POLICY BRIEF ON AGEING IN ASIA



APDA

Foreword

With the support of the United Nations Population Fund (UNFPA) Asia-Pacific Regional Office (APRO), over the last three years the Asian Population and Development Association (APDA) has been conducting projects to study population ageing in Asia. A project research committee, consisting of distinguished scholars, has reviewed and deliberated on literature related to population and ageing, as well as the output of Asian parliamentarians' conferences and field visits on ageing organized by APDA. Emerging out of these discussions have been recommendations that may benefit future policy responses to ageing in Asia, as well as other ideas that may merit further consideration. This report summarizes these recommendations and ideas.

The literature reviewed by the research committee members includes the outcomes of numerous field surveys that APDA has conducted in Asian countries over the last 35 years. In parallel with the research committee's work, parliamentarians from Asian countries in 2014 and 2015 had the opportunity to learn about the experience of Japan, which today has the world's highest level of ageing. At this time they also visited Nagano Prefecture where they could directly share study cases of Japan's good practice. Then in 2016, APDA's conference and onsite visits for Asian parliamentarians in Malaysia allowed observation of an exemplary case where universal health coverage (UHC) has been virtually achieved in a form different from Japan's. In Malaysia's case UHC was instituted that followed the principles of Islam, an example which has stimulated discussion in numerous countries.

We live in a world in which globally the population is ageing, and a demographic transition taking place. Having never encountered ageing on a global scale before, humanity is still grappling with this issue through a trial and error approach, and despite multitudinous research on the topic, a one-size-fits-all solution has yet to be found. This report too is limited in its scope, and is by no means a compendium of the vast amount of research that has been done on ageing and social security, and does not offer definitive solutions. What it does aim to do is to clearly set out issues surrounding this topic and present critical views that can help Asian countries develop better policies for population ageing.

The issue of declining fertility, while not central to the discussions of the research committee, is also discussed in this report. Achieving the needed social consensus to allocate funds from national budgets to this issue will not be easy at a time when increasingly large government expenditures are required to address the issue of ageing and its related social costs. Nonetheless, for us to make better choices for the future, whenever we discuss the issue of ageing, we really must aim to have broad discussions at the national level on policy responses to declining fertility.

Finally, just to add that this report has been compiled at the behest of APDA and is based on the results of the considerations of the project research committee

Yasuo Fukuda

Chair, the Asian Population and Development Association (APDA)

Policy Recommendations

- Ι. Demographic structures cannot be adjusted to fit existing social systems. It is important that social systems are built to fit the demographic structure.
- Π_{-} As policy responses to population ageing inherently involve questions of values, any responses require both the active involvement of parliamentarians and the creation of platforms for public discussion of these issues.
- Ш. To make social security systems sustainable and to increase the cost effectiveness of such systems, we need to clarify what areas require the development of institutions, and not just push through with the institutionalization of entire systems. A well-balanced framework should be put into place, so that instead of merely relying on establishing a public system, a system is designed that can also draw on the support of non-institutional mechanisms, including those provided by communities.
- \mathbf{V}_{-} Rather than build a UHC system on an assumption of future population increase, it is important to construct a system in a sustainable and economically rational way, so that it functions even when a country is confronted with an ageing population and fertility decline.
- At the same time, there is a need to promote research and implement policies to stem very low fertility and so avoid too rapid a decline in population.
- It is necessary to strengthen the gathering of statistics, in particular the \mathbf{V}_{-} census system, and to establish family registration systems in order to identify the paid subscribers and beneficiaries of social security, and to avoid a breakdown in the system resulting from the so-called tragedy of the commons. For this, information technology could be useful to reasonably link beneficiaries and paid subscribers.
- VII. The development and introduction of robotics should be encouraged as a way of reducing the heavy dependence on human labor that care of the elderly entails.

Key Points

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1 Diverse demographic structures in Asia

Asian nations currently have very different population structures and are at quite different stages from each other with regard to the demographic transition. Within this context, however, China's population is expected to begin to decrease in 2030, and overall, Asia's population will age over the long term. Therefore there is a need for Asian countries to fully prepare for the issue of ageing. This should include technology transfers from Japan and other countries with advanced population ageing in the field of elderly care. It will also be important to take advantage of the diversity of the population structure in this region and to establish systems for practically meeting the challenges associated with it by enhancing both the volume and quality of human exchange among Asian countries, including with respect to the transfer of skills.

