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ORIGINAL ARTICLE

AN OVERVIEW OF POPULATION AGEING IN INDIA

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Abstract:

Population ageing is a natural global phenomenon. It presents two different sides of human development. On one side population ageing is described as triumph of humanity to achieve increased life expectancy and the other side is population ageing raises psycho-socio-economic, problems of the old person's posesing the great challenge for policy makers and planners. The issue of population ageing in advanced countries is the out come of prosperity whereas developing countries it is the out come of poverty and inequality. In developed world, prosperity comes first and then the population ageing but in developing world population ageing emerges with poverty of masses.

INTRODUCTION

Unlike in the developed countries demographic change in India has occurred in a relatively short time span due to dramatic reduction in mortality rates in infancy, childhood and young adulthood, as a result of advanced medical technology related to preventive medicine and massive use of the antibiotics and other curative drugs (S.D.Sharma and Sanjay Agarwal, 1996). The improvement in sanitation and better nutrition played a pivotal role in this regards. Thus there has been dramatic increase in life expectancy at all ages, particularly at birth, so because of this longevity now more people live into the old age. (Jeffereys 1994)

Rural areas have a majority of the elderly population working in unorganized agricultural sectors. They continue to work as long as their physical strength permits. Inadequacy of health services and unaffordability of health care is further aggravation the problem. The elderly in rural areas have to depend on the unskilled, untrained private medical practitioners. The problem is further compounded by unavailability of proper transport facility to reach the clinics either in a village or a city. In spite of this condition rural elderly are better placed in terms of their social and psychological conditions. They are respected and better-taken care by the family and the community, whereas in urban areas due to fast pace of life, work culture, changes in value systems, the family as an institution has been disintegrating and as a result the family members hardly find any time to share with the elderly. The relevance of neighborhood and community feeling are not much evident in urban areas. The rural areas show good community interaction, where about 80 to 83 % older people participate in social and religious matters (NSS, 1995-96). What seems to have aggravated the living conditions is the absence of strong neighborhood relationships in large, modem cities compared to prevalence of such relationships in villages, small towns and even old sectors of large towns, where the elderly persons are isolated not only from their kin but also from their neighbors (Shah A.M. 1999). The elderly of the urban centres who have been in salaried jobs are economically better off. Those in the unorganized sectors are economically marginalized. The conditions of the elderly in urban slum are worst. Such elderly lack the cash/money for their personal use, as many a time they have to depend on their offspring/kins

India is the second largest (next to China) over populated country in the world. Its agrarian characteristics are still dominant with more than 65 % of the population residing in rural area with

agriculture as main occupation. During the 50-yers period 1951-2001, India's population had grown from 361 million, an increase of 666 million over this period. At current levels of birth rate (25.8 per 1000 population) and death rate (8.5 per 1000 population), India adds about 18 million persons annually, which is about 7 million more than what China adds every year to its population. While India is currently growing at 1.73 % a year, China (with a population of 1281 million in mid-2002) is growing at much lower rate of 0.7 % a year. This means that if the current growth rate continues unchecked, India's population would simply double in 40 years from now. Thus the gravity of population growth is very clear and the 2001 census reveals that for India as whole the period of 'population explosion' has not yet come to an end.

India's Demographic Achievements

Science last 50 yrs after independence GOI is the first country in the world which ahs its own National Family Welfare Programme. This programme has made a significant impact on demographic transition in following areas:

·Reduced the Birth rate from 41 to 20;
·Reduced the Death Rate from 25 to 8.5 per 1000 population;
·Infant Mortality Rate from 146 per 1000 live birth to 68;
·Added 25 years to life expectancy at birth from 37 years to 62 years;
·Achieved nearly universal awareness of the need for and methods of family planning, and
·On an average, women now give birth to only 3.2 children as compare to about 6 children in early 1950s.

Population Gravity

·Population of India as on 1st march 2001 census = 1027 million
·Crude Birth Rate = 25.8 per 1000
·Crude Death Rate = 8.5 per 1000
·Natural Growth Rate = 17.3 per 1000
·No. of births in a year = 27.1 million
·Number of deaths in a year = 8.9 million
·Population Addition in a Year = 18.2 million
·Population Addition in a month = 1.51 million
·Population Addition in a Day = 49863 persons
·Population Addition in one Hour = 2077 persons
·Population Addition in one minute = 35 persons
·Every two seconds one person is being added to India's population.

It is clear that although birth rate is greater than death rate but both shows declining trend particularly since 50s; resulting into increased life expectancy.

Table 1 Life expectancy (Progress in survival) at birth (in years), in India

Period	*Both Sexes*
1901 – 1910	22.9
1941 – 1950	32.1
1951 - 1960	41.3
1961 – 1970	45.6
1970 – 1975	49.7
1976 – 1980	52.3
1981 - 1985	55.4
1986 – 1990	57.7
1992 – 1996	60.7
2000 – 2005	64.2
2005 – 2010	66.2*
2010 – 2015	67.9*

*Projected

Source: Registrar General, India, Vital Rates of India, 1971 to 1996, based on the Sample Registration System (SRS), New Delhi, 1998.

The life expectancy at birth in India has been increasing from nearly 23 years in the first decade (1901-1910), 41.3 years during (1951-60) to 57.7 years during the period of 1986 – 1990. The life expectancy by the end of 2015 would reach almost 69 years this will make the problem of population ageing – the matter of great concern as well as challenge. In 2000 India exceeded the standard of ageing population of people over 60 years which is 7.7 % and it is expected to reach more than 12 % in 20025. The survival or life expectancy, at birth, increased from 22.5 years in males and 23.3 years in females in 1901 to 32.4 years in male and 31.7years in female in 1951 and became 60.1 years for male and 59.8 yeas for female in 1991. In comparison, the average life expectancy, at birth, in developed countries was 65.7 years in 1950 and became 74.5 years in 1990 (United Nations, 1991).

