



SUSTAINABLE DEVELOPMENT, RIGHTS AND CHANGING DEMOGRAPHY

INTERACTIONS IN ASIA AND THE PACIFIC



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FOREWORD

In 1994, a sweeping consensus on population and development was reached at a landmark gathering in Cairo – the International Conference on Population and Development, or ICPD. For the first time ever, governments – 179 countries in all – unanimously agreed, after years of debate and negotiation, that individual rights and choices, should be at the heart of development – with a focus on sexual and reproductive health and reproductive rights in particular, firmly underpinned by gender equality and women’s empowerment, as well as the broader agenda of human rights.



The ICPD Programme of Action reflected a huge change from earlier attitudes and policies wherein governments sought to control population growth, fearing overpopulation – especially in developing countries. ICPD shifted that thinking, paving the way for rights-based family planning and population policies, and linked them to the overall sustainable development of societies and nations.

This year, 2019, 25 years after ICPD – and incidentally 50 years after the creation of the United Nations Population Fund itself – is an opportune moment for UNFPA in Asia and the Pacific to take stock of how far we have come in realising the vision of the Programme of Action in the largest and most diverse region, encompassing the world’s two biggest populations – China and India – as well as some of the smallest.

Our flagship report for ICPD25 seeks to do so by examining the interplay between sustainable development, rights and changing demography and how this impacts the ability of governments, civil society and other stakeholders to achieve the vision set forth in Cairo and reaffirmed at the Midterm Review of the Asia Pacific Ministerial Declaration on Population and Development.

In clearly spelling out the demographic realities of Asia and the Pacific, the report also articulates the challenges and opportunities these present – ranging from realising the potential demographic dividend that predominantly youthful populations in some countries still offer, to the potential ‘longevity dividend’ that can be harnessed through fresh perspectives on low fertility and rapid population ageing, the new normal for so many other countries.

Fulfilling the promise of ICPD feeds directly into the ability of Asia and the Pacific – and our world as a whole – to achieve the 2030 Agenda for Sustainable Development. Quite simply, without achieving ICPD we won’t achieve the Sustainable Development Goals. This is a crucial message our report conveys to all concerned stakeholders who must work collectively if we are to ensure that ultimately no one is left behind.

As the custodian of the ICPD Programme of Action, we at UNFPA pledge to continue to support all our partners in this endeavour, now and in the years ahead.

A handwritten signature in blue ink, appearing to read 'Björn Andersson', with a long, sweeping horizontal line extending to the right.

Björn Andersson

Regional Director, Asia and the Pacific,
UNFPA, the United Nations Population Fund

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ACRONYMS

ASEAN	Association of Southeast Asian Nations
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
DHS	Demographic and Health Surveys
GDP	Gross Domestic Product
GNI	Gross National Income
ICPD	International Conference on Population and Development (Cairo, 1994)
ILO	International Labour Organization
MDGs	Millennium Development Goals
MMR	Maternal Mortality Ratio
NESDB	National Economic and Social Development Board
NGOs	Non-Governmental Organizations
OECD	Organisation for Economic Co-operation and Development
Lao PDR	Lao People's Democratic Republic
PPP	Purchasing Power Parity
Hong Kong SAR	Hong Kong Special Administrative Region of China
SDGs	Sustainable Development Goals
TFR	Total Fertility Rate
UIS	UNESCO Institute for Statistics
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UN-Habitat	United Nations Human Settlements Programme
WHO	World Health Organization



EXECUTIVE SUMMARY



POPULATION AND DEVELOPMENT TRENDS IN THE ASIA-PACIFIC REGION

The present report seeks to provide a clear summary of the relationship between population trends and aspects of economic, social and human development in the Asia-Pacific region, and to address policy issues arising from the current situation in different parts of the region. The basic premise is that demographic trends are a key element in any country's sustainable development, related to other aspects of development in complex ways, and ignored at our peril.

According to the United Nations medium population projection, the world's population will grow by 26 per cent between 2019 and 2050. Growth in the Asia-Pacific region will be much slower, about 13 per cent. It has been decelerating, from 2 per cent per annum in the 1970s to 0.9 per cent today, and likely further declining to 0.4 per cent by the 2030s.

The present report covers four sub-regions of Asia-Pacific: East Asia, South-East Asia, South Asia and Oceania. The analysis is restricted to the 26 countries and areas with populations exceeding 3 million. While a number of small countries are excluded, those included make up 99.9 per cent of the total population of Asia-Pacific.