Income redistribution facilitated by the UHC system during Japan's period of high economic growth

Japan had established a system of UHC before it entered its period of high economic growth (1954-1973). This system played a major role in income redistribution and contributed substantially to creating an egalitarian social structure with a large middle class, a so-called "nation of middle-class people". As the world economy develops and globalizes, income disparity is widening around the world today, and there is a growing concern that this disparity is creating social divisions and causing serious consequences. Particularly at times like these, income redistribution mechanisms put in place by UHC system merit attention.

3 Historical background of the UHC system in Japan

It has been pointed out that Japan's UHC system became well-established and functioned well for a certain period

because Japan at that time was enjoying the benefits of the so-called demographic dividend—a period when the demographic transition advances rapidly but the young and old dependent population remains small. In addition, expansion in external demand created an economic environment conducive to rapid economic growth, generating the funding necessary to maintain the system.

It was significantly important that the fruits of the economic growth were distributed in the form of household income and that a mechanism was established whereby taxes and insurance premiums collected from the distributed income could be paid into the government's coffers.

That is to say, to introduce public social security systems and ensure their sustainability, it is necessary to establish a social infrastructure, including administrative management and registration systems that cover all citizens. In Japan, a modern household registration system was established during the Meiji period (1868-1912), when Japan emerged as a modern state through the Meiji Restoration. In many developing countries, however, the government lacks sufficient data for identifying citizens. To develop equitable and efficient public social security systems, it is necessary to institute a registration system (for example social security number in the case of the U.S.) that is acceptable to all citizens.

Application of ICT to the system development

In introducing a UHC system for the first time, technology innovation has created opportunities for realistic approaches for linking beneficiaries and subscribers. Just as the use of mobile phones, which requires a subscription, has expanded even in Africa, where monetized economy is still limited. When designing a UHC system, the use of ICT and other innovative methods should be fully considered.



The Historical Foundation of the Social Security System

Japan's first household registration system, based on the *Ritsuryo* law system, and modeled after the ancient Chinese system of law, was created in the late Asuka period (592-710). The development of the *Shoen* manor system, however, made the household registration system defunct, for all practical purposes, even though it nominally continued to exist. During the Edo period (1603-1868), village communities were formed with the "ie" (household) as the basic component through the establishment of a de facto registration system (shumon ninbetsu aratame) and village contract system for the collection of land taxes (nengu murauke seido). These communities played a major role in promoting mutual support.

The village communities remained intact in the Meiji period (1868-1912) and thereafter, and became the foundation on which Japan's public social security system was built, complementing it at the same time. Changes in economic structure brought about

by economic growth and fertility decline, however, led to the collapse of village communities, and mutual aid among relatives also diminished. These changes have resulted in increasing the burden on the public social security system.

The principles on which pre-modern societies in Asia were structured vary from country to country. In China and South Korea, politically there was centralized, unified political power, but socially, patrilineal kinship communities played an important role. In India where there was historically little political unity, the caste system (jati) became a basic component of society. These traditional communities provided members with mutual support. With social modernization, these traditional communities are being dismantled, and with it, the social security provided by such communities is disappearing. On the other hand, there is considerable difficulty in maintaining social security solely through a public system. The role played by traditional communities needs to be revisited.

5 Institutional and non-institutional mechanisms

Communities in Japan historically provided mechanisms for mutual aid. As illustrated by the role played by public health volunteers in Nagano Prefecture, it is worth noting that communities could shoulder some of the local government's social welfare functions and keep public spending down.

As in the example in Tasikmalaya in Indonesia, community mutual aid is a common feature across many countries in Asia. The government could provide support, training, and organization to develop sustainable mutual-aid communities, which could produce multifarious effects of creating opportunities for meeting various social needs with relatively low cost. Such mechanisms also can help revitalize communities, and maintain and strengthen regional bonds.



