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**MGNREGA: A New Mantra for Poverty Eradication**

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**ABSTRACT**

The paper traces the status of household poverty in Paschim Medinipur, one of the backward districts in the state of West Bengal by adopting a methodology combining different dimensions of human wellbeing. It attempts to develop a household poverty index by using principal component analysis. The present study attempts to explore the impact of MGNREGA programmes on the household poverty index. The empirical results confirm that MGNREGA programmes has a significant positive impact on poverty index.

**Keywords:** Poverty, Financial Inclusion, Principal Component Analysis.

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**I. Introduction**

Eradicating poverty and reducing inequality of income distribution are among the most important development policy issues. Poverty can be defined as deprivation in well-being, which lacks precision in terms of what this constitutes. The now traditional view of poverty – as reflected in the Human Development Reports and World Development Reports since the early 90s – is that it has multi-dimensions, both monetary (as measured by income or consumption) and non-monetary (including lack of access to health, education, social relations, lack of voice, and so on)<sup>1</sup>. Poverty analysis has developed from its traditional focus which exclusively based on income and material wealth and emphasized on economic (or quantitative) aspect of life, to a multi-dimensional approach that considers not only with the economic aspect but also with other aspects of life like social, ecological, political and environmental aspects of life. Thus, measurement of poverty deals with the quantitative and qualitative facets of life. According to this approach, mere deprivation of basic needs does not imply poverty only but influence it. Sen suggests that human well-being is not determined by the possession of resources only but by the transformation of these resources into “functionings” which depends not only upon personal factors but also on social and environmental factors. Thus, Poverty can be defined as an accumulation of ‘deprivations’ or ‘shortfalls’ according to the different considered dimensions which includes economical, social, ecological, psychological and so on. Since independence, the Government of India has initiated different policy measures for eradicating the curse of poverty and sustainable development. The Mahatma Gandhi National Rural

Employment Guarantee Act (MGNREGA) is one of the best-suited vehicles through which poverty alleviation destination seems to be reachable. MGNREGA is the flagship programme of the Indian Government that directly touches the lives of the rural poor. The act was enacted on 25th August, 2005 and it came into force on 2nd February, 2006. Evolving the design of the wage employment programmes to more effectively fight poverty, the Central Government formulated MGNREGA in 2005. MGNREGA aims at enhancing the livelihood security of people in rural areas by guaranteeing hundred days of wage employment in a financial year to a rural household whose adult members volunteer to do unskilled manual work ([www.nrega.nic.in](http://www.nrega.nic.in)). MGNREGA provides employment to those who demand it and is a paradigm shift from earlier programmes. Mahatma Gandhi National Rural Employment Guarantee Act aims at creating sustainable rural livelihood through regeneration of the natural resource-base, i.e. enlarging productivity and supporting creation of durable assets and strengthening rural governance through decentralization and processes of transparency and accountability. Gram Panchayats are involved in the planning and implementation of the scheme and creation of durable assets for sustainable development of the rural areas.

The Act covered 200 districts in its first phase, implemented on February 2, 2006, and was extended to 130 additional districts in 2007- 2008. All the remaining rural areas have been notified with effect from April 1, 2008. Up to the end of financial year 2010-11, this scheme has provided employment to 5.47 crore households with around 256.44 crore person-days work, which has created 25.79 lakh assets with 24.95 lakh works are in progress. In West Bengal, MGNREGA is rapidly progressing. The Act covered 20 districts, 341 blocks and 3347 Gram Panchayats up to 2016-17. Up to the end of financial year 2016-17, this scheme has issued job cards 126.21 lakhs and provided employment to 283.65 lakhs workers with around 1509.09 lakhs person-days work, of which 31.79 per cent of total generated person days goes to SC, 8.39 per cent belongs to ST and 46.55 per cent belongs to women. In Paschim Medinipur district, the MGNREGA has been rapidly progressing. In this district, the Act covered 29 blocks. In financial year 2016-17, this scheme has provided employment to 5.31 lakhs households with around 151.22 lakhs person-days work, of which 23.54 per cent of total generated person days goes to SC, 17.77 per cent belongs to ST and 35.86 per cent belongs to women. Cumulative number of households getting job cards reaches at 9.58 lakhs ([www.nrega.nic.in](http://www.nrega.nic.in)).

