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Literacy in India: A statistical approach to understanding Census Data With special reference to Women

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Abstract

The present study uses a statistical approach to understand the literacy status of our country using the Census Data (2001-2011). A detailed state-wise analysis based on a) Rural b) urban c) Female d) Male e) Rural Male f) Urban Male g) Rural Female and h) Urban Female Literacy respectively is conducted to assess the gender inequality and the rural-urban gap prevalent in our country. This research also attempts to understand the need to focus on Women Literacy via statistical methodologies and proves its relevance in our country today. This work presents new insights on the relationship of Women Literacy with other Gender-Specific Variables and the overall Human Development and identifies homogenous clusters of states in this aspect. This will serve as an aid in the formulation and implementation of policies.

Keywords: Cluster Analysis, Graphical Methods, Gender Inequality, Literacy, Statistical Analysis, Trend Analysis, Women Literacy.

Introduction:

Literacy is no longer limited to the ability to read, write and speak a language with complete understanding. Its role in the road to progress of a developing nation like our country is multidimensional. In fact, the exponential growth in the usage of the word "Literacy" in English during the period 1800-2008 (Figure 1) underlines its Relevance in the world today rightly called, the catalyst for social upliftment, higher levels of literacy is one of the high priority targets for every developing nation today. This call for a need to understand, assess and evaluate the literacy status of the country on a regular basis. Census or complete enumeration is the only immediate solution to tackle this problem. Census is no longer a mere head-counting mechanism. As the world's largest democracy undertook the mammoth task of the 15th consecutive decade, Education and prominent themes besides assessment with the motto "Our Census, Our Future" "Unity in Diversity" apart from the vastness in terms of the process.

The Government has taken gaint leaps in the education sector during the 10th and he 11th Fieve Year Plans.Some of the initiatives include Education,Right to Education (2009)⁸,launching the Saakshar Bharat Progamme aimed at improving female literacy.Govindar R,Biswal\ K(2005)² Education for all Global monitoring Report and Jindal Asha Anganamal (2013)⁵,Prnima Menon,Anjor Bhaskar(2009) of Hunger Index and also Infant and child mortality in India in UNICEF(2012)⁷. Gandhi played a pivotal role in making the traditional home bound women to come out of their homes to participate in the freedom struggle. Gandhi"s basic ideas on women"s rights were equality in some spheres and opportunities for self-development and selfrealisation. He believed that the decline in women"s position and status lay in male prejudice and arrogance. The National Policy for the Empowerment of Women, 2001¹² states in unequivocal terms that "the raising of women"s status cannot be singularly achieved by improving their position in one sphere, institutional mechanisms; appropriate resource allocations are prerequisites for the implementation of an effective programme".

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Role of Statistics in Census Data Dissemination

The census refers to the population at a particular point of time in the year, the first attempt to obtain the size of population in India by actually counting heads was made by during 1867-1872. The first census of India by comprehensive census of population was conducted in 1881 on uniform basis covering the whole country. The recent 2011 census was conducted of 15th since 1872 and 7th since independence.

Thus, population enumeration is the oldest statistical tool in understanding the status of the human society at large (differ from place to place and era to era and across cultures) In fact, noted statistician Bowley defines statistics as the "Science of Counting". Thus, statistics is an inseparable aspect of Census process in all the stages beginning from data collection to the Census Data Dissemination phase as shown in Stages in Census 2011 (Source: censusindia.gov.in Digital Archives) in the

Table 1: Census 2011 Process.

Census 2011 Process				
First stage	Data Collection			
Second	Scanning			
Third	Image based Recognition(ICR)			
Fourth	Image Validation			
Fifth	Manual completion of unrecognized characters			
Sixth	Data base/Tabulation			
Seventh	Data Dissemination			