Community-based initiatives: The case of Suzaka City, Nagano, Japan

Nagano Prefecture has achieved Japan's highest average life expectancy and its highest healthy life expectancy (2013) and this success has been helped by the initiatives of local residents. In Suzaka City, when public health nurses were helping people improve their health as part of the state-led postwar campaign "New Life Movement", citizens felt a strong urge to help these public health nurses with their work. This keenness led to the start of the activities as health promotion volunteers in 1958, which spread nationwide and proved to be a major catalyst for the introduction of family planning and other health programmes. In Suzaka City, with an aim to train as many people as possible to experience being a health promotion volunteer and get health-related knowledge out to each and every family, a member of every family is urged to fill this role, and they are limited to serving for two years. This citizen-led initiative is still going strong today, and these days the emphasis is placed on preventing lifestyle-related diseases and on promoting a healthy

6 Diverse cultures and differing views on life and death

No matter how much healthy longevity is extended, all people must one day breathe their last breath. In Japan, the rising cost of terminal care has become an issue as today's medical science has largely focused on developing technology for prolonging life. It is high time to think from the perspective of how one can best live one's life and how one can come to view death with equanimity.

Dealing with such questions, which are closely related to how one thinks about "salvation", has generally been one of the main functions of religion. There are varying interpretations about the issue of life and death, depending on religion and on the cultural substratum that existed before the advent of religion. This is clearly made manifest in the different ways in which countries deal with terminal medical care and brain death. Interpretation of what makes for a happy death varies in different countries, cultures, and religions. Therefore, discussion about this issue should fully take into account diverse views on life and death within a country. This is an area where parliamentarians who represent the people of each country can play a role.

Japan's experience: changes in assumptions and the implications of these changes

It has been pointed out that the very successful UHC system in Japan is experiencing institutional fatigue. There are mainly two reasons. Both stem from changes in basic assumptions surrounding the system that went unrecognized at the time of its initiation.

(1) Institutional design based on an assumption of population increase

As mentioned above, Japan's UHC system was established during a period of demographic dividend. For this reason, the system, including the national pension system, was introduced based on the pay-as-you-go system where benefits and pensions for the elderly are financed from the incomes of the generation currently engaged in economic activity. It was built based on an assumption of continued population increase, and as such when it was first introduced was able to provide pensions even to the elderly who had not made any contributions to the pension scheme.

However, in the case of Japan, the fertility rate unexpectedly dropped far below the replacement level, and this change was contrary to expectations based on the theory of demographic transition at the time the system was first introduced. This has shaken the foundation of the system. When a UHC system, including pensions, is based on a pay-as-you-go method, changes in the population structure impinge significantly on the system. This means that when establishing a UHC system, in order to ensure social justice and particularly equal opportunity, there needs to be sufficient consideration put to how much of the social security cost should be publicly financed and how much of the cost should be individually funded. In this respect, when developing countries introduce a UHC system, in order to keep the system financially viable even in the face of population structure changes, they could start with a framework for securing the minimum level of social security, and then develop measures to adjust social security contributions according to different life courses or introduce the funded method.

(2) Institutionalization bringing about changes in perception

In the past, it was a common practice in Japan for the family to take care of the elderly. But this practice has become unsustainable, as longer life expectancy has brought about a situation where the elderly must look after the elderly in their families.

Analyses by Nihon University Population Research Institute (NUPRI) have shown that people's norms and perceptions changed substantially over the generation after the UHC system was established and a public elderly care system was introduced. The view that the elderly should be taken care of in their own homes is rapidly diminishing. It can be said that institutional reform has brought about a change in people's perceptions.

Although a public system of elderly care has been established, it cannot cover every need. This has given rise to a serious problem of working-age people being forced out of employment because of the need to care for older family

members. This in turn works to further reduce a working-age population that is already decreasing as a result of population ageing. It is a double loss for society as these cases further decrease the productive age population.

This demonstrates that the complete externalization of elderly care to a public system that can fulfill its institutional requirements is a large financial burden. Complete externalization has been difficult in Japan and in other Asian countries is inappropriate considering both current population structures, and the cost effectiveness of such a system.

Therefore, in more concrete terms, cost effectiveness should be taken into full account when introducing a public elderly care system. Such consideration may include ways to provide public support for in-home elderly care to prop up what community and family can do for elderly care and to involve private companies that see market opportunities in population ageing.

At the same time, if the burden of providing nursing care for the elderly has to be shouldered by family members, this may lead to working-age people disengaging from productive activities, and so have an unfavorable impact on the economy. So, there is also a need to improve institutional elderly care. In Japan, a new approach is being tried: using large refurbished apartment buildings constructed during the period of high economic and population growth so that care for the elderly can be provided more efficiently through economies of scale, and the needs of older people met at a relatively lower cost. From an economic point of view, productivity in elderly care needs to be improved one way or another in order to reduce the burden on individuals.

