

AN ECONOMIC ANALYSIS OF INDEBTEDNESS, UNEMPLOYMENT AND MIGRATION AMONG MGNREGA HOUSEHOLDS

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ABSTRACT

Rural India has various problems like unavailability of basic facilities, existing the poverty, large unemployment situation, rural to urban migration, farmer suicide, exploitation of moneylenders. There are no alternative employment opportunities other than agriculture and allied sectors. So to mitigate Mahatma Gandhi National Rural Employment Guarantee Act-2005 (MGNREGA) was introduced in rural India and it tries to solve the above problems through the legal right to work for a hundred days (out of 365 days per year) for poor people. The study focused only three problems such as indebtedness, unemployment and migration among Scheduled Caste (SC) population of MGNREGA households in Dindigul district, Tamil Nadu. Finally the study concluded that SCs households' indebtedness has been decreased significantly and unemployment situation has a moderate change as well as decreased after the implementation of MGNREGA in the study area. From the point of view, migration has a moderate change (small increases) in the study area. Therefore, MGNREGA has an effective tool to resolve the rural economic problems like indebtedness, unemployment situation and migration.

Keywords : MGNREGA, Indebtedness, Migration, Unemployment, Rural problems, Scheduled Castes

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1. Introduction

Rural India has various problems like unavailability of basic facilities, existing the poverty, large unemployment situation, rural to urban migration, farmer suicide, exploitation of moneylenders. There are no alternative employment opportunities other than agriculture and allied sectors. So to mitigate Mahatma Gandhi National Rural Employment Guarantee Act-2005 (MGNREGA) was introduced in rural India and it tries to solve the above problems through the legal right to work for a hundred days (out of 365 days per year) for poor people. It guarantees minimum wage, reduction of poverty, and checks migration of population from rural areas to urban areas and reduces rural hunger. Mahatma Gandhi National Rural Employment Guarantee Act was an Indian job guarantee scheme, enacted by the legislature of India on 25th August, 2005 and it had come into force and implemented on 2nd February, 2006 in the Anantapur district, Andhra Pradesh.

The Act was renamed as Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) on 2nd October 2009. It was implemented in all the states of India in three different phases. In Phase-I it was implemented in 200 of the most backward districts of the country out of the total districts of 615, and again with an addition 130 districts in Phase-II during 2007 – 2008. The Act was notified in the remaining 285 rural districts of India from April 1, 2008 in Phase-III (Ministry of Law and Justice of India, 2005)¹. The Act guarantees employment for one member of a family for hundred days out of 365 days per year and he/she must give some requisition within fifteen days. An unemployment allowance should be provided to a person inability worker, one who is not able to work for 15 days from the date, the Act provided some compensation (Sanjeeb Mukherjee, 2016)².

¹Ministry of Law and Justice of India (2005), The National Rural Employment Guarantee Act, 2005, New Delhi, 7th September.

²Sanjeeb Mukherjee (2016), **Business-Standard**, New Delhi. p.4, 2nd February.

Initially, it ensured that the legal right to work for a hundred days for poor people, who was willing to work for a minimum wage rate, especially in rural areas, that would turn to reduce the flow of rural to urban migration. In addition to this other important objective of the Act is to strengthen Panchayat Raj Institution (PRIs). The major dimensions of the impact of MGNREGA could be summarized by the following activities such as, increased employment opportunities, major participation by poor SC and ST population, economic empowerment of poor women, relief from rural village moneylenders, disengagement from hazardous work, rural asset formation, improvement in rural environment and sanitation, creates SHG by MGNREGA, reducing the rural partiality, hunger, unemployment and migration. It has positively impacts the rural households (Sheelakharkwal³, 2015 ; Mohammad Israr Khan⁴, 2016)

The Act creates some awareness to the people about the Panchayat Raj Institutions and government activities. It helps to increasing purchasing power, agricultural production, savings, increase in income, expenditure and strengthens PRI. MGNREGS was achieving its desired goal that is empowerment of the rural people (Prasanna Rani⁵, 2019).