Life expectancy at the age of 65 years was 7.3 years for males and females in 1901. It roses to 9.8 years and 10.3 years for males and females in 1951 and by 1991, the corresponding figure were 14.6 and 16.9 years for males and females respectively . Thus, the life expectancy at the age of 65 years in India and developed world are gradually getting closer. The increment in life expectancy has been much more at birth than at the age of 60 or 65 years. This difference is primarily due to the marked reduction in the early age mortality because of elimination of epidemics and control of infection in mortality caused by non-communicable diseases, which constitute the bulk reason of death in the elderly.

Elderly Status in India

The survey conducted by National Sample Survey Organization (NSSO) in 1987 is the first authentic document throws the light on the status of the elderly in India. In the survey of 13000 households, the data was collected. The major findings of the survey are as follows:

·There are more elderly in rural areas. There is also movement of elderly from urban to rural areas.
·Old age dependency is higher in rural areas than in urban areas
·The elderly are ageing.
· There are more females than males among the aged, and in contrast to the general sex ratio, the elderly sex ratios are rising.
·The elderly are much less literate and educated than the general population.
·There are a considerable number of single elderly of whom majorities are widows. However, the proportion of widows is on the decline.
·About 94 % of the elderly in India have children surviving them but a large number of elderly are without any children. The elderly.
·The elderly generally live with spouses / children and other relatives, however more and more elderly are now living without their children.
·The elderly are still working for a living in the absence of any suitable social security.
·As many as 70 per cent of the aged depend on others for their day to day maintenance. The is far worse for elderly females, 85 to 87 % of whom are dependent on others.
·By and large the elderly are still supported by their children. Interestingly, every sixth elderly is supported by his /her spouse.
·More elderly men than women are supported by their family.
·Majorities of the elderly are not supported by any retirement benefits and the problem is compounded in rural area.
·About 54 % of the aged own financial assets and housing. Though man of them do not have management rights or control over them.
·The prevalence of disability among the aged is also very high.
·The great majority of the elderly participate in social and religious matters and in household chores, though a large number of them can not participate in household activities. (Rajgopal D.C.; 2004)

AGE STRUCTURE IN INDIA

The transition from high to low levels of fertility and mortality brings profound alteration in age structure. Though, during early stages of demographic transition, the age structure becomes younger but with significant declines in fertility and mortality, the younger population starts shrinking and the age structure experiences change that ultimately leads to the ageing of population. However, a population starts ageing in two ways – "Bottom – up" and "Top – down" ageing. Bottom-up ageing is due to the decline in fertility, which decreases the relative proportion of those less than 15 years of age in the overall population, while top-down ageing is limited to a decline in mortality, which increases the number of population over the age of 60 in overall population). The size and proportion of the population under 15 years of age is more

directly affected by the change in fertility than the other age groups, on the other hand, change in old age mortality directly influence the population aged 60 years plus than any other age group. (Rajgopal D.C. 2004)

The Sex Ratio and Population Ageing

A few countries have sex ratio continues to be reverse, with males outnumbering females, India is one of them. This pattern persists in elderly segment and female outnumber males only beyond the age of 70 or 75 years. On the whole, the number gap between males and females has widened by as much as ten times, where as general population gap grown only by factor of four between 1901 – 1991. Surprisingly the number of elderly females was much more than elderly males in 1901, but due to growth of elderly male outpacing that of elderly females in previous century, elderly male and female became equal in 1961 and today elderly male outnumbered elderly females. The reason for the pervasive sexual discrimination has primarily to be sought in the socio-cultural milieu of society. (Rajgopal D.C. 2004)

According to the 1981 census of India, there were 960 females for every 1000 males of age 60 plus, this number drop to 930 in 1991. The NSS estimates showed an upward trend. The urban – rural division of sex ratio of Indian population is worth noticing. This is explained in the following table.

Table 2: Rural – Urban Difference in Elderly Sex Ratio (No. of Females per 1000 Males) in India

Source	*Year*	*Rural*	*Urban*	*Combined*
Census	1981	954	986	960
Census	1991	92	960	930
NSS 43rd Round	1987-88	971	1,032	983
NSS 50th Round	1993-94	963	1,060	984
NSS 52nd Round	1995-96	1,017	1,043	1,023

The sex ratio among the aged declined during period 1987-88 and 1993 – 1994 and rose during 1995 – 96 in the rural area. In the urban area, the sex ratio increases from 1,032 during 1987-88 to 960 during 1993-94 and then dropped to 1,043 during 1995-96. The following table shows the life expectancy of male and female in rural and urban areas.

Table 3: Expectation of Life at Birth (in years) by Sex and Residence from 1970 – 75 to 1991 – 95 in India

Period	*Rural*			*Urban*			*Combined*		
	Male	*Female*	*Total*	*Male*	*Female*	*Total*	*Male*	*Female*	*Total*
1970-75	48.9	47.1	48.0	58.8	59.2	58.9	50.5	49.0	49.7
1976-80	51.0	50.3	50.6	59.6	60.8	60.1	52.5	52.1	52.3
1981-85	54.0	53.6	53.7	61.6	64.1	62.8	55.4	55.7	55.5
1986-90	56.1	56.2	56.1	62.0	64.9	63.4	57.7	58.1	57.7
1991-95	58.5	59.3	58.9	64.5	67.3	65.9	59.7	60.9	60.3

Source: Registrar General, India, Vital Rates of India, 1971 to 1996, based on the Sample Registration System (SRS), New Delhi, 1998

It is observed that life expectancy of male and female in urban area is greater than rural area. The dependency ratio and index of ageing are the two parameters of dynamics of population ageing. The total dependency ratio is compared with child and elderly. The dependency ratio of children shows the number of persons aged between 0 – 14 per 100 aged 15 – 59, the dependency ratio of elderly person is defined as number of persons aged 60 plus per 100 aged 15 – 59. More dependency ratio is seen among female elderly in India. The index of ageing is defined as the number of persons age 60 plus per 100 person aged 0-14.

