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Population Aging, Health and Social Security in India

S. Irudaya Rajan
Center for Development Studies
India

March 13, 2007
Discussion Paper No. 3

Center for Research on Economic Inequality (CREI)
Graduate School of Economics
Osaka City University

3-3-138 Sugimoto, Sumiyoshi-ku,
Osaka 558-8585, Japan
http://www.econ.osaka-cu.ac.jp/CREI/index.html

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INTRODUCTION

Aging of population is a major aspect of the process of demographic transition. The developed regions of the world being ahead of the developing countries with respect to demographic transition have already experienced its consequences and the developing world is currently facing the consequences. Although the proportion of the elderly, defined as consisting of persons aged 60 years and above in a population, seems to be relatively small in some of the developing countries, such countries have large number of elderly persons because of their extensive population base. The recent emphasis on studies pertaining to the elderly in the developing world is attributed to their increasing numbers and deteriorating conditions. While the increasing numbers are attributed to demographic transition, the deteriorating economic and social conditions are the result of the fast-eroding traditional family system in the wake of rapid modernization, migration and urbanization. Projected increases in both the absolute and the relative sizes of the elderly population in many third world countries are a subject of growing concern for public policy (Kinsella and Velkoff, 2001; World Bank 2001; United Nations, 2002; Bordia and Bhardwaj, 2003; Liebig and Irudaya Rajan, 2003). Such increases in the elderly population are the result of changing fertility and mortality regimes over the past 40 to 50 years. The combination of high fertility and declining mortality during the twentieth century has resulted in large and rapid increases in elderly populations as successively larger cohorts step into old age. Further, the sharp decline in fertility experienced in recent times is bound to lead to an increasing proportion of the elderly in the future. Besides, given that these demographic changes have been accompanied by rapid and profound socio-economic changes, cohorts might differ in their experience as they join the ranks of the elderly.

Against this backdrop, we may now preface our discussion with an account of the structure and size of the elderly population. The number of elderly in the developing countries has been growing at a phenomenal rate; in 1990 the population of persons aged 60 years and above in the developing countries exceeded that of the developed countries. According to present indications, most of this trend of growth would take place in developing countries and over half of which would be in Asia (World Bank, 1994). Obviously, the two major

population giants of Asia, namely India (Irudaya Rajan, Mishra and Sarma, 1996; 1999; 2000; 2001) and China (Irudaya Rajan, 1994) would contribute a significant proportion of this growth of the elderly (Irudaya Rajan, Sarma and Mishra, 2003)

AGEING: THE INDIAN SCENARIO

The 2001 census has shown that the elderly population of India consisting of 28 states and 7 Union Territories accounted for 77 million. In 1961, the elderly population had been only 24 million; it increased to 43 million in 1981 and to 57 million in 1991. The proportion of elderly persons in India has risen from 5.63 per cent in 1961 to 6.58 per cent in 1991 (Irudaya Rajan, Mishra and Sarma, 1999) and to 7.5 per cent in 2001 (Irudaya Rajan, 2005a; 2005b; 2006). Within the elderly population, persons aged 70 and above have also grown rapidly; from a mere 8 million in 1961 to 21 million in 1991 and to 29 million in 2001. The proportion of the elderly above 70 years of age to total population increased from a mere 2.0 per cent in 1961 to 2.9 in 2001. In 1961, the Indian Census had reported 99 thousand centenarians. Their number went up to 138 thousand in 1991. The growth rates among the different groups of the elderly, namely 60 years plus, 70 years plus and 80 years plus during the decade 1991-2001, were much higher than that of the general population growth rate of 2 per cent per annum (Irudaya Rajan, Risseeuw and Perera, 2006). The sex ratio among the elderly in India favours males in contrast to the trend prevalent in other parts of the world (see Tables 1 and 2).

Table 1: Number and Proportion of Elderly by Different Age Groups, India, 1961-2001

Age	Number (in Millions)					Per cent of Elderly to the total population				
	1961	1971	1981	1991	2001	1961	1971	1981	1991	2001
60+	25	33	43	57	77	5.6	6.0	6.49	6.76	7.5
70+	9	11	15	21	29	2.0	2.1	2.33	2.51	2.9
80+	2	3	4	6	8	0.6	0.6	0.62	0.76	0.8
90+	0.5	0.7	0.7	1	1.8	0.1	0.1	0.1	0.2	0.2
100+	0.01	0.01	0.01	0.01	0.1	0.02	0.02	0.02	0.02	0.01

Note: Compiled by the authors from the past five censuses.

Table 2: Sex Ratio and Growth Rate among Indian Elderly, 1971-2001

Age	Sex Ratio of Elderly (males per 1000 females)				Growth of Elderly (Per cent)		
	1971	1981	1991	2001	1971-81	1981-91	1991-2001

60+	1066	1042	1075	1028	2.78	2.72	3.04
70+	1030	1026	1084	991	3.13	3.08	3.32
80+	950	990	1090	1051	2.54	4.35	2.35
90+	897	892	1019	1131	0.66	5.08	5.80
100+	798	844	896	1782	0.19	0.44	n.a

Note: Estimated by the authors from the past four censuses.

India is one of the few countries in the world where males outnumber females. This phenomenon among the elderly is of prime importance because female life expectancy at ages 60 years and 70 years is slightly higher than that of males. However, at any given age, there are more widows than widowers. Reasons for this unusual phenomenon need to be identified in a wider context. Since the beginning of the 20th century, life expectancy at birth among Indian males had remained higher than that among females until the first half of the 1990s. Besides, there exists the unusual demographic pattern of excess female mortality at infant and childhood years, the analysis of which is complicated by the phenomenon of age exaggeration among the aged. Therefore, the observation that males exceed females in old age, does not reveal a true picture of the situation among elderly persons (details, see Mari Bhat, 1992; Irudaya Rajan, Sarma and Mishra, 2003). In India, the sex ratio of the aged as a whole as well as that of the old-old favors males. Reasons for more males in old age may be under-reporting of females, especially widows, age exaggeration, low female life expectancy at birth, and excess female mortality among infants, children and adults (Sudha and Irudaya Rajan, 1999; 2003; Mari Bhat, Navaneetham and Irudaya Rajan, 1995; Mari Bhat 2002). Notwithstanding the several analytical and statistical problems indicated above, it cannot be disputed that the fact of preponderance of females in extreme old ages has to be brought to the attention of planners and policy makers.

Available findings on aging suggest that fertility has played a predominant role in the aging process compared to mortality. As far as India is concerned, there has been a substantial reduction in mortality compared to fertility since 1950. For instance, while the crude birth rate declined by 52 per cent from 47.3 during 1951-61 to 22.8 in 1999, the crude death rate fell more steeply by 70 per cent from 28.5 to 8.4 during the same period. Logically, therefore, India is expected to undergo a more rapid decline in fertility in the immediate future than mortality because mortality has already fallen to an extremely low level. The aging process in India is expected to be, therefore, faster in the years to come than in other

developing countries. Moreover, the transition from high to low levels of fertility is expected to narrow down the age structure at its base and broaden it at the top. In addition, improvement in life expectancy at all ages would allow more old people to survive thus intensifying the aging process. In this context, an examination of the rising trends in life expectancy indicates that the gain is going to be shared more and more by elderly people, a process which would make them live even longer (Table 3). As may be seen from the table, males are expected to live 16 years beyond the age of 60 years and 10 years beyond the age of 70 years; the corresponding years of survival for females are 18 years and 11 years respectively. Urban females are expected to live for an additional two years at age 60 compared to their rural counterparts.

Table 3: Life Expectancy at ages 60 and 70, India

Period	Male			Female		
	e0	e60	e70	e0	e60	e70
1970-75	50.5	13.4	8.6	49.0	14.3	9.2
1976-80	52.5	14.1	9.6	52.1	15.9	10.9
1981-85	55.4	14.6	9.7	55.7	16.4	11.0
1986-90	57.7	14.7	9.4	58.1	16.1	10.1
1991-95	59.7	15.3	10.0	60.9	17.1	11.0
1995-99	60.8	15.7	10.3	62.5	17.7	11.6
1996-00	61.0	15.8	10.4	62.7	17.8	11.7
1997-01	61.3	16.0	10.6	63.0	18.1	11.9

Note: Compiled from life tables produced by the Registrar General of India for various periods

Emerging Aging Scenario, 2001-2051

One of the major objectives of this paper is to assess the emerging ageing scenario of India in the first half of the 21st century. Towards this end, we have projected the elderly population of India for the next 50 years. Table 4 gives a profile of the elderly classified by ages 60 years and above, 70 years and above and 80 years and above in terms of size, proportion and gender. Figure 1 depicts India's age pyramids at three demographic regimes; high fertility and mortality (1961), moderate fertility and low mortality (2001), and low fertility and low mortality (2051). Figure 2 assesses the percentage of the elderly in the population by sex.

