AGING IN ASIA: A REVIEW OF AGING POPULATION IN ASIA WITH PARTICULAR FOCUS ON EAST ASIA REGION

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Abstract

This paper aims to explore broader patterns of elderly population in Asia with a special focus on East Asian region. The data taken from Population Division of United Nations' Department of Economic and Social Affairs are used to highlight the global, regional and country wise proportion of the elderly population in the year 2012 and the projections done for increase in this population by the year 2050. It is observed that the world had 809,743 thousand people aged 60 year or over in the year 2012. It is 11% of the total world population in the year 2012. The proportion is expected to get doubled (i.e. 22%) by the year 2050. The number of elderly people also varies in different geographical regions of the world. Asia comprises 60% (i.e. 446,974,000 people) of the total elderly population of the world in the year 2012. North and South East Asia comprising 65% of the total elderly population of Asia also has the highest proportion of the elderly population within Asia. North East Asia had the highest proportion of elderly population (i.e. 15%) with the largest number (i.e. 237,507,000 persons) of elderly people in Asia in the year 2012. South East Asia has 9% of population (i.e. 53,152,000 people) of the same age group. In the North East Asian region, Japan had the highest proportion of elderly population (i.e. 32%) followed by the Republic of Korea (17%), the Democratic Republic of Korea (14%), and China (13%) of population as aged 60 years or over. At the same time, China had the largest number of elderly citizens (i.e. almost 180,690,000 persons) in the region followed by Japan (with almost 39,967,000 persons), Republic of Korea (with almost 8,123,000 persons)

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and Democratic People's Republic of Korea (with almost 3,321,000 persons). In South East Asian region Singapore had the highest proportion (i.e. 15%) of the elderly population followed by Thailand (14%), Vietnam and Indonesia (9%), Malaysia and Myanmar (8%), Cambodia (7%), Brunei, Laos and the Philippines (6%) of the population as aged 60 years or over. Timore-Leste appears to have the least proportion of aged population in the region. Indonesia has the largest number of elderly people (i.e. 20,834 people) in South East Asia region. In short, a broader pattern of increasing proportion of elderly population is observed at global level, in general, and in Asia, in particular. Although, China is hosting the highest number of elderly population within East Asian region, but Japan is being crucially effected with this problem of aging as it is facing the critically highest proportion of the elderly population (that is 32%) around the world.

Keywords: *Aging, Asia, North East Asia, South East Asia.*

Introduction

It is unusual for a common person to think that the world may grow old as a human grows old while passing through different stages of the life course. As different societies strive for socio-economic development and pass through different stages in their move from preindustrial to modern society characterized with industrialization and urbanization, they have to face a new spectrum of challenges. One such challenge is the accelerating rates of population ageing. Some of the developed countries are rapidly growing gray as the proportion of their old age population is increasing with unprecedented rate.

Ageing population is said to be a result of declining fertility rates along with increasing longevity of life in the societies where with the industrialization and modernization a plenty of food, material resources, and good health care and technologies are provided. In turn the ageing population is also giving rise to a number of challenges for most of the social institutions of the societies. The

rapidly ageing population may lead to high dependency ratio, shortage of workforce, slow down to economic growth but at the same time with large bulk of those who are retired and need care and health facilities on regular basis lead to more financial burdens of pensions and insurance.

Ageing is the phenomenon each of the societies is either facing or has to face at some later stage. The experiences of the developed societies which are currently facing the problem show that most of the social systems when stressed with ageing population demands restructuring. Human race has to find new technologies, alternative modes of production and better saving and social security systems to change this graying malady into wise prosperity. Therefore, the current world with some early comers of the ageing societies is offering lot of knowledge and experience for the late comers to learn and plan for their better future prospects when they will be entering the same stage of societal development. This paper intends to review the patterns of ageing at global, regional, and country level with special focus on Asia and East Asian region.

