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# PHYSICALLY DISABLED PERSONS OF KERALA

DEPARTMENT OF ECONOMICS & STATISTICS
THIRUVANANTHAPURAM

AMATURE THURSDAY

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ADDITION TO RECORD OF THE PROPERTY OF THE PROP

Government of Kerala

# Estimates on Physically Disabled Persons of Kerala



Department of Economics and Statistics 1996 Daysmisson of Kenda

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# PREFACE

Disabled persons are defined as all those who suffer from malformation, deformities and other deficiencies-physical or mental -which prevent their normal functioning. At the same time a large proportion of the disabled persons are intelligent and, if given the right opportunity and environment, they develop their capabilities through education and training. What they need is proper medical attention, special education, training and guidance, to make available opportunities for suitable work and to ensure their full integration in society.

Reliable statistics regarding the number of disabled persons and its break-up in each category of disability are not available in India. The absence of statistics of disabled persons makes their rehabilitation a very difficult task. Conceptual problem, complexities in the nature of disableness, the desire of disabled persons to shun publicity etc. makes the collection of reliable data also very difficult.

In its efforts to rehabilitate the disabled persons, The Government of Kerala has now decided to conduct a survey to estimate the number of disabled persons according to nature of disability. But the results of this survey will be available only after one year. It is in this context the Department of Economics and Statistics has decided to document the available statistics in the form of a booklet. In this booklet an attempt is made to estimate the number of persons affected by three types of physical disabilities in Kerala based on 36 and 47th yound of National Sample Surveys

This report was prepared by Sri.N.Rajendra Prasad, Research officer of this Directorate. I hope this report will be found useful to the administrators and policy makers for evolving suitable measures and the strategies for the benefit of disabled persons in Kerala and also to researchers and others interested in this area. Suggestions for improvement are most welcome.

Thiruvananthapuram, 10-01-1996

Dr. M.Kuttappan
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# PREFACE

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#### INTRODUCTION

The year 1981 was declared by the United Nations as the International year of the disabled. This declaration paved the way for enlightening the attention of the administrators and social organisations for the development of physically disabled persons. Though physical disability is wide spread we have no reliable data regarding the number of disabled persons. Collection of data of disabled person is a sensitive process as disability itself is difficult to define and the non-medical investigators who are liable to collect the data are not so competent and capable to determine the degree of handicap. Same is the problem on the part of the respondents-informants who are generally hesitant to reveal their disability.

In view of the difficulties involved in adopting some feasible and practical concept and definition of disability for the purpose of sample survey, a working group of experts from relevant medical disciplines was constituted by the Governing Council of the National Sample Survey Organisation to go into the issues involved. The working group decided to devote the 36th round of National Sample Survey during 1981 to collect data on the following types of physical disabilities viz. (i) visual disability. (ii)communication(hearing and speech) disability and (iii) locomotor disability.

In the population census of 1981 also, the aggregate numbers of those who are totally blind, totally dumb and totally crippled were collected. In this census report itself it is reported that the intention of collections of such data was to make available a frame mainly for sampling purposes so as to permit sample surveys in future.

In 1991, the 47th round survey was conducted to collect the statistics of disabled persons. The National Sample Survey Organisation has published the report in June 1994.

In this paper an attempt is made to estimate number of persons affected by three types of physical disabilities in Kerala based on the 36<sup>th</sup> and 47<sup>th</sup> rounds of National Sample Surveys. The proportion of handicapped persons from N.S.S is applied to the population of 1981 and 1991 census and the projected population for 1995.

# Disability

According to the literature dealing with health, a disability means a any restriction or lack of ability to perform an activity in the manner or within the range considered normal for human being". It is characterised by deficiencies of customarily expected activity performance and behaviour. The disability may arise as a direct consequence of any loss or abnormality or psychological, physiological or anatomical structure of functions, or as a response by an individual to a physical and sensory loss or abnormality.

For deciding whether a person is disabled for the purpose of the survey enquiry, the question of curable or otherwise was not considered. The physical disability to be covered under the enquiry is "distinguished from morbidity. Morbidity covers cases of illness or injury of recent origin which have not resulted in the loss of ability to see, hear, speak or move. The cases of morbidity remained outside the coverage of the enquiry.

# Visual disability

Visual disability means loss or lack of abilities to execute tasks requiring adequate visual acquity. In the survey enquiry, persons having visual disability includes those who did not have light perception on both the eyes taken together and also those who had light perception but could not correctly count fingers of a hand even with spectacles from a distance of three metres or ten feet in good daylight.