The average days of work allocated to the Scheduled Tribe (ST) job-card households were less than the SC communities, but the former group had less easy access to the registration of job cards and spent more time in getting the jobs than

³Sheelakharkwal, Anil Kumar, (2015) Socio-Economic impact of MGNREGA: Evidences from district of Udham Singh Nagar in Uttarakhand, India, Indian Journal of Economics and Development, Vol 3 (12), p.10

⁴ Mohammad Israr Khan (2016) Economic impact of MGNREGA: A case study of Bisalpur sub-division of district Pilibhit in Uttar Pradesh, International Journal of Multidisciplinary Research and Development, Online ISSN: 2349-4182, Volume 3; Issue 10; October 2016; Page No. 131-136.

⁵Prasanna Rani , A Jahanara (2019), Impact of MGNREGA on Socioeconomic Conditions of Beneficiaries of Srikakulam District of Andhrapradesh, International Journal of Innovative Science and Research Technology, Volume 4, Issue 7. p.4.

other social groups. Only 36 per cent of the tribal respondents were aware of the provision for a minimum number of days of employment, a lower percentage than the SC and general communities. Similarly, only 42 percent of tribal respondents were aware of the provision for a minimum wage rate in the scheme; this was a larger percentage than their SC counterparts but lagged far behind those from the OBC and general communities (Pulak M⁶ et. al, 2010 ;PrattoySarkar⁷ et.al 2011). In addition, an interesting and encouraging observation was the scheme reduces the migration of people from rural to urban areas (Sivasakthi T, et. al., 2011)⁸.

2. Statement of the Problem

The MGNREGA is the main reason to economic changes in rural areas. The wage rates have increased in agriculture and allied activities in rural regions. It creates a shortage of labourers in agriculture and allied activities. There is no wage rate difference existing between the wages of MGNREGA and females' wage of agriculture at present. Hence women's participation is very high, especially SC women. The Act ensures a minimum wage to the workers. The minimum wage will not create high productivity. Many poverty alleviation programmes have not achieved the target because of lack of management, expensive administration, corruption, political intervention and so on. The MGNREGA Act also has the same problems. The Act has not considered the classifications of various factors such as occupation,

⁶PulakM et, al, (2010). "A Development Delivery Institution for the Tribal Communities: Experience of the National Rural Employment Guarantee Scheme in India". **Development Policy Review** 28(4): pp. 457-479.

⁷PrattoySarkar, Jagdish Kumar and Supriya (2011), 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* Vol. 24 (Conference Number) 201, p. 441.

⁸Sivasakthi T, et. al. (2011). "Employment, Income and Labour Supply Decision of Rural Households: An Economic Analysis of MGNREGS in Tamil Nadu". **Agricultural Economics Research Review**. Vol.24. pp. 473-484.

geographical location, socio-cultural and rural divisions.

3. Objective

The basic objective of the study is to analysis the indebtedness, unemployment and migration among MGNREGA households in Dindigul district of Tamil Nadu.

4. Significance of the Study

In India, Scheduled Castes (SCs) people are mainly depending upon agriculture and agricultural related activities. There are no alternative employment opportunities available for most of the SCs population other than agriculture operations. The Planning Commission in the year 2004-05 had estimated that more than half the SCs (about 53.5 percent) in rural areas were living below the poverty line. After implementation of MGNREGA, the poverty among SCs in rural areas fell by 22 percentage points- from 53.5 per cent in 2004-05 to 31.5 per cent in 2011-12 (SomeshJha, 2014)⁹.

In this situation the Act was introduced (Phase-I) in 200 most backward districts of the country to cover poor people Below Poverty Line (BPL). As a result, 62 per cent of the new employment created by MGNREGA in Phase I and II are utilized by the SC and ST communities, since majority of them are very poor as high. Only six districts were covered in Phase I implementation in Tamil Nadu State. These districts are Cuddalore, Dindigul, Nagapattinam, Sivagangai, Tiruvannamalai, Viluppuram. Dindigul district was selected on the basis of most economic backward district index of Tamil Nadu.

