

Original Article

# Women and SC/ST Participation in MGNREGA in India: An Inter-State Analysis

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**Abstract:** Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is a landmark policy initiative for the enhancement of the livelihood security of the rural households of the country by procuring a guarantee of at least one hundred days of wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work. This paper examines the state-wise status of women and SC/ST participation in MGNREGA. This employment generation programme requires a minimum of 33 percent of women's participation. But there are wide inter-state variations in the country regarding this. For the year 2012-13, Kerala has shown the maximum (94 percent) women participation rate, whereas Uttar Pradesh has shown the least (19) percent participation rate. Also, there are wide variations in SC/ST participation across the country. The study also correlates women and SC/ST person days under MGNREGA with poverty, population growth, sex ratio and literacy rates.

**Keywords:** Interstate-Analysis, Rural Employment, MGNREGA.

## I. INTRODUCTION

In India, rural development has been a major focus of the planning process. Since independence, the Government of India has initiated various schemes to boost rural development. The government has implemented the National Rural Employment Programme, Rural Landless Employment Guarantee Programme, Jawahar Rojgar Yojna and currently, Sampoorna Gramin Rojgar Yojna to augment rural development in India. The main focus of the schemes was rural poverty and unemployment. The surplus and underemployed labour force has been mainly focused on rural development planning. These schemes have given some relief from rural poverty, but the rural unemployment condition of the country challenged the government to take more major steps. Sampoorna Gramin Rojgar Yojna was implemented with the main objectives of rural employment generation, durable infrastructure development and food security assurance. But in 2002-2003 and 2003-2004, on average, merely 20 days of employment were provided by the scheme to poor rural households. So, the government introduced National Rural Employment Guarantee Bill in parliament to provide at least 100 days of employment yearly at minimum wages to every rural poor household. Thus, to meet the requirement of a demand-based and guarantee assurance programme, United Progressive Alliance (UPA) government, in its National Common Minimum Programme (MCMP), announced about the implementation of the National Employment Guarantee Act to provide a legal guarantee of at least 100 days of employment at minimum wages to every rural poor household.

Almost all government schemes and policies have emphasized equal opportunities for men and women in recent years. MGNREGA programme also stresses the maximum women participation. In general, Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is an Act to provide for the enhancement of the livelihood security of the rural households of the country by procuring a guarantee of at least one hundred days of wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work. In reality, this programme has widened the scope of employment opportunities for poor rural women by starting new pathways and expanding their work alternatives. This employment generation programme requires a minimum of 33 percent of women's participation. But there are broad inter-state variations in the country regarding this. In 2012-13, Kerala showed a maximum of 94 percent women participation rate, whereas Uttar Pradesh has at least 19 percent women participation rate. Also, there are wide variations in SC/ST participation across the country. In Punjab State, the ST participation rate in MGNREGA is nil as there is no ST-designated population in Punjab. In Madhya Pradesh State, the ST participation rate in MGNREGA is the highest. With this background, the paper examines the status of women and SC/ST beneficiaries of MGNREGA in general and inter-state variations in particular.

## II. REVIEW OF LITERATURE

Kakati and Behera (2014) evaluated the status of women's participation in MGNREGA in Jharkhand and found a wide gap of about 22 percent in gender mainstreaming in the State. A positive relationship exists between women's participation and



sex ratio, total expenditure, wage expenditure and administrative expenditure. But there is a negative relationship between such participation and female literacy. Through focus group discussions, the paper qualitatively analyzed and found reasons for the low participation of women in schemes like late payments, corruption in Panchayati Raj Institutions and lack of awareness among women groups.

Karthika (2015) discussed the benefits of MGNREGA implementation for women participants and socio-economic development. In Kerala, the women participation rate is 95 percent. The time-bound implementation process is followed by most of the Panchayats there. The programme improved social skills like communication, mobility and decision-making among rural poor participants. However, government should divert attention towards creating productive work under the scheme.

