

Population Ageing and Women in Kerala State, India **By Leela Gulati **

* The author of this note is Leela Gulati, Centre for Development Studies, Prasantnagar Road, Ulloor, Trivandrum 695 011, Kerala, India. This note is an abridged version of the author's paper on *Female Dimensions of Population Ageing in Kerala State* presented at the Expert Group Meeting on *Integration of Aging and Elderly Women into Development*, Division for the Advancement of Women, United Nations, Vienna, October 1991.

In this note we examine the ageing of the female population in the State of Kerala, India, in the light of current and future demographic trends as well as the social and economic implications of this process.

Concerning the choice of Kerala, it should be mentioned that in no Indian State is the demographic transition as advanced as in Kerala. The population density in this State is rather high, but its growth rate is now rapidly declining, with a high average age at marriage, a high level of family planning acceptance and fertility control, a moderate decline in mortality and a high degree of population mobility. The population is also fairly well advanced in terms of literacy and educational attainment and is moderately successful in introducing social change.

Table 1: Selected indicators of development of women in Kerala and India, 1961-1991

	Kerala				India			
	1961	1971	1981	1991	1961	1971	1981	1991
Female population	8.5	10.8	12.9	14.7	14.7	21.3	26.4	33.1
Sex ratio (females per thousand males)	1,022	1,016	1,032	1,040	941	932	934	923
Literacy rate								
Males	64.9	77.1	84.6	94.4	34.4	39.5	—	52.6
Females	38.9	54.3	65.7	86.9	13.0	18.4	24.8	32.4
Infant mortality rate (per thousand live births)	66	61	37	22	114	138	119	91**
Married couples (per thousand population)	—	151	140	—	—	170	165	—
Child-to-woman ratio* (per thousand women)	700	550	409	—	659	655	546	—
Mean age at marriage (years)								
Men	26.3	26.7	27.7	—	20.0	22.4	23.4	—
Women	19.8	21.1	21.9	—	14.5	17.2	18.7	—
Expectation of life at birth (years)								
Men	46.2	60.5	60.6	66.9	41.9	46.4	54.1	60.6
Women	50.0	61.1	62.1	72.8	40.6	44.7	54.7	61.7
Proportion of female workers to total female population	19.7	13.5	16.6	28.0	11.9	19.8	19.7	22.7

Source :Women in Kerala, Department of Economics and Statistics, 1981, Government of Kerala and Census of India, 1991.

Notes: * = Children in the age group of 0-4 years; ** = 1989.

Table 2: Proportion of women aged 60 and above in the total female population of India and its major States, 1981

States	60-64 %	65-69 %	70+ %	60+ %	Index No.
--------	---------	---------	-------	-------	-----------

Andhra Pradesh	2.8	1.5	2.6	6.9	101
Bihar	3.1	1.3	2.4	6.8	100
Gujarat	2.6	1.5	2.3	6.4	94
Haryana	2.4	1.3	2.0	5.7	84
Himachal Pradesh	2.6	1.4	2.7	6.7	99
Jammu & Kashmir	2.1	0.9	2.0	5.0	74
Karnataka	2.8	1.4	2.6	6.8	100
Kerala	2.7	2.1	3.0	7.8	115
Madhya Pradesh	2.8	1.5	2.6	6.9	101
Maharashtra	2.7	1.6	2.4	6.7	99
Orissa	2.7	1.5	2.5	6.7	99
Punjab	2.7	1.6	3.0	7.3	107
Rajasthan	2.8	1.3	2.2	6.3	93
Tamilnadu	2.7	1.5	2.1	6.3	93
Utter Pradesh	2.7	1.4	2.4	6.5	96
West Bengal	2.3	1.3	2.1	5.7	84

Source: Census of India, Social and Cultural Tables, 1981.

Note: Index measures the relative incidence of ageing of women between the various States.

