

Effectiveness of MGNREGA in Alleviating Rural Poverty among Rural Households in Tamil Nadu

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Abstract

Economic growth has been the powerful force to fight against poverty across the world. In India nearly seventy percent of the people living in rural areas and thirty percent of them are subsists under chronic poverty. Rural employment generation has emerged as one of the most crucial socio economic issues in India in recent years. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is the world's largest employment generation programme in India for rural poverty alleviation. The present study assessed the effectiveness of the programme on socio economic condition of the beneficiaries, their awareness, satisfaction and problems faced by them are also analysed. The study area confined to three districts namely Tirunelveli, Salem and Virudhunagar, outcome reveals that awareness level of the beneficiaries differed significantly among gender, age, educational qualification, type of family and size of family. Delay in payment of wages is the foremost problem faced by the beneficiaries followed by inadequacy of fund released by the government. Thus the state and central government should take necessary step to make adequate and prompt delivery of wages to the beneficiaries at time.

Keywords:

Economic growth;

Poverty alleviation;

Employment generation;

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1. Introduction

Achieving faster and more inclusive growth and sustainable development is the focal point of twelfth five year plan of Government of India. Attaining inclusive growth is a holistic concept depends on several factors such as reduction of extreme poverty, inequality, increase employment, education, health, social opportunities etc. Eliminating extreme poverty is a pivotal part that leads to achieve growth and enable the poor to participate in the overall economic activities. India accounted for the largest number of people (nearly

300 million) living below international poverty line of less than \$1.90 a day (World Bank). These people face deprivation in terms of access to basic services, including education, health, sanitation, water, electricity etc. In order to completely eliminate extreme poverty based on United Nations Sustainable Development Goals (UNSDG) 2030, India needs to adopt new strategies and targets to get 1.6 people per second out of extreme poverty. Economic growth has been the powerful force to fight against poverty across the world, especially since 2000. Although critical, economic growth alone will not be sufficient to eradicate the global poverty unless it is accompanied by policies to ensure that the poorest benefit from growth and the job creation process (Beatriz, 2016).

In India nearly seventy percent of the people living in rural areas and thirty percent of them are subsists under chronic poverty. Rural employment generation helps to alleviate poverty in rural areas and emerged as one of the most crucial socio economic issues in India in recent years. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is the world's largest social welfare scheme in India for the poverty alleviation through rural employment generation (Sanjeet Singh, 2016). The United Nations development Program (UNDP) highlighted this programme as a way to achieve the Millennium Development Goal (MDG) of eradicating poverty and deprivation.

MGNREGA enacted by Government of India in 2005, with the prime focus to provide hundred days of wage employment in a financial year to every volunteered adult member of the rural households to do unskilled manual work. It aims at providing sustainable livelihood security through regeneration of the natural resources base i.e. augmenting productivity and creation of durable and physical assets and strengthening rural governance through decentralization and processes of transparency and accountability and enhances the rural economy. The creation of physical assets in rural areas includes water and soil conservation, afforestation, flood control, watershed development, road connectivity, construction and repair of embankments, digging of new tanks/ ponds, construction of percolation tanks, check dams, etc. The act launched initially in 200 districts in 2006-07 and at present this scheme has extended to all 673 districts. Gram panchayat are responsible for planning and implementation of the scheme under Ministry of Rural Development. This programme facilitates to work in the lean season, which helps rural poor to maintain the consumption level and strengthen the livelihood resource base during this critical time period. The present study aimed to assess the effectiveness of MGNREGA in alleviating rural poverty in select districts of Tamil Nadu.

