGNREGS programme. The other important sources of satisfaction should be from work allocation (0.153) followed by quality of work (0.139). Nature of works (0.125) and worksite facilities (0.083) are the other important sources of satisfaction. The lowest importance was given to work time with a weight of 0.028. During the data collection, it was noted that almost all sample respondents expressed their displeasure on the duration of work time. Since majority of the beneficiaries in Kerala are women, they found it difficult to follow the present timing under the scheme. They insist that the work time should be rescheduled as 10am to 4pm.

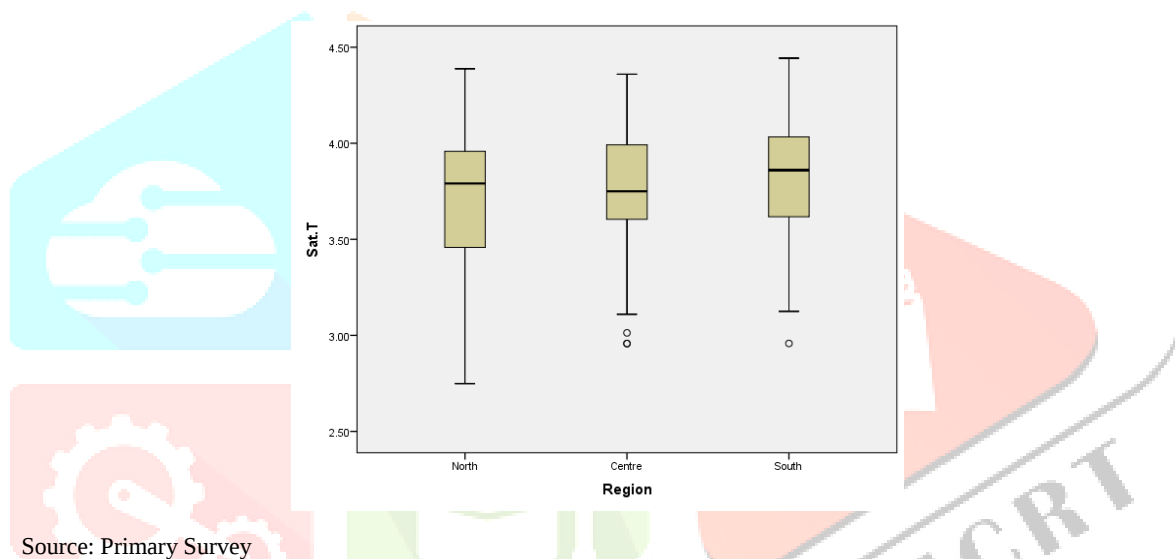
By using the computed weights, the weighted average of satisfaction score for the various sources were calculated and the descriptive statistics of the total satisfaction score was presented in Table 6.25. From the table, it can be seen that the mean satisfaction score of the beneficiaries of MGNREGS is 3.78 with a standard deviation of 0.32. The median of the score is slightly higher than mean value. The score ranges from a minimum of 3.78 to a maximum of 4.44.

Table 3 Descriptive statistics of total satisfaction of respondents about MGNREGS

Descriptive statistics	North	Centre	South	Total
Mean	3.72	3.76	3.83	3.78
Median	3.79	3.75	3.86	3.81
Std. Deviation	0.35	0.29	0.31	0.32
Variance	2.75	2.96	2.96	2.75
Maximum	4.39	4.36	4.44	4.44
Minimum	3.72	3.76	3.83	3.78

Source: Primary Survey

The mean score of satisfaction is found to be the highest in Southern region with a score of 3.83 followed by Central region with a score of 3.76. The score of respondents of Northern region is 3.72. From the result it can be inferred that beneficiaries of Southern region have comparatively higher satisfaction than other regions. The lowest satisfaction is among beneficiaries of Northern region.



