DEMOGRAPHY OF AGING

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Summary

According to the UN estimates, declining fertility and increasing longevity are resulting in aging of population in both developed and developing countries which need serious attention of the governments. Worldwide, the number of people aged 60 and over will increase from about 600 million in 2000 to almost 2000 million in 2050. In developing countries as a whole, 60 year and above population is about 8 per cent and will increase up to 28 per cent by 2050.

Successes in reproductive health and family planning programs and improvements in health care services (low fertility and low mortality) have contributed towards population aging by enabling longer survival. Moreover, population aging in developing countries is taking place at a much faster pace than it did in developed world.

The problems posed by aging population constitute economic, social and emotional dependency of the older people. Moreover, elderly population is also likely to be affected by chronic diseases and disabilities. Hence, they pose a heavy burden on the national budgets in terms of their pension, improved living arrangements, health care cost and social needs. These issues have invited policy makers to revisit the old policies and formulate new policies and social protection programs for the aged.

In most developing countries, women constitute at least 55 per cent of the total aging population. Old women experience old age, mostly as dependents and vulnerable compared to men. Developing countries need to take urgent steps to address the concerns of aging population and to take preventive measures to ensure healthy and active ageing in the future.

There is a need to evolve a new paradigm to minimize the generation gap between the older people and young generation for social protection and to meet the growing needs of elderly population on priority basis

1. Introduction and Background

Population aging is increasingly being recognized as a process of major significance for all societies, and particularly for those in less developed regions, as they enter the twenty-first century. The concern for older persons emerged strongly in The First World Assembly on Aging, held in Vienna, (1982) when United Nations International Plan for Action on Aging in the enunciation of Principles for Older Persons and Targets on Aging for the year 2001 were adopted. It was further promoted by the General Assembly Resolution 46/91 of December 1991, which more explicitly recognized the importance of these issues in less developed regions.

The Programme of Action of the 1994 International Conference on Population and Development (ICPD) provided a major impetus for addressing this theme and further progress has been made through a number of international meetings identifying needs and initiating programs and projects. These include the recommendations of the ICPD+5 Technical Meeting on Population Aging held in Brussels (Cliquet and Nizamuddin, 1999), and the proposals for key actions for further implementation of the
Programme of Action of the ICPD in the Report of the Secretary-General for the 21st Special Session of the UN General Assembly. Recommended actions focused on fostering intergenerational dialogue and solidarity, gender sensitive research to meet the policy and program challenges of population aging, and the need to document catching positive experience of relevant policies and programs from the advanced nations and from those countries with relevant experience.

The Second World Assembly on Aging (SWAA), held in Madrid in April 2002, built upon the concept of a “Society for All Ages”, set a milestone and called upon member states for changes in attitudes and adjustments in national and international policies, corporations and other organizational practices. The Madrid International Plan of Action on Aging that was adopted by the assembly, made several far reaching recommendations to the member states, such as:

i. Provide opportunities, programs and support to encourage older persons to participate or continue to participate in cultural, economic, political, social life and lifelong learning;

ii. Provide information and access to facilitate the participation of older persons in mutual self-help, intergenerational community groups and opportunities for realizing their full potential;

iii. Older persons should be treated fairly and with dignity, regardless of disability or other status, and should be valued independently of their economic contribution; encourage the establishment of organizations of older persons at all levels to, inter-alia, represent older persons in decision-making;

iv. Enable older persons to continue working as long as they want to work and are able to do so; make special efforts to raise the participation rate of women and disadvantaged groups, such as the long-term unemployed and persons with disabilities, thereby reducing the risk of their exclusion or dependency in later life; encourage appropriate social protection/social security measures for older persons in rural and remote areas;

v. Ensure equal access to basic social services for older persons in rural and remote areas.

vi. Assist families to share accommodation with older family members who desire it;

vii. Encourage and promote literacy, numeracy and technological skills training for older persons and the aging workforce, including specialized literacy and computer training for older persons with disabilities;

viii. Organize, as a matter of urgency where they do not exist, social protection/social security systems to ensure minimum income for older persons with no other means of support, most of whom are women, in particular those living alone and who tend to be more vulnerable to poverty; and

ix. Set targets, in particular gender-specific targets, to improve the health status of older persons and reduce disability and mortality.

