# An Impact Assessment Study of Individual Asset Creation and Income Generation under MGNREGA with Special Reference to Tiruchirappalli District - Pilot Study

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### Over view of the act

According to the Eleventh Five Year Plan (2007-12), the number of Indians living on less than \$1 a day, called Below Poverty Line (BPL), was 300 million which decreased from 36 per cent (1993-94) to 28 percent (2004-05) and the rural working class dependent on agriculture was unemployed for nearly three months per year. In order to overcome this problem in addition to with the remaining problems like illiteracy, hungry people, mal-nourished children, anemic pregnant women, farmer suicides, starvation deaths, migration resulting from inadequate employment, poverty, and the failure of subsistence production during droughts, the Government of India (GOI) enacted the National Rural Employment Guarantee Act (NREGA) in 2005. It is the biggest poverty alleviation programme in the world which was started with an initial outlay of Rs. 11,300 crore in year 2006-07. This Act is now called as Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA)

# **History of MNREGA**

The following table clearly explains the chronological order of the Act.

Table 1

Year	Implementation
August 2005	NREGA legalized
Feb 2, 2006	Came into force in 200 districts, first introduced in Anantapur district in the state of Andhra Pradesh
Apr 2007	130 more districts included
Apr 2008	Universalization of the scheme
Oct 2008	Wage transaction through banks/post offices
Oct 2009	Name changed to MGNREGA
16 Feb 2009	MoU with the postal dept.

NREGA has come after almost 56 years of experience of other rural employment programmes, which include both Centrally Sponsored Schemes

and those launched by State Govt. These comprise the National Rural Employment Programme (NREP) 1980-89; Rural Landless Employment Guarantee Programme (RLEGP) 1983-89; Jawahar RojgarYojana (JRY) 1989-1990; Employment Assurance Scheme (EAS)1993-99; Jawahar Gram Samridhi Yojana (JGSY) 1999-2002; Sampoorna Grameen RojgarYojana (SGRY) from 2001; National Food For Work Programme (NFFWP) from 2004 were national rural employment schemes. Among these, the SGRY and NFFWP have been merged with NREGA in 2005.

### Goals of MGNREGA

The major goal of this scheme is to protect the rural poor from vulnerabilities by providing them demand based employment. It prevents risk associated with agricultural investment and forced migration of rural poor. It brings prosperity in rural economy via increased consumption demand. Apart from this it also concentrates on the following:

- Enhancement of livelihood security in rural areas by guaranteeing 100 days of wage employment in a financial year to every registered household
- Creating productive assets
- Protect the environment
- · Reducing migration
- Special attention to social equality
- Empowering rural women and the poor through the provision of a right-based law
- Providing social safety to the vulnerable groups with help of employment, when other alternative are inadequate.

## Objectives of the study

The main objectives of the present study are:

- 1. To assess the efficacy of household assets creation and investment under MGNREGA in strengthening sustainable livelihood.
- 2. To assess the impact of MGNREGA on income generation those reflect/replicate on household expenditure pattern and savings.
- 3. To assess the bottleneck issues, and recommendations given by the stakeholders (end) to improve the operational aspects of MGNREGA.

### **Review of Related literature**

The study "MNREGA Opportunities and Challenges" conducted by CSE (2008) New Delhi found that MNREGA intervention has not been able to generate the kind of employment demand as expected. Irrational wage calculation formula has made productive assets creation less lucrative to local communities. The MNREGA transformed a labour surplus economy to a labour using economy.



Centre for Food and Agribusiness Management (2009) pointed out the perception of respondents by mean score on indicators and reveals that the highest impact of NREGS has been on the prevailing wage rate in the Gramapanchayat. The mean score on other indicators such as reduction of incidence of poverty in the village, checking distress migration form village, Development and strengthening of rural infrastructure, overall development of village and sociopolitical mobilization among deprived sections of society i.e. SC/ ST/ OBC shows that the overall impact of NREGS on development of GP has not been very impressive.

Reetika Khera (2010) states that in the present system, where payments are made on the basis of measurements rather than attendance alone, the junior engineer (J.E.) exercises a lot of power. Attendance has to be reconciled with measurement before payments are processed. Though the law requires it, in many States Muster Rolls are not maintained at the worksite.