Literature Review

The term "Ageing" or "Aging" is defined in dictionary as "growing old" or "giving the appearance of advancing age" (Thompson, 1997: 25). Ageing is appearing as a global problem; as we are aging not only as individual or community but also as a whole world (National Institute on Aging, 2007: 2; hereafter NIA). All the societies must have to deal with the problem of ageing or growing old (Henslin, 1997: 346). The particular nature of the problem encompassing local to global level is making it important to be considered by all societies for future sustainability. The ageing of human race has become one of the most prominent aspects of demography; as it is critically affecting almost all the aspects of human life from public health to national economies (Beard et al., 2012: 4).

The pace of ageing has been accelerated. World experienced a modest increase from 8% to 10% in the proportion of elderly people (60+ years in age) during last sixty years while within only four next decades this proportion is expected to reach 22% (i.e. an increase from 800 million to 2 billion elderly people) (Beard et al., 2012: 4). The problem is not increasing in number but in the geographical scope as well. The problem of ageing first emerged in developed countries but now it has become a global and almost universal phenomenon; as the rate of ageing has been accelerated in developing countries (Beard et al., 2012: 4). A rapid increase in the proportion of elderly population is expected to occur in the developing countries "which will see a jump of 140 percent by 2030" (NIA 2007: 2).

Why this problem is happening for the first time in human history with our societies? To answer this question a plenty of literature is looking on the drives or causes of global ageing in detail. Ageing is explained in terms of success of medical, social and economic advances over diseases (NIA, 2007: 3). Industrialization as a key feature of the economic and technological advances around the world brings with it a higher standard of living, better public health, pure water supply, less danger of epidemic and fatal diseases; thus as any country industrialized people start living longer lives (Henslin, 1997: 348).

The main drivers for ageing are identified as following: 1) the rise in longevity of life (i.e. increased life expectancy) and 2) Declining fertility (i.e. decreased birth rate) (Beard et al., 2012: 4; Centre of Excellence in Population Ageing Research 2013: 4, hereafter CEPAR; Muenz, 2007:1). These two drives also interlinked to create the problem of aging as the decline in mortality rates came earlier than those of fertility and caused larger cohorts born that reached to their working age and old age at a later time when the fertility declined (Beard et al., 2012: 4) and the newly added cohorts were making less fresh additions to the total population in general and the workforce

in particular.

The problem of ageing also brings several challenges with it. It creates tensions for social support and security systems including insurance and pension and effects on economic growth, trade, migration, and prevalence of disease and health care patterns (NIA, 2007: 3). At the same time, it may also result in shortage of workforce, economic growth slowdown, and resulting shortage of finances for pension health care and social security systems along with individual loneliness and insecurity (Beard et al., 2012: 4).

U.S. National Institute on Aging (2007: 3) has identified following trends related to aging sufficiently showing the challenges and opportunities that makes the problem critical: 1) overall population ageing around the globe, 2) increase in life expectancy and longevity of life, 3) increasing number of oldest old (85+ years of age), 4) growing burden of non-communicable diseases on health care system, 5) shrinking population in next decades, 6) changing family structure leaving less opportunity for elderly care, 7) changing patterns of work force and retirement causing burden on pension and social security, 8) evolving social insurance systems and 9) new economic challenges faces by governments.

The existing statistics and the future projection done are giving a critical picture of the gigantic problems we are going to face in future. According to National Institute on Aging (2007: 2) there were 500 million people of 65+ years of age in the world and the number is projected to get increased to 1 billion (i.e. 1 in every 8 persons) by the year 2030.

Method

The paper aims to study patterns of ageing population at global, regional and country level with particular focus on Asia and East Asian countries. The study is based on secondary data available at and taken from Population Division of United Nation's Department

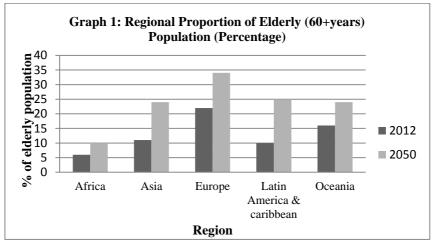
of Economic and Social Affairs (United Nations, 2012; United Nations Population Division, 2012). The statistics provided in the data set are giving the picture of ageing population till 2012 along with the projection for 2050 in this regard. The data covers the demographic, social and economic characteristics of the aging population at country, region and global level. The data taken from UN was analyzed and presented in the forms of graphs by the researcher to serve the aim of this paper.