Table 4: Dependency Ratios and Index of Ageing, India

Year	*Dependency Ratio*			*Index of Ageing (d)*
	Child (a)	*Elderly (b)*	*Total ©*	
1961	77.0	10.5	87.5	13.7
1971	80.8	11.5	92.3	14.2
1981	73.6	11.9	85.5	16.2
1991	61.4	11.3	72.7	18.4
2001	50.9	12.6	63.5	24.7
2010	44.5	13.9	58.4	31.3
2020	37.0	17.1	54.1	46.2

a) No. of person aged 0-14 per 100 aged 15-59
b) No. of persons aged 60+ per 100 aged 15-59
c) a + b
d) No. of persons aged 60 + per 100 persons aged 0-14

The Index of Ageing goes on increasing from 13.7 in 1961 to 18.4 in 1991 to 13.3 in 2010; and it will reach the maximum level by 46.2 in 2020, which is a matter of great concern.

The Gender Dimension of Population Ageing

The family is the base for support to the aged males and females. In the overall process womens are prominently observed and will be even more so tomorrow. Thus it becomes vital significance to consider the role of women in the process. While women have distinct advantages over men in terms of life expectancy, this alone is not enough. Not only in-home care and support women also provide vital economic support for their families by working outside the home. For two-third of the world's families, women's labour is essential for economic survival; in one third of the families, the women are the sole economic support. In villages, they are the main procurers of fuel and drinking water. Women need to walk for hours to fetch and carry water and firewood. These activities, in turn, adversely affect women's health. Moreover the use of cheap chemical substitutes for fuel wood causes permanent damage to women's eye and respiratory system. But who cares! While no woman ever expects any payment against such services, no attempt has been made to estimate economic value of such activities either. Most women have very little access to personal leisure time which is more often the monopoly of men.

Women are the most frequent, stable and long term care givers in the families. The economic contributions of these caregivers are unrecognized, unrewarded and neglected by the society. Women still bear the primary responsibility and for the child care and households care and also tend to be the primary caregiver for the elderly relatives. (Rajgopal D.C.; 2004) Despite this, girls are most often victims of violence neglect, including selective abortions of females' fetuses, female infanticides, sexual abuse and rapes, domestic violence and elder abuse. Girls and women have much less access to sources of political and societal influence and power. They have much less access to education, property, paid employment, pension plans and productive assets. These gender experiences culminate in the later life (Aabha Choudhary; 2002).

While the process of getting old brings it new experiences in a women's life, it also introduced new risks and tensions. The gendered realities of the old age are as discriminatory, exploitative and disquieting as they else where in women's lives. A woman marry a man much senior to her; such women, are more likely to be widowed and suffer from poverty in later life; their access to resources for care and sustenance is reduced, making them more vulnerable then before. The vulnerability becomes higher for those who have not acquired any human capital formation in the form of education; training and other skills needed to ensure an unencumbered life. The problem may be further compounded by failing health and other long-term chronic disabilities. An indigent and physically frail elderly widow is the most defenseless. With earlier retirement, a longer and healthier life and responsibility of bearing the burdens in the family, most women suffer from 'Social Ageing', defined as “the process of relinquishing meaningful social functions,

with the ensuring increased risk….of becoming prematurely obsolete, senescent and estranged from society".

IMPLICATIONS OF AGEING

Ageing is determined by both fertility and mortality reduction. The demographic transition is universal. Low fertility causes population ageing reducing the size of younger population. Also decline in mortality rate leads to increase longevity which is a great concern of population ageing and this emerges the problems such as social, economic, inadequacy, disability, health care, insecurity, physical and mental disabilities, widowhood, and ageism. In some countries the fertility decline is more prominent than the decline in mortality; under such conditions the fertility decline affects the number of young people in the population. An effort is made to work out the life expectancy of males and females (at age 60) in various countries of the Asia and some states of India. This exercise is computed with the help of Sample Registration System (SRS) based on census of India 1991.

Table 5: Life expectancy of males and females at the age of 60 in various States of India

Country /States	(M/F) 1991-1995	States	(M/F) 1991-95	States	(M/F) 1991-95
India	15.3 / 17.1	HP	18.6 / 16.2	Orissa	16.0 / 15.4
AP	14.4 / 15.1	Karnataka	15.0 / 17.1	Punjab	20.7 / 20.8
Assam	13.9 / 15.5	Kerala	18.1 / 20.6	Rajasthan	14.7 / 16.0
Bihar	16.5 / 16.7	MAH	16.1 / 18.1	Tamil Nadu	15.0 / 15.7
Haryana	17.5 /18.7	MP	14.5 / 15.3	UP	14.9 / 15.7

Source: Sample Registration System based Abridged Life Tables, 1991-95, Registrar General New Delhi,

This exercise indicates that the elderly in the state of Kerala and Punjab live much longer than those in other Indian states. The life expectancy of male is at lowest level 13.9 years in Assam. It is 14.7 years in Rajasthan. At the national level the life expectancy of male is calculated as 15.3 years and for females it comes to 17.1 years

Generally speaking the population ageing has the following implications

1-Health and Morbidity
2-Social Support and Family
3-Economic Support and Dependency
4-Social Security
5-Ageism

HEALTH AND MORBIDITY

The health status of any group of population is inferred from the mortality rate and the morbidity rate of that segment of the population. Mostly the stratified data on mortality and morbidity is derived from various sources, such as census reports, central and state government health statistics reports, survey reports like NSSO or NSS, SRS and other organizations and research project reports. The health status of the elderly can be represented through several variables. The most common is healthy life expectancy. It is the expected number of years to be lived with 'full health'. The WHO has introduced this concept as 'Disability Adjusted Life Expectancy' (DALE) to provide a clearer picture. The healthy life expectancy of India is 52 years. (Rajgopal D.C. 2004)

In case of general life expectancy, women live longer, more healthy lives than men. It is seen that as country get richer, the decline in mortality trends to be less than that of females' mortality. The same pattern holds when healthy life expectancy is measured. By the WHO ranking Japanese the longest healthy life expectancy of 74.5 years among 191 countries. A major factor that makes the Japan number one in ranking is the low rate of heart diseases in the country, traditionally low fat diet. The effect of tobacco has also been mild with low lung cancer rates. But on the other hand in India, according to Government of India (1985) and Gokhale S.D. (1992, 1993, 1994,) the leading cause of elderly mortality is cardio-vascular

disorder, followed by respiratory disorders and infections, primarily tuberculosis and lung cancer accounting for 10 % of the total mortality.