^{*}Source from Registrar General Website

In the last six decades, various statistical tools have been employed in the analysis of Census data which deals with the entire population of our country. Notably, in Census 1961, the demographic data of India and State/Union territories were published in the form of atlases which were hand drawn until the Census in 1991. Computer technology was employed for the first time in Census 2001 which was successful in producing digital images of over 6 lakh villages and 900 Class I and Class II towns. Census 2011 has incorporated Satellite Imagery based Georeferenced Digital Maps that is capable of showing buildings, streets, lanes, bi-lanes and other important land mark features in 33 capital cities apart from all the towns and sub district maps up to village level for the first time in the history of India. In addition, several graphical tools including bar charts and pie-diagrams have been used to offer ease of understanding and interpreting the Census data. Further, time series plots and area plots have been employed in order to observe patterns over time. Descriptive statistics have also been used in summarizing the data and facilitating comparisons between various administrative units. Ranking schemes have also been extensively used to identify the best and the worst performing administrative units in terms of variables measured during Census. Various imputation methods have been used in the analysis of missing data in Census. Adding to this, extrapolation and forecasting methods have also been successfully used to provide an estimate for various variables in the future years.

Countries like New Zealand and Canada employ spatial data analytics tools to assess Census data provided the corresponding geo-spatial components of data pertaining to various administrative units are made available.

This study attempts to highlight the status of literacy in India with special reference to Govinda R, Biswal K 2005, Mapping Literacy in India ¹, Women apart from addressing

its relevance to socio-economic development with the aid of statistical tools. According to Census of India 2011, any person (aged 7 and above) is considered literate, if he or she can read and write in any language with complete understanding. A person, who can only read but cannot write, is not literate. In the censuses prior to 1991, children below the age of 5 were considered illiterate. At the Census of India 1991, it was decided that all children in the age group 0-6 will be treated as illiterate since the ability to read/write and speak requires training either in the form of schooling or any other equivalent means. It is pertinent to note that literacy does not demand formal education or minimum. Also, persons who are unfortunately blind and read in Braille are also treated as literates. The term literacy rate was introduced in 1991 census for the population relating to seven years and above for the first time in India. Some related terminologies are defined as follows.

- Crude Literacy rate is defined as the literacy rate evaluated by taking into account the total population in the denominator.
- Adult literacy rate is defined as the literacy rate corresponding to the adult population (aged 15 years and above) in the country.
- Youth literacy rate is defined as the literacy rate corresponding to the youth

Population (age group 15-24 years) in the country. This paper considers literacy rate data for statistical analysis and related inferences.

Objectives

The primary objectives of this research are highlighted below:

- To compare the literacy rates at rural and urban levels separately across the two
- 2) Decades based on Census 2001 and Census 2011 and to check whether there has
- 3) Been an improvement in the urban-rural gap and gender gap during the period.
- 4) To predict the literacy rate for the next decade based on literacy rate in India
- 5) Since the last century.
- 6) To examine the performance of states in terms of literacy rates in Census 2001
- 7) And Census 2011 in the following categories namely a) Rural b) Urban c)Female d) Male e) Rural Male f) Urban Male g) Rural Female and h) Urban Female respectively and to identify the key performers at top and bottom levels. This will also serve as an aid in the assessment of urban-rural gap and the gender gap across the states.
- 8) To examine the role of gender disparity in other key aspects of development.
- 9) Moreover, this would serve as a platform in establishing relationships of various goals in the MDG framework with literacy.
- 10) To identify states (and in turn districts) that show comparable performances

With regard to literacy and related indicators. This will serve as an aid in the formulation of policies in the education sector at the national level.

Research Methodology

This research attempts to present invaluable and interesting

insights into the existing imbalance in the society between men and women apart from the rural-urban divide which is indeed, a vital input for policy and planning. The study uses secondary data obtained primarily from Census of India 2011 and Census of India 2001. And these Statitical data are used in Gupta and Sc Kapoor book³

Sl.No.	Variable Name	Unit of Measure	Definition	
1	Literacy Rate	Percentage total number of literates divided by the total population (a years)		
2	Sex Ratio	Number	Number of females per thousand males	
3	Child Sex Ratio	Number	Sex ratio in the age group 0 to 6 years	
4	4 Infant Mortality Rate Percentage		Number of children dying under one year of age/number of live births during the year*1000	
5	Child Mortality Rate	Percentage	<5 years of age children die /live births per year *1000	
6	Fertility Rate Percentage		It is overall summary measure of fertility and is obtained by summng the age specific fertility rate for each age of the child bearing span	
7	Mean Age of Marriage	Number	Average Age for marriage for a woman	

Table 3: It is important to understand the relationship between women literacy and other key gender specific variables which are listed in the following.