Table 4: Number, Proportion and Sex Ratio of Elderly, India, 2001-2051

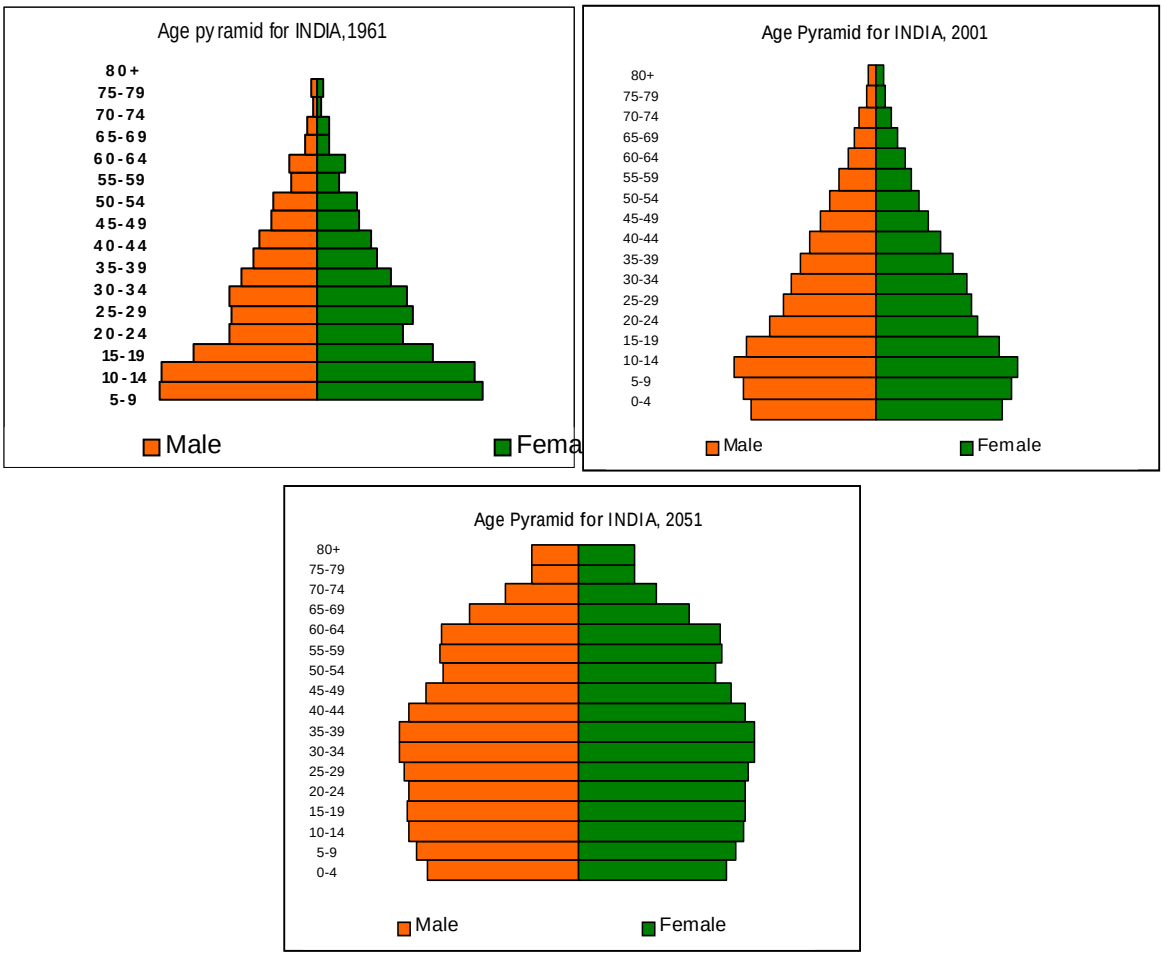
	2001	2011	2021	2031	2041	2051
60 and Above						
Numbers (in million)	77	96	133	179	236	301
Percentage to the total population	7.5	8.2	9.9	11.9	14.5	17.3
Sex Ratio (males per 1000 females)	1028	1034	1004	964	1008	1007
70 and Above						
Numbers (in million)	29	36	51	73	98	132
Percentage to the total population	2.9	3.1	3.8	4.8	6.0	7.6
Sex Ratio (males per 1000 females)	991	966	970	930	891	954
80 and Above						
Numbers (in million)	8	9	11	16	23	32
Percentage to the total population	0.5	0.7	0.8	1.0	1.4	1.8
Sex Ratio (males per 1000 females)	1051	884	866	843	774	732

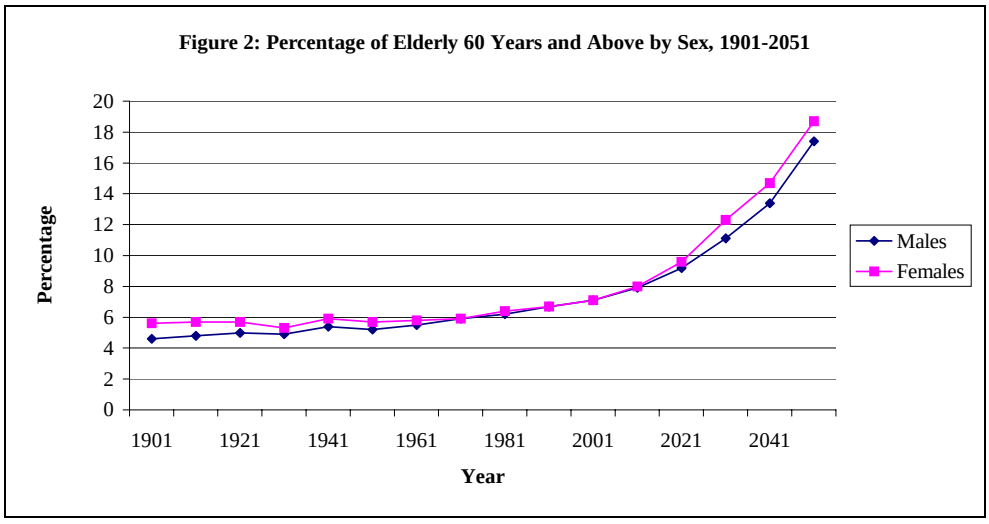
Note: According to the 2001 census, India was administratively divided into 28 states and 7 Union Territories. Population Projections have been made specifically for the present paper.

For the projections, we have used the 2001 census age data published by the Registrar General of India as the base population; assumptions regarding future fertility and mortality trends are based on past trends as revealed by the Sample Registration System and other sources such as the first and the second rounds of the National Family Health Survey (Visaria and Irudaya Rajan 1999; Guilmoto and Irudaya Rajan 1998; 2001; 2002; 2005). The projection period ranges from 2001 to 2051. It is also important to note that the number of the projected elderly persons above 60 years of age in 2051 were already 10 years old in 2001. Given our assumptions regarding mortality, the projections are likely to be valid.

The size of India's elderly population aged 60 and above is expected to increase from 77 million in 2001 to 179 million in 2031 and further to 301 million in 2051. The proportion is likely to reach 12 per cent of the population in 2031 and 17 per cent in 2051. However, the sex ratio among the elderly favours males. It will be interesting to examine the reasons for the excess of elderly males over elderly females in India, an experience contrary to that of other developing nations. The number of elderly persons above 70 years of age (old-old) is likely to increase more sharply than those of 60 years and above. The old-old are projected to increase five-fold during 2001-2051 - from 29 million in 2001 to 132 million in 2051. Their proportion is expected to rise from 2.9 per cent to 7.6 per cent. Although we have found excess males in the age group 60 years and above, the old-old sex ratio is very favourable to females. The oldest old (80+) among the elderly in India is expected to grow faster than any other age group in the population. In absolute terms, it is likely to rise four-fold from 8 million in 2001 to 32 million in 2051.

