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Abstract

It is generally seen that due to financial incapacity the poor people cannot purchase their minimum requirement to maintain their life. They suffer from malnutrition. Though Public Distribution System is the most popular and important food security measure, it is not performing well in recent years due to various reasons. In the presence of massive poverty and unemployment public distribution system is not the only answer to achieve food security of the poor people. In this case National Rural Employment Guarantee Scheme (NREGS) can play a vital role to achieve food security and livelihood security of the rural poor. It is a wage employment programme and most importantly it is self targeting. If this scheme can be implemented properly then it can increase the income level of the rural poor. So it can create the purchasing power of the rural poor. Their consumption level as well as standard of living will increase. This paper tries to explain the impact of NREGA on the food security and livelihood security of the rural poor in the Burdwan district of West Bengal.

Key words: National Rural Employment Guarantee Act, food security, livelihood security, anti-poverty programmes.

Introduction

The growing concern of national and international organizations over eradication of hunger and malnutrition prevalent among low-income consumers in many developing countries has generated a sense of urgency about analyzing the scope and effectiveness of specific policy measures available for increasing the consumption levels of the poor. Improving food security at the household level is an issue of great importance for a developing country like India where millions of poor suffer from persistent hunger and malnutrition. In India, aggregate level data shows that with per capita availability of more than 500 grams of food grains per day, self-sufficiency has been achieved. There is a consensus among the economists that the food security system in India in the form of Public Distribution

System that has evolved in the economy since the mid-sixties has been able to eliminate famines and also to bring substantial measure of relief to the consumers during years of acute scarcity. In India, food problem in the sense of shortage of food grains no longer exists. But food problem in the normative sense still continues to exist as millions of poor suffer from persistent hunger and malnutrition. In fact, the poor do not have means to gain access to food in the quantities needed for a healthy life. This is the task to which the food security system must address itself in the future.

There are several ways by which food security can be achieved. The alternative strategies consist of several policies. India's strategy in this regard consists of economic growth, direct anti-poverty programmes, which include wage-employed and self-employed targeted programmes, Public Distribution System, nutrition based programmes, provision of free or subsidized health facilities etc. Given the wide variety of policies presently the need for more efficient implementation of the poverty alleviation programmes is more urgent now because of the likely adverse impact of the new economic policies on the poor at least in the short run. For framing the policies on poverty and food security, knowledge about the composition and location of the poor is important. In India target-oriented Public Distribution Systems for food grains are very popular policy measures used to supply food grains to target groups at a subsidized price level. Public distribution can be both a step towards economic growth and a step towards achieving some level of equity in food consumption.

However, in the recent years the effectiveness of Public Distribution System (PDS) is often questioned because of its potential impact on the consumption level of the consumer target group, its impact on other sectors of the economy, its cost, and its compatibility with a direct income transfer instead of price subsidies. It is seen that the problems with the PDS are part of a larger pattern of Government inefficiency. The reasons for failure may be economic stagnation, underdevelopment and the changing political landscape. Specificities of a particular State should have to be taken into account. Here we argue that the cost effectiveness of the system appears to be low partly due to the fact that several indirect benefits of the system go unaccounted. The increased demand for food grains resulting from food subsidies would also lead to multiplier effects, raising the overall growth of the economy. Effective functioning of the PDS would lead to adequate increase in demand and reduce the need for price support to farmers. It

would also avoid the paradoxical situation of widespread hunger alongside mounting stocks of food grains.

It is generally argued that in conditions of massive poverty and mass scale unemployment, PDS is not the only safety net or anti poverty program. Rural Works Programmes (RWPs) like Employment Guarantee Scheme (EGS), Jawahar Rozgar Yojana (JRY) and Employment Assurance Scheme (EAS) which provide employment to the poor sections are also powerful safety nets for the poor. Both these programmes differ in their approach in helping the poor. The employment programmes are income generating programmes and they thus aim at providing purchasing power to the people to purchase their requirements. PDS, on the other hand, works only if people already have purchasing power in their hands. The most important advantage of Rural Works Programmes as safety net to the poor is that they are "self targeting." This advantage is missing in PDS. There are other secondary benefits of Rural Works Programmes also like the contribution of such programmes in building up rural assets, increasing the bargaining strength of unskilled workers, and acting as insurance for rural workers by preventing acute distress sales of productive assets etc. But RWPs alone cannot serve as a poverty alleviation measure. So PDS should be partly implemented through Employment Generation Scheme. However, it must be remembered that employment programmes like EGS and JRY leave out many other sections of the population such as old, handicapped, children etc. So the Government has to take care about this.

