

# MAPPING DISABILITY DISTRIBUTION IN INDIA: A DISTRICT-LEVEL ANALYSIS

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*The study carries out a comprehensive analysis of temporal and spatial variations in the disability prevalence of India at the district level using 2001 and 2011 Census data of India. The prime focus of the paper to examine nature and extent of prevalence of each type of disability at the district level across different genders and age-cohorts. The findings of the study suggest that about two-third of persons with disabilities (PWDs) reside in rural areas. However the growth rate of disabled population is more in urban areas and among urban females. The absolute number of male with disabilities is greater than the absolute number of female with disabilities. However, this gender gap disappears and even reverses at older ages. Maximum proportion of disability is observed among the persons with movement disability, however, considerably higher numbers of the PWDs under “any-other” category raise concern about the enumeration process in 2011. The study further shows that there are geographical disparities in the prevalence of disability across India. In addition, burden of disability is disproportionately concentrated in certain disadvantaged regions and districts. Further, A cursory glance across the district level distribution of persons with disabilities suggests that they are scattered across every nook and corner in India with significant temporal and spatial variations. It is also evident that the most southern states reported higher number of persons with disabilities than the northern counterparts. The study suggests balanced regional development taking cognizance of specific rights and needs of each type of disability. Active support from the state, civil societies and disability advocate groups is extremely crucial along with mass sensitisation and awareness among the masses about the disabled communities. Also, the paper recommends for enhanced social securities and inclusive disability development policies.*

**Keywords:** Disability, Demography, Gender, Regions, Census of India, GIS Mapping

**JEL Codes:** J11, J14, J18, J21, J71

## INTRODUCTION

The modern notion of disability was conceptualised in western part of the globe after post world war to bring the disabled into mainstream of the society, those who were affected during the wars were excluded from the society due to physical deformities. Later on there were various multilateral forums, disability rights and advocacy groups, policy makers and experts who came forward to championise their cause. Buckingham (2011) noted that disability is as important as race or gender as an analytic tool in the historical understanding of oppression and disempowerment.

Disability cuts across class, caste, gender, race, religion, ethnicity, and nationality, but mostly a differently abled person's first identity among their other identities is their disability. According to World report on Disability (2011). Disability is complex, dynamic, multidimensional, and contested. Chaudhary (2006) viewed that disability is difficult to define since it varies in type, form and intensity. According to the World Health Organization (WHO, 2004) “disability is any restriction or lack (resulting from an impairment) of ability to perform in a manner or within the range considered normal for a human being”. WHO explains that disability is an umbrella term, covering impairments, activity limitations, and participation restrictions. International Labour Organisation (ILO) defines

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a disabled person as an individual whose prospects of securing, retaining and advancing in suitable employment are substantially reduced as a result of a duly recognized physical or mental impairment. While the WHO definition highlights the functionality aspect, the ILO approach focuses on the employment perspective. According to Karna (1999) disability represents the loss or limitation of opportunities as a result of social, physical and attitudinal barriers.

Elwan (1999) reviewed vast literature on the subject and summarizes that there is higher incidence of disability rates in developing countries which is because of higher illiteracy, lower immunizations, poor nutritional status, lower birth weight, lack of adequate and timely health care lower occupational mobility and higher unemployment rates. Besides, accidents and conflicts are important causes of disability particularly in developing countries. World Bank report (2007) noted that disabled people are among the most excluded in Indian society, facing widespread social stigma, income poverty and limited access to education and jobs. The Social Development Report (2016) points out that “the disproportionate disadvantage, exclusion and stigmatization suffered by persons with disabilities are caused by cultural, social and physical barriers that obstruct their effective participation in social and political life”.

As far as estimates of disability prevalence are concerned, World Report on Disability (2011) provided that persons with disabilities make up around 15 percent of global population. The picture shows that more than 1 billion population suffers from some sorts of disability and majority of them reside in developing countries. Recent estimates suggest 85-90% of the world’s population of persons with disabilities resides in developing countries. The United Nations estimated that more than 1.3 billion people live in abject poverty in the global South, 600 millions of which are disabled (Yeo, 2005). Thus, the majority of people with disabilities in the South are not only poor, but they are among the poorest of the poor.

In India, there are primarily two data sources (Census and NSSO) which follow their own definitions to define disability. The NSSO considered disability as “any restriction or lack of abilities to perform an activity in the manner or within the range considered normal for human being”. It excludes illness /injury of recent origin (morbidity) resulting into temporary loss of ability to see, hear, speak or move. On the other hand, population Census does not define disability; it identifies the disabled which is self-explanatory. The Census 2001 asks the respondents whether any-one in the household suffers from a disability, without first comprehensively defining disability. Official estimates of disability prevalence in India are low at 2.1% in the Census (2001). It is 1.8% in the National Sample Survey (2002). However, the disability questions in both sources have been reported to have major limitations (Mitra & Sambamoorthi, 2006). It is also not advisable to make a comparison between Census and NSSO data. Alternative estimates based on better disability measures suggest a higher prevalence of disability in India in the range of 4–8% (ADD, 2006). During Eleventh Plan (2007-12), the erstwhile Planning Commission suggested that the disability figure was 5-6 per cent of the total population, which is much higher than the official estimates because of under-estimation.

There is consensus among the experts about the underreporting and underestimation of disability prevalence in India. It is partly attributed to perceived stigma among the women, discrimination and marginalisation. Besides, narrow definition of disability, faulty enumeration process, and lack of robust methodologies further lead to their exclusion.

According to the Census 2011 data total percentage of disabled persons is 2.21% out of total population of India. There is an increase in the disabled population between 2001 and 2011, it increased by 22.4%. In absolute terms 2.19 crore in 2001 to 2.68 crore in 2011, out of which 1.5

crore males and 1.18 crore females. Highest percentage of disability is observed for the persons with movement disability, which is 20.3%, followed by hearing impaired (18.9%) and visually impaired (18.8%). Nearly 5.6% of the disabled population is mentally challenged, a classification introduced in the 2011 Census. Highest disability prevalence was observed in Maharashtra, Andhra Pradesh, Odisha, Sikkim and Jammu and Kashmir, in these states the disabled account for 2.5% of the total population, while Tamil Nadu and Assam are among those regions where the disabled population is less than 1.75% of the total population. Also, disability is well distributed across the districts of India.

In December 2006, the United Nations General Assembly adopted the Convention on the Protection and Promotion of the Rights and Dignity (UNCRPD) of PWDs. The Preamble to the UNCRPD (2006) recognised that disability is “an evolving concept” and it has marked a shift in views on disability from a social welfare to a human rights issue. Further, the most important and recent declaration “The 2030 agenda for Sustainable Development Goals” (SDGs) was adopted in 2015 by the United Nations. The new Agenda emphasizes a holistic approach to achieving sustainable development for all which is based on the principle of “leaving no one behind”. Although, the word “disability” is not cited directly in all goals but these goals are undoubtedly relevant to ensure the inclusion and development of persons with disabilities. Notably, the SDGs make explicit references to persons with disabilities in five of its 17 SDGs. Thus, it is required that the government must ensure full human rights and fundamental freedoms in addition to capacity and inclusive development to all disabled people equally and without any discrimination under the broader ambit of the SDGs.

In 1995, the Indian government passed the PWDs Act which is the most important legislation regarding the employment of individuals with disabilities. The Act defined a person as disabled if the person suffers from not less than forty per cent of any disability as certified by a competent medical authority. The seven types of disabilities identified under the Act are, blindness, low vision, cerebral palsy, leprosy, leprosy cured, hearing impairment, locomotor disability, mental illness and mental retardation as well as multiple disabilities. Further, taking yet another land-mark decision, India signed and ratified the United Nations Convention on the Rights of Persons with Disability (UNCRPD) in 2007 and enacted the PWD Act of 2016 at a par with international standards.

Despite India has legislated many progressive laws related to disability, evidence suggest that the individuals with impairments continue to bear the brunt of systematic negligence, discrimination, societal stigmatisation, economic impoverishment and government apathy. Buckup (2009) found that exclusion of disabled persons from the labour market leads to an annual loss of approximately 3-7% of the GDP. It is pertinent that social intervention against disability needs to include prevention as well as management and alleviation. In this backdrop, the paper attempts to investigate temporal and spatial variations in the prevalence of each type of disability across genders at the district level of India using 2001 and 2011 rounds of Census data.

## **NATURE AND EXTENT OF DISABILITY PREVALENCE IN INDIA**

Five types of disability data were collected in 2001 Census of government of India, namely, persons with seeing, hearing, speech, movement and mental disability. The list expanded to 8 types of PWD categories in Census 2011. In 2001, data was collected only for mental disability, however, it was bifurcated into two groups, mental retardation (R) and mental illness (I), while collecting data in Census 2011. For the sake of simplicity and comparative analysis, mental (I) and mental (R) has been clubbed to make a comparative study. In addition, data on two new categories multiple disability and

any other disability was collected for the first time in 2011 Census. Therefore, technically precise comparison between the two time periods are difficult to ascertain. Multiple disability covers as many as three types of disabilities. Any-other category has emerged as the fourth largest (one-fifth of total PWDs) category of disability in Census 2011. This category was included in the Census to overcome the problem of estimation or counting the numbers of persons with disabilities. In other words, those PWDs who are not listed in the Census question, the informants were required to report in this category. Very high number of any other disability also shows lacunae in the enumeration process of the Census. It may be possible that the enumerators may not have properly explained the definition of any other disability to the informants. Inaccurate numbers pose challenged to the development policy framing. Thus, experts are of the view that precise comparison between the two-time periods cannot be made. It is like comparing the incomparable. Both rounds of Census data used different methodology to define disability and collect data. Nevertheless, presenting pictures of both the periods will help to understand the demographic composition and help framing specific public policies for each type of disability.

Table 1 and 2 present Indian demographic scenario using 2001 and 2011 Census data. Further, demographic status of disabled persons in 2001 and 2011 is examined and a statistical comparison is made between them. The total population of India in 2001 was 102.86 crore, which increased to 121.09 crore in 2011. On the other hand, the total number of PWD in 2001 was 2.19 crore, which increased to 2.68 crore in 2011. It shows faster rate of growth of disabled persons in India than overall population. In addition, the share of males and females are 51% and 48% respectively in 2001 for all India. However, the share of disabled males and females are 57% and 42% respectively in 2001. Therefore, the gender gap for PWDs are far more compared to total population of India. As compared to 2001 data, in 2011, roughly, the gender composition for India remained the same. However, PWDs gender composition is more volatile. The gender gap in 2011 has slightly narrowed down as its percentage share is 56% and 44% for males and females respectively.

