

IS THE WORLD HEADING TOWARDS POPULATION IMPLOSION

Dr. Chandreyi Banerjee

Department of Geography, B. S. R Govt. Arts College, Alwar (Rajasthan).

Abstract

The 21st century has been predicted to be the century of ageing of humankind which would entail an increased share of the aged in the total population. The process of population ageing is the inevitable consequence of the demographic transition in which fertility and mortality are the major drivers to which a possible third factor of migration may also be added. The levels of fertility and mortality are in turn, linked with the level of economic development of any society. The magnitude of population ageing may be such that it has been compared by scholars to a catastrophe, that is, an earthquake and hence has been termed an *agequake*. It has also been argued that the world in future may experience a *population implosion* rather than an explosion.

Key Words: Population ageing, demographic transition, agequake, population implosion.

Introduction

Sociologist and demographer **Alfred Sauvy** predicted in 1986 that 21st century would be the century of ageing of humankind. The French demographer **Jean Daric** who is regarded as one of the pioneers in the study of population ageing, defined it as a process of continuous increase in the share of the aged in the total population. Ageing is defined by the **United Nations** as a process determined by the relative size of younger and older cohorts in the population at different points of time.

Population ageing is the inevitable consequence of *demographic transition* in which fertility and mortality are the major players though a possible third factor of migration is also included. It was observed by **Ansley J. Coale and Edger M. Hoover** in 1958 that changes in fertility and mortality in turn, are associated with the level of economic development of any

society. The linkage between economic development and fertility and mortality rates are very well explained by the demographic transition model.

It has been pointed out by **Stolnitz** that, as almost all the countries in modern times move from a traditional agrarian-based economic system to a largely industrial and urbanized system, there is also a transition from high fertility and mortality to low fertility and mortality. Population ageing may largely be attributed to the worldwide decline in fertility rates coupled with declining mortality rates and increased life expectancies. Hence, **Paul Wallace** in his book '*Agequake: Riding the Demographic Rollercoaster Shaking Business, Finance and our World*,' (1999) compared the process of ageing with that of an earthquake and thus used the term agequake. He argued that rather of an explosion, the world may confront a *population implosion*.

The Scenario of Population Ageing in the World

The world is now experiencing a '*geromotic boom*.' This may continue to the extent that in 2047 it is projected that, for the first time, there may be a crossover between the old population and the young population aged 0-14 years. In 1990, the share of the elderly population was 9.2 percent which increased to 11.7 percent in 2013 and is expected to reach 21.1 percent (i.e. approximately one-fifth of the total world population) by 2050. In absolute terms, while the old people were approximately 841 million in 2013, it is projected to be more than double and cross the 2 billion mark by 2050.

That fertility decline is the major driving force behind population ageing is evident from the reports of the **United Nations Population Fund (UNFPA) and Helpage International of 2012** as well as the **World Population Prospects: The 2012 Revision** published by the **United Nations Department of Economic and Social Affairs in 2013**. The total fertility rate (TFR) for the world plummeted from 5.0 in 1950-55 by half to 2.5 in 2010-15 and is expected to decline further to 2.2 almost reaching the *replacement level fertility* in 2045-50. Against this, the *life expectancy at birth* increased throughout the world as a consequence of medical revolution. It increased by 2 points at age 60 from 20 to 22 years and by 8 to 9 points at age 80.

Population ageing is almost a pan-global phenomenon now. However, the magnitude of the process varies over space since as mentioned earlier, the demographic situation of any place is intrinsically related to the level of economic development of that place. **Muthukrishnaveni** pointed out in his study that the tempo of ageing is more in developing countries compared to the developed blocks. Table 1 provides the absolute figures and the percentage of the aged in the different regions of the world.

Table 1: Proportion (%) in the Total Population and Absolute Numbers of Aged (60 Years and Above) by Sex in the Major Regions of the World, 2013

Major Regions of the World	Proportion of the Aged in the Total Population			Absolute Numbers of the Aged		
	Total	Male	Female	Total	Male	Female
World	11.7	10.7	12.8	840628	385439	455194
Africa	5.4	4.9	5.9	60033	27428	32606
Asia	10.9	10.1	11.7	468549	223015	245535
Europe	22.9	19.8	25.7	169874	70951	98926
Latin America and the Caribbean	10.6	9.7	11.5	65491	29341	36150
Northern America	19.9	18.2	21.5	70571	31836	38736
Oceania	15.9	15.0	16.9	6109	2868	3241

Source: World Population Ageing, Population Division, Department of Economic and Social Affairs, United Nations, 2013.

It is evident from the above table that the percentage of elderlies is more in the developed regions mainly comprised of Europe and North America. However, in absolute terms, the population of the aged is almost double in the less developed regions in comparison to the

developed regions. The percentage share in the context of elderly population is maximum for Europe followed by North America whereas Africa lies at the bottom end of the scale. Continentwise, Eurasia accounts for the maximum share of old population while Oceania accounts for the lowest. But one fact which is common for all the regions is the predominance of the female elderly population.

