AN ANALYSIS OF IMPACT OF MGNREGS ON SAVINGS, INVESTMENT AND INDEBTEDNESS IN KRISHNARAYRAPURAM TALUK OF KARUR DISTRICT

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ABSTRACT

This paper deals with impact on MGNREGS that is sources of savings, investment debt positions and it is determines of the sample household of workers in before and after MGNREGS in Krishnarayrapuram Taluk of Karur District.

Key Words: Impact on MGNREG, Savings, Investment, Debt Positions

1. INTRODUCTION

This paper makes an attempt to analyse the role of MGNREGS on savings, investment and debt positions of the sample household of workers in before and after MGNREGS. For a comprehensive analysis, the following have been taken into consideration,

- i) Sources of savings and determinants of savings,
- ii) Household investment pattern, and
- iii) Indebtedness and its determinants.

1.1SOURCES AND DETERMINANTS OF SAVINGS

An attempt is made in this section to discuss the forms and sources of savings of the sample workers in before and after MGNREGS. Further, it attempts to analyse the relationship between level of savings and the influencing variables namely income, assets, number of earners, educational status and family size, and identify the factors which determine the volume of savings.

1.1.1. Forms and Sources of Savings

Savings have been classified into different forms and sources namely, physical savings, and financial savings. Physical savings are in the form of land and jewels. Financial savings are kept as cash in hands, post offices, LIC, chit funds and the like. The details of forms and sources of savings of the sample household of before MGNREGS and after MGNREGS are presented in the Table 1.1.

TABLE 1.1, ANNUAL AVERAGE PER CAPITA SAVINGS OF THE SAMPLE HOUSEHOLDS BY FORMS AND SOURCE

Forms and Sources of Savings	Before MGNREGS	After MGNREGS	
I. Physical Savings			
1. Land		498.05	
2. Jewels	282.81	421.18	
II. Financial Savings			
1. Banks	150.40	174.18	
2. Post Office	97.19	151.62	
3. LIC	85.55	85.29	
4. Chit Funds	69.46	98.20	
Total	685.41	1428.52	
Source: Survey of Primary data.	· · ·		

Table 1.1 reveals that the annual average per capita savings of sample households in the category of before MGNREGS is Rs.685.41, whereas in after MGNREGS, it is Rs.1428.52. It is inferred that the per capita saving of workers who are working through MGNREGS is higher than that of others. The variation was found in annual average per capita saving among different savings groups between before and after MGNREGS workers. The overall analysis showed that the role of MGNREGS in eradication of poverty through prevail in saving pattern among the MENRGES workers in Karur district.Regarding form and sources the higher per capita of savings of the households are held in banks. It is followed by post-office, Chit funds and LIC. Apart from financial savings through banks, post office, LIC and the like, the sample households in the study area have saved a part of their excess income in physical form viz. land and jewels. The average annual per capita saving in land was found Rs.498.05 in the case of after MGNREGA. In the same manner, the sample households of after MGNREGS workers workers invest more on jewels than those of before MGNREGS.

1.1.2 Determinants of Savings

This section makes an attempt to identify the factors, which determine the volume of savings of the sample household of before and after MGNREGS. For this, the following form of multiple log-linear regression models was estimated.

 $\label{eq:constraint} \begin{array}{l} \text{Log } Y = \beta_0 + \beta_1 \log X_1 + \beta_2 \log X_2 + \beta_3 \log X_3 + \beta_4 \log X_4 + \beta_5 \log X_5 + u \ (5.1) \\ \text{Where,} \end{array}$

- Y = Volume of savings in rupees per annum,
- X_1 =Annual family income (in Rs.),
- X_2 =Asset value (in Rs.),
- X_3 =Educational Status
- X_4 =Family size (in number),
- X_5 =Number of earners (in number)
- U =Disburance term.

The above Model 1.1 was estimated by the method of least squares and the computed results are given in Table 1.2.

	Before MG	NREGS	After MGNREGS		
Variables	Regression Coefficient	t-value	Regression Coefficient	t-value	
Intercept (β_0)	0.9478		0.8091		
Annual Family Income (β_1)	0.2985*	3.7301	0.2872*	3.2016	
Asset Value (β ₂)	0.1041	0.1012	0.1051	0.2019	
Educational Status (β_3)	0.1129*	3.0218	0.0215	0.1023	
Family Size (β_4)	-0.2215*	-4.0213	-0.2432*	-4.1207	
Earning Members (β_5)	0.1321*	2.1216	0.1218*	2.7681	
R ²	0.8201		0.7894		
F-value	38.29		33.34		

TABLE 1.2, ESTIMATED REGRESSION RESULTS

Source: Computed data.

* Indicates the coefficients are statistically significant at 5 per cent level.

It is found from Table 1.2 that all the independent variables included in the regression model were jointly responsible for 82.01 per cent (R^2) variations in the volume of savings in before MGNREGS. Out of five

variables, four variables namely annual family income, educational status, family size and earning members are statistically significant at 5 per cent level. Among the significant variables except family size, all other variables are positively related to the volume of savings in the study area. It means that an additional percentage made in these variables may lead to increase of 0.2985 per cent, 0.1129 per cent and 0.1321 per cent respectively with volume of savings. In the case of family size, one per cent increase in this variable could effect -0.2215 per cent decline in the volume of savings. It is inferred from the analysis that the variable annual family income had a greater influence on the volume of savings. The F-value shows that the model fitted is statistically significant at 5 per cent level.