Sl.No.	Varible Name
1	Female Literacy Rate(FLR)
2	Sex Ratio(SR)
3	Child Sex Ratio(CSR)
4	Infant Mortality Rate(IMR)
5	Child Mortality Rate(CMR)
6	Fertility Rate(FR)
7	Mean Age of Mariage(MAM)

Table 4: A tabular summary of the statistical methodology used to meet each objective is given below.

Objective	Statistical Tool	Software used
1	spearman Rank Correlation	Microsoft Excel 2007
	Time series plot, Anderson-Darling Normality test and	
2	trend Analysis	Minitab 18
3	Ranking Based on the literacy rate and Tabulation	Microsoft Excel 2007
4	Spearman Rank Correlation	IBM SPSS 20
5	Hierarchical Cluster Analysis & Box whisker	Minitab 18

It is noted that this study considers the undivided Andhra Pradesh. Moreover, further studies pertaining to the district level data could not be carried out owing to the change in the number of administrative units (593 in Census 2001 and 640 in Census 2011) during this period.

Statistical Analysis and Interpretation Literacy in India

India has a good organized education system. As a historian has put it, "There is no

Of their country where the love of learning had so early an origin or has exercised so lasting and powerful an influence." Thus, throughout history, India has been known not only for its rich cultural heritage but also for its well established education system. Our traditions place teachers a notch above God as portrayed in "Mata Pita Guru Daivam" which stands out as the testimony to the high regard given to the education system prevalent in the country. Priorto British era, our nation followed the Gurukul System, which was considered one of the finest education systems across the globe. However, education was restricted to the upper class only and thus, an overwhelming population remained illiterate. The Colonial Era witnessed a drastic change in the education model as there was a gradual shift towards the British Education System. This resulted in a rise in the literacy rate from 3.2 %(1881) to 12.2% (1947) as assessed in the Census during

the colonial period. It is heartening to note that this measure was unable to bring out revolution to improve the literacy status of the country. The benefits of its measures to ensure that education transcends the boundaries of caste, creed and gender. Literacy rates witnessed a sharp rise of 21.99% to close at 64.83% in the Census 1991.

Table 5: The overall literacy rates² at the national level in the last twelve decades are presented below.

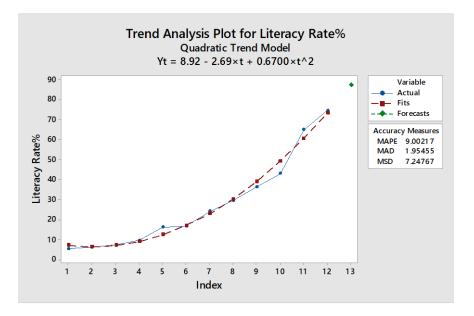
Sl.No.	Year	Literacy Rate%	Decadal Variation
1	1901	5.35	-
2	1911	5.92	0.57
3	1921	7.16	1.24
4	1931	9.5	2.34
5	1941	16.1	6.6
6	1951	16.67	0.57
7	1961	24.02	7.35
8	1971	29.45	5.43
9	1981	36.23	6.78
10	1991	42.84	6.61
11	2001	64.83	21.99
12	2011	74.4	9.57

^{*}Source from Registrar General Website

As our nation surges ahead in order to attain the super power status by 2020, it becomes aneed to predict the literacy rate for India in Census 2021. Based on the data given above, Trend analysis was implemented in Minitab 16

to arrive at the predicted estimate. It must be noted that the variable literacy rate follows normality according to Anderson-Darling Test (Statistics=0.580, p=0.103)

Quadratic Trend model was fitted to the data and the results are shown in the following graph



Based on the model, the prediction for literacy rate in the Census of India 2021 is 87.1311. Thus, it can be expected

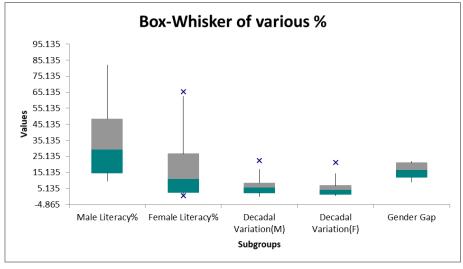
that the literacy rate will move closer to 90% in this decade below Table 6

Table 6: Indian Decadal Literacy rate Gender and Decadal viariation.

