

Growing Old in Asia: Declining Labour Supply, Living Arrangements and Active Ageing

In the future, Asia will see a surge of smaller families and therefore smaller networks of resources regardless of the living arrangements in place.

*By Evi Nurvidya Arifin**

Several decades ago, the discussion on population and development focused on the large size and high growth rate of the population, resulting from rapidly declining mortality rates and continuing high fertility which leads to population explosion. Controlling of infectious diseases through the diffusion of public health

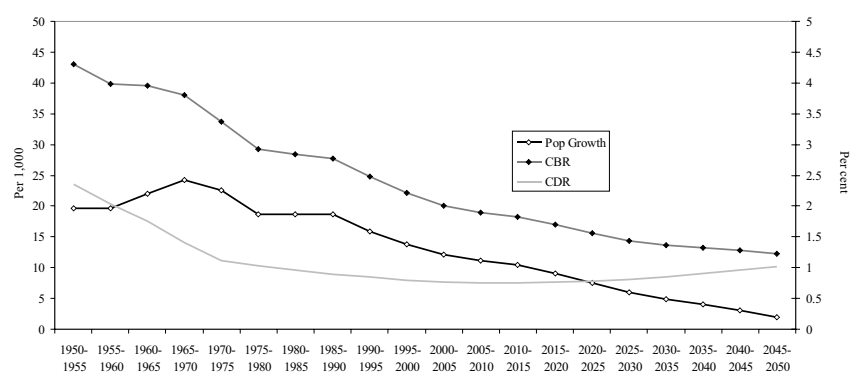
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programmes and the availability of modern antibiotics invented in Western countries were some of the key factors in declining mortality rates in developing countries including those in Asia (Hirschman, 2005).

Maintaining this high growth rate of population over a certain period of time would have adversely affected economic growth as a fast increase in the number of population – dominated by a bulk of young population – puts pressure on the allocation of resources. Therefore, attempts were made to slow population growth. Population policies and programmes in many Asian countries focused primarily on reducing the fertility rate and population growth through government-supported family planning programmes and other related programmes such as increasing girls’ enrolment in education and women’s participation in the labour force.

Prior to the 1970s, Asia’s population growth rate reached its peak at 2.42 per cent annually in 1965-1970. Subsequently, the population growth rates in several Asian countries declined rapidly in the period 1970-1980, though remaining high. During the last decade of the twentieth century, as shown in figure 1, the growth rate of the population declined to 1.21 per cent (United Nations, 2005). Hirschman (2005) mentions that fertility decline in the 1960s in several Asian countries was quite unexpected. It spread to many developing countries in Latin America and Africa in the last two decades of the twentieth century. With the expected continuous decline in fertility, the rate of population growth in Asia is projected to decline to almost zero by 2050 (see figure 1).

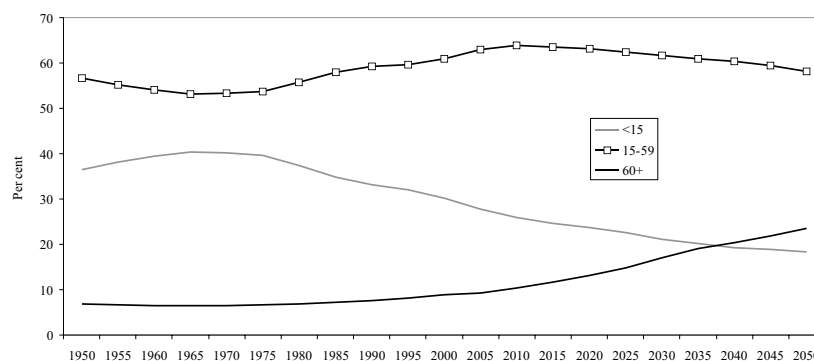
Figure 1. Asia’s population growth rate, crude birth rate (CBR) and crude death rate (CDR): 1950-2050



Source: Medium variant (United Nations, 2005), <http://esa.un.org/unpp>.

