

# A case study of job implementation by MGNREGA in all districts of Kerala

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**Abstract** - The MGNREGA is a vital scheme in the current context of international economic crisis and national economic strike, where increasing collective demand is a main mission for the government. It has been identified that the MGNREGA has the capacity to change rural fiscal and social affairs at numerous steps. The present study is based on the secondary data from different authentic survey sources. This study shows how much effective was the implementation of MGNREGA in various districts of Kerala State. Through this study we make an attempt to establish the relation on total households applied for job cards and relation on material expenditure based on the secondary data related to the districts of Kerala state. Also identify the information regarding the relationship on averages of total job cards issued, averages of total households demanded work and averages of total households allotted work under MGNREGP in various districts of Kerala state in the years 2011-2012 and 2017-2018.

**Index Terms** - ANOVA, Correlation, Job cards, MGNREGA, Regression.

## INTRODUCTION

The Mahatma Gandhi National Rural Employment Guarantee Act or MGNREGA is an Indian labor act and community welfare measure which set sights on to secure the "right to work". This act is to provide for the development of livelihood surety of the families in India by offering at least 100 days of employment with guaranteed pay in every financial year to every household whose adult members accede to do inexpert labor-intensive work. This act was passed in September 2005 under the leadership of Dr. Manmohan Singh. Adult members of the house willing to do blue-collar unskilled work can register their names in their Gram Panchayat and have a job card within 15 days of action. Then they have to specify the maximum number of days along with details of the month they would be on hand for vocation. If the act execution is complete, all suitable families that submit an application for a job card should be given their respective job cards, and those who request employment should be given jobs.

This act has been a groundbreaking intervention in the country after its independence. Adjacent with the Right to Information Act, it exhibited a new period in fulfilling rights-based structures. The workers' rights/ claims were given main priority in the construction and implementation of labor production programs for the first time. The approval of the act publicized the changing approach to concerns of equity, with work being seen as a right of the employee, and not as a thing that was forced on to them by the authority. Another prominent feature of this act is that it connects the income assurance of the underprivileged sectors of the social order with conservation of natural resource. Other noticeable crucial features of MGNREGA implementation in the states are the increase in the level of participation of women in the labor force, a comparatively lower amount of annual person days generated, higher spending of income and reduced amount of the material component.

## IMPLEMENTATION OF MGNREGA

Nowadays, the execution of the MGNREGA is marked by some other features. The program is carried out by the Panchayati Raj system, as authorized in the act. The rural development organization in the block, district and state levels upheld and manage the act. The Kudumbashree system of public organization is also involved in this act enactment. This system works on the courses for providing better livelihood for people by mitigation of poverty and encouraging more women participation in the workforce. The planning of work and implementation is explained through step-by-step process. Individual bank accounts are compulsory for all MGNREGA workers so that the salary payment is done through the bank. Some units that are associated with MGNREGA are given below.

### A. Panchayats and mgnrega

Regardless of the execution of decentralization policies, many mammoth schemes in the operational area of Panchayats have neglected the Panchayats, bestowing them only a careless function. Due to this MGNREGA takes an important action by officially asserting that the Panchayats are the main head of operation for organizing and execution. Therefore, the act is considered to the first developmental legislation that gives a significant function to PRIs. In Section 16 of the Act, it is disclosed that at least 50% of the labor in terms of amount has to be executed via this scheme. But in Kerala, that is a 100% and also it is the duty of the Grama Panchayat to assign the aspirants to the respective work openings. The act also sketches the works of intermediate and district level Panchayats in preparing and management of execution of the act. The District Collector and the District Program Coordinator, are assigned with the responsibility to support the District Panchayat. Through the execution of this act the Grama

Panchayats have developed a strong existence over the years. This act has given the government, the opportunity to empower the Grama Panchayats by bestowing the responsibility of putting the act into practice.