**Table 1: Population of India and Persons with Disabilities in Census 2001**

Population of India in 2001 (in Crore)			Disabled Persons of India in 2001 (in Crore)		
Persons	Males	Females	Persons	Males	Females
102.86	53.22 Cr	49.65 Cr	2.19 Cr	1.26 Cr	0.93 Cr
Share	51.74	48.26	Share	57.54	42.46

Source: Numbers Compiled from Census 2001 and 2011

**Table 2: Population of India and Persons with Disabilities in Census 2011**

Population of India in 2011 (in Crore)			Disabled Persons of India in 2011 (in Crore)		
Persons	Males	Females	Persons	Males	Females
121.09 Cr	62.33 Cr	58.76 Cr	2.68 Cr	1.50 Cr	1.18 Cr
Share	51.47%	48.53%	Share	55.90%	44.10%

The decadal growth among the proportion of population who are disabled is 22.4% between 2001



and 2011. As per Census data of 2011, on an average, one out of each tenth family includes a disabled member. The decadal growth is higher in urban areas than the rural areas. As far as gender analysis is concerned, it is pertinent to mention here that men tend to have higher prevalence of disability than that of women in India. However, female PWDs have recorded higher decadal growth than their male counterpart. Again, it is higher in urban areas than the rural regions.

**Table 3: Proportion of Disabled Persons and Decadal Growth by Type of Disability in India in Census 2001 and 2011**

Type of PWDs	Census 2001		Census 2011		Decadal Growth
	Total PWDs	Share (%)	Total PWDs	Share (%)	
Total PWDs	21906769	2.12	26814994	2.21	22.41
Seeing	10634881	48.55	5033431	18.77	-52.67
Speech	1640868	7.49	1998692	7.45	21.81
Hearing	1261722	5.76	5072914	18.92	302.06
Movement	6105477	27.87	5436826	20.28	-10.95
Mental	2263821	10.33	2228844	8.31	-1.55
Mental Retardation	-----	-----	1505964	5.62	-----
Mental Illness	-----	-----	722880	2.70	-----
Multiple	-----	-----	2116698	7.89	-----
Any Other	-----	-----	4927589	18.38	-----

Table 3 presents share of PWDs for different categories as per 2001 and 2011 Census data of India. It is noticeable that the decadal growth is negative for persons with seeing, movement and mental disability. However, these declines are offset by drastic rise in the decadal growth of individuals with hearing and speech disability. A number of factors can be attributed to these empirical inconsistencies which mainly emanate from the change in methods and definition of disability data collection in 2011 Census. Most importantly, in 2001, close to half of the PWDs had “in seeing” disability as compared to 18.77% in 2011. The persons who had seeing impairment experienced drastic decline in 2011. It can be attributed to the change in the definition of disability. One eyed individuals were considered as disabled in Census 2001, whereas, as per the Census 2011 such persons have not been treated as disabled in seeing. In addition, in the Census 2011 enumerators were asked to apply a simple test to ascertain blurred vision. In Census 2001 no such instructions were given and was mostly based on self-reporting.

The number for speech disability has also slightly declined in 2011 from 7.49% to 7.45%. A person was recognized as having “speech disability”, if he/she is dumb or whose speech is not understood by a listener of normal comprehension and hearing. Definition was made clearer in Census 2011

to record persons with speech disability. For instance, “persons who speak in single words and are not able to speak in sentences” was specifically mentioned to be treated as disabled. There is very high increase in “hearing” disability from 5.76% to 18.92%. Persons using hearing aid have been treated as disabled at Census 2011. They were not treated as disabled at the Census 2001. Further, persons having problem in hearing through one ear although the other ear is functioning normally was considered having hearing disability in Census 2001. But in Census 2011, such persons were not considered as disabled. It is also pertinent to mention that movement disability has significantly declined from 27.87% to 20.28%. There was also major revision in the category of movement disability. Highest number of persons are rerecorded in the category of movement disability.

Further, out of total PWDs, there were 10.33% mentally disabled people in 2011, which has slightly declined to 8.31% in 2011. There were 5.62% mentally retarded people and 2.70% mentally ill persons in 2011. Thus, even after combining both types of mental disabilities in 2011, Census 2001 depict higher proportion of individuals with mental disability. It is important to highlight that “any other” category of PWD has a very high share of the total PWDs (18.38%) and Multiple disabled persons constitute 7.89% of the total PWDs.

## **Disability Prevalence Across States of India: Evidence from Census 2001 and 2011**

A cursory glance at the state-wise distribution of persons with disabilities suggests that PWDs are scattered across every nook and corner in India. Table 4 presents share of PWD males and females out of total population in the corresponding states and makes a comparative study between 2001 and 2011 Census data. The Table is self-explanatory; however, an attempt is being made to explain in brief. According to 2001 Census, Sikkim experienced the highest prevalence of disability at 3.77%, followed by Arunachal Pradesh, Jammu and Kashmir and Odisha. It is important to mention that southern most states, Kerala, Puducherry, and Tamil Nadu, which are economically better off as compared to most states, had higher disability prevalence. Karnataka and Andhra Pradesh have lower incidence of disability, also, both of them have almost the same prevalence of disability around 1.80%. Some north-eastern states like Nagaland, Manipur and Meghalaya have the least prevalence of disability. Goa had the minimum disability (1.17%). Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, West Bengal and Gujarat are adjacent in terms of disability prevalence, it ranged from 2% to 2.5%. Among the bigger states, Maharashtra had the least number of PWDs.

It can be observed from 2011 Census data that there are many states who have reduced the incidence of disability significantly, some have worsened and some are on the same ladder. Disability prevalence in the state of Sikkim declined but still the highest in 2011, followed by Odisha and Jammu and Kashmir. Disability prevalence declined in some of the southern states. However, disability condition worsened for Andhra Pradesh and Maharashtra. Except for Sikkim, Lakshadweep and Puducherry, disability condition has improved and are among the lowest for most of the north-eastern states and union territories.

Thus, it is evident that the southern states reported more number of persons with disabilities than the northern counterparts. In this context, Kulkarni and et. al., (2019) pointed out that the southern states have provided welfare measures to the PWDs in a better way and more comprehensively than the northern states. Therefore, the northern states may be disinclined in reporting prevalence of disability, as it will add policy liability on the states.

**Table 4: Proportion of Total Disabled to the Corresponding Population in  
Census 2001 and 2011**

States	2001			2011		
	Person	Male	Female	Person	Male	Female
Jammu & Kashmir	2.98	3.20	2.74	2.88	3.08	2.65
Himachal Pradesh	2.57	2.93	2.19	2.26	2.48	2.04
Punjab	1.74	1.95	1.51	2.36	2.59	2.09
Chandigarh	1.73	1.88	1.52	1.40	1.51	1.27
Uttarakhand	2.29	2.62	1.96	1.84	2.00	1.67
Haryana	2.15	2.41	1.85	2.16	2.34	1.95
NCT of Delhi	1.70	1.90	1.46	1.40	1.54	1.24
Rajasthan	2.50	2.86	2.11	2.28	2.39	2.17
Uttar Pradesh	2.08	2.37	1.75	2.08	2.26	1.88
Bihar	2.27	2.62	1.90	2.24	2.47	1.98
Sikkim	3.77	3.95	3.55	2.98	3.03	2.92
Arunachal Pradesh	3.03	3.82	2.15	1.93	2.00	1.86
Nagaland	1.33	1.39	1.27	1.50	1.58	1.41
Manipur	1.31	1.41	1.21	2.05	2.17	1.93
Mizoram	1.80	1.91	1.69	1.38	1.48	1.28
Tripura	1.84	2.04	1.64	1.75	1.89	1.60
Meghalaya	1.24	1.30	1.18	1.49	1.56	1.42
Assam	1.99	2.16	1.81	1.54	1.61	1.46
West Bengal	2.30	2.55	2.04	2.21	2.41	2.00
Jharkhand	1.66	1.90	1.41	2.33	2.52	2.14
Odisha	2.78	3.05	2.49	2.96	3.18	2.74
Chhattisgarh	2.02	2.21	1.82	2.45	2.60	2.29
Madhya Pradesh	2.33	2.62	2.02	2.14	2.36	1.89
Gujarat	2.06	2.29	1.81	1.81	1.95	1.66
Daman & Diu	2.00	1.92	2.12	0.90	0.86	0.96
Dadra & Nagar Haveli	1.84	1.91	1.74	0.96	0.98	0.93
Maharashtra	1.62	1.85	1.37	2.64	2.91	2.35
Andhra Pradesh	1.79	2.01	1.57	2.68	2.89	2.47
Karnataka	1.78	2.00	1.55	2.17	2.35	1.98
Goa	1.17	1.29	1.04	2.26	2.30	2.22
Lakshadweep	2.77	2.89	2.63	2.50	2.53	2.48
Kerala	2.70	2.96	2.46	2.28	2.46	2.11
Tamil Nadu	2.63	2.52	2.74	1.64	1.82	1.45
Puducherry	2.65	3.03	2.28	2.42	2.67	2.17
Andaman & Nicobar Islands	1.98	2.19	1.73	1.75	1.90	1.58

Source: Calculated from 2001 and 2011 Census data

**Table 5: Proportion of Seeing Disabled to the Corresponding total disabled Population in Census 2001 and 2011**

States	Census 2001			Census 2011		
	Person	Male	Female	Person	Male	Females
Jammu & Kashmir	68.96	67.53	70.83	18.40	17.41	19.70
Himachal Pradesh	41.12	38.50	44.73	16.79	15.50	18.40
Punjab	40.25	36.84	45.26	12.57	11.81	13.62
Chandigarh	54.20	52.85	56.35	11.99	12.33	11.50
Uttarakhand	43.98	41.02	48.10	15.71	14.09	17.73
Haryana	44.25	40.73	49.56	15.14	13.83	16.93
NCT of Delhi	51.17	49.24	54.24	12.83	12.19	13.74
Rajasthan	53.40	51.22	56.60	20.12	18.40	22.17
Uttar Pradesh	53.63	50.20	58.81	18.38	17.25	19.86
Bihar	53.27	49.20	59.37	23.56	22.12	25.51
Sikkim	52.98	53.47	52.36	15.24	14.53	16.07
Arunachal P.	69.28	73.43	61.01	21.14	20.09	22.34
Nagaland	37.62	38.70	36.30	14.01	13.19	14.98
Manipur	41.28	40.53	42.17	32.78	31.81	33.90
Mizoram	39.08	40.01	37.96	13.42	13.26	13.62
Tripura	46.67	46.71	46.61	16.83	15.53	18.42
Meghalaya	46.46	46.81	46.06	15.75	14.98	16.61
Assam	53.19	51.81	54.95	16.78	15.95	17.74
West Bengal	46.67	44.29	49.86	21.04	19.81	22.60
Jharkhand	41.53	39.42	44.57	23.47	22.50	24.68
Odisha	50.34	48.19	53.04	21.20	20.28	22.29
Chhattisgarh	38.14	36.26	40.44	17.79	16.78	18.95
Madhya Pradesh	45.17	42.02	49.61	17.45	16.23	19.07
Gujarat	47.31	45.24	50.15	19.61	18.54	20.97
Daman & Diu	59.85	60.09	59.55	17.40	17.08	17.86
Dadra & Nagar H.	57.95	58.09	57.77	13.02	12.36	13.92
Maharashtra	37.01	34.32	40.97	19.37	18.43	20.63
Andhra Pradesh	42.61	41.18	44.48	17.57	16.21	19.16
Karnataka	46.87	44.90	49.50	19.95	18.43	21.79
Goa	27.89	26.05	30.28	15.04	13.81	16.34
Lakshadweep	35.94	32.74	39.64	20.87	17.78	24.20
Kerala	38.87	36.51	41.56	15.16	13.47	16.98
Tamil Nadu	58.69	50.17	66.62	10.80	10.30	11.42
Puducherry	41.17	39.96	42.79	11.95	11.24	12.79
Andaman & N.	47.06	45.13	49.95	16.28	15.49	17.36