The rapid decline in fertility and the increase in life expectancy have transformed the population structure from a triangular population pyramid to a more cylinder one. When the age composition in Asia had a triangular pyramid shape between 1950 and 1975, the share of young population ranged between 35 and 40 per cent of the population and it reached its peak in the last half of 1960s at around 40 per cent of the population. Since then it has been decreasing and it will approximately reach below 20 per cent of the population by 2050. In contrast, as seen in figure 2, the share of the older persons (those aged above 60), has been accelerating since the 1990s. The proportion of older persons will exceed that of the young population by 2040.

Figure 2. Asia's age-specific population structure: 1950-2050



Source: Medium variant (United Nations, 2005), <http://esa.un.org/unpp>.

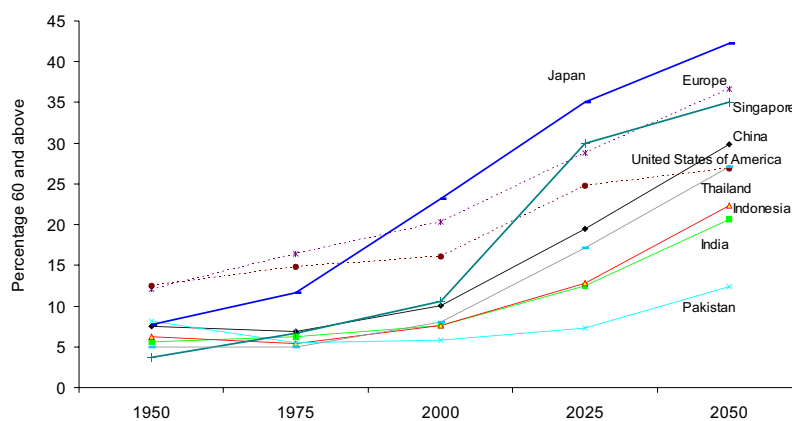
Based on the report of the United Nations on population ageing (2001), the number of the population aged 60 years and over has tripled over the past 50 years. Throughout the world, there were only 205 million older persons in 1950 with three countries each housing more than 10 million of them, namely China (42 million), India (20 million), and the United States of America (20 million). In other words, the two largest Asian countries accommodated about one third of the world's entire elderly population. Some 50 years later, the number of older persons increased threefold to about 606 million with more countries lining up as having more than 10 million older persons.

Asia is likely to be home to the largest portion of the world's elderly population by the first half of the twenty-first century. By 2050, the total number of older persons is projected to reach nearly 2 billion and by that time Asia will

accommodate about 1.2 billion older persons, that is about 62.5 per cent of the world's entire elderly population. Because of their large population size, China will count around 437 million older persons; India, 324 million; Indonesia, 70 million; and Pakistan, nearly 48 million. In 2005, the first wave of the post-independent-era Indonesian older persons joined the world's greying society. In the United States, the first baby-boom generation¹ entered this same greying group in 2006. In addition, the speed of ageing will be faster in Asia than in the more developed countries. As seen in figure 3, Japan and Singapore are examples of rapid population ageing. In 2000, the proportion of elderly persons in Japan had surpassed the proportion of elderly persons in Europe. By 2025, the proportion of elderly in Singapore is expected to be higher than the proportion of elderly in the United States and Europe.

Meanwhile, China's greying population is expected to exceed 25 per cent by 2050, surpassing the proportion of persons in the same age group in the United States. Interestingly, Thailand's ageing population will grow alongside that of China and reach the same level as the proportion in the United States by 2050. By that time, in India and Indonesia older persons will represent about one fourth of their population. Among South Asian countries, Pakistan will emerge as an ageing country in the twenty-first century.

Figure 3. Projected trend in ageing in several major Asian countries compared with Europe and the United States in 1950-2050



Source: United Nations (2001).

Note: Percentage of population aged 60 years old and over.

In short, the population age structure in many Asian countries is going through a major transition, though countries are at very different stages in this transition. Some are in the middle of the demographic transition; some others have completed it and are now facing the challenge of ageing. The population and especially the labour supply of the countries which have completed their demographic transition will begin to decline and the dependency burden will increase. This will exert a significant strain on each country's economy.