Figure 1





Old age dependency ratios refer to the population above 60 years of age to the population in working ages (15-59 years). Index of ageing is defined as the ratio of population above 60 years of age to the population of 0-14 years. The old age dependency ratio for India was 11.9 in 2001, and it is expected to increase to 19.0 in 2031 and 28.2 in 2051 (Table 5). As of 2001,

India had 20 elderly persons per 100 children and the index is expected to reach 80 in 2051.

Table 5: Indices of Aging, 200-2051.

Indices	2001	2011	2021	2031	2041	2051
Old Dependency Ratio	11.9	13.4	16.0	19.0	23.2	28.2
Index of Ageing	21.1	26.5	35.2	46.8	62.0	81.7

Note: Same as Table 4.

Health Status of the Elderly

Health care of the elderly is a major concern of a society as old people are more prone to morbidity than young age groups. It is often claimed that aging is accompanied by multiple illnesses and physical ailments. Besides physical illnesses, the aged are more likely to be victims of poor mental health, which arises from senility, neurosis and the extent of life satisfaction. The health status of the aged therefore should occupy a central place in any study of the elderly population. Most primary surveys have reported that the elderly in India in general and the aged population in the rural areas in particular have serious health problems.

The Nadal, Khatri and Kadian (1987) study found a majority of the elderly suffering from diseases like cough (cough includes tuberculosis of lungs, bronchitis, asthma, and whooping cough, according to International Classification of diseases, poor eyesight, anaemia and dental problems. The proportion of the sick and the bedridden among the elderly is found to increase with age; the major physical disability consists of blindness and deafness (Darshan, Sharma and Singh, 1987). Shah (1993) in his study of urban elderly in Gujarat found deteriorating physical conditions among two-thirds of the elderly, such as poor vision, impairment of hearing, arthritis and loss of memory. An interesting observation made in this study relates to the sick elderly's preference for treatment by private doctors. Besides physical ailments, psychiatric morbidity is also prevalent among a large proportion of the elderly. An enquiry in this direction by Gupta and Vohra (1987) provides evidence of psychiatric morbidity among the elderly. This study also draws a distinction between functional and organic disorders in old age. It is found that functional disorders precede organic disorders, which become frequent beyond seventy years of age. The First National Sample Survey which focussed on the elderly (NSS) and conducted during the second half of the 1980s indicated that 45 per cent of the elderly suffered from some chronic illness like pain in the joints and cough. Other diseases noted in the NSS survey included blood pressure,

heart disease, urinary problems and diabetes. The major killers among the elderly consisted of respiratory disorders in rural areas and circulatory disorders in urban areas. Another rural survey reported that around 5 per cent of the elderly were bedridden and another 18.5 per cent had only limited mobility. Given the prevalence of ill health and disability among the elderly, Vijaya Kumar (1991) found that dissatisfaction existed among the elderly with regard to the provision of medical aid. The author also referred to the fact that the sick elderly lacked proper familial care and that public health services were insufficient to meet the health care needs of the elderly.

The National Sample Survey in its 52nd round (July 1995-June 1996) focused on issues such as economic independence, chronic ailments, retirement and withdrawal from economic activity and familial integration among the elderly. This sample survey was conducted throughout the country. The sample consisted of 17,171 male and 16,811 female elderly persons. Among them, 20,950 lived in rural areas and 13,032 in urban areas. The following section analyses the raw data of this NSS round survey to assess the disease and disability profile among the elderly across social groups, including Scheduled Castes/Scheduled Tribes (SC/ST) and the patterns of health utilization. As stated earlier, the results of the 60th round of NSS results have been just published. The raw data used for analysis in this section are related to the 52nd round of the NSS. The following issues are analyzed further:

(a) Self-reported health

(b) Disability profile

(c) Disease profile

All elderly persons in the sample were asked to state their perceptions of their own health in two categories: `good' or `bad'. About 70 per cent of the elderly reported their health status as `good'. In this context, the differences between males and females and places of residence (rural or urban) were not significant. However, the proportion of females reporting good health was slightly higher than that of males and higher in urban areas than in rural areas (Table 6).

Table 6: Health, Disease and Disability profile of the elderly in India 1995-96

Rural			Urban			Total		
Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**

Sample Size of the Elderly								
10737	10213	20950	6434	6598	13032	17171	16811	33982
Reported as Good Health (%)								
70.05	68.53	69.31	71.53	73.02	72.28	70.60	70.29	70.45
Reported as no disease (%)								
20.92	20.98	20.95	30.39	29.11	29.74	24.47	24.17	24.32
Reported as no Disability (%)								
59.33	57.45	58.41	63.41	61.87	62.63	60.86	59.18	60.03

Note: Based on the raw data of NSS 1995-96.

The proportion reporting good health declined from 70 per cent among persons aged 60 years and above to 68 per cent among persons aged 70 years and above and to 65 per cent among those aged 80 years and above. To avoid the errors arising from the smallness of the sample, we have divided the whole country into eight regions to assess the self-perceptions of health. The Western region had the highest proportion (73.4) of the elderly reporting good health, followed by North-Western, Southern and Northern regions. The lowest proportion was reported for the North-Eastern region (for more details, see Table 7). Similar patterns were observed among age groups of 70 years and above and 80 years and above. Detailed analysis was undertaken with respect to self-reported health among Scheduled Castes and Scheduled Tribes along with others. Compared to the elderly in the general population, the elderly belonging to the SCs and STs reported generally poorer health but the differences were not very high. The only exception was in respect of urban females. However, there were not much differences reported among SCs and STs in terms of elderly health status (Table 8).

Table 7: Percentage of the Elderly Reporting Good Health by Regions, 1995-96

Region	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	70.66	68.61	69.63	73.20	75.83	74.57	71.81	71.99	71.90
Western	72.76	74.84	73.84	71.74	74.24	73.01	72.26	74.56	73.44
N – Western	72.68	70.67	71.65	72.50	76.76	74.72	72.61	73.19	72.91
Northern	71.38	69.75	70.60	72.86	74.05	73.45	71.77	70.94	71.37
Eastern	65.65	60.46	63.21	70.32	67.23	68.79	67.29	62.99	65.23
Northern Hills	69.16	70.75	69.91	68.59	67.72	68.19	69.04	70.16	69.56
North-Eastern	65.45	61.74	63.83	65.24	63.95	64.59	65.38	62.63	64.11
Union Territories	69.70	71.64	70.48	68.20	68.77	68.47	68.59	69.38	68.95
India	70.05	68.53	69.31	71.53	73.02	72.28	70.60	70.29	70.45

Note: Eastern Region: Assam, Orissa, West Bengal;

North Eastern Region: Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland,Sikkim, Tripura;
Northern Hill Region: Himachal Pradesh, Jammu & Kashmir;
North Western Region: Haryana, Punjab, Rajasthan;
Northern Region: Bihar, Madhya Pradesh, Uttar Pradesh
Southern region, Andhra Pradesh, Karnataka, Kerala, Tamil Nadu;
Union Territories: Andaman & Nicobar Islands, Dadra & Nagar Haveli, Delhi, Lakshadweep, Pondicherry, Daman & Diu, Chandigarh;
Western Region: Goa, Gujarat, Maharashtra.

Table 8: Percentage of the elderly reporting good health: Scheduled Castes and Scheduled Tribes 1995-96.

	Rural			Urban			Total		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
ST	70.35	66.33	68.44	69.53	75.39	72.37	70.20	68.00	69.15
SC	68.72	68.79	68.75	71.43	73.14	72.28	69.51	70.11	69.80
Others	70.40	68.88	69.65	71.65	72.89	72.28	70.93	70.66	70.79

Note: Same as Table 6.

In terms of the eight chronic diseases canvassed in the National Sample Survey, close to one-third of the elderly reported suffering from pain in joints, followed by cough (about 20 per cent) and blood pressure (about 10 per cent). Less than five per cent reported suffering from piles, heart diseases, urinary problems, diabetics and cancer (Table 9). Differences in the proportions were observed across gender, places of residence and socially vulnerable groups such as SCs and STs. In the case of joint pains, a common chronic disease among the Indian elderly, incidence was higher among women than any men; it was higher in rural areas than urban areas, followed by scheduled castes than the general population. On the other hand, the incidence of cough was higher among males than among females. Groups most affected by cough belonged to schedule tribes, followed by scheduled castes and the proportions were the lowest among the elderly in the general population. With respect to ailments such as piles, heart diseases, urinary problems and diabetics, the incidence was higher among males than among females whereas in the case of cancer, the reverse was the trend noticed. In general, except in the case of joint pain, cough and piles, the incidence of all other diseases was higher among scheduled castes than among scheduled tribes.