Sl.No.	Year	Male Literacy%	Female Literacy%	Decadal Variation(M)	Decadal Variation(F)	Gender Gap
1	1901	9.83	0.6	-	-	9.23
2	1911	10.56	1.05	0.73	0.45	9.51
3	1921	12.21	1.81	1.65	0.76	10.4
4	1931	15.59	2.93	3.38	1.12	12.66
5	1941	24.9	7.3	9.31	4.37	17.6
6	1951	24.95	9.45	0.05	2.15	15.5
7	1961	34.44	12.95	9.49	3.5	21.49
8	1971	39.45	18.69	5.01	5.74	20.76
9	1981	46.89	24.82	7.44	6.13	22.07
10	1991	52.74	32.17	5.85	7.35	20.57
11	2001	72.56	53.67	22.52	21.5	21.59
12	2011	82.18	65.46	6.92	11.79	16.52

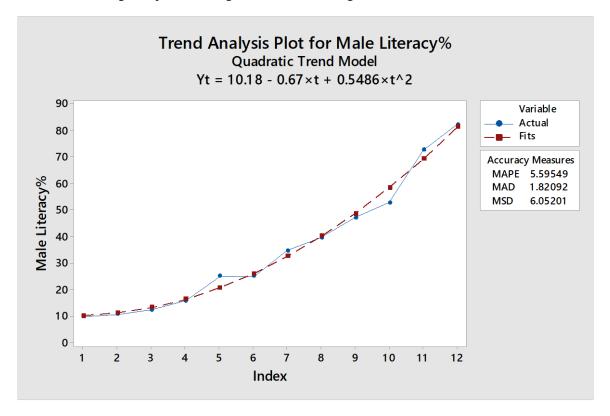
*Source from Registrar General Website⁴

The above table demonstrates the male and female literacy rates expressed in percentage over the last twelve decades. From the decadal variation values, it can be seen that female literacy has increased at a slower pace than male literacy.

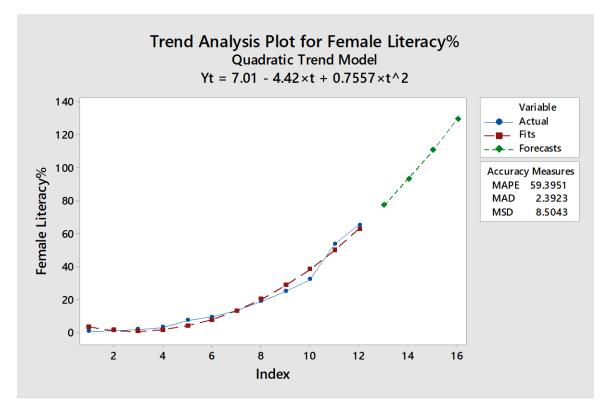


From the above Graph ceary shows that male literacy nearly equals to female also and Gender gap also slightly increased. From 1991, female literacy has improved at a faster pace than male literacy. This also indicates that the programmes launched during this period have guaranteed

fruitful results. Census 2011 has also shown decreasing trend in the gender gap which currently stands at 16.52%. Thus, there has been a decrease in the gender gap as shown in Census 2011. And the male Literacy% shown below using Minitab 18,



And the female literacy rate shown in below using Minitab 18 version the results are



The above Table values put in the Regression Statistics, therefore, the values good for literacy rate of women In order to predict the literacy rate for 2021, a quadratic model was fitted in Minitab 16, the model provides a good

fit for Mean Absolute Deviation (MAD) which stands at 1.97. The predicted value for overall literacy rate for men in Census 2021 is **95.4359%**

In the case of female literacy, the data fails to follow

normality. Moreover, all the four Models in Minitab 18 (Quadratic, Linear, S-Curve and Exponential Method) fail to provide good fits to the data in terms of Mean Absolute Deviation. However, a polynomial of degree5 available in Excel 2007 provides a good fit to the model with R= 0.995. The female literacy rate is thus predicted to be close to 80% in 2021. This proves that our country is less likely to reach its target of 100% in 2021.

