

Demographic trends of elderly in tamilnadu

D. KATHIRVEL,

*Ph.D Research Scholar, Dept. of Applied Research,
GRI-DU, Dindigul, Tamilnadu*

1. INTRODUCTION

The Demography of World without the knowledge of Indian demography is unfounded as it presently constitutes the second populous country in the world and expected to reach first place within short span of time. With India's share of 17.8 % of world's population expected to hold the present share for further decades due to the effect of demographic transition. Across the world the demographic transition which results the ageing process.

Ageing a universal process, started earlier in developed countries and was beginning in developing regions. With increased life expectancy and declined fertility rate the population of elderly (aged 60+) worldwide increasing rapidly. Currently elderly population with the composition of 12.3% worldwide and in India with 8.9% is expected to reach 19.4% by 2050 with worldwide of 21.5%. Also it is hard that India presently holds 1.6% of elderly in World population.

In absolute terms the present Indian elderly population of 11.6 crore is projected to reach 33.08 crore by 2050, an 284% increment during the years. The sharp fertility rate decline observed in the last decades and with the advanced medical facilities, the associated mortality rate had experienced the decline for the past 50 years have resulted for the significance increase of elderly in future.

Population ageing is likely to have major impact on life during twenty first in the twenty first century (United Nations, 1998). In this context the present paper concentrates on the levels and trends of elderly in India based on the various available secondary sources.

2. OBJECTIVES

- i. To study the levels and trends of elderly with respect to demographic aspects.
- ii. To study the change in age structure of the population due to the ageing process; and
- iii. To highlight the problems posed by the ageing population.

3. DATA SOURCE

The study is based on the secondary data such as census data, BKPAI Working Paper No. 1 (UNFPA), Sample Registration System, RG India, United Nations Department of Economic and Social Affairs/Population Division and Asia Population Studies Series. The collected data are compiled and presented by selected comparatives for better understanding of current demographic status of India.

4. RESULTS

Size and Growth of Population

The decline in fertility and increased have resulted in population ageing across India. Tamilnadu holding 5.96% share and holding 6th rank with respect to population have solid

effect on all dimensional growth of India. With a vital contribution towards India the study emphasis and correlates the elderly demography with mutual intercepts.

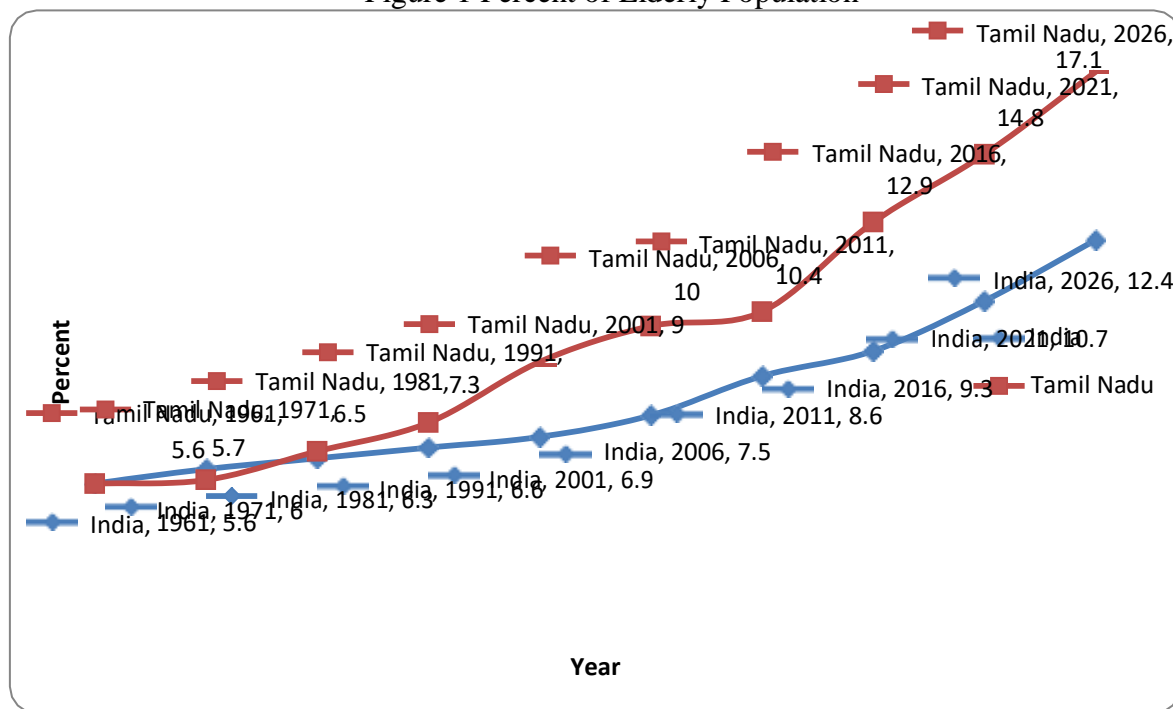
The percentage of Elderly population (60+) in India and Tamilnadu is presented in table 1 and figure 1 showed during the period from 1961 to 2026. The proportion of elderly in India increases from 5.6% to 8.3% at 2011 and expected to reach 12.4% by 2026. In Tamilnadu the proportion of elderly shows significant difference than India which series from 5.6% to 11.2% at census 2011 and still expected to grow up to 17.1 by 2026. The series projects the important contribution of elderly in Tamilnadu demography in future.