⁹SomeshJha (2014), Fewer poor among SC, ST, OBC, Business Standard, March, 14.

The Act was implemented without any consideration of rural -regional differences. Therefore, the study was done purposefully and selected different rural regions, such as city surrounded rural regions, primitive rural region/hilly regions and backward rural regions.

5. Limitations of the Study

The study has covered micro region of Dindigul district only. The researcher interacted only with Scheduled Castes people, not with the people of other communities. Difficulties also were faced in getting relevant data from the villages.

6. Methodology of the study.

The study has been conducted in Dindigul district of Tamil Nadu state during the period of 2012–2016. The field survey has been carried out from May 2014 to June 2015. Out of 14 blocks of Dindigul district, only three blocks were selected purposefully, such as city surrounded of Dindigul block, primitive or hilly area of Kodaikanal block and backward area of Batlagundu block. The sample size of the study is 345. They were selected from MGNREGA workers of Scheduled castes communities through proportionate random sampling technique at 10 per cent level, which constituted 130 (37.70 per cent), 90 (26.10 per cent) and 125 (36.20 per cent) samples from Dindigul block, Kodaikanal block and Batlagundu block respectively. Three village Panchayats were selected from each block. The major beneficiaries were scheduled castes people in the nine village Panchayats.

7. Analysis the Indebtedness, Unemployment and Migration among MGNREGA Households

The study manly focused only three problems such as indebtedness, unemployment and migration. Therefore, the problem oriented study tries to analyse

the above three problems among selective rural people (345 samples), like Scheduled Castes (SCs) participants of MGNREGA household in Dindigul district.

7.1. Annual Indebtedness Pattern of MGNREGA Households

Indebtedness has been known as one of the most infamous obstacle in the way of rural prosperity.¹⁰

Table-1: Indebtedness Pattern MGNREGA Households

Sl.No	Name of the Block	Before MGNREGA				After MGNREGA				Total	
		No		Yes		No		Yes		Count	%
		Count	%	Count	%	Count	%	Count	%		
1	Dindigul	49	37.7	81	62.3	77	59.2	53	40.8	130	100
2	Kodaikanal	39	43.3	51	56.7	62	68.9	28	31.1	90	100
3	Batlagundu	43	34.4	82	65.6	70	56.0	55	44.0	125	100
Aggregate (Dindigul District)		131	38.0	214	62.0	209	60.6	136	39.4	345	100

Source: Computed from Primary Data

7.1.1. Dindigul Block

The table -1 revealed that out of 130 households in Dindigul block, 49 (37.7 per cent) and 77 (59.2 per cent) households were not financially indebted before and after the implementation of MGNREGA respectively. The counterpart of 81 (62.3 per cent) and 53 (40.8 per cent) households were financially indebted before and after the implementation of MGNREGA respectively. Therefore, 21.5 per cent of households were entered into debt-free life after the implementation of MGNREGA in Dindigul block.

¹⁰Tulika Kumari and Binita Kumari, (2015), Rural Indebtedness in India and its Consequences, Indian Journal of Economics and Development, Vol.12 No.(1a):p.1.

Kodaikanal Block

Out of 90 households in Kodaikanal block, 39 (43.3 per cent) and 62 (68.9 per cent) households were not financially indebted before and after the implementation of MGNREGA respectively. The matching part of 51 (56.7 per cent) and 28 (31.1 per cent) households were financially indebted before and after the implementation of MGNREGA respectively. As a result, 25.6 per cent of households were entered into debt-free life after the implementation of MGNREGA in Kodaikanal block.

7.1.2. Batlagundu Block

Out of 125 households in Batlagundu Block, 43 (34.4 per cent) and 70 (56.0 per cent) were not financially indebted before and after the implementation of MGNREGA respectively. The counterpart of 82 (65.6 per cent) and 55 (44.0 per cent) were financially indebted before and after the implementation of MGNREGA respectively. As a result, 21.6 per cent of households were entered into debt-free life after the implementation of MGNREGA in Batlagundu block.

