Gender and Rural-Urban Literacy Disparity in India with Special Reference to Odisha

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Abstract: Literacy is an effective tool for human empowerment. The educated human being can enhance their skill as well as productivity, which in turn improves the quality of life. On the contrary, illiterate people suffer from the dark of ignorance. But the low literacy rate stands as a major obstacle to the development of a person and the country. Moreover, the presence of disparity in literacy in India brings regional imbalances in socio-economic development. Literacy is unequally found among the sex, region, caste, and occupational groups of the population in India. In spite of several measures taken by both the Government of India and state Government of Odisha, the literacy rate remains to be uneven and low. This paper examines inter-districts disparity of literacy in Odisha as well as inter-state disparity of literacy rate in India. It also focuses on discussing the presence of rural-urban and gender disparity in literacy in Odisha and India. In order to examine the literacy disparity, Sopher's disparity index has been used. Statistical tools like CV, arithmetic mean, range, and percentage have been also applied to analyse the secondary data collected from the census of Govt. of India.

Key words: Gender, Inter-District, Inter-State, Literacy rate and Rural-Urban
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1. INTRODUCTION:

Education is an important factor for the economic development of any country. Education is a key factor in the balanced socio-economic development of a nation. Hence, it is the most valuable tool for human beings to understand the society and the people in his positive point of view and live or manage him accordingly. This improves and increases knowledge and results in skill development hence enhances the quality of the human resources. According to World Bank (2006), better education and health lead not only to higher individual income due to increased efficiency but also a necessary precondition for long-term economic growth. Literacy is considered as one of the crucial indicators of education. There is a significant difference between a literate and an illiterate person in respect of overall attitude of the concerned individuals. (IPCD, 1994) 'Everyone has the right to education, which shall be directed to the full development of human resources and human dignity and potential, with particular attention to women and the girl child.' Educational planning in India even after six decades of planning suffers from several pitfalls. One of the important features of Indian education is its inherent inequality nature. Our government has always valued the importance of education in India and this is reflected in our economic policies. (Lal, 2013), Shri Aurobindo emphasized that education should be in accordance with the needs of our real modern life. In other words, education should create dynamic citizen so that they are able to meet the needs of modern complex life. (Das & Pathak, 2012), no single nation in the world with illiterate and uneducated people is developed or advanced. Education is an investment that contributes to individual and social development.

2. REVIEW OF LITERATURE:

(Dunn, 1993) has examined the situation of women in scheduled caste and tribes group which are referred to as weaker section of people in India. The study indicates that relative to men, women in these groups have far more limited access to both educational and employment resources. He suggests that socioeconomic development serves to reduce the disadvantage of scheduled group women relative to men. **(Nambissan, 1996)** draws attention to the effect the learning environment within the formal educational system has been having on the Dalit pupils in India. It argues that poor infrastructural facilities, lack of effective pedagogic supports to acquire linguistic, numerical, and cognitive competencies adversely affect the schooling of Dalit children. More importantly, despite active encouragement from family members, the apathetic treatment by teachers and school administrators largely shape the learning experiences of these socially disadvantaged groups. By creating a separate sphere of non-formal education for such groups, the government has abdicated its responsibility to generate equity within the formal school

system. **(Kar & Kar, 2002)** have discussed the extent to which enrolment in primary and secondary schools in the state of Odisha is determined by access to schools and the quality of schooling. This study finds that in the educational system the role of schools is instrumental in promoting secondary school education, but not in the case of primary school enrolment. Furthermore it is observed that agricultural development increases primary school enrolment. **(Mitra & Singh, 2008)** examines the differences in literacy and schooling attainment among the scheduled tribe women in India. The study views that there is high poverty rates also pose to be significant obstacles in attaining literacy and education among tribal women in India. However, large differences in literacy rates in the various states in India show that social and cultural norms, proximity to the mainstream Hindu culture, and the role of women are also important determinants in achieving literacy among tribal women. It suggests that to find the differences in economic, social, and cultural backgrounds among the various tribes need to be emphasized in order to understand the differential nature of investments in literacy rates and schooling among tribal women in India. **(Das & Pathak, 2012)** study the disparities existing between rural and urban areas and observes that income is not a sufficient indicator to capture the magnitude of disparities at any level. It is found that literacy is one of the indicators which are the causes of growing rural-urban disparity in India; the literacy rate is much higher in an urban area than in rural areas. In rural areas, the percentage of male literacy is higher in the urban area, but literacy among women in rural areas is very low. This also contributes to the low development of socio-economic indicators in rural areas. In spite of several measures taken by both the central and state government, the literacy rate remains to be low in India, particularly in rural India. **(Dash, 2015)** has examined the status of secondary education in Odisha with respect to qualitative and quantitative achievements. The study shows that GER and NER are less than 100 in state Odisha as well as in all districts. Dropout rates still high in tribal dominated backward regions. It is found that many teachers do not have the required qualification and have been engaged through government on contractual basis. The study also focuses on the environment of schools that it does not have primary facilities such as drinking water, toilet, electricity. So the status of secondary education is not satisfactory. **(Satapathy, 2016)** studies the problem of women's higher education from district perspectives. This study has examined that there is huge inter district disparities in Odisha across social groups in higher education completed by women. It investigates that higher education to ensure women's autonomy in decision-making, freedom of expression and control over resources is hardly achieved because of social hurdles. The policies should be such that more and more women opt for higher education. Proper planning and implementation of schemes would go a long way to help these districts. **(Brahmanandam & Bosu, 2016)** opine the performance of the tribes in education is much lower than scheduled castes. This study finds that the policy makers approach paid little attention to culturally linked education. This has led to dropouts and directly impacted their overall educational status. **(Nayak, Khatei, & Khatei, 2019)** examine the literacy status of tribal people as compared to other social groups in scheduled districts of Odisha. This study also analyses and compares the literacy status of tribal people in scheduled districts with non-scheduled districts of Odisha. Further, it is observed that a more gender-biased literacy rate is found among the tribal people in scheduled districts as compared to non-scheduled districts.