2. Review of literature

Nair M, Ariana P et al (2013) found that participation in MGNREGA was associated with reduced infant malnutrition possibly mediated indirectly through improved birth-weight rather than by improved infant feeding. Ensuring timely and adequate payment could improve food security, and augment the protective effect of the MGNREGA. Therefore, policies need to focus on these factors and target the persistent problem of malnutrition prevalent in India through a convergence of development, health and nutrition policies and programmes. **D. Narasimha Reddy et al (2014)** examined the impact of MGNREGA on agricultural labour markets leads to labour shortage, changes in wages, mechanization, reduction in agriculture production, peak season adjustment of work. Furthermore, it offered better bargaining power to agricultural labourers, better treatment at the place of work, ability to negotiate the working hours and has initiated a growing shift towards piece rate or contract work on agriculture facilitating change in the number of working days. **Debatra Kumar Dey (2016)** attempted to capture the extent of employment generation and creation of durable assets in the last few years in West

Bengal at district level. The Gram Panchayat has no adequate capacity which in turn leads to creation of low value assets without much concern for durability. This approach adversely affects the completion rate of projects taken up leading towards reduced usefulness of the assets or the assets created under the scheme fall short of getting the status of sustainable assets. **Rahul Bahuguna et al, (2016)** depicts that the social and economic well being of the beneficiaries in disaster affected areas of Rudraprayag district of Uttarakhand were significantly improved. The study recommends that there is a need to amend the structure of the programme by introducing more transparent and responsible system and to make it objective specific and goal oriented. **Rhonda Breitreuz, et al (2017)** found that participating experiences varied among SC and ST beneficiaries depending on how MGNREGA wages differs compared to market wages in the region, as well as local implementation of the program. Though MGNREGA offered some basic employment for marginalized groups, it did not provide substantial help to the most vulnerable. Higher wages, more opportunities for work, better implementation and a greater recognition of the care giving responsibilities of women will be required for this policy to fully meet its goals. **Prerona Baruah and Anjali Radkar (2017)** suggested that Dibrugarh district of Assam has the poorer and underprivileged regions as well as households who constitute the bulk of those demanding MGNREGA employment. Low income, poor material conditions, social backwardness, low levels of literacy and absence of stable source of income have been found to be significant in determining MGNREGA participation. Moreover, there is considerable participation by people past the conventional working age of 65 years as well as from women who are otherwise not part of the formal workforce. Thus, it is found that MGNREGA is reaching out to most of its intended beneficiaries, i.e., people who are prone to high degree of livelihood insecurities. **Prattoy Sarkar, Jagdish Kumar and Supriya (2011)** investigated the socio economic impact of MGNREGA among rural poor households includes small and marginal farmers and agricultural labourers in Burdwan district. The MGNREGA have significant impact on per capita income and savings, monthly per capita consumption expenditure, annual per child expenditure on education, condition of the dwelling houses, access to healthcare facility and possession of assets for those households who are regularly working in the scheme. The number of poor households was also reduced from 43.9 percent in 2007 – 2008 to 18.3 percent in 2009-10.

3. Objectives of the study

- To assess the socio economic status of MGNREGA beneficiaries in select districts of Tamil Nadu
- To measure the satisfaction of the beneficiaries towards MGNREGA programme
- To understand the problems faced by the MGNREGA beneficiaries

4. Methodology

4.1. Sample design

Though the aim of the study is to assess the effectiveness of MGNREGA on alleviating rural poverty, districts which have more poor people is considered for the study. As per Tamil Nadu Human Resource Development Report (TNRD) 2017, the districts namely Tirunelveli, Vilupuram, Salem, Thanjavur, Vellore and Virudhunagar have more than two lakh below poverty line (BPL) people. Multi stage random sampling technique is adopted for sample selection. In the first stage, three districts are randomly selected viz Tirunelveli, Salem and Virudhunagar, in the second phase two blocks are chosen from each districts, in third step two villages are selected from each blocks. Total of 332 sample beneficiaries are taken based on proportion to the BPL population in particular district. The list of sample districts, blocks, villages and sample size are given in Table 1

Table 1: Selection of Sample MGNREGA beneficiaries in select districts of Tamil Nadu