The last one decade has witnessed a giant change in the number of illiterates residing in our country which is now a home to the largest number of illiterates in the world.

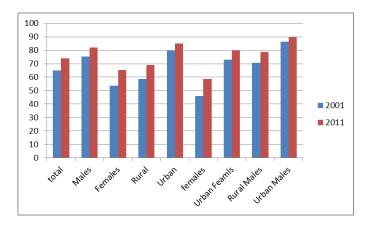
Table 7: The following tables summarize the number of illiterates (in millions)

Gender	2001	2011	Difference (2011-2001)
Persons	64.8	74.4	9.6
Males	75.3	82.2	6.9
Females	53.7	64.5	10.8

Table 9: The following Table of 2001 and 2011 all aspects comparison in below

Year	total	Males	Females	Rural	Urban	Females	Urban Females	Rural Males	Urban Males
2001	64.84	75.26	53.67	58.74	79.92	46.13	72.86	70.7	86.27
2011	74.04	82.14	65.46	68.91	84.98	58.75	79.92	78.57	89.67

And female literacy rate differences had a steep reduction from 26.73% (2001) to 21.18% (2001)



Thus, the big picture of overall national level literacy rates indeed proves that the nation is on the right track to achieve 100% literacy rate in the years to come.

State-wise Analysis

The following figure displays the thematic map of literacy rates across the states in Census2011. It can be see that the western coast in the peninsula is comparatively better in terms of the overall literacy rate than the easterates between 84%-94% while the states marked in yellow have the rates in the range of 73to 83%. The states in red have the literacy rate between 62% and 72%. Some interesting state level findings based on Census 2011 are presented in the following.

Table 10: The Top-Five and Bottom Five states of 2011 census.

Top -five	Bottom-five
Kerala(first)	Bihar(Last)
Lakshadweep	Arunachal Pradesh
Mizoram	Rajasthan
Goa	Jharkhand
Tripura	Andhra Pradesh

Table 8: Another characteristic feature the literacy rate over the last one decade is the diminishing Urban-Rural Gap. This is evident in comparisons between Census 2001 and Census 2011respectively.

	Rural		Urban		
Rural	2001	2011	Urban	2001	2011
Persons	58.74	67.77	Persons	79.92	84.11
Males	70.7	77.15	Males	86.27	88.75
Females	46.13	57.93	Females	72.86	79.11

Source from Registrar General Website

While the difference between the overall urban and rural literacy rate stood at 21.18% in 2001, it can be seen the differences in male literacy dropped from 15.57% (2001) to 11.61% (2011),

While Kerala continued to be in the first position with a literacy rate of a whopping 93.91%, Bihar occupied the last position with 63.82% with an overall variation of over 30.09%. Two north-eastern states of India, namely Mizoram and Tripura have found place in the top-five positions. Moreover, all the union territories except Dadra and Nagar Haveli are within the top ten literate states in the country.

Global Gender Gap Index

The Global Gap Index is an intiative of the world Economic Forum that seeks to measure the important aspect of gender equality;the relative gaps between women and men, across a large set of countries and across four key areas namely health, education, economics and politics. It examines the gaps between men and women in four fundamental categories. Economic participation and Opportunity, Educational Attainment, Health and Survival and Political empowerment. It is pertinent to note that all these four factors have an important role in the current plight of women in our country. India stands aat rank 101.

Corruption Perception Index

Corruption Perception Indiex is an annual report published by Transperncy International that measures and ranks countries across the globe on the basis of corruption perception in public sector.India is ranked in 94 in the index.