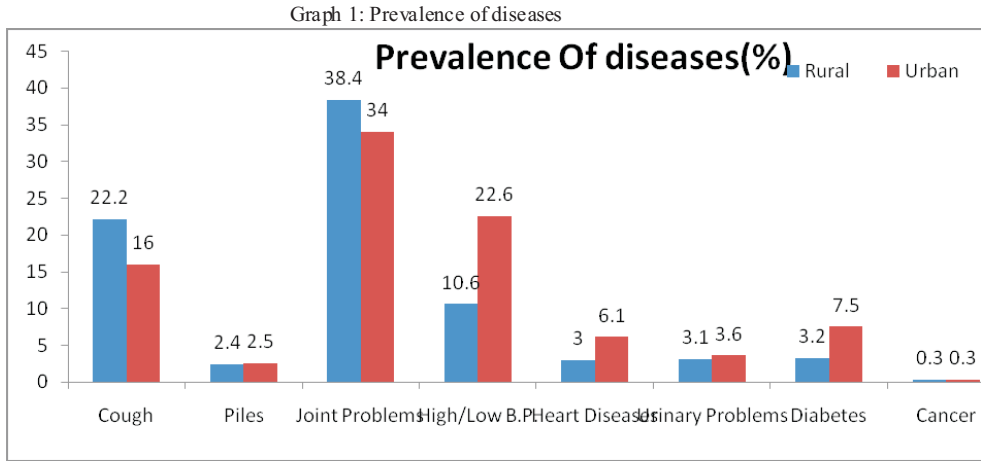
Despite the consistent increase in the life expectancy in India it would be wrong to presume that this increased life is healthy and is free of morbidity and disability. According to National Sample Survey Organization (NSSO) 45 % of elderly in rural and urban areas was suffering from chronic diseases. Joint problems and cough were reported to be major chronic illnesses in the rural areas, while hypertension, heart disease and diabetes were far more commonly reported in urban areas.

Table 6: %age of Aged Person Reporting a Chronic Disease by Sex

Types of Diseases	Rural			Urban		
	Male	Female	Total	Male	Female	Total
Cough	25.0	19.5	22.2	17.9	14.2	16.0
Piles	3.3	1.6	2.4	3.2	1.8	2.5
Joint Problems	36.3	40.4	38.4	28.5	39.3	34.0
High/Low B.P.	10.8	10.5	10.6	20.0	25.1	22.6
Heart Diseases	3.4	2.7	3.0	6.8	5.3	6.1
Urinary Problems	3.8	2.3	3.1	4.9	2.4	3.6
Diabetes	3.6	2.8	3.2	8.5	6.6	7.5
Cancer	0.2	0.3	0.3	0.2	0.4	0.3
Any of the above	52.7	51.4	52.0	52.8	56.0	54.5

Source: National Sample Survey Organisation (NSSO), The Aged in India: A Socio-economic Profile, NSS 52nd Round, July 95-june 1996, NSSO, Department of Statistics, Ministry of Planning and Programme Implementation, Government of India, Calcutta, 1998.

Graph 1: Prevalence of diseases



In terms of disability, visual, locomotor and hearing were the major disabilities. Thus, it can be said that despite the increased longevity, mortality in elderly segment is quite high, the bulk of which is due to non-communicable diseases. Many of these diseases are preventable and treatable but this would entail change in life styles like maintaining proper hygiene, doing regular exercise, taking balanced and nutritious diet, having a positive attitude toward life and staying away from intoxicants right from early childhood etc. One of the major questions surrounding demographic and epidemiological transition is the implications of the burdens of disease. Will we be faced with a massive increase in the numbers of disabled people as 'Population Ages'?

Table 1.7: Prevalence Rates of Physical Disability among the Aged by Types for each Sex (in %age)

Disabilities	Rural			Urban		
	Male	Female	Total	Male	Female	Total
Visual Disability	24.9	29.1	27.0	22.5	36.0	24.3
Hearing Disability	13.9	15.6	14.8	11.1	13.2	12.2
Speech Disability	3.2	3.8	3.5	2.9	3.4	3.2
Locomotor	10.7	11.5	11.1	8.0	9.4	8.7
Amnesia/Senility	9.6	11.3	10.5	6.1	8.0	7.0
Any Disability	38.0	42.5	40.2	33.3	36.7	35.0

Source: National Sample Survey Organisation (NSSO), The Aged in India: A Socio-economic Profile, NSS 52nd Round, July 95-june 1996, NSSO, Department of Statistics, Ministry of Planning and Programme Implementation, Government of India, Calcutta, 1998

The tool to measure both disability and mortality in a combined index is healthy life expectancy measure. As it requires both age-specific disability and age-specific mortality rates. Healthy active life expectancy tells us about people's chances of living without disability and disease.

Mental Health is also one of the major threats before the elderly persons which pose many problems not only to elderly but also to the care takers and the community too. Besides the physical illness, the emotional problems of the elderly are also immense and centre around the 'losses' in personal family and social spheres. The maladaptive responses to loss are depression, the incidence of which is reported quite high in the elderly, but reliable figures are not available for India. Dementias are other principal mental disorder which afflicts elderly and prevalence increases drastically beyond the age of 65-70 years. In addition to dementia, organic brain dysfunctions, such as acute confusional states, delirium etc; are also more likely to occur in old age. Mental health problem among the aged are a leading cause of disability and reduced quality of life.

SOCIAL SUPPORT AND FAMILY

To understand the role of ageing in development, an understanding of the role of family to the ageing process is of paramount importance. Families and households are those molecular units of the society through which life continues from one generation to another. As population ages, the family too undergoes transformation. Large families disintegrate into small families but the family as an institution continues to serve its roles more perfectly than any other institution. The family acts as buffer and lessens the social and economic impact of ageing on society. The convergence theory of family structure believes that in rural traditional societies families are essentially extended, either horizontally or vertically, where as in modern societies, the independent nuclear family predominates. On of the implication of this transition is weakening of ties with the older generation.

