

## **An Empirical Study on Socio-Economic profile of Ageing Population in India and Odisha: A Gender Perspective**

**Jeeban Jyoti Mohanty<sup>a</sup>, Sudhakar Patra<sup>b</sup>,**

<sup>a</sup> Ph.D Research Scholar, Ravenshaw University, Cuttack, Odisha, India

<sup>b</sup> Professor in Economics, Berhampur University, Odisha, India

### **Abstract**

The advancement in medical science has made the life of citizens in India better in terms of increased life expectancy and improved standard of living. But at the same time it is important to add here that ageing has given rise to increased vulnerability and deprivation of elderly in the society. Importantly women are more vulnerable compared to men as they have a higher life expectancy, derive low income and face frequent interruptions in employment and incomes due to childbirth and other family responsibilities. The paper is an attempt to delve deeper into the ageing scenario and provides a situational analysis of elderly in terms of economic and social aspects i.e. marital status, work status, living arrangements and dependency of ageing population of India in general and Odisha in particular.

The study found widowhood to be high among the elderly women. Similarly work force participation is also high among the elderly people but gainful employment is low as age progresses. Women and widows show high level dependency with the progress of age. The study clearly points out that the welfare of the elderly is being compromised and hence it stresses upon an urgent need for their social security. The study recommends for creating the necessary infrastructure and social security measures for the ageing population of India and Odisha in particular.

**KEYWORDS:** Ageing, Demographic Transition, Elderly and Social Security

### **I. INTRODUCTION**

Ageing is an inevitable phenomenon to a population as the effects of demographic transformation sets in with decline in fertility and mortality. Changing age structure and the alarming pace of growth of the ageing population can pose different challenges to economy and society and have both long run and short run implications. The phenomenon of ageing can affect the economy and economic development in many ways. Ageing determines age structure and can thus affect the labour force and its productivity. With larger ageing population, the composition of work participation gets affected as the positive effects of the windows of opportunity go down (World Bank, 1994). The changing age structure of a population can have long run economic and social implications and create an imbalance within generations. Increased ageing population along with a decreased pace of population growth can affect the whole economic performance and puts heavy pressure on the efforts to maintain intergenerational balances in the economy.

Women in India and especially in Odisha, are even more vulnerable to old age poverty than men as they enjoy a higher life expectancy than men, derive lower incomes in comparable occupations, suffer a shorter working age and frequent interruptions in employment and incomes due to childbirth and other family responsibilities. The rapid changes in the social scenario and the emerging prevalence

of nuclear family set-ups in India in recent years, the elderly people are likely to be exposed to emotional, physical and financial insecurity in the years to come. In view of the increasing need for intervention in area of old age welfare, Ministry of Social Justice and Empowerment, Government of India adopted 'National Policy on Older Persons' in January, 1999. The policy provides broad guidelines to State Governments for taking action for welfare of older persons in a proactive manner by devising their own policies and plans of action. The policy defines 'senior citizen' as a person who is 60 years old or above. It strives to ensure well-being of senior citizens and improve quality of their lives through providing specific facilities, concessions, relief, services etc. and helping them cope with problems associated with old age (Nayak, 2014). Therefore, it is very important to study on profiling of aged in India and the state of Odisha. The present study includes both demographic aspects and living conditions of the elderly population in India and Odisha in general. Living conditions covered rural-urban distribution, seniority and super-seniority, living arrangement, works status, marital status and dependency.

## II. METHODOLOGY OF THE STUDY

Ageing of the population poses several profound impacts on every aspect of life. India is continuously experiencing one of the fastest ageing populations in the developing world due to its speedy demographic transition. This unprecedented increase in the ageing population will affect various sectors of society and its institutions, either in positive or negative directions. Hence, it is useful to study the ageing process and some of its socio-economic implications in India and is imperative to allow academics, researchers and especially policy makers to better understand the profound impacts on ageing and formulate better policies for the country. With this backdrop, the objectives of our study had been started more precisely as follows:

- I. To study the demographic trend of India in general and Odisha in particular.
- II. To access the socio economic profile of elderly population in India and Odisha.
- III. To make suggestions to government for making rules and regulation of elderly people for their improvement status.