3. OBJECTIVES OF THE STUDY

   i. To examine inter-district literacy disparity in Odisha.
   ii. To study inter-state disparity of literacy in India.
   iii. To examine the gender gap in the literacy in Odisha and India.
   iv. To analyse the rural and urban disparity of literacy in Odisha and India.

4. DATA SOURCES AND METHODOLOGY

This study is based on secondary data collected from various census reports of Govt. of India from the year 1951 to 2011 and Economic Survey of Govt. of India and Odisha of different years. Statistical tools like the coefficient of variation (CV), arithmetic mean, range, percentage, and histogram are used to analyse the data. Literacy is calculated by the ratio of the total literate population and the population of a place. Moreover, for the measurement of disparity in literacy rate, the method of Sopher's Disparity Index (DI), 1974 has been used as follows:

$$\text{D.I.} = \text{Log}\ (X_2 / X_1) + \text{Log}\ [(100 - X_1) / (100 - X_2)]$$

Where D.I. = Disparity Index
For measurement of gender disparity in literacy;
X_1 = Female Literacy
X_2 = Male Literacy
For measurement of rural-urban literacy disparity;
X_1 = Rural Literacy
X_2 = Urban Literacy

In the present study, X_2 has a comparatively higher value, and X_1 has a relatively lower value. This method reveals that the greater the value of the Disparity Index shows a higher rate of disparity and a lesser the value of the Disparity Index shows a lower value of disparity between X_1 and X_2. If the value of the Disparity Index will be '0' it indicates that there is no disparity or there is perfect equality between X_1 and X_2. The value of the Disparity Index ranges between 0.00 and 1.00.
The study of disparity index of literacy has been defined in three categories as follows.
- Low disparity **(below 0.40)**
- Medium disparity **(0.41-0.50)**
- High disparity **(Above 0.51)**

5. ANALYSIS AND FINDINGS:

5.1: Inter District Variation of Literacy Rate in Odisha

Table 1: Inter-District and Gender Disparity in Literacy, Odisha from census 2001 to 2011

Districts of Odisha	Literacy Rate of Census 2001				Literacy Rate of Census 2011			
	Total	Males	Females	Gender gap	Total	Males	Females	Gender gap
Angul	68.8	81.43	55.37	26.1	77.5	86	68.6	17.4
Balasore	70.6	81.69	58.9	22.8	79.8	87	72.3	14.7
Baragarh	64	77.41	50.26	27.2	74.6	83.7	65.4	18.3
Bhadrak	73.9	84.65	62.85	21.8	82.8	89.6	75.8	13.8
Balangir	55.7	71.67	39.51	32.2	64.7	75.8	53.5	22.3
Boudh	57.7	76.23	39.02	37.2	71.6	83.3	59.8	23.5
Cuttack	76.7	85.82	66.89	18.9	85.5	91.1	79.6	11.5
Deogarh	60.4	73.33	47.18	26.2	72.6	81.9	63	18.9
Dhenkanal	69.4	80.57	57.89	22.7	78.8	86.2	71	15.2
Gajapati	41.3	54.71	28.42	26.3	53.5	64.4	43.2	21.2
Ganjam	60.8	75.22	46.44	28.8	71.1	81	61.1	19.9
Jagatsinghpur	79.1	88.55	69.28	19.3	86.6	92.4	80.6	11.8
Jajpur	71.4	81.89	60.76	21.1	80.1	86.8	73.3	13.5
Jharsuguda	70.6	82.08	58.36	23.7	78.9	86.6	70.7	15.9
Kalahandi	45.9	62.66	29.28	33.4	59.2	71.9	46.7	25.2
Kandhamal	52.7	69.79	35.86	33.9	64.1	76.9	51.9	25
Kendrapara	76.8	87.11	66.76	20.4	85.2	91.5	79	12.5
Keonjhar	59.2	71.99	46.22	25.8	68.2	78.1	58.3	19.8
Khurda	79.6	87.9	70.36	17.5	86.9	91.8	81.6	10.2
Koraput	35.7	47.2	24.26	22.9	49.2	60.3	38.6	21.7
Malkangiri	30.5	40.14	20.91	19.2	48.5	59.1	38.3	20.8
Mayurbhanj	51.9	65.76	37.84	27.9	63.2	73.8	52.7	21.1
Nabarangpur	33.9	47.04	20.67	26.4	46.4	57.3	35.8	21.5
Nayagarh	70.5	82.66	57.64	25	80.4	88.2	72	16.2
Nuapada	42	58.46	25.79	32.7	57.3	70.3	44.8	25.5
Puri	78	88.08	67.57	20.5	84.7	90.8	78.3	12.5
Rayagada	36.1	48.18	24.56	23.6	49.8	61	39.2	21.8
Sambalpur	67.3	79.01	55.21	23.8	76.2	84.4	67.9	16.5
Subarnapur	62.8	78.94	46.17	32.8	74.4	84.4	64	20.4
Sundargarh	64.9	75.34	53.88	21.5	73.3	81	65.5	15.5
ODISHA	**63.1**	**75.35**	**50.51**	**24.8**	**72.9**	**81.6**	**64**	**17.6**
CV	**24.4**	**18.9**	**33.2**	**20.15**	**17.65**	**13.31**	**23.02**	**24.27**
A. Mean	**60.27**	**72.85**	**47.47**	**25.39**	**70.84**	**79.89**	**61.75**	**18.14**