Global and Regional Patterns of Aging

Aging is an emerging problem that is and will be affecting all parts of the globe in terms of demographic characteristics, socio-cultural and economic dynamics. The data shows a broader pattern of increase in aging population at the global level. World had 809,743 thousand people of 60 year or over age group in the year 2012. It is projected that this number will increase to 2,031,337 thousands by the year 2050. It is evident that the proportion of aging population has reached to 11 percent at global level in the year 2012 and will go on increases in future to be doubled as 22% as early as the year 2050.

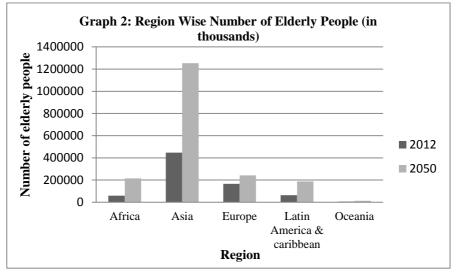
The pattern of population aging also varies according to the level of regional development. The data shows that the number of population aged 60 year or over is as higher as the socio-economic development of some particular region is higher. The number of people aged 60 or over is 279,287 thousand in more developed regions (including Europe, North America, Australia, Japan, and New Zealand), 530,455 thousand in less developed regions (including Africa, Asia (except Japan), Latin America, the Caribbean, etc.) and lowest as 46,389 thousand in least developed regions (including 33 of Africa, 9 of Asia, 1 of Latin America and the Caribbean and 5 of Oceania) in the year 2012. The proportion of the 60 year and over age group to total population is 22% in more developed regions, 9% in less developed regions and least as only 5% in least developed countries.

There are difference in the number and proportion of aging population in different geographical regions. The data analysis, presented in Graph 1, shows that Europe has the highest proportion of the people aged 60 year or over (i.e. 22 percent) to the total population. The proportion is increasing and is projected to reach to 34% by the year 2050. Europe's highest proportion of elderly population is followed by that of Oceania (16%), Asia (11%) and of Latin America and Caribbean region (10%). Africa shows the lowest proportion of aged population (i.e. 6%) of the total population. It is projected that this proportion of the elderly population is going to be increased in all the regions. By the year 2050 it is expected to reach to 24% in Oceania, 24% in Asia, 25% in Latin America and Caribbean. The proportion of elderly population in Africa will also increase from 6% in 2012 to 10% in 2050.



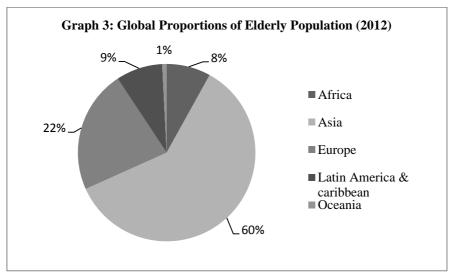
Source: The statistics are taken from population United Nations' data set for population ageing and development (United Nations 2012)

Besides the region wise proportions of elderly population showing the highest proportion of aged population in Europe, it is also important to look at the number of people aged 60 year or over in different regions. The data analysis presented in Graph 2 shows that the largest bulk of elderly people around the globe is presently concentrated in Asia. Asia has the highest number of people aged 60 years or over (i.e. almost 446,974,000) in the year 2012. It is followed by Europe (with almost 166,397,000 people), Latin America and Caribbean (with almost 63,064,000 people aged 60 years or over) and Africa (with almost 59,782,000 people). Oceania encompasses the lowest number of elderly population as only 5,928,000 people.