For example, the study by Xiujian Peng and Dietrich Fausten on China published in this special issue of the *Asia-Pacific Population Journal* (see pages 31-62) shows that stagnant growth of the working age population combined with the declining aggregate labour force participation rate will exert a downward pressure on labour supply. The reduction of available labour has potentially important adverse implications for economic growth. The current liberalization of the strict population control policy may help to decelerate the rate of population ageing, slow down the decrease in the labour force and mitigate the adverse prognoses for macroeconomic growth. However, any such liberalization counteracts the original object of China's family planning policy of controlling population growth. The potential conflict between achieving a desirable demographic structure and a desirable population size poses a dilemma for policy makers in China.

A different case of the labour supply is shown by Alam and Karim in the third paper published in this same special issue (pages 63-92). The authors examine the implications in having both rising numbers of young and old population simultaneously in India and Pakistan – countries exhibiting relatively high levels of fertility as well as rising longevity and low productive employment opportunity.

Labour supply is the first important theme highlighted in this special issue. The second important theme is the well-being of older persons themselves, particularly with respect to their living arrangement, as analysed by Evi Nurvidya Arifin in the fourth paper published here (pages 93-112). Kattika Thanakwang and Kusol Soonthornhdada in the fifth and final paper (pages 113-135) focus yet on another theme; active ageing as a means to improve the welfare of the booming elderly population.

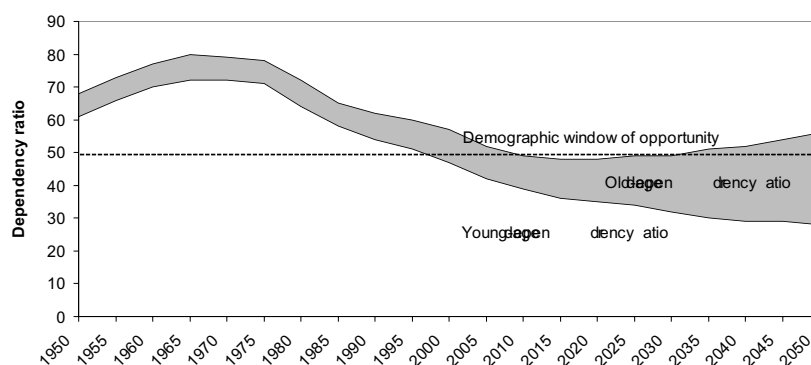
All of the four papers included in this special issue are based on quantitative approaches applied to various surveys and censuses. The strength of quantitative analysis lies in its ability to better represent a region or subregion under study, though it also has limitation. The present papers can also contribute to strengthening the database on population ageing in Asia, particularly in regions where information on this issue is still rather inadequate. For example, Alam and

Karim point out to the lack of access to readily available data on elderly persons in Pakistan. In this special issue, variations within single country are also taken into account, particularly with respect to the analysis of living arrangement in Indonesia by Arifin and the attributes of active ageing among Thai elderly by Kattika and Soonthornhadha.

Labour supply prospects in ageing society

Population ageing is expected to result in an ageing workforce and a significant slowdown in the growth of the working age population, a proxy for supply of labour. It can also have a fundamental impact on the relative proportion of the working age and dependent population within a community. Asia's total dependency ratio in the last 50 years of the twentieth century formed an inverted U-shape like figure (see figure 4), in which the ratio at 70 in 1950 kept increasing to reach its peak of 80 in 1965, before declining to 57 in 2000. Based on the United Nations medium variant population projection, in the next 50 years the ratio will evolve to form a U-shape pattern where the dependency ratio declines steadily and reaches the threshold of the demographic window of opportunity just before 2010. It will decline slightly further and reach its lowest peak at 48 between 2010 and 2015 before increasing again to close the window approximately in 2030. In other words, the span of the demographic window of opportunity in Asia, a once-in-a-lifetime opportunity to enhance the productivity of the economy and to prepare for the management of ageing issues, will probably last for two decades only. The benefits from the demographic window of opportunity are not

Figure 4. Trend in cumulative young and old dependency ratio in Asia: 1950-2050



Source: Medium variant (United Nations, 2005), <http://esa.un.org/unpp>.

automatically generated. Appropriate policies and enabling conditions are required for these benefits to be realized.