Table 10: Disease patterns among the Elderly: Scheduled Caste/Tribes and Others.

	Rural			Urban			Total		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Cough									
ST	25.13	22.35	23.81	20.41	15.77	18.17	24.28	21.14	22.78
SC	21.88	21.92	21.90	19.64	17.71	18.69	21.22	20.64	20.94
Others	24.58	21.15	22.90	16.02	15.82	15.92	20.94	18.78	19.86
Piles									
ST	3.29	2.42	2.88	1.78	1.89	1.83	3.02	2.32	2.69
SC	2.14	2.53	2.33	2.46	2.97	2.71	2.23	2.67	2.44
Others	2.97	2.48	2.73	2.58	2.41	2.49	2.81	2.45	2.63
Joint Pain									
ST	40.25	40.64	40.43	28.70	35.33	31.91	38.18	39.66	38.89
SC	38.50	38.52	38.51	35.60	37.94	36.76	37.65	38.34	37.99
Others	38.23	38.81	38.51	32.74	35.46	34.13	35.90	37.32	36.61
High/low BP									
ST	6.46	6.76	6.60	13.31	14.20	13.74	7.69	8.13	7.90
SC	7.31	6.56	6.95	17.97	19.20	18.58	10.45	10.39	10.42
Others	7.10	7.24	7.17	17.79	19.03	18.42	11.64	12.47	12.06
Heart Disease									
ST	1.94	2.06	2.00	2.37	2.52	2.44	2.01	2.15	2.08
SC	2.89	2.78	2.84	5.58	5.71	5.65	3.68	3.67	3.68
Others	2.28	2.04	2.16	6.14	5.37	5.75	3.92	3.52	3.72
Urinary Problems									
ST	2.26	2.35	2.30	1.18	2.21	1.68	2.07	2.32	2.19
SC	3.54	2.29	2.93	3.57	2.40	2.99	3.55	2.32	2.95

Others	2.97	2.28	2.63	3.39	2.71	3.04	3.15	2.47	2.81
Diabetes									
ST	1.68	1.78	1.73	3.25	4.73	3.97	1.96	2.32	2.13
SC	1.30	1.09	1.20	5.02	4.69	4.86	2.40	2.18	2.29
Others	2.13	2.11	2.12	6.93	6.49	6.70	4.17	4.05	4.11
Cancer									
ST	0.19	0.21	0.20	0.00	0.32	0.15	0.16	0.23	0.19
SC	0.33	0.05	0.19	0.45	0.57	0.51	0.36	0.21	0.29
Others	0.31	0.21	0.26	0.25	0.41	0.33	0.29	0.30	0.29
Sample									
ST	1548	1405	2953	338	317	655	1886	1722	3608
SC	2148	2012	4160	896	875	1771	3044	2887	5931
Others	7026	6767	13793	5195	5397	10592	12221	12164	24385

Note: Same as Table 19.

As disease patterns have serious implications for health care expenditure, we classify the elderly into the following four groups on the basis of sex, place of residence and region.

(a) Elderly with no disease

(b) Elderly with only one disease

(c) Elderly with two diseases

(d) Elderly with three diseases

One-fourth of the elderly in India have reported not suffering from any chronic disease. The proportions were about 20 per cent in rural areas and 30 per cent in urban areas (Table 23). Not much difference was observed between males and females. However, among the regions, the North-West reported the highest proportion of the elderly with no disease, followed by the West and the South. The lowest proportion was reported by states in the Eastern region. Similar patterns were observed among the persons in the age groups of 70 years and above and of 80 years and above.

Table 11: Disease Profile of the Elderly by Regions of India 1995-96

Elderly persons reported as having No Disease									
Region	**Rural**			**Urban**			**Total**		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
South	25.66	23.04	24.34	28.50	29.85	29.20	26.95	26.23	26.58
West	23.45	23.88	23.67	34.09	33.16	33.62	28.62	28.26	28.44

N–West	25.76	27.11	26.45	35.70	35.30	35.49	29.76	30.50	30.14
North	19.43	19.61	19.52	32.45	27.10	29.78	22.85	21.69	22.29
East	13.87	13.75	13.81	18.14	16.57	17.36	15.37	14.80	15.10
NH	21.88	22.05	21.96	30.37	28.48	29.51	23.62	23.30	23.48
NE	16.39	17.68	16.95	34.31	31.75	33.03	22.54	23.34	22.91
UT	30.30	31.34	30.72	36.04	32.41	34.33	34.55	32.19	33.48
India	**20.92**	**20.98**	**20.95**	**30.39**	**29.11**	**29.74**	**24.47**	**24.17**	**24.32**
Elderly persons reported as suffering from one Chronic Disease									
South	55.39	55.47	55.43	56.23	54.34	55.24	55.77	54.94	55.34
West	48.79	45.53	47.10	53.78	53.48	53.63	51.22	49.28	50.23
N - West	48.21	46.04	47.11	50.34	48.49	49.38	49.06	47.06	48.03
North	49.18	47.69	48.46	47.30	51.46	49.38	48.69	48.73	48.71
East	65.01	64.97	64.99	69.14	71.43	70.27	66.46	67.38	66.90
NH	56.66	48.55	52.84	58.12	63.29	60.46	56.96	51.42	54.37
NE	58.96	55.18	57.31	50.11	51.25	50.68	55.93	53.60	54.86
UT	55.56	47.76	52.41	50.53	52.96	51.68	51.83	51.88	51.85
India	**53.90**	**51.76**	**52.85**	**54.66**	**55.11**	**54.89**	**54.18**	**53.07**	**53.63**
Elderly persons reported as suffering from two Chronic Diseases									
South	20.40	19.51	19.95	21.71	21.92	21.82	20.99	20.64	20.81
West	14.40	13.50	13.93	19.05	19.79	19.42	16.66	16.47	16.56
N - West	14.90	15.56	15.24	16.42	19.47	18.01	15.51	17.18	16.37
North	18.45	18.15	18.30	21.13	20.19	20.66	19.15	18.72	18.94
East	27.86	28.30	28.07	32.39	35.41	33.89	29.45	30.96	30.17
NH	22.42	20.67	21.60	25.13	32.28	28.37	22.98	22.93	22.96
NE	24.17	22.71	23.54	17.61	19.95	18.78	21.92	21.60	21.78
UT	21.21	19.40	20.48	23.67	29.64	26.49	23.04	27.50	25.07
India	**20.15**	**19.43**	**19.80**	**21.87**	**23.08**	**22.48**	**20.80**	**20.86**	**20.83**
Elderly persons reported as suffering from three Chronic Diseases									
South	2.71	2.31	2.51	4.27	4.13	4.20	3.41	3.16	3.28
West	1.12	1.20	1.16	4.01	4.37	4.19	2.53	2.70	2.61
N - West	1.56	1.07	1.31	3.15	2.39	2.75	2.20	1.61	1.90
North	1.52	1.26	1.39	3.89	3.54	3.72	2.14	1.89	2.02
East	5.03	4.80	4.92	6.60	7.08	6.84	5.58	5.65	5.61
NH	3.13	1.53	2.38	4.71	6.33	5.44	3.45	2.47	2.99
NE	2.48	2.29	2.39	3.39	2.72	3.05	2.79	2.46	2.64
UT	2.30	0.00	1.43	4.55	7.66	6.01	3.99	6.25	5.01
India	**2.41**	**2.01**	**2.21**	**4.29**	**4.30**	**4.30**	**3.12**	**2.91**	**3.01**

Note: Same as Table 6.

One out of every two elderly in India suffers from at least one chronic disease which requires life-long medication. The proportion is slightly higher in urban areas than in rural areas. The Eastern region led all the other regions in India in the matter. The percentage of elderly (two out of three) suffering from at least one chronic disease was the highest in this region. It was followed by the South; the lowest proportions were in the North and North-Western regions of India. Similarly, one out of every five elderly reported suffering from two chronic diseases canvassed in the NSS; close to three per cent suffered from three chronic diseases.