In India, the elderly live in extended multigenerational household and rely primarily on their children for financial support and personal care. It is the family members, relative and neighbour who provide bulk of the support and care to the older adults who needs assistance. However, these traditional families are now showing signs of breaking up of ties due to demographic, economic and social changes. In countries where fertility has declined, the elderly have fewer adult children to provide them with support and care. Many of these children have moved away form their homes because of their jobs. Women are now entering the work force in increasing numbers and therefore have less time than they did in the past to spend on caring for elderly family members. Even then, there is no replacement for the family as a source of support for the elderly. The aged do not have resources or ability to support themselves. The signs of intergenerational tensions for whatever little that has done for the elderly are evident. But families must be supported, motivated and encouraged if they are to continue to provide care and support to the elderly without becoming over-burdened in the process.(Rajgopal D.C.; 2004)

Not only India but several Asian governments have adopted policies to encourage family care for the elderly. Children are now legally responsible for the support of their elderly parents. The statutory obligation of the family to support their aged members is very important to instill confidence in the minds of elderly parents. Also important are supportive measures that promote the family support system. Most of

the ageing population lives in the rural than urban areas. In fact, 60 % of the world's elderly stay in rural areas. There are definite variations in the pattern of support systems in rural and urban communities. Elderly in rural areas are well integrated socially. More people at home and in the community are available to look after and support elderly. But this scenario is changing now, as owing to the exodus of young adults to urban areas for education and jobs, the older persons are often left behind without traditional family support and at time without adequate financial resources. Other support services are often few if not negligible for most of the elderly in rural areas. The rural aged are also unable to support themselves since they lack the physical strength to continue agriculture work. Older women in rural areas are worse hit since roles are restricted to non- remunerative works and they are dependent on other for their support and survival.

ECONOMIC SUPPORT OF ELDERLY

The NSS data provides details about those people who support the economically dependent elderly – children, grandchildren, spouse and others. In India as a whole, over 75 % of the economically dependent elderly are supported by their children and grand children. It indicates that elderly are almost totally relying on the family. To be specific children support 71.1 % of the rural elderly and 70.8 % urban elderly. Grand children support 5 % of rural elderly and 5.4 % of urban elderly. The share of the spouse was 13.8 % in rural and 15.2 % in urban areas. (Rajgopal D.C. 2004)

As most of the aged do not work, depending instead on their families, religious or communal institutions or the state, it is often stated that the aged are a burden on society. Since the earnings of all the institutions stated here originate directly or indirectly from the incomes of the working population, the ratios of the non-working age and working age populations provide crude indicators of old age dependency. The ratio is calculated on the basis of the number of persons aged 65 and above per person in the age group of 15-64. However, the ratio ought to be used very cautiously as not all working age persons actually provide direct or indirect support to their elders and also because older persons in many societies are the ones who support their adult children.

About 60 per cent of elderly in their sixties and seventies do physical labour and other productive work beneficial to the household and for themselves. Nearly 80 per cent of them engage in domestic-household chores. They have to work as long as their energies permit. In rural areas they work in their fields or sell their labour to other landed people. (NSS, 1995-96; Ansari, 2000). Class and caste factors affect their living conditions. The elderly from lowest socioeconomic class engage themselves in physical labour to earn their livelihood, whereas their counterparts from the better off families do supervisory work in their agriculture, industry or other enterprises owned by the family.

Large segments of elderly in India, contrary to expectations, continue to work. The mandatory retirement is applicable only to the organized sector of economy, which comprises less than one tenth of country's total workforce, and only this segment of population currently gets decent economic security coverage in old age. On the other hand there being no fixed age of retirement in unorganized sectors and economic insecurity being rampant, retirement in unorganized sector from workforce is usually dictated by poor health. Nearly 60-70 % of all elderly are economically dependent on others, usually their children. Even those with pensions find their economic status lowered after retirement.

People are living longer today and are thus more likely to experience multiple chronic diseases, as a result of which increasing number of adults are expected to maintain very old and frail relatives. An indicator of this trend is found in the Parent Support Ratio (PaSR), which shows the number of persons aged 85 or above in relation to those between 50 and 64 years of age. In 1950, at the global level, there were less than two persons over 85 years per 100 persons within the age group 50-64 years; this figure doubled in the 50 years that followed but is projected to triple within the next 50 years. The rich-poor divide is very prominent here too.

Very common and useful but crude non-economic way of analyzing impact of age structure on economic well being is through the demographic “dependency ratio' or support ratio. Three such ratios are generally employed which express the proportion of assumed non-working population, viz. Children (0 –14) and / or elderly (60+), to working population, elderly dependency ratio has steadily risen from 9.8 in 1951 to 11.3 in 1991, while child dependency ratio and total dependency ratio rose till 1971 and there after, have fallen due to marked decline in fertility rates. Another indicator called index of ageing, express ratio of elderly 60+ to children in the population. It is a useful measure of ageing process because it defines both the structure of dependent population and is very sensitive to change in that age structure.

SOCIAL SECURITY FOR THE ELDERLY

In the Indian Constitution in Article 41 recognises the needs of the elderly and enjoins upon the state the responsibility of making effective provisions for public assistance in the case of old age along with the unemployed, sick and disabled. While the welfare of the aged is a state subject, the nodal responsibility of the aged is vested with the Ministry of Welfare of the Union Government. Under section 20 (1) of the Hindu Adoption and Maintenance Act, 1956, the aged and the infirm parent, if unable to maintain himself or herself, is entitled to maintenance. Muslim Law imposes an obligation to maintain needy parents, subject to certain circumstances. The Code of Criminal Procedure, 1973 (Section 125 [1] [d]) makes it obligatory for a person with sufficient means to support his father or mother unable o maintain himself or herself.

The Public Policies in the area of the old age income support take three general forms in India. The first one is retirement benefits, are given to formal sector employees. These are supplemented by the second kind, voluntary old age insurance scheme, encouraged through tax exemptions. Finally, there are direct government transfers to the needy aged persons. In India, only retired employees of the public sector enjoy old age social security. The combined coverage in these schemes is less than 10 % of the labour force. This low coverage is due to the large agricultural population as well as an informal sector that bypasses taxes and social insurance contributions. Participation in voluntary insurance-linked savings is even more limited. Ironically, a parts of formal sector employee, who enjoy retirement benefits, join such programmes to supplement old age incomes as well as to save money on income taxes. A large proportion of household at the bottom of income distribution system in India is too poor to save for their old age.