In the case of workers in after MGNREGS, R^2 value indicates that all the independent variables incorporated in the regression model jointly account for 78.94 per cent variation on the volume of savings. Among the significant variables, annual family income and earning members in the family are positively related to the volume of saving. It indicates that one per cent increase in these variables could effect 0.2872 per cent and 0.1218 per cent increase in the volume of savings respectively. An additional percentage made to the variable family size reduced by - 0.2432 per cent of the volume of saving. The computed F-value indicates the fitted model as statistically significant at 5 per cent level.

1.1.3 ANALYSIS OF INVESTMENT

Investment is defined as the amount of money spent on any income earning assets. Investment here refers to the amount of money spent by the sample households on purchase of land/buildings and house, durables, consumer durables, livestock, financial assets and others. Table 1.3 presents the details about average investment made by the respondents in the study area.

			(in Rs .)
Sl.No.	Items	Before MGNREGS	After MGNREGS
1	Land/Buildings and House	141226	1617122
2	Durables	27120	172381
3	Consumer durables	26308	96994
4	Livestock	19551	43038
5	Financial assets	17867	50003
6	Others	33822	91494
	Total value of assets	265894	2071032
	Mean value of assets	379.85	2958.62

TABLE 1.3, AVERAGE INVESTMENT OF THE SAMPLE RESPONDE	'N'I	ſS	
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Source: Primary Data.

Table 1.3 reveals that the average investment in all the households for workers in before MGNREGA is Rs.379.85 and for workers in after MGNREGA it is Rs.2958.62. The variation is significant. Thus, the overall impression is that variation is significant between the groups with regard to investment. It is noted from the above analysis that the impact of MGNREGS in eradication of poverty through creation of investment pattern among the MENRGES workers in Krishnarayapuram taluk of Karur district

1.2.1. Income-wise Distribution of Investment

The income-wise distribution of investment is depicted in Table 1.4.

TABLE 1.4, ANNUAL AVERAGE INVESTMENT OF THE SAMPLE HOUSEHOLDBY PER CAPITA INCOME GROUP

Sl. No.	Per Capita Income	Annual Average Investment (Rs.)		
	Group	Before MGNREGA	After MGNREGA	
1.	Below 2000		524.10	
2.	2000 - 4000		440.00	
3.	4000 - 6000	200.75	893.89	
4.	Above 6000	179.10	1100.63	
	Total	379.85	2958.62	

Source: Survey of Primary data.

It is understood from Table 1.4 that there are four categories in income levels. The income classification of investment also shows a significant variation. The variation is much pronounced in almost all the per capita income groups in the study area.

1.3. ANALYSIS OF THE DEBT OF THE SAMPLE HOUSEHOLDS

Debt is defined as the amount of money borrowed by households to fill up the deficit when the total consumption expenditure exceeds the total income. Debt consists of borrowing from banks/financial institutions, money lenders, friends and relatives. The present section attempts to analyse the volume of debt of the sample households, the sources and purpose of loan and relationship between expenditure, family size and debt.

1.3.1. Indebtedness of the Sample Households

A high level of indebtedness was an indicator of economic backwardness. The term "debt" was used to denote the amount of the outstanding loan, both principal as well as interest at the time of enquiry. Table 1.5 had given the distribution of the households according to households' Debt Groups.

	Howeehold Dobt	Before MG	Before MGNREGS		After MGNREGS	
Sl.No.	Household Debt Groups	No. of Respondents	Amount in Rs.	No. of Respondents	Amount in Rs.	
1.	0-500	32	3000	14	650	
2.	500-1000	35	11250	13	8900	
3.	1000-1500	33	16250	10	10900	
4.	1500-2000	30	17500	13	15150	
5.	2000-2500	47	50750	25	28400	
6.	2500-3000	50	72500	39	20150	
7.	3000-3500	37	45250	28	22900	
8.	3500-4000	41	68750	30	26400	
9.	4000-4500	31	36750	25	14400	
10.	4500-5000	44	54000	32	19855	
11.	5000 and above	55	77000	36	18768	
	Total	435	453000	265	186473	
	Average Debt		1041.38		703.67	

TABLE 1.5, DISTRIBUTION OF HOUSEHOLDS' DEBTS ACCORDING TO HOUSEHOLDS' DEBT GROUPS

Table 1.5 shows that the average debt in all the households for workers in before MGNREGS is Rs.1041.38 and for workers in after MGNREGS it is Rs.703.67. The variation is significant. The cause of this significant variation is due to reduce the indebtedness and increasing the income of the workers after MGNREGS. Thus, the overall impression is that variation is significant between the groups with regard to indebtedness. It is noted from the above analysis that the impact of MGNREGS in eradication of poverty through reducing the indebtedness among the MENRGES workers in Karur district

Table 1.6 Furnishes the Details about the Annual Indebtedness by Source of Borrowings.