Source: Census Report of 2001& 2011, Govt. Of India

Table 1 represents that Khurda district has the highest literacy rate with 79.6 percent in 2001 and 86.9 percent in the 2011 census. Malakangiri has the lowest literacy rate (30.5 percent) in the census 2001 but in the 2011 census, it is found that the literacy rate in the Nabarangpur district is the lowest 46.45 percent among all districts of Odisha. It is also observed that the highest male literacy rate is recorded with Jagatsinghpur district that is 88.55 percent in 2001 and 92.4 percent in 2011, whereas the lowest is in Malkangiri 40.14 percent (2001) and in Nabarangpur 57.3 percent (2011). On the other hand, the female literacy rate is highest in Khurda district 70.36 percent in 2001 and 81.6 percent in 2011, whereas Nabarangpur district has the lowest female literacy rate of 20.67 percent and 35.8 percent in census 2001 and 2011 respectively. Among all districts, Boudh district has the experience of the highest gender-gap literacy rate 37.2 percent (2001) but in 2011 Nuapada district has more gender gap in literacy rate is 25.5 percent. On the other hand, the lowest gender gap in literacy rate is maintained with Khurda district 17.5 percent and 10.2 percent in the 2001 and 2011 censuses respectively. The range difference of total literacy rate among the districts of Odisha was 49.1 in the census 2001 which has been decreased to 40.5 in the census 2011. The highest decadal growth of total literacy rate (15.3) is recorded with Nuapada district whereas the lowest (6.7) is with Puri district from 2001 to 2011 census. There are twelve districts of Odisha which include Rayagada, Nuapada, Nabarangpur, Mayurbhanj, Malkangiri, Koraput, Keonjhar, Kandhamal, Kalahandi, Gajapati, Boudh and Bolangiri are at the bottom among all districts concerning to total literacy rate running below the average literacy rate of all districts 60.27 percent in census 2001 whereas the situation does not change in 2011 except for Boudh districts. The CV of total literacy rate (24.4) in the 2001 census and it decreases to 17.65 in the 2011 census. It implies that the presence of inter-district variability in total literacy rate decreases to some extent between the census 2001 to 2011. Table 1 also shows a wide gender disparity in literacy among male and female in the census 2001 and 2011.

Table 2: Sopher's Disparity Index (DI) of Districts of Odisha for Census 2001 and 2011

Sopher's Disparity Index (DI) of Gender Literacy Rate in Census 2001		
Low DI(below (0.40)	**Medium DI (0.41-0.50)**	**High DI (Above 0.51)**
Malkangiri (0.40)	Balasore (0.49), Cuttack (0.47), Deogarh (0.49), Dhenkanal (0.48), Gajapati (0.48), Jajpur(0.47), Khurda (0.49), Koraput (0.45), Mayurbhanj (0.50), Rayagada (0.46), Sambalpur (0.48), Sundargarh (0.42), Keonjhar (0.48)	Angul (0.55), Baragarh (0.53), Bhadrak (0.51), Balangir (0.59), Boudh (0.70), Ganjam (0.54), Jagatsinghpur (0.54), Jharsuguda (0.51), Kalahandi (0.61), Kandhamal (0.62), Kendrapara (0.53), Nabarangpur (0.53), Nayagarh (0.54), Nuapada (0.61), Puri (0.55), Subarnapur (0.64).
Sopher's Disparity Index (DI) of Gender Literacy Rate in Census 2011		
Low DI(below (0.40)	**Medium DI (0.41-0.50)**	**High DI (Above 0.51)**
Gajapati (0.38), Jajpur (0.38), Khurda (0.40), Koraput (0.38), Malkangiri (0.37), Mayurbhanj (0.40), Nabarangpur (0.38), Rayagada (0.39), Sundargarh (0.35)	Angul (0.45), Balasore (0.41), Baragarh (0.43), Bhadrak (0.44), Balangir (0.44), Cuttack (0.42), Deogarh (0.42), Dhenkanal (0.41), Ganjam (0.44), Jagatsinghpur (0.47), Jharsuguda (0.43), Kalahandi (0.47), Kandhamal (0.49), Kendrapara (0.46), Keonjhar (0.41), Nayagarh (0.46), Nuapada (0.47), Puri (0.44), Sambalpur (0.41), Subarnapur (0.48)	Boudh (0.53)

Source: Calculation of Authors as per table-1 using Sopher's Disparity Index (DI)

5.1.1: Low Gender Literacy Disparity:

In the 2001 census Malkangiri district only comes under the first category of low gender literacy disparity that is 0.40 among all districts of Odisha, but in the 2011 census Sundargarh district occupies the lowest gender disparity, i.e., 0.35 (table-2). Other districts which come under low gender literacy disparity are Gajapati (0.38), Jajpur (0.38), Khurda (0.40), Koraput (0.38), Mayurbhanj (0.40), Malkangiri (0.37), Nabarangpur (0.38) and Rayagada (0.39) in census 2011. Moreover the districts Gajapati (0.48), Jajpur(0.47), Khurda (0.49), Koraput (0.45), Mayurbhanj (0.50), Rayagada (0.46) and Sundargarh (0.42) have experienced a decrease in gender disparity in literacy in comparison to 2001 census. More particularly, the status of Nabarangpur districts has been improved from (0.53) of the 2001 census to 0.38 in the census 2011.

5.1.2: Medium Gender Literacy Disparity:

The districts which recorded the gender disparity index of literacy between 0.41 and 0.50 are included in this category. There are thirteen districts included in this category in 2001 census i.e. Balasore (0.49), Cuttack (0.47), Deogarh (0.49), Dhenkanal (0.48), Gajapati (0.48), Jajpur (0.47), Keonjhar (0.48), Khurda (0.49), Koraput (0.45), Mayurbhanja (0.50), Raygada (0.46), Sambalpur (0.48), Sundargarh (0.42). Twenty districts with a combination of six districts include Balasore (0.49), Cuttack (0.47), Deogarh (0.49), Dhenkanal (0.48), Sambalpur (0.48), Keonjhar (0.48) from medium disparity range of census 2001 and fourteen districts include Angul (0.45), Baragarh (0.43), Bhadrak (0.44), Balangir (0.44), Subarnapur (0.48), Nayagarh (0.46), Nuapada (0.47), Puri (0.44), Ganjam (0.44), Jagatsinghpur (0.47), Jharsuguda (0.43), Kalahandi (0.47), Kandhamal (0.49) and Kendrapara (0.46) from high disparity range of census 2001 are recorded in medium disparity category in census 2011. Here is the increase in the number of districts in the medium disparity category in the 2011 census in comparison to the 2001 census. Moreover, those fourteen districts (Angul, Baragarh, Bhadrak, Balangir, Subarnapur, Nayagarh, Nuapada, Puri, Ganjam, Jagatsinghpur, Jharsuguda, Kalahandi, Kandhamal, and Kendrapara) experience an improvement in reducing gender disparity in literacy in census 2011. It because these fourteen districts are economically well-developed which helps to reduce the gender disparity in literacy, and people are also more aware of the importance of education.

