

Literacy Transition in Scheduled Caste Population: A Study of Rural Haryana

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Abstract: *The study examines the trend of literacy and gap in literacy between male-female (1991 to 2011) in comparative mode between Haryana and India at the level of scheduled caste population (sc) in rural area. The study also analysis the spatial pattern of literacy as well as gender disparity in literacy at district level in Haryana. Correlation between literacy and other selected indicators, also find out. The study reveals that rural literacy rate in sc is remaining high in Haryana from India at all levels (total, male and female) during the entire time period (1991-2011) and its growth rate is recorded very high and almost same in both at all levels during the successive censuses. Gap in literacy between male-female is decreased eight per cent in Haryana and six per cent in India during the entire time period however, it is high almost 20 per cent in both at current time. Sirsa, Fatehabad, Kaithal, Hisar, Jind and Karnal have low literacy while all central, south-west and southern districts (except Gurgaon and Rohtak) have high gender disparity in literacy.*

Keywords: comparative trend and gender gap in literacy, spatial pattern, gender disparity and Correlation Matrix.

1. Introduction

Literacy is defined as the ability of people to read and write a simple message in any language with some understanding. It is not mandatory that to be treated as a literate, a person should have received any formal education or acquired any minimum educational standard. Literacy status can be acquired through adult literacy classes or by attending any non-formal education system. Person who are unfortunately blind and read in Braille are also treated as literates. From 1991 census, children below seven years are ignored when working out literacy rate in the country and the population aged seven years and above only would be classified as literate or illiterate. The proportion of literate persons in population is known as literacy level and the process of dissemination of literacy among the people in a society known as literacy transition. Literacy is related to all type of development which prepares the individual for full participation in a rapidly changing social and economic order. Better literate person is more likely to secure qualitative employment, more earnings, long and healthy life and cleaner and sustainable environment. An overall progress in literacy is necessary in a country, equally important is its distributional spread in all its areas – towns and villages, social classes and the two sexes (Gosal, 1979). The status of literacy varies significantly across different regions and different communities depending on the socio-economic and demographic characteristics as well as on the magnitude and direction of modernization, urbanization and industrialization. In this context, the study examines the status of literacy in scheduled caste population (sc) of rural Haryana.

2. Study Area

It is a study of literacy transition (1991-2011) in Scheduled Caste Population of rural Haryana. Haryana is located on the north-western side of Indian Union. It consists of 21 districts at the time of census (2011) enumeration. It is extended from 27° 39' north to 30°55'5'' north latitudes and 74° 27'8" east to 77° 36'5" east longitudes. It is situated to the south- east and south of Punjab. Similarly

Uttar Pradesh is situated in east of Haryana while Haryana adjoining with national capital. Rajasthan is located in south and south-west of Haryana. Geographically, Ghaggar river makes the south-west boundary of Haryana which divides Punjab from Haryana. Siwalik hills are situated in north part of Haryana while river Yamuna flows in east of Haryana which separates Uttar Pradesh from Haryana. Arawali hills are situated in south Haryana.