Source: Primary Survey

Figure 1 Box plot of level of satisfaction of beneficiaries on works undertaken by MGNREGS

Figure 6.1 presents the box plot of level of satisfaction of beneficiaries on works undertaken by MGNREGS in different regions of Kerala. The figure shows that the level of satisfaction among beneficiaries of South and Central regions is comparatively consistent as the length of the box plots is shorter than that of North region. The score is found to be nearly normal in the case of Southern region but, it is skewed towards higher value in Northern region as the median line is shifted to the upper part of the box and the upper whisker curve is comparatively shorter than the lower whisker. In Central and Southern regions, there exist few outliers at the lower level of the scores. These outliers were excluded for further analysis of the data.

Determinants of satisfaction

The determinants of satisfaction of beneficiaries on the works undertaken by MGNREGS were identified by using multiple regression analysis. The composite variable representing level of satisfaction of the beneficiaries was taken as dependent variable. Their characteristics such as age, gender, caste, marital status, education and income along with their opinion about importance of MGNREGS to the family, changes occurred after availing MGNREGS work, perception about the usefulness of works, frequency of Panchayat officials visiting the worksite, status of getting sufficient equipment to carry out the work, promptness in wage payment, status of discussing the selection of works in Gram Sabha meetings and status of having asset benefitted from MGNREGS are the independent variables taken. As the characteristics of beneficiaries are categorical variables, they are converted into dummy variables as given below.

Variables	Dummy variables	Reference Category
Age	A1: 1 if less than 40, 0 otherwise	70 and above
	A2: 1 if 40-49, 0 otherwise	
	A3: 1 if 50-59, 0 otherwise	
	A4: 1 if 60-69, 0 otherwise	
Gender	G: 1 if male, 0 otherwise	Female
Caste	C1: 1 if SC/ST, 0 otherwise	General
	C2: 1 if OBC, 0 otherwise	
Marital status	M1: 1 if married, 0 otherwise	Widowed/Separated
	M2: 1 if unmarried, 0 otherwise	
Education	E1: 1 if primary, 0 otherwise	Technical
	E2: 1 if high school, 0 otherwise	
	E3: 1 if higher secondary, 0 otherwise	
	E4: 1 if degree/PG, 0 otherwise	
Income	I1: 1 if up to 1500, 0 otherwise	Above 6000
	I2: 1 if 1501-3000, 0 otherwise	
	I3: 1 if 3001-6000, 0 otherwise	

Backward selection method of regression analysis was used to find out the significant determinants of satisfaction of beneficiaries. The backward selection method eliminated 13 insignificant variables from the regression model and at the 14th step, the final regression model was estimated.

Table 4 Model Summary of the initial and final regression model on the determinants of satisfaction of beneficiaries

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.983	0.966	0.964	0.06023	
14	0.983	0.965	0.964	0.05981	2.105

Source: Primary Survey

Table 4 presents the model summary of the initial and final regression model on the determinants of satisfaction of beneficiaries. From the table, it can be seen that the R square of the initial and final regression models are 0.966 and 0.965 respectively. The difference between the final and initial regression model is only 0.001. The result indicates that the eliminated insignificant variables have very low effect on the level of satisfaction of beneficiaries. The R square of the final regression model indicates that 96.5 percent variation in the level of satisfaction of beneficiaries is determined by the independent variables retained in the final regression model. The Durbin- Watson of the final regression model is found to be 2.105, which is nearly equal to the recommended value of 2.00. From the result, it can be inferred that the independent variable is free from serial correlation which is one of the important desirable qualities for doing regression analysis.

Table 5 ANOVA of the initial and final regression model on the determinants of satisfaction of beneficiaries

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.208	24	1.55	427.336	0.000
	Residual	1.302	359	0.004		
	Total	38.511	383			
14	Regression	37.18	11	3.38	945.028	0.000
	Residual	1.331	372	0.004		
	Total	38.511	383			

Source: Primary Survey

Table 5 which shows the result of ANOVA indicates that both the initial and final regression models are valid for explaining the satisfaction of beneficiaries on the basis of selected independent variables as the significance levels of F values are less than 0.05. Table 6 presents the coefficients of initial regression model on determinants of satisfaction of beneficiaries.