Table 1. Percentage of Elderly Population (60+), India and Tamilnadu, 1961 - 2026

State/Union Territory	1961	1971	1981	1991	2001	2006	2011	2016	2021	2026
India	5.6	6	6.3	6.6	6.9	7.5	8.3	9.3	10.7	12.4
Tamil Nadu	5.6	5.7	6.5	7.3	9	10	11.2	12.9	14.8	17.1

Data Source: BKPAI Working Paper No. 1 (UNFPA), Sample Registration System, RG India, Census of India 2011

Figure 1 Percent of Elderly Population



In 2011 with 10.4 percent of elderly composition in tamilnadu is expected for a hike of 7% within a short span of time. A significant difference also observed from India and tamilnadu demographic with respect to elderly for the study period.

Life Expectancy

The mean expectation of life at birth has improved over the years. The value of life expectancy in India at 2013 was 66.46 and shows the steady increment over decades due to the great participation of the Governments in health sector, education and improvement in the technologies of medical sciences. The Life expectancy at birth from year 1901 to 2025 in sex wise was presented in table 2 which shows the increased value for male from 41.9 years at 1951-1960 to 67.3 years at 2011-2015. Similar increment was also observed at female from 40.6 years at 1951-1960 to 69.6 years at 2011-2015.

Table 2. Life Expectancy of Elderly Population (60+), India

Year	Source	Male	Female	Year	Source	Male	Female
1901-10	(a)	22.6	23.3	1981-85	(b)	55.4	55.7
1911-20		19.4	20.9	1986-90		57.7	58.1
1921-30		26.9	26.6	1991-96	(c)	60.6	61.7
1931-40		32.1	31.4	1996-01		62.3	65.3
1941-50		32.4	31.7	2001-05	(d)	63.8	66.1
1951-60		41.9	40.6	2006-10		65.8	68.1
1961-70		46.4	44.7	2011-15		67.3	69.6
1970-75		50.5	49	2016-20		68.8	71.1
1976-80	52.5	52.1	2021-25	69.8		72.3	

Source: (a) Office of the Registrar General, India; (b) Occasional Paper SRS No.3 of 1995 (c) Report of the Technical Group on Population Projection, 1996- 2016 (Registrar General, India); (d) Report of the Technical Group on Population Projections, 2001-2026 M/O Health & Family Welfare.

Worldwide, the average life expectancy at birth was 71.0 years (68.5 years for males and 73.5 years for females) and in India, the average life expectancy at birth was 66 years (64 years for males and 68 years for females) over the period 2010–2013 according to United Nations World Population Prospects 2012 Revision. Also the life expectancy of female found to be higher than males in previous decades.