5.1.3: High Gender Literacy Disparity:

The districts which recorded gender disparity index of literacy is above 0.51 are included in this category. In 2001 census there are 16 districts in which gender disparity is very high and these are Angul (0.55), Bargarh (0.53), Bhadrak (0.51), Balangir (0.59), Boudh (0.53), Ganjam (0.54), Jagatsinghpur (0.54), Jharsuguda (0.51), Kendrapara (0.53), Nabarangapur (0.53), Nayagarh (0.54), Puri (0.55), Kalahandi (0.61), Kandhamal (0.62), Nuapada (0.61), Subarnapur (0.64). Out of these sixteen districts fourteen districts has reduced gender disparity from high to medium and only Nabarangpur district experiences low gender disparity where as Boudh district shows no improvement as per census 2011. Here is major districts have more gender disparity because of majority of parents give preference to only for son's education. The awareness of literacy and its importance is comparatively less in these districts. Custom of early marriage, lack of parental motivation for education, poor economic condition, domestic work for girls are the major reasons for high disparity in literacy. Here girl's child labour also is one of the severe issues. Most of the girls support to their parent by participating in different activities like collecting fire wood and fodder and work in agriculture fields. Due to low income of family, parents are not interested in providing and upgrading the level of their girl child education. The female literacy rate suffers from more inter district variation for both 2001 and 2011 census compared to male literacy.

5.2: Rural-Urban Literacy Disparity in Odisha

Table 3: Gender Disparity of Literacy of Rural-Urban Areas in Odisha

Among Thirty Districts of Odisha	2001 Census						2011 Census					
	Rural			Urban			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total (Odisha)	59.8	72.9	46.7	80.8	87.9	72.9	70.2	79.6	60.7	85.7	90.7	80.4
DI		0.49			0.43			0.40			0.38	
CV	27.2	21.22	37.2	6.9	5	9.6	19.64	14.97	25.51	4.95	3.36	6.98
A. M.	57.57	70.81	44.28	78.64	86.71	69.85	68.68	78.24	59.15	84.01	89.78	77.98
SD	15.66	15.02	68.8	5.44	4.36	6.70	13.49	11.71	15.09	4.16	3.01	5.44
Highest	78.7	88.6	68.8	86.7	93.6	80.9	86.5	92.5	80.4	91	94.2	87.5
Lowest	27.3	37.4	15.6	65.3	74.9	55	42.4	54.1	31.3	74.5	83.4	64.9

Source: Author's calculation from census report of Govt. Of India

It is observed from table 3 that there is rural-urban and gender biased disparity in literacy rate among different districts of Odisha in both census 2001 and 2011. The gender gap in rural literacy rate is 26.2 in 2001 census and it decreases to 18.9 in census 2011 due to faster increase in female literacy rate in rural area. On the other hand gender gap in urban literacy rate is 15 in 2001 census and it also decreases to 10.3 in census 2011 due to more improvement in female literacy in urban area. It is found that gender gap in rural area has been reduced more than urban area and growth of rural female literacy is more than urban female literacy from 2001 to 2011 census in Odisha. It is also observed that female literacy in rural area is lower than urban area in both 2001 and 2011 census. The rural gender literacy disparity index is 0.49 more than 0.43 of urban areas in the census 2001. It describes gender literacy disparity in the rural area which was more than the urban area in 2001. Though the degree of disparity has been reduced for both rural and urban areas in census 2011, still there is the existence of more gender literacy disparity in the rural area in 2011. The coefficient of variation (CV) of rural literacy rate among districts of Odisha is 27.2 in 2001 census which has been decreased to 19.64 in 2011 census and CV of urban literacy rate among districts of Odisha has been decreased from 6.9 in 2001 census to 4.95 in 2011 census. More variation still exists in rural literacy rate among different districts of Odisha. Not only more variation is found in rural as well as urban female literacy among districts of Odisha as compared to male literacy but also rural female literacy rate suffers with more variation than urban areas of different districts of Odisha in 2011 census. The average of rural literacy rate of all districts is 57.57 percent (2001) which has been increased to 68.68percent (2011) and average of urban literacy rate has also been increased from 78.64 percent (2001) to 84.01percent (2011) and it is evident that growth of rural literacy rate is more as compared to urban. On the other hand average of rural female literacy of all districts of Odisha 44.28 percent (2001) is much less than the urban area performance 77.98 percent (2011). The districts Jagatsinghpur occupies highest literacy rate in terms of total (86.5 percent), Male (92.5 percent) and female (80.4 percent) and Koraput is in lowest position with total (42.4 percent), Male (54.1 percent) and female (31.3 percent) in rural area where as Khurda district occupies the highest literacy rate concerning to total (91 percent), Male (94.2 percent) and female (87.5 percent) and Malkangiri is at lowest position in urban area in 2011 census. Thus it is clear that there is gender wise as well as sector wise (rural-urban) disparity and uneven growth of literacy rate is observed among different districts of Odisha in 2011 census.

It is evident from figure 1 that total literacy rate in Odisha has been increased from 49.09 percent (1991) to 72.9 percent (2011) still it is below national level i.e. 74 percent of 2011 census (table 4). Though rural urban gap in literacy rate of Odisha shows a declined trend from 26.53 percent (1991) to 15.67 percent (2011), still it is closer to rural-urban gap of national level i.e. 16.3 percent in 2011 census (table 6) but within two decades this gap has been reduced 10.86 percent only.