Carswell and Neve (2013) conducted the study in two villages in Tamil Nadu and selected 240 households from one village (Allapuram) and 279 households from the other (Mannapalayam) for the survey. That fieldwork presented a broader scene of changing rural life and employment avenues in Tamil Nadu. Further, one more survey was conducted to examine the MGNREGA work areas of the two above-mentioned villages selecting 55 MGNREGA workers from Allapuram village and 54 MGNREGA workers from Mannapalayam. The study has used different tools like observation, focus group discussions, in-depth interviews and case studies to collect information about their income and employment sources, caste structure, education and financial matters. The scheme proves to be much more significant for some most vulnerable groups of society, like widows, single and separated women and aged rural people. Though MGNREGA wages are less than other work wages, especially for men, it provides assurance for locally available work and also for fixed and regular wages, which attracts women beneficiaries the most. Moreover, workers face no caste and gender-based biasness at work sites. Political parties' support and the Tamil Nadu government's attention are responsible for its women-friendly and gender equality-based approach in the state.

Bishnoi, Rampal and Meena (2015) conducted a study in the Bikaner and Ludhiana districts of Rajasthan and Punjab state, respectively. The study analyzed constraints faced by women beneficiaries of the selected states. The study included a total of 120 women beneficiaries for data collection from each selected block of the districts. The study used a personal interview method for data collection. In the case of constraints related to work, 'hard and laborious work' in Ludhiana and 'delay in the measurement of work' in Bikaner were the most important constraints faced by women. In case of constraints related to wages, 'low wage rates' in Ludhiana and 'delay in wage payment' in Bikaner are ranked first by the respondents. On the basis of constraints related to job cards, 'less job and more job cards' in Ludhiana and 'capture of job cards by elite group' in Bikaner are ranked first. In case of constraints related to facilities, 'lack of resting place' in Ludhiana and 'lack of child care facilities' in Bikaner are ranked first. On the basis of social constraints, 'social prohibition' ranked first and 'tenacious social norms' ranked last in both districts. So the study highlighted the above-mentioned constraints faced by women participants under MGNREGA in both districts.

### III. METHODOLOGY

Data for the study were collected from secondary sources. The secondary sources consist of government records, the MGNREGA website ([nrega.nic.in](http://nrega.nic.in)) and the Registrar General of India. Secondary data were used to analyze the implementation status of MGNREGA all over India and the participation of women and SC/ST population in the scheme. Women and SC/ST participation have been analyzed with the determinants like poverty rates, population growth rates, unemployment rates, literacy rates and sex ratio. Percentage and Pearson correlation were used as statistical tools for the analysis.

#### A) MGNREGA: Status of Implementation in India

MGNREGA programme has a special focus on gender inclusion in Indian society. This employment generation programme requires a minimum of 33 percent of women's participation. But there is a broad inter-state variation in the country regarding this. MGNREGA was implemented in 2006 in three phases in India. In the first phase, it was implemented in 200 districts. In 2007, the second phase was started, in which 130 districts were included under the programme. And in the third phase, all the remaining districts of India were covered. The main objective of the Act is to provide wage employment and manage the utilization of resources to alleviate poverty in the country. Rural poor people need stability in income sources for their livelihood. MGNREGA aims to ensure at least 100 days of wage employment for them. This is not the first scheme of the government to target unemployment and poverty. Before this, many schemes were implemented by the government. But this scheme has a unique feature of concerning various gender and local issues for creating a society having sustainability in cultural and physical resources. Table-1 shows the performance of MGNREGA in India. It indicated a mixed picture of the performance of various heads under MGNREGA. The number of households that provided employment decreased from 4.6 crores in 2012-13 to 1.26 crores in 2016-17. Total person days employment generation also declined from 205.47 crores in 2012-13 to 19.33 crores in 2016-17. Women participation rate increased from 51.65% (2012-13) to 56.83% (2016-17). Also, the

ST participation rate increased from 16.33% to 18.42% in five years. But SC participation rate decreased from 21.51% (2012-13) to 20.2% (2016-17). Households availed 100 days of employment decreased from 9.75% (2012-13) to 0.03% (2016-17).