7.1.3. Dindigul District

Out of 345 households in Dindigul district, 131 (38.0 per cent) and 209 (60.6 per cent) were not financially indebted before and after the implementation of MGNREGA respectively. The counterpart of 214 (62.0 per cent) and 136 (39.4 per cent) were financially indebted before and after the implementation of MGNREGA respectively. Accordingly, 22.6 per cent of households were entered into debt-free life after the implementation of MGNREGA in Dindigul district.

Accordingly, 21.5 per cent, 25.6 per cent, 21.6 per cent and 22.6 per cent of households were entered into debt-free life after the implementation of MGNREGA in Dindigul block, Kodaikanal block, Batlagundu block and Dindigul district

respectively. As a result, annual households' indebtedness has been reduced in the study area.

7.2. Migration from MGNREGA Households (Members)

Migration often separates families, with some households members migrating and others staying behind in the country of origin.¹¹

Table-2: Migration from MGNREGA Households (Members)

Sl.No	Name of the Block	Before MGNREGA				After MGNREGA				Total	
		No		Yes		No		Yes			
		Count	%	Count	%	Count	%	Count	%	Count	%
1	Dindigul	91	70.0	39	30.0	76	58.5	54	41.5	130	100
2	Kodaikanal	71	78.9	19	21.1	69	76.7	21	23.3	90	100
3	Batlagundu	94	75.2	31	24.8	88	70.4	37	29.6	125	100
Aggregate (Dindigul District)		256	74.2	89	25.8	233	67.5	112	32.5	345	100

Source: Computed from Primary Data

7.2.1. Dindigul Block

Out of 130 households in Dindigul block, 91 (70.0 per cent) and 76 (58.5 per cent) households' members werenot migrated before and after the implementation of MGNREGA respectively. The counterpart of 39 (30.0 per cent) and 54 (41.5 per cent) households' members weremigrated before and after the implementation of MGNREGA respectively. Accordingly, 11.5 per cent of households' members

¹¹ElieMurard (2019), The Impact of Migration on Family LeftBehind: Estimation in Presence of Intra-Household Selection of Migrants, Discussion Paper Series, IZA DP No. 12094, p.1.

were migrated after the implementation of MGNREGA in Dindigul block. Refer table Table-2.

7.2.2. Kodaikanal Block

Out of 90 households in Kodaikanal block, 71 (78.9 per cent) and 69 (76.7 per cent) households' members were not migrated before and after the implementation of MGNREGA respectively. The matching part of 19 (21.1 per cent) and 21 (23.3 per cent) households' members were migrated before and after the implementation of MGNREGA respectively in Kodaikanal block. Therefore, 2.2 per cent of households' members were migrated after the implementation of MGNREGA in Kodaikanal block.

7.2.3. Batlagundu Block

Out of 125 households in Batlagundu block, 94 (75.2 per cent) and 88 (70.4 per cent) households' members were not migrated before and after the implementation of MGNREGA respectively. The counterpart of 31 (24.8 per cent) and 37 (29.6 per cent) households' members were migrated before and after the implementation of MGNREGA respectively. Hence, 4.8 per cent of households' members were migrated after the implementation of MGNREGA in Batlagundu block.

7.2.4. Dindigul District

Out of 345 households in Dindigul district, 256 (74.2 per cent) and 233 (67.5 per cent) households' members were not migrated before and after the implementation of MGNREGA respectively. The counterpart of 89 (25.8 per cent) and 112 (32.5 per cent) households' members were migrated before and after the implementation of MGNREGA respectively. As a result, 6.7 per cent of households' members were migrated after the implementation of MGNREGA in Dindigul district.

Accordingly, 11.5 per cent, 2.2 per cent, 4.8 per cent and 6.7 per cent of

households' members weremigrated after the implementation of MGNREGA in Dindigul block, Kodaikanal block, Batlagundu block and Dindigul district respectively. As a result, migration has been increased in the study area.