Distribution in Population Age 60 and over

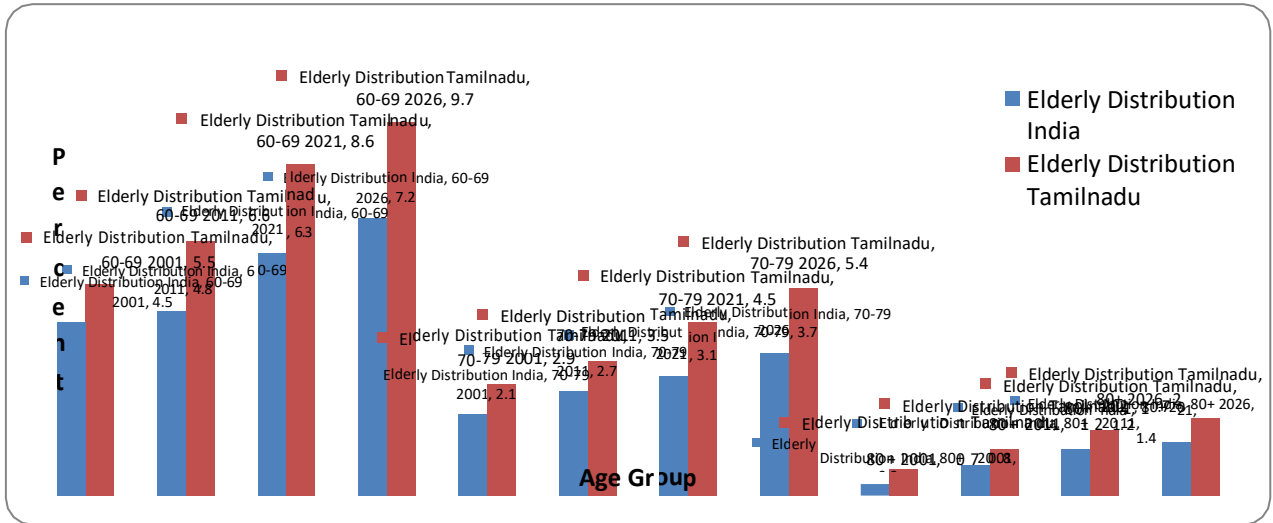
With the increased level of life expectancy the elderly population cohorts assert the attention to focus on. The distribution of elderly in age-group for the period 2001-2026 is presented in the table 3 and in figure 2. As already witnessed with high composition of elderly in Tamilnadu compared with overall India, in age-group we find 4.5% of age group 60-69 in year 2001 is expected to raise by 7.2% in the same group by 2026. In Tamilnadu it is expected to reach 9.7% by 2026 from 5.5% at 2001 in age group 60-69.

Table 3. Distribution of Elderly (60+) by age-group, India and Tamilnadu, 2001-2026

Region	2001			2011			2021			2026		
	60-69	70-79	80+	60-69	70-79	80+	60-69	70-79	80+	60-69	70-79	80+
India	4.5	2.1	0.3	4.8	2.7	0.8	6.3	3.1	1.2	7.2	3.7	1.4
Tamilnadu	5.5	2.9	0.7	6.6	3.5	1.2	8.6	4.5	1.7	9.7	5.4	2

Source: Registrar General & Census Commissioner of India, 2006 & Census of India.

Figure 2. Distribution of Elderly (60+) by age-group



With increased distinctiveness with India, in Tamilnadu the elderly population of age-group 70-79 likely to increase 2.9% at 2001 to 5.4% with more closure increased rate of 100% and the same trend is observed for the age-group of 80+.

Median Age

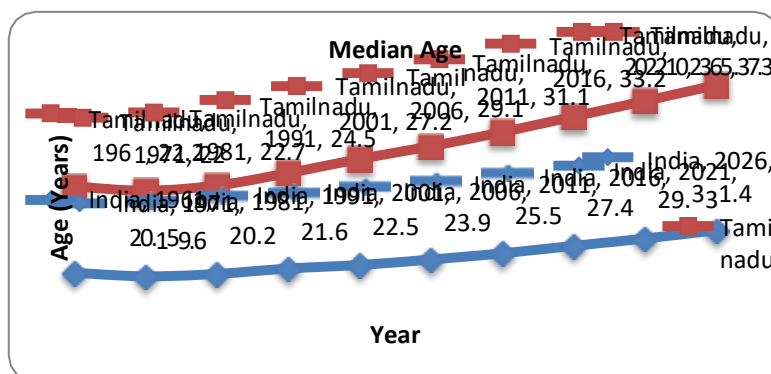
The Median age that divides the population into two numerically equal group, a index which summarizes the distribution of the population. The median age of India and Tamilnadu over the period from 1961 to 2026 is listed in table 4 and figure3. The median age increased from 20.5 at 1961 to 27.4 at present and expected to reach 31.4 for India.