The process of population ageing has affected the developed countries much earlier than the developing countries. It is true that the maximum share of the aged currently resides in the developed nations, majority of the older people basically lives in the developing countries. It was foreseen by **Bold** in **2001**, that by 2020, the developing world would host almost three-quarter of the world's elderly population. The two population giants----India and China----are expected to house about 38 percent of the world's aged by 2025 (**Leibig et. al, 2005**).

India is currently passing through the phase of *demographic dividend* which means that the share of the population in the age group of 15-49 years is maximum due to the earlier prevalent high fertility rates. The implication of this is that India is now having the greatest proportion of the available workforce.

If we go down to the country level, it is predicted that in the coming years, Japan will maintain its spectacular increase in the share of its elderly population followed by Europe and U.S.A. The increase will be lowest in Africa and comparatively mild in India. China will also exhibit a significant leap in her elderly population while the increase in the Caribbean and Latin America is predicted to be greater than the present European figures. These facts will be clearer if we look at Table 2.

Table 2: Observed and Forecasted Percentages of the Elderly (65+ years) in Selected Regions and Countries of the World---1950, 2000, 2050.

Regions and Countries of the World	1950	2000	2050
World	5.2	6.9	19.3
Africa	3.2	3.3	6.9
Latin America and the Caribbean	3.7	5.4	16.9
China	4.5	6.9	22.7
India	3.3	5.0	14.8
Japan	4.9	17.2	36.4
Europe	8.2	14.7	29.2
U. S. A	8.3	12.3	21.1

Source: World Population Prospects: The 2000 Revision, United Nations, 2001.

The above table depicts the share of the elderly population for a century between 1950 and 2050 across different regions and countries of the world. Initially, Europe and U.S.A, both belonging to the developed block dominated in the proportion of the aged. Their figures even surpassed that of the world figure since the onset of population ageing took place first in the developed countries. Africa, India and Latin America, all belonging to the developing block were on the bottom end of the scale. Even Japan did not record a very high figure. In a span of 50 years between 1950 and 2000, the figure of Japan surpassed all other nations as the proportion of her elderly population increased by more than three times whereas the situation for the other regions of the world almost remained unchanged. Again, for the next span of 50 years, that is between 2000 and 2050, it has been forecasted that leaving Africa, there will be a great surge in the share of the aged in almost all parts of the world though even for Africa, the figure is just expected to be more than double. Japan will continue with its dominance. The world figure is expected to be about three times of what it was in 2000. There will be great spurts in the proportion of the aged even in the developing blocks especially the two population giants of India and China. For India and Latin America, the figure will be approximately three times the current figure and for China it will be more than three times.

Conclusion

The phenomenon of population ageing is like a great paradox as on one hand it reflects the great success story of humankind in the form of massive survival to old age consequent of the medical revolution while on the other hand, the ageing population with their varying needs is supposed to create big challenges for the public institutions. Over the years, with the rising world population our concern was with the population exceeding the carrying capacity of the earth and hence we had conceived of a population explosion. But the demographic transition across the globe with declining fertility rates worldwide, now we have to conceptualize about a population implosion rather than explosion. Facts and figures suggest that the process of ageing initially started in the developed countries but has now become almost universal. The implication of population ageing is again variable. It has been rightly pointed out by **Gro Harlem Brundtland**, as the Director General of the **World Health Organization (WHO)**, that while the developed countries became rich before they became old, the developing countries will become old before they become rich.

References

Bold (2001), *Health Status of Elderly in India*, International Institute of Ageing, United Nations, Malta.

Coale Ansley, J and Edgar M. Hoover (1958), *Population Growth and Economic Development in Low Income Countries*, Princeton University Press, Princeton, pp. 9-13.

Helpage International (2003), *Population Ageing and Development: New Strategies for Social Protection*, Report of a Seminar held on 31 October 2002 at National Press Club, Washington D.C., U. S. A.

Leibig, P. S and S. I. Rajan (2005), *Ageing in India: Perspectives, Prospects and Policies*, Rawat Publications, New Delhi.

Muthukrishnaveni, S. (2010), *Living Arrangements and Health Conditions of Elderly in Rural India*, Serial Publications, New Delhi, pp.22-23.

Stolnitz, George J. (1964), *The Demographic Transition from High to Low Birth Rates and Death Rates in Freedman Ronald (ed.) Population: The Vital Revolution*, Doubleday and Company, New York, pp.30

United Nations (2013), *World Population Prospect: The 2012 Revision*, Department of Economic and Social Affairs, Population Division, New York.

United Nations (2001), *World Population Prospect: The 2000 Revision*, Department of Economic and Social Affairs, Population Division, New York.

Wallace Paul (2001), *Riding the Demographic Rollercoaster Shaking Business, Finance and our World*, Nicholas Brealey Publishing, London.