Source: The statistics are taken from population United Nations' data set for population ageing and development (United Nations 2012)

It means, although Europe has the largest proportion of the people aged 60 years or over to the total population but Asia is the host of 60% of elderly people presently living around the globe (see Graph 3) in comparison to Europe hosting 22%, Latin America and Caribbean hosting 9%, Africa with 8% and Oceania hosting only 1% of them.



Source: The statistics are taken from population United Nations'data set for population ageing and development (United Nations 2012)

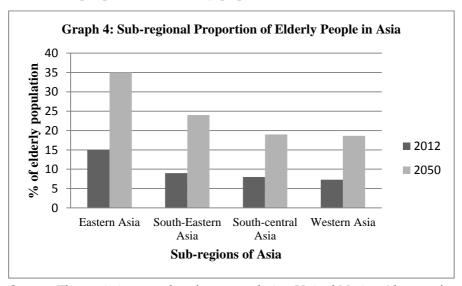
By the year 2050, there will be an increase to elderly populations in Asia, Africa, and Latin America and Caribbean rising the percentage of elderly population to 65%, 11% and 10%, respectively. Oceania will remain stagnant with 1% of its elderly population till 2050. The overall data presentation and discussion shows that Asia is host of largest share of aged population in world and it will remain the same in future, as this number of elderly people in this region will be increasing more rapidly than any other region in future. Therefore, the following sections of the paper will focus on aging in Asia with further details on sub regions within Asia and the conditions of different countries within these sub regions in this regard.

Aging in Asia

Asia being host of the largest share (60%) of the elderly population of the world is the focus of this paper. Although, overall number of elderly people in Asia is high but the data analysis shows sub regional differences. Asia is divided into following four sub regions:

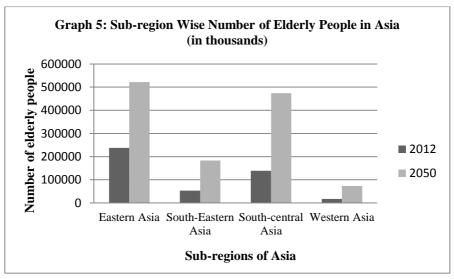
Eastern Asia, South Eastern Asia, South Central Asia and Western Asia. The pattern of aging is different in each region. The proportion of elderly population to the total population of different sub regions within Asia, presented in Graph 4, shows Eastern Asia at the top of list. Eastern Asia has the highest proportion of elderly population (i.e. 15%) in the year 2012. It is followed by South Eastern Asia with 9%, South Central Asia with 8% and Western Asia with 7% of its total population aged 60 year or over.

The proportion of elderly people is projected to get increased in all the sub regions of Asia in future (see Graph 4). The highest increase is projected in the case of Eastern Asia resulting in rise the proportion of its elderly population from 15% in 2012 to 35% in 2050. The rising pattern of higher proportion of elderly population in the other three sub regions of Asia is also predicted from the year 2012 to 2050. South Eastern Asia will witness a rise from 9% to 24%, South Central Asia from 8% to 19% and Western Asia from 7% to 19% in the proportion of elderly population.



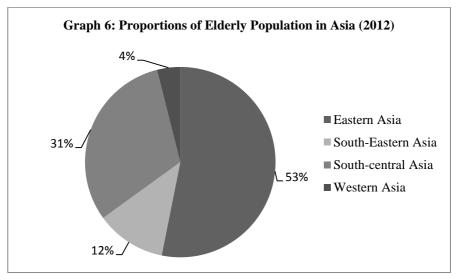
Source: The statistics are taken from population United Nations'data set for population ageing and development (United Nations 2012)

Although, the proportion of elderly populations in each sub region has been discussed, it is also important to know the number of people aged 60 years or over in each region. The data analysis presented in graph 5 shows that most of the elderly population of the region is concentrated in Eastern Asia. East Asia had 237,507,000 persons of 60+ year age group in the year 2012. It is followed by South Central Asia that has almost 138,728,000 persons of the same age group till 2012. South Eastern Asia and Western Asia had almost 53,152,000 and 17,587,000 people of the same age group, respectively.