Five types of disabilities of the elderly were probed by the NSS: visual impairment, hearing problem, difficulty in walking (locomotor problem), problems in speech and senility (Table 12). Twenty-five per cent of the elderly in India suffered from visual impairment, followed by hearing difficulties (14 per cent) and locomotor disability and senility (each 11 per cent). The prevalence rates of all the five disabilities were higher in rural than in urban areas. Except in respect of visual impairment, women were ahead of males in respect of the disabilities. Between SCs and STs, disabilities among Scheduled tribes were higher than among Scheduled Castes. Scheduled tribes reported the highest incidence of disabilities, higher than of Scheduled castes and the general population.

Table 12: Disabilities among the Elderly by Social Group in India 1995-96.

	Rural			Urban			Total		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Visual									
ST	27.71	27.33	27.53	23.96	23.66	23.82	27.04	26.66	26.86
SC	28.12	26.09	27.14	26.00	27.09	26.54	27.50	26.39	26.96
Others	25.52	26.70	26.10	23.41	24.92	24.18	24.62	25.91	25.27
Hearing									
ST	17.89	20.00	18.90	13.91	17.03	15.42	17.18	19.45	18.26
SC	13.87	14.21	14.04	10.83	13.71	12.25	12.98	14.06	13.51
Others	14.66	16.23	15.43	12.03	12.03	12.03	13.54	14.36	13.95
Speech									
ST	4.84	5.77	5.28	5.62	3.79	4.73	4.98	5.40	5.18
SC	3.26	3.73	3.49	2.12	2.74	2.43	2.92	3.43	3.17
Others	3.69	3.95	3.81	3.21	3.15	3.18	3.49	3.59	3.54
Locomotor									
ST	11.30	11.89	11.58	10.06	7.57	8.85	11.08	11.09	11.09
SC	10.34	10.49	10.41	8.71	9.60	9.15	9.86	10.22	10.03
Others	10.86	11.56	11.20	8.93	9.88	9.41	10.04	10.81	10.42
Amnesia / senility									
ST	10.72	12.17	11.41	9.47	8.83	9.16	10.50	11.56	11.00
SC	10.34	10.24	10.29	6.47	9.03	7.74	9.20	9.87	9.53
Others	9.34	10.36	9.84	7.08	7.23	7.16	8.38	8.97	8.67

Note: Same as Table 6.

About 60 per cent of the elderly in India lead disability-free lives. The highest proportion of elderly persons with no disability was reported from South India and the lowest from East India (Table 13). It was slightly higher in rural than in urban areas. Among the five disabilities highlighted in the NSS survey, 40 per cent of the elderly suffered from at least one disability, the proportion being slightly higher among females than among males. Gender differentials were reported in respect of 2-3 disabilities in some individuals; 15 per cent suffered from at least two disabilities and another 6 per cent suffered from three disabilities in the country as a whole.

Table 13: Disability Profile among the Elderly by Regions, 1995-96

Elderly persons reported suffering from no Disability									
	Rural			**Urban**			**Total**		
Region	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
South	59.79	59.33	59.56	65.77	64.68	65.20	62.49	61.84	62.16
West	54.83	55.75	55.31	63.81	59.54	61.65	59.19	57.54	58.35
N – West	63.94	59.82	61.84	64.71	61.18	62.87	64.25	60.39	62.26
North	61.40	58.46	59.99	61.54	63.33	62.43	61.44	59.81	60.65
East	55.34	51.50	53.54	59.84	57.50	58.68	56.92	53.75	55.40
NH	58.02	60.18	59.04	65.45	65.82	65.62	59.55	61.28	60.36
NE	58.73	56.25	57.65	62.08	62.13	62.10	59.88	58.61	59.30
UT	63.64	53.73	59.64	63.25	58.50	61.01	63.35	57.50	60.68
India	**59.33**	**57.45**	**58.41**	**63.41**	**61.87**	**62.63**	**60.86**	**59.18**	**60.03**

Elderly persons reported suffering from one Disability									
South	39.25	38.60	38.92	32.36	33.76	33.09	36.13	36.33	36.23
West	44.31	43.13	43.70	35.64	39.39	37.54	40.10	41.36	40.75
N - West	34.87	38.49	36.71	33.52	37.19	35.43	34.32	37.95	36.19
North	37.02	39.60	38.26	36.96	34.81	35.88	37.00	38.27	37.62
East	43.89	46.85	45.28	38.28	41.18	39.71	41.92	44.73	43.27
NH	40.63	39.36	40.03	34.55	33.54	34.10	39.37	38.22	38.84
NE	37.62	39.18	38.30	35.44	35.60	35.52	36.87	37.74	37.27
UT	35.35	46.27	39.76	34.98	40.32	37.50	35.08	41.56	38.03
India	**39.30**	**40.69**	**39.98**	**35.03**	**36.62**	**35.83**	**37.70**	**39.09**	**38.39**
Elderly persons reported suffering from two Disabilities									
South	14.69	15.50	15.10	11.35	10.72	11.02	13.18	13.26	13.22
West	17.41	17.01	17.21	12.49	14.62	13.56	15.02	15.88	15.46
N - West	13.71	13.87	13.79	11.90	13.82	12.90	12.98	13.85	13.43
North	16.80	18.80	17.76	13.97	16.03	15.00	16.06	18.03	17.02
East	18.32	20.77	19.47	14.13	16.09	15.10	16.85	19.02	17.89
NH	14.67	14.40	14.54	12.57	12.03	12.32	14.24	13.93	14.10
NE	15.45	19.82	17.35	14.00	12.70	13.35	14.95	16.96	15.87
UT	13.13	31.34	20.48	13.43	19.37	16.23	13.35	21.88	17.24
India	**16.08**	**17.49**	**16.77**	**12.74**	**13.84**	**13.30**	**14.83**	**16.05**	**15.44**
Elderly persons reported suffering from three Disabilities									
South	4.25	5.04	4.65	2.98	3.27	3.13	3.68	4.21	3.95
West	6.98	6.55	6.76	4.92	5.35	5.14	5.98	5.98	5.98
N - West	5.34	5.51	5.42	3.56	5.28	4.45	4.62	5.41	5.03
North	7.49	8.12	7.79	6.37	6.02	6.19	7.19	7.54	7.36
East	7.44	8.45	7.92	5.54	4.56	5.05	6.77	7.00	6.88
NH	5.57	4.29	4.97	2.62	5.06	3.72	4.96	4.44	4.72
NE	6.84	8.38	7.51	6.77	5.44	6.11	6.82	7.20	6.99
UT	5.05	11.94	7.83	3.53	6.72	5.04	3.93	7.81	5.70
India	**6.38**	**6.84**	**6.61**	**4.59**	**4.82**	**4.70**	**5.71**	**6.05**	**5.88**

Note: Same as Table 19.

In the 52nd NSS round, a few interesting questions were put to all households about morbidity status and hospitalization. The questions were:

(i) Whether hospitalized during the last one year

(ii) Whether ailing during the last 15 days

(iii) Whether ailing on the day before the date of survey

(iv) If yes to question (iii), whether normal activity is disrupted

We have analysed the raw data relating to the above questions with reference to cases in which the elderly had responded positively. Comparisons were made between SCs, STs and Others. Close to 10 per cent of the elderly among STs and 12 per cent among SCs reported that they had been hospitalized during the one year previous to the date of the survey (Table

14). Apparently, the proportion of the elderly who had been hospitalized was lower among SCs and STs than among the rest of the elderly. The results, however, should not be taken at their face value because in most of the poor households in India, the elderly are not hospitalized till a crisis situation arises, obviously with a view to minimizing medical expenses. The proportion of the elderly ailing during 15 days preceding the date of the survey was reported to be slightly higher than the proportion of the elderly hospitalized during the previous one year. Though the elderly in India tend to suffer from many ailments, particularly the old-old and the oldest old, they do not undergo proper medical treatment due to absence of a comprehensive health insurance scheme; this is particularly true in the case of the poorer elderly. One out of every 10 elderly in India was ailing during the day previous to the date of interview according to the results of the NSS 52nd round. If this proportion is applicable to India's 90 million elderly, it is seen that close to 9 million suffer from some ailment every day. About 5 per cent of the elderly who were reported ailing during the previous day stated that their usual activities were disrupted due to indisposition and that they were thus deprived of a day's earnings.