The paper explores the demographic profile of older persons in India using the 2001 census data and projections upto 2050 to build a knowledge base to better understand on socio economic implications of changing population age structure. The study has utilized secondary source of information such as Census of India 2011, 68<sup>th</sup> Round of NSSO and Situation analysis of the elderly in India, 2011 report. Data have been collected from various other sources of the government, private research agency and from published papers. The analyzed data is presented based on objectives of the research in the form of tables, which are described, interpreted and conclusion drawn.

## III. DEMOGRAPHIC TREND OF INDIA AND ODISHA

Population aging is a universal phenomenon, and India is not an exception to the rule. India accommodates about 17 percent of the world population out of which 7.6 percent are elderly. The following table shows the changes in the salient features of the Indian vs Odisha population from 1971 to 2011 (Table 1):

**Table 1: Change in population from 1971 to 2011 India vs. Odisha**

Sex	Region	1971	1981	1991	2001	2011
Male	India	28,40,49,276	35,33,74,460	43,93,58,440	53,22,23,090	623270258
	Odisha	1,10,41,083	1,33,09,786	1,60,64,146	1,86,60,570	21212136
	%	3.89	3.77	3.66	3.51	3.40
Female	India	26,41,10,376	32,99,54,637	40,70,62,599	49,65,14,346	587584719
	Odisha	1,09,03,532	1,30,60,485	1,55,95,590	1,81,44,090	20762082
	%	4.13	3.96	3.83	3.65	3.53
Total	India	54,81,59,652	68,33,29,097	84,64,21,039	1,02,87,37,436	1210854977
	Odisha	2,19,44,615	2,63,70,271	3,16,59,736	3,68,04,660	41974218
	%	4.00	3.86	3.74	3.58	3.47

Source: Census of India, 2011

The Table-2 shows how the Indian population is gradually greying owing to diminishing birth and death rates. Improvement in literacy led to better degree of awareness about health care and sanitation facilities, while innovations in medical science increased life expectancy. Moreover, the increasing participation of women in the workforce reduced the fertility rate. However, the higher proportion of children of the age group of 0–6 years makes India a younger nation as compared to 10.15 percent of the world average.

**Table 2: Demographic details of India from 1981 to 2011**

Sl. No	Particulars	Year			
		1981	1991	2001	2011
1	Population size (in Million)	683.33	846.3	1028.7	1210.85
2	Crude Birth Rate (Per 1000 population)	33.9	29.5	26.1	22.5
3	Crude death Rate (Per 1000 population)	12.5	9.8	8.7	7.3
4	Total fertility rate per women	4.5	3.6	3.3	2.6
5	Infant mortality rate per 1000 live births	110	80	70	53
6	Life expectancy at birth (in years)	54.4	60.3	61.1	63.4
7	literacy rate (Percentage)	43.57	52.2	64.8	74.04
8	Proportion of children (0-6 years)	17.94	15.37	17.94	13.12

Source: Economic Survey

The projection period ranges from 2001 to 2051. It is also important to note that projected elderly population above 60 years of age in 2051 were already born in 1991 and were 10 years old in 2001. Given our assumptions regarding mortality, the projections are likely to be valid. The projections of Indian population of different age groups for selected years are given below (Table-3):

**Table 3: Number, Proportion and Sex ratio of the elderly, 2001-2051**

Sl.No		2001	2011	2021	2031	2041	2051
I	<b>60 and Above</b>						
	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
II	<b>70 and Above</b>						
	Numbers (in Million)	29	36	51	73	98	132
	Percentage to the total population	2.9	3.1	3.8	4.8	6	7.6
	Sex Ratio (Males per 1000 females)	991	966	970	930	891	954
III	<b>80 and Above</b>						
	Numbers (in Million)	8	9	11	16	23	32
	Percentage to the total population	0.5	0.7	0.8	1	1.4	1.8
	Sex Ratio (Males per 1000 females)	1051	884	866	843	774	732

Source: Rajan Irudaya S (2006), Population ageing and Health in India, The Centre for Enquiry into Health and Allied Themes (CEHAT), Mumbai, Survey No. 2804 &2805, PP-4

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 percent in 2031 and 17 percent in 2051 (Table-3). However, the sex ratio among the elderly favours males, which is contrary to the experience of other developing nations. The number of elderly persons above 70 years of age (old-old) is likely to increase more sharply than those 60 years and above. The old are projected to increase five-fold in between 2001 to 2051 (from 29 million in 2001 to 132 million in 2051). Their proportion is expected to rise from 2.9 to 7.6 %. The elderly population of India is nearly 8.95 % whereas in Odisha, it is nearly 9.78 percent of the total population as on 2011 census. The elderly female at national level is high comparatively male elderly population whereas in state Odisha it is vice versa (Table-4). In absolute term nearly 41.03 million elderly populations are living in the state out of which 20.55 million are males and 20.48 are females (Table-5).