Table 4. Trends in the Median Age (Years) of the population in India and Tamilnadu

Region	1961	1971	1981	1991	2001	2006	2011	2016	2021	2026
India	20.5	19.6	20.2	21.6	22.5	23.9	25.5	27.4	29.3	31.4
Tamilnadu	22.2	22	22.7	24.5	27.2	29.1	31.1	33.2	35.3	37.3

Data Source: BKPAI Working Paper No. 1 (UNFPA), Sample Registration System, RG India, Census of India 2011

Figure 3. Trends in the Median Age (Years) of the population in India and States



The median age for Tamilnadu have raised from 22 years at 1971 to 31 years presently and expected to still hike by 37.3 years by 2026.

Index of Ageing

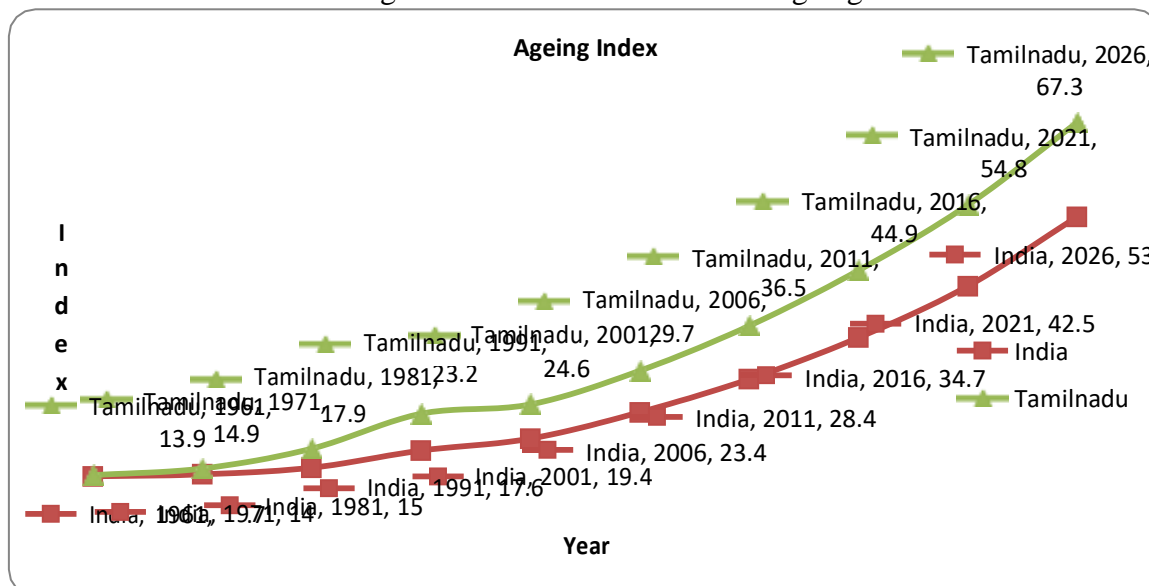
The index of ageing, a composite demographic ratio, defined as the percentage between the old age population (over 65) and the young population (under 15). The ageing index ratio for India and Tamilnadu for the year 1961 to 2026 is presented in the table 5 and figure 4. The ratio have raised from 13.7 to 28.4 presently and expected to develop to 53 by 2026.

