International Journal of Research in Social Sciences
Vol. 8 Issue 1, January 2018,
ISSN: 2249-2496 Impact Factor: 7.081
Journal Homepage: http://www.ijmra.us, Email: editorijmie@gmail.com
Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A

AGEING OF POPULATION: A CONTEMPORARY ISSUE

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Abstract:

Ageing of population is natural consequence of process of demographic transition. It is going to be the most noteworthy demographic characteristic feature of the twenty-first century. Ageing of population represents gradual shifts in relative share of population towards older age groups. Ageing of population is a global phenomenon with great regional variations. Ageing of population has social, economic and political implications. To address the physical, socio-emotional and economic needs of old age population, innovative public policies and service deliveries are required. The objectives of the present paper are – (i) to describe the trends and patterns of ageing of population; (ii) to explain the causes of ageing of population; (iii) to highlight implications of ageing of population; and (iv) finally, to identify the needs of ageing population.

Key Words: Ageing, Demographic, Transition, Longevity and Fertility.

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Introduction

Ageing of population is natural outcome of process of demographic transition. It is going to be the most significant demographic characteristic features of the twenty-first century. It represents a gradual shift in age structure of a country towards older age groups (60 years and above). This is characterized by an increase in mean and median ages of population, decline in fertility rates and consequent decrease in share of juvenile population especially children, increased longevity and increase in the share of old age persons. Ageing of population is taking place all over the world, at different intensities. The number of old age persons is increasing in absolute sense as well as in terms of relative share (Figure 1). Population ageing has social, economic and political implications. It is going to influence labour and financial markets, consumption patterns, social security and infrastructural requirements and support systems. Therefore, innovative public policies and public services for the old age persons are required to achieve the goal of sustainable development.

Figure 1: Ageing of Population

Source:

https://cdn.slidesharecdn.com/ss_thumbnails/ageingandyouthfulpopulations-140828035139-phpapp01-thumbnail-4.jpg?cb=1409197944

Trends of Ageing of Population in Absolute Numbers

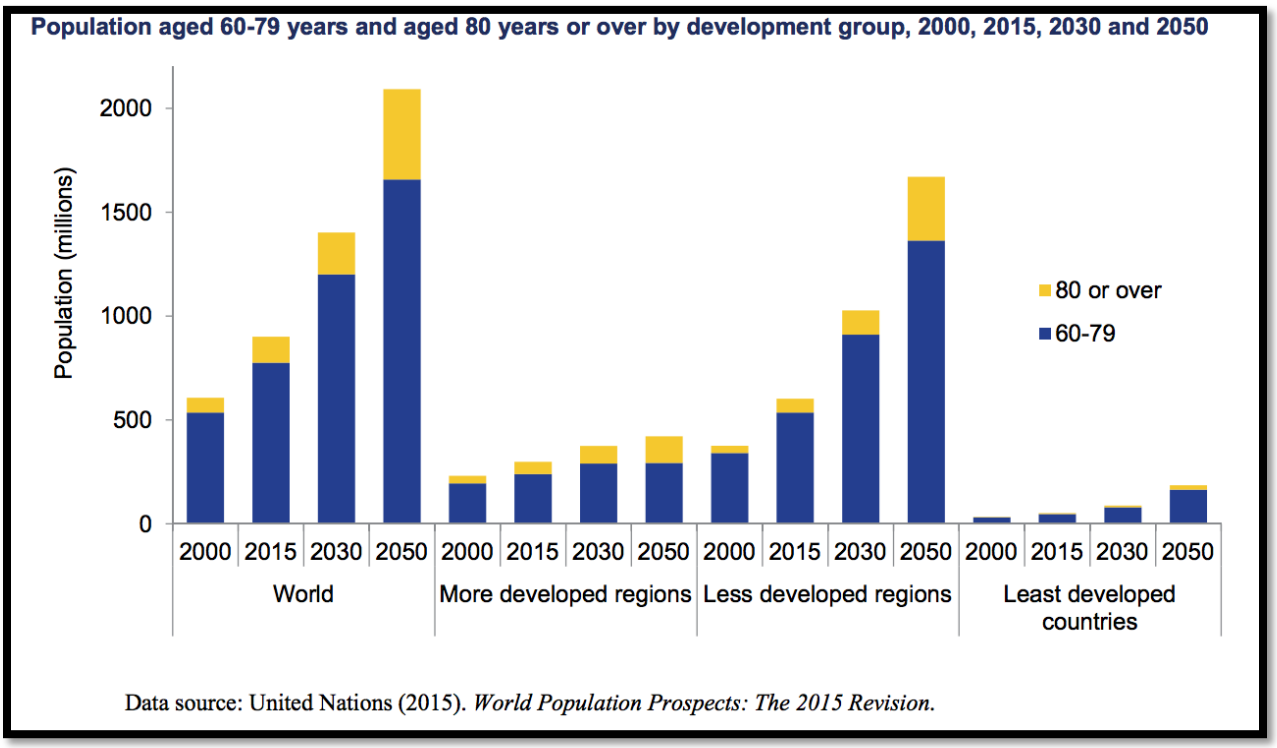
Ageing of population is a global phenomenon with great regional variations. It is well established in more developed countries. In these countries it started more than half a century ago. It is accelerating in developing countries and the rate is substantially greater than occurred in more developed countries earlier. The number of persons aged 60 years and above has increased in the world significantly in recent years and it is further accelerating. In 1950, there were about 200 million persons in this age group and by 2000 their number increased three folds to 607 million. In 2015, the number increased to 901 million and it is going to be more than double of this size by 2050 to about 2.1 billion (Table 1). It is noteworthy that within this old age population class the "oldest-old" i.e. persons aged 80 years or above, is accelerating at faster rate than general ageing of population. In 2000, this sub-group size was 71 million, it increased by 77 per cent to 125 million in 2015 by 2050 its projected size is 434 million persons (Figure 2).

Table 1: Trends of Population Ageing, 2000-2015, (in millions)

Region	2000		2015		2030		2050		Percentage Share in ≥60 Years Population	
	≥60 Years	≥ 80 Years	≥60 Years	≥ 80 Years	≥60 Years	≥ 80 Years	≥60 Years	≥ 80 Years	**2015**	**2050**
World	607.1	71.0	900.9	125.3	1402.4	201.8	2092.0	434.4	100	100
More Developed Countries	231.3	36.5	298.8	59.1	375.2	85.2	421.4	127.8	33.2	20.2
Less Developed Countries	375.7	34.4	602.1	66.2	1027.2	116.6	1670.5	306.7	66.8	79.9
Africa	42.2	3.0	64.4	5.7	105.4	9.3	220.3	22.2	7.2	10.5
Asia	319.5	30.9	508.0	60.0	844.5	103.7	1293.7	255.7	56.4	61.8
Europe	147.3	21.2	176.5	34.6	217.2	46.1	242.0	71.0	19.6	11.6
Latin America	42.2	5.1	70.9	10.3	121.0	18.7	200.0	44.8	7.9	9.6

