MGNREGS and the Labour Migration Issue in Ganjam District: An Empirical Assessment

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Abstract

The Mahatma Gandhi National Rural Guarantee Act (MGNREGA) introduced in 2006 is a novel initiative by the Govt of India to provide a guaranteed 100days employment in a year to every household to era dicate some core issues like poverty, unemployment and labour migration. Ganjam district is a village intensive district of Odisha state and most of them live in the rural and sub-urban areas. Many of these people migrate to different states for earning a livelihood leaving their families behind. This migration leads to their exploitation. Besides, they are also compelled to work in a poor environment with low pay being deprived of any government support relating to food security, education, health etc. This particular paper is an attempt to investigate the factors that lead to the preference of joining MGNREGS to migration intention or to neither of the options among the rural households. The findings suggest that lower value of agricultural assets without any additional source of income, being lower caste, and male are the significant determinants of individual willingness to join MGNREGS. Whereas, higher level of education, rising value agricultural assets/products, livestock, economic status, and submissive females are neither interested in migration nor joining MGNREGS. Thus, it can be inferred that with the increase in social status in terms of different assets with additional and multiple sources of income people, generally don't like to migrate. On the contrary, the value of household property and family size have not any significant role in the making of decision to choose any of the options.

Keywords: Rural Development, Employment Guarantee, Labour Migration, Ganjam.

Introduction

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) was enacted by the govt. of India in 2005 to give job opportunities for locals and promote rural development. The program was aimed at the rural poor to improve rural household livelihood security by providing 100 days' of work in a year to any adult who wanted to participate in the scheme (Ministry of Law and Justice, 2005). However, numerous other government programmes have also been introduced in the past to alleviate poverty and bring the rural poor into the mainstream. The significance of MGNREGA stems from its ability to improve millions of livelihoods on a long-term basis with a guarantee to wage employment on local resources to develop the economic and social infrastructure in rural India, allowing a wider range of long-term employment opportunities. While the MGNREGA's short-term goal is to improve rural households and rural livelihoods and the long-term goal is to diversify rural folks' choice and capability by ensuring appropriate utilization of existing natural resources to generate employment opportunities by constructing longer-term capital assets. In other words, it is a village-based job creation initiative aimed primarily at the economic empowerment of the underprivileged groups in the society via the construction of community assets. It is established on the premise of providing 100 days' of paid work per home in each financial year. In addition, the initiative was designed to

put India's constitutional 'Right to Work' into a reality (Dutta et al, 2014). The initiative, which was successfully implemented in 2006, has grown to become the world's largest public employment scheme (Reddy et al, 2010; Dutta et al, 2014; Klonner and Oldiges, 2014). It's also expected to enable collaborative development and integration with other initiatives. The MGNREGA is designed to halt the flow of rural migration to urban areas or movement from one district to another by guaranteeing wage employment and economic empowerment.

The MGNREGA is commonly seen as an attempt to minimise or prevent labour migration, despite its professed goal of alleviating rural poverty (Jacob, 2008; Solinski, 2012; Das, 2015). Even though all citizens have the right to move, the migrating labour force from rural areas are frequently censured for overcrowding the cities, thus being a burdenin the urban infrastructure, overloading job markets, increasing crime, polluting their environment, and exacerbating congestion (de Haan, 1999; Deshingkar and Start, 2003; Debnath and Roy, 2013; UNESCO/UNICEF, 2013; Tacoli et al, 2015). Labour migration is also considered as a 'Poverty Problem' that affects metropolitan regions and is exacerbated, partly, by a dearth of rural employment (Tacoli et al, 2008). Providing employment opportunity through the MGNREGA in the local area, according to public and political discourse, should presumably provide migrants and their families with a viable substitute for their migratory labour activities. Against this backdrop, the study aims at investigating the determinants that affect the decision of the households in the rural villages of the district of Ganjam to participate in this programme. Moreover, it also examines how the scheme is useful in reducing the intention of labour migration.