The approach paper of Eleventh Five-Year Plan (2007-12) has chosen 'faster and more inclusive growth' as its central theme. It recognized the need to make growth 'more inclusive' in terms of benefits of growth flowing to those sections of population, which have been bypassed by high rates of economic growth achieved in the recent years. It has also been perceived that disparities among regions have been increasing steadily and the gains of the rapid growth have not reached all parts of the country in an equitable manner (Ghosh, 2010). One of the major planks of rapid poverty reduction in the Eleventh Five-Year Plan is the successful implementation of MGNREGA in all the states of India.

The MGNREGA is completely different in concept from the earlier government employment schemes since it treats employment as a right and the programme is commenced to be demand-driven. The right-based framework of the programme makes the government legally bound to extend employment to those who demand it. It is also being increasingly recognized that the MGNREGA has the potential to transform rural economy and social relations at many levels. The performance of the scheme has shown a consistent improvement almost in every aspect. The number of households who have been provided employment under MGNREGS has increased rapidly which shows a wide coverage of the scheme. The other important points to be noticed are the increasing participation of women, the increasing person days employment per household and the average wage per person day. All these indicate that substantial income is being provided to the households working under the Scheme. Wage-earners are the main focus of this Scheme and it has enormous potential to uplift the socio- economic status and eradication of poverty of the rural poor who are mainly landless agricultural labourers and marginal and small farmers. Substantial increase in income will

perceptibly lead to a better standard of living. Keeping all this into account, the present study has examined the impact of MGNREGA on rural poverty reduction and improving socio-economic conditions of the rural poor.

The poverty, a growing area of study, has gained its position in the empirical research of various fields like social policy, economics, psychology, health services and so forth. The main problem is that there is no universal determination of the poverty index. A few studies related to poverty and its determinants have been done in India and abroad so far. Access to credit helps the poor to improve their productivity and management skill which in turn increases their income and other benefits, such as, health care and education. Realistic evidence can be originated from various papers, such as, Morduch (1995), Gulli (1998), Pitt and Khandker (1998, 2002), Zeller (2000), Parker and Nagarajan (2001), Khandker (2001, 2003), Khandker and Faruque (2001), etc.. Benhabib *et al.* (2007) observes that the fuzzy set approach is more pertinent than others in capturing different graded attributes of poverty. The study reveals that income is not the sole indicator of the poverty and should be supplemented by other attributes, *viz.*, housing, level of comfort and social capital. Kabir *et al.* (2012) have examined the impact of micro credit on reduction of poverty through improvement of standard of living and increasing empowerment of poor and marginalized sections of the society. They conclude that there is a noticeable and positive impact of micro credit activities on the standard of living, empowerment and poverty reduction among the poor people of Bangladesh. Pamecha and Sharma (2015) has made an effort to analysis the socio-economic impact of MGNREGA scheme on the livelihood of the beneficiaries of Dungarpur District, Rajasthan. The study reveals that the programme has brought the change in lives of the beneficiaries. Vashishtha P. S. (2015) observes that MGNREGA effect on poverty reduction in less developed areas as compared to more developed areas. Areas with low participation rate experienced much greater poverty reduction than areas with a high participation rate. The study also finds that MGNREGA got out of focus. Declining employment and declining awareness are feeding on each other. Hanumantha Rao (2014) unambiguously observes that while the impact of the NREGA on overall poverty reduction may be moderate, it certainly results in reducing the intensity of poverty of the beneficiary households, which is directly related to the days of participation in the scheme and innovative ways of planning the works. 'Rights' based interventions such as NREGA *per se* cannot resolve the socio-economic problems of the rural poor community that has been experiencing multiple deprivations and has been denied justice over a long time. Sarkar *et. al.* (2011) observe that the socio-economic condition of the households regularly working under the MGNREGA scheme is considerably poor than of the other households in the rural area. They are the really needy people. Though the socio-economic conditions have been improving gradually, but to fasten the rate of improvement some developmental initiative can be integrated with the scheme mainly targeting those households who are working regularly under the scheme for long periods. Convergence of MGNREGA with other scheme of public works will certainly improve the skill levels among the workers.