Figure 1: Rural-Urban Gap in Literacy Rate in Odisha from 1991 to 2011
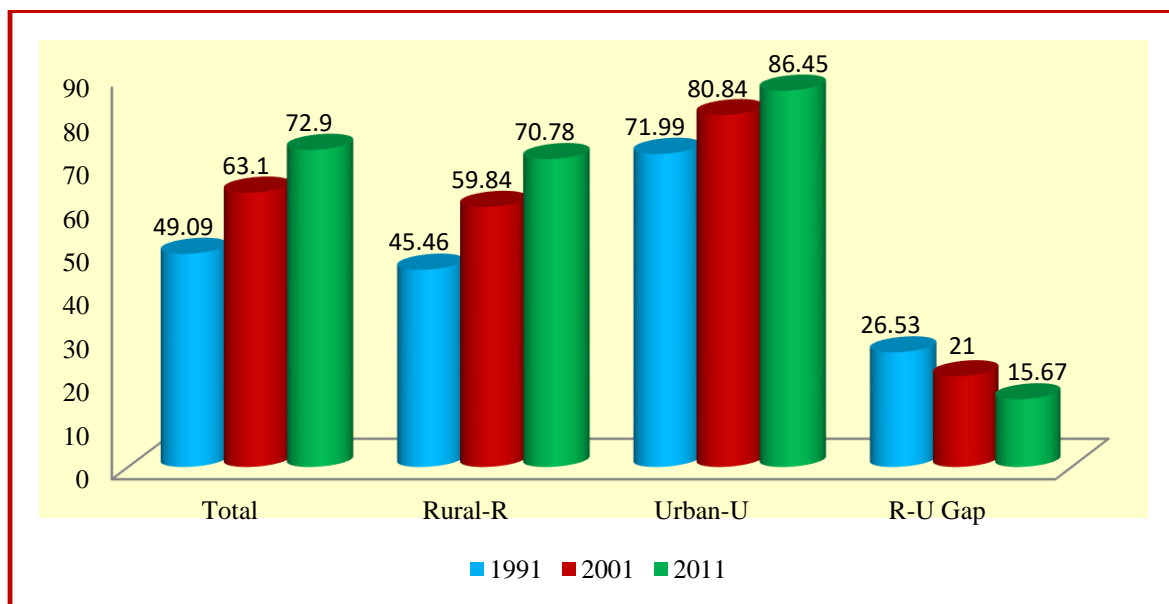
Source: Census report 1991 to 2011of Govt. of India

5.3: Inter-State Variation of Literacy in India

Table 4: Inter-State Analysis of Literacy Rate in India from 2001 to 2011

States/Union	2001Census				2011 Census			
	Total	Female	Male	DI	Total	Female	Male	DI
A & N Islands	81.3	75.2	86.3	0.32	86.6	82.4	90.3	0.30
Andhra Pradesh	60.5	50.4	70.3	0.37	67	59.1	74.9	0.31
Arunachal Pradesh	54.3	43.5	63.8	0.36	65.4	57.7	72.6	0.29
Assam	63.3	54.6	71.3	0.32	72.2	66.3	77.8	0.25
Bihar	47	33.1	59.7	0.48	61.8	51.5	71.2	0.37
Chandigarh	81.9	76.5	86.1	0.28	86	81.2	90	0.32
Chhattisgarh	64.7	51.9	77.4	0.50	70.3	60.2	80.3	0.43
D & N Haveli	60	43	73.3	0.56	76.2	64.3	85.2	0.50
Daman & Diu	81.1	70.4	88.4	0.51	87.1	79.5	91.5	0.44
Delhi	81.7	74.7	87.3	0.37	86.2	80.8	90.9	0.38
Goa	82	75.4	88.4	0.40	88.7	84.7	92.6	0.35
Gujarat	70	58.6	80.5	0.46	78	69.7	85.8	0.42
Haryana	67.9	45.7	78.5	0.64	75.6	65.9	84.1	0.44
Himachal Pradesh	76.5	67.4	85.4	0.45	82.8	75.9	89.5	0.43
Jammu & Kashmir	55.5	43	66.6	0.42	67.2	56.4	76.8	0.41
Jharkhand	53.6	38.9	67.3	0.51	66.4	55.4	76.8	0.43
Karnataka	66.6	56.9	76.1	0.38	75.4	68.1	82.5	0.34
Kerala	90.9	87.9	94.2	0.35	94	92.1	96.1	0.33
Lakshadweep	86.7	80.5	92.5	0.48	91.8	87.9	95.6	0.48
Madhya Pradesh	63.7	50.3	76.1	0.50	69.3	59.2	78.7	0.41
Maharashtra	76.9	67	86	0.48	82.3	75.9	88.4	0.38
Manipur	70.5	60.5	80.3	0.43	79.2	72.4	86.1	0.37
Meghalaya	62.6	59.6	65.4	0.11	74.4	72.9	76	0.07
Mizoram	88.8	86.8	90.7	0.17	91.3	89.3	93.3	0.22

Nagaland	66.6	61.5	71.2	0.19	79.6	76.1	82.8	0.18
Odisha	63.1	50.5	75.4	0.48	72.9	64	81.6	0.40
Puducherry	81.2	73.9	88.6	0.44	85.8	80.7	91.3	0.40
Punjab	69.7	63.4	75.2	0.24	75.8	70.7	80.4	0.23
Rajasthan	60.4	43.9	75.7	0.60	66.1	52.1	79.2	0.54
Sikkim	68.8	60.4	76	0.32	81.4	75.6	86.6	0.32
Tamil Nadu	73.5	64.4	82.4	0.41	80.1	73.4	86.8	0.38
Tripura	73.2	64.9	81	0.36	87.2	82.7	91.5	0.35
Uttar Pradesh	56.3	42.2	68.8	0.48	67.7	57.2	77.3	0.41
Uttarakhand	71.6	59.6	83.3	0.53	78.8	70	87.4	0.47
West Bengal	68.6	59.6	77	0.36	76.3	70.5	81.7	0.27
India	**64.8**	**53.7**	**75.3**	**0.42**	**74**	**65.5**	**82.1**	**0.38**