8 The importance of healthy longevity

In Japan, preventative medicine has been considered effective in cutting social costs arising from population ageing. Health economics research, however, has shown in recent years that even if preventative medicine can extend life expectancy, it only postpones the burden of diseases until later, and cannot reduce healthcare costs.

Even so, extending healthy life expectancy so that it closes the gap with average life expectancy is fundamental in reducing the social cost arising from population ageing, and this should be promoted. In addition, if we can build a social system that can harness the benefits of extended healthy lives, it can contribute to increasing a country's economic activity.

In other words, preventative medicine should be considered not just from the perspective of reducing social economic cost, but also with regard to promoting the well-being and happiness of older persons, and securing more workers in the context of a changing population structure. In that respect, promoting preventative medicine has an essential implication.

9 The limits of depending on humans for elderly care

In Japan, a combination of population ageing and a decrease in youth population is expected to reduce the supply of youth labor, which has been an integral part of the overall labor force. On the other hand, the baby boomers born between

1947 and 1949 after the Second World War in Japan will soon become so-called "late-stage senior citizens", people over 75 years old, who will increasingly require elderly care.

Changes in social norms usually occur later than changes in social conditions. As a result, many people in Japan continue to base their behavior on the social norms that existed when Japan had an expansive, pyramid-shape population structure. The expectation of older people today is that elderly care will be provided in the same way it was provided during those days. Here again, it is inevitable that changes in the population structure will induce major changes in people's values and social systems. It is inappropriate, both in terms of population structure and economic efficiency through social innovation, to depend on youth labor and to channel their labor force to provide elderly care.

Although there is possibility for cooperation in Asia to take advantage of the differences in population structures within the region in the near future, such an undertaking is clearly unsustainable over the long term for Asia as a whole if we consider future changes in population structures. In that respect, it will be necessary to promote developments in robotics and other artificial intelligence (AI) technology to reduce the labor burden of care.

10 Measures against low fertility

Decline in fertility exacerbates the issue of population ageing. A prolonged low total fertility rate (TFR) of, for example, below 1.2 will lead to a steady population decline, making all forms of social systems unsustainable and eventually resulting in societal collapse. Never in human history have we seen populations of prosperous societies continually decline without major wars or natural disasters. But now, very low fertility can be observed in Germany, Italy, Eastern Europe, Japan, South Korea, Taiwan, and Hong Kong. There is a potential for very low fertility in Southeast Asia. Even in China, which overturned its restrictive one-child birth-control policy, it is uncertain whether the fertility rate will pick up again.

As overpopulation and population increase had been the overriding concerns for which measures were taken, the problems and risks of extremely low fertility and the ensuing population decline went largely unaddressed. This caused a lag in starting research on the causes of, and in introducing measures against low fertility. Long-term recovery of the fertility rate is absolutely necessary. Aggressive policies to encourage birth, however, will only trigger social confusion and backlash.

A more realistic approach would be to build a social security system based on the assumption of a continued fertility and population decline and, at the same time, to promote measures against low fertility that are acceptable to society at large. Fertility decline may be the result of changes in our social systems, changes in people's values after the collapse of the traditional communities, or people's rational choice. These must be taken into consideration in designing policies to steer the fertility rate towards recovery. Research in this area is, at the moment, nowhere near sufficient.

Analyses

Demographic Changes and Measures for Population Ageing

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Japan underwent a period of rapid economic growth at a time of demographic bonus that ensued after the demographic transition, and was able to develop a social security system that could prepare for the advent of an ageing society. However, since the mid-1970s, an unexpected decline in fertility to far below the replacement level, coupled with increased longevity, has led to the arrival of a "hyper-ageing society". The old-age dependency ratio in Japan rose from 20% to over 40% in the last 20 years and is forecast to jump to 75% in the next 50 years. Can Japan's pay-as-you-go social security system developed during the period of demographic bonus meet the requirements of the future "hyper-ageing society"? What lessons can other Asian countries learn from Japan's experience, for example, regarding its pension system?

Some predict that if Japan's pension system is left unchanged, its public pension reserve will sooner or later be depleted and the financial burden on the government will become unbearable. In response to long-term estimates on ageing in Japan, since the 1990s the government has taken various measures both to curb pension benefits and to place more of the burden on citizens. The former includes measures such as increasing the pension age and introducing a "macroeconomic slide formula". The latter includes raising the level of pension contributions, introducing a consumption tax, allowing pension plan membership to expand to part-time workers, and increasing taxation on pensioners with high incomes.