Table 5. Trends in the Index of Ageing for India and Tamilnadu

Region	1961	1971	1981	1991	2001	2006	2011	2016	2021	2026
India	13.7	14	15	17.6	19.4	23.4	28.4	34.7	42.5	53
Tamilnadu	13.9	14.9	17.9	23.2	24.6	29.7	36.5	44.9	54.8	67.3

Data Source: BKPAI Working Paper No. 1 (UNFPA), Sample Registration System, RG India, Census of India 2011

Figure 5. Trends in the Index of Ageing



Note: Index of ageing = (Population aged 60+) / (population aged 0-14) x 100, * State formed in 2000.

Source: Registrar General & Census Commissioner of India, 2006.

As the trend for elderly in population percent the ageing index also show significant incremental trend for Tamilnadu with India. The ratio lift up from 13.9 at 1961 to the present level of 36.5 and anticipated to 67.3 at 2026 with significant decrement with Total Fertility Rate and Crude Birth Rate over the years.

Sex Ratio

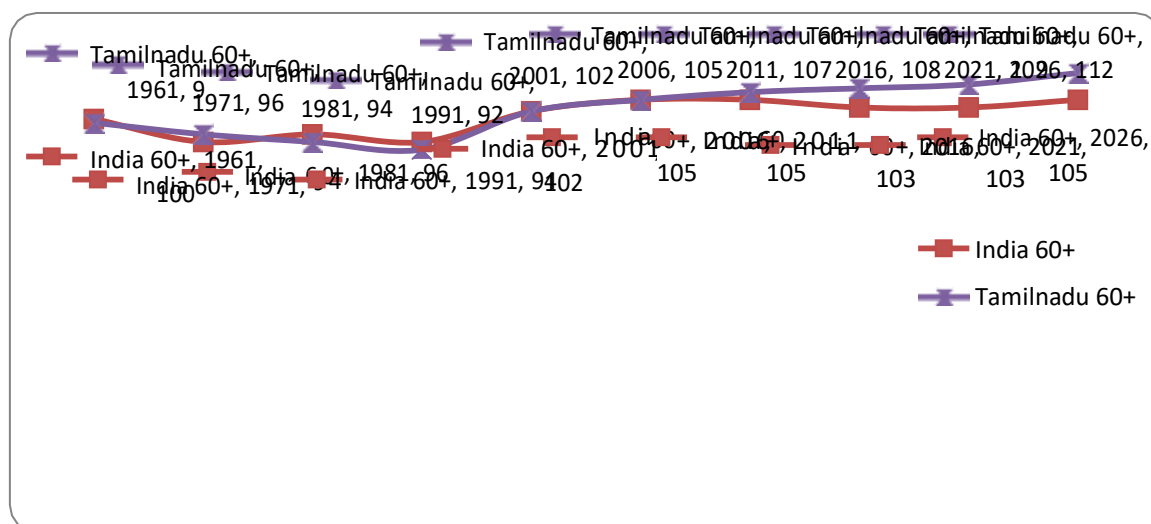
To corroborate the implications of ageing the sex ratio of elderly for India and Tamilnadu over the years 1961 to 2026 were provided in the table 6. And figure 5. Sex ratio of elderly may be influenced with several factors such as culture, personal habits, environment, etc., it is observed from the table that both India and Tamilnadu associated closely for the previous decades, but for the estimated future it is likely to deviate from the general group.

Table 6. Sex ratio of the elderly in different age-groups in India and Tamilnadu, 1961-2026

Region	Age Group	1961	1971	1981	1991	2001	2006	2011	2016	2021	2026
India	60+	100	94	96	94	102	105	105	103	103	105
India	70+	106	97	98	93	99	107	114	116	113	111
Tamilnadu	60+	99	96	94	92	102	105	107	108	109	112
Tamilnadu	70+	102	100	95	90	101	107	112	116	117	117

Data Source: BKPAI Working Paper No. 1 (UNFPA), Sample Registration System, RG India, Census of India 2011

Figure 5. Sex ratio of the elderly



With the focused trend on sex ratio likely to be increasing for elderly in Tamilnadu gives raise to various implications on ageing on future. The Sex ratio ranges from 92 during the year 1991 to the expected value of 112 at 2026.

Rural and Urban Composition

On the consideration of elderly cohort it is apparent to have appraise on the composition of group through the vicinity. The composition of elderly population in rural and urban areas of India an Tamilnadu was presented in the table 7. and figure 6. The proportion of elderly in India over the years was observed with increased value at rural and slightly reduced value at urban.