East Asia and South Asia are two different worlds demographically. East Asia's population is expected to start contracting around 2029; South Asia's will still be growing at 1 per cent per annum at that time. South-East Asia is in between, with enormous differences between countries. Across Asia, life expectancy gained more than 30 years from 1950 to 2019, and is now above 73 years. The success in lowering mortality has been remarkable, and further gains are expected. Likewise, fertility fell by more than half in the short period between 1970 and 2000, and declines are continuing.

Over the past several decades, Asia-Pacific has experienced remarkable economic dynamism. Since 1980, the growth of gross national income (GNI) per capita has considerably exceeded that in the world as a whole. There are important feedback loops among economic development, human development and demographic trends. Economic development affects demographic trends in multiple ways. Demographic trends influence the speed of attaining human development objectives, particularly improving health conditions and raising educational attainment. Sharp declines in fertility rates lead in time to slower increases in the labour force, facilitating a shift of workers from lower to higher productivity sectors of the economy.

How do the four broad sub-regions of the Asia-Pacific rank in terms of indicators of development—per capita income, aspects of human development, and the transition to lower mortality and fertility levels? Although there are wide differences among countries within each region, East Asia leads on all of these, South-East Asia comes next and South Asia lags behind. The intercountry diversity in Oceania is so great that it is not possible to rank it meaningfully with the other sub-regions.

The demographic dividend

An important implication of the varying growth of different age groups in Asia-Pacific countries is what is generally referred to as the “demographic window of opportunity”. This is a period of variable duration following a decline in fertility, during which the proportion of dependants to the working-age population decreases, remains low and finally begins to rise as the share of elderly people increases. This “window of opportunity” can be turned into a “demographic dividend” if good use is made of the development opportunities it provides. Most countries in Asia-Pacific currently have an age structure conducive to reaping the benefits of the demographic dividend, though they are at widely differing stages in moving through this period. Countries where fertility declined earliest are now experiencing rising dependency ratios through ageing, but have benefited enormously from the demographic dividend. By some estimates, it has contributed to approximately one-third of East Asia’s economic growth miracle. Countries nearing replacement level fertility are mostly now benefiting from low and still declining dependency ratios. Countries where the total fertility rate (TFR) is still above 3 remain in the early stages of a decline in dependency ratios.

There is nothing automatic about benefiting from a demographic dividend. If burgeoning numbers of young workers entering the labour force find themselves unemployed, underemployed or in work not befitting their educational background, the dividend is unlikely to be realized. Indeed, the growth of large numbers of disaffected youth can become a nightmare rather than a dividend, endangering the economic, social and political stability on which sustained growth depends.

There are actually two demographic dividends, which can take place sequentially. The first is a direct and immediate consequence of the rise in the working-age share of the population. Provided that the additional job seekers find work, average standards of living will be higher. The effect will be felt at the household level and across economies at large. The second demographic dividend arises when the faster growth of the working-age population leads to greater savings in the short run, and higher investment in human and physical capital and investment per worker in the long run.

Feedback loops between demographic trends and the Sustainable Development Goals

There are many significant feedback loops between the global Sustainable Development Goals (SDGs) and future population trends, for example, the links between educational goals, reproductive health goals and demographic outcomes. For example, lowered fertility results in a reduction in the share of young dependants in the population, which contributes to lowering poverty. The crucial role of education can hardly be over-emphasized, as it is a key determinant of both mortality and fertility levels. On the whole, Asia-Pacific countries have seen significant improvements in education during their most marked periods of fertility decline. Relatively slow educational development has characterized countries where fertility decline has been more limited.