The article by Hiral Dave (2010) reveals large scale duplication of job cards in Kotda village of Kutiyana block of Porbandar district of Gujarat. The number of job cards issued, there is at least three times of the total number of voters.

This study by Harisha *et al.* (2011) has evaluated the impact of MGNREGA on income generation and labour supply in agriculture in one of the districts in central dry zone of Karnataka. Results have shown that the number of days worked in a year with the implementation of MGNREGA programme has significantly increased to 201 days, reflecting 16 per cent increase. Regression analysis has revealed that gender, education and family size of the workers are the significant factors influencing the worker's employment under the Program. The increase in income is to the tune of 9.04 per cent due to additional employment generated from MNERGA.

A study done by Ahuja *et al.* (2011) in Haryana reveals that the farmers owning large size of landholdings and more number of livestock are not much interested in participating in MGNREGA works as they are busy in their own activities. The farmers who have small land and livestock resources are more inclined to work in MGNREGA and their participation is also more. Thus, MGNREGA is providing livelihood security to the resource-poor rural people.

A study by International Labour Organization (2012) in Bihar highlights that though the Act stipulates certain worksite facilities, none of the worksites visited had basic provisions like space for taking rest, or a first aid kit available. In a few of the worksites even drinking water was not stored and readily available. People were found to be working in harsh conditions, continuously and in ergonomically non-acceptable positions. One of the workers at a worksite, when quizzed on safety issue said, it's all unskilled work Sir and NREGA is for poor people

K.Singaravelu was of the opinion that highest priority is given to the water conservation work which accounts for 52% of the total works executed under

NREGS. During the financial year 2011-2012 the total employment provided to the households were 3.32 crore and total person days were 96.23 crore.

### **Statement of the Problem**

From the past reviews the researcher found that most of the studies were on performance analysis, community asset creation and women empowerment under this scheme. Very few people have concentrated on social audit and political aspects of NREGS. No researcher gave importance to individual asset creation and their income - expenditure pattern. This induces the researcher to concentrate on the current research problem. The study mainly focuses on the answer to the following question:

- 1. Whether the scheme improves the expenditure pattern of the respondents?
- 2. Whether the scheme uplifts the beneficiaries' life through investment?

# Research Methodology

### Research design

With the help of this research, the researcher wants to explore the facts and figures related to respondent's income - expenditure pattern and asset created by them. Therefore this research is exploratory in nature.

## **Universe of Study**

The study was carried out in state of Tamilnadu. However, the study area was confined to Pullambadi Block in Tiruchirappalli district. Using purposive sampling method the study area was selected. The Pullambadi Block consists of 33 Panchayat which includes 21770 registered households that contains 34742 registered jobholders.

The below tables gives the full information related to the study area from the government record.

**Table 2: Information related to Job cards and number of workers** (Figures in parenthesis workers in numbers)

Total No. of GPs	33
Total No. of Job Cards	21770
Total No. of Workers	34742
i) SC worker % as of total Workers	21.05 (7318)
ii) ST worker % as of total Workers	0.03 (11)
iii) No n SC&ST worker % as of total Workers	78.9 (27413)
iv) Men worker % as of total Workers	37.4 (12989)
v) Women worker % as of total Workers	62.6 (21753)

Table 3: depict the working progress of the study area in the last four FY

Progress	FY 2015- 2016	FY 2014- 2015	FY 2013- 2014	FY 2012- 2013
Total Households Worked	16,982	17,169	17,032	18,029
Total Individuals Worked	20,789	21,540	22,028	27,429
% of Men Worked	19.79	21.5	23.6	34.13
% of Women Worked	80.21	78.5	76.4	65.87
% of SC Worked	20.55	20.95	21.6	22.36
% of ST Worked	0.02	0.01	0.01	0
% of Disabled Persons Worked	0.74	0.76	0.84	0.78

Table 4: Wage disbursements in the study area in the last four FY

Progress	FY 2015- 2016	FY 2014- 2015	FY 2013- 2014	FY 2012- 2013
Average Wage rate per day per person (Rs.)	119.17	116.7	98.21	102.09
Average Cost Per Day Per Person (in Rs.)	143.83	137.19	103	1
Wages (Rs. in Lakhs)	1,232.76	1,028.86	1,114.01	1,239.3
Material and skilled Wages (Rs. in Lakhs)	231.46	162.75	20.12	15.63
Total Adm Expenditure (Rs. in Lakhs.)	4.26	44.55	36.5	22.29
Total Exp (Rs. in Lakhs.)	1,468.48	1,236.17	1,170.63	1,277.22