AGEISM

Ageism, a term coined by Robert N. Butler (Kaplan et. Ed. 1994), refers to discrimination of old people and negative stereotypes about old age that are held by younger adults. Old persons may themselves resent and fear other old people and discriminate against them. It is widely prevalent in west. Even in Indian setting, the educated younger elite is reported to be more at discomfort in presence of elderly and harbor more negative feelings and stereotypes regarding elderly (Rajan et.al., 1995)

RURAL AGEING IN INDIA

According to the report of the UN population Divison-2002, the world population is in the transitional phase of urbanization; India still remains the first ranked country in the world where more than 70 % of the population belongs to the rural areas. India is well known as the country of villages. In terms of %age, the overall population has grown by 170 % since 1947; 'the 60 plus' category is growing at a rate of 270 % and the '80 plus' segment even faster. Decline in morbidity, reduction in birth rate and increase in life expectancy have led to an increased population of the elderly. The number is likely to touch 75.9 million by 2001. India with 6.7 % of the elderly population in 1991 ranks fourth in terms of elderly population and it is second only to China. India is a primary producing agrarian country in which more than 72 % of the population is residing in rural area.

To understand the 'Rural Ageing' it is essential to understand the life styles and living arrangements of the older persons under different socio-cultural conditions, agro-climatic and environmental conditions which contribute to the longevity of rural elderly. Also the foundation for healthy and happy ageing of the Indian society is deep rooted in sound family structure, intergenerational relationship, existing family support of personal and health care and the welfare of older persons in the rural area. The ageing of rural population is well underway in a good number of developing countries, our understanding of this phenomenon's social and economic implications and into welfare plans and policies remain inadequate.

Indian social norms, values, and codes of conduct prescribed in the scriptures and sacred texts and as they evolved through the ages, have enjoined not only the proper care of the elderly but also assigned to them a position of honor and authority in most matters connected with the family. This status was reinforced by the importance of tradition in society, the value of knowledge of the past in solving the problems of the present and the ownership and control exercised over sources of livelihood. In many communities there were socio-religious ceremonies to honor the persons who attained the age of 60. These were, perhaps, as much a reflection of the respected attitude towards the old as also of the rather small numbers who reached that age.

The traditional Indian practice was of total involvement of parents in their children and not developing or cultivating other interests including leisure-time pursuits which could sustain their interest and keep them occupied in their old age (religious pursuits in old age do not sustain their interest and keep

them busy during their entire free time); larger investments than in the past on the education and upbringing of children which result in less resources being available for the care of the aging. Further, inflationary pressures, causes disproportionately greater hardship to the old. The status of the elderly females has been further affected due to less importance being assigned to socio-religious ceremonies in which her knowledge and advice were valued and less use of her knowledge and experience in child rearing due to greater reliance on modern medicine, technology and information. (APO- Reprot on Rural Ageing – 1999)

The position and status of the old have, however, been seriously undermined by factors such as: changing values, growing individualism and rising aspiration for consumer goods as a result of the impact of education, urbanization, westernization and industrialization which prompt the younger generation to give primacy to themselves; less number of children due to acceptance of small family norms and hence greater affect the well-being and care of elderly are:

1)Loosening of traditional control of the parents over younger generation due to replacement of family production by employment and hence creation of more and more nuclear families instead of joint or extended families.
2)Increase labor force participation of women, making them less available as care-givers.
3)Lesser availability of adult children as caregivers due to fertility decline; and
4)Physical separation between the generations due to migration.

In traditional Indian patrilineal / patriarchal joint and stem family systems, along with a relatively marginal or powerless position of females, there also remain a strong differentiation of authority along general lines. The position of parents in patrilineal or patriarchal joint and stem family systems in traditionally one of authority and respect, based in no small measure on parental control of productive resources such as land and livestock. The shift from family-run enterprises to wage employment due to industrialization results in a decline of control of family elders over younger family members, which result in less loyalty and obedience of young family members toward their elders. Moreover, with population growth and urbanization, a decreasing proportion of parents own such resources.

According to the National Sample Survey Organization (NSSO), out of 48.2 million elderly citizens in 1998, 39.5 million were in rural areas and 8.7 million in urban centers. About 41 % of them were found working in rural India, and only 27 % in urban India, indicating that a large section of the elderly were unemployed and therefore dependent on others. The survey showed that 12 % of the aged males and a little over one % of the aged females were living alone in rural India where as about 10 % and a little less than 1 % of aged males and females respectively, were living alone in urban India.

The survey also revealed that 44-47 aged males out of 1,000 persons reported physically immobile as against 67-68 aged females out of the same number. The proportion of the aged persons with the chronic diseases varied between 443 to 455 per 1,000 populations at the national level. A tragedy among the elderly group is that about 37 % of the aged were willing to move to old age homes. (NSSO - Report)

Around 7 % of the Indian population is in the 60 and above bracket today. It is likely to touch 10 % by 2020. The 76 million elderly populations today are likely to double in just one generation. The proportion of 70 and above persons is expected to increase even faster. The ever-increasing growth rate of the elderly persons would be accompanied by the continuous decline in the growth rate of the general population. The sex ratio of the aged persons favors males today. But the balance is shifting slowly. In fact, females are preponderant in the extreme old ages. Three out of four elderly persons reside in rural areas.

LIVING ARRANGEMENTS IN RURAL AREAS

The traditional Indian family structure used to provide the required environment for comfortable living of the elderly. The extended family usually consisted of two generations living together wherein the elderly used to have a different status in the households. But with the increasing number of nuclear families, the elderly seems to have been deprived of certain needs, a situation to many families are unable to adapt. For instance, the development evolution has taken the female folk out the home and transformed the family structure to the nuclear form which results in deprivation of care for the needy at home. The status and security of the elderly has deteriorated in the transient family structure. (S.Irudaya Rajan, U.S.Mishara and P.S. Sharma; 1996)

The elderly in the nuclear households have a feeling of helplessness. They are looked upon as a burden especially among poverty ridden households. Loneliness appears to be one of the major problems in the aged in India. Their presence irks most of the family members. Thus, the breaking down of kinship and family organization has put in a state of helplessness, isolation and economic dependence. These differences not only provide an insight into the changes that taking place in the traditional Indian family due

to forces of industrialization, urbanization and migration, but have an important bearing in evolving suitable policies in the context of the growing elderly population and increasing urbanization.