State	Districts	Blocks	Villages	Number of samples
Tamil Nadu (332)	Tirunelveli (133)	Vasudevanallur (67)	Nelkattumseval	34
			Thenmalai	33
		Kadayanallur (66)	Punnaiyapuram	33
			Nainaragaram	33
	Salem (111)	Omalar (56)	Thumbipadi	28
			Vallalapatti	28
		Panamarathupatty (55)	Amanikondalampatti	28
			Nazhikkalpatti	27
	Virudhunagar (88)	Srivilliputhur (44)	Achanthavilthan	22
			Pattakkulamsallipatti	22
		Sattur (44)	Soorangudi	22
			O.Mettupatti	22

Note: Values in the parenthesis are number of sample size

4.2. Data and tools used for the study

The study made use of primary and secondary data. The secondary data are collected from MGNREGA reports, Tamil Nadu Human Development Report (TNHDR) 2017, Ministry of rural development, journals, books, magazines and other related information are collected from blocks and village panchayat office of selected districts. The necessary primary data are collected from MGNREGA beneficiaries among select districts of Tamil Nadu through interview schedule. Percentage analysis, t test, ANOVA and Garret ranking technique are adopted for analysing the collected primary data.

4.3. Hypotheses of the study

H01: There is no significant difference between selected demographic variables and level of satisfaction

H02: There is no significant difference between selected demographic variables and awareness level.

5. Results and Discussion

Table 2: Socio demographic details of MGNREGA beneficiaries in selected districts of Tamil Nadu

S.No	Demographic Variables	Categories	Tirunelveli		Salem		Virudhunagar		Total	
			Number	%	Number	%	Number	%	Number	%
1	Gender	Male	28	21.1	21	18.9	26	29.5	75	22.6
		Female	105	78.9	90	81.9	62	70.5	257	77.4
		Total	133	100	111	100	88	100	332	100
2	Age	25-35	39	29.3	18	16.2	15	17	72	21.7
		36-45	40	30.1	44	39.6	13	14.8	97	29.2
		46-55	30	22.6	23	20.7	36	40.9	89	26.8
		56-65	18	13.5	24	21.6	19	21.6	61	18.4
		Above 66	6	4.5	2	1.8	5	5.7	13	3.9
		Total	133	100	111	100	88	100	332	100
3	Marital Status	Single	8	6	4	3.6	5	5.7	17	5.1
		Married	104	78.2	82	73.9	69	78.4	255	76.8
		Divorced	8	6	3	2.7	0	0	11	3.3
		widowed	13	9.8	22	19.8	14	15.9	49	14.8
		Total	133	100	111	100	88	100	332	100
4	Social group	SC	46	34.6	76	68.5	50	56.8	172	51.8
		MBC	74	55.6	21	18.9	33	37.5	128	38.6
		OBC	12	9	11	9.9	4	4.5	27	8.1
		General	1	.8	3	2.7	1	1.1	5	1.5
		Total	133	100	111	100	88	100	332	100
5	Type of Family	Joint Family	32	24.1	17	15.3	16	18.2	65	19.6
		Nuclear Family	101	75.9	94	84.7	72	81.8	267	80.4
		Total	133	100	111	100	88	100	332	100
6	Size of the Family	Up to 2	33	24.8	40	36	32	36.4	105	31.6
		3 to 5	95	71.4	69	62.2	56	63.6	220	66.3

		Above 5	5	3.8	2	1.8	0	0	7	2.1
		Total	133	100	111	100	88	100	332	100
7	Educational Qualification	No formal education	68	51.1	57	51.4	39	44.3	164	49.4
		Up to Primary	37	27.8	25	22.5	36	40.9	98	29.5
		Up to Secondary	27	20.3	28	25.2	13	14.8	68	20.5
		Graduate	1	.8	1	.9	0	0	2	.6
		Total	133	100	111	100	88	100	332	100
8	Occupation	Self employed in non-agriculture	0	0	3	2.7	3	3.4	6	1.8
		Self employed in agriculture	31	23.3	0	0	7	8	38	11.4
		Regular labour	70	52.6	87	78.4	59	67	216	65.1
		Casual Labour	28	21.1	20	18	17	19.3	65	19.6
		Others	4	3	1	.9	2	2.3	7	2.1
		Total	133	100	111	100	88	100	332	100

