

Review Article

Distinct Demographic Characteristics of Kerala-A Comparative Analysis with the Indian Context

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Abstract - Demographic factors are found to have a very decisive role in the progress and development of a country. The quality and quantity of the population determine whether the population will be a liability or an asset for a nation. The objective of the study is to identify the distinguishing demographic characteristics of Kerala with respect to health, social, gender, and economic situations on the basis of a comparative analysis of the situations in India and Kerala. Concerning sex composition, mortality rates, and other quality factors of population, Kerala is far ahead of the nation. Albeit, concerning the old age composition of the population, old-age dependency ratio, work participation rate (both male and female), Kerala is in a disadvantageous position. The study examines the unique demographic characteristics of the state of Kerala and analyses its demographic advantages and disadvantages in comparison with all Indian figures.

Keywords - Sex ratio, Crude birth rate, Crude death rate, Infant mortality rate, Age-dependency ratio, Total fertility rate, and Work participation rate.

I. INTRODUCTION

Demographic factors are being recognized as critical in influencing the progress and development of a country. The quality and magnitude of the population determine whether it will be a liability or asset for a nation. There are many studies to pose this issue, viz, Irudaya Rajan (1989); Bhat and Rajan (1990); James (1995); Gulati, Rajan and Ramalingam(1997); and Zachariah and Irudaya Rajan (1997). Concerning the sex composition, mortality rates, and other quality factors of the population, Kerala is ahead of the nation. However, concerning the age composition of the population, old-age dependency ratio, work participation rate (both male and female), Kerala is not in an advantageous position.

II. OBJECTIVES OF THE STUDY

The objective of the study is to identify the unique demographic characteristics of Kerala concerning health,

social, gender, and economic situations based on a comparative analysis of the situations in India and Kerala.

III. METHODOLOGY & DATA SOURCE

This study is based on secondary data only. Census data for the period 1991, 2001, and 2011 are the vital sources of the data. Simple statistical tools are used for the analysis.

IV. RESULTS AND DISCUSSION

A. Size and Growth of Population

Census figures for 1991 exhibit that the population of India was 8464.2 lakh and that became 12108.5 lakhs in 2011 and during that period population of Kerala has increased from 290.98 lakh to 333.87 lakh. Kerala's population was 3.43% of India's population in 1991, and that became 2.76 % in 2011. The percentage increase of population in India during 1991-2001 was 21.54%, and in Kerala, it was only 9.4% during that period. Moreover, in Kerala, female population growth was greater than that of male population growth. In the 2001-2011 period, the increase of population in India was 17.70%, and it was only a mere 4.8% in Kerala. The female population growth rate in Kerala was almost double the population growth rate of the male population(Table 1).

Table 1. Demographic Profile of India and Kerala

India						
Cens us Year	Population (in lakh)			Decadal Percentage of Increase of Population		
	Male s	Femal es	Person s	Male s	Femal es	Perso ns
1991	4393.6	4070.6	8464.2	-	-	-
2001	5322.2	4965.1	10287.4	21.14	21.97	21.54
2011	6232.7	5875.8	12108.5	17.11	18.34	17.70
Kerala						
1991	142.89	148.09	290.98	-	-	-



2001	154.69	163.73	318.41	8.25	10.5	9.4
2011	160.21	173.66	333.87	3.6	6.1	4.8

Source: Census Reports 1991,2001 & 2011

B. Social and gender development

By using Census data, we examine the comparative advantage of Kerala in gender ratio, including child sex ratio, general literacy, and female literacy. As per Fisher’s principle, the sex ratio of 1:1 is ideal for most sexually reproducing species. Many factors have led to the decline of the sex ratio in India. Some of them are sex-selection abortion, neglect at birth or childhood, a cultural preference for the male child, failure in the implementation of the law. In India, the sex ratio was 926 in 1991, and that slightly improved to 943 in 2011. In Kerala, the gender ratio was always favorable to women, and it was 1036 in 1991 and 1084 in 2011. A very dangerous thing noticed in India during 1991-2011 was the continuously declining child sex ratio. In Kerala, while women outnumber men in the general category, the child sex ratio (0-6 years) showed an opposite trend, and the only consoling matter is it is significantly higher than the national average. Effective policy measures are essential for improving the child sex ratio in the state in the coming years.