[Table 1](#) provides the main social and demographic indicators for Kerala and India as a whole; it indicates that Kerala's women are way ahead of women nationally in terms of these indicators. Of the various States in India, the overall sex ratio (females per 100 males) in Kerala has been much higher throughout the present century than for any other State or the country as a whole. As a result, in no Indian State is the ageing of the female population as advanced as it is in Kerala. [Table 2](#) shows that Kerala leads all other Indian States in its proportion of women above the age of 60 years. The proportion of elderly women in Kerala is 15 per cent higher than in the country as a whole. However, the distribution of elderly women among the three age-groups, 60-64 years, 65-69 years and 70+ years, is strikingly different in Kerala compared with most of the other States. While the proportion of women aged 60-64 years is 3.1 per cent for India as a whole, it is only 2.7 per cent for Kerala. By contrast, Kerala leads all other Indian States in the proportion of women over 65-69 and 70+.

Trends and projections

Table 3: Population of Kerala aged 60 or more years of age: actual and projected, 1961--2026

Year (1)	Population aged 60 (in millions)			Population aged 60+ (percentage of total)		
	Total (2)	Male (3)	Female (4)	Total (5)	Male (6)	Female (7)
1961	0.9	.4	.5	5.8	5.7	6.0
1971	1.3	.6	.7	6.2	6.0	6.5
1981	1.9	.9	1.0	7.5	6.4	7.6
1986	2.2	1.0	1.2	7.8	7.1	8.6
1991	2.6	1.1	1.5	8.7	7.7	9.7
1996	3.1	1.3	1.7	9.5	8.3	10.7
2001	3.5	1.5	2.0	10.2	8.9	11.5
2006	4.0	1.7	2.2	10.8	9.4	12.2
2011	4.6	2.0	2.6	11.9	11.6	13.2
2016	5.7	2.6	3.1	13.8	12.6	15.0
2021	6.9	3.2	3.7	16.0	14.8	17.1
2026	8.3	3.9	4.4	18.4	17.3	19.5

Source: Census of India, Reports; and Population Projections for Kerala, Bhat and Rajan, CDS.

[Table 3](#) presents a picture of how the population of Kerala has been ageing since 1961 and how it will look until the year

2026. It should be noted that since 1961 the population of elderly men has exceeded that of elderly women. The absolute excess, which was 0.1 million in 1961, is expected to be 0.6 million in 2011, stabilising at 0.5 million from 2016 onward.

Thus, while the total population of the elderly is estimated to have increased from 0.9 million in 1961 to 2.6 million in 1991, the elderly population is projected to reach 8.3 million in 2026. During the same 35-year period, the number of elderly female women will have increased from 0.5 million to 4.4 million. It is also of significance that, while the percentage of elderly men in the total male population will have increased during this period from less than 6 to over 17, the percentage of elderly women in the total female population will have increased from 6 to about 20. Thus, elderly women will continue to outnumber elderly men in Kerala.

The gender gap in mortality

The estimated and projected expectation of life at birth for selected time periods, namely 1960-1965, 1980-1985, 2000-2005 and 2020-2025, are presented in [table 4](#). Not only has the expectation of life at birth been consistently higher for women in Kerala compared with men, but the gap in recent years has been widening. By contrast, for the country as a whole, the male-female differential has been in favour of men and will remain so into the next century. Whereas in 1960-1965, the expectation of life for women in Kerala was higher by 3.8 years, in the quinquennium of 1980-1985, it was higher by 5.9 years. The expectation of life at birth in Kerala is projected to reach 76.9 years for men and 79.8 years for women during the period 2020-2025. With the projected faster improvement in the expectation of life of men, the difference between men and women with regard to expectation of life at birth is projected to decline from 5.9 years during 1980-1985 to 2.9 years during 2020-2025. For India as a whole also, the projections are that the gender differential will have turned in favour of women by the period 2020-2025, but at a distinctly lower level of life expectancy for both women (68.6 years) and men (67.2 years).

Table 4: Sex differences in estimated and projected expectation of life at birth, Kerala State and India, 1960-1965, 1980-1985, 2000-2005, 2020-2025(years)

Years	Kerala			India		
	Male	Female	Difference	Male	Female	Difference
1960-1965	56.2	60.0 *	3.8	44.5	43.0	-1.5
1980-1985	65.6	70.2	5.9	53.0	52.0	-1.0
2000-2005	74.4	78.1	4.3	61.0	60.3	-0.7
2020-2025	76.9	79.8	2.9	67.2	68.6	1.4

Sources: Statistics for Planning, 1986. Bureau of Economics and Statistics, Government of Kerala; Estimates by Bhat and Rajan, unpublished CDS working paper; and *Periodical on Aging*, Department of International Economic and Social Affairs, United Nations, new York, 1985.