Source: Calculated from Census 2001 and 2011 Data

## **Prevalence of Different Types of Disabilities across Gender and Regions in Census 2001 and 2011: A Comparative Study across States of India**

Table 5 provides disability prevalence rates for persons with seeing disability, categorized by gender, 35 states and union territories in 2001 and 2011. Prevalence of Disability is marginally higher among males than females. Also, there are considerable disparities in disability prevalence among states. According to 2001 Census, it is pertinent to mention that Jammu and Kashmir and Arunachal Pradesh had almost 70% seeing PWDs out of the total PWDs of the states. Among major states, Tamil Nadu has very high value followed by Uttar Pradesh, Rajasthan, Bihar, Odisha and Gujarat. Goa has the lowest seeing PWDs followed by Maharashtra, Nagaland, Chhattisgarh, Kerala and Punjab. According to 2011 Census data, the highest values are observed in Manipur, which is followed by Bihar, Jharkhand, Odisha, West Bengal, Rajasthan, Karnataka, Gujarat and Maharashtra. Lowest values are observed in Tamil Nadu, followed by Puducherry, Chandigarh, Punjab and Delhi.

Table 6 provides details of prevalence of hearing disability across regions and genders in 2001 and 2011. As shown in Census 2001, It is striking to note that all the north-eastern states had the highest prevalence of hearing PWDs. The highest values are observed in Nagaland, followed by, Sikkim, Mizoram, Meghalaya, Manipur, Assam, and Tripura. After these regions, some of the Union territories also experienced higher incidence of hearing disability. The lowest hearing disability is observed in Delhi, Uttar Pradesh, Chandigarh, Punjab, Bihar and Tamil Nadu. In 2011 Census also, north-eastern states observed higher rates of disability prevalence, the highest being Arunachal Pradesh Nagaland, Sikkim and Meghalaya, followed by Uttar Pradesh, Bihar, Punjab, Mizoram and Manipur. Lowest values are observed in Kerala, Lakshadweep, Rajasthan, Delhi and Andhra Pradesh.

AS presented in Table 7, most of the north-eastern states had higher prevalence of speech disability in 2001. The highest value was observed in Nagaland (16%), it was followed by Sikkim, Mizoram, Meghalaya, Goa, Assam, Andhra Pradesh and Manipur. Kerala, Tamil Nadu and Uttar Pradesh have very similar disability prevalence rates. North-Western states, Rajasthan, Punjab and Haryana, had the least number of persons with speech disability. In 2011, Maharashtra (16%) and Goa have comparatively much higher concentration of persons with speech disability. Speech disability in Bihar and West Bengal has also increased. Similar to 2001 figure, the least values were observed in north-western states like Punjab, Haryana and Rajasthan.

Table 8 shows proportion of movement disability to the corresponding population across states in Census 2001 and 2011. According to 2001 Census, Maharashtra and Chhattisgarh had the highest prevalence of movement disability, which was followed by Punjab, Madhya Pradesh, Jharkhand and Andhra Pradesh. North-eastern states observed the lowest values. In 2011 Census, Chhattisgarh and Puducherry observed the highest numbers of persons with movement disability, followed by Delhi, Daman and Diu, Rajasthan, Madhya Pradesh and Tamil Nadu. Again, the lowest values were observed in the north-eastern states. Bihar and West Bengal appear to have significantly reduced prevalence of movement disability.

**Table 6: Proportion of Hearing Disabled to the Corresponding Population in  
Census 2001 and 2011**

States	Census 2001			Census 2011		
	Person	Male	Female	Person	Male	Female
Jammu & Kashmir	4.68	4.48	4.94	20.52	20.87	20.06
Himachal Pradesh	9.77	9.30	10.42	17.19	16.50	18.05
Punjab	4.09	3.65	4.73	22.43	20.75	24.75
Chandigarh	3.91	3.71	4.22	16.73	14.50	19.94
Uttarakhand	8.21	7.78	8.80	20.34	18.67	22.41
Haryana	6.08	5.53	6.92	21.14	19.31	23.66
NCT of Delhi	3.71	3.35	4.27	14.69	13.93	15.77
Rajasthan	5.33	4.74	6.19	14.00	13.34	14.77
Uttar Pradesh	3.72	3.52	4.01	24.72	23.06	26.91
Bihar	3.92	3.84	4.04	24.55	22.94	26.73
Sikkim	16.85	16.83	16.88	29.38	30.55	28.02
Arunachal Pradesh	9.22	7.53	12.59	30.40	29.55	31.37
Nagaland	19.79	19.39	20.29	30.17	31.01	29.17
Manipur	10.55	9.81	11.44	22.02	21.45	22.66
Mizoram	15.12	14.93	15.36	22.12	22.30	21.92
Tripura	9.67	8.39	11.35	18.18	17.99	18.41
Meghalaya	12.73	11.72	13.89	27.87	28.08	27.64
Assam	9.77	9.26	10.43	21.16	20.12	22.36
West Bengal	7.12	6.72	7.66	15.62	14.71	16.79
Jharkhand	6.30	5.96	6.78	21.54	20.65	22.65
Odisha	8.24	8.03	8.49	19.11	18.26	20.12
Chhattisgarh	8.12	7.92	8.37	14.77	14.35	15.26
Madhya Pradesh	6.06	5.88	6.32	17.23	16.32	18.45
Gujarat	6.73	5.86	7.92	17.46	16.39	18.82
Daman & Diu	3.78	2.53	5.39	14.07	12.15	16.85
Dadra & Nagar H.	8.33	7.56	9.37	21.71	21.34	22.20
Maharashtra	5.89	5.55	6.39	15.97	15.66	16.39
Andhra Pradesh	5.38	4.64	6.34	14.75	13.66	16.03
Karnataka	5.30	4.73	6.06	17.80	16.89	18.91
Goa	6.35	5.30	7.71	16.20	15.40	17.04
Lakshadweep	8.76	8.44	9.14	13.87	12.53	15.32
Kerala	9.26	7.95	10.75	13.83	12.18	15.60
Tamil Nadu	4.42	4.41	4.44	18.67	16.71	21.12
Puducherry	8.81	7.09	11.09	20.38	18.07	23.11
Andaman & Nicobar	7.72	7.22	8.48	18.30	17.20	19.83

Source: Calculated from Census 2001 and Census 2011 Data

**Table 7: Proportion of Speech Disabled to the Corresponding Population in Census 2001 and 2011**

States	Census 2001			Census 2011		
	Person	Male	Female	Person	Male	Female
Jammu & Kashmir	5.60	5.67	5.51	5.17	5.54	4.69
Himachal Pradesh	8.18	8.31	8.01	5.33	5.65	4.93
Punjab	5.36	5.34	5.40	3.75	3.77	3.73
Chandigarh	5.68	5.78	5.52	6.49	6.43	6.59
Uttarakhand	8.60	8.78	8.35	6.66	6.82	6.47
Haryana	5.48	5.71	5.12	3.99	4.22	3.67
NCT of Delhi	6.57	6.50	6.68	6.43	6.46	6.37
Rajasthan	5.18	5.54	4.65	4.44	4.97	3.82
Uttar Pradesh	7.41	7.29	7.59	6.41	6.39	6.44
Bihar	6.91	6.82	7.05	7.33	7.29	7.38
Sikkim	15.58	14.50	16.97	8.67	8.36	9.03
Arunachal Pradesh	7.29	6.40	9.06	5.75	6.18	5.27
Nagaland	16.60	15.71	17.67	7.74	7.81	7.66
Manipur	9.76	9.72	9.81	4.55	4.77	4.29
Mizoram	12.53	12.37	12.72	7.67	7.33	8.07
Tripura	8.66	8.54	8.82	7.10	7.15	7.03
Meghalaya	11.91	11.43	12.46	6.11	6.05	6.17
Assam	10.74	10.68	10.82	8.28	8.50	8.02
West Bengal	9.20	8.94	9.56	7.30	7.21	7.42
Jharkhand	8.85	8.52	9.32	6.06	6.13	5.98
Odisha	6.72	6.61	6.86	5.51	5.71	5.27
Chhattisgarh	7.25	7.21	7.30	4.52	4.64	4.38
Madhya Pradesh	5.38	5.53	5.18	4.47	4.54	4.37
Gujarat	6.36	6.73	5.86	5.52	5.76	5.23
Daman & Diu	5.96	5.96	5.96	6.79	7.92	5.13
Dadra & Nagar H.	7.29	7.13	7.50	6.10	6.08	6.14
Maharashtra	7.20	6.83	7.75	15.98	15.41	16.74
Andhra Pradesh	10.18	9.82	10.65	9.69	9.93	9.39
Karnataka	9.64	9.39	9.98	6.85	6.86	6.84
Goa	11.86	11.67	12.11	15.97	16.50	15.41
Lakshadweep	12.34	14.10	10.30	4.52	5.73	3.22
Kerala	7.79	8.11	7.43	5.43	5.65	5.18
Tamil Nadu	7.58	8.61	6.62	6.79	6.77	6.81
Puducherry	7.03	6.64	7.55	6.04	5.85	6.27
Andaman & Nicobar	9.24	9.06	9.50	7.97	8.18	7.68