In addition, other proposals for reform of the current pension system have been discussed in Japan. Raising the pension age, which has been adopted in many countries as an effective means of improving pension finances, necessitates major policy discussion on the timing of these increases in the pension age, on which age the pension age should ultimately be raised to, and on how to secure employment and income for retirees before they reach the pension age. Because of strong public resistance, introducing a consumption tax and increasing its rates normally takes time in a democracy. Some argue that the current pension system in Japan is too favorable to those who are elderly at present and suggest substantially reducing pension benefits, but politically there is little chance that such a cut could be realized. Proposals have also been made to make income taxation more progressive or to raise the inheritance tax so as to increase tax revenue that could be used to finance pension plans, but such proposals are directly linked with the issue of how to reduce social inequality and the question of which political ideologies citizens will opt to support.

Many economists say the pay-as-you-go pension system is unsustainable in a rapidly ageing society. The alternative is a funded pension system. This system, however, is disadvantageous in times of inflation. In addition, transition from the pay-as-you-go system to the funded system will not be easy because of the substantial costs of transition (especially as the current working-age population will have to shoulder a double burden under the two systems). As some European countries have carried out pension system reform by combining the pay-as-you-go and funded methods, there could be other alternatives. As the economy develops, other Asian countries, with varying levels of population ageing occurring at different speeds, will be introducing and further enhancing various social security systems in their countries. If, like Japan, these countries were to face extreme ageing in their societies, they will need to flexibly reform the systems they have developed in accordance with social changes.

If these countries can maintain a total fertility rate near the replacement level over the long term, however, they can moderate the pace of population ageing so that the level of ageing will not be as extreme as in Japan. Although the causes of very low fertility are not yet clear, if the rise of women's status and changes in the social roles as a result of economic development, and the recognition of gender equality as a universal concept are historical trends, then countries will need to carry out social reforms adapted to such historical trends, namely, creating systems to help people balance work and childrearing based on the assumption of gender equality, together with implementing other measures for population ageing.

Two Demographic Dividends and Economic Growth in an Ageing Asia

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In the developing world, there has been a rapid change in age structure in recent years. Asia is a typical example of this trend. Focusing on the anticipated rapid ageing in the developing world, scholars, notably Ronald Lee and Andrew Mason, established a new method for analyzing ageing, called the National Transfer Accounts (NTA), at the beginning of this century. Currently, 14 countries from Asia are participating in the Global NTA Project.

The first step for a country participating in the NTA project is to make an estimate of the age profiles of labor income and consumption for that country. By using these two age

profiles and multiplying the data with the population in each age group, it is possible to estimate the period of the first demographic dividend. In many cases, this period lasts only 20 to 30 years. For example, Singapore, South Korea, Taiwan, and Hong Kong recorded dramatic economic growth, dubbed "the Asian miracle", at the height of the first demographic dividend in their countries from the mid-1980s to early 1990s. However, their economic growth began to gradually decline thereafter, and by 2010 in all of them the period of the first demographic dividend came to an end.

An important point to note is that the first demographic dividend only provides the potential for economic growth. The key is in implementing suitable policies, so that the potential can be realized during the dividend period. Therefore, it is essential for countries that are now experiencing or that are about to enter into the period of the first demographic dividend, to determine when the dividend period will occur and introduce effective policies for long-term economic development, including employment policies. Calculation based on the latest NTA data shows that the period of the first demographic dividend will be completed in 2026 for Indonesia, 2029 for Malaysia, 2039 for India, and 2045 for the Philippines. These countries will need to implement policy responses to fully take advantage of the potential for economic growth.

In those countries that have already completed the period of

the first demographic dividend (for example, South Korea in 2010, China in 2013, Thailand in 2015, and Vietnam in 2016), it is believed that improvements in life expectancy that were realized during the period of the first demographic dividend will be sustained in future as well, which means that individuals will live extended lives in old age. In terms of policy response, the key will be in how to increase saving, at both individual and national levels, so people can prepare for old age. This phase, in which longer life expectancy acts as an incentive to accumulate assets, is called the period of the second demographic dividend.