**Table 4: Status of elderly population of India by broad age group & sex, 2011**

Age Group	Persons	% to total population	Males	% to total population	Females	% to total population
All ages	1210854977	100	623270258	100	587584719	100
0-59	1102516135	91.05	569825505	91.425	532690630	90.66
60-64	37663707	3.11	18701749	3.00	18961958	3.23
65-69	26454983	2.18	12944326	2.08	13510657	2.30
70-74	19208842	1.59	9651499	1.55	9557343	1.63
75-79	9232503	0.76	4490603	0.72	4741900	0.81
80+	11289005	0.93	5283695	0.85	6005310	1.02
Age not stated	4489802	0.37	2372881	0.38	2116921	0.36
Total Elderly	108338842	8.95	53444753	8.575	54894089	9.34

Source: Compiled by research scholar from the 2011 census data

**Table 5: Broad Age Group and Sex of Odisha 2011**

Age	Persons	% to Total population	Males	%	Females	%
1	2	3	4	5	6	7
ODISHA TOTAL OF All ages	41974218	100	21212136	50.54	20762082	49.46
01-14 AGE	11237608	26.77264	5747732	51.15	5489876	48.85
15-59 AGE	25794177	61.45243	12989518	50.36	12804659	49.64
60+ AGE	2453586	5.84546	1225484	49.95	1228102	50.05
70+ AGE	1132870	2.698966	563929	49.78	568941	50.22
80+ AGE	318265	0.758239	165446	51.98	152819	48.02
90+ AGE	63438	0.151136	31490	49.64	31948	50.36
100+ AGE	16289	0.038807	7921	48.63	8368	51.37
Age not stated	119171	0.283915	61347	51.48	57824	48.52
<b>TOTAL OF ALL ELDERLY</b>	<b>4103619</b>	<b>9.776523</b>	<b>2055617</b>	<b>50.09</b>	<b>2048002</b>	<b>49.91</b>

Source: Compiled by research scholar from the 2011 census data

The above projections definitely points out to difficult times ahead if the same are not met with proper planning and policy making. Ignoring the same or a delayed or faulty policy shall undeniably cause a social imbalance that the future generation shall not pardon. The socio-economic profile of the elderly that plays a key role in quality of their life as well as have a great impact on the society.

#### IV. ECONOMIC AND SOCIAL PROFILE OF ELDERLY

Population characteristics vary from one geographical area to other and it is a familiar fact that level of development is not the same among different states of India nor it is among different districts of a state due to various reasons like social structure, economic state, demography etc. So it is imperative to go through the qualitative and quantitative framework of elderly population and the amenities available to them. This could act as the cornerstone for the objectives of the study to sprout further. As age goes up there is not only a complete turnaround of life for the aged but also for the whole population making it a disadvantaged one. This is reflected in the marital status, work status, living arrangements and dependency (Scaffer, 1999; Kan, Park and Chang, 2001; World Bank 1994). These four major causes of population turmoil due to ageing of its individuals has discussed in detail.

##### 1. Marital Status

It is a common belief that a person living with a spouse fares better in terms of overall economic and social aspects than a person without spouse whatever be the cause of lack of spouse attributed to viz. not marry at all, widowed, divorced, separated etc. Gulati and Rajan (1999) attributed two reasons for it i.e. longer life span of women compared to men and general tendency in India for women to marry men older than themselves. In India, in spite of it being a fact that relationship between wellbeing and presence of a spouse may not be entire, yet loss or lack of spouse is likely to affect the overall situation of an individual or society. But studies in Western societies have documented that there is higher risk for the widowed elderly in comparison to the counterpart living with spouse (Gove, 1973; Trovato and

Lauris, 1989; World Bank, 1994). It can be a generalised fact that an elderly with a spouse has a better living in the later years of life as they can act as supporting systems to each other in state of distress. Whatever may be the case, it is undebatable that marital status need be treated as a key variable in deciding the living quality. It plays a vital role in the health security of the elderly (Sreerupa, 2007).