Source: Calculated from Census 2001 and Census 2011 Data



**Table 8: Proportion of Movement Disabled to the Corresponding Population in  
Census 2001 and 2011**

States	Census 2001			Census 2011		
	Person	Male	Female	Person	Male	Female
Jammu & Kashmir	12.54	13.57	11.20	16.10	17.16	14.71
Himachal Pradesh	29.82	32.22	26.52	20.96	22.53	18.99
Punjab	35.28	38.04	31.21	19.88	21.48	17.67
Chandigarh	24.64	26.21	22.13	25.78	27.20	23.74
Uttarakhand	29.00	31.45	25.59	19.97	22.13	17.28
Haryana	33.29	36.08	29.08	21.24	23.06	18.74
NCT of Delhi	27.51	29.47	24.38	28.69	29.43	27.62
Rajasthan	28.37	30.13	25.77	27.33	28.42	26.04
Uttar Pradesh	26.95	29.94	22.44	16.30	18.68	13.17
Bihar	27.14	30.65	21.89	15.85	18.28	12.55
Sikkim	10.66	11.45	9.67	11.37	12.46	10.10
Arunachal Pradesh	10.43	9.59	12.09	12.10	13.58	10.41
Nagaland	16.07	16.04	16.11	12.92	13.84	11.81
Manipur	21.77	22.69	20.67	9.08	10.15	7.85
Mizoram	15.46	16.18	14.60	13.03	14.17	11.69
Tripura	23.70	25.39	21.48	18.19	20.08	15.87
Meghalaya	17.80	18.89	16.57	11.99	12.85	11.02
Assam	17.34	18.95	15.29	15.83	17.52	13.88
West Bengal	22.34	25.27	18.41	16.01	18.18	13.26
Jharkhand	30.85	33.23	27.43	19.21	20.87	17.13
Odisha	24.56	26.91	21.61	20.89	22.67	18.77
Chhattisgarh	36.11	38.38	33.31	30.46	32.45	28.16
Madhya Pradesh	35.21	37.96	31.31	26.08	28.40	22.97
Gujarat	29.73	31.66	27.07	22.51	24.36	20.15
Daman & Diu	21.76	23.27	19.83	28.23	28.23	28.24
Dadra & Nagar H.	19.64	20.48	18.50	20.70	23.24	17.27
Maharashtra	36.31	40.12	30.72	18.51	21.12	15.03
Andhra Pradesh	30.47	33.15	26.96	23.78	26.78	20.25
Karnataka	28.34	31.39	24.26	20.54	23.56	16.87
Goa	31.18	34.67	26.65	16.90	18.53	15.16
Lakshadweep	30.10	33.74	25.87	22.35	25.06	19.43
Kerala	27.61	31.06	23.69	22.53	25.56	19.27
Tamil Nadu	21.54	27.65	15.85	24.34	27.00	21.01
Puducherry	34.15	37.54	29.63	29.99	33.37	25.98
Andaman & Nicobar	26.50	30.08	21.16	23.92	27.01	19.65

Source: Calculated from Census 2001 and Census 2011 Data

Census 2001 shows that Goa observed the highest proportion of persons with mental disability, as presented in Table 9. It was followed by Mizoram, Manipur, Kerala, Punjab, West Bengal and Maharashtra. Lowest mental disability was observed in the states of Arunachal Pradesh, Sikkim, Rajasthan, Tamil Nadu and Madhya Pradesh. It is also important to note that in some of the north-eastern states, there is very high level of disability, whereas in some very less and are among the lowest. In 2011, Kerala had the maximum prevalence of mental disability, it was followed by Mizoram, Chandigarh, Tamil Nadu and Delhi. Lowest incidence of mental disability was observed in Bihar, followed by Sikkim, Uttar Pradesh and Maharashtra.

Table 10 shows prevalence rates of mental retardation and mental illness across genders and regions in 2011. Mizoram has the highest numbers of mentally retarded people. Southern states, Kerala, Tamil Nadu, Puducherry and Karnataka have comparatively higher proportion of persons with mental retardation than the other states. Bihar, Uttar Pradesh, Nagaland and Sikkim have the least numbers of mentally retarded persons. Finally, absolute number of persons with mental retardation is higher than that of mental illness. Data on mental illness in 2011 suggests that Kerala has the maximum proportion of persons with mental illness, it was followed by most of the smaller states and union territories; Mizoram, Lakshadweep, Andaman and Nicobar, Meghalaya, Chandigarh, Goa and Tripura. Southern states have lower proportion of persons with mental illness. Karnataka has the least percentage of persons with mental illness out of total PWDs of the state. It was followed by Bihar, Uttar Pradesh, Andhra Pradesh and Maharashtra.

Table 11 presents proportion of “any other” disabled to the corresponding population in 2011. “Any other” PWD has emerged as one of the largest categories of disability. Punjab and Uttar Pradesh have around one-fifth of total PWDs under “any other” category, followed by Haryana, Tamil Nadu and West Bengal. Least values have been observed in union territories, north-eastern states and some smaller states. Also, the gender gap in the any other category of disability is very small.

Table 12 provides proportion of multiple disability to the total disabled population of that particular state as calculated by Census 2011. Proportion of individuals having multiple disability is maximum in the state of Sikkim (16%). Rajasthan, Jammu and Kashmir have also very high disability prevalence rate. The multiple disability prevalence rates vary between 8% to 10% for Odisha, West Bengal, Madhya Pradesh, Andhra Pradesh, Tamil Nadu and Karnataka, these states are the middle range. The lowest disability prevalence rate is observed in the state of Bihar (4.76%), followed by Uttar Pradesh, Punjab and Gujarat. Although, absolute number of males with multiple disability are higher than that of females, the gender gap for multiple disability is not wide.

**Table 9: Proportion of Mental Disability to the Corresponding Population in  
Census 2001 and 2011**

States	Census 2001			Census 2011		
	Person	Male	Female	Person	Male	Female
Jammu & Kashmir	8.22	8.75	7.53	8.97	9.08	8.82
Himachal Pradesh	11.10	11.68	10.31	9.11	9.66	8.42
Punjab	15.03	16.14	13.40	10.24	10.78	9.50
Chandigarh	11.58	11.45	11.78	12.48	12.90	11.86
Uttarakhand	10.21	10.97	9.16	9.66	10.59	8.49
Haryana	10.90	11.94	9.32	8.47	9.37	7.23
NCT of Delhi	11.04	11.43	10.43	11.23	12.05	10.06
Rajasthan	7.72	8.36	6.78	7.83	9.17	6.24
Uttar Pradesh	8.30	9.05	7.16	6.20	6.89	5.30
Bihar	8.76	9.50	7.65	5.44	5.97	4.71
Sikkim	3.92	3.76	4.13	5.66	5.41	5.95
Arunachal Pradesh	3.79	3.05	5.25	7.09	6.87	7.33
Nagaland	9.92	10.16	9.63	7.58	7.51	7.65
Manipur	16.64	17.26	15.91	10.77	11.12	10.36
Mizoram	17.81	16.51	19.37	17.38	17.31	17.47
Tripura	11.30	10.97	11.74	11.21	11.11	11.35
Meghalaya	11.10	11.15	11.03	10.54	10.33	10.78
Assam	8.95	9.30	8.51	9.41	9.90	8.85
West Bengal	14.66	14.78	14.51	10.31	10.38	10.22
Jharkhand	12.47	12.87	11.90	7.48	7.81	7.08
Odisha	10.14	10.26	10.00	9.26	9.37	9.13
Chhattisgarh	10.39	10.24	10.57	8.64	8.52	8.78
Madhya Pradesh	8.18	8.61	7.58	7.56	7.91	7.08
Gujarat	9.87	10.52	8.99	9.93	10.48	9.21
Daman & Diu	8.64	8.15	9.27	12.07	11.69	12.61
Dadra & Nagar H.	6.79	6.74	6.86	8.96	8.72	9.28
Maharashtra	13.59	13.19	14.18	7.39	7.29	7.52
Andhra Pradesh	11.37	11.21	11.58	7.75	7.56	7.96
Karnataka	9.85	9.58	10.20	8.68	8.30	9.13
Goa	22.72	22.31	23.25	10.58	10.81	10.33
Lakshadweep	12.87	10.99	15.06	12.88	13.01	12.74
Kerala	16.46	16.36	16.57	17.41	17.59	17.21
Tamil Nadu	7.76	9.16	6.47	11.34	11.19	11.53
Puducherry	8.84	8.76	8.94	10.56	10.60	10.52
Andaman & Nicobar	9.48	8.52	10.91	9.88	8.37	11.97

Note: Mental Disability in 2011 has been calculated by combining Mental Illness and Mental Retardation

**Table 10: Proportion of Mental Retardation and Mental Illness to the Corresponding Disabled Population: Census 2011**

States	Mental Retardation 2011			Mental Illness 2011		
	Persons	Males	Females	Persons	Males	Females
Jammu & Kashmir	4.63	4.78	4.43	4.34	4.30	4.39
Himachal Pradesh	5.79	6.15	5.33	3.33	3.51	3.10
Punjab	6.89	7.20	6.46	3.35	3.58	3.04
Chandigarh	7.37	7.81	6.72	5.11	5.09	5.14
Uttarakhand	6.18	6.76	5.45	3.48	3.83	3.04
Haryana	5.50	6.11	4.68	2.96	3.26	2.55
NCT of Delhi	6.96	7.50	6.17	4.28	4.55	3.89
Rajasthan	5.20	6.19	4.03	2.63	2.97	2.21
Uttar Pradesh	4.36	4.82	3.76	1.84	2.08	1.53
Bihar	3.83	4.12	3.43	1.61	1.85	1.28
Sikkim	2.84	2.80	2.88	2.82	2.61	3.07
Arunachal Pradesh	4.73	4.46	5.04	2.36	2.41	2.30
Nagaland	4.22	4.12	4.33	3.36	3.39	3.32
Manipur	8.28	8.42	8.11	2.49	2.70	2.25
Mizoram	10.46	10.28	10.66	6.93	7.03	6.81
Tripura	6.69	6.65	6.75	4.52	4.46	4.59
Meghalaya	5.26	5.29	5.23	5.28	5.03	5.55
Assam	5.49	5.78	5.17	3.92	4.13	3.68
West Bengal	6.77	6.77	6.77	3.54	3.61	3.46
Jharkhand	4.86	5.06	4.62	2.62	2.75	2.46
Odisha	5.82	5.98	5.63	3.44	3.40	3.50
Chhattisgarh	5.31	5.26	5.37	3.33	3.26	3.42
Madhya Pradesh	5.01	5.24	4.71	2.55	2.67	2.37
Gujarat	6.08	6.41	5.65	3.85	4.07	3.56
Daman & Diu	8.01	7.54	8.71	4.05	4.15	3.91
Dadra & Nagar H.	5.46	5.02	6.07	3.49	3.70	3.21
Maharashtra	5.41	5.34	5.49	1.98	1.94	2.03
Andhra Pradesh	5.84	5.74	5.96	1.90	1.82	2.00
Karnataka	7.10	6.81	7.44	1.58	1.49	1.69
Goa	5.50	5.67	5.33	5.07	5.14	5.00
Lakshadweep	6.93	8.95	4.76	5.94	4.06	7.98
Kerala	8.63	9.02	8.20	8.78	8.57	9.01
Tamil Nadu	8.55	8.50	8.61	2.79	2.69	2.92
Puducherry	7.73	7.85	7.60	2.83	2.75	2.92
Andaman & Nicobar	4.41	4.14	4.79	5.47	4.22	7.18