The timing of the transition towards the opening of the demographic window of opportunity differs across countries depending on the speed of decline of the fertility and mortality rates. The four largest countries in Asia can be used as an illustration. The demographic window opened in China since 1990, earlier than Indonesia and India, owing to the impact of their one-child policy. China's demographic window of opportunity will close approximately in 2030. The demographic window of opportunity opened in Indonesia in 2005 and will last until 2035 or 2040, depending on the fertility scenarios that will unfold (Ananta, Arifin and Bakhtiar, 2005). India will see its demographic window of opportunity opening in 2020 and closing by 2050. Meanwhile, Pakistan will experience this once-in-a-lifetime opportunity starting from 2035. Thailand has been experiencing it since 1995 and will probably see it end by 2025 (United Nations, 2005).

Population ageing will slow down the growth of the working age population in Asia, which will expand by 0.7 per cent annually only for the period 2000-2050. This is much slower than the annual growth of 2.3 per cent witnessed in the past five years. This working age population will begin to shrink in 2050. Peng and Fausten reveal that in China the working age population, aged 15-64 years, will reach a peak of 1,001 million around 2015. In Indonesia, this productive group will reach its peak between 2035 and 2045 (Ananta, Arifin and Bakhtiar, 2005). Based on the medium variant of the United Nations World Population Prospects (2005), India will dominate the world's labour supply by 2050 as the size of its working age population will reach a peak of 1,064 by 2050. Pakistan's working age population will override that of Indonesia by 2050 (205 million for Pakistan compared with about 185 million for Indonesia). The working age population may continue to rise in Pakistan beyond 2050. In contrast, by 2050 Thailand will be experiencing a contraction of its working age population which will have reached its peak of nearly 50 million in 2035.

Peng and Fausten's paper illustrate the significant impact of various regimes² of fertility decline on population ageing in China, based on different ageing scenarios and the changing labour force participation rates. The authors found out that the proportion of older persons in the total population increases most rapidly under the low fertility scenario. It reaches 28.1 per cent in 2050, compared to 24.8 per cent, 23.6 per cent and 18.4 per cent in the same year for the following scenarios, respectively: constant fertility scenario, medium variant scenario and high fertility regime scenario. In other words, by 2050 the difference between the low and high fertility scenarios on the share of older population in the total

population amounts to a remarkable 35 per cent. This significant difference in the ageing proportion may influence the supply of and demand for labour, good and services. Since the participation rate of older persons is much lower than that of the prime-age labour force, Peng and Fausten demonstrate that ageing of the workforce will reduce the aggregate labour force participation rate in China. With declining participation in economic activities of old persons, it may not be implausible to expect high old-age poverty. Alam and Karim in the third article published in this issue of APPJ point to the low economic participation of older persons and highlight serious poverty-related issues in most major states of India. Furthermore, they argue that India and Pakistan are different from many of the fast greying societies. These two countries will remain both young and old for most of this century. The fast decline in fertility, the slow but definite narrowing in fertility and mortality differentials, as well as the past high fertility have created a bulge of young and middle-age population as well as reproductive-age population. An increase in life expectancy in higher age groups and a fast decline in fertility have resulted in a visible growing number of elderly. On the other hand, the fast-emerging market in India and Pakistan is without a credible social security system for this segment of the population and the deprived. Job opportunities in high-productivity employment are decelerating, and this situation in turn aggravates the risk of these people falling further into poverty. The current economic regimes in the two South Asian countries do not seem to have much to offer to the young and old groups of the population. The combination of rising numbers of young and old population and low productivity, as argued by Alam and Karim, will result in a mismatch between the changing demographics of the two countries and their emerging economic regimes.