# Communication Disability

Communication disability referred to the inability to hear or to speech defects. The speech defects included inability to speak or voice defects.

Hearing is the ability to, perceive sound. The hearing ability is judged by taking into consideration this ability for the better car. For the purpose of the survey enquiry, the person having one ear with normal hearing ability and the other with total loss of hearing ability was treated as having normal hearing ability. Hearing ability was judged without the use of hearing aid. A person's hearing disability was classified into (i) Cannot hear at all (not hearing loud sound such as thunder and understanding only gestures) (ii) profound (hearing only loud sound such as thunder and understanding only gestures) (iii) Severe (that is hearing only shouted words or hearing if the speaker is in front) and (iv) Moderate (persons having hearing disability to such extent that they usually ask to repeat or like to see the face of the speaker or feel difficulty in conducting telephone conversation or in hearing whispers)

# Locomotor Disability

Locomotor disability means an individual's inability to execute distinctive activities associated with moving both himself and objects from place to place.

The loss or lack of normal ability of an individual associated with moving both himself and objects from one place to another can occur due to (i) Paralysis of the limb or body, (ii) deformity of the limb (iii) amputation (iv) disfunction of joints of the limb and (v) deformity in the body other than that in the limb (Example deformity in spine, deformity in neck) The hunch-back and dwarfs were also included under locomotor disability for the purpose of the survey.

All cases of fracture not attended by medical experts for more than three months, and subsequently having deformity of the limb or disfunction of the joints, were treated as cases of locomotor disability. The cases of fracture under plaster or under other treatment were not treated as cases of locomotor disability.

A person was considered as having multiple locomotor disabilities if the person had two or more locomotor disabilities due to paralysis/deformity limb/amputation/disfunction of joints. For persons having locomotor disabilities of all the four types, disabilities of the first three types were taken into consideration.

#### Observations

As per the 1991 census report there are 55 lakhs households in the State. The National Sample Survey Organisation in the 47th round of the survey, conducted field surveys in the 2595 households for the central samples. Among them 1907 households are in the rural sector and 688 households in the urban sector.

The estimated numbers in the following reports and tables are obtained by applying survey based proportions of 47th round to census/projected population.

In table 1 rural, urban and total population of 1981 census and 1991 census and the projected population of 1995 by the department of Economics and Statistics are presented. Out of 206.3 lakhs of rural population in 1981, the number of disabled persons was 3.38 lakhs which comes to 1.65% of total population against all India average of 1.84%. In the urban sector the estimated number of disabled was 0.78 lakhs against urban population of 47.7 lakhs. The percentage of disabled to total population comes to 1.65 against All India rate of 1.42. Thus it can be seen that the percentage of disabled person in the rural area in Kerala is less than the All India average whereas in the urban area the percentage is more than All India average The estimated number of disabled in the State was .4.17 lakhs against the total population of 254 lakhs the percentage comes to 1.65

According to the N.S.S. 47th survey conducted in 1991 the proportion of disabled person in the rural area was 1.95 and in urban area 1.75 as against the respective All India average of 1.99% and 1.57%. In the 1991 census the total population of the State was 290.9 lakhs of which the estimated disabled comes to 5.51 lakhs, which constitutes, 1.89% of total population. Against the rural population of 214.1 lakhs the estimated disabled were 4.17 lakhs, the percentage is 1.95. In urban sector the disabled were estimated to 1.34 lakhs for total population of 76.8 lakhs, the percentage comes to 1.75. The percentage of disabled in rural and urban section during 1981 were more or less equal i.e., 1.64 and 1.65 respectively. But in 1991, the percentage show much difference. The percentage in the rural sector is 1.95 and in the urban sectors it is 1.75, which reveals that the percentage of the disabled persons in rural sector is .020% higher than the urban area. The medical facilities and awareness of the medical treatments in the urban people may be the main reason for the difference.

The table II represents the percentage of disable persons in various types of disabilities i.e., visual, hearing, speech and locomotor disabilities, in rural and urban of 1981 and 1991. The percentage of locomotor disability in rural as well as in urban sector are very higher than the other types, i.e., visual hearing and speech disabilities. In the urban people this also shows a little less percentage than the rural people.

The number of disabled according to various types of disabilities to total population of 1981 & 1991 census and to the projected population of 1995 are presented in table No.III.