**Table: 1 Performance of MGNREGA in India from 2012-13 to 2016-17**

Performance Indicators/Year	2012-13	2013-14	2014-15	2015-16	2016-17
No. of Households who have demanded Employment	47889792	48873098	45899523	49870700	24186791
No. of Households Provided Employment	46039604	45187471	39476508	42066893	12657288
Total Persondays (Lakhs)	20547.19	20750.35	14897.78	17646.59	1932.69
SC Persondays (Lakhs)	4420.12	4677.34	3355.04	3998.84	390.41
SC participation (%)	21.51	22.54	22.52	22.66	20.2
ST Persondays (Lakhs)	3355.73	3526.22	2538.3	3145.2	355.95
ST participation (%)	16.33	16.99	17.04	17.82	18.42
Women Persondays (Lakhs)	10612.75	10886.16	8197.93	9854.31	1098.44
Women participation (%)	51.65	52.46	55.03	55.84	56.83
Others	12771.34	12546.79	9004.44	10502.55	1186.33
Average Persondays per Household	44.63	45.92	37.74	41.95	15.27
Households Availed 100 days of Employment	4491932	4402564	1740731	2527235	3372
Percentage of households availed 100 days	9.75	9.74	4.41	6.01	0.03

Source: Mahatma Gandhi National Rural Employment Guarantee Act (official website), <http://nrega.nic.in>.

#### B) MGNREGA and Participation of Women and SC/ST in India

Table 2 shows that Chhattisgarh, with 42.03 percent and Jharkhand, with 37.31 percent, are the states having the highest percentage of MGNREGA beneficiaries to total rural households in 2006-07. Madhya Pradesh (35.85 percent), Meghalaya (29.01 percent) and West Bengal (27.36 percent) are some other states which show a high percentage of MGNREGA beneficiaries. However, Haryana (1.99 percent), Punjab (1.13 percent) and Gujarat (3.81 percent) are the states having least percentage of MGNREGA beneficiaries in total rural households. On the basis of women participation rate, Tamil Nadu (81.11 percent), Rajasthan (67.14 percent) and Kerala (65.62 percent) show the highest percentage, whereas Jammu Kashmir shows least women participation rate with only 4.45 percent. Punjab (69.36 percent) and Haryana (60.03 percent) are the states which have the highest SC participation rate, but Manipur (nil), Arunachal Pradesh (nil), Meghalaya (0.29 percent), Jammu Kashmir (5.42 percent) and Assam (8.65 percent) were the states having lowest SC participation rate in MGNREGA in 2006-07. On the other hand, Manipur and Arunachal Pradesh have a 100 percent ST participation rate in MGNREGA.

**Table: 2 MGNREGA beneficiaries Households (2006-07) as a percent of Rural Households, Women Participation Rate (%), SC Participation Rate (%) & ST Participation Rate (%)**

States/Participation Rates/ Poverty Rate (%)	MGNREGA beneficiaries Households (2006-07) as a percent of Rural Households (2001)	Women Participation Rate (%)	SC Participation Rate (%)	ST Participation Rate (%)
Andhra Pradesh	17.14	54.79	29.82	13.01
Arunachal Pradesh	10.17	30.02	0	100
Assam	18.85	31.67	8.65	46.26
Bihar	13.61	17.38	47.08	3.2
Chattisgarh	42.03	39.32	12.01	45.55
Gujarat	3.81	50.19	7.04	64.26
Haryana	1.99	30.59	60.03	0
Himachal Pradesh	5.89	12.24	30.4	22.41
Jammu Kashmir	10.4	4.45	5.42	23.22
Jharkhand	37.31	39.48	23.08	40.29
Karnataka	8.11	50.56	33.05	20.35
Kerala	1.98	65.62	20.12	12.4
Madhya Pradesh	35.85	43.24	15.87	48.64
Maharashtra	3.45	37.07	16.19	40.88
Manipur	6.8	50.89	0	100