#### *B. The kudumbashree system*

Among all the states of India, Kerala has the highest contribution of women in the catalogued work force of MGNREGA. Around 90% of the employees in the state are females. The principal motive for augmented involvement of women is the elevated pay rate for male workers which crafts the MGNREGA pay unappealing to them. Another prominent reason is that the yearly average of person days generated is comparatively low. The average person days created in Kerala in 2010-2011 is 40.85 which makes Kerala to be positioned at 21st among all the states. In Kerala, with 95% of entire expenses being used up on pays, the disbursement on wages is very much high. The outgoings on the material component is also low. Only Andaman and Nicobar Islands and Tamil Nadu are the other two states with low expenditure on material component. This was due to the State initiative to curb the expenditure on resources. This initiative was taken by the state government to guarantee zero exploitation in carrying out the program.

### **OBJECTIVE OF THE STUDY**

The objective of the current piece of research is to examine the effectiveness of the MGNREGA in districts of Kerala. Several vital indicators which have a straight connection on the functioning of MGNREGA are cast off and their patterns are scrutinized, studied and compared to have a large-scale view on the comparative working of the blocks and the villages of Kerala. Records associated to the execution of the program in all the 14 districts are collected from the official publications and other official sources of the state and central government departments. Study on numerous traits of enactment of the work assurance scheme is endeavored in this paper. Any data on MGNREGA related to a district means the cumulative data from the Block Panchayats and Grama Panchayats of that district since the plan is put into action through them itself.

### **RESEARCH OBJECTIVES**

To check whether there is a relation on total households applied for job cards in districts of Kerala state in the years 2011-2012 and 2017-2018.

To check whether there is a relation on material expenses in districts of Kerala state in the years 2011-2012 and 2017-2018.

To check whether there is a relation on averages of total job cards issued, averages of total households demanded work and averages of total households allotted work under MGNREGP in districts of Kerala state in the years 2011-2012 and 2017-2018.

### **METHODOLOGY**

Using Correlation and Regression Analysis

Correlation analysis is used in calculating the association between two continuous variables. Regression analysis denotes to evaluating the relation between the outcome and one or more variables. The correlation coefficient is calculated using the correlation analysis. It ranges between -1 and +1, denoted by  $r$  and computes the strength and direction of the linear association among two variables. The correlation among two variables can either be positive or negative or even zero. The sign and the magnitude of the correlation coefficient shows the direction and the strength of the association respectively.

Analysis of Variance

Analysis of variance (ANOVA) is a statistical method to analyze variation in a response variable determined under certain situations described by distinct factors. We also use ANOVA to examine likeness among numerous means of different samples by assessing variance among groups comparative to variance within groups.

### **STATISTICAL INTERPRETATION OF DATA**

Following are the results of the present study conducted using the secondary data received from different authentic sources.

To check whether there is any relation connecting total households applied for job cards in districts of Kerala state in the years 2011-2012 and 2017-2018.

The demand for manual unskilled labor is always assessed on the basis of the number of job cards applied by the job seekers through the Panchayati Raj institutions. The first step in the implementation of the scheme is requesting for work and obtaining a job card. Table 1 shows the number of job cards applied by the job seekers in the years 2011-2012 and 2017-2018.

Data related to the execution of the program in all the 14 districts are collected from the authorized publications and other official resources of the state and central government departments.

On inspecting table 1 it is seen that in Wayanad District, the total households applied for job card registered with 92483 households in 2011-2012 and this increased to 134153 households in the year 2017-2018. In Thrissur district, the total applied stood at 123216 in 2011-2012 and this grew to 266157 households in the year 2017-2018. In Thiruvananthapuram blocks, the total households applied for job card stood at 208040 in 2011-2012 and this raised to 373417 households in the year 2017-2018. In Pathanamthitta district, the total households applied for job card was 77745 households in 2011-2012 and this boosted to 133571 households in the year 2017-2018. In Palakkad blocks, the total households applied for job card stood at 164459 households in