Literature Review

The MGNREGA is praised for its universal accessibility and rights-based approach, which allows any rural person to participate in itvoluntarily. However, because of the nature of the employment available under this scheme, as well as, the payment received, there is an implicit self-targeting mechanism geared at the rural poor (Shankar et al, 2011).

The scheme differs from most of the other rural or agricultural wage labour possibilities with regard to the wage rates as these are equal for men and women (Carswell and De Neve, 2014; Narayanan and Das, 2014). Furthermore, this initiative specifically targets women (Carswell and De Neve, 2013). Women are required to constituting one-third of the total participants, and surprisingly, according to the Ministry of Rural Development (2014), women constituted around 48% of all participants in India in 2013–2014. The MGNREGA also targets people from lower castes, with around 41% of participation from Scheduled Castes (SC) and Schedule Tribes (ST) over the same period (Ministry of Rural Development, 2014). Female participation rates and low caste participation rates, on the other hand, fluctuate greatly among the States (Ravi and Engler, 2015). The decentralised character of MGNREGA, as well as the heterogeneity in its execution, has resulted in a wide range of programme outcomes across the country. Egagement of womenin MGNREGA has been claimed to be helpful in greater women empowerment as well as higher educational achievements for their children (Pankaj and Tankha, 2010; Afridi et al, 2012). It is also linked to increase in household welfare, such as; higher consumer spending and better food security (Patel et al, 2015; Ravi and Engler, 2015; Liu and Deininger, 2010). There is the evidence that MGNREGA programmes have led to advances in infrastructure development at the village level (Jacob, 2008)

Workers, in some instances, criticise MGNREGA for failing to fulfil employment demands and offering the mandated 100 days of work (Dutta et al, 2012). In certain jurisdictions, the absence of long-term employment leads to job rationing and rotation, which may disproportionately harm the most vulnerable employees, especially women (Liu and Barrett, 2012; Imbert and Papp, 2014; Narayanan and Das, 2014). Additionally, there may be some stigma attributed to women's participation in the programme as a result of the shortage of employment supplied through the programme (Jakimow, 2014); although, in certain circumstances, this stigma may be less than the stigma associated with agricultural labour (Carswell and De Neve, 2013). Landowners,

offering equivalent local agricultural labour prospects, are also concerned that the MGNREGA may impact the supply and demand of rural labour, placing increasing pressure on rural pay rates (Azam, 2011; Basu, 2013). The magnitude and complexity of MGNREGA's governance create abundant opportunity for inefficiency and corruption at various levels within the program's administration (Reddy et al, 2010).

The impact of MGNREGS on migration from rural areas has been inconsistent. It offers an alternative work opportunity for rural labour, particularly, during the off-seasons in the agriculture sector, which has now contributed to a decline in distraught migrants (Sharma, 2014; Nayak and Lenka, 2012 and Rajamohan and Dhanabalan, 2013). Though, MGNREGS has become one of the most successful tools to curtail poverty and migration problems in India, building a significant influence on rural development (Jaffer, 2008) and stagnating the livelihood of rural households (Negi at el., 2015; Gupta and Pandey, 2016), enhancing their standard of living (Shome et al., 2012) and reducing the rate of migration from villages (Tiwari et al., 2010). Further, it has lowered the rate and frequency of labour migration (UNDP, 2010; Majumdar, 2016; Chatterjee, S., 2015); and Pamecha and Sharma, (2015) and forced up agricultural incomes, which managed to prevent labour migration (Bhatia and Ranjan, 2009; and Maurya and Gadkar, 2006). Not all analysts, indeed, accept this optimistic impact. Ghose (2011), reported that even after the introduction of NREGS, labour migration remained common. He argued that although MGNREGS has helped reduce the average duration of migration time, but had not resulted inadequately removing the need for worker out-migration.

Adhikari & Bhatia (2010), through their study, made this scheme known as NREGS which has the ability to regulate migration by offering a source of livelihood for the rural poor. Though jobs available locally, a handful of people would opt to go out and migrate to suburbs. It is surprising to see that many of those beneficiaries who gained from NREGA are among the lowest dregs of the society without land and education, whose primary source of livelihood is working as casual unskilled labourers. NREGA has proved to be a "lifeline" for such families, not just because they get work to support themselves, but they get the work near to their own Gram Panchayat too.