Table 11: Corruption Perception Index

Correlations								
			Global Gender Gap Rank	Corruption Perception Index				
	Global Gender Gap Rank	Correlation Coeffcient	1	0.435				
		Sig.(2tailed)		0				
Speraman's rho		N	130	130				
		Correlatin Coefficent	0.435	1				
	Corruption Perception Index	Sig.(2tailed)	0					
		N	130	130				

Human Development Index

Human Development Index is a composite stataistic of life expectancy, education and income indicies used to rank

countries into four tires of human development, it is published every year United Nations Development Programme. India stands at 136^{th} position in HDI,

Table 12: Human Development Index

Correlations								
			Global Gender	Corruption				
			Gap Rank	Perception Index				
	Global	Correlation coefficient	1	0.44				
Speraman's	Gender Gap	Sig.(2tailed)		0				
rho	Rank	N	130	130				
		Correlation coefficient	0.44	1				
	HDI Rank	Sig.(2tailed)	0					
		N	130	130				

Relationship to other Gender-specific variables

It is important to understand the relationship between women literacy and other key gender specific variables which are listed in the following. Census data 2001 was used to check whether there exists a linear relationship between the variables with Female Literacy Rate. The Descriptive statistics and the Speraman's Correlation coefficient computed in IBM SPSS 20 are presented below.

Table 13: The Descriptive statistics and the Spearman's Correlation Coefficients computed in IBM SPSS 20 are presented.

Descriptive Statistics							
	Mean Standard Deviation						
FR	2.5114	0.63975	35				
CMR	57.7143	19.13508	35				
IMR	51.7714	17.53498	35				
MAM	20.5086	1.84668	35				

Surprisingly, the Spearman's Correlation measure on the state-wise data which is ranked based on the values available in the Census data reveal that the relationship between Female Literacy Rate and other indicator variables is indeed very low and negligible. It must be noted that p-values can be ignored in the analysis since the data comes from a population and not are preventative sample. However, a high correlation is observed between FR, CMR, IMR and MAM and hence measures taken to control

one variable will indirectly help in controlling the remaining indicators in the following Table 14.

Table 14

Correlations									
			FR	CMR	IMR	MAM	CSR	SR	FLR
Spearman's rho	o FR Cf		1	0.581	0.595	-0.502	0.0504	0.027	0.052
		Significance of two tailed		0	0	0.002	0.758	0.877	0.766
		N	35	35	35	35	35	35	35
	CMR	Cf	0.581	1	0.977	-0.646	-0.059	-0.19	-0.059
		Significance of two tailed	0		0	0	0.735	0.275	0.738
		N	35	35	35	35	35	35	35
	IMR	Cf	0.595	0.977	1	-0.646	-0.038	-0.176	-0.053
		Significance of two tailed	0	0		0	0.829	0.311	0.761
		N	35	35	35	35	35	35	35
	MAM	Cf	-0.502	-0.646	-0.646	1	0.112	-0.124	-0.127
		Significance of two tailed	0.002	0	0		0.523	0.477	0.466
		N	35	35	35	35	35	35	35
	CSR	Cf	0.054	-0.059	-0.038	0.112	1	0.368	-0.143

	Significance of two tailed	0.758	0.735	0.829	0.523		0.03	0.411
	N	35	35	35	35	35	35	35
SR	Cf	-0.027	-0.19	-0.176	-0.124	0.368	1	0.12
	Significance of two tailed	0.877	0.275	0.311	0.477	0.3		0.492
	N	35	35	35	35	35	35	35
FLR	Cf	0.052	0.059	-0.053	-0.127	-0.143	0.12	1
	Significance of two tailed	0.766	0.738	0.761	0.466	0.411	0.492	
	N	35	35	35	35	35	35	35

Cf: means correlation coefficient:

Correlation is significant at the 0.01 level (2tailed)

Correlatin is significant at the 0.05 level (2 tailed)

Cluster Analysis on Gender-Specific Indicators (Census 2001)

Cluster Analysis is one of the most common multivariate tools employed to

Uncover the hidden homogeneity in data. In this study, cluster analysis has been used to identify and bring together states that are homogenous with respect to the variables presented in Table 19. This will in turn serve as an aid in the formulation and implementation of policies at the national level as states which are homogenous across this set of variable would require same set of measures. Hierarchical Cluster Analysis using Wards Method and Squared Euclidean Distance Measure has been applied on the standardized variables from the Census 2001 data.

Table 15: The resulting clusters are represented in the following dendrogram.