Meghalaya	29.01	20.69	0.29	83.15
Odisha	21.06	35.6	23.65	49.27
Punjab	1.13	37.76	69.36	0
Rajasthan	16.66	67.14	15.97	64.36
Tamil Nadu	8.25	81.11	56.06	2.38
Tripura	13.77	75	15.92	62.18
Uttar Pradesh	12.63	16.55	56.85	3.11
Uttarakhand	11.33	-	26.7	1.41
West Bengal	27.36	18.28	36.08	18.61

Source: Census of India, 2001; 2011 [www.censusindia.gov.in](http://www.censusindia.gov.in), [nrega.nic.in](http://nrega.nic.in) (DMU report)

**Table 3: MGNREGA beneficiaries Households (2011-12) as a percent of Rural Households, Women Participation Rate (%), SC Participation Rate (%) & ST Participation Rate (%)**

States/Participation Rates/ Poverty Rate (%)	MGNREGA beneficiaries Households (2011-12) as a percent of Rural Households ( 2011)	Women Participation Rate (%)	SC Participation Rate (%)	ST Participation Rate (%)
Andhra Pradesh	20.21	56.49	27.19	15.87
Arunachal Pradesh	1.61	41.18	0	100
Assam	24.91	24.92	5.55	22.82
Bihar	9.86	28.64	24.57	1.77
Chhattisgarh	62.57	45.25	9.63	37.56
Gujarat	12.13	45.23	7.85	40.26
Haryana	9.12	36.43	49.68	0.02
Himachal Pradesh	38.02	59.51	30.08	6.11
Jammu Kashmir	23.36	17.72	7.36	14.98
Jharkhand	32.96	31.28	12.75	39.1
Karnataka	20.83	45.93	15.7	8.3
Kerala	34.18	92.85	14.32	2.37
Madhya Pradesh	33.7	42.65	21.16	27.42
Maharashtra	10.47	45.98	5.8	17.11
Manipur	87.46	33.46	0.6	70.7
Meghalaya	77.06	41.59	0.65	93.97
Odisha	17.07	38.65	17.5	38.17
Punjab	7.32	43.24	77.44	0
Rajasthan	47.7	69.17	16.76	24.54
Tamil Nadu	66.7	74.02	28.88	1.28
Tripura	92.21	38.65	17.99	42.03
Uttar Pradesh	28.52	17.13	31.55	1.25
Uttarakhand	32.24	44.59	18.34	2.89
West Bengal	39.27	32.44	33.74	10.24

Source: Census of India, 2001; 2011 [www.censusindia.gov.in](http://www.censusindia.gov.in), [nrega.nic.in](http://nrega.nic.in) (DMU report)

Table 3 shows that Tripura, with 92.21 percent, and Manipur, with 87.46 percent, are the states having the highest percentage of MGNREGA beneficiaries to total rural households in 2011-2012. Meghalaya (77.06 percent), Tamil Nadu (66.7 percent) and Chhattisgarh (62.57 percent) are some other states which show a high percentage of MGNREGA beneficiaries. However, Arunachal Pradesh (1.61 percent) and Punjab (7.32 percent) are the states having the lowest percentage of MGNREGA beneficiaries to total rural households (in 2011-2012). Also, Arunachal Pradesh, Bihar and Odisha have shown a decline in this proportion in 2011-2012 compared to 2006-2007. On the other hand, Tripura and Meghalaya states have shown a significant increase in the proportion of MGNREGA beneficiaries in 2011-2012 compared to 2006-2007. Based on the women participation rate, Kerala (92.85 percent), Tamil Nadu (74.02 percent) and Rajasthan (69.17 percent) show highest percentage. In contrast, Jammu Kashmir (17.72 percent) and Uttar Pradesh (17.13 percent) showed lowest participation rate in 2011-12. In Kerala, the women participation rate increased from 65.62 percent in 2006-07 to 92.85 percent in 2011-12. But in Tamil Nadu's case, women's participation rate in MGNREGA decreased from 81.11 percent to 74.02 percent. Punjab (77.44 percent) and Haryana (49.68 percent) states have the highest SC participation rates, but Arunachal Pradesh (nil), Manipur (0.6 percent), Meghalaya (0.65 percent) and Assam (5.55 percent) states had the lowest rate in MGNREGA in 2011-12. However,