According to Harish et al. (2011), the number of employment days under the MGNREGA in a financial year has grown dramatically to 201 days in a district in Karnataka. They found that the strategy helped households lessen their debt burden by encouraging them to spend more money. The income level has grown by 9.04 percent as a result of the creation of more employment days. Using regression analysis, they discovered that characteristics such as the employees' gender, education, and family size had a substantial influence on their involvement in the NREGS scheme.

Kumar (2013) examined the employment generation, migration patterns, and factors of household involvement in MGNREGA using both primary and secondary data collected from sixteen states. He discovered that factors such as the SC/ST community, family size, BPL status, and MGNREGA wage rate are significantly and positively affecting the willingness to participate in the scheme. Whereas, the availability of alternate employment opportunities, level of the education value of asset ownership are negatively related to participation in the scheme. However, it was difficult to determine exactly whether the MGNREGA plan had been successful in lowering the migration of the distressed labour.

According to an assessment of the NREGS' performance in Andhra Pradesh and Rajasthan, Jha et al. (2009), claimed that land ownership is a negative predictor of MGNREGA participation in Rajasthan, whereas, the relationship is just the opposite in Andhra Pradesh, signalling inadequate targeting due to possible elite capture. As per Gaiha et al. (2010), the MGNREGA removes the need for an intervening administrator to select the beneficiaries, instead emphasising beneficiary self-selection through the introduction of incentives, ensuring only the poor to participate in the programme. The scheme's self-selection process is intended to keep households earning more than the minimum wage.

Objectives:
- to analyse the major determinants of the households' decision to participate under the scheme.
- to find out how MGNREGA affects the migration intention of the rural households.

Methodology

The study has been carried out in the context of Ganjam district of Odisha which is one of the biggest districts with the highest number of villages and the majority of whose people are migrating to different places such as. Surat, Mumbai, Chennai, Hyderabad and Bangalore for earning their bread and butter. From the District, 20 villages were randomly selected and then 20 respondent households of each village have been contacted for the survey which yield a total of 400 responses. After the collection of data from these 400 responses, the completion of the responses have been verified. This helped to detect 385 valid references and

rejection of only 15 responses as those were biased and incomplete. Primary data for this purpose have been collected from both APL and BPL families irrespective of their caste. A self-administered close-ended questionnaire has been prepared to collect data through a personal interview method. The data have been collected during 2021 and 2022.

The logistic regression analysis method / model has been employed to identify the factors leading to the willingness of the respondents to choose between MGNREA or Migration to other places in search of work. The factors included in the regression model as independent variables are the gender of the respondents (GEN), Caste (CST), Education level (EL), Economic Status (ES), an additional source of income (ASI), Value of Agricultural Assets (VAA), Family Size (FS), Value of Live Stock Assets (VLSA) and Value of House Property (VHP). The estimation methods of the variables are given in Table-1 below.

Table-1: Estimation of the Variables

Variables	Estimation Method
GEN	1=Male, 2=Female
CST	1=SC/ST, 2=Backward Classes, 3=General
EL	1=no formal education, 2= up to 10th class, 3= Above 10th class
ES	1= BPL, 2= APL
ASI	1= No Additional Source of income, 2= have one or more additional sources of income (other than income from MGNREGA and Migration work)
FS	1= Nuclear Family (2 to 5-member family), 2= Joint family with more than five members
VAA	Value in terms of size of agricultural landholding coded between (1 to 5, 1 with no agricultural land and 5 being the highest holding of agricultural land)
VLSA	Monetary Value in terms of the livestock holding by the respondent coded between (1 to 5, 1= no livestock, holding and 5 being the highest value of livestock holding)
VHP	1= Low, 2= Average, 3= High value (Categorised as per the value of the house property responded by the households)
WTP	0= willingness to work in MGNREGA, 1= Willingness to Migrate to other states, 2=Neutral (Neither join MGNREGA nor Migrate)