Source: Computed Data

The demographic details such as gender, age, marital status, social group, type of family, size of family, educational qualification, occupational status and income level of the beneficiaries are collected and presented in Table 2. It could be observed from the Table that MGNREGA beneficiaries consists 77.4 percent of female and 22.6 percent of male in the selected districts, whereas the percentage of female is higher in Salem district (81.9 percent) and low in Virudhunagar district. The maximum number of beneficiaries belongs to the age group of 36-45 years in Tirunelveli and Salem districts while age group of 46 to 55 years are high in Virudhunagar district and only 3.9 percent of the beneficiaries belong to the age group of above 66 years in all the districts. The maximum number of beneficiaries are married among the selected districts with 76.8 percent and 3.3 percent consists of divorced beneficiaries. 51.8 percent of Scheduled caste groups are benefited more than the other and mostly backward classes. 80.4 percent of the total beneficiaries are living under nuclear type of family and their family size is 3 to 5. More than 49.4 percent of beneficiaries have no formal education in all the districts and 65.1 percent are regular labour.

Table 3: Gender and Awareness level - Independent sample t test

Level of Awareness	Male		Female		t Value	Sig.
	Mean	SD	Mean	SD		
NREGA Implementation Process	2.93	1.018	2.97	1.10	-0.250	0.803
Right to apply for work and employed within 15 days	2.75	0.946	3.04	0.979	-2.291*	0.023
Work application procedure	2.79	0.934	2.76	1.036	0.181	0.857
Right to minimum wages	3.12	1.196	3.02	1.127	0.670	0.503
Wage calculation method	2.73	0.811	2.47	0.805	2.443*	0.015
Period of wage payment (within a week/15 days)	3.20	0.870	3.44	0.753	-2.301*	0.022
Right to get unemployment allowance	3.43	0.808	3.70	0.825	-2.503*	0.013
Minimum worksite facility	3.87	0.759	4.03	0.747	-1.632	0.104
List of Permissible work under the NREGA	3.73	0.859	4.04	0.819	-2.812*	0.005

Source: Computed Data

Note: **significance at one percent level, * significance at five percent level

To examine the significant difference in the awareness level of MGNREGA beneficiaries among male and female, an independent t- test was used and the results are depicted in Table 3. The mean value of each dimension reveals that the awareness level of the beneficiaries is moderate since their values lies around 2 to 3, the female beneficiaries (4.04) are highly aware towards list of permissible work under the NREGA than male beneficiaries (3.73). However, the mean value for wage calculation method was low for both groups, whereas female beneficiaries are highly aware (2.76) than male beneficiaries (2.79). From this, it is inferred that female beneficiaries are aware more than male beneficiaries regarding the employment programme. The outcome of t – value signified that all the nine dimensions of awareness level differed significantly at five percent level except NREGA implementation process, work application procedure, right to minimum wages and minimum worksite facility.

Table 4: Awareness level of the beneficiaries and select demographic variables – ANOVA

Socio demographic variables		Sum of squares	df	Mean Square	F	Sig.
Age	Between groups	55.712	23	2.422	2.012*	0.005
	Within groups	370.854	308	1.204		
	Total	426.566	331			
Marital status	Between groups	17.726	23	0.771	1.313	0.156
	Within groups	10.780	308	0.587		
	Total	198.506	331			
Type of family	Between groups	6.948	23	0.302	2.053*	0.004
	Within groups	45.326	308	0.147		
	Total	52.274	331			
Educational Qualification	Between groups	62.912	23	2.735	5.557**	0.000
	Within groups	151.595	308	0.492		
	Total	214.506	331			
Occupation	Between groups	10.121	23	0.440	0.477	0.982
	Within groups	24.348	308	0.923		
	Total	294.470	331			
Size of family	Between groups	12.008	23	0.653	2.953**	0.000
	Within groups	68.065	308	0.221		
	Total	83.072	331			

Source: Computed Data

Note: **significance at one percent level, *significance at five percent level

Table 4 depicts the results of one way ANOVA in order to assess the significance difference between the select demographic variables and the level of awareness. The outcome of test reveals that beneficiaries' level of awareness differed significantly among educational qualification and size of family at one percent level, age and type of family differed significantly at five percent level since the F statistic value is higher than critical value (2.45). The level of awareness is not differed significantly with the marital status and occupation of the beneficiaries while the F statistic is below the critical value.