Most of the earlier studies as mentioned above put their effort on the measurement of poverty of the households, which are exclusively based on income and material wealth and emphasized on economic (or quantitative) aspect of life. Qualitative aspect of poverty has been left out in those studies. The earlier studies did not put any specific emphasis on the role of MGNREGA on poverty eradication through upliftment of income and wealth level. There is hardly any work conducted so far on the impact of MGNREGA on poverty alleviation in the context of backward region. The regional problems and prospects relating to poverty are not clearly discussed or demonstrated in the earlier studies. The study thus attempts to explore and find out to what extent the poverty of the sample households in the district of Paschim Medinipur, one of the backward districts of West Bengal, has been influenced after they could obtain access to MGNREGA programmes. The following questions have been addressed in the study: Does MGNREGA play any significant role on poverty

eradication of the households? Is education level of the head of the household related to wellbeing of the households?

## II. Methodological Treatment:

When poverty is conceptualized as a multidimensional construct, it should be measured through the aggregation of the different deprivation variables experienced by the households. Accordingly, measuring multidimensional poverty usually involves the incorporation of information provided by several variables into a composite poverty index. The general procedure in the assessment of composite indices faces three problems, namely, selection of indicators, definition of a weighting scheme for each indicator and aggregation of the variables into a composite one. In this study principal component analysis has been applied for measuring multiple poverty index. This analysis reduces the number of indicators and helps to assign the weights to each principal component in accordance with their contribution in total variability in the data set. Standardization is generally recognized as a necessary step before applying principal component analysis. This is important to avoid giving variables with different measurement units and disproportionate ranges undue importance at the expense of others (Gilthorpe, 1995).

Basically, the principal component technique slices information contained in a set of indicators into several components. Each component is constructed as a unique index based on the values of all the indicators. The main idea is to formulate a new variable,  $z_1$ , which is the linear combination of the original indicators so that it accounts for the maximum of the total variance in the original indicators (Basilevsky, 1994).

In other words, once data on  $k$  indicators are arranged in  $k$  columns to form a  $n \times k$  matrix  $X$ , the method of principal components can be used to extract a small number of variables that accounts for most or all variations in  $X$ . This is done by obtaining a linear combination of the columns of  $X$  that provides the best fit to all columns of  $X$  as in

$$z_1 = Xw \dots\dots\dots(1)$$

The first principal component is then described by the index variable  $z_1$ , as defined in equation 1. This index aggregates the information contained in the poverty indicators. Having identified the first principal component as the 'poverty' component, one can compute for each household denoted by the subscript  $j$  its poverty index  $z_j$  with the following equation:

$$z_j = f_1 * ((X_{j1} - X_1) / S_1) + \dots + f_N * ((X_{jN} - X_N) / S_N) \dots\dots\dots(2)$$

where  $f_1$  is the weight for the first of the  $N$  poverty indicator variables identified as significant in the PCA model,  $X_{j1}$  is the  $j$ th household's value for the first variable, and  $X_1$  and  $S_1$  are the mean and standard deviation of the first variable over all households (Zeller et al., 2006). This study has used the eigen values as the weight of the PCs. The first principal component (PC1) has the highest eigen value and accounts for the highest percentage of variance. The second component (PC2) is completely uncorrelated with PC1 and explains additional but less variation than PC1. Eigen values describe how much variance is accounted for by a certain factor. This poverty index is a measure of relative poverty. Having a negative value for the poverty index identifies a household as being poorer than the population mean, whereas positive values indicate an above-average wealth.

In this study principal component analysis has also been used for assessing households' MGNREGA index.

## III. Sample and Data source

On the basis of a number of socio economic indicators, districts of West Bengal are segregated into two groups: relatively developed districts and relatively backward districts (Das, 2011). In the study, Paschim Medinipur district has been selected from the group of backward districts.