& Caribbean										
Oceania	4.1	0.7	6.5	1.1	9.6	2.0	13.2	3.6	0.7	0.6
North America	51.0	10.0	74.6	13.6	104.8	22.0	122.7	37.2	8.3	5.9

Figure 2: Trends of Ageing of Population, 1950 – 2050



Source: https://themarketmogul.com/wp-content/uploads/2017/04/AgingPopulation-1.png

In this population ageing, sex ratio is in favour of females because they have higher life expectancy. In the old age population of 60 years and above their share is 54 per cent and in "oldest-old" category this share is 61 per cent. The ageing of population is more intense in urban areas as compared to rural areas. In 2015, in the old age population of 60 years or over about 58 per cent were concentrated in urban area and this share in case of "oldest-old" was 63 per cent. The MDCs (More Developed Countries) constituted 33 per cent population of the world's older age group. This share was 38 per cent in 2000 and by 2030 will decline to 27 per cent. Thus, two-thirds of the world's older people reside in the developing regions and this share will grow

faster in future. In 2050, the developing regions will constitute two-thirds of the oldest-old population also.

According to the United Nations report on World Population Prospects (2015), twenty countries of the world constitute three quarters of the world's old age population. About one fourth is constituted by China. China along with India, USA, Japan and Russia represents half of the world's old age population. In China and India the number of older persons is projected to grow by 71 and 64 per cent between 2015 and 2030, respectively.

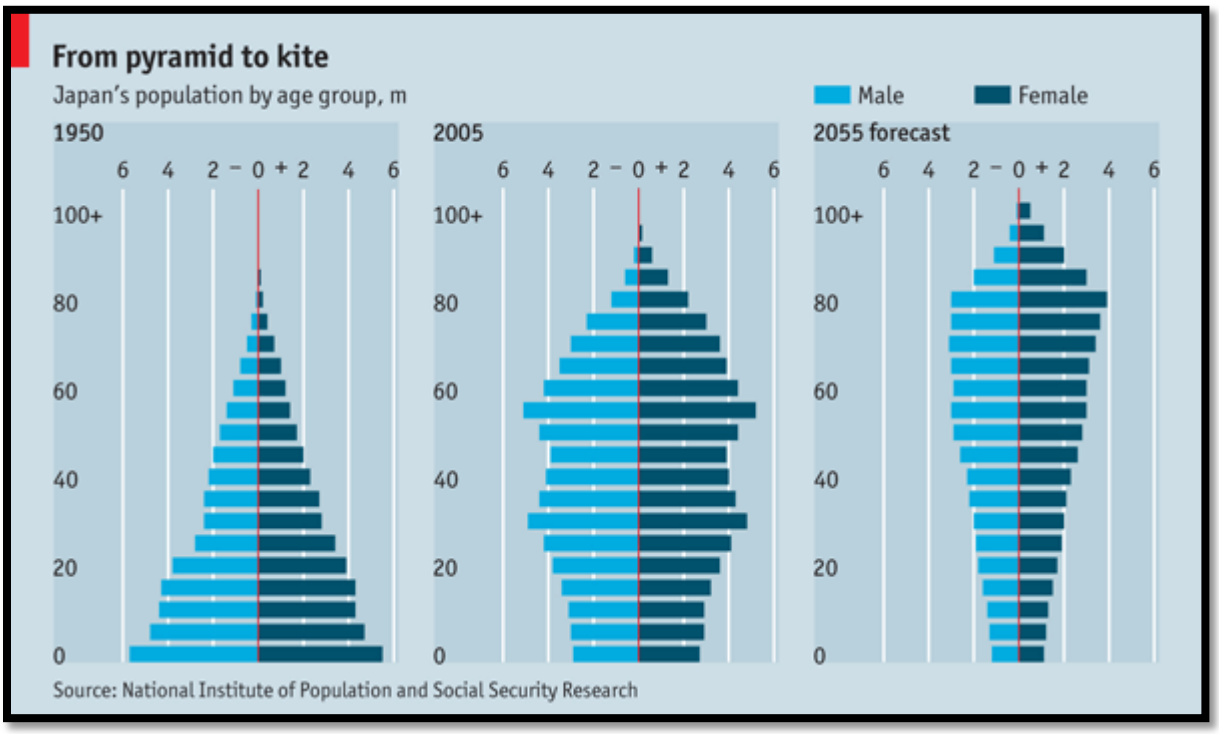
Trends of Population Ageing in Percentage or Relative Terms

From the facts mentioned so far, the worldwide trend of increase in the number of older persons is clear but the process of ageing of population by definition focuses on an increasing proportion of older people in total population. Therefore, ageing of population is determined not on the basis of increase in number of older persons but on the basis of increase in relative percentage share of the older age group in total population, which means that the growth rates of other age groups also matter. As a matter of fact, worldwide, the growth rate of older age group population is faster than other age groups. Thus, increase in the percentage share of older people in the total population in a universal phenomenon, but at varying growth rates. It is most pronounced in MDCs. Japan, with a share of 33 per cent of old age group people in total population, is home to the world's most aged population. It is followed by Germany (28 per cent), Italy (28 per cent), Finland (27.2 per cent), Portugal (27.1 per cent), Greece (27 per cent) and Bulgaria (26.9 per cent).

At global level, the growth rate of children under age 10 years is slow and growth rate for adult age group (25 to 59 years) is faster but the population growth of old age (60 years and over) persons is fastest. A noticeable aspect of population ageing is the ageing of older population itself. The average annual growth rate of 3.8 per cent of the oldest-old (80 years and over) is at present double of growth rate of population of 60 years or over (1.9 per cent).These differential growth rates over the period of time are resulting into ageing of population. In 2015 at world level out of eight people one was aged 60 years or over and by 2050 it will become one in every five persons (Figure). The most noteworthy increase is going to take place in Japan where, in

2050, more than 1 in every 3 persons aged 60 or above with be at least 80 years old. The age and sex pyramid of Japan will change to kite shape (Figure 3).