Source for Tables 2-4: www.nrega.com Designed & Developed by NIC-DRD Informatics centre, krishi Bhawan, New Delhi

Table 5: Data related to the current year work progress

Particulars	Values in Numbers
Total households demanded & allotted work	17,227
Total persons demanded work	22,021
Total persons allotted work	22,019
Total persons worked	2 21,540
Total households reached 100 day limit	1,065
Total bank accounts	2 26,967

Source: Panchayat record maintained by Pullambadi union office.

# **Sampling Procedure**

For the selection of beneficiary respondents two stages were followed. In the first stage purposive sampling method was adopted for the selection of the study area. In the second stage, for selecting the sample respondents, random sampling method was adopted.

# Sample Size

Even though the population varies from each and every Panchayat the researcher selected two samples from each Panchayat uniformly totally 66 jobholders.

### **Data Collection**

Data was collected both from primary and secondary sources. Primary data was collected from all the end stakeholders of MGNREGA. Well structured Questionnaire was used for collecting data from the beneficiaries. Informal interviews also taken from selected households. In addition with this, a casual walk into the MGNREGA worksites were conducted in order to understood the factual position of the scheme at their footsteps. The secondary data was collected from official records, policy documents, published reports of similar projects, journals and Ph.D. thesis, journals and online sources.

### Tools for data analysis

Both qualitative and quantitative data was analyzed in the light of framed objectives. Quantitative data was tabulated and statistically analyzed. Qualitative data was interpreted based on the information collected from the field. The researcher adopted the chi-square test of goodness-of-fit to test the hypotheses formulated.

## Findings from the data Analysis

### Related to investment:

Table 6: Whether they invest any amount on financial and non-financial assets with the help of MGNREGA's income.

Options	No of Re	espondents		ntage of ondents
_	Male	Female	Male	Female
Yes	16	22	24	33
No	17	11	26	17
Total	33	33	100	

Source: primary data

The above table clearly states that only 57 percent of the respondents invested in financial and non -financial assets with the help of MGNREGA's income. Among the financial asset shares, treasury bills and Kishan Vikaspathra were

totally neglected by the respondents. Under the financial asset, Selvamagal Thittam was given highest priority by the respondents when compared with other options.

Table 7: preferences given by the respondents related to Investment options

Investment	No of Re	spondents
mvestment	Male	Female
Financial asset		
a. Shares	0	0
b. Gold bonds	2	4
c. Treasury bills	0	0
d.Kishan vikaspathra	0	0
e.Selvamagal pathra	2	5
Non-financial assets - A. Farm assets		
a. Poultry	2	7
b. Calf	0	0
c. Buffalo	0	0
d.Cow	2	0
e. Sheep	0	4
f. Goat	1	0
g. Tiller	1	0
h.Tractor	0	0
i.Weeding machine	2	0
Non-financial assets - B. Non-farm asse	ets	•
a. Investment in housing land	0	1
b. Investment in house leasing	0	0
c. Investment in business	3	1
d. Investment in cultivated land	1	0
Total	16	22

Source: primary data

Among non-financial assets, 19 respondents have invested in various farm assets like poultry, cow, sheep, goat, tiller and weeding machine. They felt that the earnings from MGNREGA are not enough to invest in remaining options of farm assets. Only six respondents have invested in nonfarm assets of non-financial assets like investment in housing land, house leasing, business and cultivated land.

**Table 8: Forms of savings** 

Options	No: of respondents	Percentage of respondents
Post office	5	7.50
Bank	18	27.27
Chit	9	13.61
Purchasing ornaments	11	16.67
Insurance policies	15	22.72
Lending money to others for interest	8	12.12
Total	66	100.00

Source: Primary data

It has been noted that as high as 27.27 percent of the respondents make their savings in banks. The reason for high percentage is wages are paid through banks while very least percent of 7.5 saved in post office, 13.61 percent deal in Chit. From the table it is clear that the rural people are very cautious in insurance, the preference given by them is 22.72 percentages. 12.12 percentages of the respondents are engaged in money lending business like a black money lenders.