Haryana state has shown a decline in SC participation rate from 60.03 percent to 49.68 percent. Arunachal Pradesh (100 percent) and Meghalaya (93.97 percent) have the highest ST participation rate in MGNREGA.

### C) Determinants of MGNREGA Participation

In order to analyze the relationship between state-wise MGNREGA beneficiaries and socio-economic indicators, we have selected variables like MGNREGA beneficiaries' households proportion in total rural households, women and SC/ST participation rate under MGNREGA, rural poverty rates (state-wise), population growth rate (rural), female literacy rate (rural), sex ratio (rural), proportion of SC and ST population in various states and SC/ST literacy rates (rural). The data regarding MGNREGA has been taken for 2006-2007 and 2011-2012. If the socio-economic indicators data is unavailable for these years, then the data for the closest year available has been taken (Appendices 1 and 2).

**Table 4: Results of the Correlation Analysis (2006-2007)**

Variables	Correlation Coefficient
MGNREGA beneficiaries Households (2006-07) as a percent of Rural Households ( 2001) and Poverty Rate (Rural) (2004-05)	0.506 *
Women Participation Rate in MGNREGA (2006-07) and Poverty Rate (Rural) (2004-05)	0.313
SC Participation Rate in MGNREGA (2006-07) and Poverty Rate (Rural) (2004-05)	0.119
ST Participation Rate in MGNREGA (2006-07) and Poverty Rate (Rural) (2004-05)	0.210
MGNREGA beneficiaries Households (2006-07) as a percent of Rural Households ( 2001) and Population Growth Rate (Rural) (2001-11)	0.436*
Women Participation Rate in MGNREGA (2006-07) and Population Growth Rate (Rural) (2001-11)	
SC Participation Rate in MGNREGA (2006-07) and Population Growth Rate (Rural) (2001-11)	-0.154
ST Participation Rate in MGNREGA (2006-07) and Population Growth Rate (Rural) (2001-11)	0.302
Women Participation Rate in MGNREGA (2006-07) and Female Literacy Rate (Rural)	0.475 **
Women Participation Rate in MGNREGA (2006-07) and Sex Ratio (Rural)	0.440 **
SC Participation Rate in MGNREGA (2006-07) and Proportion of SC in States (Rural) 2001)	0.862 *
ST Participation Rate in MGNREGA (2006-07) and Proportion of ST in States (Rural) (2001)	0.854 *
SC Participation Rate in MGNREGA (2006-07) and SC Literacy Rate (Rural) (2001)	-0.107
ST Participation Rate in MGNREGA (2006-07) and ST Literacy Rate (Rural) (2001)	0.505 **

**Source:** Authors calculation.

Note; \* significant at 1% level of significance and \*\* significant at the 0.05 level 2-tailed