The second social and gender aspect is literacy and female literacy. Even in 1991, Kerala had 90% of literacy, and then only 50% of Indians were literate. The literacy rate in Kerala increased to 94% in 2011. There existed a wide gap with respect to female literacy between India and the state of Kerala. In 1991 the gap was 47%, and even in 2011, the gap is 27%.

Female education is a positive factor that influences all aspects of community and national life. The benefits of women's education are lower fertility rates, reduction of child and maternal mortality, improvement of child nutrition and health, enhancement of women’s participation in community life, etc. According to the World Bank, it is estimated that one year of female schooling reduces fertility by 10 percent. Women who have completed primary school have fewer children than those with no education. The effect is particularly pronounced for secondary schooling. Kerala leads the country in women’s education. Much of the success in female education in Kerala was attributed to the historical value of women in Kerala society. The democratically elected governments in Kerala also promoted women's education. The pronounced distinction between India and Kerala concerning literacy and women's literacy is shown in Table-2.

Table 2. Social and Gender Development

Items	India			Kerala		
	1991	2001	2011	1991	2001	2011
Over all sex ratio	926	933	943	1036	1058	1084
Child sex ratio (0-6 age group)	945	927	919	958	960	964
Literacy	52.21	64.83	74.0	89.81	90.86	93.91
Female Literacy	39.29	53.67	65.5	86.17	87.72	91.98
Density of population	267	325	382	749	819	859

Source: Census Reports 1991,2001 & 2011

C. Rural-Urban Distribution of Population

In 1991 and 2001, regarding the rural-urban distribution of population, there was only a negligible difference between India and Kerala. However, in 2011, the urban population of Kerala has increased to about 50%, and it was only 31% in India. It is found that the process of urbanization in India was slow over the decades. The state of Kerala has been registering a faster increase in urban growth rate since 2001 (Table 3). Urbanization in the state is marked with some peculiarities. Firstly, the growth rate of the total population in the state is consistently decreasing over time, but the urban population growth rate has been increasing at a higher rate since 2001. Secondly, the State is undergoing an urban spread other than concentration. The high level of urbanization and the resultant shifting of labor to urban employment, especially service sector jobs, have increased the scarcity of labour force in agricultural and related activities in rural areas of the state.

Table 3. Rural-Urban Distribution of Population

Census Year	India		Kerala	
	The proportion of total Population (in %)		The proportion of total Population (In %)	
	Rural	Urban	Rural	Urban
1991	74.30	25.7	73.61	26.39
2001	72.20	27.8	74.03	25.97
2011	68.80	31.2	52.28	47.72

Source: Census Reports 1991,2001 & 2011

D. Health Status

Kerala made significant gains in health indices such as high life expectancy, low infant mortality rate, birth rate, and death rate. Health status is generally measured in terms of mortality indicators like Death rate, Infant mortality rate, and expectation of life at birth, among others. Mortality

indicators show that the health status of Kerala is far advanced and higher than the all India average and is even comparable with some of the developed countries of the world. This outstanding progress in health status is achieved through widespread growth of the three systems of medicine in public, private, cooperative sectors combined with people's health awareness. Kerala is having the highest number of health care institutions as per the 1991 census. About 26% of total health care institutions in India are located in Kerala.

The various censuses clearly showed the superior health status of Kerala compared to India and other states in India. The infant mortality rate is an important marker of the overall health of a society. In India, it was 80 in 1991 and 44 in 2011, and in Kerala, they were 16 and 12. Child Mortality Rate was only 13 in Kerala in 2011 compared to 55 in India. The Maternal Mortality Rate was also very low in Kerala compared to the all-India average. Similarly, the crude birth rate, crude death rate, and natural growth rate, and total fertility rate in Kerala were lower than that of all India figures. General life expectancy and female life expectancy were higher in Kerala (Table-4)

Table 4. Overall Health Status of Kerala

Items	India			Kerala		
	1991	2001	2011	1991	2001	2011
Infant Mortality	80	66	44	16	11	12
Under-five Mortality Rates (U5MR)	-	-	55	-	-	13
Maternal Mortality	-	-	167	-	-	61
Crude Birth Rate	29.5	25.4	21.8	18.3	17.1	14.8
Crude Death Rate	9.8	8.4	7.1	5.8	6.4	6.8
Natural growth rate	19.7	17.0	14.7	12.5	10.7	8.2
Life Expectancy	-	61.7	67.13	-	73.5	75.2
Life expectancy Female	-	62.5	68.22	-	76.1	78.2
Total fertility rate	3.6	2.52	2.4	2.60	1.7	1.6