2. Global Ageing: An Overview of Major Trends in Developed and Developing World

In the year 2007, United Nations undertook a detailed global review of the progress

Declining mortality has improved survivorship among the middle aged and the elderly, further enhancing the prospects of extended life expectancy and contributing to the structural shift from younger to the older populations. Consequently, populations of older persons are not only growing numerically but also as a proportionate share of the total population. (United Nations, 2007).

The above mentioned figures indicate the proportion of the population aged 60 and over in the world population in 2006 and 2050. It shows that in 2050 the population of 60+ persons will be doubled, which is a serious concern for the policy makers and program managers in both developed and developing world.

Despite the increasingly widespread occurrence of this phenomenon, however, the extent of population aging at the end of the twentieth century varies widely between regions. The large proportions of older persons in the more developed regions have attracted a great deal of supportive concern as those 60 years of age and over reached 20 percent of the total population by 2006, and projected to reach a level of 32 percent by 2050(United Nations 2007). By contrast, relatively little attention has been directed to the rapidly changing population structure in less developed regions.

The issue of living alone in old age is also considerable as in more developed regions, there are only 13 percent men living alone at old age in 2006 compared to 32 percent women. In less developed regions these figures are 5 percent and 9 percent for men and women respectively. (See Table 1). Aged people 60 years or over, who are currently married, in more developed regions, 79 percent are men and 48 percent are women. In the less developed regions, situation is not much different having 81 percent men and 47 percent women married at this age. Thus, a large proportion of older women at age 60 and over are either widowed, divorced or separated, which of course put these women in vulnerable position.

Population aging has the following notable features:

i) Population aging also causes changes in living arrangements resulting in increasing number of older people living alone (about 13% men and 35% women of older age in 2006, in Europe, lived alone (see Table 1).

ii) Population aging is particularly rapid among women, resulting in “feminization” of population aging (because of lower mortality rates among women). For example, in Asia, there were 10.4 percent older women and 8.9 percent older men in 2006 aged 60 years or over, or a sex ratio of 88 men for every 100 women (see Table 1).

iii) Since older persons have usually lower income and a higher proportion of them are living below the poverty line, population aging is associated with poverty, particularly in developing countries. (Gavrilov and Heuveline 2003)
### Population Aged 60 Years or Older

<table>
<thead>
<tr>
<th>Country or Area</th>
<th>Number (millions)</th>
<th>Percentage of total population</th>
<th>Percentage currently married</th>
<th>Percentage living alone</th>
<th>60 and above population</th>
<th>Sex ratio (men per 100 women) 2006</th>
<th>Life expectancy at age 60 2005-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>687</td>
<td>1968</td>
<td>11</td>
<td>22</td>
<td>80/48</td>
<td>8/19</td>
<td>40/16</td>
</tr>
<tr>
<td>More Developed Regions</td>
<td>247</td>
<td>400</td>
<td>20</td>
<td>32</td>
<td>79/48</td>
<td>13/32</td>
<td>22/11</td>
</tr>
<tr>
<td>Less Developed Regions</td>
<td>440</td>
<td>1,568</td>
<td>8</td>
<td>20</td>
<td>81/47</td>
<td>5/9</td>
<td>50/19</td>
</tr>
<tr>
<td>Least Developed Countries</td>
<td>39</td>
<td>171</td>
<td>5</td>
<td>10</td>
<td>85/39</td>
<td>4/8</td>
<td>71/37</td>
</tr>
<tr>
<td>Africa</td>
<td>48</td>
<td>192</td>
<td>5</td>
<td>10</td>
<td>85/39</td>
<td>6/11</td>
<td>64/32</td>
</tr>
<tr>
<td>Asia</td>
<td>374</td>
<td>1,231</td>
<td>9</td>
<td>24</td>
<td>81/50</td>
<td>5/9</td>
<td>48/18</td>
</tr>
<tr>
<td>Europe</td>
<td>151</td>
<td>225</td>
<td>21</td>
<td>34</td>
<td>80/47</td>
<td>13/35</td>
<td>15/7</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>50</td>
<td>188</td>
<td>9</td>
<td>24</td>
<td>75/42</td>
<td>7/10</td>
<td>46/16</td>
</tr>
</tbody>
</table>