Table 5: Gender and level of satisfaction – Independent Sample t test

Level of Satisfaction	Male		Female		t Value	Sig.
	Mean	SD	Mean	SD		
Selection of beneficiaries under the scheme	4.03	0.854	4.01	0.877	0.131	0.896
Wage rate sanctioned by the government	3.01	0.830	3.30	0.949	-2.576*	0.011
Mode of payment of age rate	3.21	0.977	3.39	0.995	-1.382	0.168
Work site facilities (Drinking water, first aid, child care etc)	3.19	1.049	3.18	0.929	-0.092	0.927
Technical Supervision, Monitoring and Transparency	3.72	0.879	3.95	0.930	-1.871	0.062
Time taken for completing particular work	3.73	0.890	3.96	0.907	-1.889	0.060
Quality of the assets created through NREGA activities	3.77	0.831	4.12	0.796	-3.329*	0.001
The overall performance of the scheme	3.69	0.838	3.95	0.711	-2.443*	0.016

Source: Computed Data

Note: **significance at one percent level, *significance at five percent level

To examine the significant difference in the satisfaction level of MGNREGA beneficiaries among male and female, an independent t- test was used and the results are depicted in Table 5. The mean value of each dimension reveals that the satisfaction of the beneficiaries is moderate since their values lies around 3, the female beneficiaries (4.12) are highly satisfied towards quality of the assets created through NREGA activities than male beneficiaries (3.77), whereas male beneficiaries are highly satisfied towards selection of beneficiaries (4.03) than female beneficiaries (4.01). However, the mean value for wage rate sanctioned by the government is low for male group and work site facilities (drinking water, first aid and child care) are low for female groups. From this, it is inferred that female beneficiaries are satisfied more than male beneficiaries regarding the employment programme. The outcome of t – value signified that all the eight dimensions of satisfaction level not differed significantly at five percent level except Quality of the assets created through NREGA activities, Wage rate sanctioned by the government and The overall performance of the scheme.

Table 6: Level of satisfaction and select demographic variables - ANOVA

Socio demographic variables		Sum of squares	df	Mean Square	F	Sig.
Age	Between groups	36.020	17	2.119	1.704*	0.041
	Within groups	390.546	314	1.244		
	Total	426.566	331			
Marital status	Between groups	8.796	17	0.517	0.856	0.626
	Within groups	189.710	314	0.604		
	Total	198.506	331			
Type of family	Between groups	2.559	17	0.151	0.951	0.515
	Within groups	49.716	314	0.158		

	Total	52.274	331			
Educational Qualification	Between groups	13.139	17	0.773	1.205	0.258
	Within groups	201.367	314	0.641		
	Total	214.506	331			
Occupation	Between groups	22.495	17	1.323	1.528	0.083
	Within groups	271.975	314	0.66		
	Total	294.470	331			
Size of family	Between groups	3.067	17	0.180	0.708	0.795
	Within groups	80.006	314	0.255		
	Total	83.072	331			

Source: Computed Data

Note: **significance at one percent level, * significance at five percent level

In order to assess the significant divergence between the satisfaction levels of the beneficiaries and select demographic variables, one way ANOVA is performed and the results depicted in Table 6. The result clearly indicates that level of satisfaction is differed significantly among the different age group of the beneficiaries at five percent level. The rest of the variables viz marital status, type of family, educational qualification, occupation and size of family are not differed significantly with level of satisfaction, though the F statistic value is lower than the critical value (2.45).