The results of the correlation analysis for 2006-2007 are given in Table 4. Results show that the Coefficient of Correlation between MGNREGA beneficiary households as a percent of rural households and the poverty rate (rural) is 0.506, which is significant. Also, the correlation coefficients of Women Participation Rate (Rural) and SC/ST Participation Rate (Rural) with Poverty Rate (Rural) are 0.313, 0.119 and 0.210, respectively. But the correlation between the above variables is not significant. The coefficient of correlation between MGNREGA beneficiaries' households as a percent of rural households and population growth rate (rural) is 0.436, which is significant. The correlation coefficients of the Women Participation Rate (Rural) and SC/ST Participation Rate (Rural) with Population Growth Rate (rural) are -0.154 and 0.302, respectively. Women's participation rate correlates significantly with the female literacy rate (rural) and sex ratio (rural) of 0.475 and 0.440, respectively. The coefficients of correlation of SC participation rate (rural) with the proportion of SC in states (rural) and SC literacy rate (rural) are 0.862 and -0.107, respectively. Similarly, the coefficients of correlation of ST participation rate (rural) with the proportion of ST in states (rural) and ST literacy rate (rural) are 0.854 and 0.505, respectively. Thus the results indicate that MGNREGA participation has a positive and significant correlation between poverty rates and rural population growth rates.

Similarly, women's participation in MGNREGA positively and significantly correlates with women's literacy rate (rural) and sex ratio (rural). The SC and ST participation rates in MGNREGA are positively and significantly correlated with SC and ST population proportions in total state populations. ST participation rate in MGNREGA is also positively and significantly correlated with state-wise ST literacy rate (rural)

**Table 5: Results of the Correlation Analysis (2011-12)**

Variables	Correlation Coefficients
MGNREGA beneficiaries Households (2011-12) as a percent of Rural Households ( 2011) and Poverty Rate (Rural) (2011-12)	0.105
Women Participation Rate in MGNREGA (2011-12) and Poverty Rate (Rural) (2011-12)	-0.186
SC Participation Rate in MGNREGA (2011-12) and Poverty Rate (Rural) (2011-12)	-0.307

<b>ST Participation Rate in MGNREGA (2011-12) and Poverty Rate (Rural) (2011-12)</b>	0.439 **
<b>MGNREGA beneficiaries Households (2011-12) as a percent of Rural Households ( 2011) and Population Growth Rate (Rural) (2001-11)</b>	0.009
<b>Women Participation Rate in MGNREGA(2011-12) and Population Growth Rate (Rural) (2001-11)</b>	-0.436 **
<b>SC Participation Rate in MGNREGA (2011-12) and Population Growth Rate (Rural) (2001-11)</b>	-0.124
<b>ST Participation Rate in MGNREGA (2011-12)and Population Growth Rate (Rural) (2001-11)</b>	0.402 **
<b>Women Participation Rate in MGNREGA (2011-12) and Female Literacy Rate (Rural) (2011)</b>	0.598 *
<b>SC Participation Rate in MGNREGA (2011-12) and Proportion of SC in States (Rural) (2011)</b>	0.888 *
<b>ST Participation Rate in MGNREGA (2011-12) and Proportion of ST in States (Rural) (2011)</b>	0.973 *
<b>Women Participation Rate in MGNREGA (2011-12) and Sex Ratio (Rural) (2011)</b>	0.572 *
<b>SC Participation Rate in MGNREGA (2011-12) and SC Literacy Rate (Rural) (2011)</b>	0.206
<b>ST Participation Rate in MGNREGA (2011-12) and ST Literacy Rate (Rural) (2011)</b>	0.401 *

**Source:** Authors calculation.

Note; \* significant at 1% level of significance and \*\* significant at the 0.05 level 2-tailed

The results of the correlation analysis for the years 2011-12 are given in Table 5. Results show that the coefficient of correlation between MGNREGA beneficiary households as a percent of rural households and the poverty rate (rural) is 0.105 and not significant. The correlation coefficients of the women participation rate in MGNREGA and SC/ST participation rate in MGNREGA with poverty rate (Rural) are -0.186, -0.307 and 0.439, respectively. Rural poverty significantly correlates with only ST participation rate in MGNREGA. The coefficient of correlation between MGNREGA beneficiary households as a percent of rural households and population growth rate (rural) is 0.009 and non-significant. Results show a positive and significant correlation between women's participation in MGNREGA and sex ratio; however, the correlation of same with rural population growth comes out to be negative and significant. The SC and ST participation rates in MGNREGA are positively and significantly correlated with SC and ST proportions in state populations. The SC literacy rate is not significantly correlated with SC participation in MGNREGA, while the ST literacy rate is positively and significantly correlated with ST participation in MGNREGA.