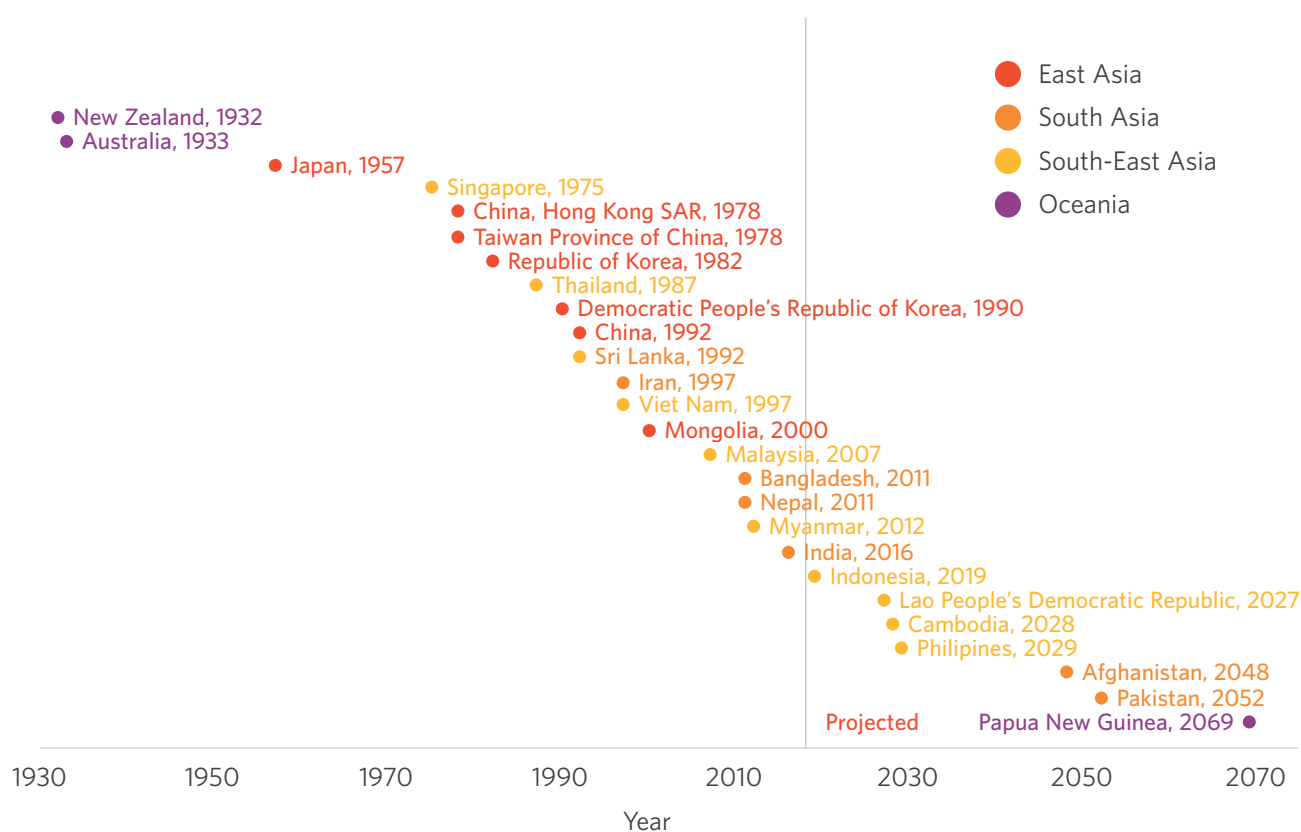
The SDGs have profound implications for future demographic trends. If they are largely realized, this could alter the course of global fertility and mortality, and result in considerably slower world population growth than implied by, say, the United Nations medium projection. If reached, the highly ambitious universal secondary education target, in combination with better access to family planning, could accelerate the reduction in fertility rates, leading to lower population growth rates, and a stronger and quicker demographic dividend.

Demographic megatrends

Present fertility levels in Asia-Pacific are dramatically different from those prevailing just two decades ago. In 1990-1995, eight countries had TFRs above 4; by 2015-2020, only one country (Afghanistan) did. At the beginning of 2019, 19 of the 26 countries and areas considered for this analysis have reached near-replacement fertility or below. Another major country (Indonesia) is expected to join this group by 2020 (Figure ES-1). Although the Asia-Pacific region encompasses countries at all stages of demographic transition, the “centre of gravity” of fertility levels has shifted dramatically from high fertility to near-replacement fertility, with significant numbers of countries at very low levels.

FIGURE ES-1:

Asia and the Pacific countries and areas: year in which total fertility rate first fell below 2.3



Source: United Nations Population Division, 2019.

In recent times, fertility has fallen close to replacement level even in some very low-income countries, including Bangladesh, India, Myanmar and Nepal. It is clear that many factors are important, beyond just economic development, narrowly measured. Scatter plots of the relationship between fertility levels and three variables—GNI per capita, the Human Development Index and the Gender Inequality Index—show that fertility has a closer relationship with human development than with per capita income.