A glimpse of Table-6 shows the distribution of individuals living without a spouse separately for widowed, divorced and separated. In case of the country and the state, the widowed elderly population has denied descending from the level of 30% of the total elderly population. The proportion of Widowed to that of currently married elderly has also showed a rising trend in the same manner. Occurrence of widowed population is as bulky as to cross more than half the total percent occurrence of the currently married elderly population which is a matter of concern. The piteous thing is that in comparison to the male elderly, the proportion of female elderly is more than threefold and is approximately the same as much as that of currently married elderly. This means for every currently married female there is a widow.

Table 6: % distribution of Marital status of Elderly to Total Elderly, Place of Residence & Sex wise

Region	Marital status	TOTAL			RURAL			URBAN		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
India	Never married	4.6	5.5	3.7	4.2	5.1	3.2	5.5	6.3	4.8
	Currently Married	64.6	80.1	49.5	64.7	79.6	50.3	64.3	81.2	47.7
	Widowed	30.4	14.1	46.2	30.6	14.9	45.9	29.7	12.1	46.9
	Separated	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.3	0.5
	Divorced	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Odisha	Never married	3.0	3.2	2.8	2.7	2.9	2.6	4.4	4.7	4.0
	Currently Married	65.3	81.5	48.9	65.2	81.4	49.0	65.9	82.5	48.3
	Widowed	31.2	14.9	47.7	31.5	15.3	47.7	29.3	12.4	47.1
	Separated	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.3	0.5
	Divorced	0.1	0.0	0.2	0.1	0.0	0.2	0.1	0.0	0.1

Source: Compiled by research scholar from the 2011 census data, Values rounded off, so percentages may not exactly add up.

A comparison of Table-4 & 6 shows percentage values of population of elderly to the total population and population of inclusive-widowed (that includes widowed, separated and divorced population) to the total population. While the total elderly population stands at 8.95% of the total population (Table-4), the population of inclusive-widowed stands at 30.4 (Table-6). In Odisha the value stood at 31.2% which is higher than the national average.

Table 7: Percentage of Widowed elderly to Total elderly population

Region	Total			Rural			Urban		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
India	30.8	7.1	23.7	31.1	7.5	23.6	30.2	6.2	24.0
Odisha	31.8	7.7	24.1	32.1	7.8	24.3	29.7	6.6	23.2

Source: Compiled by research scholar from the 2011 census data, Values rounded off, so percentages may not exactly add up.

In the Indian house hold where the elderly males command respect and obedience, the female counterparts are a deprived lot. Due to many social factors they prefer silence and digest all sorts of deprivation. They rarely disclose their personal difficulties including the essential needs like medication and health care and observe a non-complaining attitude till embracement of death. The 30.8% of the widowed population of the national and 31.8% at the state level show the quantum of attention it is required to address the problems of widowhood (Table-7). The tearing social fabric leading to loss of family integrity and values is a heavy blow to the elderly in general and particularly to the widowed elderly in the present scenario. Most of the young earning family members stay far away from the home where the elderly parents are ignored. Shrinking size of the family also reduced their probability of alternatives. With progress of old age other haunting factors also fasten their seatbelts to add further botheration to the elderly. Even the affluent or middle-class elderly suffer save those of the poor and the poorest who lead a miserable life. Dependency and insecurity becomes their inseparable companion.

## 2. Work Status

With the progress of age, activity of a person diminishes. This accentuates the economic condition of the elderly in India. Women are more prone to financial scarcity. In spite of their fading energy and reduced efficiency they are compelled to work to meet both ends meet. The problem is more pertinent among elderly who are widowed and/or live in a nuclear family, and lack a definite source of income. The maze becomes more complex for the elderly with or without spouse specifically in time of distress like illness etc. Therefore for the elderly dependence and economic insecurity becomes chief concern which triggers social insecurity among them. In view of this analysis of work force participation becomes indispensable. In the country about 31.4% of the elderly continue to add to the workforce as main workers. The non-workers constitute 58.4% whereas the marginal workers 10.2%. In Odisha, the main work force of elderly constitutes 24% in comparison the national average of 31.4% (Table-8). This implies to a total 76% non-workers and marginal workers together.