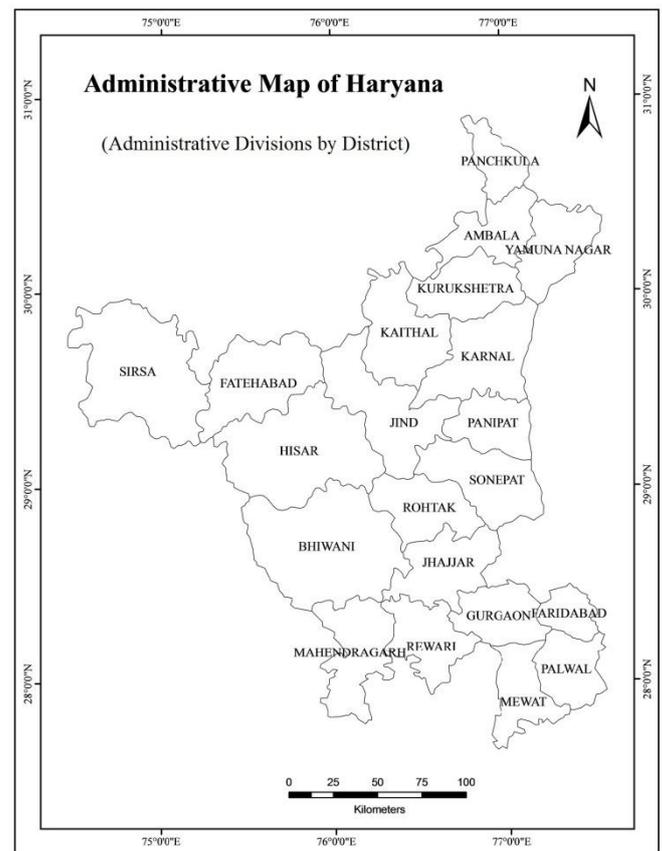


Figure 1

3. Objectives of the Study

- (1) To examine comparative trend of literacy and gap in literacy by sex (1991-2011) in scheduled caste population of rural area between Haryana and India.
- (2) To represent the spatial pattern of literacy at district level.
- (3) To identify gender disparity in literacy at district level.
- (4) To examine the correlation between literacy and selected indicators of socio-economic and demographic.

4. Data and Methodology

In this study, data have obtained from Census of India 1991, Primary census Abstract, Scheduled caste table. Census of India 2001, Social and Cultural Tables, Table C-8. Census of India 2011, Social and Cultural Tables, Table C-8, SC. for showing comparative trend of literacy and gap in literacy by sex between Haryana and India as well as spatial pattern and gender disparity in literacy at district level in Haryana. For calculate correlation, data are used from Census of India 2011, Social and Cultural Tables, Table C-8, SC. Data of urbanization are collected from

urbanization report which is published by Town and Country Planning Organization, Ministry of Urban Development, Government of India, January 2012.

Methodology is central to any research work which helps in scientific description and explanation of reality. A systematic approach has been followed in present study. The data have been analyzed keeping state and district as a unit of observation. Absolute figures are converted into percentages and these percentages are processed for necessary cartographic representations and interpretation. Pearson's correlation is used. Requisite maps have been drawn with the help of Arc GIS software. Correlation is calculated with the help of SPSS software. Sopher's Disparity Index (1980) modified by Kundu and Rao (1985) as given below, has been used to compute gender disparity in literacy at district level.

$$Ds = \text{Log}(x_2/x_1) + \text{Log}(200-x_1/200-x_2)$$

Here,

Ds = Gender Disparity index

X₂ = male literacy rate

X₁ = female literacy rate

Table 1: Literacy Rate and Gender Gap in Scheduled Caste Population of Rural Area (1991-2011)

State and Country	Literacy Rate and Gender Gap in Literacy	1991	2001	2011
India	Total Literacy Rate	33.25	51.16	62.85
	Male Literacy Rate	45.95	63.66	72.58
	Female Literacy Rate	19.46	37.84	52.56
	Gap betweenin Male-Female Literacy Rate	26.48	25.81	20.01
Haryana	Total Literacy Rate	37.67	54.13	65.75
	Male Literacy Rate	50.62	65.88	75.10
	Female Literacy Rate	22.48	40.64	55.20
	Gap between Male-Female Literacy Rate	28.14	25.24	19.90

Source: Census of India 1991, Primary census Abstract, Scheduled caste table. Census of India 2001, Social and Cultural Tables, Table C-8. Census of India 2011, Social and Cultural Tables, Table C-8, SC