Primary data have been collected from the households which have been selected on the basis of multi-stage stratified random sampling. In the first stage, 3 blocks have been randomly chosen from the selected district. In second stage, 2 villages have been randomly selected from the selected blocks. In final stage 20 households have been selected from each selected village. Thus, a total of 120



households have been selected for the detailed survey. Relevant information for measurement of household MGNREGA index and household poverty index from each sample household has been collected in order to assess the impact of access to MGNREGA programme on household poverty. The information from 120 sample households was collected on the socio-economic characteristics affecting well-being of the households, *viz.*, provision of health care, education expenses per student of the household, average amount of nutritious food consumption per member of the household, average amount of assets possessed by the household, per capita monthly household income, provision of housing or shelter, provision of safe drinking water, provision of sanitation, their experience regarding relative social liberty, their participation in social decisions and their involvement in social works and development, etc.. These data have been collected with the help of a well-structured questionnaire.

#### **IV. Findings relating to Poverty Index of the Households after application of Principal Component Analysis**

##### ***The Indicators of Poverty Index***

The HDI in any economy comprises of three basic dimensions, namely, a long and healthy life (*i.e.*, health dimension), knowledge (*i.e.*, education dimension), and a decent standard of living (*i.e.*, wealth dimension). In addition to these three components, human wellbeing is also influenced by societal component. Ten indicators have been taken into consideration in this study and they have been categorized under four above-mentioned components.

Health component includes better health care, safe drinking water and use of sanitation. Education component includes educational expenses per student of household. Wealth or standard of living component includes nutritious food budget, average amount of assets possessed by household, per capita household income and better housing or shelter. Societal component includes relative social freedom and social recognition.

Let us now elaborate the notations used to represent different indicators as mentioned above and scoring of response received from different sample respondents whereas applicable.

**Y<sub>1</sub>** denotes better health care of the household. 2 point has been given to the respondents who go to the private clinic for their health treatment. 1 point has been assigned to those who obtain their health treatment from the public health centre or any other charitable health institutions. 0 point has been given to them who have not any ability either to go to private health clinic or public health centre for their better health treatment; they only follow traditional method of health treatment.

**Y<sub>2</sub>** denotes educational expenses per student of the household.

**Y<sub>3</sub>** denotes average amount of nutritious food consumption per member of the household.

**Y<sub>4</sub>** denotes average amount of assets including business assets and household assets.

**Y<sub>5</sub>** denotes amount of monthly household income per member of the household.

**Y<sub>6</sub>** denotes better housing/ shelter.

- a. If the house is owned by the respondent, point 1 is to be given, otherwise 0.
- b. If the house is modern type, point 1 is to be given, otherwise 0.
- c. If the house is pucca type, point 1 is to be given, for chucha type point 0.
- d. If the house has electric connection, point 1 is to be given otherwise 0.
- e. If the house has gas connection, point 1 is to be given otherwise 0.

**Y<sub>7</sub>** denotes use of safe drinking water. If the respondent has own sources of drinking water system, 1 point has been given. In case of supplied by local authority like Gram Panchayat, point 0 is to be given. Another extra 1 point is to be given to those households who drink water after proper purification.

**Y<sub>8</sub>** denotes use of sanitation. If the respondent has erected the sanitation system out of his own sources of income, point 2 is to be given. If the respondent has erected the sanitation system with the financial support of local Panchayet, point 1 is to be given. Otherwise point 0 is given.

**Y<sub>9</sub>** denotes relative social freedom.

- i. Point 1 is to be given, if there is no political or other disturbance in his or her village, otherwise 0 is given.
- ii. If the respondent can participate in any public protest freely, point 1 is to be given to him.
- iii. Point 1 is to be given, if the respondent can express his or opinion freely in his or her society, otherwise 0 is given.

$Y_{10}$  denotes social recognition.

- i. Has he or she any participation in social decision?

Point 1 is to be given for yes, otherwise 0 is given.

- ii. Has he or she any involvement in social works and development?