7.3. Unemployment Situation of MGNREGA Households

An unemployed person is one who having potentialities and willingness to earn, is unable to find a remunerative work. Unemployment is a term referring to individuals who are employable and actively seeking a job but are unable to find a job.¹²

Table-3: Unemployment Situation of MGNREGA Households

Sl.No	Name of the Block	Before MGNREGA				After MGNREGA				Total	
		No		Yes (Jobless)		No		Yes (Jobless)			
		Count	%	Count	%	Count	%	Count	%	Count	%
1	Dindigul	99	76.2	31	23.8	111	85.4	19	14.6	130	100
2	Kodaikanal	74	82.2	16	17.8	79	87.8	11	12.2	90	100
3	Batlagundu	98	78.4	27	21.6	108	86.4	17	13.6	125	100
Aggregate (Dindigul District)		271	78.6	74	21.4	298	86.4	47	13.6	345	100

Source: Computed from Primary Data

7.3.1. Dindigul Block

Out of 130 households in Dindigul block, 99 (76.2 per cent) and 111 (85.4 per cent) households' members got any employment opportunities or employed (most number of days in a month) before and after the implementation of MGNREGA

¹²<https://corporatefinanceinstitute.com/resources/knowledge/economics/unemployment/>

respectively. The counterpart of 31 (23.8 per cent) and 19 (14.6 per cent) households' members were unemployed or jobless (most number of days in a month) before and after the implementation of MGNREGA respectively. As a result, 9.2 per cent of households' members were employed after the implementation of MGNREGA in Dindigul block. (Table-3)

7.3.2. Kodaikanal Block

Out of 90 households in Kodaikanal block, 74 (82.2 per cent) and 79 (87.8 per cent) households' members got any employment opportunities or employed before and after the implementation of MGNREGA respectively. The counterpart of 16 (17.8 per cent) and 11 (12.2 per cent) households' members were unemployed or jobless before and after the implementation of MGNREGA respectively. As a result, 5.6 per cent of households' members were employed after the implementation of MGNREGA in Kodaikanal block.

7.3.3. Batlagundu Block

Out of 125 households in Batlagundu block, 98 (78.4 per cent) and 108 (86.4 per cent) households' members got any employment opportunities or employed before and after the implementation of MGNREGA respectively. The counterpart of 27 (21.6 per cent) and 17 (13.6 per cent) households' members were unemployed or jobless before and after the implementation of MGNREGA respectively. As a result, 8.0 per cent of households' members were employed after the implementation of MGNREGA in Batlagundu block.

7.3.4. Dindigul District

Out of 345 households in Dindigul district, 271 (78.6 per cent) and 298 (86.4 per cent) households' members got any employment opportunities or employed before

and after the implementation of MGNREGA respectively. The counterpart of 74 (21.4 per cent) and 47 (13.6 per cent) households' members were unemployed or jobless before and after the implementation of MGNREGA respectively. As a result, 7.8 per cent of households' members were employed after the implementation of MGNREGA in Dindigul district.

Accordingly, 9.2 per cent, 5.6 per cent, 8.0 per cent and 7.8 per cent of households' members were employed after the implementation of MGNREGA in Dindigul block, Kodaikanal block, Batlagundu block and Dindigul district respectively. As a result, unemployment situation has been reduced in the study area.

7.4. McNemar Test

McNemar test is one of the important nonparametric tests often used when the data happen to be nominal and relate to two related samples. As such this test is especially useful with before-after measurement of same subjects¹³.

The McNemar's test is a statistical test used on paired nominal data. It is applied to 2×2 contingency tables with a dichotomous trait, with matched pairs of subjects, to determine whether the row and column marginal frequencies are equal (that is, whether there is "marginal homogeneity"). It is named after Quinn McNemar, who introduced it in 1947¹⁴.

¹³Kothari C.R (2004). "Research Methodology", 2nd ed., **New Age International Publishers**, New Delhi, p.289.

¹⁴McNemar, Quinn (June 18, 1947). "Note on the sampling error of the difference between correlated proportions or percentages". *Psychometrika*.12(2): pp.153–157.