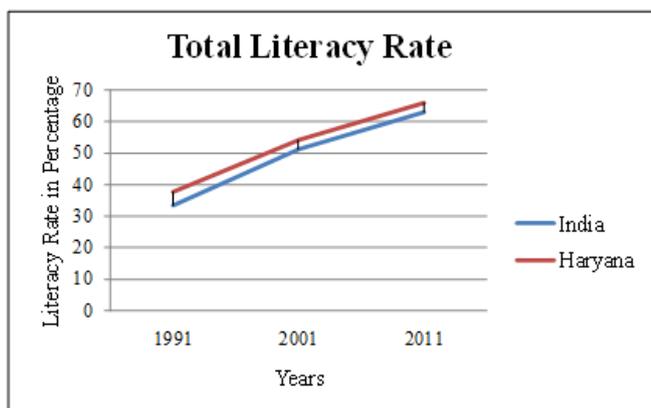


Figure 2

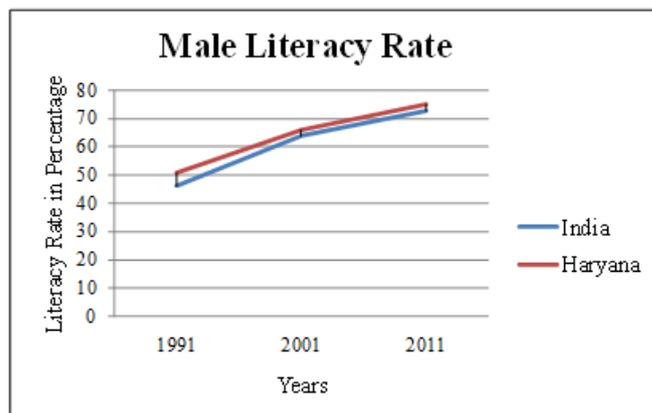


Figure 3

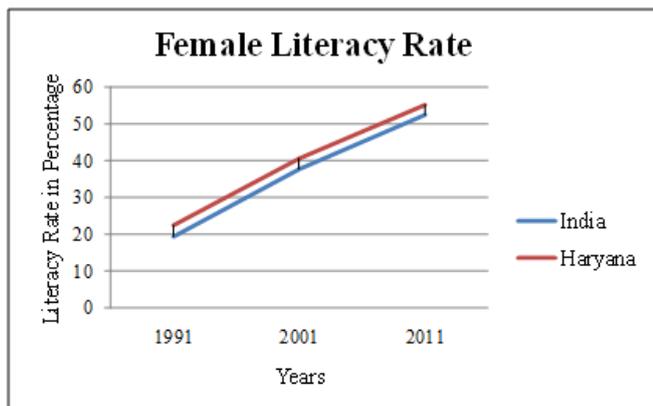


Figure 4

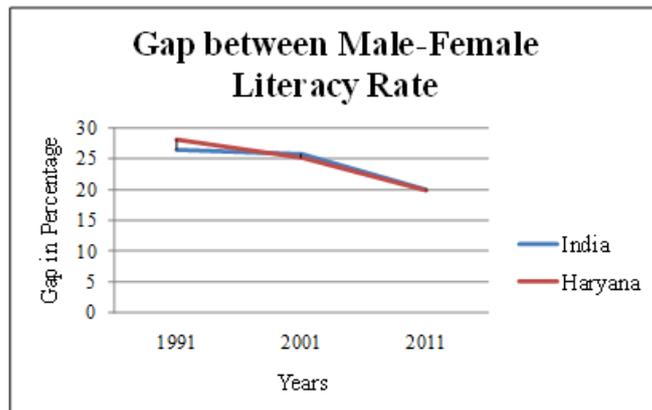


Figure 5

Trend of Literacy and Gender Gap

Rural literacy rate in Scheduled Caste Population is remaining high in Haryana from India at all levels (total, male and female) during the entire time period (1991-2011) and its growth rate is recorded very high and almost same in both at all levels during the successive censuses. Gap in literacy between male-female is decreased from 28.14 per cent to 19.90 per cent in Haryana while in India, it decreased from 26.48 per cent to 20.01 per cent during the entire time period.