The logistic model using the above variables can be presented mathematically as

$Y= e(0+ nXn+i)$

$Logit (Y) = \beta_0 + \beta_n X_n + \varepsilon_i$

Probability of occurrence of Y termed as P(Y) is given by

$P(Y) = 11 + e^{-(0+ nXn+i)}$

$P(Y) = 11 + 1e^{-(0+ nXn+i)}$

$P(Y) = 11 + e^{-Logit(Y)} = eLogit(Y)1 + eLogit(Y)$

Where

Odds= eLogit(Y)=Y1-Y=Probability of occurrence of an event (Y)Probability of non-occurrence of the event (Y)

Or it can be written as,

Y1-Y

The term in the square bracket is the odds of occurring of the event "Y", i.e. the respondent's willingness to join MGNREGA

As in this model, the choice of MGNREGA is coded as '1', automatically the choice of Migration is coded as '0'. So, here 'Y' means the occurrence of the event "willingness to join MGNREGA"

β_0 is the Constant called the Intercept, whereas, β_n, is the Cefficient for the X_n independent variable, n= 1,2,3…

ε_i is the standard error term for each independent variable ($i=1,2,3…$)

Results

The following table shows the descriptive statistics of the variables included in the study. It can be seen that there are 54.3% male participants compared to 45.7% female participants. As such, there are a higher number of respondents from the backward classes (44.2%) followed by scheduled castes and scheduled tribes (31.9%). Only 23.9% of the respondents belong to the general category. Similarly, there are 39.5% of respondents have no formal education compared to 38.4% who have school education up to the 10th standard and 22.1% have higher qualifications above 10th standard, while 40% of the families participated in the survey belonge to BPL while 60% of them belong to APL families, 56.9% of the respondents have not any additional source of income, around 51% of the respondents have in joint families with five or more than five members. 21.3% of the respondents have no agricultural asset and 36.1% have no livestock asset, and 39.2% respondents have low valued household property,

Table-2: Descriptive Statistics

Variables	Code	Levels	Counts	% of Total
Gender	1	Male	209	54.3 %
	2	Female	176	45.7 %
Caste	1	Scheduled Caste and Schedule Tribe	123	31.9 %
	2	Backward Class	170	44.2 %
	3	General Class	92	23.9 %
Education Level	1	No formal Education	152	39.5 %
	2	Up to 10th class	148	38.4 %
	3	Above 10th	85	22.1 %
Economic Status	1	BPL	154	40.0 %
	2	APL	231	60.0 %
Additional Source of Income	1	No Additional Source of Income	219	56.9 %
	2	One or more additional sources of income	166	43.1 %
Family Size	1	Nuclear	189	49.1 %
	2	Joint Family	196	50.9 %
Value of Agriculture Asset	1	No Agricultural Land	82	21.3 %
	2	2 (Low)	118	30.6 %
	3	3	76	19.7 %
	4	4	63	16.4 %
	5	5 (High)	46	11.9 %
Value of Live Stock Asset	1	No Livestock Holding	139	36.1 %
	2	2 (Low)	104	27.0 %

	3	3		49	12.7 %
	4	4		53	13.8 %
	5	5 (High)		40	10.4 %
Value of House Property	1	Low Value		151	39.2 %
	2	Average Value		140	36.4 %
	3	High Value		94	24.4 %
Willingness to Participate	0	MGNREGA		145	37.7 %
	1	Migrate to other states		103	26.8 %
	2	Neutral (Neither join MGNREGA nor Migrate)		137	35.6 %

The following table presents the correlation matrix of the variables of the study. It can be observed that there is no multicollinearity issue among the independent variables as the Pearson's regression coefficient is not high (>0.7) for any variable