Source: Census report 1951 to 2011of Govt. of India

Kerala occupies highest position (table 4) among all states and UTs in literacy concerned to total (90.9 percent), male (94.2 percent) and female (87.9 percent) in census 2001 and total (94 percent), male (96.1 percent) and female (92.1 percent) in census 2011. Bihar stands at lowest ladder with total (47 percent), male (59.7 percent) and female (33.1 percent) of literacy rate in census 2001 and total (61.8 percent) and male (71.2 percent), female (51.5 percent) in census 2011. But in female literacy rate state Bihar maintains lowest i.e. 51.5 percent in 2011 census. It shows that there are wide disparities between male and female literacy rate.

From the table 4 it is observed that in 2001 census higher disparity was found in six states/UTs i.e. D & N Haveli (0.56), Daman & Diu (0.51), Haryana (0.64), Jharkhand (0.51), Rajasthan (0.60), and Uttarakhand (0.53) because of primarily traditional agricultural economy and high concentration of socio economically backward sections of the society. Whereas medium disparity was in thirteen states/UTs i.e. Bihar (0.48), Chhattisgarh (0.50), Gujarat (0.46), Himachal Pradesh (0.45), Jammu Kashmir (0.42), Lakshadweep (0.48), Madhya Pradesh (0.50), Maharashtra (0.48), Manipur (0.43), Odisha (0.48), Puducherry (0.49), Tamil Nadu (0.41) and Uttar Pradesh (0.48). In 2001 there was sixteen states/UTs are comes under low disparity index i.e. A&N Island (0.32), Andhra Pradesh (0.37), Arunachal Pradesh (0.36), Assam (0.32), Delhi (0.37), Goa (0.40), Karnataka (0.38), Kerala (0.35), Sikkim (0.32), Tripura (0.36), West Bengal (0.36), Chandigarh (0.28), Meghalaya (0.11), Mizoram (0.17), Nagaland (0.19) and Punjab (0.24).

But in 2011census among all states/UTs there is no higher disparity but 13 states/UTs come under medium disparity index because lack of awareness about female literacy these are Chhattisgarh (0.43), D&N Haveli (0.50), Daman & Diu (0.44), Gujarat (0.42), Haryana (0.44), Himachal Pradesh (0.43), Jammu & Kashmir (0.41), Jharkhand (0.43), Lakshadweep (0.48),Madhya Pradesh (0.41), Rajasthan (0.54), Uttar Pradesh (0.41) and Uttarakhand (0.47). But as compared to 2001 census some states/UTs includes Chhatisgarh, Gujarat, Himachal Pradesh, Jammu Kashmir, Lakshadweep, Madhya Pradesh, Uttarpradesh and Uttarakhand are stable in the same category in 2011 census or not change their disparity level because of large concentration of tribal population and earlier marriage of female girl child. There are 23 states/UTs are comes under low disparity in 2011 census but not very less disparity as compared to 2001 census, these sates/UTs are A & N Islands (0.30), Andhra Pradesh (0.31), Assam (0.25), Bihar (0.37), Chandigarh (0.32), Delhi (0.38), Goa (0.35), Karnataka (0.34), Kerala (0.33), Maharashtra (0.38), Manipur (0.37), Odisha (0.40), Puducherry (0.40), Sikkim (0.32), Tamil Nadu(0.38), Tripura (0.38), Uttar Pradesh (0.35), Arunachal Pradesh (0.29), Meghalaya (0.07), Mizoram (0.22), Nagaland (0.18), Punjab (0.23) and West Bengal (0.27). In 2011 it is clearly reveals that value of disparity of some states are very less because people of these states are more aware about the benefit of literacy.

5.4: Gender Differential of Literacy in India

Table 5: Gender wise Literacy Status in India from Census 1951 to 2011

Year	Total literacy rate	Male literacy Rate	Female literacy Rate	Male-Female Gap	Disparity Index
1951	18	27	8	19	0.63
1961	28	40	15	25	0.58
1971	34	45	21	24	0.49
1981	43	55	29	26	0.48
1991	52	65	39	26	0.46
2001	65	75	53	22	0.42
2011	74	82	65	17	0.39

Source: Census report 1951 to 2011of Govt. of India

It is observed from table 5 that the literacy in India has increased from18 percent (1951) to 74 percent in (2011). Thus it took six decades to make four times increase in literacy rate from 1951 to 2011. But it is still below the world average of 84.3 percent (World Bank). The gender gap in literacy rate in India has taken inverted U-turn in six decades. It remained almost stagnant at 26 percent in 1991 then it declined to 17 percent in 2011 but it is not much less than 19 percent (1951). Thus the decrease in gender gap in literacy is not significant. It is a good sign that the disparity index of male and female literacy has declined from 1951 census to 2011 census but it has not decreased as expected, still there is presence of disparity in 2011 census.