Source: The statistics are taken from population United Nations'data set for population ageing and development (United Nations 2012)

The number of people aged 60 years or over is expected to increase in sub regions of Asia in future (see Graph 5). It will reach to almost 521,949,000 in Eastern Asia, almost 473,859,000 in South Central Asia, almost 183,259,000 in South Eastern Asia and 73,522,000 in Western Asia.

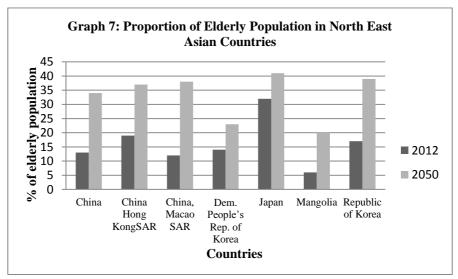


Source: The statistics are taken from population United Nations'data set for population ageing and development (United Nations 2012)

It is observed that more than half (i.e. 53%) of the people aged 60 years or over in Asia are concentrated in Eastern Asia followed by 31% in South Central Asia, 12% in South Eastern Asia and only 4% in Western Asia in the year 2012 (see Graph 6). East Asia appears to have the largest portion of the total elderly people within Asia. This proportion of elderly population in sub regions of Asia is also going to change in future. The proportion of elderly population in East Asia will come down from 53% in 2012 to 42% in 2050. The rest of three sub regions including South East Asia, South Central Asia and Western Asia will show increasing trend in proportion of elderly population with 14%, 38% and 6%, respectively, by the year 2050. The following sections of the paper will particularly focus on North East Asia and South East Asia in this regard.

Aging in North East Asian Countries

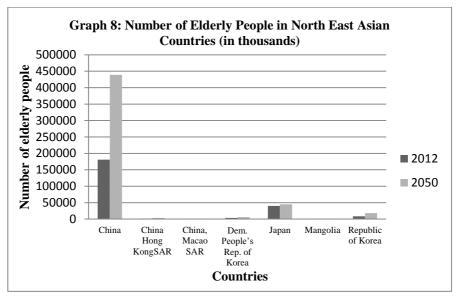
This section of the paper deals with the situation of aging in North East Asian Countries. The data analysis presented in Graph 7 shows that the proportion of elderly population to the total population of different countries in the region varies significantly. Japan has the highest proportion of elderly people as 32% of its total population aged 60 years or over. China, Hong Kong and Macao are having 13%, 19% and 12% elderly population to the total population, respectively. The proportion of elderly population in Republic of Korea was 17% and in democratic People's Republic of Korea as 14% of the total populations of both the countries in the year 2012. Mongolia has the lowest proportion of 6% of elderly people in the year 2012.



Source: The statistics are taken from population United Nations' data set for population ageing and development (United Nations 2012)

The future projections as presented in graph 7 show that Japan and Democratic People's Republic of Korea are going to have the lowest increase (i.e. 9%) in the proportion of elderly population till 2050 as compared to the other countries in the region. Japan is going to have its 41% of population reaching the age of 60 year or above till 2050. Similarly, Democratic People's Republic of Korea will have 23% of country's population in the same age group by 2050. The highest increase in the proportion of elderly people is expected to occur in Macao, Republic of Korea, and China as increase of 26%, 22% and

21%, respectively. After the increased mentioned the proportion of elderly population in Macao, Republic of Korea and China will reach to 38%, 39% and 34%, respectively by the year 2050.



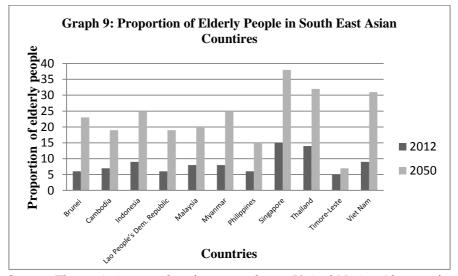
Source: The statistics are taken from population United Nations'data set for population ageing and development (United Nations 2012)

The largest number of elderly people of North East Asian region is concentrated in China (i.e. almost 180,690,000) in the year 2012, followed by Japan (with almost 39,967,000 elderly people) and Republic of Korea (having almost 8,123,000 elderly people) (see Graph 8). Democratic People's Republic of Korea had almost 3,321,000 people aged 60 year or above. Hong Kong had almost 1,398,000 people of the same age group by the year 2012.