Table-3: Correlation Matrix

	GEN	CST	EL	ES	ASI	FS	VAA	VLSA	VHP
GEN	1.000								
CST	0.191	1.000							
EL	0.052	0.236	1.000						
ES	0.036	0.261	0.119	1.000					
ASI	0.222	0.313	0.157	0.293	1.000				
FS	0.015	-0.016	-0.013	0.004	0.079	1.000			
VAA	0.149	0.188	0.185	0.119	0.100	-0.017	1.000		
VLSA	0.183	0.203	0.161	0.119	0.136	0.049	0.120	1.000	
VHP	-0.013	0.029	0.096	0.089	0.064	0.040	0.039	0.027	1.000
WTP	0.297	0.602	0.415	0.364	0.481	0.019	0.344	0.386	0.100

The model fit table given below indicates the different measures of R-square about the logistic regression model. Nagelkerke R Square has been a widely used parameter for ensuring the predictability of the independent variable. It can be seen that Nagelkerke R Square is 0.632 which is quite impressive. The overall model fit measure also confirms the goodness of fit of the logistic model with a chi-square value of 465.01 at 24 degrees of freedom which is significant at a p-value of less than 0.01. This allows us to more forward with the proposed model which is given in Table-5.

Table-4: Model Fit Measures

					Overall Model Test		
Deviance	AIC	R^2_{McF}	R^2_{CS}	R^2_N	χ^2	df	p
381.906	433.906	0.544	0.326	0.632	465.01	24	$< .001$

The omnibus likelihood ratio test is the primary test of whether the explained variance in a set of data is significantly greater than the overal unexplained variance. It also provides a prior glimpse of the significant contribution of the independent variables while predicting the dependent variables. It can be seen that FS and VHP are not giving any significant value of the test statistics indicating at least one pair of the

groups is not significantly predicting the dependent variable.

Table-5: Omnibus Likelihood Ratio Tests

Predictor	χ^2	df	p
VAA	18.624	2	< .001
VLSA	19.385	2	< .001
FS	0.094	2	0.954
ASI	23.566	2	< .001
ES	12.131	2	0.002
EL	64.684	4	< .001
CST	89.349	4	< .001
GEN	54.353	2	< .001
VHP	2.37	4	0.668

The final multinomial logistic model given in table-6 is grouped into two separate models. The first model is a logistic model between the choice of 1=Migration and 0=MGNREGA, whereas, the second model is a choice between 2=Neutral and 0= MGNREGA. It can be observed that the value of agricultural asset (VAA) and the value of livestock asset (VLSA) are the significant determinants of the respondent's willingness to participate in MGNREGA. The results indicate a higher level of VAA and VLSA and lead to the decision of not choosing either of the alternatives i.e. MGNREGA and Migration as the households are financially sound and able to earn sufficiently from agriculture and livestock farming. However, higher VLSA has no significant impact on the decision of their choice between MGNREGA (0) and migration (1). On the other hand, Family Size (FS) is insignificant in explaining the participation and migration behaviour of the respondents. Similar observations have also been made for economic status, where, the APL and the BPL are not significant in deciding the element for choosing between '0' and '1'. However, APL families don't like to join MGNREGA instead they like to have their own source of income.

Table-6: Multinomial Logistic Regression Model

WTP	Predictor	Category Code	Estimate	SE	Z	p
1 - 0	Intercept		-3.856	0.722	-5.340	< .001
	VAA		0.574	0.150	3.823	< .001
	VLSA		0.251	0.148	1.689	0.091
	FS:	2 – 1	0.076	0.354	0.214	0.830
	ASI:	2 – 1	0.992	0.400	2.480	0.013
	ES:	2 – 1	0.275	0.356	0.774	0.439
	EL:	2 – 1	0.476	0.364	1.310	0.190
		3 – 1	25.873	0.254	101.902	< .001
	CST:	2 – 1	0.981	0.382	2.566	0.010
		3 – 1	2.869	0.620	4.628	< .001
	GEN:	2 – 1	-1.419	0.425	-3.340	< .001
	VHP:	2 – 1	0.06	0.406	0.148	0.882
		3 – 1	0.669	0.470	1.422	0.155
2 - 0	Intercept		-25.218	0.681	-37.05	< .001
	VAA		0.667	0.188	3.551	< .001
	VLSA		0.715	0.177	4.033	< .001