Table 2: Literacy Rate and Gender Disparity in Literacy

District	Total Literacy Rate	Male Literacy Rate	Female Literacy Rate	Value of Gender Disparity Index
Ambala	72.27	79.91	63.66	0.15
Bhiwani	66.92	77.27	55.10	0.22
Faridabad	70.51	82.21	57.31	0.24
Fatehabad	55.29	63.88	45.86	0.20
Gurgaon	76.82	87.09	65.57	0.20
Hisar	61.14	70.76	50.13	0.21
Jhajjar	73.51	83.57	62.05	0.20
Jind	61.34	70.58	50.67	0.21
Kaithal	58.62	67.77	48.28	0.21
Karnal	63.95	72.36	54.47	0.18
Kurukshetra	67.11	75.10	58.27	0.17
Mahendragarh	74.03	86.55	60.08	0.25
Mewat	66.82	78.38	53.81	0.24
Palwal	66.10	80.12	50.15	0.30
Panchkula	71.59	78.30	64.00	0.14
Panipat	68.00	77.76	56.86	0.20
Rewari	75.77	87.69	62.70	0.23
Rohtak	69.18	78.29	58.68	0.19
Sirsa	53.97	61.23	45.98	0.17
Sonipat	70.25	79.91	59.03	0.20
Yamunanagar	72.31	79.35	64.31	0.14

Source: Census of India 2011, Social and Cultural Tables, Table C-8, SC.

Spatial Pattern of Literacy and Gender Disparity

Rural literacy rate (65.75 per cent) in scheduled caste population is below almost seven per cent from general literacy rate of rural area. It varies from 53.97 per cent in Sirsa to 76.82 per cent in Gurgaon.

Rural male literacy rate (75.10 per cent) in scheduled caste population is below almost eight per cent from general male literacy rate of rural area. It varies from 61.23 per cent in Sirsa to 87.69 per cent in Rewari.

Rural female literacy rate (55.20 per cent) in scheduled caste population is below almost six per cent from general

female literacy rate of rural area. It varies from 45.86 per cent in Fatehabad to 65.57 per cent in Gurgaon.

Gender disparity in literacy is presented by gender disparity index. Value of gender disparity index (0.20 points) in scheduled caste population of rural area is low 0.01 point from the value of gender disparity index of all rural population. It varies from 0.30 points in Palwal to 0.14 points in Panchkula.