Note: * Refers to 1965-1968.

Table 5: Sex ratio in Kerala for the general population and the elderly, 1961-2026

Year	Total Population	Age Group		
		60+	60-74	75+
1961	102	108	107	113
1971	102	109	107	117
1981	103	113	120	131
1991	104	128	122	156
2001	101	131	127	144
2011	101	126	119	148
2021	100	114	108	141
2026	99	111	106	132

Source: Census of India, Population Projections, CDS.

Male predominance in the sex ratio at birth is a global biological phenomenon; however, the sex ratio in India, expressed in the Indian censuses in terms of the number of females per 100 males, is very low. It can be observed from [table 5](#) that the sex ratio among the elderly in Kerala is even more pronounced for all the years projected when compared with the general population. If the elderly are disaggregated, the sex ratio is particularly high among the very old, i.e. those over 75 years

of age. The peak of 156 females for every 100 males over 75 years of age was reached in 1991; thereafter, the ratio is expected to start declining, but at a much slower pace among the younger elderly (60-74 years of age) than among the older elderly (75+ years).

Heavy female concentration among the very old is a likely future trend. In terms of numbers, the elderly in Kerala over the age of 75 years will number 1.97 million in 2026; as many as 1.12 million of that number will be women. The preponderance of women at old ages, particularly among the very old, has important implications for policy makers.

Marital status among elderly women

In view of the fact that in Kerala women not only outnumber men but also outlive them, it is important to know about their likely marital status when they become old, because that could influence the overall level of care and support they receive both from their family and society.

Table 6: Percentage distribution of population by age, sex and marital status in India and Kerala, 1981

Age group		Kerala			India		
		C	W	D/S	C	W	D/S
All ages	Male	37.0	1.1	0.2	42.0	2.4	0.2
	Female	38.7	9.1	1.4	45.8	8.0	0.4
60-64 years	Male	90.8	6.0	1.0	83.4	14.1	0.4
	Female	42.6	52.3	2.2	43.1	56.1	0.5
65-69 years	Male	87.82	8.9	1.0	80.3	17.2	0.4
	Female	33.0	63.0	1.6	40.6	58.6	0.4
70+ years	Male	77.9	19.1	1.1	70.4	27.0	0.4
	Female	16.7	80.7	1.0	21.7	77.6	0.3

Notes: C = currently married; W = widowed; D/S = divorced or separated.

[Table 6](#) gives the percentage of widowed men and women by age both for Kerala and India as a whole. It can be seen that, while only 1 per cent of the total male population in Kerala is widowed, the proportion of the female population widowed is 9 per cent. The corresponding proportions for the country as a whole are 2 per cent and 8 per cent, respectively. The gender gap in the incidence of widowhood in Kerala is thus more than twice that for the country as a whole. While 19 per cent of men aged 70+ in Kerala are widowers, over 80 per cent of the women of that age were widowed in 1981. The corresponding percentages for the country as a whole during that period were 27 and 78, respectively.

With advancing age, the incidence of widowhood obviously accelerates regardless of whether people are living in rural or urban sectors, as can be seen from [table 7](#). In the age group of 70+, over 92 per cent of the rural women in Kerala are widows as compared with almost 80 per cent in India as a whole.

Table 7: Percentage of widowed persons by sex and age group

Age groups	Rural				Urban			
	Kerala		India		Kerala		India	
	Male	Female	Male	Female	Male	Female	Male	Female
60-64	7.37	57.2	17.8	62.0	6.8	63.3	11.0	64.2
65-69	9.96	65.3	21.0	64.0	9.4	70.8	17.5	67.7
70+	21.10	92.3	30.9	79.9	18.9	85.4	27.9	82.4

Source: Census of India, Social and Cultural Tables, 1971.

The differences in the incidence of widowhood arise for several reasons, the most important of which are the following: (a) sex differentials in the age at marriage, (b) women having married men who are significantly older than themselves and therefore belonging to cohorts which are exposed to a higher risk of mortality, (c) the higher expectation of life of women and (d) the significantly higher rate of remarriage among men compared with women.