Point 2 is to be given for active participation; point 1 is to be assigned for sleeping participation and point 0 is to be given for non participation.

Before going to compute household poverty index, a bi-variate correlation matrix of the selected indicators and the descriptive statistics have been presented in Table 1 and Table 2 respectively.

**Table 1 Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
$Y_1$	120	0	3	2.15	0.932
$Y_2$	120	0	2500	542.36	558.81
$Y_3$	120	0	1200	290.85	239.33
$Y_4$	120	3500	2000000	468508.3	549428.3
$Y_5$	120	48	6667	1820.28	1309.70
$Y_6$	120	0	5	2.88	1.43
$Y_7$	120	0	2	0.78	0.825
$Y_8$	120	0	2	1.29	0.74
$Y_9$	120	0	3	1.58	1.13
$Y_{10}$	120	0	3	1.66	1.19
$Z_i$ (Poverty Index)	120	-1.744	1.635	0.00000007	0.876
Valid N (listwise)	120				

**Table 2 Correlation Matrix**

	$Y_1$	$Y_2$	$Y_3$	$Y_4$	$Y_5$	$Y_6$	$Y_7$	$Y_8$	$Y_9$	$Y_{10}$
$Y_1$	1.00									
$Y_2$	0.613**	1.000								
$Y_3$	0.654**	0.838**	1.000							
$Y_4$	0.610**	0.786**	0.775**	1.000						
$Y_5$	0.555**	0.755**	0.794**	0.779**	1.000					
$Y_6$	0.718**	0.682**	0.760**	0.798**	0.697**	1.000				
$Y_7$	0.646**	0.600**	0.636**	0.728**	0.648**	0.710**	1.000			
$Y_8$	0.596**	0.541**	0.629**	0.651**	0.566**	0.787**	0.634**	1.000		
$Y_9$	0.290**	0.238**	0.317**	0.210*	0.230*	0.316**	0.240**	0.267**	1.000	
$Y_{10}$	0.275**	0.234*	0.299**	0.207*	0.264**	0.303**	0.248**	0.173	0.825**	1.000

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

The correlation matrix shows the Pearson correlation coefficient between all pairs of variables. The correlation matrix is used to check the pattern of relationships. Since the correlation coefficients between all pairs of variables do not exceed 0.9, the data set is free from multicollinearity problem.

Table 3 shows the appropriateness of the Principal Component Analysis for the data set of poverty index. The KMO measure of sample adequacy and sphericity test support the application of

PCA in the data set. For these data the KMO value is 0.879, which indicates that the sample size is adequate for factor analysis.

**Table 3 KMO and Bartlett's Test: Appropriateness Test of Principal Component Analysis**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.879
Bartlett's Test of Sphericity	Approx. Chi-Square	1012.576
	df	45
	Sig.	.000

Table 4 presents the result of PCA of the data set. It shows that two components are much important to present the variation in the data set of the indicators of household poverty. The first component explains 60.623 per cent of total variation while the second component explains 15.90 per cent of total variation in the data set.

**Table 4 Results of PCA of the Indicators of Household Poverty**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.062	60.623	60.623	6.062	60.623	60.623	5.704	57.042	57.042
2	1.590	15.900	76.522	1.590	15.900	76.522	1.948	19.480	76.522
3	0.653	6.533	83.055						
4	0.427	4.266	87.321						
5	0.390	3.898	91.219						
6	0.236	2.361	93.580						
7	0.216	2.163	95.743						
8	0.162	1.620	97.363						
9	0.149	1.490	98.852						
10	0.115	1.148	100						

Extraction Method: Principal Component Analysis.

#### V. Findings relating to MGNREGA Index of the Households after application of Principal Component Analysis

In this study, the MGNREGA index of the households have been constructed by using PCA. Three important factors of MGNREGA index, *viz.*, 'access to programme' ( $M_1$ ) (*i.e.*, whether the household participates into the programme or not), 'intensity' ( $M_2$ ) (*i.e.*, number of job cards hold by the household) and 'penetration' ( $M_3$ ) (*i.e.*, number of days participated in the job by the household in a year) have been taken into consideration for construction of MGNREGA index. Descriptive statistics on the basis of scores of the three important factors of MGNREGA index, *viz.*, 'access to programme', 'intensity', and 'penetration' as well as the MGNREGA index of the households are presented in Table 5.