The medium projection of the United Nations Population Division assumes continued declines in fertility in most Asia-Pacific countries, but increases in those with very low fertility. The countries with the highest fertility are expected to experience the greatest growth in population through 2050. The only exceptions are Australia and Malaysia, which are predicted to sustain considerable levels of net immigration. Japan's population is expected to contract over the whole period. China and Thailand will experience population declines beginning around 2030.

It is striking that even in countries where fertility has reached near-replacement levels, or even below-replacement levels, considerable population growth is expected before it ceases, often around mid-century. The reason is "population momentum"—the effect of a pyramidal-shaped age structure inherited from times of higher fertility.

Projected trends in key sub-populations: children, youth, working-age people and the elderly

The only countries where the number of children is expected to increase between 2019 and 2030 are those with the highest initial levels of fertility—notably Afghanistan, Pakistan, and Papua New Guinea. (Australia and Malaysia are exceptions due to net migration, along with Singapore, New Zealand and China, Hong Kong SAR). From 2030 to 2050, declines in child populations are expected throughout the Asia-Pacific region, except in Pakistan, Papua New

Guinea and Australia. The change from formerly very rapid increases in children to a cessation and indeed reversal of growth is of enormous significance for lowering dependency ratios, raising school enrolment, improving educational quality and increasing investment in human development.

Numbers of working-age people, between the ages of 15 and 64, are expected to increase rapidly in all countries with a starting level of fertility above 2, except Sri Lanka and Viet Nam. The increase will slow from 2030 to 2050 in some - notably, Bangladesh, Indonesia, Iran and Myanmar, as cohorts born in times of declining fertility make their way through working age. Countries with fertility far below the replacement level (China; China, Hong Kong SAR; Japan; the Republic of Korea; Singapore; Taiwan Province of China and Thailand) will experience a contraction of their working-age population, which is expected to become more marked from 2030 to 2050.

It is important to divide the working-age group into younger and older segments—for example, those aged 15 to 29 and those aged 30 to 64. Not only the growth but also the characteristics of younger and older segments are likely to differ greatly. The younger segment will actually contract in size from 2030 to 2050 in countries such as Bangladesh, Indonesia and Myanmar, whereas the older segment will continue to increase substantially. The slow overall rise will be the balance between contractions and rapid increases.

As for the older population—aged 65 and over—this is where the most dramatic changes of all will likely take place. Irrespective of the initial level of fertility, the older population is expected to grow more rapidly than the rest of the population over coming decades.

As the natural increase of populations slows, internal migration is playing an increasing role in shaping the population dynamics of most Asia-Pacific countries. Notably, migration patterns greatly affect disparate patterns of population ageing in different subnational regions and contribute to burgeoning urbanization.

Macrosocietal level impacts of demographic megatrends

Based on the point they have reached in the fertility transition, there are three groups of countries in the Asia-Pacific region:

- Group 1.** High-fertility countries (TFR above 2.5). This is a shrinking group, expected to be three fewer in 2030. They made up 9 per cent of the Asia-Pacific population in 2019, projected to have fallen to 7 per cent by 2030. If the high-fertility states of India are added, however, the share of this group in the total regional population would rise to about 21 per cent in 2019.
- Group 2.** Countries with near-replacement fertility (TFR between 1.7 and 2.5). This is a very large group, with 51 per cent of the Asia-Pacific population in 2019, and projected to rise to 87 per cent by 2030, because the Philippines is projected to move into this group from above and China from below.
- Group 3.** Countries with very low fertility (TFR below 1.7). A growing group, it accounted for 40 per cent of the Asia-Pacific population in 2019, without including the low-fertility states of India and provinces of Indonesia.

Group 1 countries are mainly located in South and South-East Asia, Group 2 countries in South and South-East Asia also, and Group 3 countries in East Asia, plus Singapore and Thailand in South-East Asia.

A massive population increase is expected in the remaining high-fertility countries, even assuming steady declines in fertility to lower levels. Much more manageable population growth is forecast in Group 2 countries, though whether that growth will become a decline in the last half of the century depends very much on fertility trends. For Group 3 countries currently experiencing ultra-low fertility, eventual sharp population declines are predicted.