2011-2012 and then enlarged to 325908 households in the year 2017-2018. In Malappuram blocks, the total households applied for job card stood at 165342 households in 2011-2012 and this improved to 302158 households in the year 2017-2018. In Kozhikode blocks, the total households applied for job card stood at 168978 in 2011-2012 and this boosted to 282664 households in the year 2017-2018. In the case of the blocks of Kottayam the total households applied for job card stood at 122188 in 2011-2012 and this escalated to 178135 households in the year 2017-2018. In Kollam blocks, the total households applied for job card stood at 152583 in 2011-2012 and this grew to 326127 households in the year 2017-2018. As seen in the table, in Kasargod blocks, the total households applied for job card stood at 71251 households in 2011-2012 and this escalated to 144222 households in the year 2017-2018. The blocks of Kannur have the total households applied for job card stood at 104670 households in 2011-2012 and then later increased to 202967 households in the year 2017-2018. The blocks of Idukki, the total households applied for job card stood at 126286 in 2011-2012 which grew to 182897 households in the year 2017-2018. The Ernakulam blocks has total households of 134969 who applied for job card in 2011-2012 and this rose to 215082 households in the year 2017-2018. In the case of Alappuzha blocks, the total households applied for job card stood at 174564 households in 2011-2012 and this increased to 258339 households in the year 2017-2018. For the entire state of Kerala, the total households applied for job card stood at 1886774 in 2011-2012 and this expanded to 3325797 households in the year 2017-2018.

TABLE 1

Districts	Total number of households applied for job cards in 2011-2012.	Total number of households applied for job cards in 2017-2018.
Alappuzha	174564	258339
Ernakulam	134969	215082
Idukki	126286	182897
Kannur	104670	202967
Kasargod	71251	144222
Kollam	152583	326127
Kottayam	122188	178135
Kozhikode	168978	282664
Malappuram	165342	302158
Palakkad	164459	325908
Pathanamthitta	77745	133571
Thiruvananthapuram	208040	373417
Thrissur	123216	266157
Wayanad	92483	134153
Total	1886774	3325797

Figure 1 the scatter plot corresponding to total household applied for job cards in the year 2011-2012 and 2017-2018.



Table 2 shows the correlation analysis between the total number of households applied for job cards in 2011-2012 and 2017-2018.

	Total number of households applied for job cards in 2011-2012	Total number of households applied for job cards in 2017-2018
Total number of households applied for job cards in 2011-2012	1	
Total number of households applied for job cards in 2017-2018	0.902756127	1

**Interpretation:** From table 2, we find that the correlation coefficient obtained for total households applied for job cards in districts of Kerala state in the years 2011-2012 and 2017-2018 is 0.902756127. This means that there is a "high positive correlation" between the number of total households applied for job cards in districts of Kerala state in the year 2011-2012 and number of total households applied for job cards in districts of Kerala state in the year 2017-2018.

To check whether there is a relation on material expenses in districts of Kerala state in the years 2011-2012 and 2017-2018. The material expenditure made by each district in the state of Kerala has to be also examined. Table 3 shows the district wise amount of expenditure incurred for materials (disbursed+ pending) under MGNREGP (in Rs. lakhs).

TABLE 3

Districts	Material expenses in 2011-2012	Material expenses in 2017-2018
Alappuzha	592.41	2457.71
Ernakulam	345.94	1332.06
Idukki	218.02	1571.9
Kannur	104.47	244.67
Kasargod	55.06	25.82
Kollam	256.77	280.99
Kottayam	159.75	993.55
Kozhikode	168.41	886.16
Malappuram	206.12	866.69
Palakkad	269.61	338.82
Pathanamthitta	128.5	284.25
Thiruvananthapuram	286.22	722.98
Thrissur	333.3	1093.54
Wayanad	167.07	370.56

Figure 2 shows the material expenditure in districts of Kerala in the years 2011-12 and 2017-18 under MGNREGP in Kerala State.