Source: Census Reports 1991,2001 & 2011

Though Kerala has attained better health care indicators, the people are now facing the problem of high morbidity both from communicable and non-communicable diseases. The state of Kerala is facing the issue of suitability concerning health indicators. Besides, the State also needs to address problems of Nutrition-Related Non-Communicable Diseases (NR-NCD) and communicable diseases. The state

urgently needs an effective treatment protocol to contain these diseases. In addition to that, new threats to the health scenario of the State, like mental health problems, suicide, substance abuse and alcoholism, adolescent health issues, and a rising number of road accidents, are considered as new and added challenges.

E. Economic Indicators

This section portrays the age composition of the population, age dependency ratios, composition of the male-female workforce, distribution of the working population by broad occupational groups, work participation rate, and the overall living standard and quality of life of the people.

India has one of the youngest populations in an ageing world. As per the 2011 census, more than 91% of its population is under the age of 60 (Table 5). Such a young population ensures a potential addition to the working-age group in the coming years. In the case of Kerala, the percentage of the population under the age of 60 declined from more than 90 % in 1991 to 87% in 2011. In India, the population in the age group of 60+ was only 8.95%, and in Kerala, it was 12.6%. Further, while the percentage of the population in the age group 60+ in India only marginally increased from 7% in 1991 to 8.95% in 2011, in Kerala, it increased from 8.8% to 12.6%. While the old-age dependency ratio in India in 2011 was only 14%, in Kerala, it is almost 20% (Table-6). The old-age dependency ratio of India has increased marginally between 1991 and 2011. The increase in Kerala was remarkable (from 14% to 20%). Thus, while the population of India is going to be younger, in the case of Kerala, it is going to be older. This is significant concerning the future supply of the labor force in the economy.

Table 5. Age Composition of the Population in India and Kerala

Census Year	Age group 0-14		Age group 15-59		Age group 60+	
	India	Kerala	India	Kerala	India	Kerala
1991	38.00	29.78	56.00	61.42	7.00	8.8
2001	35.35	26.10	56.93	63.38	7.72	10.5
2011	30.76	23.2	60.29	64.3	8.95	12.6

Source: Census Reports 1991,2001 & 2011

Table 6. Age Dependency Ratio in India and Kerala

	1991			2001			2011		
	U	D	T	U	D	T	U	D	T
India	67.2	12.2	79.4	62.1	13.0	75.1	51.0	14.2	65.2
Kerala	48.5	14.4	62.9	41.1	16.5	57.6	36.7	19.6	56.3

Source: Census Reports 1991,2001 & 2011

Note: CD/child dependency; OAD/old age dependency; TD/total dependency.

Child (Young) dependency ratio = (No. of persons in age group 0-14 years ÷ No. of persons in the age group 15-59 years *1000

Aged (Old) dependency ratio = (No. of persons in age group 60and above ÷ No. of persons in the age group 15-59 years *1000

In Kerala, the percentage of the female workforce is lower than that in India. In 2011, it is 31.1% in India and 27.3% in Kerala(Table-7). It points out the comparative disadvantages of the female workforce in Kerala. Kerala has a lower work participation rate compared to that of India(Table-8). There is not much difference between India and Kerala with respect to the male work participation rate, while substantial differences exist in India and Kerala with respect to the female work participation rate. The female workforce participation rate (FWPR) is an important indicator of women’s economic empowerment. FWPR remains very low in Kerala despite its high social development, decreasing fertility rates, and rising education levels of women and girls. Women of Kerala outperform their male counterparts in many developmental indicators. But in the case of economically active persons, the outcome is contrary in Kerala.