Aging in South East Asian Countries

This part of the paper explores the proportion and number of elderly people in South East Asian region. The data analysis, presented in Graph 9, shows the proportion of elderly population to the total population of different countries in South East Asian

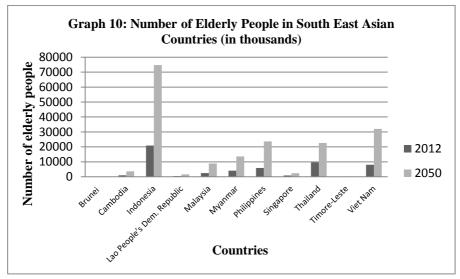
region. Singapore is the country with highest proportion of the elderly population (i.e. 15%) in the region by the year 2012. It is followed by Thailand with 14%, Vietnam and Indonesia with 9%, Malaysia and Myanmar with 8%, Cambodia with 7%, Brunei, Laos and the Philippines with 6% of the total population as aged 60 years or over in the year 2012. Timore-Leste appears to be the country with the least proportion of its elderly population throughout the region in the year 2012.



Source: The statistics are taken from population United Nations'data set for population ageing and development (United Nations 2012)

The proportion of the elderly population has been projected to grow rapidly throughout the region by the year 2050. The proportion of the elderly population will increase almost four times in Brunei from 6% in 2012 to 23% in 2015. While Laos (with 6% to 9% projected increase), Myanmar (with 8% to 25% projected increase) and Vietnam (with 9% to 31% projected increase) are expected to witness more than three times increase in the proportion of elderly population from the year 2012 to 2050. Almost three times increase has also been projected in the proportion of elderly population in Cambodia (i.e. from 7% to 19%), Indonesia (i.e. from 9% to 25%),

Malaysia (i.e. from 8% to 20%), and the Philippines (i.e. from 6% to 15%) from the year 2012 to 2050. Singapore (from 15% in 2012 to 38% in 2050) and Thailand (from 14% in 2012 to 32% in 2050) are predicted to reach more than double the proportion of elderly population by 2050. The least increase in the proportion of elderly population is projected in the case of Timore-Leste from 5% in the year 2012 to 7% in the year 2050.



Source: The statistics are taken from population United Nations'data set for population ageing and development (United Nations 2012)

The analysis of number of elderly population, presented in Graph 10, again shows a relatively different situation as was visible from the analysis of the country wise proportion of the elderly population in the region. It is observed that Indonesia has the largest number of elderly population with almost 20,834,000 people aged 60 years or over in the year 2012. Following Indonesia, Thailand had almost 9,600,000 people, Vietnam had almost 8,018,000 people, The Philippines had almost 5,905,000 people, Myanmar had almost 4,122,000 people and Malaysia had almost 2,437,000 people aged 60 or above in the year 2012. Cambodia with almost 951,000 people,

Singapore with almost 814,000 people, Laos with almost 387,000 people, and Timore-Leste with almost 211,000 people aged 60 years or over appeared to be the countries with least number of the elderly people in the region.

Conclusions

This paper aims to explore broader patterns of aging population in Asia. The special emphasis is on the patterns of proportion and number of aged population in North East Asian and South East Asian countries. The paper is based on the data taken from Population Division of United Nation's Department of Economic and Social Affairs. The paper highlights the global regional and country wise proportion of the aging population in the year 2012 and also compares this condition with the projections done for increase in aging population by the year 2050. It is observed that the world had 809,743 thousand people of 60 year or over age group in the year 2012. It is 11% of the total world population. This proportion is expected to get doubled (i.e. 22%) by the year 2050. The number of aged population also varies in more developed, less developed and least developed regions of the globe. Geographical regions of the world also differ in their proportion and number of aged population. Europe appears to have the highest proportion (i.e. 22% in 2012) of the aged population but Asia seems to have been hosting the largest number of aged population (i.e. almost 446,974,000 people). It is observed that Asia comprises 60% of the total elderly population of the world.