5.5: Rural and Urban Literacy Status in India

Table 6: Rural and Urban Literacy Disparity in India from Census 1951 to 2011

Year	Rural	Urban	Combined	Rural-Urban Gap	Disparity Index (DI)
1951	12.1	34.59	18.32	22.49	0.58
1961	22.5	54.4	28.31	31.9	0.61
1971	27.9	60.2	34.45	32.3	0.59
1981	36	67.2	43.57	31.2	0.56
1991	36	67.2	52.21	31.2	0.56
2001	59.4	80.3	64.83	20.9	0.44
2011	67.8	84.1	74.04	16.3	0.40

Source: Census report 1951 to 2011of Govt. of India

Figure 2: Rural and Urban Gap in Literacy in India from 1951 to 2011
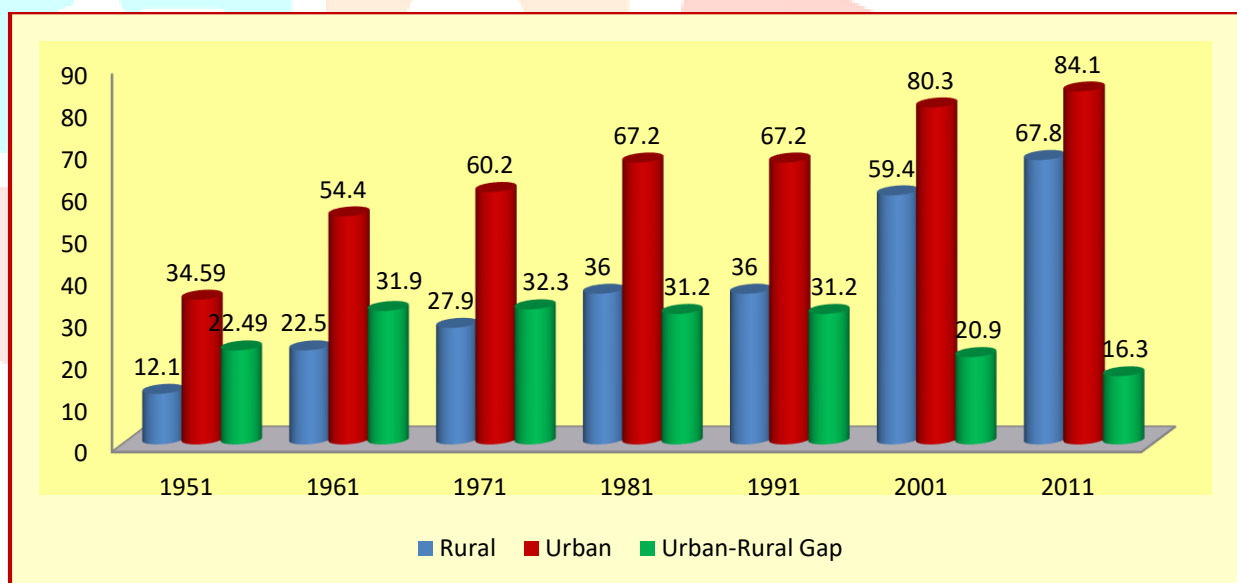

Source: Census report 1951 to 2011 of Govt. of India

The range variation in urban literacy rate is 49.51 percent whereas it is 55.7 percent for the rural area between 1951 and 2011. The rural literacy rate has been increased by 5.6 times from the census 1951 to 2011 whereas in urban literacy it is 2.43 times. It describes that more progress is found in rural literacy. But the literacy rate (67.8 percent) in rural area is low in comparison to the urban area literacy rate (84.1 percent) in 2011 census. The gap in rural- urban literacy has increased from 22.49 percent in 1951 to 32.3 percent in 1971 then it declined to 16.3 percent in 2011 census (Table 6). The value of disparity index is 0.58 in the 1951 census then it increased to 0.61 in the 1961 census, which indicates the higher disparity level. And thereafter it declined to 0.56 of 1911 census but still remains in high disparity category. The rural-urban literacy disparity index is 0.44 in the census 2001 and 0.40 in the census 2011, here is the improvement in rural and urban disparity in literacy, but this improvement is not satisfactory as expected during sixty years.

Figure 3: Rural and Urban Literacy Disparity Index in India from 1951 to 2011
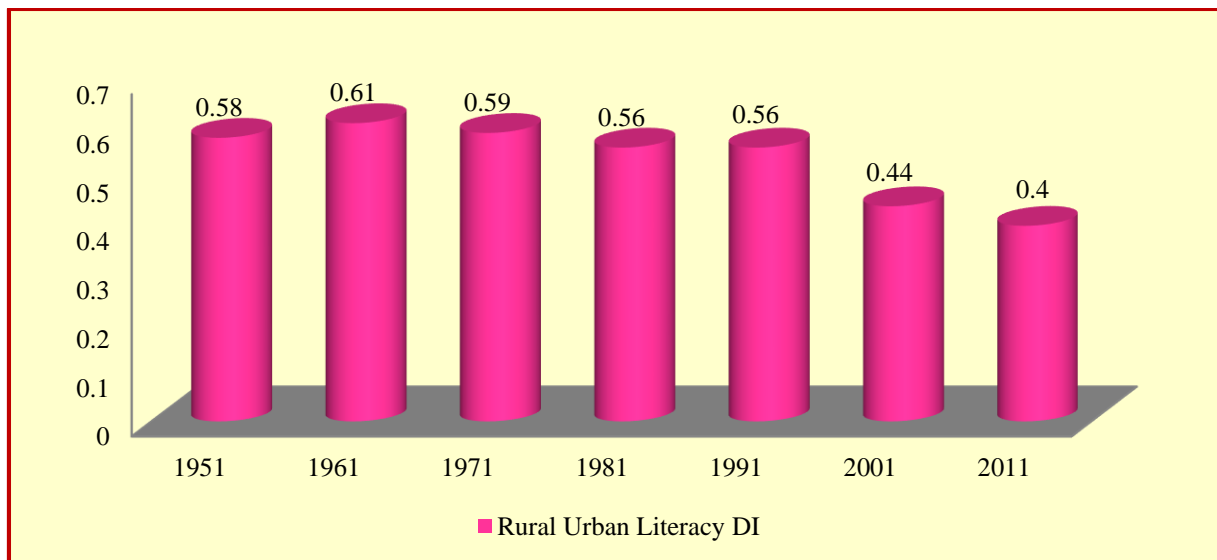
Source: As per Calculation of Disparity Index, table-6

6. SUMMARY AND CONCLUSION

There are gender imbalances, income imbalances, state imbalances, caste imbalances, and technological barriers which lead to disparity in literacy rates in the country. Flaws in the process of governance have a negative impact on achieving the goal of universal literacy along with the high growth rate of the population in India. Low female literacy is also responsible for the dependency of women on men. She, who does not know the importance of education in life, does not emphasize the same for her children. Thus this all leads to the formation of a vicious circle of low literacy rate. Another barrier to female education in India is the lack of female teachers in schools. As India is a gender-segregated society, it is a very important factor in the low female literacy rate in India. The presence of income inequalities is also responsible for literacy rate disparity in Odisha and India. One of the primary reasons for the disparity in literacy rate is inadequate school facilities; it includes the lack of proper sanitation facilities, lack of drinking water and shortage of teachers, etc. which leads to more drop-out of children.