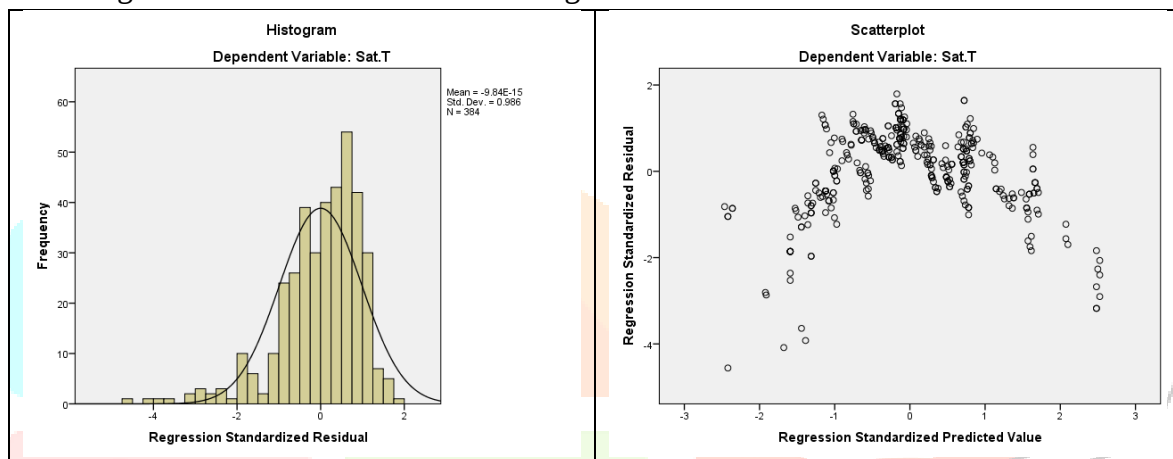
Table 6 Coefficients of initial regression model on determinants of satisfaction of beneficiaries

Variables		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
(Constant)		2.960	0.065		45.647	0.000		
Age	A1: 1 if less than 40, 0 otherwise	-0.029	0.021	-0.030	-1.413	0.159	0.213	4.704
	A2: 1 if 40-49, 0 otherwise	-0.032	0.019	-0.045	-1.681	0.094	0.133	7.510
	A3: 1 if 50-59, 0 otherwise	0.234	0.018	0.347	12.849	0.000	0.129	7.743
	A4: 1 if 60-69, 0 otherwise	0.242	0.018	0.323	13.421	0.000	0.162	6.161
Gender	G: 1 if male, 0 otherwise	-0.132	0.009	-0.170	-15.468	0.000	0.779	1.283
Caste	C1: 1 if SC/ST, 0 otherwise	0.259	0.008	0.388	30.642	0.000	0.586	1.706
	C2: 1 if OBC, 0 otherwise	0.000	0.008	0.000	-0.012	0.991	0.583	1.715
Marital Status	M1: 1 if married, 0 otherwise	0.270	0.009	0.316	29.336	0.000	0.813	1.230
	M2: 1 if unmarried, 0 otherwise	-0.027	0.025	-0.011	-1.057	0.291	0.828	1.207
Education	E1: 1 if primary, 0 otherwise	0.312	0.013	0.490	23.553	0.000	0.217	4.598
	E2: 1 if high school, 0 otherwise	0.037	0.013	0.051	2.727	0.007	0.272	3.670
	E3: 1 if higher secondary, 0 otherwise	0.010	0.015	0.011	0.672	0.502	0.365	2.741
	E4: 1 if degree/PG, 0 otherwise	-0.002	0.017	-0.002	-0.113	0.910	0.482	2.077
Income	I1: 1 if up to 1500, 0 otherwise	0.435	0.010	0.584	42.835	0.000	0.506	1.976
	I2: 1 if 1501-3000, 0 otherwise	0.146	0.009	0.225	15.906	0.000	0.470	2.126
	I3: 1 if 3001-6000, 0 otherwise	0.072	0.010	0.092	6.924	0.000	0.529	1.889
Importance of MGNREGS to the family		0.007	0.007	0.009	0.940	0.348	0.936	1.068
Changes occurred after availing MGNREGS work		0.004	0.006	0.008	0.780	0.436	0.899	1.113
Perception about the usefulness of works		0.003	0.007	0.004	0.435	0.664	0.917	1.090