Figure 3: Age Structure of Japan, 1950 - 2055



Source: https://cdn.static-economist.com/sites/default/files/20101120_WOC951.gif

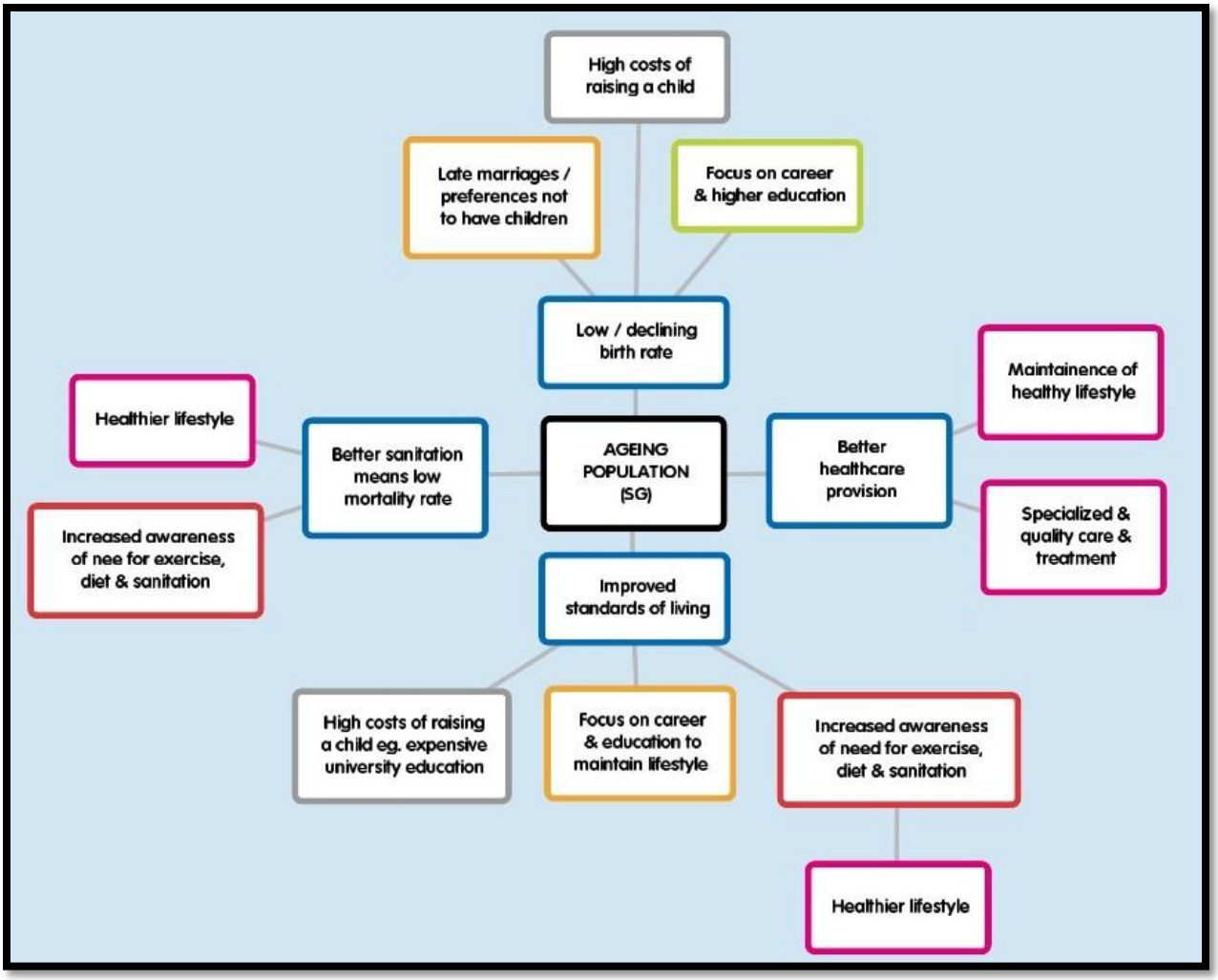
At present, the older persons account for about one-fourth of the population of MDCs, about 10 per cent of the population in developing countries but only about 5.5 per cent in the least developed countries population. The ageing of population is projected as most accelerating for developing countries. Therefore, the present day developing countries are facing the challenges of ageing of population at more intense level that too at much lower levels of economic advancement as compared with the experiences of MDCs.

Causes of Ageing of Population

The demographic drivers of ageing of population are decline in fertility and increase in longevity (Figure 4). It represents the demographic success caused by reduced fertility and mortality associated with social and economic advancement or betterment. Therefore, ageing of population is a preordained consequence of the process of demographic transition. Progress in reducing infant mortality rates, child mortality rates, improvements in health and medical facilities,

improved access to education and employment opportunities, access to reproductive health and family planning measures, better quality of life and improved standards of living result into overall improved living conditions and these changes are reflected in increased life expectancy or longevity.

Figure 4: Causes of Ageing of Population



Source: https://pyss2012sec3ss.files.wordpress.com/2012/02/causes-of-ageing-population.jpg

Declining birth rates and increasing longevity together result into substantial changes in age structure of the population. The proportion of juvenile population decreases and share of senile population increases. These shifts in age structure are very well reflected in the age pyramids. For instance, the expanding age pyramid of Japan changes into kite shape over time. This transformation involves the factors which operate in time scale of 60 years and over. Because the old age population of present is result of conditions that prevailed at the time of their birth and

upbringing. The demographic transition model is simple and powerful tool to reflect these transformations.

European and North American countries were the first one to shift in early expanding stage and late expanding stages of demographic transition. In the early expanding stage the mortality rates declined at a faster rate as compared to fertility rates but later on fertility decline became sharper. These reductions in fertility occurred over the last two centuries. These countries are today in low stationary stage of demographic transition or declining stage or negative population growth stage of demographic transition. For instance, in Germany, the total fertility rate (TFR) in 1950 was 2.1 children per women, in countries such as India and Brazil it was 6 or above. Due to low TFR the old aged persons share in Germany was about three times of the share in Brazil and India (Table). In Germany by 2015, TFR further declined to 1.4 and thus share of old age population almost doubled to 28 per cent. Similar were the trends of fertility decline and ageing of population in most of the European and North American countries and countries like Japan. At present these countries are focus on increasing the fertility but even with expectation of slight increase in fertility rates by 2050 the rates are projected to remain less than replacement rate (RR i.e. TFR, 2.1). Therefore, not only the further ageing will take place but further rise in oldest-old age sub-group. By 2050, the old age population share is projected to be about 39 per cent.

Table 2: Relationship of Fertility and Ageing

Country	1950		2015		2050	
	Total Fertility Rate(TFR)	≥ 60 Years percentage share	Total Fertility Rate(TFR)	≥ 60 Years percentage share	Total Fertility Rate(TFR)	≥ 60 Years percentage share
Germany	2.1	15	1.4	28	< RR (2.1)	39
Brazil	6.2	5	1.8	12	< RR (2.1)	29
India	6.0	4.5	2.3	8.9	< RR (2.1)	19.4
Tanzania	6.7	4	5.1	5	3.3	7

The populations of most of Asian and Central and Latin American countries are youthful as compared with European, North American and countries like Japan due to delayed demographic

transition. These countries have high birth rates in 1950 but death rates were comparatively very low. For instance, in India in 1951 the crude birth rate and crude death rates were respectively 40.8 and 25.1 per thousand, respectively. The TFR in Brazil and India were about 6 and share of old aged persons was limited to about 5 per cent due to very broad base of age pyramid. In 2015, the level of fertility decline in Brazil is slightly more and in case of India slightly less than the level of TFR in Germany in 1950. Therefore, the share of old-age population in Brazil in 2015 was 12 per cent and in India about 9 per cent.