This study observes that there has been a quantitative expansion of literacy in India, but the disparity in its expansion both region-wise and gender-wise needs serious attention of the Government as well as the society. Not only the Government but also every literate person needs to accept the eradication of literacy as a personal goal. Each and every contribution by a literate person can make a contribution to eradicate the menace. Moreover, effective governance is necessary to reduce educational inequalities. The government should focus on building adequate economic as well as social infrastructure in rural areas which will provide economic wellbeing to rural people and in turn help to reduce rural-urban disparity in literacy rate. One of the initiatives is 'Teach India' which aims to provide a platform to educated Indians to provide assistance in basic education to unprivileged children. (The New York Times, 2008) As in the words of Barack Obama, "Change will not come if we wait for some other person or some other time. We are the ones we have been waiting for. We are the change that we seek".

References:

[1] Behera, A. K. (2015). Primary Education among Tribal People of Mayurbhanj District of Odisha: An Evaluative Study. *International Journal of Humanities and Social Science Invention , 4* (2), 43-54.

[2] Brahmanandam, & Bosu, T. (2016). Educational Status Among The Scheduled Tribes: Issues And Challenges. *The Nehu Journal , 14* (2), 69-85.

[3] Chandra, & Mahesh. (2015). Tribal Development in India . *An Overview International Contemporary Research Journal in Management and Social Science , 1* (2), 75-79.

[4] Das, D., & Pathak, M. (2012). The Growing Rural-Urban Disparity in India : Some Issues. *International Journalof Advancements in Research and Technology , 1* (5), 1-7.

[5] Dash, M. (2015). Status of Secondary Education in Odisha. *IOSR Journal of Humanities And Social Science , 20* (3), 9-20.

[6] Devi, S., & Mahesh, E. (2011). Development Of Education Of Scheduled Tribes In Orissa: The Role Of Pesa Act. *Centre For Multi-Disciplinary Development Research* , 15.

[7] Dunn, D. (1993). Gender Inequality In Education And Employment In The Scheduled Castes And Tribes Of India . *Population Research And Policy Review , 12* (1), 53-70.

[8] GoI. (2002). *Odisha Development Report.* Planning Commission. New Delhi: Government of India.

[9] GoI. (2005-2006). *Report of Planning Commission of India.* New Delhi: GoI.

[10] GoO. (2004). *Odisha Human Development Report.* Planning and Co-ordination Department. Bhubaneswar: Govt of Odisha.

[11] GoO. (2007). *Tribal Inclusion and Development Assessment And Tribal Development Plan.* Bhubaneswar: Varun Techno Infrastucture Pvt. Ltd on Integrated Social and Environmental Assessment Study.

[12] IPCD. (1994). Programme of Action of International Conference on Population and Development. *2.* Cairo: United Nations Population Fund.

[13]   Kar, J., & Kar, J. (2002). Promoting Girls' Schooling in Orissa. *Indian Journal of Gender Studies , 9* (1), 62-79.

[14]   Karuna, C. (1993). The Dilemma Of Schooling Women, Minorities, Scheduled Castes And Scheduled Tribes In Contemporary India. *Higher Education , 26* (1), 69.

[15]   Lal, M. (2013). Relvance of Educational Philosophy of Sri Aurobindo Ghosh in the Present System of Education. *Airo International Research Journal , 1*.

[16]   Mitra, A., & Singh, P. (2008). Trends in Literacy Rates and Schooling among the Scheduled Tribe Women in India. *International Journal of Social Economics , 35* (1/2), 99-110.

[17]   Mohapatra, K. (2004). Tribes of Orissa SC and ST Research and Training,. 50.

[18]   Nambissan, G. B. (1996). Equity in Education? Schooling of Dalit Children in India. *Economic and Political Weekly , 31* (16/17), 1011-1024.

[19]   Nayak, P. P., Khatei, R., & Khatei, L. (2019). Extent of Educational Backwardness among Tribal People: A Comparison between Scheduled and Non Scheduled Districts of Odisha. *Tribal Studies: A Journal of COATS , 8* (2), 88-97.

[20]   R, G. (2002). *India Education Report: A Profile of Basic Education (NIEPA).* New Delhi: Oxford University Press.

[21]   Rakesh, D., & Anushree, S. (2003). Role of Tribal Women in Education. *Yojana , 47* (6), 40.

[22]   Satapathy, S. (2016). Status of Higher Education for Women in Odisha: an Inter District Analysis. *IOSR Journal Of Humanities And Social Science , 21* (8), 1-10.

[23]   Sedwal, M., & Kamat, S. (2008). Education And Social Equity With A Special Focus On Scheduled Castes And Scheduled Tribes In Elementary Education. *Create Pathways To Access Research Monograph* (19).

[24]   Singh, B., & Mahanti, N. (1997). Tribal Education in India. *Inter India Publication* , 136.

[25]   Subudhi, S., Das, S., & Kumar, S. (2019). A Method of Assessment of Inter district disparity in Odisha. *International journal of basic and applied research , 9* (6), 1320-1335.

[26]   *The New York Times.* (2008, February 5). Retrieved March 3, 2021, from https://www.nytimes.com/2008/02/05/us/politics/05text-obama.html

[27]   Tilak, J. B. (2002). *Education in Orissa: A Review of Progress, Problem and Perspectives for Future on School Education Monograph prepared for UNDP.* New Delhi.

[28]   World Bank. (2006). *World Development Report: Equity and Development. In World Development Report.*