Among the sub region of Asia the East Asian region has the highest proportion of the elderly population. North East Asia has its 15% of its population as 60 year or above. South East Asia has 9% of its population of the same age group. North East Asia also appears to have hosted the largest number of aged people (i.e. almost 237,507,000 people) in Asia. It is followed by South Central Asia with 138,728,000 persons of the same age group. The South East Asia

has almost 53,152,000 people of the same age group. It is observed that 65% of the total elderly population in Asia is concentrated in North East and South East Asian region.

In the North East Asian region, Japan had the highest proportion of elderly population (i.e. 32%). Republic of Korea has 17% and the Democratic Republic of Korea had 14% of the total population as aged 60 years or over in the year 2012. China had 13% of the population in same age group. But at the same time China had the largest number of elderly people (i.e. almost 180,690,000) living in there. It is followed by Japan (with almost 39,967,000 elderly people), Republic of Korea (having almost 8,123,000 elderly people) and Democratic People's Republic of Korea (with almost 3,321,000 elderly people).

In South East Asian region, Singapore had the highest proportion (i.e. 15%) of the elderly population. It is followed by Thailand (with 14% elderly people), Vietnam and Indonesia (with 9% of elderly people), Malaysia and Myanmar (with 8% of the elderly people) and Cambodia (with 7% of elderly people). Brunei, Laos and the Philippines had only 6% of the population as aged 60 years or over. Timore-Leste appears to have the least proportion of elderly population in the region. The country wise analysis of the number of elderly people shows that Indonesia is the host of largest number of elderly people (i.e. almost 20,834,000 people) in South East Asia region.

In short, aging is an issue of global nature. A broader pattern of increasing proportion of elderly population is visible all around the world. Asia is hosting the largest number of elderly people that is the 60% of the total elderly population around the world. North Eastern Asia is the host of the largest elderly population within Asia. It is almost 53% of the total elderly population living in Asia. Although, China is hosting the highest number of elderly population within East Asian region, but Japan is crucially effected

with this problem of aging as it is facing the critically highest proportion of the elderly population (i.e. 32%) around the world. This highest proportion of the elderly population in Japan is affecting the social, economic, and demographic patterns and the shrinking of overall population appears as a threat to the survival of the country.

References

- Beard, J. R., Biggs, S., Bloom, D. E., Fried, L. P., Hogan, P., Kalache, A., & Olshansky, S. J. (Eds.). (2012). *Global Population Ageing: Peril or Promise*. Geneva: World Economic Forum.
- Centre of Excellence in Population Ageing Research. (2013). *Asia in The Ageing Century: Part I-Population Trends.* The University of New South Wales.
- Henslin, J. M. (1997). *Sociology: A Down to Earth Approach* (3rd ed.). Massachusetts: A Viacom Company.
- Muenz, R. (2007). Aging and Demographic Change in European Societies: Main Trends and Alternative Policy Options. Social Protection, The World Bank.
- National Institute On Aging (NIS). (2007). Why Population Aging Matters: A Global Perspective. U.S. Department of Health and Human Services, U.S. Department of State.
- Thompson, D. (Ed.). (1997). *The Concise Oxford Dictionary* (9th ed.). London: BCA.
- United Nations. (2012). Data Set for Population Ageing and Development 2012. Retrieved December 4, 2014, from http://www.un.org/esa/population/publications/2012PopAgeingDev_Chart/2012AgeingWallchart.html
- United Nations Population Division. (2012). Population Ageing and Development 2012. New York: Department of Economic and Social Affairs, United Nations. Retrieved December 4, 2014, from http://www.un.org/esa/population/publications/2012PopAgeingDe v_Chart/2012PopAgeingandDev_WallChart.pdf