Source: Calculated from Census 2011

**Table 11: Proportion of Any Other Disabled to the Corresponding Disabled Population:  
Census 2011**

<b>States</b>	<b>Persons</b>	<b>Males</b>	<b>Females</b>
Jammu & Kashmir	18.54	17.99	19.26
Himachal Pradesh	18.69	18.49	18.93
Punjab	25.32	25.38	25.24
Chandigarh	17.46	17.77	17.00
Uttarakhand	16.58	16.69	16.44
Haryana	21.38	21.40	21.35
NCT of Delhi	15.76	15.74	15.78
Rajasthan	12.77	13.37	12.05
Uttar Pradesh	22.76	22.37	23.28
Bihar	18.52	18.35	18.75
Sikkim	13.52	13.11	14.00
Arunachal Pradesh	14.51	14.60	14.40
Nagaland	16.33	15.66	17.13
Manipur	14.74	14.49	15.02
Mizoram	12.63	12.31	13.00
Tripura	18.38	18.33	18.43
Meghalaya	19.67	19.66	19.68
Assam	18.22	18.08	18.38
West Bengal	19.97	20.25	19.62
Jharkhand	14.59	14.56	14.64
Odisha	13.89	13.93	13.85
Chhattisgarh	12.31	12.53	12.05
Madhya Pradesh	19.01	18.69	19.44
Gujarat	18.10	17.53	18.83
Daman & Diu	12.02	14.00	9.15
Dadra & Nagar H.	14.66	14.05	15.49
Maharashtra	17.23	16.49	18.23
Andhra Pradesh	18.08	17.50	18.75
Karnataka	18.63	18.32	19.01
Goa	17.52	17.24	17.82
Lakshadweep	11.33	11.93	10.68
Kerala	12.62	12.54	12.70
Tamil Nadu	20.20	19.95	20.52
Puducherry	13.70	13.41	14.06
Andaman & Nicobar	12.58	12.69	12.43

Source: Calculated from Census 2011

**Table 12: Proportion of Multiple Disability to the Corresponding Disabled Population:  
Census 2011**

States	Persons	Males	Females
Jammu & Kashmir	12.31	11.95	12.77
Himachal Pradesh	11.93	11.66	12.28
Punjab	5.81	6.04	5.49
Chandigarh	9.07	8.86	9.37
Uttarakhand	11.08	11.01	11.17
Haryana	8.65	8.82	8.42
NCT of Delhi	10.38	10.19	10.65
Rajasthan	13.51	12.33	14.91
Uttar Pradesh	5.22	5.35	5.05
Bihar	4.76	5.05	4.35
Sikkim	16.17	15.58	16.84
Arunachal Pradesh	9.01	9.13	8.88
Nagaland	11.26	10.98	11.59
Manipur	6.07	6.20	5.91
Mizoram	13.74	13.32	14.23
Tripura	10.11	9.80	10.50
Meghalaya	8.07	8.04	8.10
Assam	10.32	9.93	10.76
West Bengal	9.74	9.46	10.10
Jharkhand	7.64	7.49	7.83
Odisha	10.14	9.78	10.58
Chhattisgarh	11.51	10.73	12.41
Madhya Pradesh	8.21	7.91	8.62
Gujarat	6.88	6.94	6.79
Daman & Diu	9.43	8.92	10.16
Dadra & Nagar	14.85	14.21	15.70
Maharashtra	5.55	5.61	5.46
Andhra Pradesh	8.40	8.35	8.45
Karnataka	7.55	7.64	7.44
Goa	7.80	7.71	7.90
Lakshadweep	14.18	13.96	14.41
Kerala	13.03	13.00	13.05
Tamil Nadu	7.86	8.08	7.60
Puducherry	7.37	7.46	7.27
Andaman & Nicobar	11.07	11.06	11.08

Source: Calculated from Census 2011

## Distribution of Incidence of Disability across Districts of India in 2011:

### Evidence from GIS Mapping

This section illustrates disability prevalence across diverse regions of India with the help of Geographical Information System (GIS Mapping). The study makes use of district level Census data of 2011. The district level analysis is undertaken for different types of PWD categories mentioned in the Census of India.

Figure 1 presents the spatial image of total disability prevalence in India at the regional level. The prevalence rates are calculated as a proportion of persons with disability out of total population in that particular district. Disability is well spread across most districts of India. However, there are some clusters where there is very higher concentration of incidence of disability. In addition, there are some zones where there is continuous spread of prevalence of disability (beyond the territorial boundary of the states). The regions which have witnessed very high disability prevalence are the states of Jammu and Kashmir, Odisha, some parts of Maharashtra, and Arunachal Pradesh, followed by Rajasthan, Punjab, Haryana, Karnataka, Andhra Pradesh and Chhattisgarh. Comparatively lower incidence of disability can be observed in the states of Tamil Nadu, some parts of Kerala, Uttar Pradesh and Bihar.

**Figure 1: Prevalence of Disability across Districts of India in 2011**

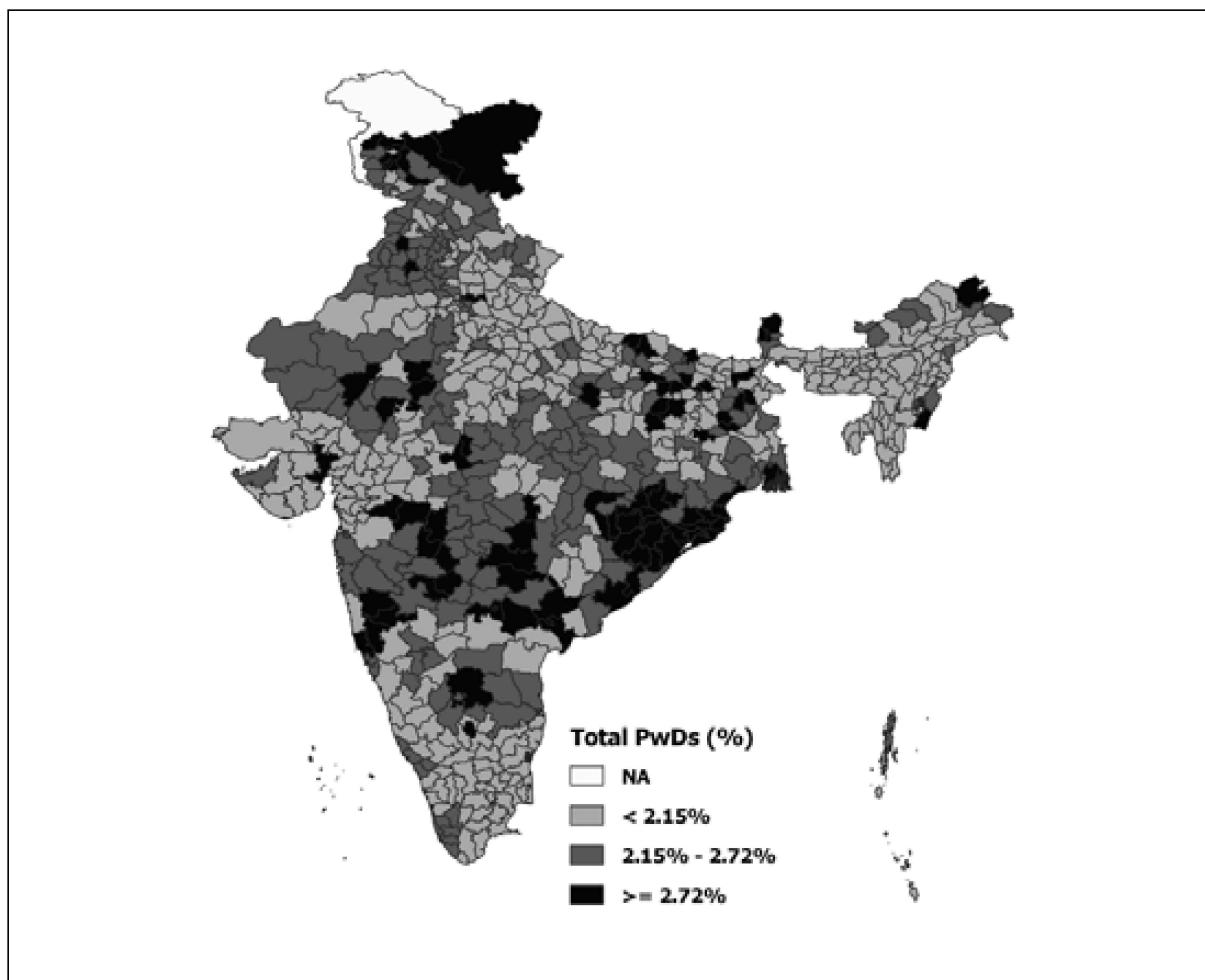
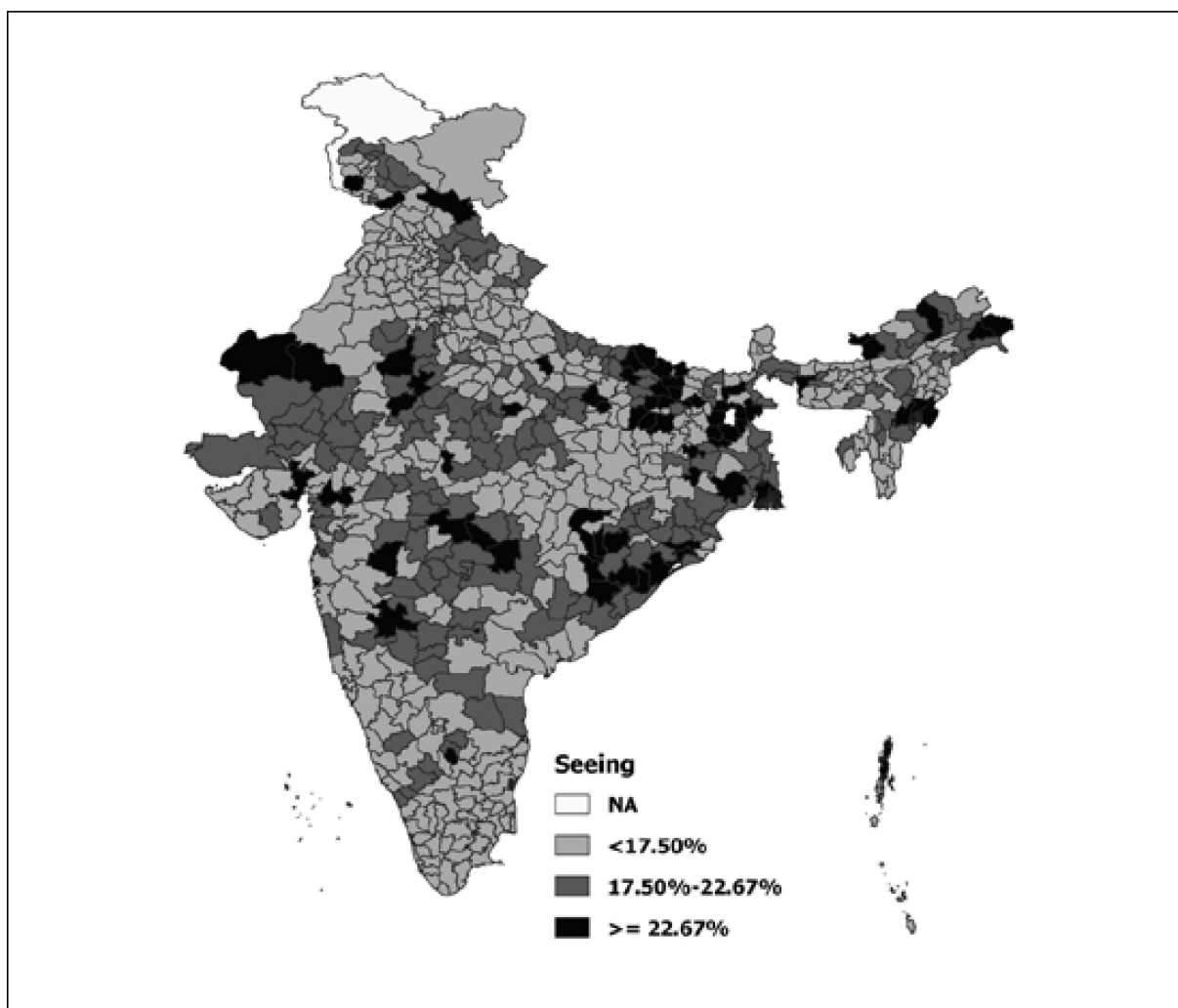