Table 7. Percentage of Male and Female Workforce in India and Kerala

Census Year	India		Kerala	
	Male	Female	Male	Female
1991	71.4	28.6	74.3	25.7
2001	68.4	31.6	75.7	24.3
2011	68.89	31.1	72.74	27.26

Source: Census Reports 1991,2001& 2011

Table 8. Work Participation Rate India and Kerala

Items	India			Kerala		
	1991	2001	2011	1991	2001	2011
WPR	37.5	39.1	39.8	31.43	32.3	34.78
Female WPR	22.3	25.68	25.51	15.9	15.4	18.23
Male WPR	51.6	51.7	53.3	47.6	50.2	57.2

Source: Census Reports 1991,2001& 2011

The distribution of the working population by broad occupational groups in India and Kerala is shown in Table-9. The working population in India is divided into four categories, viz. cultivators, agricultural laborers, workers in household industries, and other workers. The first two are agricultural workers, and the remaining last two are non-agricultural workers. In the distribution of the workforce, a pronounced difference exists between India and Kerala. In Kerala, the share of cultivators and agricultural laborers is very low in the total workforce compared to India. Between 2001 and 2011, there was a decline in the percentage of

cultivators in India and an increase in the percentage of agricultural laborers. In the case of Kerala, the share of both cultivators and agricultural laborers declined during the period. The share of the non-agricultural workforce in Kerala was 77.19% in 2001, and that increased to 82.8%, while the share of the agricultural workforce declined from 22.8% to 17.2% during the period. The majority of the workers in Kerala were classified as ‘Other Workers’ who were working in the service sector. In India, more than 50% of the workforce is working in the agricultural sector. Thus, the workforce distribution in India is in favor of the agriculture sector, and in the case of Kerala, it is in favor of the non-agricultural sector, particularly the service sector.

Table 9. Distribution of Working Population by Broad Occupational Groups

Census Year		% of Cultivators (in total workers)	% of Agricultural laborers (in total workers)	% of Household industries (in total workers)	% of Other workers (in total workers)
		2001	India	31.65	26.55
	Kerala	7.04	15.76	3.59	73.60
2011	India	24.6	30	3.8	41.6
	Kerala	5.8	11.4	2.3	80.5

Source: Census Reports 1991,2001& 2011

There was also a perceptible difference between the living conditions of people in India and Kerala, which could be analyzed with the help of information provided by the census reports on conditions of houses, basic facilities in houses, and the share of slum population. In India, 53.19% of houses were pucca and good, and in Kerala, it was 66.36% in 2011. In India, even 50% of the houses did not have a latrine facility even in 2011, while in Kerala, more than 95% of houses had this facility in 2011(table 10). The situation in the rural area regarding the availability of this facility was very high in Kerala. Moreover, 94.5% of houses in Kerala had electricity in 2011 compared to 67.2% in India.

Table 10. Percentage of Houses having Latrine and Electricity Facility

Census Year		Latrine facility			Electricity		
		Total	Rural	Urban	Total	Rural	Urban
India	2001	35.8	21.9	73.7	55.8	43.5	87.6
	2011	46.9	30.7	81.4	67.2	55.3	92.7
Kerala	2001	84.0	81.3	92.0	70.2	65.5	84.3
	2011	95.2	93.2	97.4	94.5	92.1	97.2

Source: Estimated from census figures 1991,2001& 2011

For the first time in Census 2001, slum areas were earmarked across the country, particularly in cities and towns having a population of 50,000 or above in the 1991 Census.

The slum population in Kerala is very low, and the slum population in the state is only 0.6% of its total population.

V. CONCLUSION

Demographic factors are found to have a profound influence on the progress and development of any country. Regarding the sex composition, mortality rates, and other quality factors of the population, Kerala is in a superior position compared to the national average. As far as the old age composition of the population, old-age dependency ratio, work participation rate (both male and female) is concerned, the picture of Kerala is not rosy. In Kerala, while women outnumber men in the general category, the child sex ratio (0-6 years) showed a contrary trend, and the only consoling matter is it is significantly higher than the national average. Kerala leads the nation in women's education. Much of the success in female education in Kerala was attributed to the historical value of women in Keralite society. Kerala made significant gains in health indices such as high life expectancy, low infant mortality rate, birth rate, and death rate. While the population of India is going to be younger, it is going to be older in Kerala. This has its dent in the future supply of the labor force in Kerala. Kerala has a lower work participation rate compared to the rest of India. The female work participation rate remains very low in Kerala despite its

high social development, decreasing fertility rates, and rising education levels of women and girls. The workforce distribution in India is skewed in favor of the agriculture sector, and in Kerala, it is in favor of the non-agricultural sector, particularly the service sector. There were perceptible differences between living conditions of people in India and Kerala viz. housing conditions, basic amenities in dwelling.

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