	FS:	2 – 1	-0.026	0.447	-0.059	0.953
	ASI:	2 – 1	2.287	0.493	4.637	< .001
	ES:	2 – 1	1.666	0.514	3.243	0.001
	EL:	2 – 1	1.441	0.510	2.829	0.005
		3 – 1	26.485	0.254	104.315	< .001
	CST:	2 – 1	18.009	0.443	40.611	< .001
		3 – 1	20.184	0.482	41.914	< .001
	GEN:	2 – 1	1.389	0.502	2.766	0.006
	VHP:	2 – 1	-0.025	0.519	-0.048	0.962
		3 – 1	0.61	0.592	1.030	0.303

Independent variable: WIP

The level of education is also a significant determinant of an individual's choice of MGNREGA. The higher the level of education the less is the individual's inclination towards joining MGNREGA. A similar observation has also been recorded for castes where only scheduled caste and scheduled tribe households are more likely to join MNREGA work compared to the individuals of back ward and general category. This may be attributed to the fact that NREGA is a labour-intensive work as such higher caste people in the society don't like to do such work instead they refer to migrate or to do something other than the labour work in their village. On the other hand, the value of household property of the respondents has no significant role in deciding their choice of joining MGNREGA, rather the gender of the respondents is a deciding element showing the inclination of male respondents towards joining MGNREGA and migrating to other states, whereas, females are not willing to choose either of the options but like to stay more at home and either to do cultivation or livestock rearing.

Conclusion

The basic aim of this study is to explore the factors responsible for the choice of respondents to participe either in MGNREGS or migration to other states for better a living or not willing to do either of the things. It can be concluded that the value of agricultural assets, caste, additional source of income and gender are the significant determinants of the willingness of the respondents to join MGNREGS. Respondents with higher level of education, valuable agricultural and livestock assets economic status, and females are neither interested in migration nor in MGNREGS. Thus, it can be inferred that with the increase in social status, in terms of different assets with additional and multiple sources of income, people generally don't like to migrate. In contrast, the value of household property and family size have no significant role to choose one from any of the three options.

Limitations

The study has certain limitations too. The major limitation is the selection of only one district for the survey. The coverage of a greater number of districts would have provided a more generalized outcome. Further, the study has not taken into account the socio-economic need of the households. It was realised during the survey that some families have been forced to migrate due to heavy financial burdens. It is suggested that further studies can be exclusively carried out to find out such elements that lead to choice of an occupation.

References:

Adhikari, A., & Bhatia, K. (2010). NREGA Wage Payments: Can We bank on the Banks?. *Economic and Political Weekly*, 30-37.

Afridi, F., Mukhopadhyay, A. and Sahoo, S. (2012) *Female Labour Force Participation and Child Education in India: the effect of the National Rural Employment Guarantee Scheme* IZA Discussion Paper No. 6593. Bonn, Germany: Institute for the Study of Labor.

Ahuja, U. R., Tyagi, D., Chauhan, S., & Chaudhary, K. R. (2011). Impact of MGNREGA on Rural Employment and Migration: A Study in Agriculturally-backward and Agriculturally-

advanced districts of Haryana. *Agricultural Economics Research Review*, *24*(conf), 495-502.

Azam, M. (2011) *The impact of Indian job guarantee scheme on labor market outcomes: Evidence from a natural experiment* IZA Discussion Paper No. 6548. Bonn, Germany: Institute for the Study of Labor.

Basu, A.K. (2013) Impact of rural employment guarantee schemes on seasonal labor markets: optimum compensation and workers' welfare. *The Journal of Economic Inequality* 11(1): 1–34.

Bhatia, L., & Ranjan, A. (2009). Alternate to Migration. *Frontline,* 26(1).

Carswell, G. and De Neve, G. (2013) Women at the Crossroads: Implementation of Employment Guarantee Scheme in Rural Tamil Nadu. *Economic & Political Weekly* 48(52): 82–93.

Carswell, G. and De Neve, G. (2014) MGNREGA in Tamil Nadu: A story of success and transformation? *Journal of Agrarian Change,* 14(4): 564–585.