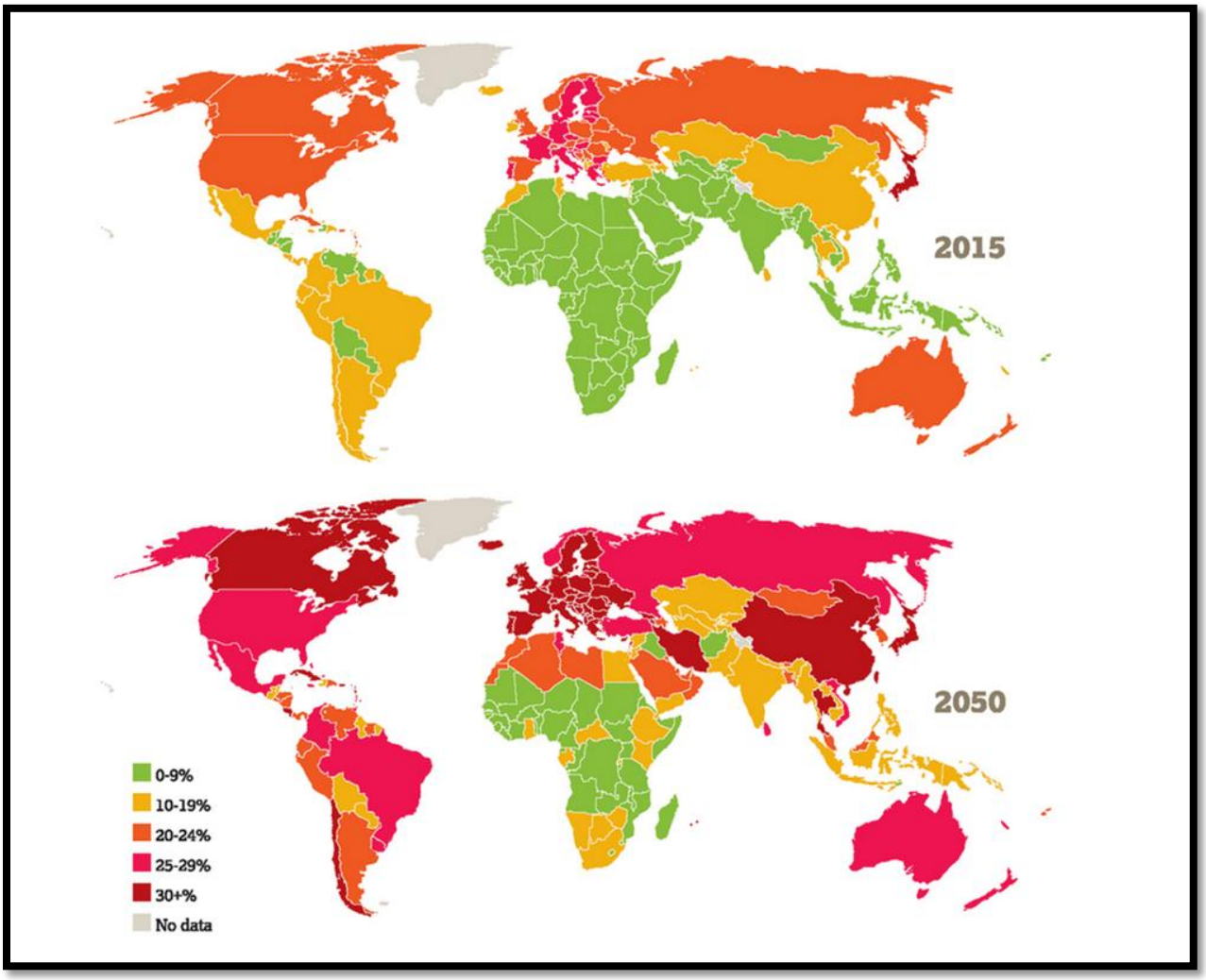
It is noteworthy that the gap between fertility and mortality rates were more intense in these countries or simply during population explosion stage the highest growth rates were almost double in LDCs as compared to MDCs. The higher fertility rates and faster fertility decline in most of the Asian and Latin American countries than the MDCs means the ageing in absolute as well as in relative terms is more intense. Consequently the process of population ageing is more accelerating at present and in future in Asian and Latin American countries. The share of old aged population is projected to be about 36.5, 29, 28.6, 21.5 and 19.4 per cent in 2050 in China, Brazil, Sri Lanka, Bangladesh and India, respectively.

Ageing of population is least intense process in majority African countries because they are still in the early expanding stage of demographic transition. The total fertility rates are still very high and are at the level of 1950 of the Asian and Latin American countries like India and Brazil in 1950. For instance, in 2015 the total fertility rates in Tanzania (5.1) Burundi (6.1), Somalia (6.6), Uganda (5.9), Angola (6.2), Chad (6.3), Democratic Republic of Congo (6.2) and Nigeria (5.7) are very high and it is highest in Niger at 7.6 children per women. In these countries as fertility decline between 1950 and 2015 is negligible, therefore, the share of old-aged persons has remained almost constant at level less than 5 per cent of the total population. The projected gradual decline in fertility in African countries indicates that the level of ageing will be low and may reach to 7 to 10 per cent in majority countries by the mid-century. In Niger old aged population share will be lowest at 4.1 per cent of the total population.

Taking into consideration the demographic transition stages of different countries at different points of time it can be concluded that the level of fertility and ageing in MDCs in 1950s are

equal to levels in developing countries in 2010s and least developed countries will be able to achieve these levels by 2050s. Consequently, the challenges of ageing of population first surfaced in MDCs and now they are accelerating in developing economies and in future least developed countries of the world are going to face them. Thus the process of ageing of population is a preordained consequence of demographic transition. The world pattern of ageing in 2050 will be different from the present world pattern (Figure 5).

Figure 5: World Pattern of Ageing of Population, 2015 and 2050



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https://images.theconversation.com/files/105180/original/image-20151210-7438-q2xwv0.png?ixlib=rb-1.1.0&q=45&auto=format&w=1000&fit=clip