National Rural Employment Guarantee Act (NREGA)

National Rural Employment Guarantee Act (NREGA)² was passed in the year 2005. It is a major step towards legal enforcement of the right to work as an aspect of the fundamental right to live with dignity. This act was enacted to enhance mainly the livelihood security of the poor households in the rural areas by providing 100 days of wage employment in a financial year. In West Bengal NREGA became operational since February, 2006. Constructions of roads, ponds, drainage system, plantation etc. are some most popular areas where NREGA complemented in village development. The listed works under this NREGA scheme are likely to promote livelihood security and food security of the rural poor. This employment scheme is generally assumed to be self-selecting.³The success of the programme is conditioned by increased degree of peoples' participation

and increased employment days together with generation of productive assets. Though there is a country-wise demand for increased employment days, yet it is often found that the number of days generated by this scheme is substantially less than 100.4 An innovative feature of the National Rural Employment Guarantee Act is that it gives a central role to "social audits" as a means of continuous public vigilance. The NREGA introduced bank payments or post office payments as safeguards against corruption in wage payments to the labourers. It has been specified in the act that if an applicant is not provided employment within 15 days of his application seeking employment, then the person shall be entitled to a daily unemployment allowance which will be paid by the State Government. In respect of payment of wages under NREGA, men and women are entitled to receive the same wages. In fact, any form of gender discrimination is strictly prohibited under the NREGA scheme. The act provides that wages are to be paid on time. Disbursement of wages to workers has to be done on weekly basis and not beyond fortnight from the date on which work was done. One of the important objectives of the NREGA is to arrest the migration of the rural poor who go outside in search of job. Awareness about NREGA among people in all its aspects is an important aspect for the success of NREGA.

Literature review

Many economists have studied the performance of NREGA scheme as a wage employed programme to improve the standard of living of the rural poor in different parts of India. Notable among them are Arun Jacob and Richard Varghese (2006),⁵ Chhaya Datar (2007),⁶ Jha. R, R. Gaiha and S. Shankar (2008),⁷ Jha. R, S. Bhattacharyya, R. Gaiha and S. Shankar (2009),⁸ Ashok Pankaj and Rukmini Tankha (2010),⁹ Subhasis Dey and Arjun Bedi (2010),¹⁰ Prattoy Sarkar, Jagdish Kumar and Supriya (2011),¹¹ Puja Dutta, Rinku Murgai, Martin Ravallion and Dominique Van De Walle (2012),¹² Minati Sahoo (2013),¹³ etc.

Objective of the study

NREGA through generating incremental income is expected to bring about changes in the living standard of the rural poor. The potential benefit of NREGA might have been greater if households were provided with full one hundred days of employment during the financial year. Many economists

argued that the overall impact of NREGA on food security is positive as it improved the food security for majority of households. But some studies showed that NREGA did not have a significant impact on the food security of the rural poor as the number of employment days is sufficiently low. So NREGA did not help them to increase their income level. Moreover, wage is not paid regularly. There is a delay in the case of payment of wage. Due to these reasons it is sometimes argued that NREGA is not an effective mechanism to improve the standard of living of the rural poor. Due to their low purchasing power they are not able to purchase the required food grains. So their food security and livelihood security is not ensured. So the objective of this study is to identify the factors determining the participation of rural people in NREGA scheme and to see whether NREGA has been successful or not in ensuring food security and livelihood security of the rural poor in the Burdwan district of West Bengal by using a probabilistic model.

Methodology

In this study we want to examine the impact of NREGA on food security and livelihood security of the rural poor in the Burdwan district of West Bengal. This study is mainly based on primary data. The primary data is collected through random sampling by using a questionnaire. Here we selected two blocks from Burdwan district. From each block two panchayats were selected. Three villages were selected from each panchayat. From each village 25 poor households were selected who were entitled to get job in NREGA scheme. So in this study we consider total 300 representative households during the period 2014 - 2015.

Econometric Model

 $Y_{i} = \beta_{1} + \beta_{2}X_{i} + \beta_{3}S_{i} + \beta_{4}K_{i} + \beta_{5}M_{i} + \beta_{6}A_{i} + \beta_{7}E_{i} + \beta_{8}F_{i} + \beta_{9}N_{i} + \beta_{10}R_{i} + \beta_{11}P_{i} + U_{i}$ Where,

Y_i = Decision to join in NREGA scheme to improve food security and livelihood security of the rural poor