Table 8 : Work Force Participation Rate of Elderly Population in India &amp; States, % to Total Elderly Population

Region	Main workers	Marginal workers			Non-workers	
		Worked for less than 3 months	Worked for 3 to 6 months	Seeking/available for work*	Total	Seeking/available for work*
India	31.4	2.3	7.9	2.8	58.4	1.5
<b>Odisha</b>	<b>24.0</b>	<b>3.2</b>	<b>10.9</b>	<b>4.1</b>	<b>61.9</b>	<b>1.7</b>

\*Figures already included in the respective heads and hence not added to percentage

Source: Compiled by research scholar from the 2011 census data

As discussed earlier the workforce participation diminishes with progress of old age. As it can be observed from Table-9, there is a substantial decrease in the main workforce while going down from the age group 60+ to 80+, from 23% to 1.8% at national and 18.2 to 1% at state level.

Table 9: Work Force Participation Rate in India, Odisha and Study area, Age group wise

Region	Age Group	Elderly Population in %	Main workers	Marginal workers			Non-workers	
				Worked for <sup>3</sup> months	Worked for 3 to 6 months	Seeking/available for work*	Total	Seeking/available for work*
India	60+	61.7	23.0	1.6	5.8	2.2	31.4	1.1
	70+	27.4	6.7	0.6	1.7	0.5	18.5	0.3
	80+	10.9	1.8	0.2	0.5	0.2	8.5	0.1
	Total Elderly %	100	31.4	2.3	7.9		58.4	
Odisha	60+	61.6	18.2	2.3	8.3	3.3	32.7	1.2
	70+	28.4	4.8	0.7	2.1	0.6	20.8	0.4
	80+	10.0	1.0	0.1	0.5	0.2	8.4	0.1
	Total Elderly %	100	24.0	3.2	10.9		61.9	

Source: Compiled by research scholar from the 2011 census data, Values rounded off, so percentages may not exactly add up.

It is pitiable to observe that even at the age of 80+, 16.5% and 10% of the elderly constitutes the main work force at national and state level respectively. This definitely reflects their economic meagerness, to meet which, even at such an age they are compelled to work. The observations that at the age of 70+ also, at the national and state level 24.5 and 17% of elderly contributed to the main work force is nevertheless less worrying.

Due to lack of social security and due to existence of high level poverty in India there is high level work force participation by the elderly. In many developing countries more than half of elderly are economically active. In contrast, in the developed countries only 2% of men aged 65 and above contribute to the work force. The rest 98% afford to retire as in rich countries different social security and pension schemes are available.

Table 10: Work Force participation Rate in India, Place of Residence and Sex wise

Region	Work category		Total Elderly		Rural Elderly		Urban Elderly	
			Mal es	Femal es	Mal es	Femal es	Mal es	Femal es
India	Main workers		24.3	7.1	26.0	8.3	20.2	4.2
	Marginal workers	Worked for less than 3 months	1.1	1.2	1.4	1.5	0.4	0.3
		Worked for 3 to 6 months	4.3	3.6	5.2	4.6	2.1	1.2
		Seeking/available for work*	1.8	1.0	2.3	1.3	0.6	0.3
	Non-workers	Total	19.5	38.9	16.5	36.4	26.6	44.9
		Seeking/available for work*	0.6	1.0	0.5	1.0	0.8	0.9
<b>Total</b>			49.2	50.8	49.1	50.9	49.3	50.7
Odisha	Main workers		20.7	3.3	21.1	3.3	18.2	3.2
	Marginal workers	Worked for less than 3 months	1.6	1.6	1.7	1.9	0.5	0.3
		Worked for 3 to 6 months	5.9	4.9	6.5	5.5	2.4	1.3
		Seeking/available for work*	2.5	1.7	2.8	1.9	0.6	0.3
	Non-workers	Total	21.8	40.1	20.5	39.5	30.4	43.8
		Seeking/available for work*	0.6	1.1	0.6	1.1	0.8	0.7
<b>Total</b>			50.1	49.9	49.8	50.2	51.4	48.6

Source: Compiled by research scholar from the 2011 census data, Values rounded off, so percentages may not exactly add up.

A comparison of sex wise participation at a spatial level showed that at the national level in comparison to males 22.6% of females constituted the main work force in total which at a spatial difference found to constitute 24.2% at rural level and 17.2% at urban level. In Odisha the contribution of female main work force is found to be total 13.8, rural 13.5 and urban 15% (Table-10). Observation shows that there is larger participation of elderly women in rural areas in comparison to urban areas. This is basically due to the economic inadequacy the rural women folk face. Further, most of the urban elderly women do not contribute to the economy of the house and spend most of their lives as home maker. Household activities are not considered as an economic activity. In rural areas however they work as the labour force mainly in the agricultural activities. However there is a reverse trend in Odisha attributable to dwindling of avenues in agriculture sector while there sprouts ample opportunities at the urban side.