While it is well known that countries that have completed the period of the first demographic dividend are putting efforts into strengthening the foundation of social security systems, such as pension and healthcare, to enhance the lives people lead in their retirement, an important point of consideration is that there will be substantial difference in the size of the second demographic dividend depending on which method is used to finance the social security systems. If a funded system is used to build the pension system, pension reserves will increase, social capital will be reinforced, and, if the capital is used effectively, these reserves can contribute to economic growth. On the other hand, if a pay-as-you-go system is used, there will be no pension reserves and it is highly likely that there will be a shortage of capital for economic growth. Depending on policies on social security and tax systems, the size of the second demographic dividend may vary significantly.

Japan's Role as the Forerunner in Finding Solutions to Emerging Issues

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Using Japan's experience of modern economic growth after the Meiji Restoration as a reference point, an analysis of other East Asian countries shows both commonalities and differences with Japan. After the Second World War, Japan developed by supplying, at low real wages, surplus labor that had accumulated in the agricultural sector to promote industrialization, and once the surplus labor was exhausted, it faced the Lewis Turning Point, when it is no longer possible to depend on the economic growth model that had been applicable up to that time. Similarly, one of the factors contributing to the remarkably high level of economic growth in China and other East Asian countries was industrialization through the supply, at low real wages, of surplus labor that had accumulated in the agricultural sector. These countries also subsequently experienced the Lewis Turning Point.

Whereas the demographic dividend in Japan ended about a quarter-century after the country reached the Lewis Turning Point during the 1970s, China faced the Lewis Turning Point and the end of its demographic dividend simultaneously. Unlike Japan, the high level of economic growth in other East Asian countries was made possible basically through acceptance of direct foreign investment. Nevertheless, the commonality between Japan and other East Asian countries with respect to the availability of labor supply from rural areas to support industrialization makes an examination of Japan's experience meaningful for other Asian countries, and can help contribute to their development.

Japan is today confronted with declining fertility and an ageing population. Other Asian countries will also have to grapple with this issue in the near future. Can Japan contribute meaningfully to other Asian countries in dealing with this emerging state of demographic burden?

In Japan, the pay-as-you-go method, which supports the elderly using the income of the economically active population, was introduced into the system of universal insurance coverage (including pensions) in 1973, the year that was declared by the Japanese government as the "first year of the welfare era". This system, which was introduced during the period of "demographic bonus" when the dependent population ratio was small, played a significant role in income redistribution. Even though Japan's economic growth rate began to decline at around this time, the government as the yen dramatically appreciated and Japan transformed itself into "a major economy", did not put much weight in the changes in the social fabric brought about by declining fertility and ageing population that were already becoming apparent at that time.

Since the 1990s, Japan's national economy has been stagnating with economic growth close to 0%. Nonetheless, Japan, as the "forerunner in finding solutions to emerging issues", must fulfill its international role in contributing to other Asian countries. This requires us to discard a mindset that has been founded on an assumption of population

increase and that has constrained us for more than a century; we need to reappraise economic, political, and social changes that have taken place in Japan since the Meiji Period. Such changes include a rapid loss of a sense within families of the need to care for the elderly within their homes that followed the introduction of the public elderly care system. More than 70 years ago, Yasuma Takata, in Keizaigaku Genri (Principles of Economics; 1947), predicted with remarkable accuracy the future of a Japan in which declining fertility and ageing population are the top priority policy issues, writing, "As illustrated by past examples, as the

level of social productivity and labor wage increases, the fertility will go down, which will also bring the natural fertility rate down. (snip) The long-term supply will decline in relative terms following a rise in production and labor wages". Therefore, if the supply capacity 30 years from now is to be described with a curve, it will be equivalent to the decreasing function of labor wages". By plotting Japan's path for the 21st century based on such reappraisal and establishing the necessary policy systems, we will also be making an important contribution to other Asian countries.

Implications of the Statistics on Ageing in Asia

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The population census provides the most fundamental statistical information. In 1950, the United Nations, in its World Population Census Programme, recommended that countries conduct censuses in years ending in 0 or 1. In response, an increasing number of countries have been carrying out a decennial population census.

According to the UN Statistics Division, 239 countries and areas carried out the census in the 2010 census round. In Asia, all countries and areas conducted the census, with the exception of eight countries including Afghanistan, Iraq, and Pakistan. Pakistan, however, plans to conduct a census in 2017. And Afghanistan conducted the Demographic Health Survey (DHS) for recording statistical information on births, infant mortality, AIDS, and sanitary conditions in 2015, and provides demographic information.