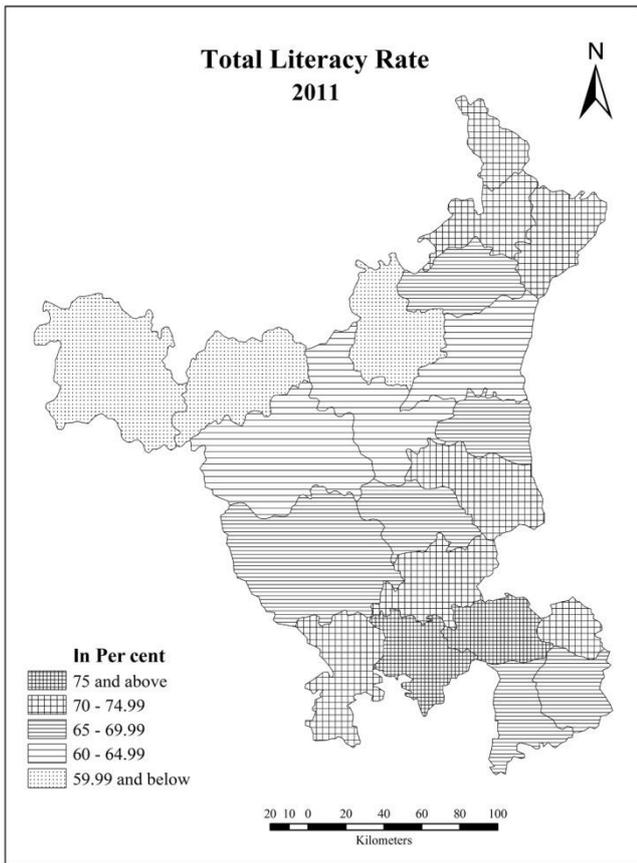


Figure 6

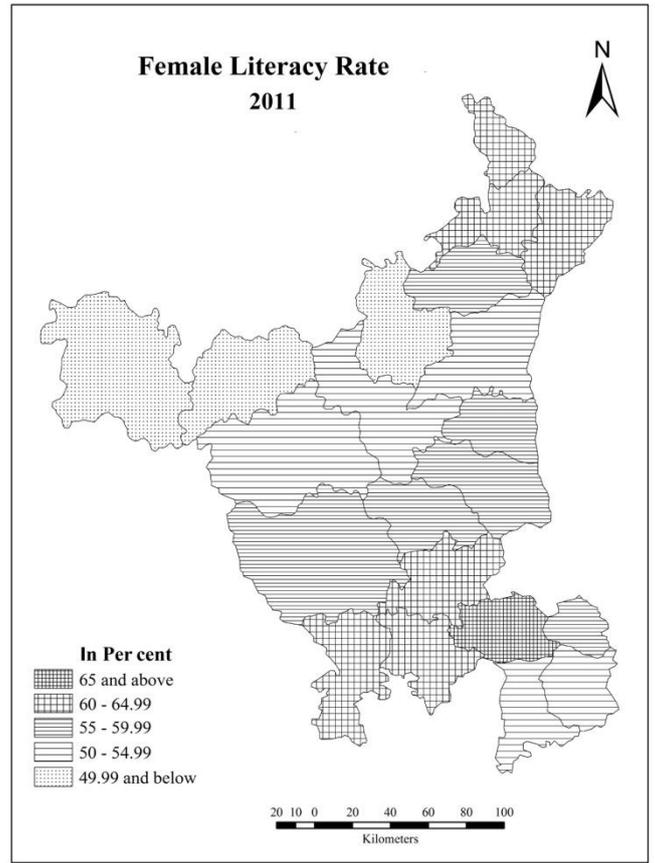


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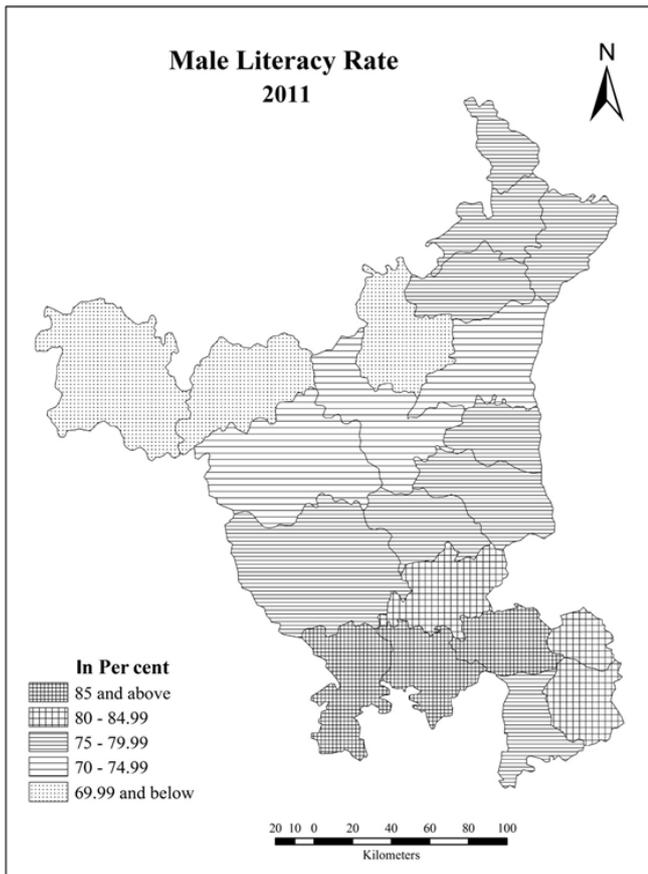