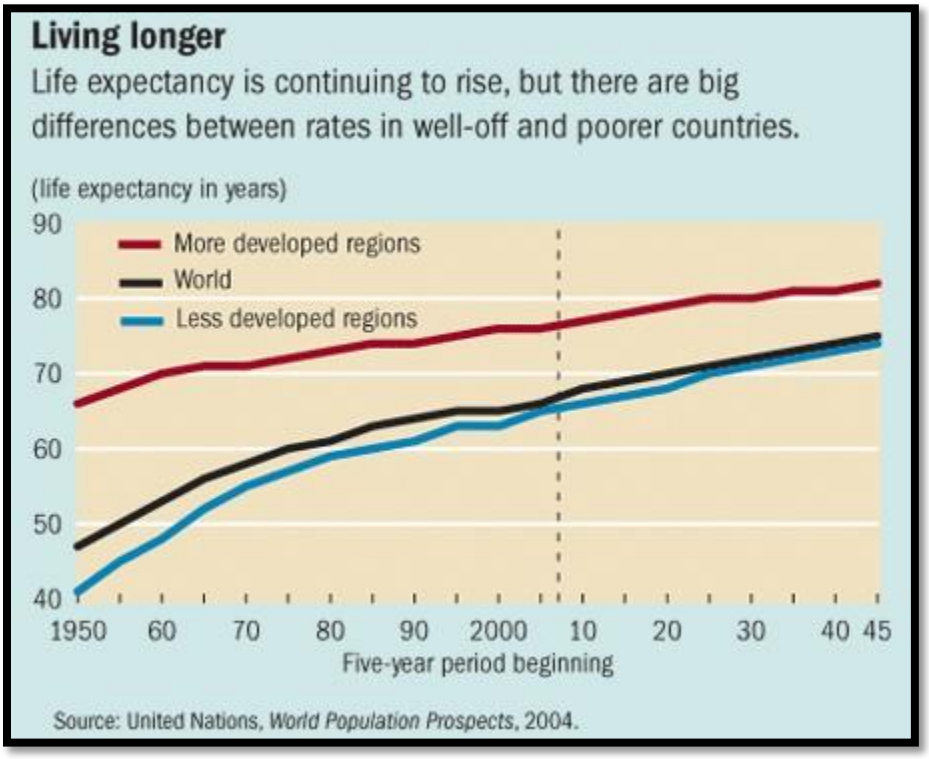
It is clear from the discussion so far that the immediate cause of ageing of population is decline in birth rates, which requires a drop first in infant mortality rates (IMR). However, the increase in life expectancy due to decline in IMR and mortality in general contributes significantly in ageing of population. The enhanced longevity and reduced IMR get rid of not only the demographic requisite of high births but also increase the number of persons surviving for longer ages. Due to decline in fertility and mortality and improvement in health and medical facilities the life expectancy has increased worldwide since 1950 and same trend will continue in future (Table 3and Figure 6).

Table 3: Life Expectancy at Birth (Years), 1950 to 2050

Region	1950-55	1995-2000	2045-2050
World	46.5	65.0	76.0
More Developed Regions	66.2	75.0	82.1
Less Developed Regions	41.0	62.9	75.0
Least Developed Regions	35.5	50.3	69.7

Source: World Population Prospects United Nations Report 2004, P-62.

Figure 6: Life Expectancy in World, 1950 - 2045



Source: http://www.imf.org/external/pubs/ft/fandd/2006/09/images/bloom2.gif

The data in table shows that all regions have experienced an increase in life expectancy but with regional variations. The age specific mortality rates contribute differently in improving life expectancy of different regions and countries. At world level the life expectancy at birth increased to 4.9 years between 1995-2000 and 2010-2015 and reduced CMR (Child Mortality Rate) contributed about half of this increase in life expectancy at birth, and 25 per cent each was the share of mortality reductions between ages 5 and 59 years and 60 years and over. In this period the life expectancy of Africa increased by 9 years and contribution of CMR was 55 per cent and 60 years and over age mortality reductions 9 per cent. In case of Europe and Oceania during the same period, the life expectancy increased by about 4 years and share of reductions in mortality in 60 years or over population accounted for about 51 per cent share. In Northern America the increase was 2.7 years and 71 per cent contribution was of reductions in mortality in old-age (≥ 60 years). It means that as life expectancy at birth increases, the reductions in higher age-group mortality rates improve the survival chances at older ages and the overall longevity of population improves.

Like improvement in life expectancy at birth, all regions of the world have experienced increase in the life expectancy at age 60 and this trend will continue in coming decades resulting into increase in share and rates of the oldest-age sub group population. In 2010-2015, life expectancy at 60 years age increased worldwide by 20.2 years. It was highest in Oceania (23.7 years) and lowest in Africa (16.7 years). Reduced mortality rates or improvements in survival at age 60 or over contributed for more than half of the total increase in longevity in Oceania, Europe and Northern America but in case of Africa, Asia and Latin America reduction in IMR and CMR contributed more significantly in improvement in longevity.

The key drivers of the process of ageing of population are fertility and mortality but migration as an element of population dynamics also contributes in changing the age structures in some countries and regions. However, in most countries, international migration is projected to bring marginal changes in ageing of population. In the countries experiencing large youth labour force immigration flows the ageing of population can be slow downed and delayed. For instance in the Gulf States of Bahrain, Kuwait, Qatar and the United Arab Emirates (UAE), by 2030 in UAE the

old age population share will be 11.3 per cent of the total population without immigration it would have been 14.2 per cent and in Qatar these figures are 7.9 per cent and 11.3 per cent respectively. Australia, Luxembourg, Macao, Canada and Switzerland are other countries in this category.

On the other hand, at the place of origin emigration of young workforce accelerates the process of ageing of population in some countries, especially in Eastern Europe countries facing economic crisis. Between 2000 and 2015 due to net emigration of youth, old age population share increased from 19 per cent to 25 per cent in Lithuania and 21 per cent to 25 per cent in both Latvia and Estonia. Net emigration of working aged persons, net immigration of old aged persons or both can accelerate the process of ageing in some countries, especially in Caribbean region, Lebanon, Tonga and Sri Lanka.

Implications of Ageing of Population

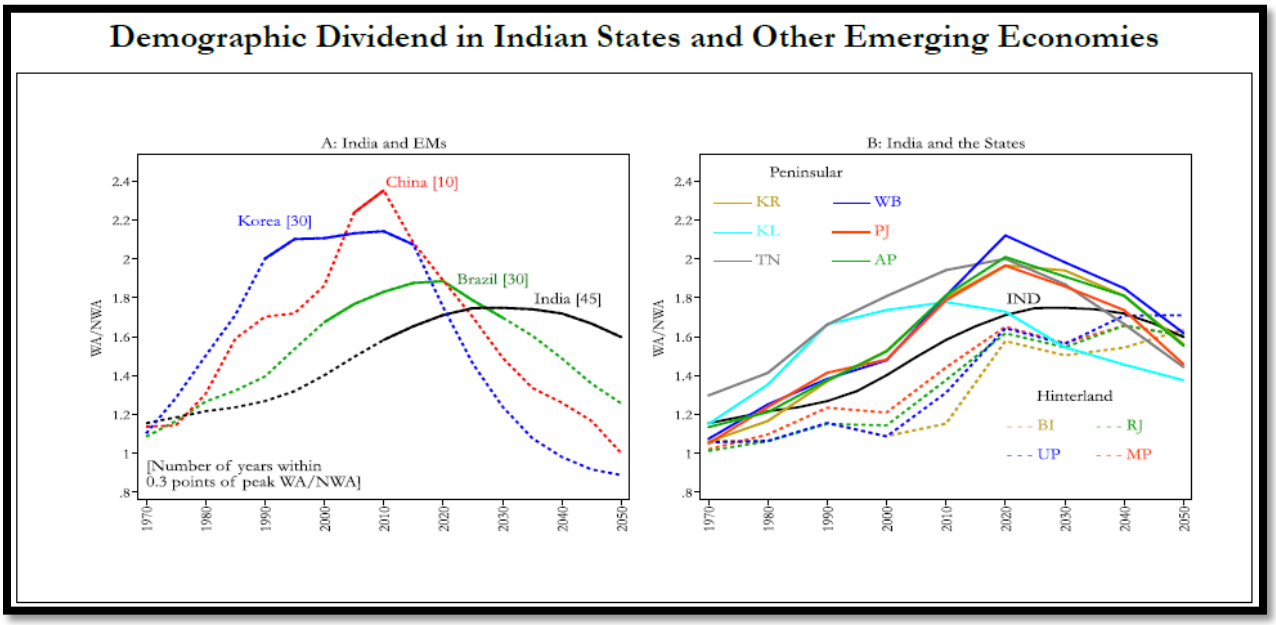
The process of ageing of population in absolute numbers as well as relative proportion of old-aged persons has significant economic, social and political implications. These implications have spatio-temporal variations and therefore are complex. They are predictive, at macro level, because the present day developed economies have already experienced them and developing countries have started experiencing them and least developed will witness such transformations in future. Implications of ageing of population vary because different economies are at different levels of economic advancement and have different socio-cultural backgrounds and demographic characteristics. The major diverse implications are highlighted in the following section.