In a traditional Indian family system, the sons (particularly the elder son) are supposed to take care of the parents in their old age. In the absence of the son(s), parents prefer to live either alone or with a married daughter (Nandal, Khatri and Kadian; 1987). Only a negligible proportion of the elderly males and females in rural as well as in urban areas reportedly live in homes for aged or other institutions. A higher proportion of the elderly males (10 %) was found living alone than elderly females less than 1 %). Nearly 37 % of the elderly males and 6 % of elderly females were found to be living with their children in rural areas. The proportion of elderly living with their children was higher in the urban areas: 40 % for males and 67 % for females. A small proportion of the elderly of both the sexes in rural and urban areas was living with their grandchildren and other relatives (NSSO – 1991).

The Indian family has the central role in the care of its aged members. It will continue to play a very important role in the caring process for several reasons. First, there is a widely held belief that family responsibility for the care of elderly is a moral imperative. According to Hindu philosophy and tradition, it is enjoined upon the younger members to look after the elderly and provide them with care. Help and services, which are provided to the aged, consist of a number of activities from personal care to emotional support. Generally there are two types of services: the first type is classified as “Primary Services” which encompasses social and recreational activities and emotional support. Three main types of informal support given to the elderly can be distinguished. First, emotional support involves the provision of moral and psychological support through sympathetic and caring relationship. Second, informal support which assists the elderly with problem-solving and decision-making. And third, instrumental support which takes the form of help with the practical tasks of everyday life (Arun P.Bali; 1996) .

A nationwide survey found that 34 % of the rural elderly are financially independent as against 29 % of their urban counterparts. Surprisingly, the share of old age workers in agriculture increased over time, both in rural as well as urban areas. Almost 80 % of aged workers in India work in the agriculture sector. Detailed investigations indicate that 62 % of elderly males work as cultivators where as 70 % of females work as agricultural laborers. Owing to their difficulties in maintaining their daily life, elderly persons in India continue to work after 60 years of age. (NSSO). The most critical to the well-being of the elderly is their economic status and ability to control their resources. The work participation rate of the elderly males is very high in India mainly because of its agrarian economy which has no specific age of retirement.

Compared to elderly males, the work participation rates of elderly women are much lower. Compared to urban elderly, a higher proportion of rural elderly of both sexes were found to be economically fully or partially independent. The incidence of economic dependence was much higher among elderly women then among men. Among the elderly men, 33 % in rural areas and 37 % in urban areas were economically fully dependent. The rates for the female elderly, at 78 % full dependence and 86 % in rural and urban areas, respectively. The literacy levels among elderly persons are pretty low and it is extremely low in rural areas and especially among women. However, the situation is changing at a faster pace. Increasing literacy levels among elderly persons joining ranks in years to come is evident. In future, they expect to demand more from the government for social security and other financial benefits.

Married persons fare better than the single on a number of dimensions i.e. economic, social, and emotional and care given during the progression through older life. But the female share of the older population is on the rise. It would mean increasing widowed women in the extreme old age. Gender disparity in widowhood among the elderly in India is a dawning reality visible all around. Through the expansion of health care infrastructure for providing primary health care and medical services has been the country's first priority. As a result, the elderly in rural, tribal and urban areas have been benefited by the expansion of health care infrastructure. The government has started concentrating on the development of rural health infrastructure so as to provide primary health care services to the entire rural population.

Panchayats need to be involved in planning and implementation of programs for elderly in rural areas. Panchayats could be involved in training field level workers, community leaders, voluntary workers, and Para-professional workers for delivering different types of services to the elderly. Health is an important dimension and careful planning of preventive, curative and promotive services is needed. In rural settings where the social status of older persons is high and their decision power is having significance, it is required to be crucial and effective for rural population ageing and favorable to rural sector too. (The APO Report on Rural Ageing ; 1999)

However, the existence of such a large number of the elderly in rural areas (which may also imply an exodus of the surplus rural population to the cities) has caused no setback to development, either is the rural or the urban areas. To be precise, the standards of living have improved in both rural and urban areas. There has been no negative impact on the overall situation of food security at the national level. The conditions in the rural sector appear to have improved at the same lime as the population has aged. This is

not to say, of course, that conditions improved because the rural population aged. There could very well be localized pockets of deprivation because of the ageing of rural populations and the exodus of the younger, most productive members of those populations. However, the government policy for rural development was careful enough to ensure rural progress despite the ageing.

Problems that have arisen in rural areas include the lack of infrastructure development, the decline of the agricultural economy, an insufficient technological knowledge, inappropriate transfer of resources to workers and a lack of access to agriculture markets. A growing number of older persons are left behind without traditional family support and some with infrequent or little support from absent kin. It is urgent that resources be targeted to rural areas, first, to stem the out-migration of youth, and second, to sustain the independence of older persons. Priority should be given to strengthening the capacity of older farmers through access to financial and infrastructure services, improved farming techniques and technologies, revitalization of small-scale industries and enterprises, establishment of income generating projects and rural cooperatives, and the provision of ongoing education, training and retraining for all adults.

Demographic ageing tends to be associated with declining ability of affected communities to adapt the social change same as the ageing of an individual. It's all because of loss in physical function and declining capacity of elderly to acquire new skills and knowledge. The simple reason behind this is that elderly see little sense in adopting themselves, as they perceive their remaining life as being short. In conditions of advanced demographic aging, the rural population may ultimately not able to respond to stimuli such as agricultural intensification or other technological change. The approach of lifelong learning remains to be tested but its application would require significant shifts in human resource policies, such as agricultural extension. The knowledge of ageing and the development of positive attitudes towards old-age contribute to the improvement of intergenerational relations, combat stereotypes that promote ageism and develop a more realistic outlook towards one's ageing process.