The degree of disability in rural and urban sectors and in both series seems similar. The details of degree of disability in sex-wise is given in table IV. For determining the degree of disability of a disable person, self care, such as ability to go to latrine, taking food, getting dressed etc. were taken into account. Irrespective of whether or not a disabled person had "single " or "multiple" disability, he/she was classified into one of the three categories i.e., (i) those not able to take self care even with aid/appliance, (ii) those able to take self care without aid/appliance. The degree of disability referred to the above three categories are termed as (i) cannot function even with aid/appliance (ii) can function only with aid/appliance and (iii) can function without

aid/appliance. In the State more than 25% and 21% in rural and urban sector respectively among the total disabled persons were observed as severely disabled as they could not function even with aid /appliances. At the All India level also the percentage is 25 & 20 respectively.

#### Age at the onset of disability

Some people are born disabled and some acquire disability after birth in the course of life. For those who acquired disability after birth, information relating to age at the onset of disability was collected. In order to study the pattern of age at the onset of disability, the persons of age 60 years and above who acquired disability have been considered and their distribution over age at the onset of disability for rural and urban sectors is given in table V & VI. From the distribution of disabled person of age 60 years and above, it is revealed that physical disability is mainly an old age problem. The majority i.e. about 59 to 70 %, acquired disability at the age of 60 years and above in all types of disability in both the rural and urban sectors. The next important age group was 45 to 59 were the percentage is 15 to 25. The third position comes to the age group of 35-44. Altogether the results given an indication that for all the types of disability i.e., visual, hearing, speech and locomotor disabilities, the possibility of incidence was relatively higher in the older ages than that in the middle and lower ages of life.

The aggregate numbers of those who are totally blind, totally dump and totally crippled were collected in the listing stage of 1981 population census. According to the census report out of a total population of 254 lakhs 31053 were disabled which constituted 8178 persons are totally blind, 12056 persons are totally crippled and 10819 persons are totally dump. The district wise distribution of totally blind, totally crippled and totally dump according to 1981 census are given in table No.VII. Based on the proportion of 1981 census, the estimated number of totally disabled persons during 1991 comes to 35500. It may be remembered that details of disabled persons were not collected in 1991 census and as such the number of disabled persons can be estimated only by using the proportion of 1981 census The criterion adopted in the 1981 census for identifying disabled persons, was that the specific disability i.e., being blind, crippled or deaf should be total and hence partially blind, partially crippled and partially deaf persons were not considered. From the proportions of 1981 census and 1991 national sample survey, the person with total disability was 35500 against 5.51 lakhs of disabled persons forms only a negligible percentage while size of the partially disabled stands substantially high.



<u>Table No. I</u>

Population, Estimated number of disabled and percentage of disabled to total population

Year	Rural/ Urban	Population (Lakhs)	No. of disabled (Estimated)	Percentage of disabled to total population	Percentage of disabled All India
1981	Rural	206.3	338332	1.65	1.84
	Urban	47.7	78705	1.65	1.42
La Participation	Total	254.0	417037	1.65	
1991	Rural	214.1	417495	1.95	1.99
	Urban	76.8	134400	1.75	1.57
	Total	290.9	551895	1.89	
1995 (Projected)	Total '	306,9	580041	1.89	

<u>Table No. II</u>
percentage of disabled on type disability to total population

Year			Percentage of disabled on types									
	Rural/ Urban	Population (Lakhs)	Visual	Hearing	Speech	Either hearing or speech	Locomotor	At least one type of disability				
1981	Rural	206.3	0.255	0.489	0.420		0.877	1.65				
	Urban	47.7	0.303	.0.413	0.472	400	0.843	1.65				
1991	Rural	214.1	0.525	0.467	0.273	0.636	1.074	1.95				
	Urban	76.8	0.302	0.339	0.237	0.498	0.962	1.75				

# Table No. III

# Estimated number of disabled on type of disability

hidri	and the same	CH245	No. of disabled on types of disability									
Year	Rural/ Urban	Population Lakhs	Visual	Hearing	Speech	Either hearing or Speech	Locomotor	At least one type of disability				
1	Rural	206.3	52,606	1,00,880	86,646		1,80,825	3,38,332				
1981	Urban	47.7	14,453	19,700	22,514	and a	40,211	78,705				
	Total	254.0	67,059	1,20,580	1,09,160	Total T	2,21,136	4,17,037				
	Rural	214.1	1,12,402	99,984	58,449	1,36,167	2,29,943	4,17,495				
1991	Urban	76.8	23,193	26,035	18,201	38,246	73,881	1,34,400				
	Total	290.9	1,35,595	1,26,019	76,650	1,74,413	3,04,285	5,51,895				
1995	Total (Projected)	306.9	1,43,052	1,32,950	80,865	1,84,006	3,21,021	5,80,041				