Chatterjee, S. (2015). National Rural Employment Guarantee Act and Its Impact on Rural Society A Socio-Economic Study in Khejuri, East Medinipur, *W.B. International research journal of multidisciplinary studies.* 3(7), 1- 9.

Das, U. (2015) Can the rural employment guarantee scheme reduce rural out-migration: Evidence from West Bengal, India. *The Journal of Development Studies* 51(6): 621–641.

de Haan, A. (1999) Livelihoods and poverty: The role of migration-a critical review of the migration literature. *Journal of Development Studies,* 36(2): 1–47.

Debnath, A. and Roy, N. (2013) Linkage between internal migration and crime: Evidence from India. *International Journal of Law, Crime and Justice*, 41(3): 203–212.

Deshingkar, P. and Start, D. (2003) Seasonal Migration for Livelihoods in India: Coping, Accumulation and Exclusion. London: Overseas Development Institute.

Dutta, P., Murgai, R., Ravallion, M. and van de Walle, D. (2012) Does India's employment guarantee scheme guarantee employment? *Economic & Political Weekly*, 47(16): 55–64.

Dutta, P., Murgai, R., Ravallion, M. and Van de Walle, D. (2014) *Right to Work?: Assessing India's employment guarantee scheme in Bihar.* Washington D.C.: World Bank.

Gaiha, R., V.S. Kulkarni, M.K. Pandey, and K.S. Imai. 2009. National Rural Employment Guarantee Scheme, Poverty and Prices in Rural India. *ASARC Working Paper* 2009/03.

Ghose, K. A. (2011). Addressing the Employment Challenge: India's

Gupta, R., & Pandey, P. (2016). Impact of MGNREGA on living standard and migration in Chhattisgarh: A case study of Bilaspur District, *Global Journal of Engineering Science and Research Management,* 5, 104-111.

Harish, B.G. et al. (2011) 'Impacts and Implications of MGNREGA on labour supply and income generation for agriculture in central dry zone of Karnataka', *Agricultural Economics Research Review,* Vol. 24 (Conference Number), pp.485–494.

Jha, R., Bhattacharyya, S., Gaiha, R. and Shankar, S. (2009) 'Capture of anti-poverty programs: an analysis of the national rural employment guarantee program in India', *Journal of Asian Economics*, Vol. 20, No. 4, pp.456–464.

Imbert, C. and Papp, J. (2014) Short-term Migration and Rural Workfare Programs: Evidence from India Job Market Paper.

Jacob, N. (2008) *The impact of NREGA on rural–urban migration: Field survey of Villupuram District*, Tamil Nadu. Centre for Civil Society, New Delhi.

Jaffer P.C (2008)*India's National Rural Employment Guarantee Scheme (NREGA): Localized Implementation in Gulbarga District of Karnataka.* Knowledge.nrega.net/231/[Accessed October 23, 2019].

Jakimow, T. (2014) 'Breaking the backbone of farmers': Contestations in a rural employment guarantee scheme. *Journal of Peasant Studies,* 41(2): 263–281.

Klonner, S. and Oldiges, C. (2014) *Safety Net for India's Poor or Waste of Public Funds? Poverty and Welfare in the Wake of the World's Largest Job Guarantee Program* Discussion Paper Series No. 564: University of Heidelberg

Kumar, P. (2013) Impact of MGNREGA on Wage Rate, Food Security and Rural Urban Migration: A Consolidated Report.

Liu, Y. and Barrett, C.B. (2012) Heterogeneous pro-poor targeting in India's Mahatma Gandhi

National Rural Employment Guarantee Scheme. *Economic & Political Weekly* 48(10): 46–53.

Liu, Y. and Deininger, K. (2010) *Poverty Impacts of India's National Rural Employment Guarantee Scheme: Evidence from Andhra Pradesh*. Paper presented at the Agricultural & Applied Economics Association, Denver, Colorado

Majumdar, K. (2016). Could MGNREGA Parry the Seasonal Rural Migration? Micro Evidence from West Bengal, India. *Imperial Journal of Interdisciplinary Research,* 2(3), 37 – 42.