Ageing of Population and Demographic Dividends

Ageing of population need not obstruct economic growth. Rather in the initial phase it enhances the economic growth due to demographic dividends associated with it. Population ageing provides demographic dividends. The first demographic dividend is due to the rise in the economic support ratio. Economic support ratio is different from dependency ratio. It represents the effective number of workers divided by the effective number of consumers in a given population. It simply means that the ratio of producers to consumers in the population increases. This situation favours economic growth because additional resources are used to increase per

capita consumption, savings and investments. Conversely, a declining economic support ratio i.e. fewer producers to support consumers has a negative economic impact. The countries which experienced fast fertility declines between the 1970s and 1990s achieved better economic growth rates during 1980-2015 due to demographic dividends by increasing economic support ratios. For instance, in China, South Korea, Brazil, Vietnam and Thailand growth of economic support ratio was high, but in countries which had already achieved very low fertility like Italy, France, United Kingdom and USA it was low and in countries with very low birth rates like Japan, the economic support ratio decreased during this period. Increasing economic support ratios are projected to contribute to future economic growth in developing countries such as India, Indonesia, Kenya and Nigeria during 2015-2050. The demographic dividends (Working Age population/ Non-Working Age i.e. WA/NWA) are peaking up in India and majority Indian states and other emerging economies of the world (Figure 7).

Figure 7: Demographic Dividends in Indian States and Other Emerging Economies



Source: http://www.clearias.com/media/file/Demographic-Dividend-In-Indian-States-and-Other-Emerging-Economics..png

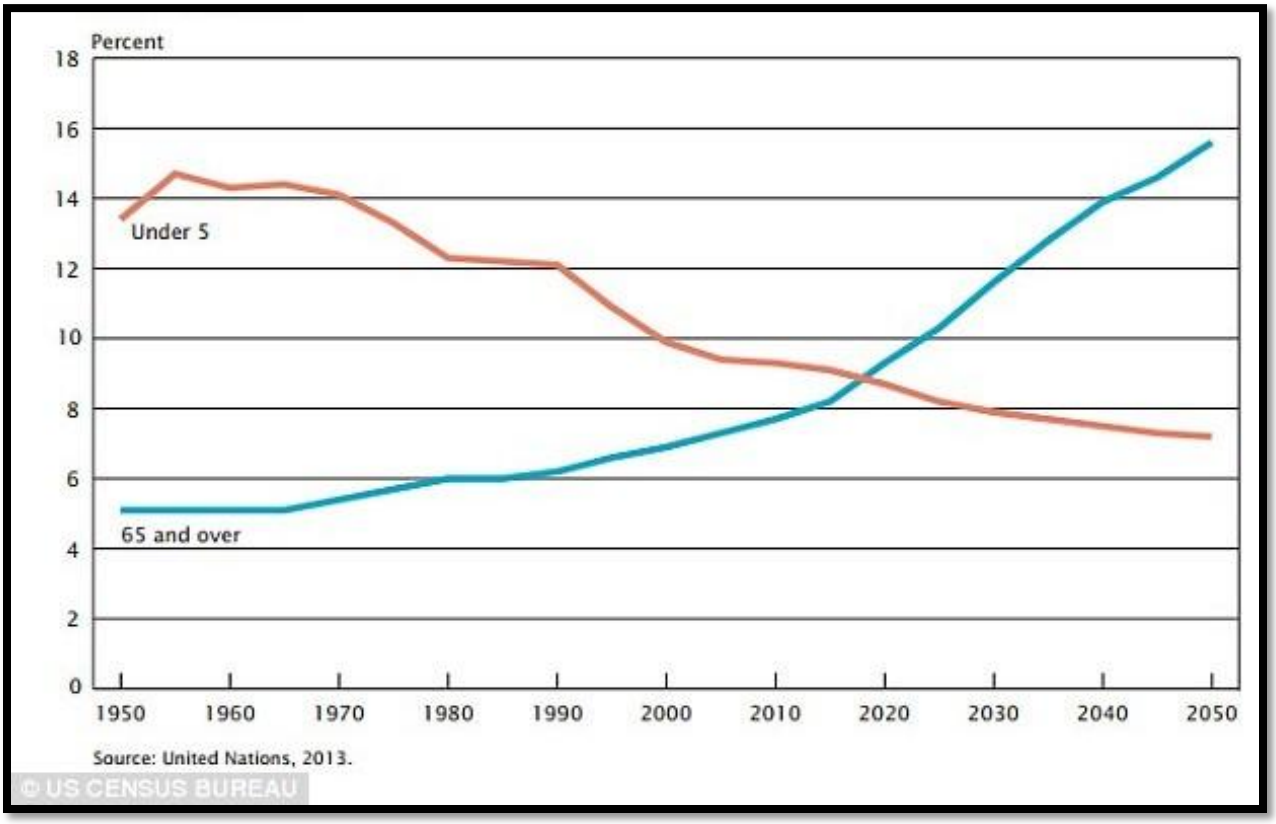
In countries where savings for old age accompany declining fertility and increased life expectancy, the increased volume of savings can further increase economic growth and this leads

to second demographic dividend of ageing of population. These demographic dividends depend on the employment opportunities, rates of unemployment and level of wages.

Increase in Dependency Ratio

Dependency ratio is a general indicator of dependents supported by working age persons. It is calculated as the ratio of the number of children and young people under age of 20 plus the number of persons aged 65 years or over divided by the number of persons aged 20 to 64 years. The global dependency ratio declined from 112 "dependents" per 100 working-age persons in 1970 to a historical low of 74 in 2015 due to sharp decline in fertility rates. Now it is projected to increase due to ageing of population to 79 dependents per 100 workers by 2050. It is projected to increase in all continents except Africa and it will be highest in Europe (91) and followed by Northern America (84). The ageing of population is reflected in changing composition of dependents. In 1950, among depends only 10 per cent were old aged persons and rest were dominantly children but share of old age persons has increased to 20 per cent in 2015 and will further increase to 36 per cent in 2050 among the dependents (Figure 8).