Living arrangements

Rapid population ageing in Asia is accompanied by rapid changes in socio-economic and political developments. This will in turn affect living arrangements of older persons while family has traditionally been the pillar of support for this segment of the population in Asia, some studies have shown that modernization and urbanization tend to affect the level and quality of this familial support.

Living arrangements of older persons vary greatly among countries and regions owing to different levels of development (Bongaarts and Zimmer, 2001). Living with a child or grandchild is the most common type of arrangement among elderly in the region, which is similar to that in Latin America, the Caribbean and Africa, whereas in Europe and the United States, elderly persons most commonly reside with their spouses, in couple-only household, or alone. In Africa and Asia,

on average about three quarters of those aged 60 years and over are living with a child or grandchild. In Latin America and the Caribbean, on average the proportion of elderly co-residing with their children was about two thirds. In Europe, by contrast, the average was about one fourth.

Earlier research has found evidence of a trend towards separate residence of older persons in developed countries and in a few developing countries, particularly in Eastern and South-Eastern Asia. Indeed, there is an emerging global trend towards independent forms of living arrangements among older persons – alone or with spouse only – and a corresponding decline in co-residential arrangements. Simultaneously, available evidence shows that in many developing countries, the magnitude of changes has been relatively small so that a striking contrast between developed and developing countries will persist for many years. For example, Alam and Karim in this special issue of APPJ show that in rural India, the percentage of elderly persons living with their spouse increased from 9.5 per cent in 1986-1987 to 14.2 per cent in 1995-1997. Furthermore, they underscore that in Pakistan, interestingly; the proportion of elderly persons living with spouse only was even higher than in India, standing at 19.2 per cent for female and 30.9 per cent for male.

In general, co-residence with children continues to be the single most important source of living arrangement for the elderly persons which belies the fear that parents are deserted by their children, the latest being thought to be increasingly mobile in terms of social, economic and geographical conditions. In countries such as China, some evidence of declining levels of familial support have surfaced due to the effects of massive rural-urban migration of young adults, and changes in occupational structures (Yi and George, 2000). Alam and Karim note that filial dependence may not remain an option for many elderly in India. With family members participating increasingly in the labour force, other care-giving alternatives are yet to catch up in India. In Taiwan Province of China, the percentage of older persons living independently (alone or with a spouse only) has changed drastically, rising from 9 per cent in 1976 to 38 per cent in 1996 (Kan, Park and Chang, 2001). However, evidence also suggest that Asian families are adapting to changing economies and that elderly's general well-being is not declining. Research on intergenerational transfers in Indonesia; Malaysia; the Philippines; Singapore; Taiwan Province of China and Thailand, has shown high-levels of intergenerational support for elderly parents either via co-residence or the transfer of goods and services. To a certain extent, Frankenberg, Chan, and Ofstedal (2002) found very high-levels of family support, as measured by rates of co-residency in Asia. Approximately 80 per cent of Singaporean elderly lived with

at least one child, while 70 per cent of Indonesians elderly and nearly three quarters of the elderly in Taiwan Province of China lived in such an arrangement. Elderly living alone represented only a small fraction, 6.2, 5.3 and 6.7 per cent, respectively. In Thailand, 4.3 per cent of elderly persons lived alone and 74 per cent resided with at least one child. However, the proportion of those living alone among Thais was increasing. Kattika and Soonthornhdada found that 6.2 per cent of them lived on their own.