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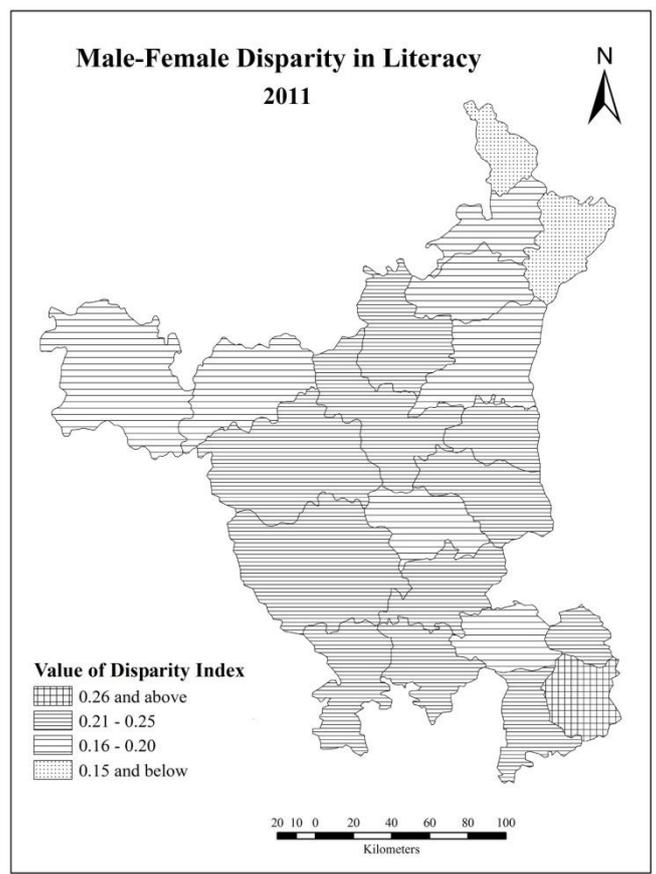


Figure 9

Spatial pattern of rural literacy in sc reflects that Kaithal, Fatehabad and Sirsa are very backward at all levels (total, male and female). Karnal, Jind and Hisar contain low literacy at all levels as well as Mewat and Palwal also contain low female literacy. Northern districts (except male literacy) and the almost districts which are situated around to national capital have high literacy at all levels while rest part has moderate literacy at all levels.

Spatial pattern of gender disparity in literacy reflects that Panchkula and Yamunanagar are only two districts which contain low gender disparity while Palwal has very high gender disparity. Ambala, Kurukshetra, Karnal, Rohtak, Gurgaon, Fatehabad and Sirsa contain moderate gender disparity while rest part has high gender disparity. It is interestingly that Rewari, Mahendragarh and Jhajjar have high male-female literacy as well as high gender disparity.

Table 3: Factors of Correlation

District	Rural Literacy Rate in SC	Rural Sex Ratio in SC	Urbanization	Rural Female Literacy Rate in SC	Main Worker (Agricultural Labourers) per SC	Marginal Worker (Agricultural Labourers) per Lakh Rural Population in SC	Main Worker (Cultivator) per Lakh Rural Population in SC	Marginal Worker (Cultivator) per Lakh Rural Population in SC	Main Worker - Household Industries (Female) per Lakh Rural Female Population in SC	Marginal Worker - Household Industries (Female) per Lakh Rural Female Population in SC
Ambala	72.27	880	44.38	63.66	9277	4040	1286	228	212	202
Bhiwani	66.92	877	19.8	55.1	9455	9613	3782	1724	162	579
Faridabad	70.51	885	79.44	57.31	3227	2659	1254	435	501	680
Fatehabad	55.29	907	19.05	45.86	15181	9313	2946	715	200	207
Gurgaon	76.82	907	68.82	65.57	4195	4888	1230	507	380	383
Hisar	61.14	873	31.73	50.13	15335	10123	2961	946	253	181
Jhajjar	73.51	873	25.39	62.05	6504	9596	1164	623	134	187
Jind	61.34	866	22.82	50.67	13103	10411	1715	620	107	116
Kaithal	58.62	882	21.97	48.28	12116	9732	1130	480	235	306
Karnal	63.95	887	30.27	54.47	12326	8740	1705	306	202	381
Kurukshetra	67.11	903	28.93	58.27	15287	6419	1193	180	179	165
Mahendragarh	74.03	893	14.43	60.08	2756	8473	1144	896	109	148
Mewat	66.82	888	11.38	53.81	3667	5392	1323	418	160	108
Palwal	66.1	880	22.65	50.15	4932	6405	1732	636	125	234
Panchkula	71.59	889	54.87	64	4607	2525	1979	1463	202	574
Panipat	68	875	45.97	56.86	8197	7845	1094	451	278	240
Rewari	75.77	910	25.82	62.7	2906	6653	928	528	375	403
Rohtak	69.18	871	42.02	58.68	6778	6064	1161	373	196	205
Sirsa	53.97	912	24.75	45.98	19281	9129	3252	781	225	114
Sonipat	70.25	863	30.52	59.03	10111	10144	968	445	249	359
Yamunanagar	72.31	879	38.94	64.31	11048	3937	1218	136	221	213