Table 14: Morbidity Particulars among the elderly according to social groups, 1995-96

Whether Hospitalized	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
ST	8.59	6.83	7.75	10.36	8.83	9.62	10.85	8.83	9.89
SC	8.33	6.46	7.43	13.84	9.49	11.69	14.11	10.59	12.4
Others	9.04	7.26	8.16	12.82	10.56	11.67	18.52	15.68	17.12
Total	8.83	7.04	7.96	12.83	10.34	11.57	16.53	13.73	15.16
Whether ailing during the last 15 days at the time of survey									
ST	12.86	13.88	13.34	10.36	9.15	9.77	12.86	13.88	13.34
SC	16.57	17.3	16.92	17.3	15.43	16.37	16.57	17.3	16.92
Others	17.44	17.5	17.47	16.44	14.77	15.59	17.44	17.5	17.47
Total	16.6	16.96	16.78	16.24	14.58	15.4	16.6	16.96	16.78
Whether ailing on the previous day at the time of survey									
ST	8.14	9.40	8.74	5.92	6.62	6.26	8.14	9.40	8.74
SC	12.38	12.52	12.45	13.50	11.54	12.54	12.38	12.52	12.45
Others	12.62	12.43	12.53	12.88	11.58	12.22	12.62	12.43	12.53
Total	11.93	12.03	11.98	12.60	11.34	11.96	11.93	12.03	11.98
Was usual activity disrupted due to ailing? The proportions who reported `yes'									
ST	3.68	3.70	3.69	1.78	3.47	2.60	3.68	3.70	3.69
SC	4.84	4.82	4.83	4.91	3.89	4.40	4.84	4.82	4.83
Others	4.92	4.39	4.66	4.08	3.85	3.97	4.92	4.39	4.66
Total	4.73	4.38	4.56	4.08	3.84	3.96	4.73	4.38	4.56

Note same as Table 6.

In the NSS 52nd round, information was also elicited about deaths in the household during the one year preceding the date of the survey. The information included age at death, cause of death, place of death and any medical attention given before death. Of the 1283 elderly persons reported dead during the one-year period, 755 were males and 528 females (Table 15). Among the elderly, 80 per cent died at home and only 17 per cent died in hospitals (9 per cent in government hospitals compared to 8 per cent in private hospitals). Similarly, close to 30 per cent of the elderly had not received any medical attention before death. A few had been examined by medical practitioners. One in three was reported to have died of old age. More than 5 per cent of the elderly died due to causes such as disorders of the respiratory and or the circulatory system, fever, digestive disorders and heart failure.

Table 15: Medical attention at death among the elderly

Medical attention before Death	60 – 69	70 - 79	80 +	Total
Govt.	31.47	21.9	14.75	23.83
Others	11.75	13.54	10.03	11.76
Registered Medical Practioner	22.11	25.73	21.83	23.15
Other Medical Practioner	10.36	12.42	14.45	12.07
No medical attention	24.3	26.19	38.94	29.03
Cause of death				
Old age	18.92	37.02	64.31	37.15
Disorders of respiratory system	15.94	11.74	7.08	12.15
Diseases of circulatory system	5.98	6.09	2.65	5.14
Accidents & injuries	2.19	3.61	1.18	2.41
Fevers	6.97	5.42	4.13	5.69
Digestive disorders	6.57	3.84	4.42	5.06
Disorders of nervous system	4.98	3.61	1.77	3.66
Other symptoms	20.72	16.03	9.73	16.20
Bleeding	0.20	0.45	0.00	0.23
Anemia	0.20	0.00	0.00	0.08
Jaundice	1.20	0.45	0.00	0.62
Heart failure	6.77	5.42	2.36	5.14
Others	8.96	5.87	2.06	6.07
Place of Death				
Home	73.31	79.46	89.68	79.76
On the way to hospital	2.79	1.13	0.59	1.76
Govt. hospital	12.95	8.13	4.13	9.01
Pvt. Hospital	8.57	9.26	4.13	7.49
Others	2.19	1.81	0.88	1.68

Note same as Table 6

SOCIAL ASSISTANCE PROGRAMMES FOR ELDERLY

The International Labour Organization has defined social security as `the protection which society provides for its members, through a series of public measures, against economic and social distress otherwise would be caused by the stoppage or substantial reduction of earnings resulting from sickness, maternity, employment injury, unemployment, invalidity, old age and death' (International Labour Organization, 1942). Sir William Beveridge, father of the British Social Security System, defined it as, `security of an income to take the place of earning when they are interrupted by unemployment, sickness, or accident; to provide retirement benefit, to provide against loss of support by the death of other person and to meet exceptional expenditure such as those connected with birth, death and marriage' (Beveridge, 1943). According to Piree Laroque, former President of the National Social Security Fund in France, social security, though sometime assimilated into social insurance, is a basically new development. It represents a guarantee by the whole community to all its members of the maintenance of

their standard of living or at least tolerant living conditions by means of a redistribution of income based on national solidarity' (Laroque, 1969). Leal de Araujo has viewed social security systems as supplementary machineries or economic agents for redistribution of income' (Leal de Araujo, 1972). Social security schemes may be classified into four types on the basis of their characteristics (Table 16).

Table 16: Basic Features of Major Social Security Schemes

Type of Scheme	Sources of funding	Coverage	Entitlement criteria
Social Assistance	Public revenue	Persons in designated categories who have low incomes	Means test
Social Insurance	Contribution from employee, employer	Members of insurance scheme	Contribution record
Employer liability	Employer	Employed in designated categories	Employment criteria
Social allowances	Public revenues	Persons in designated categories	Domicile

Source: ILO, 1979; United States, 1980; 1982; Midgley, 1984

The Directive Principles of the Indian Constitution in Article 39 provide for an adequate means of livelihood and insist on the health and strength of workers not being abused; Article 41 expects the State to grant the right to work and public assistance in the case of unemployment, old age**,** sickness and disability; Article 47 reinforces that the primary duty of the State is to raise the standard of living of its population. As regards the maintenance of the aged persons without means, the Hindu Adoption and Maintenance Act 1956 provides that subject to the provision of Section 20, a Hindu is bound during his\her lifetime to maintain his\her children or aged or infirm parents**.** Section 21 of the Act says that the dependents include *father* and *mother*; Section 22 says that each person who has a claim on the property of a person has the duty to maintain him/her.

According to Section 125 of the Code of Criminal Procedure, if any person who has sufficient means, refuses to maintain his wife, children or parents who are unable to maintain themselves, the magistrate may fix a monthly allowance at the rate of not less than Rs. 500. If the person concerned refuses to comply with such an order without any sufficient cause the court can sentence him\her to imprisonment up to one month or till the payment is made.

Social security, stated in terms of assistance and insurance, is not a new concept for India. The idea of social security has existed in India ever since the post-Vedic period.

Kautiliya in his *Arthashastra* had laid down various rules for the regulation of guilds, whose main purpose was collective security for life, prosperity and freedom from want and misery. The observations of *Shukracharya* in his penetrating Shukraniti (750-850 AD) contain many a reference regarding sickness benefits, pension and old age benefits, family pension and maintenance allowances. Indeed until recently, traditional joint family system formed the first line of social defence for old people in India.

The submission of the Adarkar report on 15th August 1944 for introducing a social security scheme in India constituted a land mark. According to him, any social security scheme should possess the following eight features: (a) compulsory; (b) contributory; (c) simple to administer; (d) implementation with minimum trouble; (e) scope of expansion and extension; (f) financially sound and viable; (g) minimal disputes and (h) flexible.

A complete review of various legislations on social security in India since independence with details of contributory and non-contributory schemes, types of pensions schemes, role of Life Insurance Corporation of India as well as the provident funds, is available (Irudaya Rajan, Mishra and Sarma, 1999**;** Irudaya Rajan, 2002; Irudaya Rajan, Perera and Begum, 2005; for an earlier case study on India**,** Williamson and Pampel, 1993). Table 17 outlines the existing models of social security in India as presented by Subrahmanya and Jhabvala (2000).