**Table 5 Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
'Access to Programme' ( $M_1$ )	120	0	1	0.85	0.359
'Intensity' ( $M_2$ )	120	0	5	2.79	1.472
'Penetration' ( $M_3$ )	120	0	100	53.2	27.125
MGNREGA index (MGI)	120	-2.292	0.6143	0.0117	0.961
N	120				

**Table 6 Correlation Matrix**

	(M <sub>1</sub> )	(M <sub>2</sub> )	(M <sub>3</sub> )
(M <sub>1</sub> )	1.000		
(M <sub>2</sub> )	0.689**	1.000	
(M <sub>3</sub> )	0.750**	0.851**	1.000

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

Since the correlation coefficients between all pairs of variables do not exceed 0.9, the data set is free from severe multicollinearity problem. Table 7 shows the appropriateness of the Principal Component Analysis for the data set of MGNREGA index of the households. For these data the KMO value is 0.718. Since the KMO value is greater than 0.5, sample adequacy and Sphericity test support the application of PCA in this data set.

**Table 7 KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.718
Bartlett's Test of Sphericity	Approx. Chi-Square	250.146
	df	3
	Sig.	.000

Table 8 presents the result of PCA of the data set in respect to MGNREGA index of the households. It shows that two components are much important to present the variation in the data set of the indicators of household financial inclusion index. The first component explains 84.282 per cent of total variation while the second component explains 10.990 per cent of total variation in the data set.

**Table 8 Results of PCA of the Indicators of Household Financial Inclusion Index**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.528	84.282	84.282	2.528	84.282	84.282
2	0.330	10.990	95.272			
3	0.142	4.728	100			

Extraction Method: Principal Component Analysis. Only one component is extracted. Solution can't be rotated.

## VI. Estimation of Household Poverty: Multiple regression results

### *The Regression Model for Estimation of Household Poverty*

In this section, we investigate the impact of MGNREGA activities on the poverty of the households by using multiple linear regression analysis. The dependent variable is poverty indices as measured in the previous section. Two sets of independent variables are included in the regression analysis: those relating with MGNREGA index (C<sub>1</sub>) and control variables measuring household characteristics, namely per capita savings of the households (C<sub>2</sub>) as well as education of household head (C<sub>3</sub>). The reason why we include control variables is that personal characteristics may influence the wellbeing of the household. The specification of independent variables and their descriptive statistics is summarized in Table 9.

**Table 9 Specification of Independent Variables and their Descriptive Statistics**

Variables	Specification	MAX	MIN	MEAN	SD
C <sub>1</sub>	MGNREGA index of the households	0.614	-2.292	0.0118	0.961
C <sub>2</sub>	Per capita savings of the household	2500	0	506.267	593.86
C <sub>3</sub>	Education Level of the Head of the Household	3	0	1.58	1.017

The poverty of the households is estimated on the basis of the following regression model:

$$Y = a + C\beta + \varepsilon$$

where, C is (3xN) matrix of household characteristics variables,



$a$  and  $\varepsilon$  are  $(N \times 1)$  vectors of constant and disturbance term as usual,  
 $\beta$  is the  $(N \times 1)$  coefficient vectors of household characteristics  
 $N$  is the number of observations (households), which is 120, and  
 $Y$  is the poverty index of the Households.

The above regression model is applied to estimate the poverty of the households. Separate regression equations have been run taking separate indicators of poverty index as the dependent variable. Accordingly, eleven regression models, *i.e.*, ten models for ten indicators and additional one for overall poverty index score ( $y_{it}$ ) have been run. Thus, eleven models have been specified for the estimation of  $Y_1, Y_2, Y_3, Y_4, Y_5, Y_6, Y_7, Y_8, Y_9, Y_{10}$  and  $y_{it}$ . The results of the eleven regression equations are presented in Table 10.