Table 7: Problems faced by MGNREGA beneficiaries – Garrett ranking

S. no	Problems	1	2	3	4	5	6	7	8	9	10
1	Lack of awareness about the terms and conditions of the scheme	5	7	19	13	37	53	72	44	48	34
2	System of parameter for selection of beneficiaries was not found adequate	0	2	3	3	13	23	61	61	78	88
3	Waiting for long period in the BPL list serial number	6	13	27	42	59	57	40	35	27	26
4	Wages are paid less than the minimum wage	39	61	46	61	52	38	10	11	6	8
5	There were delays in wage payments	147	69	52	29	31	1	3	0	0	0
6	Task was too much compared to the wages paid	41	67	48	50	35	39	21	20	8	3
7	Inadequacy of funds released by the government	73	60	72	58	30	21	9	3	4	2
8	Authorities are not monitoring properly	4	4	7	12	20	39	38	95	49	64
9	No latest technology and skilled labour were used for construction	16	48	58	62	49	38	26	16	13	6
10	Expenditure incurred for getting selected in the scheme	1	2	2	2	8	23	49	44	100	101

Table 7 portrays the problems faced by MGNREGA beneficiaries. Among 332 beneficiaries, there were delay in wage payments ranked as first by 147 beneficiaries, second ranked by 69 beneficiaries and only three beneficiaries ranked as seventh rank. However, inadequacy of funds released by the government ranked as first by 73 beneficiaries, secondly ranked by 60 beneficiaries. However, none of the beneficiaries given first rank for system of parameter for selection of beneficiaries was not found adequate.

Table 8: Problems faced by MGNREGA beneficiaries - Garret ranking analysis

S.No	Problems	1	2	3	4	5	6	7	8	9	10	Total	%	Rank
1	Lack of awareness about the terms and conditions of the scheme	405	490	1197	741	1924	2491	3024	1584	1392	612	13860	41.75	7
2	System of parameter for selection of beneficiaries was not found adequate	0	140	189	171	676	1081	2562	2196	2262	1584	10861	32.71	9
3	Waiting for long period in the BPL list serial number	486	910	1701	2394	3068	2679	1680	1260	783	468	15429	46.47	6
4	Wages are paid less than the minimum wage	3159	4270	2898	3477	2704	1786	420	396	174	144	19428	58.52	3
5	There were delays in wage payments	11907	4830	3276	1653	1612	47	126	0	0	0	23451	70.64	1
6	Task was too much compared to the wages paid	3321	4690	3024	2850	1820	1833	882	720	232	54	19426	58.51	4
7	Inadequacy of funds released by the government	5913	4200	4536	3306	1560	987	378	108	116	36	21140	63.67	2
8	Authorities are not monitoring properly	324	280	441	684	1040	1833	1596	3420	1421	1152	12191	36.72	8
9	No latest technology and skilled labour were used for construction	1296	3360	3654	3534	2548	1786	1092	576	377	108	18331	55.21	5
10	Expenditure incurred for getting selected in the scheme	81	140	126	114	416	1081	2058	1584	2900	1818	10318	31.08	10

The rank obtained from the beneficiaries are analysed with the help of Garret ranking technique and presented in Table 8. The outcome reveals that there were delays in wage payments got the first rank followed by Inadequacy of funds released by the government, Wages are paid less than the minimum wage, Task was too much compared to the wages paid, No latest technology and skilled labour were used for construction, Waiting for long period in the BPL list serial number, Lack of awareness about the terms and conditions of the scheme, Authorities are not monitoring properly, System of parameter for selection of beneficiaries was not found adequate, Expenditure incurred for getting selected in the scheme got 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, and 10th rank respectively.