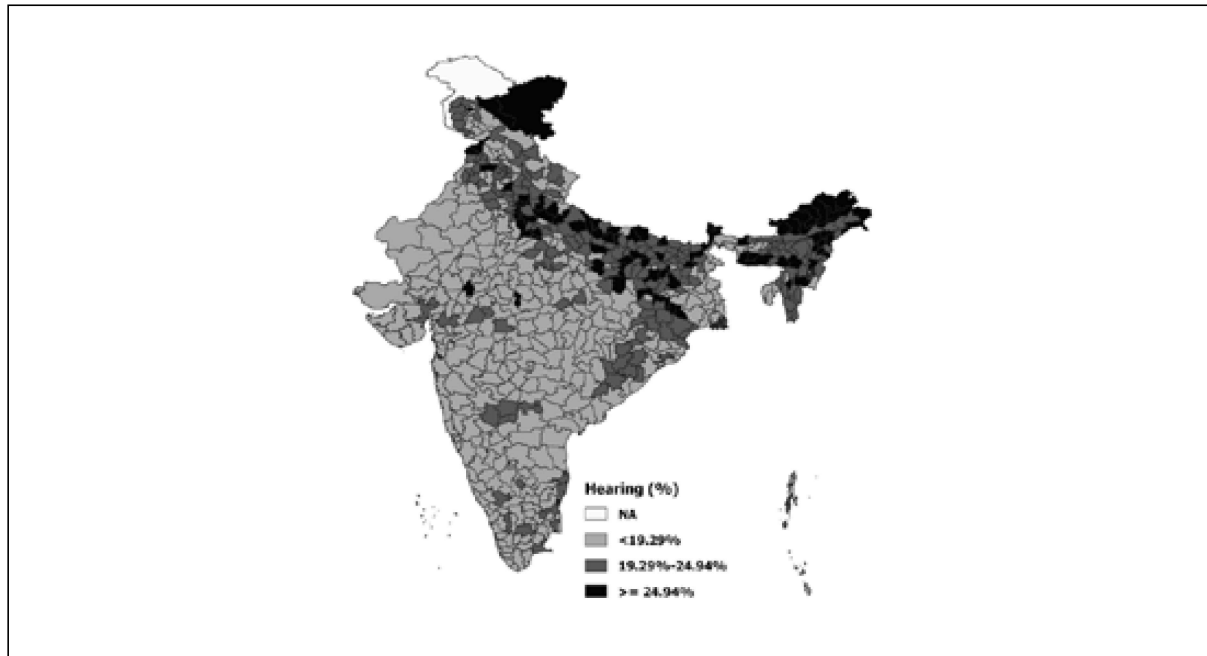


Figure 2 illustrates prevalence of persons with visual disabilities across the districts of India. The prevalence rates are calculated as a proportion of persons with seeing disability out of total persons with disability in that particular district. The highest proportion of persons with seeing disability is observed in the districts of South-Western Rajasthan, Gujarat, some parts of Madhya Pradesh, Eastern Odisha and Maharashtra, and in the north eastern states of Arunachal Pradesh and Manipur. The lowest prevalence rates are recorded in the southern most states followed by Punjab, Haryana, Uttar Pradesh and Bihar.

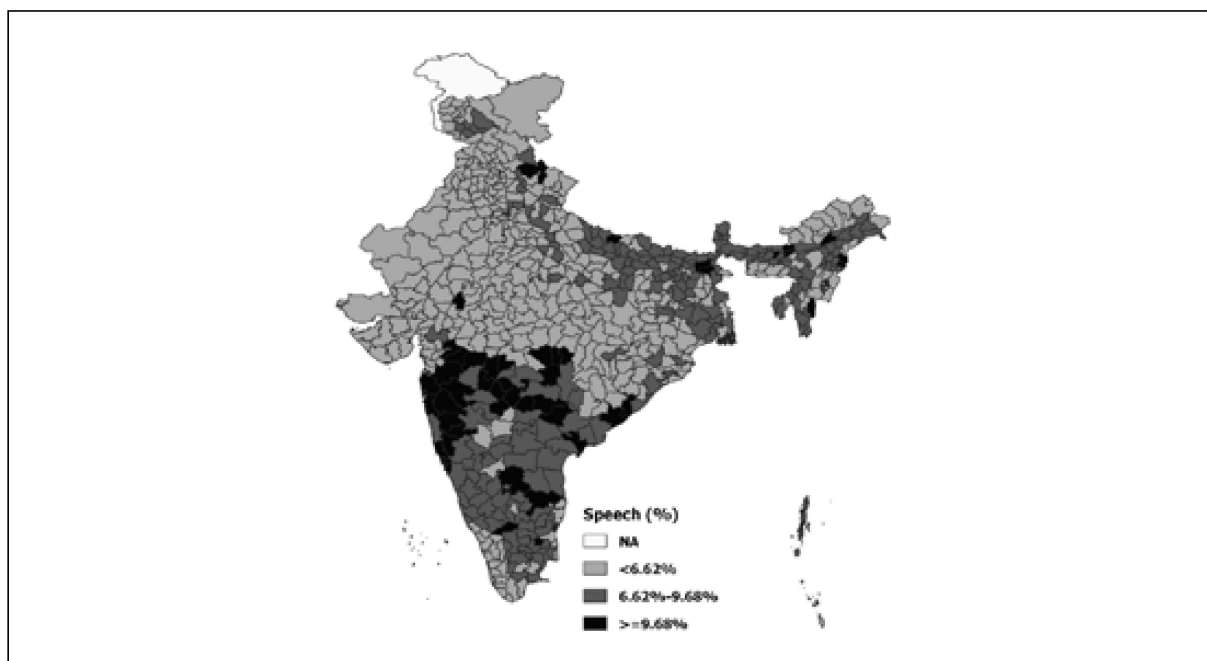
**Figure 2: Prevalence of “Seeing” Disability across Districts of India in 2011**



Prevalence of hearing disability across districts of India is depicted in the figure 3. It is interesting to note that the maximum concentration of hearing disability is continuously clustered in the regions ranging from North-Western (around Jammu and Kashmir) to the most parts of north-eastern regions, that is the areas between the Himalayas and the great north Indian plains. Some parts of Odisha has also recorded higher incidence. Therefore maximum prevalence of hearing disability has been observed in the districts of Jammu and Kashmir, Himachal Pradesh, Uttar Pradesh, Bihar, Odisha and most parts of north-eastern states. In most other parts of the country, the concentration is not clustered and are only intermittent in different regions.