Population censuses provide statistics that form the foundation of policymaking, aspects such as the age structure of a population, employment status, educational levels, population distribution and migration, the composition of households, and foreign nationals by nationality. But even when developing countries have some system for registering their population, in a number of countries, the system is not yet fully functional, and so demographic statistics based on the registration of births and deaths are insufficient for truly understanding the situation in these countries. In order to get a clearer picture of the situation, a population census is needed to collect information on births and deaths within households in the last 12 months, and to estimate fertility and mortality rates.

In relation to the use of statistics, more than a few developing countries have problems associated with completeness (under-enumeration and double counting) and accuracy (such as respondents giving false age) of statistics. Therefore, evaluation on statistical reliability is important. For assessment of completeness, post-enumeration sample surveys and inter-censal comparisons can be used. There are also various methods than can be used for assessment of statistical data accuracy. Cambodia, for example, includes results of their assessment in their population census reports.

Using the 2015 United Nations Population Estimates and Projections (medium variant) on the ratio of population ageing (as measured by the proportion of the population age

65 and over), we see that the world's ratio of population ageing will increase from 9.3% to 16.0% from 2020 to 2050. In more developed regions and less developed regions, the ratios will rise from 19.4% to 26.5% and from 7.4% to 14.4% respectively. In Asia, the ratio will more than double, from 8.8% to 18.2%.

As for the projections of the ratio of population ageing in 51 countries and areas in Asia in 2020, the ratio is estimated to be 15% or over in five countries and areas (including Japan. South Korea, and Singapore), 10-15% in eight countries and areas (including Thailand, China, and Sri Lanka), 7-10% in seven countries (including North Korea, Vietnam, and Malaysia), 5-7% in 11 countries and areas (including India, Iran, and Indonesia), and less than 5% in 20 countries and areas (including Cambodia, Mongolia, Pakistan, and Iraq). The data show that in 2020, 20 countries and areas will reach the 7% mark, which is considered the benchmark indicator of an ageing population, while 31 countries and areas will fall short of the 7% mark. Countries and areas with a young population structure will make up about 60% of all countries and areas in this region.

Asia's population, however, is estimated to age rapidly thereafter so that by 2050, the ratio in six countries and areas will be 30% or over, which is considered the ratio at which point a country can be described as a super-ageing society, 20-30% in 11 countries and areas, 10-20% in 25 countries and areas, and less than 10% in nine countries and areas (and less than 7% in five of these nine). The projections show that around 90% of Asian countries will be either ageing or super-ageing societies by 2050. Ageing in Asia is particularly characterized by the rapid pace of ageing in East Asian countries.

Whereas it took more than 40 years for the ratio of population ageing to double from 7% to 14% in Western countries, it took less than 25 years in countries such as South Korea, Singapore, and Japan. For these countries, it will take an even shorter period for the ratio of population ageing to increase from 10% to 20%. This illustrates the urgent need for countries in Asia to have accurate statistical information, which can form the basis of their responses to population ageing, and allow them to implement various other policies and socioeconomic measures to prepare for this coming change.

Rapid Economic Growth, Social Changes and Population Ageing

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In today's world where economic globalization has given rise to the large-scale cross-border movement of labor, goods, and capital, an increasing number of countries have leveraged these economic factors to successfully bring about long-term increases in national economic output, or economic growth.

By putting their countries on a trajectory of economic growth, some of these countries have attained annual growth rates as high as around 10%. One of the factors facilitating such fast-paced growth has been the demographic bonus. It is believed that economic development leads to a demographic transition in which the birth rate is lowered, which in turn lowers the economic burden on the working-age population (the population of those from 15 though 64 years of age) who support the dependent population (the population of those from 0 though 14, and those 65 and over), and this enables even higher levels of economic growth.

As illustrated by past examples of rapid industrialization and urbanization, fast-paced economic growth leads to structural and qualitative changes in an economy. The propagation of an idea that economic rationality trumps all else will also, slowly but surely, erode social bonds that have been cultivated over the course of history through interpersonal relations and customs. For example, communal farming is transformed into a system of agriculture operated by individuals using tractors and cultivators. The main providers of social welfare for children and the elderly are no longer traditional communities and families but public programmes.

While fast-paced economic growth has brought about a weakening of social bonds, the demographic bonus will be followed by a demographic burden. Population ageing and fertility decline from the demographic transition will increase the percentage of elderly in a country's population, and this will impede economic growth and development by putting a greater burden on the working-age population who need to support the dependent population, and imperiling the foundation of social welfare finances. The weakening social bond from changes in social norms and the disintegration of the foundation of social welfare finances will affect senior citizens and those who are most economically vulnerable.