Table 9: Whether able to purchase household durable assets

Options	No: of respondents	Percentage of respondents
Able to purchase	5	7.5
Not able to purchase	61	92.5
Total	66	100.0

Source: Primary data

Ninety three percentage of respondents opined that the income from MGNREGA has not helped them in any way to purchase any household durable assets. Only7.5 percentage of the respondents agreed that they have purchased some durables with help of earning from this scheme. Some of the respondents told that the durables were purchased with their main income only and this earning helped them as an additional source. Thus, MGNREGS income has nil or negligible impact on Purchasing of durable assets.

The Table-10 clearly shows that MGNREGA income has given the freedom to spend or meet on day to day requirements. The indicators are ranked by SA - Strongly Agree; A - Agree; ND - Neither agree nor disagree; D - Disagree; SD - Strongly Disagree; NA- Not answered. Nearly 55 of the respondents agreed that this scheme has helped them to only to fulfill their biological need and recreation. The next rank has given by them related to purchase of Alcohol, tobacco and Betel nut which indicates that the village people are very addict to

these habits. The respondents totally denied that the income from this source does not help them to renovate the house and meeting agriculture expenses. All the whole respondents said that the income from this source did not help them fully to meet their expenses.

Table 10: Spending patter on day to day requirements

Kind of expenditure	SA	A	ND	D	SD	NA	Total
Food and consumption items	45	10	10	1	-	-	66
Clothing	20	12	2	24	8	-	66
Electricity bill	12	25	8	2	19	-	66
Alcohol & tobacco & Betel nut	48	12	-	-	-	6	66
Phone bill	6	10	05	15	-	30	66
Cooking fuel	6	7	4	24	25		66
Recreation	45	10	5	6	-	-	66
Transport	12	10	4	18	22	-	66
Social/religious function /festival	15	24	2	6	19	-	66
Agriculture related expenses	0	0	1	18	32	15	66
Renovation of the house	0	2	1	18	45	-	66
Expenses for livestock	11	4	4	12	30	5	66

Source: Primary data

# **Hypothesis Testing**

 $\mathbf{H}_0$ : There is no significant relationship between gender and selection of investment options.i.e gender and investment options are independent

Table 11

Options	Male	Female
Financial asset	4	9
Non-financial assets	12	13
Total	16	22

Source: Field Survey

Table 12: Computation of observed and expected frequencies for investment options

Oi	Ei	(Oi - Ei)2	(Oi - Ei)2 / Ei
4	5.47	2.1609	0.395
12	10.52	2.1609	0.208
9	7.52	2.1609	0.286
13	14.47	2.1609	0.149
	Total		1.035

#### **Notes:**

- i) The observed frequencies (Oi) are from the responses of the respondents regarding criteria of investment options.
- ii) While the expected frequencies (Ei) are obtained using the formula below:

$$E \textbf{i} = \frac{\text{Row total for the row of that cell} \times \text{Column total for the column of that cell}}{\text{Grand Total}}$$

Chi-square depends on:

- i) Degree of freedom (d.f) = (R-1) (C-1)where, R = 2: C = 2. Therefore, d.f = (2-1) (2-1) = 1x 1 = 1
- ii) At 5% level of significance:  $\alpha = 0.05$  (a one tail-test) Thus, = 3.84

The value of the chi-square above is obtained from the chi-square distribution table using 5% level of significance and 1 degree of freedom.

## Interpretation

The null hypothesis  $(H_0)$  is accepted, since chi-square calculated value (1.035) is less than chi-square tabulated value (3.84) at 5% level of significance. Therefore, it could be concluded that gender and investment options are independent.

#### Conclusion

From the above analysis it is concluded that the performance of MGNREGA in Pullambadi is not at all satisfactory. The scheme could not ensure the 100 days job guarantee to the majority of the job card holders. Only 1065 households reached 100 day limit. It is too bad for success of the program. It is observed that the scheme does not provide any avenue/platform for investment or savings. Their standard of living has not improved due to MGNREGA. Therefore the overall impact is very low. Certain initiatives and changes should be taken to remove these barriers. Even though the scheme promised 100 days of employment to rural people the scheme does not receive 100 marks from the beneficiaries. Therefore the government has to revamp the scheme and their operations.

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