A Micro Level Study on the Impact of Prime Minister's Rozgar Yojana (PMRY) on Income, Assets and Employment Generation among Rural People in Madurai District

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Abstract

The objective of the PMRY scheme is to bringing the assisted families above the poverty line by ensuring appreciable and sustained level of increase over a period of time. In the present study an attempt has been made to identify the problems connected with the implementation of the PMRY and to analyze the prospects for development in future. For better exposition, the analysis has been carried out under the following heads viz., Income, asset and employment generation in different taluks of Madurai District.

Keywords: PMRY scheme, Unemployment, cottage sectors, Policy makers, National Income, SSI sector

Introduction

Unemployment is considered as a bane of India's development particularly the educated unemployed youth who become unproductive and frustrated are to be paid special attention. The small-scale sector includes village and cottage sectors are found out to be the best means to solve the growing unemployment problem. Self-employment is the only solution to the unemployment. Policy makers and economists studied and drew conclusion that setting up a small scale unit with a moderate investment has got the potential to provide employment to about 4 to 5 people directly and indirectly. The satisfaction of self-employment and the contentment of contributing to the National Income and proving livelihood to few unemployed can have positive multiplier effect. Adding to it the SSI sector has got the inherent advantage of utilizing the local resources, technologies for productive purposes and at the same time could satisfy the needs of the local people and exploit the local market at micro level.

Hon'ble Prime Minister of India, announced a new scheme the Prime Ministers' Rozgar Yojana (PMRY) on 15th August, 1993. The scheme was launched on the auspicious day of 2nd October, 1993, the birth Anniversary of Mahatma Gandhi all over the country The main objective of the PMRY scheme was to provide easy subsidized financial assistance to educated unemployed youth for starting their own enterprises in manufacturing, business & service and trade sectors. Initially the scheme was aimed at providing self-employment to one million educated unemployed youth in the country by setting up 7 lakh micro

enterprises through inducting service and business ventures over a period of $2 \frac{1}{2}$ years. The scheme was a stupendous success and caught the imagination of the youth. Overwhelmed with the response and ever-increasing need, the Government has decided to make it a permanent scheme and framed modalities & guidelines for its successful implementation and to fulfill the purpose for which it is designed.

In the present study though evaluation studies have been taken by various agencies like District Industries centres, Lead bank of various Districts, Office of the Director of Employment and Training Madras and Planning and Credit Department of Reserve Bank of India there was no comprehensive study taken up for this exclusive programme "Prime Minister Rozgar Yojana". Hence at this juncture it becomes necessary to study the overall performance of the scheme of PMRY in Madurai District.

Hypothesis

Progress of PMRY contributes much to beneficiaries family income.

Income Generation

Since the assets under PMRY scheme can be expected to produce returns, with in a period of one year from the commencement of the project and commercialization of produce or services, the success of the scheme lies in its ability to generate additional income to the beneficiaries which results in a chain of reinvestment returns from the additional assets created. In this section, the impact of the scheme on the beneficiaries is identified in terms of its additional income generating capacity to the families of the beneficiaries.

(i) Per capita Annual Income

The impact of PMRY scheme on per capita income of the beneficiaries is presented in Table 1.

Table 1 Impact of PMRY Scheme on per Capita Income of Beneficiaries per Annum

SI. No.	Per Capita Income Group	No. of Beneficiaries	Pre-loan period Average per capita income	Post-loan period Average per capita income	Percentage Increase	't' value
1.	Below 3,000	106	1,462.31	1,894.51	29.56	5.31*
2.	3,000 - 4,000	153	2,611.75	2,999.61	14.85	4.26*
3.	4,000 - 5,000	84	3,291.46	4,011.45	21.87	5.68*
4.	5,000 - 6,000	37	3,9416	5,0141	27.12	15*
5.	6,000 and above	20	5,961.48	7,011.45	17.61	4.75*
	Total	400	2,551.48	3,319.61	30.10	5.30*

^{*}Significant at 5 per cent level.