Almost, everywhere, women live longer than men do and over their lifetime have less opportunity to accumulate financial and other resources. Simply because men often outlive their spouses. Older men get married again with younger women if they want in case of their wives death but older women are less prone to remarry if their spouse has died, and thus they more likely to spend their old age without a spouse to provide support. Older women are much vulnerable if they are widows. In the rural settings where certain occupations or social roles are regarded as predominantly for female; it may well that rural women have better chances than men to continue working in old age for example small scale agricultural producer, traditional healers, or providers of domestic help.

Active, Positive and Successful Ageing

ACTIVE AGEING

The term “Active ageing” was adopted by the World Health Organization in the late 1990s. It is meant to convey a more inclusive message than “healthy ageing' and to recognize the factors and sectors in addition to health care that affect how individuals and populations age. If ageing is to be a positive experience, longer life must be accompanied by continuing opportunities for the independence and health, productivity, and protection. The World Health Organization uses the term “active ageing” to express the process for achieving this vision. “Active ageing is the process of optimizing opportunities for physical, social, and mental well-being throughout the life course, in orders expected to extended healthy life expectancy, productivity and productivity and quality of life in older age. Thus, the word “active” refers to continuing involvement in social, economic, spiritual, cultural and civic affairs, not just the ability to be physically active. Older people who are ill or have physical restrictions due to disabilities can remain active contributors to their families, peers, communities and nations. (WHO ; 2002)

Maintaining independence – one's ability to control, cope with and make decisions about daily life – is a primary goal for both individuals and policy makers. Health that enables independence is the key factor of an active ageing experience. An active ageing approach to policy and programme development has the potential to address all of the challenges of both individual and population ageing. Ultimately, it allows older people to optimize their potential for independence, good health and productivity while providing them with adequate protection and care when they require assistance. Potentially, when health, labour market, employment, education and social policies support active ageing. The active ageing approach is based on recognition of the human rights of older people and the United Nations principles of independence, participation, dignity, care and self-fulfillment. It shifts the strategic planning away from a “need based” approach (which assesses that older people are passive targets) to a “right- based” approach that recognizes the rights of older peoples to quality of opportunity and treatment all aspects of life. It supports their responsibility to exercise their participation in the political process.

Active ageing polices and programs support both a life course perspective and intergenerational solidarity. Today's child is tomorrow's grandmother or grandfather. The quality of life they will enjoy, as grandparents will depend on the threats or opportunities they experienced in early life. They and their grandchildren are explicitly linked in a social contract of intergenerational interdependence. There are good economic reasons for enacting policies and programs that promote active ageing – in terms of increased productivity and reduced costs in care. People without disabilities face fewer impediments to continued work. They use less medical care giving services. It is far less costly to prevent disease than to treat it. The healthy and productive ageing depends on variety of factors or "determinants" that surrounds individuals, families and nations. Understanding the evidence we have about the determinants of active ageing will help us design policies and programmes that work. These determinants are as follows:

1-Hereditary Determinants
2-Socio-Economic Determinants
3-Life Style and other Behavioral Determinants
4-Gender – related Determinants
5- Cultural Determinants
6-Political Determinants
7-Spiritual and Religious Determinants

POSITIVE AGEING

Positive ageing may be distinguishable from other alternative concepts like productive ageing and healthy ageing. It is because of integrating concerns for both the individual and society and their interaction. Where as productive ageing emphasizes the older individual's contribution to society and successful or healthy ageing emphasizes the individual's well being or health (Bose Ashish; 1999), positive ageing anticipates both. Positive ageing maintains that older people have abundant positive resources, which facilitate their positive contribution to the self and society. There is advocacy for the extension of people's work life, education, both their careers and leisure, social and community participation, and adding life their years rather than adding years to life (Clark, 1996; Karl Essar, 1998; Van den Heuvel, 1997). This advocacy for the positive ageing takes the assumption that older people are capable and they can retain their role in the community.

Positive ageing is the absence of negative ageing, which includes distress, morbidity, isolation, discrimination and ageism. It emphasizes the positive features of the ageing. it emphasizes the positive feature of the ageing and is independent of appeal of anti-ageism. Positive ageing is affirmative, constructive and empowering rather than defensive, patronizing, over generalizing and grievances-redressing as in the case of anti-ageism.

SUCCESSFUL AGEING

In the social science literature, several perspectives have informed the study of older persons. Theories of disengagement, activity, continuity, age stratification, exchange (decreasing social interaction), labeling, personality, life satisfaction and crisis are notable among them. None however, is considered adequate to deal with the multifaceted phenomenon of social and functional ageing.

Successful ageing, according to the Ericksonian model of life stages, is determined by the completion of expected life tasks and sense of achievement or fulfillment derived from them. Thus, ego integrity determines success and despair determines failure, the 'social role' theory in social case work draws attention to acceptance, expectations, support and stimulation in social relationships. An individual's role includes attitudes, values, and behavioral expectations and behavior, as well as his/her capacities and opportunities. Roles are perceived, accepted, played and integrated by individuals. Adaptations, shifts, gains or losses occur in social roles. Past experiences, present perception and future aspiration of an individual determine the role, its performance and effectiveness. For healthy and productive ageing, the 'activity theory' is generally preferred now to the 'disengagement theory'. The society's perception however, still favors social retreat or disengagement for older persons. Thus, increase in longevity without any social planning for at least 15-20 years for a sizeable population is bound to create social problems and add to mental and social health burden of society.

In any discussion on successful ageing, one has to address the meaning of term 'successes. Is success an individual's perception? Is it the perception of a social group or community to which the individual belong? Is it subjective or objective? And if so, what are the determinants of success? Are these personal satisfactions, social satisfaction, maturity, response to crisis, social contribution, productivity,

work, economic security (earning), health spirituality, social connectedness, empowerment, institutional support, identity, dignity, independence or self-fulfillment? One can see that almost all these factors are inter-related and only one of them can not be a true predictor or index of ageing.

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