#### IV. CONCLUSION

From the above analysis, we find an increase in women and ST participation rates in MGNREGA, while the SC participation rate has somewhat declined from 2012-13 to 2016-17. There is a positive relationship between women's participation rate with sex ratio and literacy rate, which means that these variables have a positive impact on women's participation in MGNREGA. Also, the ST participation rate is positively related to the ST literacy rate and ST population proportion in states. MGNREGA beneficiaries' households, as a percentage of rural households, have a positive relation with poverty and rural population growth rate.

#### V. REFERENCES

- [1] Bishnoi, S., Ranpal, V. K., & Meena, H. R. (2015). To Compare Impact of MNREGA on Socio-economic Status of Rural Women in Punjab and Rajasthan States. *Research Journal of Agricultural Sciences*, 6(2), 306-309.
- [2] Carswell, G. & Neve, G. D. (2013). Women at the Crossroads Implementation of Employment Guarantee Scheme in Rural Tamil Nadu. *Economic & Political Weekly*, 48(52), 82-93.
- [3] Kakati, B. K. & Behera, M. C. (2014). Women Workers and Their Status in MGNREGA Programme: A Study in Jharkhand. *Journal of Rural Development*, 33(3), 281-290.
- [4] Karthika, K. T. (2015). Impact of MGNREGA on Socio-Economic Development & Women Empowerment. *Journal of Business and Management*, 17(7), 16-19.
- [5] Press Note on Poverty estimates 2009-10, Govt. of India
- [6] [www.nrega.nic.in](http://www.nrega.nic.in)
- [7] [www.censusindia.gov.in](http://www.censusindia.gov.in)
- [8] [www.planningcommission.nic.in](http://www.planningcommission.nic.in)

**Appendix 1: Indicators Used for Correlation Analysis (2001)**

States/ Indicators	Poverty Rate (%) (Rural) (2004-05)	Population Growth Rate (Rural) (2001-11) (%)	Female Literacy Rate (%) (Rural) (2001)	Sex Ratio (Rural) (2001) (Per 1000 Male Persons)	Proportion of SC in States (Rural) (2001)	Proportion of ST in States (Rural) (2001)	SC Literacy Rate (%) (Rural) (2001)	ST Literacy Rate (%) (Rural) (2001)
Andhra Pradesh	32.3	1.7	43.5	983	18.4	8.4	50.32	35.43
Arunachal Pradesh	33.6	22.6	36.9	914	0.4	69.7	65.87	45.04
Assam	36.4	15.5	50.7	944	6.7	13.6	64.92	61.29
Bihar	55.7	24.3	29.6	926	16.4	1	26.93	25.91
Chattisgarh	55.1	17.8	47	1004	11.4	37.6	62.47	50.95
Gujarat	39.1	9.3	47.8	945	6.9	21.6	65.59	46.45
Haryana	24.8	9.8	49.3	866	21.4	0	54.13	0
Himachal Pradesh	25	12.7	65.7	989	25.6	4.3	69.54	64.78
Jammu Kashmir	14.1	19.4	36.7	917	8.3	13.8	57.1	35.74
Jharkhand	51.6	19.6	29.9	962	12.4	31	32.52	38.08
Karnataka	37.5	7.4	48	977	18.4	8.4	47.25	45.26
Kerala	20.2	-25.9	86.7	1059	10.8	1.5	81.65	63.65
Madhya Pradesh	53.6	18.4	42.8	927	15.6	25.8	55.39	40.01
Maharashtra	47.9	10.4	58.4	960	10.9	13.4	67.88	52.31
Manipur	39.3	9.1	57	963	1.3	44.4	70.76	65.09
Meghalaya	14	27.2	53.2	969	0.4	90.2	51.91	56.36
Odisha	60.8	11.8	46.7	987	17.2	24.6	54.23	36.13
Punjab	22.1	7.8	57.7	890	33	0	54.35	0
Rajasthan	35.8	19	37.3	930	17.9	15.5	49.86	43.7
Tamilnadu	37.5	6.6	55.3	992	23.8	1.6	59.61	38.41
Tripura	44.5	2.2	60.5	946	17.2	36.5	73.59	55.46
Uttar Pradesh	42.7	18	36.9	904	23.4	8.4	44.52	32.99
Uttarakhand	35.1	11.5	54.7	1007	19.9	69.7	61.53	61.65
West Bengal	38.2	7.7	53.2	950	26.9	13.6	57.09	42.35