Table 17: Existing Models of Social Security

Model	Nature of benefit	Beneficiaries	Administrative/Financial Arrangement
Employer's liability	Workmen's comp Maternity benefit Gratuity Retrenchment comp	Workers in the organised sector	Employers manage and pay exclusively
Social Insurance	Medical care Sickness benefit Maternity benefit Occupational injury Old-age benefit Invalidity benefit Survivors' benefit Provident Fund	Workers in the organised sector Workers in the organised sector and some workers in the unorganised sector	Administered by Employee's State Insurance Corporation Financed out of contributions from employers, employees and state governments Administered by central board of trustees, financed by contributions from employers, employees and central governments

Social assistance (a) Welfare funds of central government	Medical care Education Housing Water supply Old-age benefit Survivors' benefit	Mine workers Beedi workers Cine workers Building workers	Administered departmentally Financed by special levies in the form of cesses
(b) Welfare funds of Kerala government	Wide range of benefits including: Old-age benefit, Medical care, Education, Assistance for marriage, housing, etc.	Workers in the unorganized sectors, such as handloom workers, coir workers, and cashew workers.	Administered by autonomous boards Financed by contributions from employers, workers and others.
(c) Subsidised insurance	Survivors' benefit Invalidity benefit	Vulnerable groups of workers such as agricultural workers, handloom workers, etc.	Administered by LIC and GIC and Financed by contributions from central and state governments
(d) Other forms of social assistance	Old-age benefit Maternity benefit Survivors' benefit Assistance for employment, Training, Education, etc.	Persons outside the job market and below the poverty line, destitutes, orphans, deserted and divorced women, widows, disabled persons, SCs, STs, OBCs.	Administered departmentally Financed from general revenues

Source: Subrahmanya and Jhabvala (2000).

NATIONAL SOCIAL ASSISTANCE SCHEME

Until August 1995, there did not exist any social assistance programme managed by the Government of India for its poor citizens. The announcement, on 15th August 1995, of a National Social Assistance Scheme (NSAS) was a significant step towards the fulfillment of the Directive Principles enshrined in Article 42 of the Indian Constitution, which talks about public assistance in old-age. On March 19, 1999, the Government of India also announced also another social assistance scheme called `Annapurna' for its elderly destitutes.

The National Social Assistance Scheme introduced on 15th August 1995 had three components: National Old Age Pension Scheme (NOAPS), National Family Benefit Scheme (NFBS) and National Maternal Benefit Scheme (NMBS). Among the three schemes, NOAPS is meant for the poor elderly. This is a centrally sponsored programme with 100 per cent central assistance to the States and Union Territories in accordance with the norms, guidelines and conditions laid down by the Central Government. The scheme is managed by the Ministry of Rural Development, Government of India.

The following criteria strictly apply in the implementation of the NOAPS: (a) The age of the applicant (male or female) shall be 65 years or higher. (b) The applicant must be a destitute having little or no regular means of subsistence from his/her own sources of income or through financial support from members of his/her household or other sources. In order to determine destitution, the criteria, if any, currently in force in the state/union territory are to be followed. The Government of India reserves the right to review these criteria and suggest appropriate revised criteria. (c) The amount of old-age pension will be Rupees 75 per month under this scheme. (d) The ceiling on the total number of old age pensions for purposes of claiming central assistance will be specified for the states and Union territories from time to time. (e) The benefit under NOAPS should be disbursed in not less than two instalments in a year and, if possible, the benefit may be disbursed in more instalments as per the direction of the state government. In 2006, the prime minister of India announced the enhancement of NOAPS to Rs. 200 from then existing rate of Rs. 75 per month.

The village panchayats and the municipalities report every instance of the death of a pensioner immediately after the event to the appropriate sanctioning authority. The sanctioning authority shall ensure that payments are promptly stopped. The sanctioning authority shall have the right to stop/recover payments of any pension amount sanctioned on the basis of false or mistaken information about eligibility (Irudaya Rajan, 2001).

The numerical ceilings and the qualifying financial entitlements are worked out as follows: it is assumed that 50 per cent of the population below the poverty line in the age group 65+ will qualify for old age pensions under the destitution criteria laid down. For example, for Andhra Pradesh, the numerical ceiling and the financial entitlements are calculated on the basis of the following formula: Total Population* Poverty Ratio* Proportion of 65+ age group in total population*0.5 (corrected to the nearest hundred)

= 71713000*0.317*0.041*0.5 = 466000 (numerical ceiling)

The qualifying financial entitlement = Rs.900 (Rs 75 for 12 months) * the numerical ceiling

= 466000* 900 = Rs.4194.8 lakhs of rupees

During the year 1995-96, the numerical ceiling was 5.4 million elderly (i.e. 50% of the population below the poverty line in the age group 65 years and above) and the qualifying amount was Rs. 48020 lakhs for all-India. Later, in 1998-99, both the numerical ceiling and the permissible amount were raised. The current numerical ceiling is 6.9 million and the qualifying amount is Rs. 61929 lakh. As of now, around 6.5 million elderly above the age of 65 years are benefited by this scheme.

Table 31: Quantitative Assessment of National Old Age Pension Scheme, 1995-2000

Year	Numerical Ceiling (No)	Achievement (No)	Percentage achievement	Allocation (in Rs)	Amount Claimed (in Rs)	% claimed
1995-96	5335000	2937677	55.06	29706.60	21614.62	73.50
1996-97	5335600	4760097	89.21	50737.08	37381.65	73.68
1997-98	5335600	5093704	95.47	46396.79	38629.05	83.26
1998-99	6881000	6214000	90.31	45685.23	42080.99	92.11
1999-00	6881000	6311014	91.72	47623.58	44797.13	94.07

Source: Calculated by the author from the unpublished data of Ministry of Rural Development, New Delhi.

Over the past five years, the scheme has become better known; the achievement (both numerical achievement and amount claimed) has reached above 90 per cent (Table 18). However, the allocation of resources for National Old Age Pension Scheme has been lower than the financial entitlement.

Interestingly, for the past two years, the Department of Rural Development have compiled the statistics on the beneficiaries by caste, sex etc. It has been shown that the proportions of beneficiaries among schedule castes, scheduled tribes, women and the handicapped has increased during this period. This piece of information clearly indicates that the National Old Age Pension Scheme has benefited the weaker sections of the society more than others. The record is impressive among all the vulnerable groups. For instance, the proportion of female beneficiaries increased from 30 per cent to 37 per cent during 1998-99 to 1999-2000. (see Table 19 for details).

Table 19: Relative Position of Beneficiaries of National Old Age Pension Scheme in India

Percentage of	1998-99	1999-2000
Scheduled Castes	28.33	31.42
Scheduled Tribes	10.66	14.21
Other Castes	61.02	54.38
Women	30.21	36.71
Physically Handicapped	0.93	1.59

Source: Same as Table 18.

Among the states in India such as Andhra Pradesh and Rajasthan, half the number of beneficiaries belonged to scheduled castes. In Tripura, Daman and Diu, Lakshadweep, Orissa, Madhya Pradesh and Jammu and Kashmir, the share of beneficiaries among the scheduled tribes has been substantial. Except in a few states, the proportion of women benefiting from the old age pension scheme also has been quite high.

ANNAPURNA SCHEME

On March 19, 1999, the Government of India announced another social assistance scheme, namely *Annapurna* for the elderly destitutes who have none to take care of them. Under this scheme, an elderly destitute will be provided with 10 kilograms of rice or wheat per month free of cost through the existing public distribution system. This scheme

aims at covering destitutes who are otherwise eligible for old age pension under the National Old Age Pension Scheme. The government has allotted a sum of Rs. 100 crore for the first year of its implementation; it is expected that this scheme will benefit around 6.6 lakh elderly destitutes. It is implemented by the Ministry of Rural Development with the assistance of the Ministry of Food and Civil Supplies. The progress of this scheme, however, has been very slow in the first year of its implementation.

CRITICAL ASSESSMENT

In formulating a policy for the rehabilitation of the elderly in India, special attention need to be focused on certain crucial characteristics. Poverty is undoubtedly one aspect which ought to be given the foremost attention. Besides poverty, incidence of widowhood is a major factor contributing to the vulnerability of the elderly. According to the results of the 2001 census, more than half the number of elderly females in India (51 per cent) were widowed, divorced, or separated compared to only 15 per cent of elderly men. Further, the extent of dependency status, as reported by the elderly themselves, varies between men and women. While more than 65 per cent of the elderly were dependants, the proportion varied from 63 per cent among females to 37 per cent among males. The 2001 census has shown that there were 6.31 lakh elderly beggars (0.8 per cent of the elderly population) in India. It may be noted that only 0.2 per cent elderly was reported to be beggars in India by the 1999-2000 National Sample Survey.