SI.		Annual Average Debt (in Rs.)		
No.	Sources	Before MGNREGA	After MGNREGA	
1.	Banks/Financial Institutions	350.25	228.02	
2.	Money Lenders	449.74	314.48	
3.	Friends and Relatives	240.39	161.17	
	Total	1041.38	703.67	

TABLE 1.6, AVERAGE ANNUAL DEBT BY SOURCE OF BORROWING

Source: Survey of Primary data.

Table 1.6 reveals that the households in both the groups borrow money from the banks, moneylenders, friends and relatives. The annual average debt of the sample households in before MGNREGS is Rs.1,047.38 and for after MGNREGS it is Rs.703.67. The major source of borrowing for both before and after MGNREGS is private money lenders. The next important source of borrowing is bank and financial institution in before MGNREGS and after MGNREGS and relatives for after MGNEGS. It should be mentioned that the annual average capita debt is higher in the case of households in before MGNREGS than the households in after MGNREGS. Friends and relatives are also the important source of borrowing for both the categories.

1.3.2 Purpose of Loan

It is important to know whether the loan borrowed is used for investment or for other expenditure purposes. To ascertain their trend, an effort was made to identify the purpose of borrowing among the households. The purpose of the loan of the sample households is depicted in Table 1.7.

SL.		Before MGNEGES		After MGNREGS		
No	Purpose of Loan	No. of Households	Percentage	No. of Households	Percentage	
1.	To meet consumption expenditure	132	30.34	80	30.18	
2.	To celebrate marriage	96	22.07	75	28.30	
3.	To meet medical expenditure	79	18.16	43	16.23	
4.	For business investment	23	5.29	20	7.55	
5.	To purchase land	57	13.10	31	11.70	
6.	Others	48	11.03	16	6.04	
	Total	435	100.00	265	100.00	

 TABLE 1.7,AVERAGE ANNUAL DEBT BY PURPOSE OF LOAN

Source: Survey of Primary data.

It is observed from Table 1.7 that in both the groups, more number of households borrow money to meet consumption expenditure. Next to consumption expenditure, a large number of households borrow for celebrate marriage followed by medical expenditure. It is concluded that the majority of the workers in before and after MGNREGS borrow money for consumption expenditure.

1.3.3. Expenditure and Debt

It is quite reasonable and valid to postulate that expenditure can determine the volume of debt. In order to examine the relationship between expenditure and average annual debt, the household has been classified into five groups based on expenditure. The relationship between expenditure and debt is depicted in Table 1.8.

TABLE 1.8, AVERAGE ANNUAL DEBT BY EXPENDITURE OF THE HOUSEHOLDS (in Rs.)

			(In Ks.)	
SI. No.	Expenditure Classification	Annual Average Per Capita Debt (in Rs.)		
		Before MGNREGS	After MGNREGS	
1.	Below 5000	978.10	526.18	
2.	5000-7000	1142.17	671.32	
3.	7000-9000	1252.61	720.16	
4.	9000-11000	1263.18	732.41	
5.	11000 and above	1389.18	625.36	
	Overall	1041.38	703.67	

Source: Survey data.

Table 1.8 shows that the overall trend shows that there is no significant variation in per capita debt in respect of expenditure. For households in before MGNREGS the overall annual average per capita debt is Rs.1041.38 and for households in after MGNREGS it is Rs.703.67. It was observed that a positive relationship between expenditure and per capita debt exists in the case of households in before MGNREGS whereas it was found to fluctuate for households in after MGNREGS.

CONCLUSIONS

- 1. The average annual per capita saving in land was found Rs.498.05 in the case of after MGNREGA. In the same manner, the sample households of after MGNREGS workers invest more on jewels than those of before MGNREGS.
- 2. The impact of MGNREGS in eradication of poverty through creation of investment pattern among the MENRGES workers in Krishnarayapuram taluk of Karur district.
- 3. The income classification of investment also shows a significant variation.
- 4. The average debt in all the households for workers in before MGNREGS is Rs.1041.38 and for workers in after MGNREGS it is Rs.703.67. The variation is significant.
- 5. The annual average debt of the sample households in before MGNREGS is Rs.1, 047.38 and for after MGNREGS it is Rs.703.67.
- 6. It is concluded that the majority of the workers in before and after MGNREGS borrow money for consumption expenditure.
- 7. It was observed that a positive relationship between expenditure and per capita debt exists in the case of households in before MGNREGS whereas it was found to fluctuate for households in after MGNREGS

REFRENCES

- 1. H. Theil (1961), *Economics and Information Theory*, North Holland Publishing company, Amsterdam, pp.121-125.
- 2. S.P. Gupta (1981), *Statistical Methods*, Sultan Chand and Sons, New Delhi, pp E10-E16.
- 3. P.S. Grewal (1990), *Methods of Statistical Analysis*, Sterling Publishers, New Delhi p.973.
- 4. Herman World and Larsjureen (1953), *Demand Analysis and Study in Econometrics*, John Wiley and Sons, Inc., New York, pp. 219-221.