Table 1. Population aged 60 years or older: World and Major Regions

*Source: United Nations Population Division 2007*
Although most countries in these regions have younger populations, showing clear signs of aging. According to the latest estimates, in less developed regions as a whole, just 8 per cent of the population today is aged 60 years or over but by 2050, 20 per cent of their population is expected to be in that age range. The proportion of older persons is lowest in Africa, though rising, but in the Latin America/Caribbean region the proportion is just below that for Asia which is expected to reach 24 percent in 2050. At that stage, Asia will have 85 percent of the less developed regions' population aged 60 and over. Less developed regions are predicted to have 20 percent of their population in the over 60 years of age category by 2050.

Most of the elderly live in the less developed regions. By 2006, the less developed regions had 64 percent of the world's older population and in 2050; this share is expected to be 80 percent and above. Translated into numerical terms, less developed regions had about 440 million persons aged 60 and over in 2006 compared with 247 million in more developed regions, and these totals will rise to 1568 and 400 million respectively in 2050 (see Table 1). The implication is clear: the less developed countries, where issues of reproductive health including family planning, infant, child and maternal mortality have long been the central focus of population policy, must now also include serious considerations of population aging.

3. Rapid Populations Ageing in Developing World

Population ageing has been a global issue since the early 1980’s. Population aging is happening on a very large scale in developing countries. The numbers of older persons in developing countries will more than double by 2025 (reaching 850 million). 200 million more than the total population of Europe at that date. Developing regions were having greater percentage of population in the age group of 5-50 as compared to the percentage in the age group 60-80 years or more (United Nations, 2002). But the percentage of these age groups is estimated to change drastically in the year 2050 when the pyramid of Population Aging converts into a pillar with less percentage of lower age group population and more percentage of higher or old age population (see figure 1).

![Figure 1. Age Structures – From Pyramids to Pillars: Developing Regions](United Nations, 2002)
3.1. Regional Dimensions in Population Aging

Global trends reflect significant differences among older population on the basis of region and gender. Wide regional variations do exist with aging population among developing countries.

Demographic trends show that globally 51% of the older persons live in cities. In developed countries 74% of older people are living in cities. Whereas, in developing countries, majority of older people (63%) live in rural areas. This trend in developing countries has serious implications for rural development policies because higher proportion of older people in rural areas means less number of people for production activities and large number of people for consumption of goods and services.

Developed countries have gone through the demographic transition and lowered their fertility and mortality rates, resulting in their populations becoming greyer at a slower but consistent pace. On the other hand, the population in the developing countries have historically maintained high fertility rates and thereby a young age structure. The demographic data indicates that average age of population starts increasing with declining fertility rates. For the period 1995-2000, 61 countries in the world, representing 44 percent of the world’s population, are at or below replacement fertility. By 2015, the world’s population is projected to reach 7.2 billion, of which about two thirds will be living in countries at or below replacement fertility.

The fast aging process is taking developing countries by surprise. Already scarce resources will be further strained; competition for them from different sectors will intensify.

The Asia and Pacific region experienced rapid decline in fertility in past several decades. Total fertility Rate (TFR) dropped from 6.0 in 1950-1955 to 2.7 in 1995-2000, though there are sub regional variations. Pace of aging is fastest in Asia and Pacific which is an inevitable outcome of sustained declines in fertility and mortality during last three decades. It took 114 years for Sweden and France to double its 60+ population from 7 to 14 per cent while the same was accomplished in Singapore in just 18 years(see figure 4). Therefore, no Asian country will escape the substantial aging of its population in the first half of this millennium.

Although the growth of older population is more in the developed regions, the speed of aging is more rapid in the less developed countries. Because rapid changes in age structure may be more difficult for societies to adjust to than change that is spread over a longer time horizon, the speed of population aging has important implications for government policies, such as pension schemes, health care and economic growth.