### 3. Living arrangement among Elderly

Living arrangement denotes type of family in which the elderly live, headship they enjoy, place of staying, relationship with the near and dear ones etc. Living arrangements are influenced by a variety of factors including number and availability of children and other relatives, kinship patterns of the society, location of household, marital status, financial status, availability of services and physical and mental well-being of the elderly (Scaffer, 1999, Kan, Park and Chang, 2001). Changes in living

arrangements, family structure and mode of retirement adversely affect the old (D'Souza, 1989). Living patterns on the other hand include living with spouse, living with children or living in old age home. In the young-elder living alone or with spouse is the most stable arrangement whereas for the super senior-elders living with children and/or grandchildren is the most stable arrangement. Emerging events like increased divorce rates, prevalence of widowhood etc. influence the living arrangements at old age greatly (Legare and Martel, 2003; Martel and Carriere, 2003). Panigrahi (2010) showed that, demographic characters like age, sex and number of surviving sons affect significantly the living arrangement preferences among the elderly in Odisha and also that, education and their economic independence are also strongly correlated with the preference to live alone. As rightly pointed out, India is moving towards a more western system of living arrangements, where highly educated, functional elderly in good health are more likely to live independently of familial structures by choice rather than compulsion (Jadhav, Sathyanarayana, Sanjay Kumar and James; 2013). Thus, living arrangement plays a crucial role in determining the safety and security of elders.

In traditional Indian families the elderly act as the head of the house hold (HoH). A comparison of sex wise percentage of HoH in different age groups has been taken as per reports of Census, 2011. Table-11 shows that about 70-80% heads belong to males in comparison to their female counterparts. At National and state level, rural areas have more male house heads than urban areas whereas the females dominated in the urban in comparison to the elderly females of rural areas. Table-12 shows that a majority of elderly are co-residing but about a fifth of all elderly are living alone or with their spouse only; a significant 6 percent living alone. A higher proportion of elderly women than elderly men live alone (9.6% compared to 2%). This is true in both rural and urban areas. The reason of living alone has been shown as not having children or children living elsewhere, most likely due to migration or marriage (Jadhav, Sathyanarayana, Sanjay Kumar and James; 2013). This is more prominent in urban areas.

Table 11: Percentage distribution of elderly by Head of Household (HoH); Age group, sex and place of residence wise, 2011

Region	Age group of the HoH	Total		Rural		Urban	
		Males	Females	Males	Females	Males	Females
India	60+	79.1	20.9	80.0	20.0	77.2	22.8
	70+	75.0	25.0	76.2	23.8	72.1	27.9
	80+	72.0	28.0	73.8	26.2	67.8	32.2
	Total	77.4	22.6	78.4	21.6	75.0	25.0
Odisha	60+	81.4	18.6	81.5	18.5	80.5	19.5
	70+	77.7	22.3	77.9	22.1	76.2	23.8
	80+	78.6	21.4	79.3	20.7	74.8	25.2
	Total	80.2	19.8	80.4	19.6	78.9	21.1

*Values rounded off, so percentages may not exactly add up.*

*Compiled by research scholar from the 2011 census data*

Table 12: Percentage distribution of elderly by type of living arrangement according to residence and sex, 2011 (N=9,852)

Living Arrangements	Total			Rural			Urban		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Alone	2.0	9.6	6.0	2.1	9.3	5.9	1.7	10.5	6.5
Spouse only	20.8	11.3	15.8	21.4	12.9	17.0	19.2	7.0	12.6
Spouse, children & grand children	58.0	24.9	40.6	57.6	25.7	41.0	59.3	22.5	39.3
Children & grand children	12.1	45.5	29.7	12.4	43.6	28.6	11.3	50.6	32.7
Others	7.0	8.8	7.9	6.5	8.5	7.6	8.5	9.4	9.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	4672	5180	9852	2453	2685	5138	2219	2495	4714

Source: IUSSP, 2013

With background characteristics taken into consideration other patterns emerge as shown at Table-12. Living with spouse, children and grandchildren remains the dominant type of living arrangement across all categories. Widowed older women having no education and without any work lived mostly with children and grandchildren. The findings that about 15% of widowed men and women live alone points out marital status, particularly widowhood as a crucial deciding factor of living arrangement. Elderly without any children lived alone more so than those with children (27%), with important difference by gender of child. About 15 percent of elderly with only female child lived alone compared to 5% with only male child. Individuals with no education and at the lowest level of the wealth index reported higher levels of living alone just like individuals who have never worked exclusively dominated by women. About half of elderly who live with their children receive a pension of any sort compared to 10% of those who live alone.