The burden of having to care for the elderly is not equally distributed among households. For instance, nearly 60 per cent of the households in India have no elderly persons to care for while about 31 per cent had only one elderly member each, 11 per cent had two elderly members each and about one per cent of the households had 3 or more elderly each (for more details, see Irudaya Rajan and Sanjay Kumar, 2003). Any policy for social assistance should, therefore, take into account the living arrangement among the elderly. The latest National Sample Survey of elderly persons (Jan–June 2004) reports some other relevant characteristics of the elderly members in the Indian society. Almost 5 per cent of India’s elderly live alone and more than 12 per cent live with their spouses only. Interestingly, another 5 per cent of the elderly live with relations or non-relations but not with their children or grandchildren. Again, during 2004, about 6 per cent of the

elderly in India had no surviving children to look after them. These aspects should certainly be paid adequate attention in designing a national social assistance scheme for India's elderly population.

The recently released Old Age Social and Income Security Report has cautioned that `the poverty alleviation programmes directed at the aged alone cannot provide a solution to the income and social security problems of the elderly. For instance, an old age pension of Rs. 100 per month to the projected 175 million population of the elderly in 2025, would translate into an annual outflow of over Rs. 210 billion (or Rs. 21,000 crore) for the Government' (report Page 11). It may be pointed out that this estimate is based on the wrong assumption that the entire elderly population in India needs old age pension. Such flawed and highly exaggerated projections made by some of the policy makers create unwarranted worry in the minds of the public about the growing number of senior citizens.

Administrative Coverage: On the basis of our earlier discussion, one may safely conclude that one-fourth of India's elderly already receive some social assistance from the state-level pension schemes or from the National Old Age Pension Scheme/Annapurna scheme. There is no denying that this is certainly a commendable achievement. If we assume that only half the number of the Indian elderly requires social assistance in terms of their dependency status, half the number of dependants is already provided with some income in old age ranging from Rs. 75 to Rs.300. We have to cover another 20-25 per cent of the elderly through some other social assistance schemes or social safety nets. India also runs various poverty alleviation programmes in rural and urban areas for the public at large at various levels. The impact of such programmes on the elderly is unknown**. (**The lowest amount of pension, Rs. 75, is reported by many states while the highest amount of Rs 300 is paid only by West Bengal) Although the National Social assistance scheme has fixed the rate of central assistance at Rs.75 per elderly person, many states have added another Rs 25 to this minimum amount prescribed. It may be advisable for the Government of India to call a meeting of the various implementing agencies to discuss with them the desirability of a uniform rate of old age pension for the entire country.

Rate of Assistance: There has arises some criticism from among social scientists regarding the adequacy of old-age pension. On an average, the pension works out to be Rs. 150 per month, an amount which is less than a day's wage of a casual or unskilled labourer in Kerala. A little reflection will show that even this small amount would do wonders for the poor and destitute elderly. The total cost of purchasing all the entitlements (8 kg wheat, 8 Kg rice and 0.4 Kg sugar) for a one-month period is just Rs. 100 if bought through the public distribution system by a BPL (below poverty line) cardholder (for more details, see Table 36). Assuming that for a person above 60 years of age, the food requirements are substantially low particularly when he/she is not engaged in any strenuous physical activity, the entitlement should take care of an elderly person's basic food needs. Thus the present rate of old age pension not only enables a senior citizen to buy his/her basic food requirements, but also provides him/her a small allowance over and above the amount needed to buy food. The pension, however, would not be adequate if he/she is living all alone in a rented accommodation. If pensioners are living with families, the pension make them less of a burden and enhances their acceptability to immediate family members, besides relatives, neighbours and friends.

Table 20: Monthly Entitlement and their Cost Under the Public Distribution System, 2004.

Food Item	Entitlement (Per Month)	Price (Rupees)	Total Cost (Rs)
Rice	8 Kg	7.70 (9.70)	61.6 (77.6)
Wheat	8 Kg	4.20 (6.20)	33.6 (49.6)
Sugar	0.4 Kg	13.50	5.4
Total			100.6 (127.2)

Notes: Compiled by the authors on the basis of existing prices in the public distribution system in Kerala. The figures in parenthesis are those applicable to the above-poverty line card holders.

Eligibility Criteria: As pointed out earlier, the eligibility age for old age support varies at the state level from 55 years to 74 years, though the government of India had initially fixed the eligibility age at 65 years and above. Rajasthan has stipulated the lowest age of 55 years for women and Sikkim has fixed it at 74 years for men. It is desirable that a uniform age is fixed for all the states and union territories. As the expectation of life at age 65 years, is about 10 years in India, we should fix the eligible age at 65 years and above, for all persons brought under the old-age pension scheme except for those covered under schemes for widows and physically handicapped.

Costs: Though the Government of India spends around 8.5 per cent of its non-plan expenditure on pension to its employees under non-developmental expenditure in 2004-05, the amount earmarked for National Old Age Pension and Annapurna schemes together came to only 0.6 per cent. In the absence of any other significant expenditure on social security, the Government of India is certainly capable of spending a little more on social assistance schemes. We have little knowledge about the situation prevailing in the states and union territories other than Kerala. It is known that Kerala spent 3.29 per cent of its non-plan expenditure on social security and social assistance schemes in 2004-05. The Ministry of Welfare, Government of India, or any international organisation working in the area of social security should initiate a detailed study to assess the expenditure pattern of social assistance programmes in the various states and union territories in India

Issues pertaining to the delivery system: While the delivery of social assistance to the needy elderly would not be a major problem, identification of the beneficiaries would constitute major challenge as the demand for such benefits is higher than that could be met. At the state level, however, the delivery mechanisms have been fairly well organized. For instance, the pension for agricultural workers in Kerala is paid once in three months by postal money order. Once a person's claim to old age pension is approved, the beneficiary will receive social assistance until his/her death. As long as the postal money order requires the signature/thumb impression of the beneficiary, the chances of fraud are limited.

Another major problem consists of the political identity of the individuals. Often, it may happen that new beneficiaries enrolled for any social assistance scheme may belong to the ruling political party and that genuine claimants may be overlooked. Secondly, it is also possible that while some among the elderly poor are unable to obtain any assistance, others may manage to avail assistance from more than one source.

The Home Ministry, Government of India, introduced a pension scheme for freedom fighters as early as in 1972. According to the information furnished by the Ministry, 1.5 lakh freedom fighters in India received this pension. Called *Sainik Samman* Pension Scheme, it provides for a monthly pension of Rs. 3600. According to Joginder Singh who monitored the scheme in the Home Ministry, `even by a conservative estimate, at least 30

per cent of the 1.5 lakh freedom pensioners could be declared as `fake'. Official figures also show that out of 13,547 applications processed during the year 1999-2000, pension could be granted only in 85 cases (Indian Express, October 15, 2000). In the light of such experiences, it may be made mandatory to evaluate the state and the central level schemes at least once in five years.

Challenges ahead: One obvious challenge faced by the states and the union territories consists of the financial burden involved. Of course, we have no clear evidence of the extent of the financial constriants faced by each. T Sivadasa Menon, former Finance Minister of Kerala, for instance, stated in the Legislative Assembly that due to financial stringency, pensions for widows and the old were not being paid for several months. Such an eventuality poses a major problem. Secondly, as already indicated, identification of the really needy would always remain a major task.

Feasible Reforms: In the short-run, the social assistance scheme has to be revamped, introducing new eligibility criteria such as rate of pension, eligibility age and other conditions.

In the long-run, new schemes such as the one administered for the benefits of fisherfolk by the Kerala Fishermen's Welfare Fund Board, an organization managed independently with the support of the Government could be thought of. Similar schemes could be initiated by Life Insurance Corporation and other insurance companies in the country. Besides, the message of SEWA should be spread throughout the country. The urogranized poor workers should organize themselves so that they themselves would be able to plan for their old age security. Needless to say, various NGOs functioning in India must play a major role in this reform process.

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