Typically, the transition from 7 to 14 per cent took longer for countries that reached the 7 per cent level at an earlier date. For example, France and Sweden, which reached the 7 per cent point before 1900, took 115 years and 85 years, respectively, to reach 14 per cent. Several developing countries shown in figure 5 will also make a rapid transition from 7 to 14 per cent aged 65 or older. Brazil, Sri Lanka, Thailand and Tunisia are projected to make this transition in a time span of less than 25 years, and the two most
populous countries, China and India, may require only 26 and 28 years, respectively.

**Figure 2.** Number of years required or expected for percent of population aged 65 and over to rise from 7 percent to 14 percent.


In many cases, it will take substantially less time for the transition from 14 per cent to 21 per cent, than it took to move from 7 to 14 per cent aged 65 years or older. Although no country has yet reached the point where 21 per cent of the population is aged 65 or older, some countries are expected to reach that point before the year 2015. At a later date, Canada and the United States of America are expected to make a very rapid transition from 14 to 21 per cent aged 65 or older, as its large baby boom cohorts enter the higher ages. Thus, in the near future some societies will be faced not only with older populations than have ever existed at the national level, but populations that are aging at an extremely rapid pace.

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Biographical Sketches

**Dr. M. Nizamuddin**, obtained, PhD from the University of Michigan, Ann Arbor, Masters from the University of Chicago, USA and BA Honors and Masters from University of Karachi, Pakistan. Immediately after completing PhD, he taught as Assistant Professor at the University of North Carolina, Chapel Hill. Later, he joined the UN system where he served in high level leadership positions in both programmatic and technical areas. During the 24 years of service with UN Population Fund, he was posted in Jordan, Egypt, and Ethiopia and finally at the headquarters in New York, as Director for the Asia and Pacific region and as Director for Technical and Evaluation Division. During 2002-2005, as Clinical Professor for Socio medical Sciences Mailman School of Public Health Columbia University New York. He also served as UNFPA’s Senior Advisor on Ageing, and Program Director of International Program on Population Aging in Developing Countries, implemented in collaboration with Columbia University, New York. For the last three years, he has been serving as a Foreign Professor, under Higher Education Commission, University of the Punjab, Lahore and has been serving as the Vice Chancellor, University of Gujrat, Pakistan. He has extensive teaching and research experience in population issues. He has several publications some of whom were published by the United Nations. Dr. Nizamuddin is regarded internationally an authority on population aging. Since 2004, he is Co-Chair of IUSSP Panel on Ageing in Developing Countries (IUSSP, Paris, France).

**Javed S. Ahmad**, holds a Master’s degree in Public Health Education, from the University of California, Berkeley, a MBA from Long Island University, New York and MA in Social Welfare from Dhaka University of Bangladesh. During his nearly forty years’ professional career with UN, bi-lateral donor and international non-governmental organizations, he has provided technical support to ministries of health and education, academic institutions and NGOs in sub-Saharan Africa and South and Central Asia, in the population field, He has served in Sri Lanka, Kenya, Liberia, Nepal, Kazakhstan and Slovakia with regional and/or national responsibilities. After retiring from the UN-ILO in 2002, he worked for two years on a Population Aging Program in Columbia University, New York. From July 2007 to March 2008, he worked for the University of Gujrat as a visiting Professor. He has several research reports and professional publications to his credit. He is a citizen of the USA and currently working as a Health Communication Consultant. [E-mail: javedsahmad@gmail.com]

**Fauzia Maqsood** has Masters in Sociology (Gold Medalist) from the University of Punjab. She is lecturer at Government APWA College Lahore. She is also a PhD candidate in Sociology at the Institute of Social and Cultural Studies, University of the Punjab, Lahore. Currently she is consultant for Research and Planning Cell, University of Gujrat and teaching course Population Aging to Postgraduate diploma students. She worked as Research Officer in the Project Contribution of Private Tube wells in the Development of Water Potential in Pakistan sponsored by Ministry of Planning and Development and conducted by Specialist Group Incorporated(SGI) and National Engineering Services Pakistan(NESPAK) 1990 to1991. She also served as Social Welfare Officer in Social Welfare Department Government of the Punjab Lahore from 1991 to 1994.She worked as data analyst in projects(i) Women’s Rights to

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