## Table No. IV

# Per 1000 Distribution of disabled persons by degree of disability

The state of the s	7-1-171	Rural		Urban			
Degree of disability	Male	Female	Person	Male	Female	Person	
Cannot function even with aid	242	268	254	208	229	218	
Can function only with aid	193	154	176	192	162	178	
Can function without aid	555	575	564	594	605	599	
Total including (N.R)	1000	1000	1000	1000	1000	1000	

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## Table No. V

Per 1000 distribution of physically disabled persons of age 60 years and above by age at on set of disability for each type of disability.

Rural

	699		- Age at onset (years)										
Type of disability		0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-44	45-59	60& Above	Total*	
Visual /	Kerala	3	-	6	7	15		3	13	229	719	1000	
	India	. 8	8	9	2	3	3	14	18	255	689	1000	
Hearing	Kerala		5	23	6	4	11	16	43	206	686	1000	
	India	9	6	12	9	11	10	12	41	280	609	1000	
Speech	Kerala	N.A											
136	India	42	23	24		10	-	12	25	262	594	1000	
Locomotor	Kerala	37	3	12	-32	7	4	9	49	251	597	1000	
	India	29	19	17	17	10	8	22	59	278	541	1000	

<sup>\*</sup> Including NR

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Table No. VI

Per 1000 distribution of physically disabled persons of age 60 years and above by age at on set of disability for each type of disability.

Urban

						01 4104	1						
		Age at onset (years)											
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-44	45-59	60&	Total*		
Kerala	58	31	43	-	- 8		20	30	156	654	1000		
India	12	15	7	3	6	5	5	18	236	690	1000		
Kerala	-	38	18	21	12	31	30	101	159	588	1000		
India	7	13	10	11	9	14	13	55	215	651	1000		
Kerala					19	N.A	1	-					
India	35	39	9	-	23		7	27	287	572	1000		
Kerala	68	12	25	21	7 17	. 7	13	-50	198	602	1000		
India	21	16	15	9	12	8	13	41	280	585	1000		
	India Kerala India Kerala India Kerala	Kerala 58 India 12 Kerala - India 7 Kerala India 35 Kerala 68	Kerala     58     31       India     12     15       Kerala     -     38       India     7     13       Kerala     1ndia     35     39       Kerala     68     12	Kerala     58     31     43       India     12     15     7       Kerala     -     38     18       India     7     13     10       Kerala     India     35     39     9       Kerala     68     12     25	Kerala     58     31     43     -       India     12     15     7     3       Kerala     -     38     18     21       India     7     13     10     11       Kerala       India     35     39     9     -       Kerala     68     12     25     21	0-4   5-9   10-14   15-19   20-24	N.A	0.4   5.9   10.14   15.19   20.24   25.29   30.34     Kerala   58   31   43   -	0.4     5.9     10-14     15-19     20-24     25-29     30-34     35-44       Kerala     58     31     43     -     8     -     20     30       India     12     15     7     3     6     5     5     18       Kerala     -     38     18     21     12     31     30     101       India     7     13     10     11     9     14     13     55       Kerala     N.A       India     35     39     9     -     23     7     27       Kerala     68     12     25     21     17     7     50	Kcrala     5.9     10-14     15-19     20-24     25-29     30-34     35-44     45-59       Kcrala     58     31     43     -     8     -     20     30     156       India     12     15     7     3     6     5     5     18     236       Kerala     -     38     18     21     12     31     30     101     159       India     7     13     10     11     9     14     13     55     215       Kerala     N.A       India     35     39     9     -     23     7     27     287       Kerala     68     12     25     21     17     7     50     198	N.A		

<sup>\*</sup> Including NR

## District wise visurbution of disabled persons in Kerala(1981 - Census)

SI. No.	District	District Totally blind Nos.					
1	Kannur	879	1122	1213			
2	Waynad	155	197	156			
3	Kozhikode	674	1030	1067			
4	Malappuram	823	940	811			
5	Palakkad	960	. 669	736			
6	— Thrissur	824	Fire 1049	1223			
7	Ernakulam	1131	1115	1116			
8	Idukki	264	348	418			
9	Kottayam	439	928	809			
10	Alappuzha	700	1338	1145			
11	Kollam	679	1614	1267			
- 12	Thiruvananthapuram	650	1706	858			
	Kerala	8178	12056	10819			

Source -1981 Census