Age at marriage

[Table 8](#) shows that the age at marriage for both men and women has been consistently higher in Kerala right from the turn of the century than for the country as a whole. The mean age at marriage of women in Kerala was 17.1 years in 1901 when the corresponding figure for India as a whole was 13.2 years. In 1981, the age at marriage for women in Kerala was 21.9 years and that for women in India as a whole was 18.3 years. In terms of age differences between marriage partners, the sex differentials have come down more sharply in India as a whole than in Kerala. While for the whole of India, the sex difference in mean age at marriage has varied between 7.0 years and 4.4 years over the 80-year period. In Kerala, the age difference, although quite high, has fluctuated between a narrower range, namely, 6.8 and 5.3 years. However, the higher age differentials of marriage partners combined with the higher expectation of life of women as compared with men (see [table 4](#)) contribute to the high incidence of female widowhood. Further investigation is needed to determine whether the significantly lower rate of male widowhood can be explained largely in terms of these two factors. In this context, it is relevant to note that, in 1981 for both Kerala and India as a whole, the proportion of those currently married among men was at least twice as high as among women at higher ages (i.e. at 60+). Also, this position was somewhat more pronounced in Kerala than for India as a whole (see [table 6](#)). This strongly suggests that remarriage is possibly more prevalent among men relative to women in Kerala than in the rest of India.

Table 8: Mean age at marriage for men and women 1901-1981

(years)

Year	India			Kerala		
	Men	Women	Difference	Men	Women	Difference
1901	20.2	13.2	6.1	23.2	17.1	7.0
1911	20.5	13.6	6.5	23.8	17.3	6.9
1921	18.4	12.6	5.5	23.3	17.8	5.8
1931	20.2	15.0	6.0	25.6	19.6	5.2
1941	19.8	15.4	6.3	25.6	19.3	4.4
1951	21.4	16.1	6.5	26.3	19.8	5.3
1961	21.3	16.7	6.8	23.8	20.0	4.6
1971	22.7	17.2	5.5	26.3	20.8	5.5
1981	23.3	18.3	5.3	27.2	21.9	5.0

Sources: *Fact Book on Population and Family Planning*, Demographic Research Centre, Trivandrum, 1974; and *Women in India: A Statistical Profile, 1988*. Government of India, New Delhi.

Dependency ratio

There are a number of different ways of looking at the extent to which elderly people become dependent on society. [Table 9](#) presents various dependency ratios. The old-age dependency ratio indicates the number of dependents above the age of 60 per 100 persons of working age, i.e. those between the ages of 15 and 60. The old-age dependency ratio for Kerala in 1981 stood at 13; by 2026, this ratio is projected to go up to 81.

Table 9: Dependency ratios

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Total 60+	Total 60+	Females 60+	Total 0-4	(0-14)	(0-14), 60+	Total 60+
	Total (15-59)	Female (15-59)	Male (15-59)	Female (60+)	15-59	Total (15-59)	Total (0-14)
1981	13.0	25.4	13.10	300	62.0	-	-
1991	14.1	27.9	16.9	197	47.0	61.2	30.0
1996	15.1	30.1	17.1	180	44.0	59.2	34.4
2001	16.1	32.2	18.3	161	42.2	58.3	38.2
2006	17.0	34.2	19.4	143	40.8	57.9	41.7
2011	18.7	37.8	21.1	124	38.8	57.6	48.2
2016	22.0	44.4	24.2	105	37.4	59.4	58.7
2021	26.0	52.6	28.2	90	36.4	62.3	71.5

Source: Computed from Bhat and Rajan.

1. Population age 60+ ÷ total population (15-59).
2. Population age 60+ ÷ female population (15-59)
3. Female population 60+ ÷ female population (15-59)
4. Children (0-4) ÷ female population (60+).
5. Population (0-14) ÷ total (15-59).
6. Population (0-14) + (60+) ÷ total (15-59)
7. Population (60+) ÷ total (0-14).