Frequency of Panchayat officials visiting the worksite	0.006	0.007	0.008	0.814	0.416	0.934	1.071
Status of getting sufficient equipment's to carry out the work	0.005	0.010	0.005	0.515	0.607	0.940	1.063
Promptness in wage payment	0.013	0.007	0.020	1.979	0.049	0.925	1.081
Status of discussing about the selection of works in Gram Sabha meetings	-0.002	0.011	-0.001	-0.136	0.892	0.950	1.052
Status of having asset benefitted from MGNREGS	-0.004	0.008	-0.005	-0.446	0.656	0.924	1.082

Source: Primary Survey

From table 6, it can be seen that out of 24 independent variables, 11 of them have significant impact on the level of satisfaction of beneficiaries in the work undertaken by MGNREGS as the significance levels of t value are less than 0.05. Table 6.29 which present the coefficients of final regression model shows that the same significant variables exhibited as significant in the initial regression model are retained in the final model indicating that the variables are free from significant interaction.



Source: Primary Survey

Figure 2 Histogram of regression standardized residual and scatter plot of regression standardized residual on regression standardized predicted value

The histogram of the regression standardized residual presented in figure 2 is almost limited to the shape of normal distribution indicating that the residuals of the regression equation is almost normally distributed which is another important desirable quality for conducting the regression analysis. Similarly, the scatter plot of regression standardized residual on regression standardized predicted value are reasonably scattered in the plain indicating lack of homoscedasticity of residual. The other important desirable quality of lack of multicollinearity among independent variables is evident from the value of variance inflation factor (VIF) which is less than the threshold value of 10 for all independent variables. From the results, it can be concluded that the final regression model satisfies all the major assumptions of regression analysis and hence it can be used to study the variation in the level of satisfaction of beneficiaries with respect to the retained independent variables in the final regression model.

Table 7 Coefficients of final regression model on determinants of satisfaction of beneficiaries

Variables		Unstandardized Co-efficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
(Constant)		2.995	0.015		204.482	0.000		
Age	A3: 1 if 50-59, 0 otherwise	0.263	0.007	0.390	36.131	0.000	0.797	1.255
	A4: 1 if 60-69, 0 otherwise	0.269	0.009	0.359	30.792	0.000	0.682	1.467
Gender	G: 1 if male, 0 otherwise	-0.132	0.008	-0.170	-16.604	0.000	0.884	1.131
Caste	C1: 1 if SC/ST, 0 otherwise	0.260	0.007	0.390	39.919	0.000	0.975	1.026
Marital status	M1: 1 if married, 0 otherwise	0.272	0.008	0.318	32.185	0.000	0.950	1.053
Education	E1: 1 if primary, 0 otherwise	0.311	0.008	0.488	39.749	0.000	0.615	1.625
	E2: 1 if high school, 0 otherwise	0.032	0.008	0.045	3.843	0.000	0.678	1.475
Income	I1: 1 if up to 1500, 0 otherwise	0.435	0.010	0.584	44.100	0.000	0.529	1.891
	I2: 1 if 1501-3000, 0 otherwise	0.146	0.009	0.225	16.160	0.000	0.479	2.086
	I3: 1 if 3001-6000, 0 otherwise	0.073	0.010	0.093	7.186	0.000	0.549	1.822
Promptness in wage payment		0.014	0.006	0.021	2.149	0.032	0.961	1.040