An application of the test in genetics is the transmission disequilibrium test for detecting linkage disequilibrium.¹⁵ The commonly used parameters to assess a diagnostic test in medical sciences are sensitivity and specificity.

The test statistic under McNemar test is worked out as under (as it uses the under-mentioned transformation of chi-square test):

2×2 ContingencyTable

Before	After	
	Unfavour	Favour
Favour	A	B
Unfavour	C	D

$$X^2 = \frac{(A-D-1)^2}{(A+D)}$$

The minus 1 in the above equation is a correction for continuity as the Chi-square test happens to be a continuous distribution, whereas the observed data represent a discrete distribution.

¹⁵Spielman RS; McGinnis RE; Ewens WJ (Mar 1993). "Transmission test for linkage disequilibrium: the insulin gene region and insulin-dependent diabetes mellitus (IDDM)". *Am J Hum Genet.* **52** (3): 506–16.
https://en.wikipedia.org/w/index.php?title=McNemar%27s_test&oldid=1015131087

**Table – 4 : Cross tabulation to calculate the McNemar test
 (Indebtedness, Unemployment and Migration among MGNREGA Households)**

Sl. No	Name of the block	A B	Indebtedness			Migration			Unemployment		
			Yes	No	Total	Yes	No	Total	Yes	No	Total
1	Dindigul	No	14	35	49	24	67	91	11	88	99
		Yes	39	42	81	30	9	39	8	23	31
		Total	53	77	130	54	76	130	19	111	130
2	Kodaikanal	No	6	33	39	8	63	71	5	69	74
		Yes	22	29	51	13	6	19	6	10	16
		Total	28	62	90	21	69	90	11	79	90
3	Batlagundu	No	17	26	43	17	77	94	9	89	98
		Yes	38	44	82	20	11	31	8	19	27
		Total	55	70	125	37	88	125	17	108	125
4	Overall	No	37	94	131	49	207	256	25	246	271
		Yes	99	115	214	63	26	89	22	52	74
		Total	136	209	345	112	233	345	47	298	345

Source: Computed from Primary Data

Note: B – Before the implementation of MGNREGA

A – After the implementation of MGNREGA

Table-5 : The McNemar Test to Analysis the Indebtedness, Unemployment and Migration among MGNREGA Households

Sl. No	Name of the Block	Variable	Paired Difference (Before-After)		't' test value	McNemar's Test (At 5% level of sig. χ^2 value is 3.84)			Hypothesis Result- H_0
			Mean	Std. Deviation		Cal. Value (χ^2)	Degrees of freedom	p-value (Sig. 2 tails)	
1	Dindigul	Indebtedness	.215	.622	3.946	13.01786	1	0.000*	Reject
		Migration	-.115	.492	-2.672	5.939	1	0.015*	Reject
		Unemployment	.092	.505	2.084	3.559	1	0.059	Accept
2	Kodaikanal	Indebtedness	.256	.572	4.238	13.82857	1	0.000*	Reject
		Migration	-.022	.396	-.532	0.07143	1	0.791	Accept
		Unemployment	.056	.407	1.296	1.06667	1	0.302	Accept
3	Batlagundu	Indebtedness	.216	.667	3.621	11.08197	1	0.001*	Reject
		Migration	-.048	.473	-1.135	0.893	1	0.345	Accept
		Unemployment	.080	.468	1.910	2.893	1	0.089	Accept
	Aggregate	Indebtedness	.226	.625	6.719	39.00658	1	0.000*	Reject
		Migration	-.067	.462	-2.679	6.453	1	0.011	Reject
		Unemployment	.078	.467	3.116	8.779	1	0.003*	Reject

Source: Computed from Primary Data

*- Significant

7.5. Indebtedness of MGNREGA Households (Table-5)

Hypothesis

H₀– There is no significant difference in indebtedness after the implementation of MGNREGA

H₁– There is a significant difference in indebtedness after the implementation of MGNREGA

7.5.1. Dindigul Block

The calculated value of the McNemar test ($\chi^2=13.01786$) is greater than the table (3.84) value at 5 per cent level of significance. The p-value is 0.0000. The result is significant at $p < .05$. Therefore null hypothesis is rejected and the alternative hypothesis is accepted. Hence, there is a significant difference in indebtedness after the implementation of MGNREGA in Dindigul Block.