Impact on the average per capita income of the beneficiaries before and after receiving the loan assistance under the PMRY scheme was collected and Table 1 observed the distribution of per capita increase among different income groups. It could be indicates that the percentage increase in per capita income varied between 14.85 per cent and 29.56 per cent. The highest increase in per capita income was observed in the income group below Rs.3000, at 29.56 per cent followed by the income group of below Rs.5,000 - 6,000 where the increase was 27.12 per cent. The percentage increase in per capita income was found to decline with higher income groups. The sector wise impact on the changes in per capita income of PMRY families inferred that in the absolute terms the per capita increase in income was highest in business followed by industry and service. Percentage increase in per capita income was found in business followed by 51.41 per cent increase in industry and a 422 per cent increase in service. On the whole, there has been a positive increase in per capita income of the beneficiaries even though the percentage increase is found to vary for different types of ventures. The details of sector wise changes in per capita income are given in Table 2.

Table 2 Changes in per Capita Income of PMRY Families Sector-Wise

SI.	Sector	No. of Beneficiaries	Pre-loan period	Post-loan period	Percentage	
No.			Average per capita capita income		Increase	't' value
			income	cupita income		
1.	Business	239	2,999.26	4,541.24	51.41	4.29*
2.	Industry	33	2,8115	4,211.45	49.55	14*
3.	Service	128	2,661.16	3,891.21	422	5.94*
	Total	400	3,891.30	4,211.41	8.82	4.24

^{*} Significant at 5 per cent level.

Table 2 indicates that out of three ventures namely business, industry and services the increase in average per capita income of the beneficiaries is highest in business sector which is 51.41 per cent, followed by industry. Industry sector ranks second in which the average per capita income pre-loan period is Rs.28115 and the post loan period is Rs.4211.45. The percentage increase in average per capita income of service sector is 422 per cent while it is 49.55 per cent in Industrial sector. As a whole sector wise analysis inferred that the increase in average per capita income compared to the pre-loan period and post loan period is 8.82 per cent.

(ii) Family Asset position Before and After Joining the PMRY Scheme

In order to examine the additional income accruing to the families of the beneficiaries, data was collected regarding the family assets of the beneficiaries before and after getting financial assistance under the PMRY scheme for setting up the projects at concessional rates in interest. Table 3 presents the distribution of assets among the four

different asset classes which shows the average family assets of the respondents before and after getting financial assistance under PMRY scheme.

Table 3 Classification of family assets before and after joining PMRY scheme

			Pre-loan period	Post-loan period		
SI. No.	Per Capita Asset (in Rs.)	No. of Beneficiaries	Average per capita asset (in Rs.)	Average per capita asset (in Rs.)	Percentage Increase	't' value
1.	Below 50,000	128	17,869.25	25,113.41	40.54	34*
2.	50,000 - 1,00,000	168	26,461.25	36,891.21	39.42	4.51*
3.	1,00,000 - 1,50,000	64	40,314.15	50,114.21	24.31	5.64*
4.	1,50,000 and above	40	49,695.11	66,981.21	34.78	5.73*
	Total	400	28,431.43	38,343.15	34.86	5.71*

^{*}Significant at 5 per cent level.

It could be shows from Table 3 that there has been an increase in the assets position of the beneficiaries after getting financial assistance under PMRY scheme and the percentage of increase in assets is found to be the highest that is 40.54 per cent for those in the asset group below Rs.50,000 which is followed by 39.42 per cent for the asset class between Rs.50,000 - 1,00,000. An increase of 34.78 per cent and 24.31 per cent in the asset position is found in the asset classes of Rs.1,50,000 and above between Rs.1,00,000-1,50,000 respectively. The analysis also indicates that the PMRY is improving the standard of living of the beneficiaries families through improvement in their assets position. Table 4 presents changes in family assets during pre-loan and post-loan periods for the different types of ventures.

Table 4 Change of Family Assets during Pre and Post Loan Period Sector Wise

SI. No.	Sector	No. of Beneficiaries	Pre-loan period Average Value (Rs.)	Post-loan period Average value (Rs.)	Percentage Increase	't' value
1.	Business	239	18611.11	25815.11	38.71	4.75*
2.	Industry	33	34345.11	521424	51.83	5.16*
3.	Service	128	24981.16	381124	52.58	4.68*
	Total	400	27691.46	394826	42.59	5.78*

^{*}Significant at 5 per cent level.