Source: Primary Survey

From Table 7 which shows the coefficients of final regression model, it can be seen that dummy variable representing 50-59 and 60-69 are having significant effect on the satisfaction of beneficiaries. The coefficient of these two variables is 0.263 and 0.269. From the result it can be inferred that beneficiaries in the age group from 50-69 significantly have higher satisfaction compared to the reference category of 70 and above as well as younger age groups. Out of these two age groups, beneficiaries in 60-69 years age group have higher level of satisfaction compared to those in the age group 50-59 years. It was observed that most of the beneficiaries who are aged 60 and above were women who cannot engage in other available works for their livelihood. It may be inferred that MGNREGS offers an assured flow of income to this group of people who would have otherwise remained unemployed or underemployed. On the other hand, it was also informed that special provisions for elderly women workers are not available under the present implementation structure of the scheme.

The regression coefficient related to gender is -0.132 indicating that compared to the reference category of females, males have significantly lower level of satisfaction on the work undertaken by MGNREGS. The difference between the level of satisfaction of male and females is 0.132 units. This indicated that women are actively participating in MGNREGS works, since it creates decent and favourable work conditions for women (MoRD, 2012). It can be inferred that comparatively lower wage rate, parity in wages, more women friendly worksites, lower chances of skilled work etc. have impeded men in Kerala to participate in MGNREGS. At the same time, beneficiaries from SC/ST category showed significantly higher level of satisfaction on MGNREGS work compared to General and OBC category. This indicated the inclusion of the vulnerable sections of the society to a government sponsored scheme and their preference to work under the scheme rather than going for other works which earn low income.

Marital status wise analysis revealed that compared to widower/separated and unmarried, married beneficiaries have significantly higher level of satisfaction over the works undertaken by MGNREGS. During the survey, it was found that majority of the beneficiaries of the scheme in Kerala were married

women. For them, MGNREGS offers ample opportunities to earn a living so that they can assist their spouse in familial matters. But, it was observed that unmarried women in Kerala are not willing to work under MGNREGS may be because of cultural restraints and lack of freedom.

The regression coefficients of dummy variables representing primary and high school are found to be 0.311 and 0.032 respectively which indicates they are having significantly higher level of satisfaction about the work undertaken by MGNREGS compared to higher educated beneficiaries. The satisfaction is found to be the highest among beneficiaries having primary education with a value of 0.311. From the result it is clear that satisfaction on the work decreases as education increases. It is obvious that the vast number of underemployed people in Kerala is not ready to do less paid jobs, instead they prefer white collar jobs. Similarly, higher educated workers in MGNREGS were having less satisfaction in MGNREGS.

Similar type of negative relationship of level of satisfaction is seen in the case of family income of the respondents. The satisfaction is the highest among respondents having monthly family income up to 1500 with a value of 0.435. The level of satisfaction steadily decreases as level of monthly family income increases. From the analysis, it can be concluded that there prevails a negative relationship between family income and the level of satisfaction of beneficiaries. It further exhibits the accomplishment of self-targeting under MGNREGS.

Promptness in the wage payment was found to have significant positive impact on the level of satisfaction of beneficiaries on work undertaken by MGNREGS. As one unit increased in the promptness in wage payment, it found to have increased 0.014 units in the level of satisfaction of beneficiaries. Delay in wage payments has been the most severe stumbling block in the successful implementation of MGNREGS ever since its inception. Most of the beneficiaries surveyed expressed their concern over timely payment of wages. Perhaps, the survey also found out that MGNREGS beneficiaries in Kerala strongly wanted to increase the wage rate.

Conclusion

From the above analysis, it was evident that the most important factors affecting their level of satisfaction are their socio-economic and demographic characteristics. The result indicates that their satisfaction is mainly based on the benefit itself and not on the other specifications of MGNREGS. From the result it can be inferred that the benefits are getting for the targeted sections of the society in Kerala, where the scheme opens a space for them to work with dignity. Thus, self-targeting is working in the implementation of MGNREGS in the State. However, care must be taken to ensure apt practices of the specifications laid down under the MGNREG Act, so that the outcome can be maximized by all the means.

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