According to Situation Analysis of elderly in India (2011) report, among economically dependent elderly men 6-7% was financially supported by their spouses, almost 85% by their own children, 2% by grandchildren and 6% by others. Of elderly women, less than 20% depended on their spouses, more than 70% on their children, 3% on grandchildren and 6% or more on others including the non-relations. Panigrahi (2010) in his study on living arrangement preferences of the elderly in Odisha found that although co-residence is the most preferred living arrangement, preference to live alone is also high among certain sub-groups of the elderly. Age, sex and number of sons affect significantly the living arrangement preferences. Education of the elderly and their economic independence are also strongly correlated with the preference to live alone.

#### 4. Dependency among the Elderly

It may be seen that dependency status of Odisha is in single digit when compared to the national average of 14.2. It is seen that in the urban as well as rural area, the dependency status is more in females than in males. In the state of Odisha in comparison to males, dependency of females is 8.3% irrespective of place of residence.

Table 12: Old age Dependency Status in India &amp; Odisha, Place of Residence &amp; Sex wise (% value)

Region	Total			Rural			Urban		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
India	14.2	13.6	14.9	15.1	14.5	15.8	12.4	11.8	13.1
Odisha	6.3	4.9	8.3	7.8	6.1	10.1	4.7	3.8	6.3

Source: Compiled by research scholar from the 2011 census data

## V. POLICY INTERVENTION

- i. The active roles of the elderly in the family and society should be considered, recognized and appreciated by the family, community and the State as whole in providing special programmes to empower them. The promotion of several awareness and educational programmes are required at school and grass root level for young adults and children to understand the importance of positive role of the elderly and their contributions to the development of family and society. All these may help to develop the norms of children and young adults to respect to the elderly (Siddhisena, 2005).
- ii. The strengthening of social security benefits for the elderly by using several policy options is beneficial as the present coverage and the benefits are inadequate for the survival of the elderly people with their increased longevity. Elderly people who are in the private and unorganized sector, unemployed, and also those who are in agricultural and casual work, with uncertain or low wages, should be seriously taken into consideration to provide them some form of social security benefits and socioeconomic empowerment to the family to look after their health and diet in a more satisfactory manner.
- iii. Learning from the experiences of the developed world, it should be possible for India to develop funded health and pension schemes before the full consequences of population ageing make themselves apparent on the fiscal. The role of partnerships between the public and private sectors, in areas such as health, education and caring for the elderly, also needs to be carefully explored (Singh, 2013).
- iv. Research on various old age social security schemes is in its infancy. Implications of alternative designs and delivery systems for old age social security scheme need to be rigorously researched for financial sustainability and for their impact on the level of benefits to members. Different risk sharing arrangements among all the stakeholders also need to be explored.

These all-policy implications will lead to alleviating the problems associated with ageing in the future to some extent, the elderly of the future becoming a healthier and more productive group of people in India and Odisha as well.

## VI. CONCLUSION

Old age vulnerability of different intensity has been witnessed in different states of the country as well due to variation in the overall development and age structure among them. The study described the extent of deterioration in the living condition of the elderly in India and Odisha. Disparity in the living conditions in terms of marital status, work status, living arrangements and dependency has been indicated in detail. Widowhood is observed to be high among the elderly with a greater occurrence in

women. Work force participation is also high in elderly. On the contrary gainful employment is low as age progresses. Women and widows in particular and elderly in general showed high level dependency with the progress of age. The study clear points out to the fact that, as age goes up welfare of the elderly is being compromised stressing an urgent need for their social security. The government should introduce special pension scheme for elderly people. The government should establish working house where elderly people can work there. It will be very useful to earn something and to maintain their health also. The government should establish a special club for recreation and special court for elderly people to solve their problems.

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