*Source:* press note on poverty estimates, 2009-10, Govt. of India, Planning Commission 2012, Census of India, 2001; 2011 (pg 2 & 8) (population finder 2001) [www.censusindia.gov.in](http://www.censusindia.gov.in)

**Appendix 2: Indicators Used for Correlation Analysis (2011)**

States/ Indicators	Poverty Rate (%)(Rural) (2011-12))	Population Growth Rate (Rural) (2001-11) (%)	Female Literacy Rate (%) (Rural) (2011)	Sex Ratio (Rural) (2011) (Per 1000 Male Persons)	Proportion of SC in States (Rural) (2011)	Proportion of ST in States (Rural) (2011)	SC Literacy Rate (% (Rural) (2011)	ST Literacy Rate (% (Rural) (2011)
Andhra Pradesh	10.96	1.7	51.5	995	19.2	9.3	58.6	46.9
Arunachal Pradesh	38.93	22.6	52	929	0	74.1	0	60.4
Assam	33.89	15.5	63	956	6.8	13.7	75.7	70.9
Bihar	34.06	24.3	49	919	16.6	1.4	47.7	50.3
Chattisgarh	44.61	17.8	55.1	1002	12.8	36.9	69	57.6
Gujarat	21.54	9.3	61.4	947	6.6	23.1	75.2	61.3
Haryana	11.64	9.8	60	880	22.5	0	65.7	0
Himachal Pradesh	8.48	12.7	74.6	988	26	6.1	78.3	73
Jammu Kashmir	11.54	19.4	51.6	899	8.2	15.4	68.3	49.1
Jharkhand	40.84	19.6	48.9	960	12.6	31.4	52.7	55.2
Karnataka	24.53	7.4	59.7	975	20	9.2	60.4	59
Kerala	9.14	-25.9	90.8	1077	10.4	2.5	87.2	74
Madhya Pradesh	35.74	18.4	52.4	936	15.7	27.2	62.7	49.3
Maharashtra	24.22	10.4	68.5	948	12.2	14.6	75.8	63.2
Manipur	38.8	9.1	68.9	966	2.7	45.6	72.7	75.9
Meghalaya	12.53	27.2	68.4	983	0.5	90.1	61.1	71
Odisha	35.69	11.8	60.7	988	17.8	25.7	68.1	51.1
Punjab	7.66	7.8	65.7	906	37.5	0	63	0
Rajasthan	16.05	19	45.8	932	18.5	16.9	57.2	51.7
Tamilnadu	15.83	6.6	65	993	25.5	1.8	69.9	51.3
Tripura	16.53	2.2	79.5	956	16.1	41.2	89.1	78.4
Uttar Pradesh	30.4	18	53.7	914	23	0.7	59.8	54.5
Uttarakhand	11.62	11.5	66.2	1000	21.3	3.8	73.1	72.4
West Bengal	22.52	7.7	65.5	950	27.5	7.8	67.5	56.7

*Source: press note on poverty estimates, 2011-12, govt. of India, Planning Commission, July 2013, Census of India, 2001; 2011(pg 2 & 8) (Population Finder 2001) [www.censusindia.gov.in](http://www.censusindia.gov.in)*