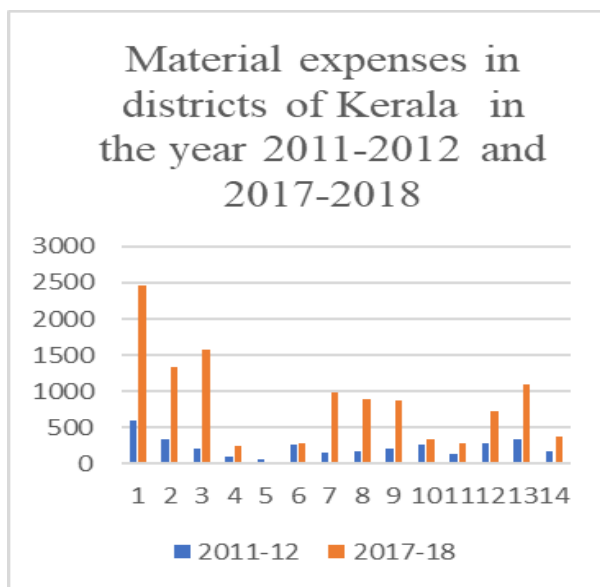


FIGURE 2

Regression Statistics	
Multiple R	0.800269
R Square	0.640431
Adjusted R Square	0.610467
Standard Error	409.756
Observations	14

TABLE 4

**Interpretation:** We can analyze the following from table 4. The coefficient of correlation obtained for the material expenses in the years 2011-2012 and 2017-2018 is 0.800269. This means that there is a "positive correlation". The absolute value shows the relationship strength. Here R square is exercised as the indication of goodness of fit. It illustrates the amount of points occupy on the regression line. Here R Square is 0.640431, which means that around 64% of our values fit the regression line model.

ANOVA	df	SS	MS	F	Significance F
Regression	1	3588577	3588577	21.3733	0.000587
Residual	12	2014800	167900		
Total	13	5603376			

TABLE 5

ANOVA segment is hardly exploited for simple linear regression. From table 5, the significant F value offers a hint about how dependable the result is. Here the F value is 0.000587 which is less than 5% level of significance. Therefore, the results of material expenses in districts of Kerala in the year 2011-2012 and 2017-2018 are reliable.

C) To check whether there is a relation on averages of total job cards issued, averages of total households demanded work and averages of total households allotted work under MGNREGP in districts of Kerala state in the years 2011-2012 and 2017-2018 (using ANOVA).

ANOVA is generally used to compare data sets. The key responsibility in the case of enactment of MGNREGA is to allot job cards to those who have requested. After that the households actually need to demand work which indicates their actual necessity for a pay job for their living. Then MGNREGS provide the households demanded work within the specified time limit. We need to find if there is a relation on averages of total job cards issued, averages of total households demanded work and averages of total households allotted work under MGNREGP in districts of Kerala state in the years 2011-2012 and 2017-2018.

**HYPOTHESIS:** If there is any significant impact on MGNREGA on averages of different households demanded work and averages of job cards issued.

Table 6 gives the distribution of averages of total household demanded work, averages of total job card issued and averages of total household allotted work.

Districts	Averages of total household demanded work	Averages of total job cards issued	Averages of total household allotted work
Alappuzha	140350	230366	140344
Ernakulam	95409	186950	95402
Idukki	112514	164288	112508
Kannur	91014	176549	91008
Kasargod	65607	116358	65604
Kollam	144413	266389	144401
Kottayam	74535	159833	74530
Kozhikode	139916	244835	139904
Malappuram	111641	255235	111628
Palakkad	158890	266667	158883
Pathanamthitta	59403	118654	59402
Thiruvananthapuram	188730	314000	188726
Thrissur	112902	228035	112896
Wayanad	74290	123060	74286

The actual necessity for work is evaluated on the basis of the number of households actually expressed their willingness to work, even if job cards are gained. This shows their real need for a pay job for their livelihood. MGNREGS is put into service for providing wage employment, sustainable income and for guaranteeing food security as part of the right to work. Therefore, the gap between the demand for work and supply of work is an important factor. The work demanded by the households must be provided with in the prescribed time limit, as it is the duty of the Grama Panchayat.