The addition to assets is found to vary from those engaged in different types of ventures. In absolute terms the increase in the assets is found to be the highest in service followed by industry and business. Percentage wise, there has been a 52.58 per cent increase in asset position for those engaged in service followed by a 51.83 per cent increase in industry and 38.71 per cent in business. These variations may be due to the pre-loan asset position of the families of the beneficiaries.

(iii) Generation of Additional Man-days Employment

Size of employment generated is measured in terms of average man-days within the family of the four income classes in order to identify the principal beneficiaries of the PMRY scheme. Table 5 furnished the size of employment generated by PMRY among different income classes.

Table 5 Size of Employment Generated By PMRY in Different Income Classes

Per Capita Income- wise Classification	Number of Beneficiaries	Average Employment Generated Within the Family	Average Employment Generated with Regard to Hired Hands
Below 3,000	106	289	216
3,000 - 4,000	153	306	299
4,000 - 5,000	84	246	249
5,000 - 6,000	37	296	226
6,000 and above	20	289	225
Total	400	289	255

Regarding average man days of employment created within the family, it was found to vary from 2460 to a maximum of 3060. Highest average man days of employment was found among the income group Rs.3,000 - 4,000 followed by the income class Rs.5,000 to 6,000. Employment generated among other than family members on hire basis was found to vary between 2160 man days and 2995 man days. The average number of man days generated was found to be the highest among the income class Rs.3,000 - 4,000 followed by the income class Rs.4,000 - 5,000. Table 6 presents the employment pattern and labor absorption capacity of PMRY units venture wise.

Table 6 Employment Pattern and Labor Absorption Capacity of PMRY

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Ventures	No. of Units	Average Employment Generated Within the Family	Average Employment Generated with Regard to Hired Hands
Business	239	289	263
Industry	33	311	299
Service	128	289	241
Total	400	289	255

From the above table 6, it can be inferred that among the different ventures undertaken by the PMRY entrepreneurs, the industry sector has provided more number of man days both within the family and for hired laborers. In the case of other ventures the average days of employment is just ranging between 241 - 289 days.

Factors Influencing the Repayment of Loan

An attempt has been made to analyze the repayment performance of the loan by the beneficiaries of the PMRY scheme. The repayment schedule is determined in respect of term loan component. The PMRY scheme stipulates that the period of repayment of term loan component shall be three to seven years with a moratorium period of 6 to 18 months. In order to identify the factors which influence the repayment of loan in the study area,

information has been collected regarding the loan amount received, net income received from the venture (trade), number of installments and annual family income including other sources of each venture namely business, industry and service.

Analytical Framework

In order to identify the factors which influence the repayment amount of loan with respect to business, industry and service, log linear regression model is used. In this regression model, annual repaid amount in rupees (Y) is treated as a dependent variable and other influencing factors namely: (i) Loan amount received in rupees (X_1) , (ii) Annual net income received from the venture (X_2) , (iii) Annual family income including other source (X_3) and (iv) Number of installments (X_4) are included as independent variables. In the linear regression model one dependent variable and four independent variables are included in the form given below:

Log Y =
$$\beta_0$$
 + β_1 log X_1 + β_2 log X_2 + β_3 log X_3 + β_4 log X_4 + u (5.1) Where,

Y is annual repaid amount in rupees

X₁ is loan amount received in rupees

 X_2 is annual net income received from the venture in rupees

X₃ is annual family income including other source in rupees

 X_4 is number of installments

u refers to disturbance term and

 β_0 , β_1 β_4 are the parameters to be estimated.

The above model (3.1) was estimated by the method of least-squares for each sector separately. The estimated results are presented in Table 7.

Table 7 Estimated values of the regression co-efficients

Variables	Parameter Estimates					
Variables	Business	Industry	Service	Total		
Intercept	414	2.74	3.25	4.94		
log V	0.91*	0.98*	0.97*	0.93*		
log X ₁	(7.68)	(37.86)	(35.48)	(4.26)		
log V	0.0006	-0.007	-0.009	0.0008		
log X ₂	(0.023)	(-0.852)	(-0.087)	(0.018)		
log V	0.08	0.007	0.008	0.08*		
log X ₃	(0.009)	(0.29)	(0.28)	(2.78)		
log V	-0.98*	-0.99*	-0.98 [*]	0.98*		
log X₄	(-5.48)	(-17.25)	(-17.27)	(-5.38)		
R^2	0.79	0.98	0.97	0.67		
F-Value	4277	388.65	0.78	8.97		
Sample size	239	33	128	400		

Indicates that the co-efficients are statistically significant at 5 per cent level.