Clusters	Regions
	Andhra Pradesh, Manipur, Goa, Tripura, Himachal
1	Pradesh, Karnataka, Andaman, Kerala, Mizoram,
	Delhi
	Gujrat, MP, Meghalaya, Pondicherry, J&K, UP,
2	Rajasthan, Dadra Nagar, Jharkhand, Odisha,
	Nagaland, TN
3	Haryana, Lakshadweep, Punjab, Chandigarh, Daman
3	and Diu, Arunachal Pradesh
4	Bihar, Assam, WB, Chhattisgarh, Maharashtra,
4	Uttarakhand, Sikkim

Cluster 1 is characterized by relatively low MAM, slightly high values of CMR

And IMR, high SR/CSR and very high FLR (Except Andhra Pradesh). Cluster 2 consists of states with very low MAM, slightly high values of CMR and IMR, high SR/CSR and relatively low FLR. Cluster 3 represents states with low CMR and IMR, high MAM, low SR/CSR and relatively low FLR. According to Census 2011, the states in Cluster 4 need immediate attention with respect to the status of women as they contain few worst performing states in this aspect.

NSS Report of 64th and 71st Rounds:

As per NSS 71st round report, overall 75.7% male and 62% female are literate, in rural India 72.3% Male and 56.8% Females and in Urban India 83.7% male and 74.8% females are literate in the year 2014. Further, 34.9% of males and 31.9% of females have completed primary level education while 12.8% of males and 9.6% of females have completed secondary level education as per the NSS Report).

Table 16: Comparison of literacy rates (%) for persons in different age groups for rural and urban population.

Age groups	Rural			Urban			Total		
2007-2008(NSS 64th round)	Male	Female	Person	Male	Female	Person	Male	Rural	Person
Age 5 and above	76.8	57.3	67.3	89.7	78.1	84.2	80.3	62.7	71.8
Age 15 and above	71.8	47.5	59.7	88.7	74.6	82	76.7	54.9	66
all age(age o and above)	68.4	51.1	60	82.2	71.6	77.1	72.1	56.3	64.5
2014(NSS 71st round)									
Age 5 and above	80.3	62.4	71.4	91	80.9	86.1	83.6	68.1	76
Age 7 and above	79.8	61.3	70.8	91.1	80.8	85.9	83.2	67.1	75.4
Age 15 and above	75	53.1	64.1	89.7	77.9	84	79.8	60.8	70.5
all age(age o and above)	72.3	56.8	64.7	83.7	74.8	79.5	75.7	62	69.1

Discussion

Over the last few decades, literacy has turned out to be the basic indicator to the level of development achieved by a society. It is closely associated with the important traits of Modern civilization such as modernization, urbanization, industrialization, communication and commerce. It has also transformed to an important input to the overall development of individuals enabling them to comprehend their social, political and cultural environment better and respond to it appropriately. In this direction, the present study attempts to make a state-wise assessment of the literacy status of the country on the basis of Census 2001 and Census 2011. This research attempts to recapture this

reality via the use of statistical analysis. It is seen that women literacy has a greater share in improving the Human Development Index (HDI). While the study is aimed at understanding the plight of Indian women in terms of Literacy, it also underlines the need of a women-oriented literacy improving mechanism by establishing its relationship to the key indicators of development.

Conclusion

The results obtained using various statistical tools are indeed promising and can be summarized improved literacy rates across all the dimensions

Reduced Gender gap

- Reduced Urban-Rural Gap
- > Improved Literacy rates in Rural areas
- > Steady growth in the literacy rates of women(both urban and rural)over the years

Our country is no way behind in bringing about innovative legislative norms, but its implementation is not without flaws. Thus, there is a need to ensure that the policies designed to improve literacy do reach the grassroots of the country. NSS recent data also shows that good results of women literacy and gender gap.

Thus, the nation needs an assessment of literacy which is not limited to reading, wrting and speaking a language. Though, indictors like number of languages known and computer literacy have added luster to the assessment of literacy, it becomes essential to look at literacy have added lusture to the assessment of literacy, it becomes essential to look at literacy in a bigger picture as this would definitely serve as an aid in the formulation and implementation. Also, this will be a catalyst to the citizen participation in all the democratic processes in the nation that would truly transform it to the most powerful democracy in the world.

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