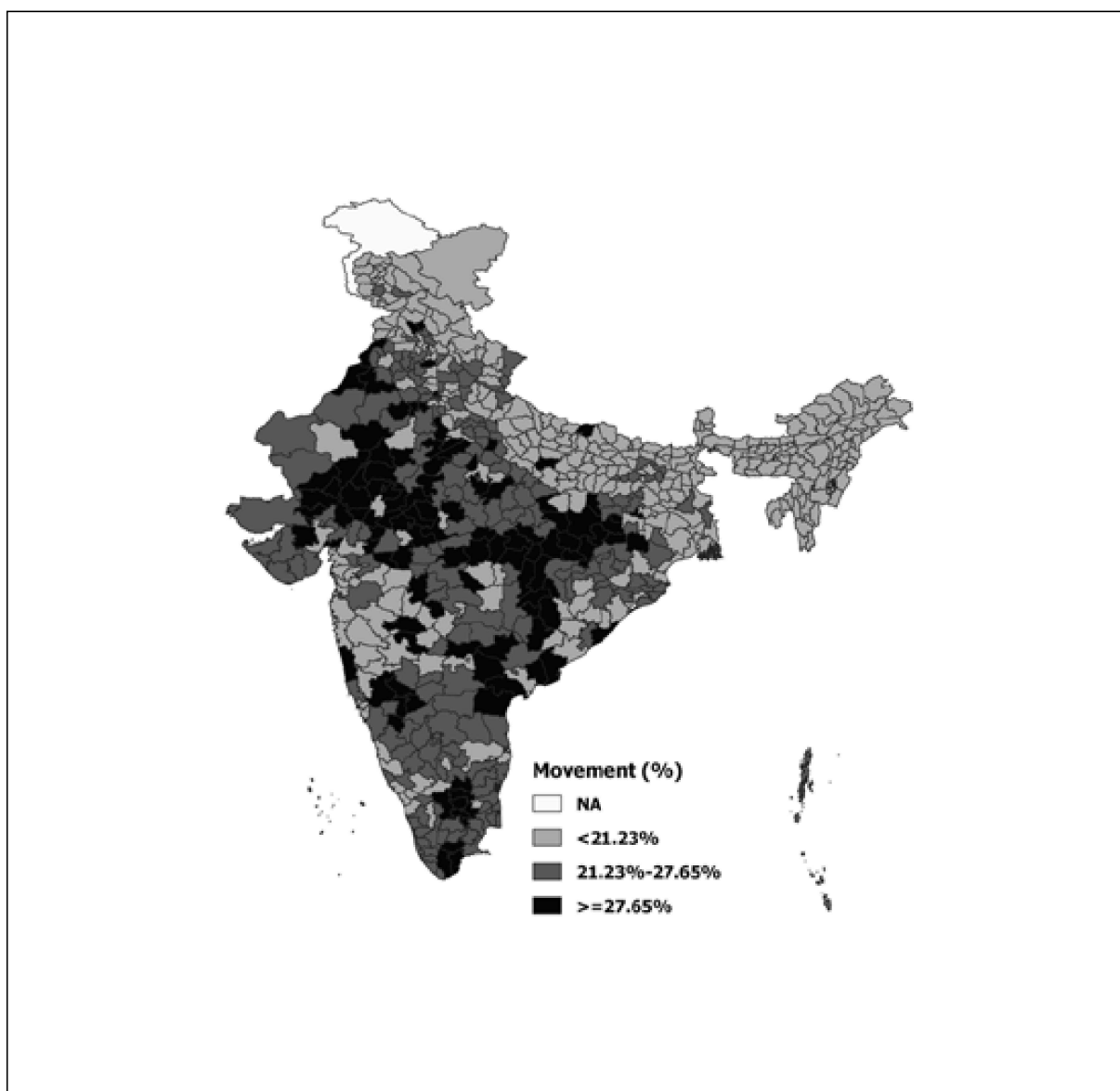
**Figure 3: Prevalence of Hearing Disability across Districts of India in 2011**

Distribution of speech disability across districts of India is shown in the figure 4. Out of total PWDs, about 9% constitute individuals with speech disability. The incidence of speech disability is more concentrated in the southern parts of India. A continuous range can also be observed in the states of Some parts of eastern Uttar Pradesh, Bihar, West Bengal, Tripura, Sikkim, Nagaland and lower parts of Arunachal Pradesh. The most severe concentration can be seen across the districts of Maharashtra and some parts of Karnataka and Andhra Pradesh.

**Figure 4: Prevalence of Speech Disability across Districts of India in 2011**

It is also interesting to highlight that the districts where there is higher prevalence of hearing disability observed lower prevalence of movement disability. It is one of the most common forms of disability, as shown in figure 5. The incidence of movement disability is well distributed across the districts of India. The highest cluster of movement disability is recorded across the districts of eastern Rajasthan, Madhya Pradesh, Jharkhand and Chhattisgarh. Some concentration can also be seen in central part of Tamil Nadu.

**Figure 5: Prevalence of Movement Disability across Districts of India in 2011**



Mental retardation is more among the states which are doing better on socioeconomic indicators. As shown in the figure 6, the retardation is predominant among the states of Punjab, Kerala, Tamil Nadu followed by eastern parts of Gujarat. Comparatively moderate levels of mental retardation is observed across the southern districts of Andhra Pradesh and Karnataka and some parts of Maharashtra. Among the north-eastern states, Tripura and Mizoram recorded higher prevalence.

**Figure 6: Prevalence of Mental Retardation across Districts of India in 2011**

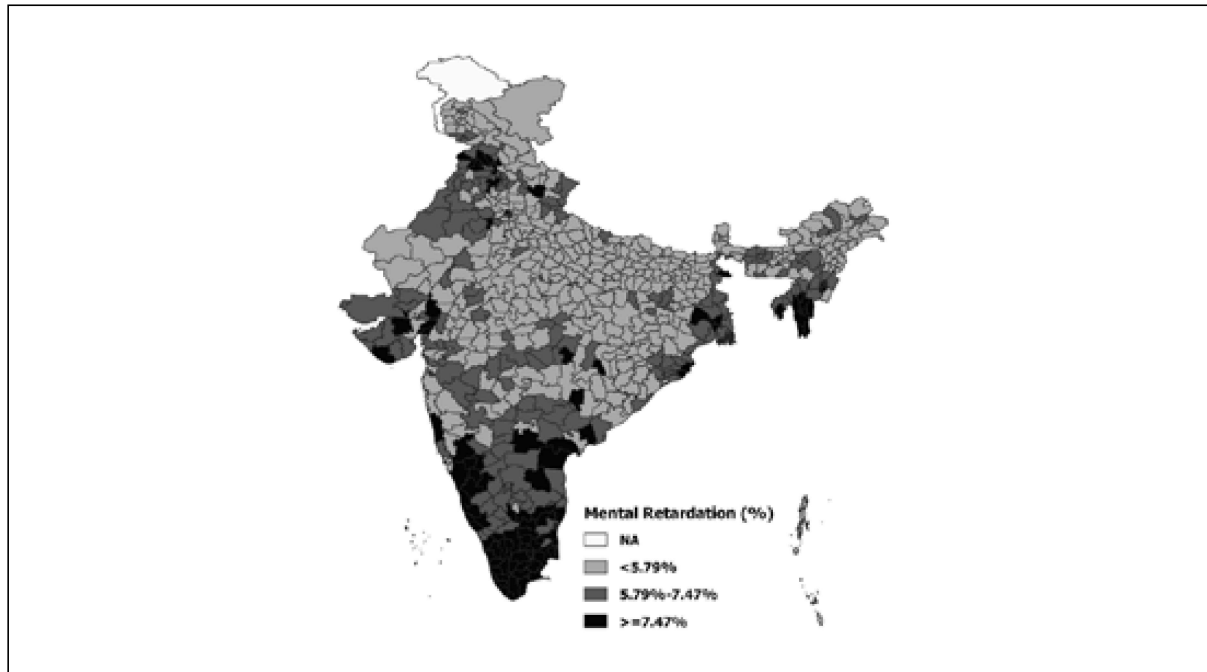
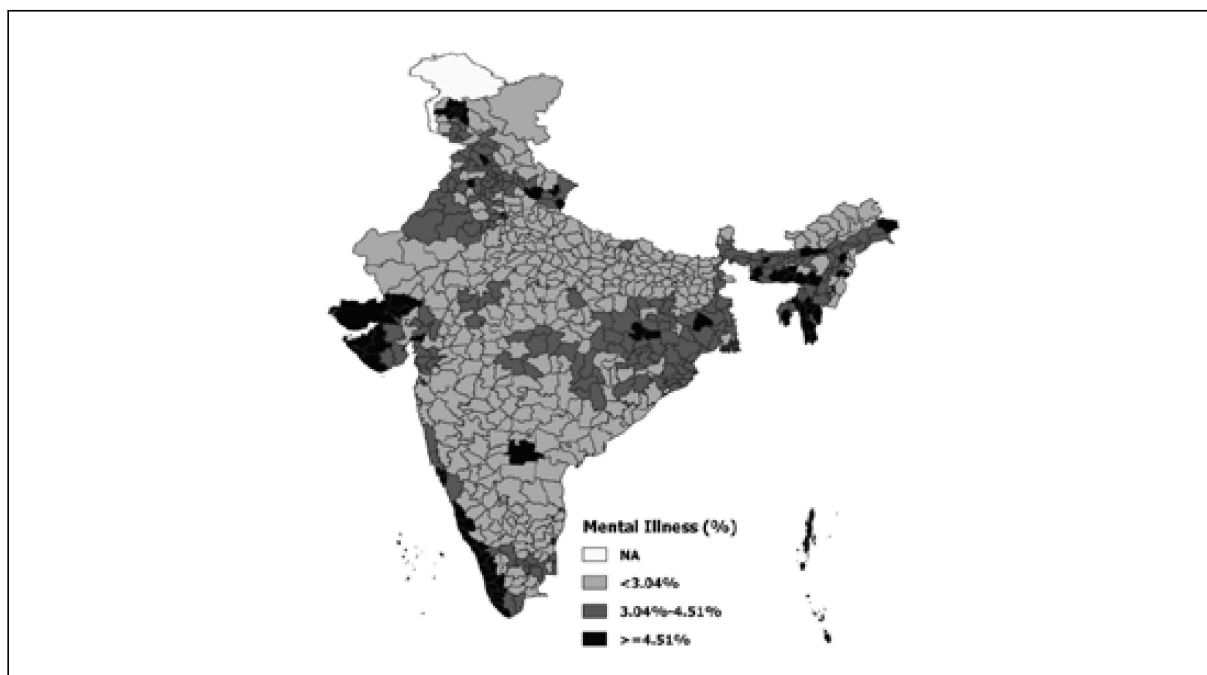