 X_i = income from alternative sources

 $S_i = Size of the household$

 $K_i = Caste of the household$

M_i = Wage rate received in NREGA

A_i = Asset holding of the household

E_i = Educational attainment

 $F_i = Age composition of the family$

 $N_i = Number of days employed in NREGA$

 $R_i = Regularity of wage payment in NREGA$

 $P_i = Public awareness$

U_i = Random disturbance term

Empirical estimates

Regressors Constant	Coefficient 6.2906**	Standard error 2.2927	t-statistics 2.7438
X _i	-0.042814*	0.9956E-2	-4.3004
S_{i}	1.8196**	0.46161	3.9420
K _i	0.14541	0.48099	0.30231
M_{i}	1.8196	0.46161	3.9420
A_{i}	-0.53114*	0.40399	1.3147
E _i	-0.90808**	0.49956	-1.8178
F_{i}	-0.52029***	0.27039	-1.9242
N _i	0.24562*	0.50343	0.48789
R _i	0.47593*	0.20718	2.2972
P _i	1.1180***	0.44708	2.5006

Akaike Information Criterion = -110.7793

Schwarz Bayesian Criterion =-142.2614

Hannan-Quinn Criterion =-123.3785

Goodness of fit (R^2) = 0.83000

Adjusted $R^2 = 0.80224$

Source: Author's own calculation based on primary sample data.

From the above table we see that the decision of the rural poor to join in NREGA scheme depends on certain quantitative and qualitative factors. NREGA is a wage employed scheme. It is self targeting. So the actual poor

^{*} stands for significant at 1% level of significance.

^{**} stands for significant at 5% level of significance.

^{***} stands for significant at 10% level of significance.

people will demand job in this scheme. Income earned by the individual from other sources is a crucial variable in deciding whether the individual will join in NREGA scheme or not. They are negatively related and the result is statistically significant at 1% level. The reason is obvious. If the individual earns income from other sources in a regular basis then their urge to getting employed under NREGA scheme will be less. Size of the household is also a crucial variable. If the family size is large then they want to join in NREGA scheme to increase their income level as well as purchasing power. The relation is positive and significant. The result is significant at 5% level. The major objections against NREGA scheme are that actual number of employment days is very low and wage is not paid regularly. So these two variables are very important and positively and significantly related with the decision to join in NREGA. They are significant at 1% level. Caste of the people is also an important variable. Many non general people (belonging to SC, ST, OBC) are engaged in this scheme. So they are the beneficiaries of this scheme. But in this study this variable does not play significant role. Public awareness is necessary to know the process of implementation, functioning and the impact of the scheme properly. So it has a positive impact on the decision to join in NREGA scheme. But here the result is statistically significant at 10% level. Education level of the individual is a crucial variable in affecting the decision of the individual. Here the relation is negative. If the individual is educated, then he is not willing to join in NREGA scheme as an unskilled labour. He is trying to get job in formal sector where skill is necessary. In this study the result is statistically significant at 5% level. Asset holding of the individual is negatively related with the decision to join in NREGA scheme. If the individual has some assets then he has little interest to join in NREGA scheme to work as an unskilled labour. The result is significant at 1% level. Age composition of the household which is represented by childadult ratio here is negatively related with the decision of the individual. Generally children are not getting job in this scheme. So if the child-adult ratio is high then it will create a negative impact on the decision of the individual to join in the scheme. The result is significant at 10% level. Lastly, the amount of wage received under NREGA is also a crucial variable in affecting decision of the individual to join in the scheme. If wage rate is high then there is a tendency of the poor people to join in the

scheme. But here the result is not statistically insignificant.

Conclusion and policy prescription

It should be noted that PDS is not the only answer for improving food security of the poor because it can help only those who have purchasing power. Other anti-poverty programmes have to be strengthened as part of the economic reforms for creating income generation among the poor and vulnerable sections of the people. From the above study we see that National Rural Employment Guarantee scheme has the great potential in enhancing food security and livelihood security of the rural poor. So it may increase the standard of living of the rural poor. But there are certain limitations also. In spite of making provision for 100 days of employment in a financial year, actual employment generation has been much lower than 100 days in a year. In many cases delay in wage payment is noticed. Procedural irregularities are also noticed at the stage of implementation of the scheme. It should be noted that NREGA has a positive impact on income generation, asset creation and in improving the standard of living of the rural poor. So if the measures are taken to remove the loopholes of the system, then the effectiveness of NREGA would increase and it would be able to ensure livelihood security and food security of the poor. So the main focus is on implementing the scheme in a proper way. Measures should be taken to increase the number of employment days. Wage should be paid regularly. In this case the rural poor people will be the ultimate beneficiaries. They get some kind of job security. Their income level will increase to some extent. Their purchasing power will increase. Their food security and livelihood security will ensure to some extent. Asset generation will take place in the rural economy and rural-urban migration may reduce in this case.

Endnotes:

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