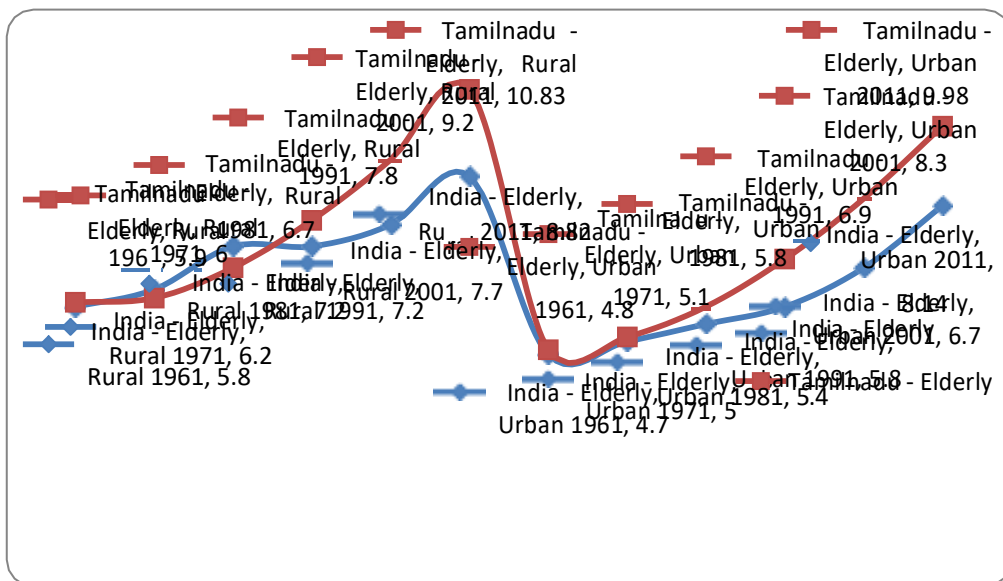
Table 7. Proportion (percent) aged (60+) in urban & rural areas in India, Tamilnadu, 1961 - 2011

Year	1961		1971		1981		1991		2001		2011	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
India	5.8	4.7	6.2	5	7.2	5.4	7.2	5.8	7.7	6.7	8.82	8.14
Tamilnadu	5.9	4.8	6	5.1	6.7	5.8	7.8	6.9	9.2	8.3	10.83	9.98

Data Source: BKPAI Working Paper No. 1 (UNFPA), Sample Registration System, RG

India, Census of India 2011

Figure 6. Proportion (percent) aged (60+) in urban & rural areas in India, Tamilnadu, 1961 - 2011



In Tamilnadu the differences in the composition of rural and urban with higher proportion in rural in previous decades have been reduced the present level equally likely proportion of 8.82 for rural and 8.34 for urban experienced during census.

Summary

The analysis on the secondary data on the demographics of elderly in Tamilnadu to the India revealed the percentage of elderly population is substantially increasing from 5.6% to expected level of 17.1% over the years from 1961 to 2026 compared to Wholesome India the growth was significantly high in Tamilnadu. In terms of life expectancy due to better Government interventions & good living conditions the values for both sex substantially from male - 22.6 years and female 23.3 years at the beginning of previous century to the male-68.8 years and female-71.1 years at second decade of present century.

With respect to the population distribution over elderly age cohorts it is observed that oldest old people are likely to be increasing the coming future. The median age of tamilnadu far deviated from the India is likely to increase from 22 years at 1971 to 37.3 at 2026. As of the other indicators index of ageing for Tamilnadu also shows increasing trend as of India and found to have significant difference among the rest of India with respect to Ageing Index.

The increases in the elderly population have concurrent implications both at social and personal level. The trend also predicts the demand for social, economic and health care support for elderly in approaching future.

References

1. Demographics of Population Ageing in India: Trends and Differentials., BKPAI Working Paper No. 1, 2011. United Nations Population Fund (UNFPA), New Delhi.
2. Census Data : Office of the Register General & Census Commissioner ; India