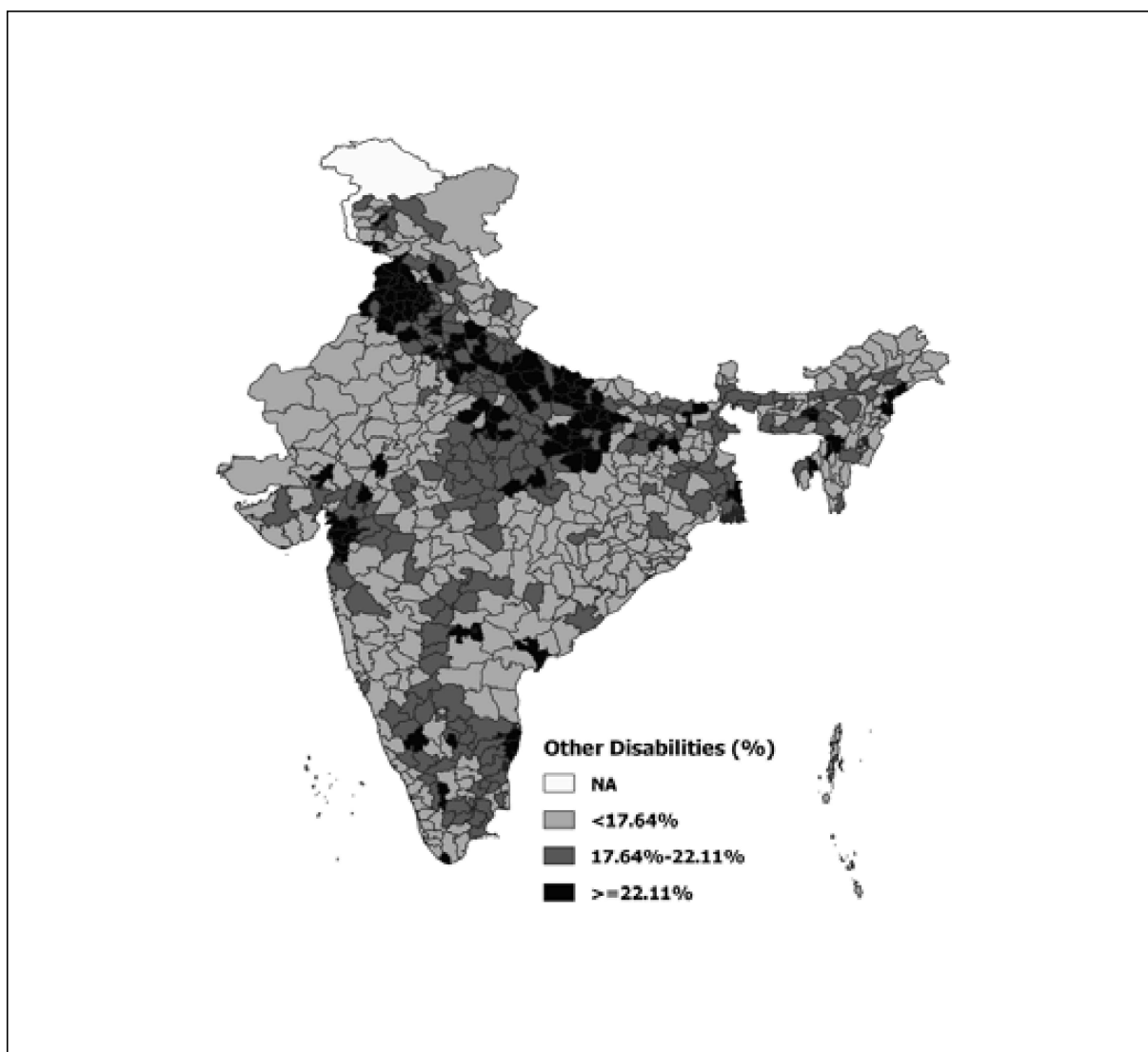
Figure 7 shows the spatial picture of prevalence of mental illness across the districts of India in 2011. The highest disability prevalence is recorded in the western parts of Gujarat and Kerala, followed by Meghalaya and Mizoram. Assam and some parts of Arunachal Pradesh also scored higher incidence of mental illness. Comparatively moderate level of mental illness is found in the districts of Punjab, West Bengal and Jharkhand.

**Figure 7: Prevalence of Mental Illness across Districts of India in 2011**

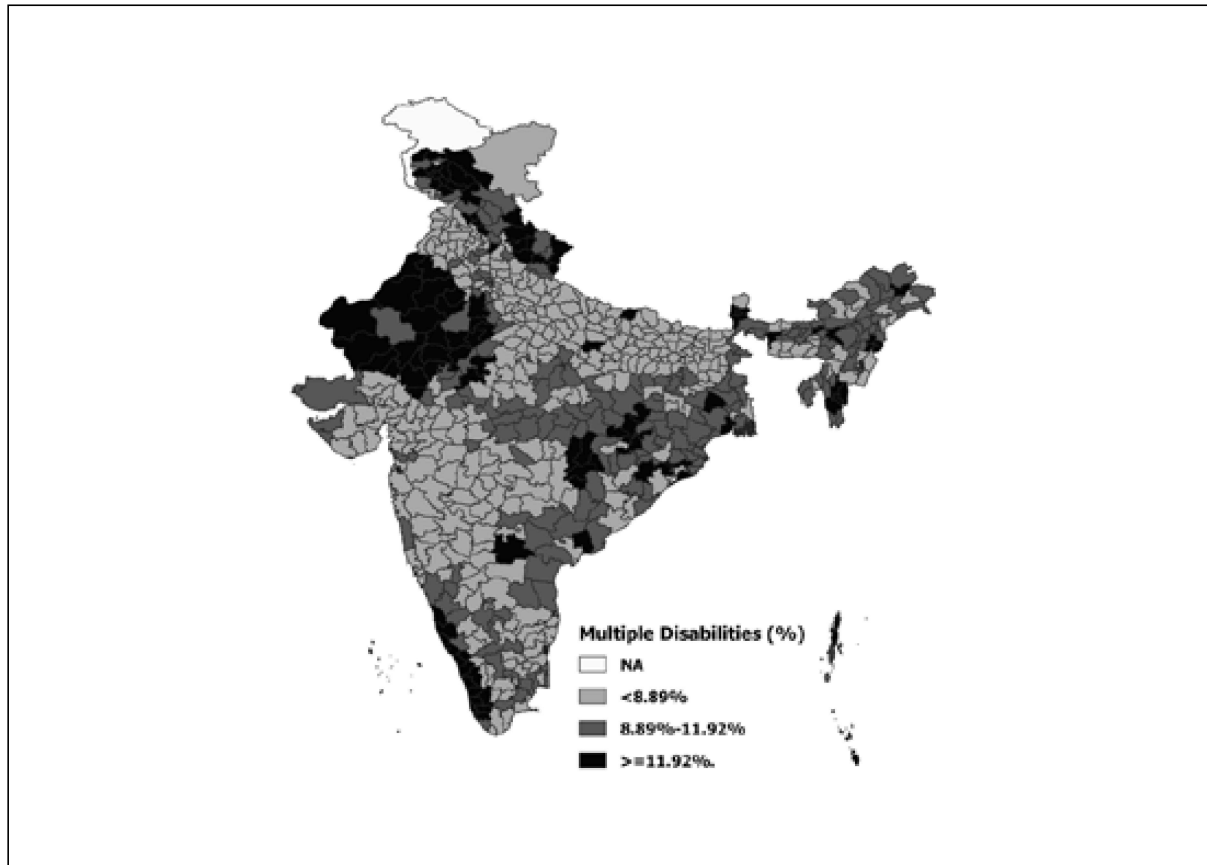


Data on Any-Other category of disability was collected for the first time in India in Census 2011. It has emerged as one of the largest categories of disability (about 21%). The figure 8 shows that the clusters which are continuously spread are the regions of Punjab, Haryana, Uttar Pradesh, Bihar and some parts of northern Madhya Pradesh. There are several continuous and discontinues spatial zones. However, it is perceptible that the incidence is more among the districts of north India. Increase in the number of nay-other category of disability also suggest lack of awareness about disability and ambiguous enumeration process followed by stigma, discrimination and marginalisation.

**Figure 8: Prevalence of “Any-other” Disability across Districts of India in 2011**



Multiple disability is considered as the most severe form of disability. The spatial pattern is depicted in the figure 9. An enormous territory of high predominance of multiple disability is spread among the regions of Jammu and Kashmir, Himachal Pradesh, most parts of Rajasthan, western Kerala, West Bengal, Jharkhand, Odisha and some parts of Madhya Pradesh. North-eastern regions have also observed very high prevalence of multiple disability. Uttar Pradesh and Bihar seems to have recorded lower prevalence rates.

**Figure 9: Prevalence of Multiple Disability across Districts of India in 2011**

In general, it is expected that the district having better socioeconomic and demographic indicators lead to lower prevalence of disability. There are regions which are better off on these fronts like Tamil Nadu and Kerala but higher prevalence of disability is observed. On the other hand, among the bigger states disability prevalence is lowest in Maharashtra. Therefore, there are mixed results and no conclusion can be drawn simply by looking at spatial patterns. In this context, the next chapter of the thesis makes an attempt to identify and estimate the factors which affect the prevalence of disability in a particular district in the broader framework of social model of disability.

## CONCLUSION

As per Census data of 2011, on an average, one out of each tenth family includes a disabled member in India. The decadal growth among PWDs of India is higher in urban areas than the rural areas. At all India level, the total number of PWDs in 2001 was 2.19 crore, which increased to 2.68 crore in 2011. In percentage terms it was 2.12% and 2.21% respectively. The highest proportion of individuals with disabilities can be seen among SC communities (2.45% in 2011), and least among STs (2.05%). A cursory glance across the district level distribution of persons with disabilities suggests that PWDs are scattered across every nook and corner in India with significant temporal and spatial variations. It is also evident that the most southern states reported higher number of persons with disabilities than the northern counterparts. Southern most states, Kerala and Tamil Nadu, which are also better off on various socioeconomic parameters, have higher rates of disability prevalence. In this context, Kulkarni and et. al., (2019) pointed out that the southern states have provided welfare measures

to the PWDs in a better way and more comprehensively than the northern states. Therefore, the northern states may be disinclined in reporting prevalence of disability, as it will add policy liability on the states.

The disabled communities are disadvantageously placed in the society and require immediate affirmative interventions. Limited public health care facilities, increasingly unaffordable private health services, low level of income and also lower coverage of social security system will lead to higher burden of disability on society. In this context, it is pertinent that the state and society should pay special attention to persons with disabilities, particularly, under the broader ambit of the social protection policies of the state. There is a dire need for effective policy interventions to balance regional development and framing disability policies in the context local idiosyncrasies.

A number of steps need to be taken by the government along with the coordinated efforts of the civil society and the communities to strengthen the disability sector. Little intervention can bring perceptible changes in their lives. There is urgent need to improve the robustness and reliability of disability data at a par with the international standards. In addition, the disabled communities should also be involved at different stages from the initial stage of data collection to the upper stage of designing and executing public health policies. The enumerators should be trained about the appropriate methods to collect quality data and the respondents should be sensitised about its importance. The upcoming round of Census enumeration to be conducted in 2021 has gained momentum in India. It is evident from the body of literature that there is underreporting in the disability estimates of India. In this context, various related issues have been highlighted in the present study, if these pertinent issues are taken into consideration, these may lead to improvement and robustness in the validity and reliability of India's disability estimates in the coming Census survey under the broader ambit and commitment for the 2030 Agenda for Sustainable Development Goals.

In the light of these discussions, no matter how little has been contributed by the government in the disability sector, many Disability Rights Organisations and advocacy groups believe that coining the terms like "Divyang", enacting the PWDs Act of 2016 (not adequate but at least an improvement over the earlier provisions) and initiatives like "Accessible India Campaign" and "Divyang Kumbh Mela" recently held at Allahabad, etc. have emerged as silver linings in the times of hopelessness and despair among the differently-abled. The recent global pandemics like "COVID-19" gives an opportunity to the government to reorient its health strategies towards the disability sector. We need to learn from the contemporary experiences and create accessible environment for the disabled and build holistic health infrastructures in the long run. PWDs are often stigmatized and discriminated and excluded which is a matter of grave concern. The disabled are often afraid of being left out, neglected, or intentionally excluded. Along with the social protection policies of the state, moral support and solidarity by the community and building trusts among the PWDs are crucial that they realised their rights and needs are not compromised and "they are not left-behind".

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