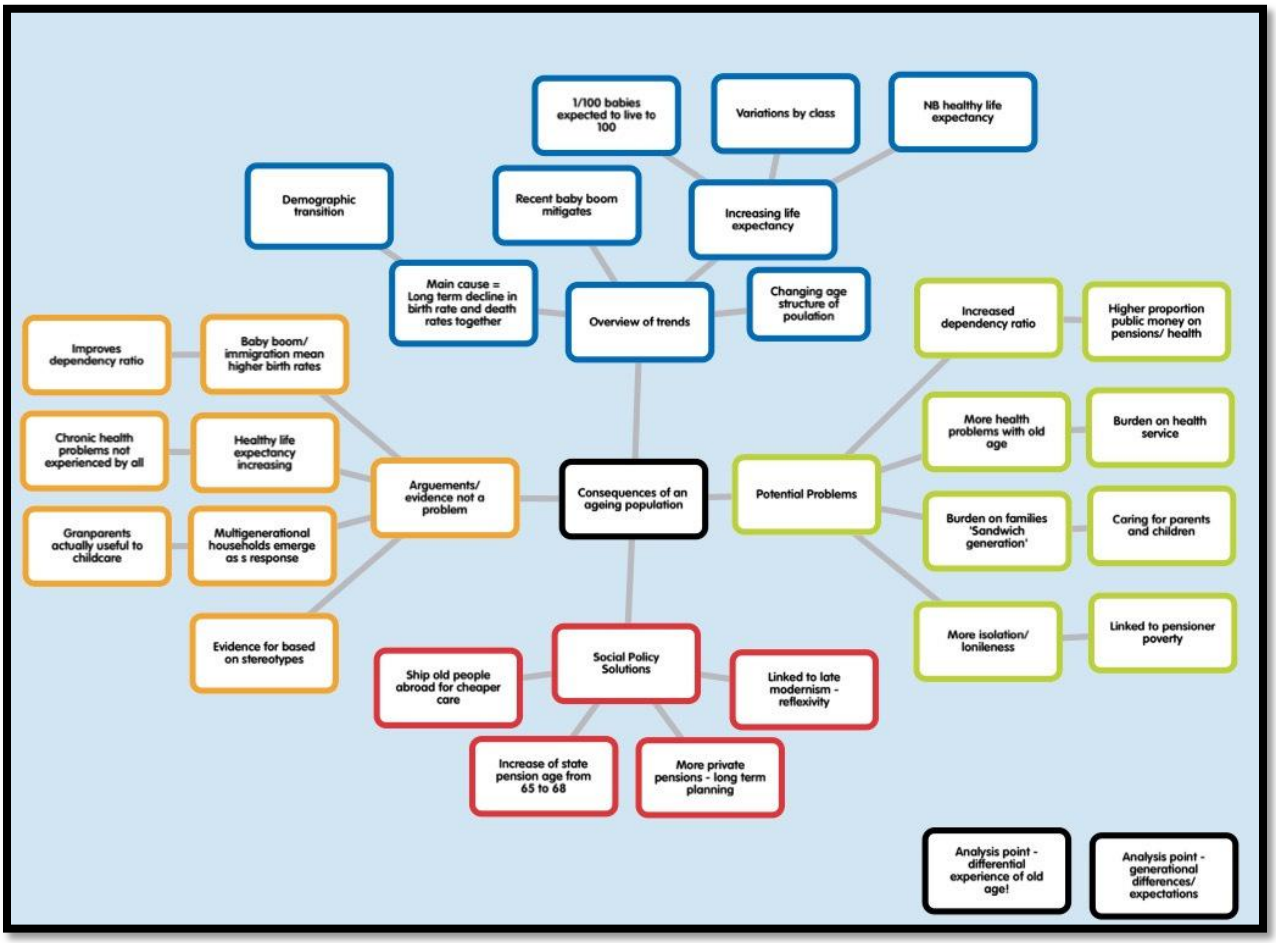
Figure 8: Changes in Share of Children and Older Population in World Population



Source: http://i.dailymail.co.uk/i/pix/2016/03/29/17/32A4278A00000578-3513167-While_the_number_of_people_age_65_and_over_has_soared_since_1950-m-27_1459270098898.jpg

The transition phase during which fertility rates decline moderately and life expectancy increases result into multigenerational families. Some scholars have identified the working generation as 'sandwich generation' caring for children as well as old age persons by making economic and social sacrifices (Figure 9).

Figure 9: Consequences of Ageing of Population



Source:

https://alevelsociology.files.wordpress.com/2015/04/file-09-04-2015-09-40-05.jpeg?w=1400

The increase in dependency leads to shortage of skilled workforce and rise in labour costs along with decline in productivity, international competitiveness and business expansion. To compensate this immigration takes place but it may results into insider-outsider conflicts. The

older age group provides lower tax revenue but spending on health care, pension and other facilities is far more, especially in most of the developed countries. In 2015, to support one old-aged (65 years or over) person, there were 7 persons in the working age group of 20-64 years. By 2050, the ratio will be 1:3.5 means one old age person supported by 3.5 working-aged persons. Because of better health conditions and ageing of population in majority MDCs the statutory retirement ages have increased. Generally, older people try of remain active even after retirement. In 2015, the share of old aged persons in active labour force was about 30 per cent and 14 per cent for older men and women.

Ageing and National Insecurity

The ageing of population results into high dependency ratio and in dependents old aged persons share becomes gradually high. This results into shortage of workforce for defense forces and police. This increases the risk for internal as well as external insecurities.

Ageing and Poverty

The poverty rates among old aged persons normally match with those of the population in general. But in case of countries in sub-Saharan Africa and in Asia, the older aged poverty is more intense as compared to poverty at younger ages due to lack of pension systems and other security measures. In MDCs due to better security measures poverty rates among older age persons are same or lower than those of the population in general. Consequently, the levels of consumption of older ages in LDCs are lower and in MDCs higher as compared to consumption in adult age groups.

Ageing and Social Protection

Due to ageing of population, old age person's dependency and vulnerability increases and they require care and support from others, especially in case of the absence of no reliable income sources. In recent decades following the practice of MDCs many low and middle income countries have also expanded beneficiaries in pension and old age insurance schemes. Right to income security in old age is listed in the Universal Declaration of Human Rights (1948), in the International Convention on Economic, Social and Cultural Rights (1966), and more recently in the Agenda for Sustainable Development 2030. In case of India, Article 41 of the Indian

Constitution provides that the State should provide old age security. In 1992, Integrated Program for Older Persons (IPOP) was started with the goal of improving the quality of life senior citizens by providing basic amenities like shelter, food, medical care and entertainment opportunities. To reaffirm the concern for well-being of elderly in 1999 the National Policy on Older Persons (NPOP) was introduced. Taking into consideration the rising share of old aged persons, decline in moral and ethical values, rising economic considerations in decision making at the cost of social relations, the Maintenance and Welfare of Parents and Senior Citizens Act, 2007 was introduced. It assigns responsibility and obligation on the heirs to provide care and support to the elderly. In the changing economic scenario, the life styles, family structures, social roles and relations have changed rapidly. The old aged persons generally feel socially neglected, isolated and lonely. Even in country like India where tradition of great respect to parents prevails there are rising cases of material exploitation and property grabbing, financial deprivation, abandonment, verbal and physical humiliation of the elderly. Therefore, only declaration of rights and policies would not be sufficient, moral and ethical values in young generations and the feeling of self respect in elderly are also to be reinforced.