The Mean difference is 0.215 and the Standard Deviation difference is 0.622 (Compared after and before). The paired differences are indicated that indebtedness has decreased significantly in Dindigul Block.

7.5.2. Kodaikanal Block

The calculated value of the McNemar test ($\chi^2=13.82857$) is greater than the table (3.84) value at 5 per cent level of significance. The p-value is 0.0000. The result is significant at $p < .05$. As a result null hypothesis is rejected and the alternative hypothesis is accepted. For this reason, there is a significant difference in indebtedness after the implementation of MGNREGA in Kodaikanal Block.

The Mean difference is 0.256 and the Standard Deviation difference is 0.572. The paired differences are indicated that, indebtedness has decreased significantly in Kodaikanal block.

7.5.3. Batlagundu Block

The calculated value of the McNemar test ($\chi^2=11.08197$) is greater than the table (3.84) value at 5 per cent level of significance. The p-value is 0.001. The result is significant at $p < .05$. Accordingly null hypothesis is rejected and the alternative hypothesis is accepted. Hence, there is a significant difference in indebtedness after the implementation of MGNREGA in Batlagundu Block.

The Mean difference is 0.216 and the Standard Deviation difference is 0.667. The paired differences are indicated that, indebtedness has decreased significantly in Batlagundu Block.

7.5.4. Dindigul District

The calculated value of the McNemar test ($\chi^2=39.00658$) is greater than the table (3.84) value at 5 per cent level of significance. The p-value is 0.0000. The result is significant at $p < .05$. Therefore null hypothesis is rejected and alternative hypothesis is accepted. As a result, there is a significant difference in indebtedness after the implementation of MGNREGA in Dindigul District.

The Mean difference is 0.226 and the Standard Deviation difference is 0.625. The paired differences are indicated that, indebtedness has decreased significantly after the MGNREGA in Dindigul District.

7.6. Migration from MGNREGA Households (Table-5)

Hypothesis

H_0 – There is no significant difference in migration after the implementation of MGNREGA

H_1 – There is significant difference in migration after the implementation of MGNREGA

7.6.1. Dindigul Block

The calculated value of the McNemar test ($\chi^2=5.939$) is greater than the table (3.84) value at 5 per cent level of significance. The p-value is 0.015. The result is significant at $p < .05$. Therefore null hypothesis is rejected and the alternative hypothesis is accepted. For this reason, there is a significant difference in labour migration after the implementation of MGNREGA in Dindigul Block.

The Mean difference is -0.115 and the Standard Deviation difference is 0.492. The paired differences are indicated that, migration has increased after the implementation of MGNREGA in Dindigul Block.

7.6.2. Kodaikanal Block

The calculated value of the McNemar test ($\chi^2=0.07143$) is less than the table (3.84) value at 5 per cent level of significance. The p-value is 0.791. The result is *not significant* at $p > .05$. Therefore null hypothesis is accepted and the alternative hypothesis is rejected. For this reason, there is no significant difference in migration after the implementation of MGNREGA in Kodaikanal Block.

The Mean difference is -0.022 and the Standard Deviation difference is 0.396. The paired differences are indicated that, migration has a moderate change after the MGNREGA in Kodaikanal Block.

7.6.3. Batlagundu Block

The calculated value of the McNemar test ($\chi^2=0.893$) is less than the table (3.84) value at 5 per cent level of significance. The p-value is 0.345. The result is not significant at $p > .05$. Therefore null hypothesis is accepted and the alternative hypothesis is rejected. For this reason, there is no significant difference in migration after the implementation of MGNREGA in Batlagundu Block.

The Mean difference is -0.048 and the Standard Deviation difference is 0.473. The paired differences are indicated that, migration has a moderate change in Batlagundu Block.