Note: Figures in brackets are the t-values

In the case of business sector, all the four variables are jointly responsible for 79 per cent variation in the repayment of loan. The co-efficient of the amount of loan received and the number of installments are statistically significant at 5 per cent level. The variable "amount of loan received" is positively related to the repayment whereas the variable, "the number of installments" is negatively related to it. Analysis indicates that an additional percentage of the amount of loan received could increase repayment amount by 4.14 per cent. In the case of "the number of installments" an addition made to this variable is capable of decreasing the repayment amount by 0.79 per cent.

In the case of industry sector the same two co-efficients are statistically significant at 5 per cent level. In the category of industry the variable "amount of loan received by the beneficiaries" shows a positive relation to the repayment of loan. The co-efficient of variable, "the number of installments" shows negative relation to it. The R² value indicates that all the explanatory variables jointly account for about 98 per cent responsibility in the repayment whereas in the case of service also the same two co-efficients are statistically significant at 5 per cent level. In the category of business the variable "among of loan received by the beneficiaries", indicates a positive relation to the repayment of loan. The co-efficient of variable, "the number of installments" reveals negative relation to it. The R² value indicates that all the explanatory variables jointly account for about 97 per cent responsibility in the repayment.

In the case of overall, three out of four variables are statistically significant at 5 per cent level. The explanatory variables together account for 67 per cent variations in the repayment amount. The amount of loan received and annual family income have a positive effect on the repayment amount of loan. The researcher infers that one per cent increase in these variables is capable of increasing repayment by 0.93 per cent a negative effect on "the repayment of loan". As per the F-value given in table 5.7 in all the four categories, the regression model is found to be significant at one per cent level. Hence, it is concluded from the above results that in all the four categories, business, industry, service and Overall the two variables, namely the amount of loan received and the number of installments have the same influence on the repayment of loan under PMRY scheme. In the case of the variable, the amount of loan and the number of installments show negative relation to it in all four categories. In the case of overall, in addition to these two variables, the variable, "annual family income" was also a significant factor which influences the repayment of loan under PMRY scheme. Thus the hypothesis namely significant growth in annual family income of the beneficiaries results better repayment is affirmed.

Summary

Regarding the income generation after getting the loan under PMRY scheme, it could be inferred that the highest increase in per capita income was found in the income group below Rs.3,000, followed by the income group between Rs.5,000 - 6,000. The

percentage increase in the income group "below Rs.3,000" and "Rs.3,000-4,000" was 29.56 per cent and 14.85 per cent respectively. The sector-wise impact on per capita income was found highest in business followed by industry, service and overall. The increase in per capita income was 52.58 per cent, 51.83 per cent and 38.71 per cent and 42.59 per cent in business service, industry and overall respectively. In the case of asset position, after getting the loan under PMRY scheme, the position of the beneficiaries under the asset group 100,000 and above has improved and it is followed by the asset class Rs.50,000-100.000.

The percentage increase in the asset position of the beneficiaries after getting the loan was 40.54 per cent, 39.42 per cent and 24.31 and 34.78 per cent in the asset group below Rs.50,000-1,00,000, Rs.1,00,000-1,50,000 and Rs.1,50,000 and above respectively. The venture-wise increase in asset position was found to be highest in the case of industry followed by service and business. Regarding the employment generation, the average mandays generated among the family members and also with regard to hired hands were found to be the highest in the per capita income group "Rs.3,000-4,000". Among the ventures, the industrial sector was provided more number of man days both within the family and for hired labourers. Regarding the identification of the factors which influence the repayment of loans, the regression results of the Table 7 observed that the variables, "the loan amount received" and "the number of instalment" had significant effect on the repayment of loan under PMRY scheme. The coefficient of variable "the loan amount received" had a positive effect on the repayment of loan whereas "the number of instalments" showed a negative relation to the repayment in all the four categories.

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