Ageing and Health

The demand for health care facilities increases with ageing of population. In MDCs public expenditure provides health care but in LDCs it is mostly through out of pocket expenditure by older persons and their families. The low levels of public health expenditure in LDCs contribute to a lack of health security and inferior care for older persons. In MDC the spending on health care needs increases at the cost of spending on other infrastructural facilities. Further, in MDCs the health care sector also faces problem of skilled and unskilled workforce shortage. This situation is also reflected in rising medical tourism. Ageing of population leads to greater demands for the prevention and treatment of the non-communicable diseases associated with old age. The old age disabilities are a great challenge. According to WHO (2012) unipolar depressive disorders, hearing loss, back and neck pain, Alzheimer's disease and other dementias, osteoarthritis, chronic obstructive pulmonary disease and diabetes mellitus are important causes of disability among older persons globally. In population under 18 years disability prevalence is just 5.8 per cent but it is 44.6 per cent in age group 65 to 74 years, and increases to 63.7 per cent

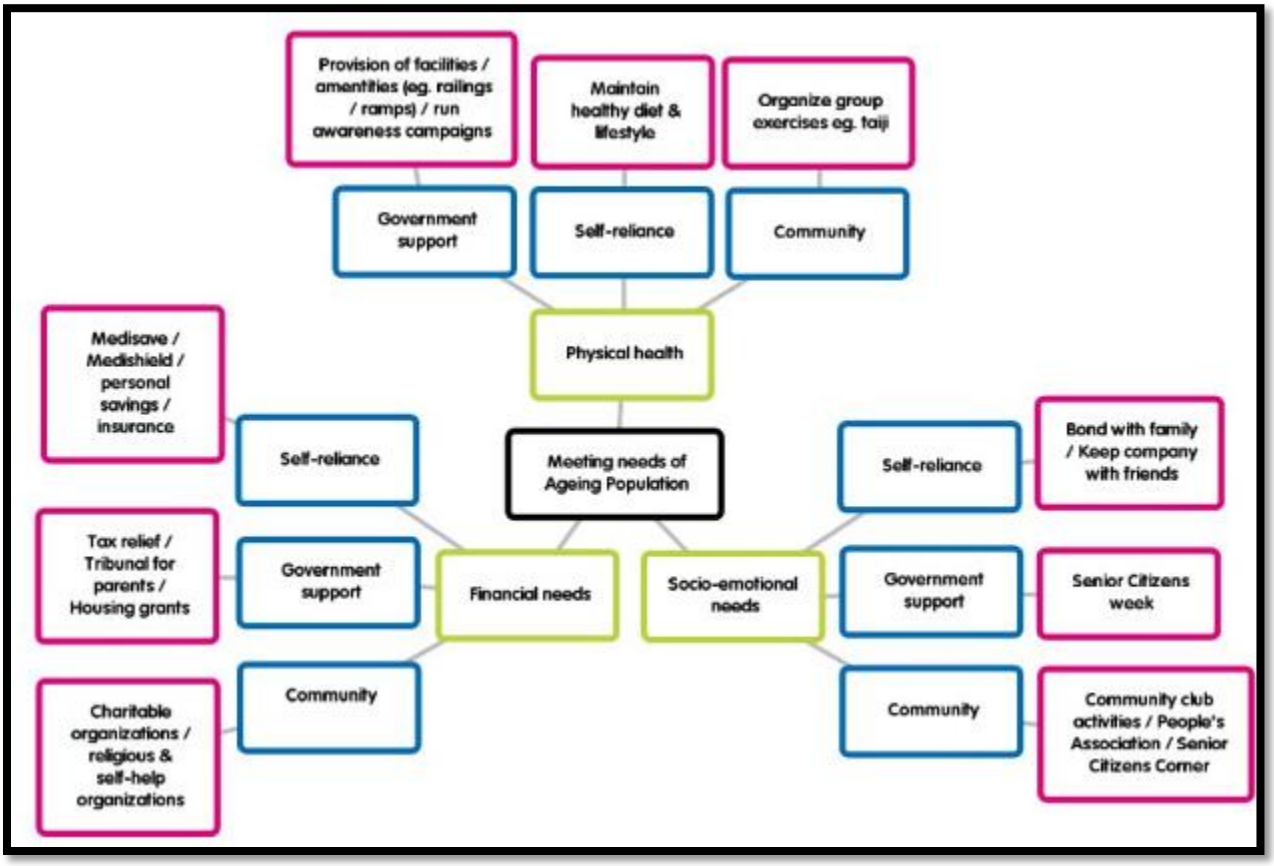
among people aged 75 to 84 and further increases to 84.2 per cent among persons aged 85 and over

To address these disabilities not only treatment is required but provision of necessary accommodation, accessible housing and transportation and prevention and postponement of disability causing conditions is also required. In India, elderly suffer from cardio-vascular and circulatory illnesses, cancer, arthritis, hyper tension, osteoporosis, mental disorders, communicable diseases, kidney problems, vision problems, diabetes, rheumatism and digestive disorders. In developing countries the health care systems must adapt to fulfill the rising demands of old aged persons related health issues.

Conclusion

Ageing of population is an unavoidable consequence of the process of demographic transition. The declining fertility and increasing longevity are the main causes of ageing of population. International migration can also change its rate to slower or faster sides depending on situations. The trends of ageing surfaced first of all in present day developed countries. Japan with highest population ageing is known as home of elderly. The process of ageing of population is at present accelerating in developing countries like China, Brazil and India. African countries with high birth rates and lower longevity are projected to face this challenge by about 2050. The experiences of the developed world and partnerships between public and private sectors can play a significant role in addressing issues of health and care and financial security of elderly (Figure 10). The consequences of the ageing of population such as rising dependency ratio, demographic dividends, health problems, social isolation and loneliness are to be tackled properly to achieve sustainable development.

Figure 10: Needs of Ageing Population



Source:

https://mrseveooi.files.wordpress.com/2012/08/meeting-needs-of-ageing-population.jpg?w=640

Finally, the presumptions that old aged persons are economically less productive or unproductive, unhealthy dependents, less innovative and are passive recipients of welfare benefits are not that much valid. Evidences of the productive and creative participation with vitality of old aged persons in workplaces, communities and families are common all over the world. Therefore, they are respectable senior citizens and are fully entitles for their human rights.

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