Differences in living arrangements of older persons are also observed within a single country. For example, in this special issue of APPJ, Arifin explores differences in living arrangement of the elderly in three different districts of East Java, Indonesia a province with the largest proportion of older persons in the country, taking into account the effect of demographic and socio-economic conditions and the general well-being of elderly. The Regency of Pacitan is the home to the oldest population in the province of East Java, with a percentage of persons aged 65 and above standing at 10.1 per cent in 2000. Pacitan is also the poorest district in the province having the lowest gross regional domestic product and an urbanization rate of only 10 per cent in 2000. Thus, Pacitan has “become old before getting rich”. By contrast, the city of Surabaya is fully urbanized and considered as the second biggest city in Indonesia. However, the proportion of elderly is lowest (3.6 per cent) as a result of a big influx of migrants. The per capita gross regional domestic product of Surabaya is the second largest in the province. Contrary to the situation in Pacitan, Surabaya has “become rich before getting old”. On the other hand, the Regency of Malang is a district in transition. The ageing proportion, urbanization rate and per capita gross regional domestic product lie between those of Pacitan and Surabaya. Its urbanization rate nears 50 per cent and its per capita gross regional domestic product is about twice that of Pacitan. The percentage of older persons co-residing with children was found to be higher in districts at more advanced stages of economic development (in Malang and Surabaya). In rural areas, elderly parents were less likely to co-reside with their children. To sum up, the urbanization and modernization did not systematically prevent older persons from co-residing with their children, although Indonesia does not provide any financial incentives to encourage co-residence.

Active ageing

Active ageing is the concept promoted by the World Health Organization (WHO) in response to the rapidly growing number of persons aged 60 and over. This notion is well-known in the field of gerontology. Its aim is to preserve the active role of elderly persons in the society (Mandin, 2004). According to WHO ageing should be viewed as a positive experience, therefore living longer has to go

along with continuing opportunity for health, participation and security. WHO defines “active ageing” as “the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age”. The word “active” refers not only to the ability of being physically active and participating in the labour market, but also refers to the continuing participation in social, economic, cultural, spiritual and civic affairs. This definition encompasses all individuals across all communities. Retired persons, disabled and ill individuals, for instance, can still contribute to their families or communities. Also the definition allows for people to realize their full potential for physical, social, and mental well-being throughout their life course while adequate protection, security and care should be provided to them in times of need (WHO, 2002).

Based on the above-cited concept of WHO, various key direct and indirect determinants should be considered in a policy framework for this concept to be realized. Health and social service system, health-seeking behaviours, personal factors, physical, social and economic environments (see figure 5) are either direct or intermediate determinants.

Figure 5. The determinants of active ageing



Source: World Health Organization (2002).

By contrast, culture and gender are among the indirect determinants of active ageing. Cultural values and traditions determine many aspects of ageing issues. Different cultures have different social perceptions of the value and benefits of old age. In many African and Asian countries, older persons are characterized as “people with knowledge”, although this value is eroding in many cultures. Cultures also affect the living arrangement preference for elderly, whether they co-reside or not with children, as well as their health-seeking behaviours. In many societies, gender differentiates social status and access to certain things such as education, meaningful work, food and health.

In order to better understand this complex issue of the determinants of active ageing, Kattika and Soonthronhada in this special issue focus on measuring active ageing, based on the concept promoted by the World Health Organization. The authors use elements of health, community participation and security as indicators of a proposed active ageing index. According to their findings, older persons in Thailand rank at a moderate level in terms of active ageing attribution. The active ageing groups mostly males, married elderly, having more prestige occupations and education, and no chronic illnesses. They found that in Thailand only one fifth of older persons had made some kind of preparation for their economic well being and health in old age. Furthermore, one fourth of Thai elderly was found to be in poor health, and more than half of them participated in their communities at a low level whereas most of them had a moderate to high level of security. These findings suggest that, in order to promote active ageing, more support and emphasis should be placed on elderly women, the oldest old, elders suffering from chronic illnesses, as well as uneducated or unemployed elderly.

In the future, Asia will see a surge of smaller families and therefore smaller networks of resources regardless of the living arrangements in place. Because future cohorts of older adults in these societies will have higher levels of education and standards of living, there are some concerns that traditional support for elderly may fade. Therefore, promoting active ageing may be one important means to reduce the dependence of older persons on the younger population.

Acknowledgements

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Endnotes

1. The baby-boom generations in the United States were the generation of people who were born between 1946 and 1964.
2. Detailed information on these four scenarios of fertility decline can be read in Peng and Fausten’s paper in this edition.

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