In Japan, a broad range of complex issues are surfacing today: questions of how to secure financial resources for pension schemes and welfare programmes; "kodokushi", or the lonely death of older people living alone without any acquaintances or relatives attending at their deathbeds; marginal depopulated village communities without the capacity to organize communal activities, such as religious festivals and farming, due to ageing and the outflow of young and middle-aged population from rural areas; and the inevitable shift in land-use planning from outward urban expansion to revitalization of urban centers (compact cities), which among other reasons makes it easier to maintain infrastructure.

Economic growth, which aims to bring about a better quality of life, enables material affluence. On the other hand, it also transforms social values, increases economic inequality, and bears down most harshly on the economically vulnerable. These problems can be seen in many developed countries that have already experienced high levels of economic growth. Countries that are now in the midst of fast-paced economic growth should note from the experience of developed countries that such socioeconomic phenomena as described above, which are not tracked by GDP and other macroeconomic indicators of economic growth, could very well become major policy issues in the near future in their own countries.

International Cooperation of Japan in the Field of Population Ageing

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International cooperation in post-war Japan in the field of population started with family planning programs; the first project was one launched in 1969 in Indonesia on population and family planning. However, since the 1980s, population ageing has also become a major focus. Due to the one-child policy, population ageing was anticipated to arrive in China much earlier than expected and a Japan-China cooperation project on population ageing was carried out starting from 1985 for a duration of five years. This UNFPA-assisted project, "Development of Research on the Aged for Policy Making Purposes", was conducted jointly by JOICFP (Japanese Organization for International Cooperation in Family Planning) and the China National Committee on Aging. It involved experts from both countries in six fields: population analysis, population projections, economics and labor, pensions and employment, family and welfare, and health care. Another example of the Japanese cooperation on population ageing was "International Symposium on Population Structure and Development" held in Tokyo in September 1986, jointly organized by the United Nations Population Division, the Japan Ageing Research Center and the Institute of Population Problems of the Ministry of Health and Welfare, Japan. In this symposium, the topics of discussion were the global expansion of population ageing, the social and economic implications for ageing societies, issues of long-term care for the elderly, and competition and complementarity with youth.

In the 2000s, along with global ageing, a number of technical cooperation projects on ageing were planned and carried out through the Japan International Cooperation Agency (JICA). The Project for Social Welfare Policies for the Elderly in Chile conducted from 2004 to 2007 aimed to enhance the awareness of central and local governments of the need for welfare programs for older people and to increase their capacity to implement such programs. In Thailand, two consecutive projects to create a long-term care service model were conducted from 2007 to 2011 (CTOP), and from 2013 to 2017 (LTOP). In Malaysia, the Project on Successful Ageing: Community Based Programmes and Social Support System (2015-2017) was instituted. It aims to build communitybased elderly program and social support systems. The China-Japan Cooperation Project on Measures for the Aging Society (2016-2020) aims at improving the management of elderly care and welfare services, and techniques for longterm care. The Project on Strengthening the Capacity for Social Insurance Operation in Mongolia (2016-2020) is proceeding to raise the capacity to implement social insurance, most notably the pension scheme, through actuarial training and improvements in the system used to collect premiums. In Indonesia, a new project based on the Project for Strengthening Social Security System (conducted from 2014 to 2017) is now being prepared. It will introduce a professional qualification similar to that of the Japanese

Labor and Social Security Attorney in order to increase the participation rate in public insurance.

Promoting healthy and active ageing is one of the pillars of Japanese global health policy—it was clearly mentioned in the G7 Ise-Shima Vision for Global Health released in 2016. In the same year, the Asia Health and Wellbeing Initiative was launched by the Prime Minister's Office, and the Asian-wide development of care personnel through circular international migration, along with the dissemination of innovative care technology including integrated community care system, care assisting robots and welfare appliances in view of differentiated waves of ageing. The parliamentarians are also active through Japanese initiatives in extending their efforts in the field of population ageing. The International Parliamentarians' Conference on Population and Aging was held in Tokyo by the Asian Population and Development Association (APDA) in 2013 and a standing committee on active ageing was created in the Asian Forum of Parliamentarians on Population and Development (AFPPD), and the first meeting was held in Hanoi in September 2016.

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