Source: Census of India, Social and Cultural Tables, Table C-8, SC. Urbanization Report (2011), published by Town and Country Planning Organization, Ministry of Urban Development, Government of India, January 2012.

Table 4: Correlation Matrix

Variable	Type of Correlation	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10
x1	Pearson Correlation	1	-.080	.419	.942**	-.783**	-.537*	-.613**	-.114	.256	.314
x2	Pearson Correlation	-.080	1	.012	-.038	.053	-.210	.151	-.004	.281	.012
x3	Pearson Correlation	.419	.012	1	.489*	-.303	-.663**	-.252	-.141	.739**	.572**
x4	Pearson Correlation	.942**	-.038	.489*	1	-.595**	-.586**	-.564**	-.143	.244	.296
x5	Pearson Correlation	-.783**	.053	-.303	-.595**	1	.524*	.523*	-.060	-.238	-.388
x6	Pearson Correlation	-.537*	-.210	-.663**	-.586**	.524*	1	.354	.200	-.411	-.361
x7	Pearson Correlation	-.613**	.151	-.252	-.564**	.523*	.354	1	.690**	-.201	.078
x8	Pearson Correlation	-.114	-.004	-.141	-.143	-.060	.200	.690**	1	-.210	.392
x9	Pearson Correlation	.256	.281	.739**	.244	-.238	-.411	-.201	-.210	1	.582**
x10	Pearson Correlation	.314	.012	.572**	.296	-.388	-.361	.078	.392	.582**	1

**Correlation is significant at the 0.01 level (2-tailed).

*Correlation is significant at the 0.05 level (2-tailed).

Note: Variable x1 is Rural Literacy Rate in SC, Variable x2 is Rural Sex Ratio in SC, Variable x3 is Urbanization, Variable x4 is Rural Female Literacy Rate in SC, Variable x5 is Main Worker (Agricultural Labourers) per Lakh Rural Population in SC, Variable x6 is Marginal Worker (Agricultural Labourers) per Lakh Rural Population in SC, Variable x7 is Main Worker (Cultivator) per Lakh Rural Population in SC, Variable x8 is Marginal Worker (Cultivator) per Lakh Rural Population in SC, Variable x9 is Main Worker - Household Industries (Female) per Lakh Rural Female Population in SC, Variable x10 is Marginal Worker-Household Industries (Female) per Lakh Rural Female Population in SC.

Literacy Correlates

Correlation between total literacy and female literacy is found very high positively ($r = .942^{**}$) while its result is found low level positively between total literacy and main and marginal female workers in household industries as well as urbanization.

Correlation between total literacy and main workers (cultivator and agricultural labourers) is found high negatively. Result of correlation is found at moderate level negatively ($r = -.537^*$) between total literacy and marginal worker (agricultural labourers) while its results are found very low (negatively) between total literacy and rest factors.

5. Conclusion

If we say in few words, rural literacy rate in sc is remaining high in Haryana from India at all levels (total, male and female) during the entire time period (1991-2011) and its growth rate is recorded very high and almost same in both at all levels during the successive censuses. Gap between male-female literacy is decreased eight per cent in Haryana and six per cent in India during the entire time period however, it is high almost 20 per cent in both at current time. Sirsa, Fatehabad, Kaithal, Hisar, Jind and Karnal have low literacy while all central, south-west and southern districts (except Gurgaon and Rohtak) have high gender disparity in literacy. Correlation between total literacy and female literacy is found very high positively ($r = .942^{**}$) while it is recorded negatively between total literacy and (cultivator and agricultural labourers).

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