7.6.4. Dindigul District

The calculated value of the McNemar test ($\chi^2=6.453$) is greater than the table (3.84) value at 5 per cent level of significance. The p-value is < 0.011 . The result is significant at $p < .05$. Therefore null hypothesis is rejected and the alternative hypothesis is accepted. Accordingly, there is a significant difference in migration after the implementation of MGNREGA in Dindigul District.

The Mean difference is -0.067 and the Standard Deviation difference is 0.462. The paired differences are indicated that, migration has increased after the MGNREGA in Dindigul district.

7.7. Unemployment situation among MGNREGA Households(Table-5)

Hypothesis

H₀– There is no significant difference in unemployment situation after the implementation of MGNREGA

H₁– There is a significant difference in unemployment situation after the implementation of MGNREGA

7.7.1. Dindigul Block

The calculated value of the McNemar test ($\chi^2=3.559$) is less than the table (3.84) value at 5 per cent level of significance. The p-value is < 0.059 . The result is not significant at $p > .05$. Therefore null hypothesis is accepted and the alternative hypothesis is rejected. From now, there is no significant difference in unemployment situation after the implementation of in Dindigul Block.

The Mean difference is 0.092 and the Standard Deviation difference is 0.505. The paired differences are indicated that, unemployment situation has a moderate change after the MGNREGA in Dindigul Block.

7.7.2. Kodaikanal Block

The calculated value of the McNemar test ($\chi^2=1.06667$) is less than the table (3.84) value at 5 per cent level of significance. The p-value is < 0.302 . The result is not significant at $p > .05$. Therefore null hypothesis is accepted and the alternative hypothesis is rejected. Consequently, there is no significant difference in unemployment situation after the implementation of MGNREGA in Kodaikanal Block.

The Mean difference is 0.056 and the Standard Deviation difference is 0.407. The paired differences are indicated that, unemployment situation has a moderate change after the MGNREGA in Kodaikanal Block.

7.7.3. Batlagundu Block

The calculated value of the McNemar test ($\chi^2=2.893$) is less than the table (3.84) value at 5 per cent level of significance. The p-value is < 0.0589 . The result is not significant at $p > .05$. Therefore null hypothesis is accepted and the alternative hypothesis is rejected. Accordingly, there is no significant difference in unemployment situation after the implementation of MGNREGA in Batlagundu block.

The Mean difference is 0.080 and the Standard Deviation difference is 0.468. The paired differences indicated that, unemployment situation has a moderate change after the MGNREGA in Batlagundu Block.

7.7.4. Dindigul District

The calculated value of the McNemar test ($\chi^2=8.779$) is greater than the table (3.84) value at 5 per cent level of significance. The p-value is < 0.003 . The result is significant at $p < .05$. Therefore null hypothesis is rejected and the alternative hypothesis is accepted. For this reason there is a significant difference in unemployment situation after the implementation of MGNREGA in Dindigul district.

The Mean difference is 0.078 and the Standard Deviation difference is 0.467. The paired differences are indicated that, unemployment situation has decreased after the MGNREGA in Dindigul district.

8. Conclusion

The present study found that there is a significant level of difference existed in indebtedness among all the blocks and overall Dindigul district. The paired differences are exactly indicated that indebtedness has decreased significantly in the study area. In view of that, there is a significant difference in reduction of migration in Dindigul block and Dindigul district. In contrast, there is no significant difference in migration in Kodaikanal Block, Batlagundu block. The paired differences are indicated that, migration has a moderate change (small increases) in the study area. Accordingly, there is a significant level of difference existed in unemployment situation in Dindigul district. On the other hand there are no significant differences existed in all blocks of the study area. The paired differences indicated that, unemployment situation has decreased or moderate change after the implementation of MGNREGA in Dindigul district and all these three blocks of the study area.

Finally the study concluded that Scheduled Caste households' indebtedness has been decreased significantly and unemployment situation has a moderate change as well as decreased in the study area after the implementation of MGNREGA. The migration has a moderate change in the study area.

Therefore, MGNREGA has an effective tool to resolve the rural problems like indebtedness, unemployment situation and migration.

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