**Table 10 Regression Estimations**

Dependent Variables	$\alpha$	Independent Variables			R <sup>2</sup>	Adj. R <sup>2</sup>	F Value
		C <sub>1</sub>	C <sub>2</sub>	C <sub>3</sub>			
Y <sub>1</sub>	1.707***	0.366***	0.00063***	0.075	0.494	0.481	37.822***
Y <sub>2</sub>	170.813**	66.548	0.651***	25.876	0.593	0.582	56.261***
Y <sub>3</sub>	89.521***	28.325*	0.269***	40.839***	0.677	0.668	80.893***
Y <sub>4</sub>	-29.792	17.50	0.598***	123.300***	0.629	0.620	65.621***
Y <sub>5</sub>	978.561***	335.662***	1.525***	41.675	0.703	0.695	91.480***
Y <sub>6</sub>	1.779***	0.423***	0.0011***	0.333***	0.632	0.623	66.478***
Y <sub>7</sub>	0.276**	0.163**	0.00076***	0.071	0.486	0.473	36.616***
Y <sub>8</sub>	0.897***	0.215***	0.00049***	0.091	0.419	0.404	27.927***
Y <sub>9</sub>	0.698***	0.230**	-0.00026*	0.646***	0.418	0.403	27.822***
Y <sub>10</sub>	0.856***	0.322***	-0.0003*	0.601***	0.398	0.382	25.527***
$y_{it}$	-0.572***	0.298***	0.0008***	0.102*	0.812	0.659	74.809***

\*\* → Significant at 1% Level, \* → Significant at 5% Level and \* → Significant at 10% Level.

The results indicate that the poverty of the households is positively significantly influenced by MGNREGA activities, per capita savings of the households and also by the education level of the head of the household. MGNREGA is a significant potential powerful explanatory indicator of the household poverty. Access to MGNREGA programmes creates job opportunities which lead to enhance per capita income of the household, which makes them economically safer and secured and ensures them to have a better household wellbeing. The empirical findings show that MGNREGA is an important causal factor behind all the components (or, the independent variables in the regression model) of poverty eradication. It has also positive significant impact on social factors. Participation into MGNREGA programmes creates social association which leads them to enhance their involvement in social works and development. They also take active participation in social decision making process which leads them to feel relative social freedom. Per capita saving positively and significantly stimulates all the components of poverty except social freedom (Y<sub>9</sub>) and social recognition (Y<sub>10</sub>). In fact, relative social freedom and social recognition significantly depend much more upon 'education' level of the household head. Education level of the household head in fact influences all the indicators of poverty eradication positively. Thus it can be conclude that participation into MGNREGA programmes of a household induces economic as well as social aspect of life, whereas per capita savings enhance only economic aspect of life. Here comes to the role of education. Expectedly, education has succeeded to induce the households positively in respect of their upliftment of wellbeing in the field of both economic and social aspects of life.

## VII. Conclusion

The paper traces the status of poverty index of the households in the district of Paschim Medinipur and also throws light on its determinants thereof. The empirical investigation follows the construction of poverty index of the households, by applying principal component analysis, while regression analysis has been used to study the dimensional impact on poverty index. The empirical findings show that MGNREGA is an important causal factor behind all the components of poverty eradication. It has also positive significant impact on social factors. Per capita saving positively and significantly stimulates all the components of poverty except social freedom ( $Y_9$ ) and social recognition ( $Y_{10}$ ). In fact, relative social freedom and social recognition significantly depend much more upon 'education' level of the household head. The study observes that participation into MGNREGA programmes of a household induces economic as well as social aspect of life, whereas per capita savings enhance only economic aspect of life. Here comes to the role of education. Education has succeeded to induce the households positively in respect of their upliftment of wellbeing in the field of both economic and social aspects of life. The study accordingly concludes that to improve the overall status of quality of life, there is a need to improve all the dimensions simultaneously. This is because they are very much interdependent of each other. The lack of one leads to lack of others, resulting in an overall degradation in the status of life. The study also recommends that there is an urgent need of well-integrated programme for the relatively backward blocks of this district.

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