Maurya, R. D., & Gadkar. (2006). *Kurukshetra*. February, 13.

Ministry of Law and Justice. (2005) *The National Rural Employment Guarantee Act, 2005*. New Delhi: Ministry of Law and Justice.

Ministry of Rural Development. (2014) NREGA at a Glance. Government of India. Retrieved February 1, 2015, from http://mnregaweb4.nic.in/netnrega/all_lvl_details_dashboard_new.aspx.

Narayanan, S. and Das, U. (2014) Women participation and rationing in the Employment Guarantee Scheme. *Economic and Political Weekly* 49(46): 46–53.

Pankaj, A. and Tankha, R. (2010) Empowerment effects of the NREGS on women workers: a study in four states. *Economic and Political Weekly* 45(30): 45–55.

Patel, K., Gartaula, H., Johnson, D. and Karthikeyan, M. (2015) The interplay between household food security and wellbeing among small-scale farmers in the context of rapid agrarian change in India. *Agriculture & Food Security* 4(1): 1–16.

Ravi, S. and Engler, M. (2015) Workfare as an effective way to fight poverty: the case of India's NREGS. *World Development* 67: 57–71.

Nayak, S., & Lenka, J. (2012). What Influences to Participate in the Mahatma Gandhi NREGP (MGNREGP)" Empirical Evidence from the Mayurbhanj District of Odisha North *Orissa Journal of Social Science*,1(1), 1-13.

Negi, R.S., Singh, S & Dhanai, R. (2015). Impact Assessment of MGNREGA: Study of Pauri Garhwal District of Uttarakhand, India. *International Journal of Multidisciplinary and Current Research Article*, 93-99.

Pamecha, S., & Sharma, I. (2015). Socio-Economic Impact of Mgnrega - A Study

Undertaken among Beneficiaries of 20 Villages of Dungarpur District of Rajasthan, *International Journal of Scientific and Research Publications*, 5(1),1-4.

Rajamohan, S., & Dhanabalan, T. (2013). Women Empowerment Through Rural Development Schemes. *International Journal of Retailing & Rural Business Perspectives*. 2,203-204.

Reddy, D.N., Tankha, R., Upendranadh, C. and Sharma, A.N. (2010) National rural employment guarantee as social protection. *IDS Bulletin* 41(4): 63–76

Shankar, S., Gaiha, R. and Jha, R. (2011) Information, access and targeting: The national rural employment guarantee scheme in India. *Oxford Development Studies* 39(01): 69–95.

Solinski, T. (2012) NREGA and labour migration in India: Is village life what the 'rural' poor want? *The South Asianist* 1(1): 17–30.

Sharma, A. (2014). MGNREGA- An Alternative to Migration. *Kurukshetra*, 2014, 62 (11), 26-28.

Shome, S., Shetty, R., Joseph, T. J., & Dash, M. (2012). Impact of workfare programmes on quality of life: A case study of National Rural Employment Guarantee Act in India. *Spark-Stirling International Journal of Postgraduate Research*, *1*(1).

Tacoli, C. and Mabala, R. (2010) Exploring mobility and migration in the context of rural—urban linkages: why gender and generation matter. *Environment and Urbanization* 22(2): 389–395.

Tacoli, C., McGranahan, G. and Satterthwaite, D. (2008) Urbanization, poverty and inequity: Is ruralurban migration a poverty problem or part of the solution. *The New Global Frontier: Urbanization, Poverty and Environment in the 21st Century*, pp. 37–53.

Tacoli, C., McGranahan, G. and Satterthwaite, D. (2015) *Urbanisation, Rural–Urban Migration and Urban Poverty*. London: IIED.

UNESCO/UNICEF. (2013) *Social Inclusion of Internal Migrants in India*. New Delhi: UNESCO.

UNDP. (2010). Right based legal Guarantee as development policy NREGA. UNDP, India.

Vanik, A. (2008). NREGA and the death of Tapas Soren. *Economic and Political Weekly*, Vol. XLIII (30), 8, pp 37-45.