If the number of total elderly is compared with only the female population of working age, in order to indicate the burden of day-care that the elderly place on women who normally are the ones who provide care for them, in the year 2026 every 100 women will have to take care of 63 older men and women. Of course, the elderly are not alone in depending on others for care and support. Children also need to be taken care of. In fact, it can be argued that, even when the elderly do not have any economic contribution to make, they still can, and do, partake in providing child care and this is especially so for elderly women.

Economic status of the elderly

The vast majority of the elderly do not have any independent means of support except for those who had a pensionable job during their working life. Those who are involved in agriculture or casual wage labour have access to income only during their working life. Once they cease working, they become totally dependent on their children or relatives for support. As a result, elderly men and women continue to work much beyond what is normally regarded as the working ages.

In 1981, while the work participation rate for men above the age of 60 was as high as 43 per cent, only 7 per cent of the women were engaged in work ([table 10](#)). Of course, recorded work participation among women was considerably lower than among men even at younger ages. Thus, for the age group 40-49 years, the work participation of women was only 27 per cent compared with men's 88 per cent in 1981. The drop in women's work participation at age 60+ is considerably more pronounced than for men. This clearly has implications with regard to the considerably higher dependency of elderly women in comparison with elderly men.

Table 10: Work participation by sex and age groups in Kerala, 1981

(per cent)

Age group	Men	Women
All ages	41.01	12.77
40-49	88.09	26.75
60+	43.40	7.03

Source: Census of India, 1981.

Economic support for the elderly

The problems of the elderly have traditionally been taken care of by the family network. The entire responsibility for the care and support of the elderly members still continues to be shouldered by the family irrespective of whether it is a matriarchal or patriarchal family. While the obligations of the family to look after the elderly and respect them still holds true in both India as a whole and Kerala, there are many factors which may make the practice of the ideal increasingly problematic. Thus, it is becoming necessary for the State to take initiatives in the matter of the care of the elderly.

Welfare programmes for the elderly

When the Kerala State Government initiated a pension system for the destitute elderly and widows in 1967, the pensions were restricted to those who had no family to help them or who had been abandoned by their relatives, or whose family income was extremely low. In 1980, a separate scheme was introduced granting pensions to agricultural workers with a family income below a prescribed ceiling; the entire cost of these two schemes is met by the State exchequer. The pension rates have been revised upwards from time to time following escalations in the cost of living. Nonetheless, the rates are very low in real terms and are just about adequate to cover the cost of minimal quantities of basic food items. In 1989-1990, the number of persons covered under the first scheme was 180,000 and under the second scheme 300,000. Of the pension schemes administered by Kerala State, none is specially addressed to elderly women. Under the scheme for destitute people, there is a special provision made for pensions for widows and divorced or separated women. But the entitlement to a pension under this provision concerns the marital status of the women and their economic position, not their age. As far as the other scheme is concerned, it is quite likely that many elderly women may be left out, not because they are not in need of assistance,

but because they do not qualify for it in terms of the occupational norms that had been adopted for the pension scheme. Thus, there is a need to address the problems of elderly women who do not fall either into the category of destitutes or those who had worked in a particular occupation. With the passage of time, their numbers are bound to swell and their economic problems become more acute.

References

Bhat, M. and S. I. Rajan (1989). "Population Projections for Kerala, 1981-2026", Centre for Development Studies, Trivandrum (mimeo).

Census of India (1984). *Provisional Population Totals*, Paper No. I, Census Commissioner for India, New Delhi.

_____ (1984a). *Population Projections for India, 1981-2001*, Series I - India Paper I, Census Commissioner for India, New Delhi.

_____ (1961-1991). *Social and Cultural Tables*, New Delhi.

Government of India (1988). *Women in India - A Statistical Profile*, New Delhi.

Government of Kerala (1974). *Fact-book on Population and Family Planning*, Bureau of Economics and Statistics, Trivandrum.

_____ (1981). *Women in Kerala*, Bureau of Economics and Statistics, Trivandrum.

United Nations (1982). *Population of India*, Country Monograph Series No. 10, (New York, Economic and Social Commission for Asia and the Pacific).

_____ (1984-1985). *Periodical on Aging*, Vol. 1, (New York, Department of International Economic and Social Affairs).

Asia-Pacific Population Journal, www.unescap.org/appj.asp

Print this page