6. Conclusion

To alleviate poverty in the rural areas, Government of India has been launching various programs from time to time. MGNREGA is the world's largest employment generation programme in India for poverty alleviation. The study assessed the effectiveness of this programme on the socio economic condition, beneficiaries' level of awareness, satisfaction and problems faced by them are also analysed. It can be found that participation of women workers are high, while scheduled caste beneficiaries constitute largest share in the selected districts. The awareness level is significantly differed among gender, age, educational qualification, type of family and size of family. Satisfaction differs significantly among different age group of the beneficiaries. Delay in payment of wages is the foremost problem faced by the beneficiaries followed by inadequacy of fund released by the government. Thus the state and central government should take necessary step to make adequate and prompt delivery of wages to the beneficiaries at time. It can be concluded that implementation of poverty alleviation programme will not reduce the extreme poverty; the government should scrutiny the effectiveness of the programme from time to time in order to make the programme more efficient.

References

- [1] Amit Kundu, "Effectiveness of Mahatma Gandhi National Rural Employment Guarantee Programme to check Migration among the Rural Households", *Journal of Rural Development*, NIRD&PR, Hyderabad, vol. 34 (2), pp. 123–133, April–June 2015.
- [2] Beatriz Pérez de la Fuente, "Economic Growth and Poverty Reduction in a Rapidly Changing World", *European Economy Economic Briefs*, 019, October 2016.
- [3] Debatra Kumar Dey, "Employment Generation and Asset Building through MGNREGA: reflections from West Bengal", *Journal of Rural Development*, NIRD&PR, Hyderabad, vol. 35 (1), pp. 51-76, January – March 2016.
- [4] Nair, M., Ariana, P., Ohuma, E.O., Gray, R., De Stavola, B., et al., "Effect of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on Malnutrition of Infants in Rajasthan India: A Mixed Methods Study", *PLOS ONE*, vol. 8(9), e75089, September 2013.
- [5] Narasimha Reddy, D., Amarender Reddy, A., and Bantilan, M. C. S., "The Impact of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on Rural Labor Markets and Agriculture", *India Review*, vol. 13 (3), pp. 251-273, February 2014.
- [6] Narasimha Reddy, D., Amarender Reddy, A., Nagaraj, N., and Cynthia Bantilan, "Impact of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on Rural Labour Markets", *India: International Crops Research Institute for the Semi-Arid tropics*, working paper series no. 58, February 2014.
- [7] Prasanna, V., Salian and Leelavathi, D.S., "Implementation of MGNREGA in Karnataka: Issues and Challenges", *Journal of Rural Development*. NIRD & PR, Hyderabad, vol. 33 (3), pp. 261-279, July – September 2014.
- [8] Prattoy Sarkar, Jagdish Kumar and Supriya, "Impact of MGNREGA on Reducing Rural Poverty and Improving Socio-economic Status of Rural Poor: A Study in Burdwan District of West Bengal", *Agricultural Economics Research Review*, Conference No. 24, pp. 437-448, 2011.

- [9] Prerona Baruah and Anjali Radkar, "MGNREGA in Assam: Who are taking up Employment? ", *Journal of Rural Development*, NIRD&PR, Hyderabad, vol. 36 (2), pp. 213-230, April–June 2017.
- [10] Rahul Bahuguna, Akhilesh Chandra Pandey, and Vishal Soodan, "A study on socio economic impact of MGNREGA on beneficiaries in Rudrapryag district of Uttarakhand - India", *International Journal of Management and Applied Science*, vol. 2 (10), ISSN: 2394-7926, 2016.
- [11] Rhonda Breitzkreuz, Carley-Jane Stanton, Nurmaiya Brady, John Pattison-Williams, King, E.D., Chudhury Mishra and Brent Swallow, "The Mahatma Gandhi National Rural Employment Guarantee Scheme: A Policy Solution to Rural Poverty in India? ", *Development Policy Review*, vol. 35 (3), pp. 397-417, 2017.
- [12] Tripathy, K. K., "Rural Employment, Wage and Wage Guarantee: is MGNREGA on the Right Track? ", *Journal of Rural Development*, NIRD&PR, Hyderabad, vol. 34 (4), pp. 439–456, October – December 2015.