From figure 3, it is clear that averages of job cards issued is greater than averages of total household demand work and averages of total household allotted work.

FIGURE 3

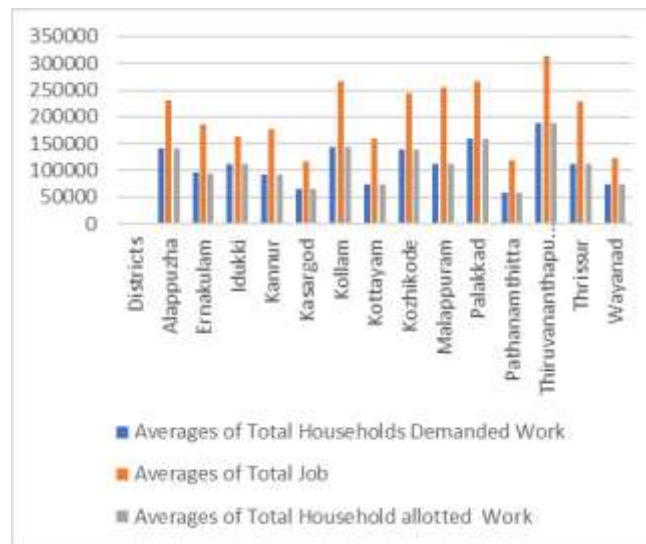


TABLE 7

Source of Variation	SS	df	MS	F	P-value	F critical
Between Groups	7.822 E+10	2	391102212	17	5.013E-06	3.238096
Within Groups	8.993 E+10	39	23059479			
Total	1.682 E+11	41				

TABLE 8

Groups	Count	Sum	Average	Variance
Averages of total households demanded work	14	1569614	112115.2857	1475454800
Averages of total job cards Issued	14	2851219	203658.5	3967049796
Averages of total households allotted Work	14	1569522	112108.7143	1475339362

**Interpretation:** Table 7 and 8 indicates result of ANOVA. Here P-value is 5.013E-06. F value is 17 and f critical is 3.238096, which is lesser. Therefore, we reject the hypothesis.

### CONCLUSION

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is considered as an essential scheme of the government in eradicating rural poverty. It also gives employment in villages. The analysis of the secondary data could provide with the conclusion that in the state of Kerala, the MGNREGA experienced a positive growth.

### REFERENCES

- [1] Abhay Singh (2008). "Awareness in the Development of Tribals", Yojana, Vol 52, August.
- [2] Ahirrao, Jitendra (2008). "Employment and unemployment situation in India:Kurukshehra, Vol.56, March, 2005-06.
- [3] Barna Maulick, "Implications of NREGA- District Barabanki, Uttar Pradesh: A case study", Kurukshehra, Dec 2009, Vol. 58.
- [4] C.R Kothari, Research Methodology Methods and Techniques, New Age International (P) Ltd, Publishers, 2011.
- [5] Lakshmi Suresh, Malavika V R, Sarika S G, Usha Kumari V, - "A case study on COVID-19 in two districts of Kerala state viz. Kannur and Thiruvananthapuram".
- [6] Montgomery, D.C., Runger, G.C., Applied Statistics and Probability for Engineers, John Wiley & Sons, 2003
- [7] P.R. Vital, Business Mathematics and Statistics., Marham publications.
- [8] Vishnu Manoj, Sarika S G, Raji P and Lincy Thomson, "An analysis of dropout students in education system of Kerala", International conference on Physics and Photonics Processes in Nano Sciences, vol. 1362, pp., 2019. 2.