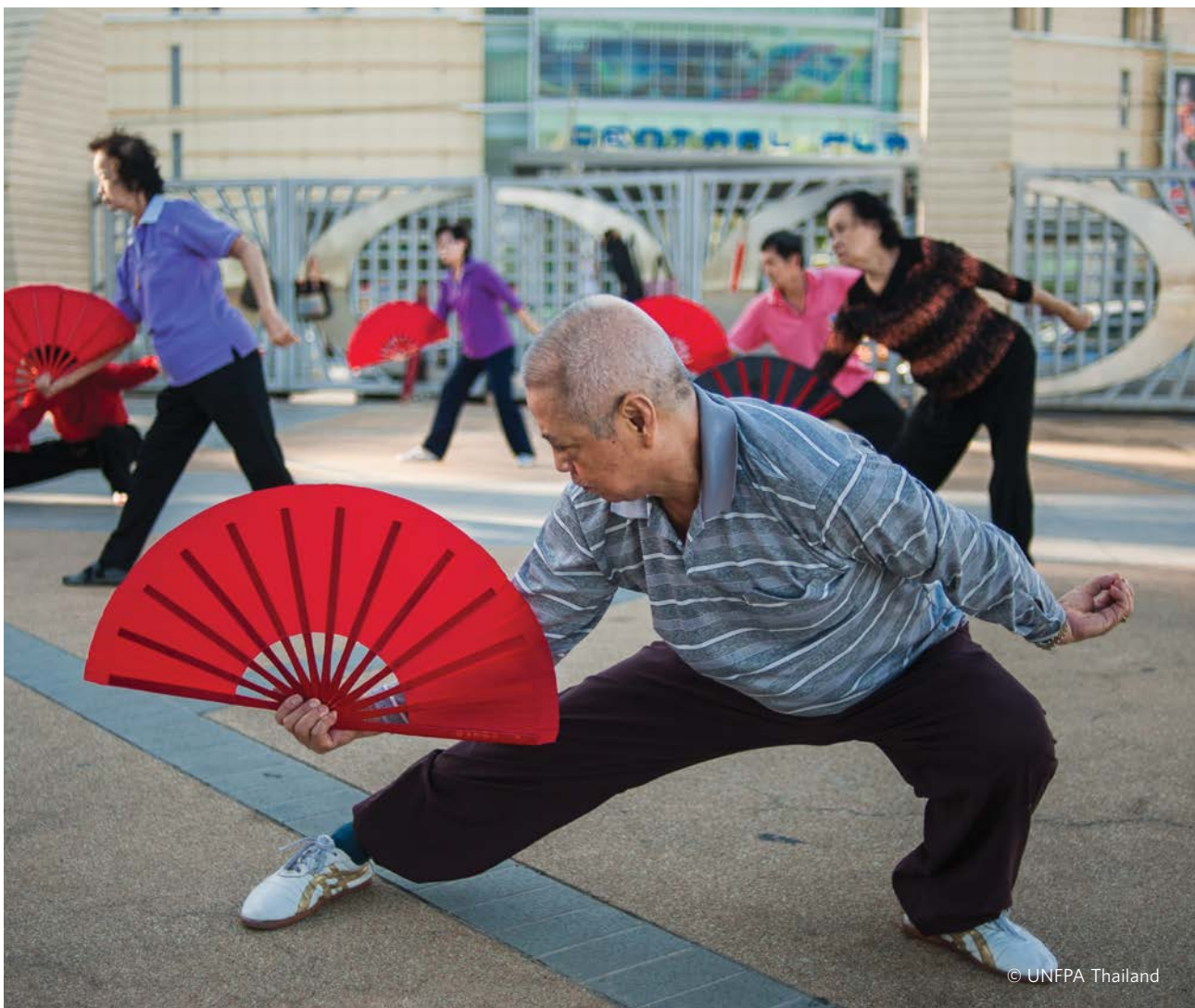
Rapid population ageing

Population ageing is an inevitable consequence of demographic transition. A major challenge is that demographic transition has been so rapid in many Asia-Pacific countries that many of them face population ageing at lower levels of socioeconomic development than was the case in developed Western countries, which aged over a longer period of time. Even so, there is a need to counter excessive alarm about ageing. For one thing, rising educational levels mean tomorrow's older population will be healthier and more productive than today's.

At the macro level, the clear implications of ageing are a rising demand for health services, growing requirements for long-term care, and increasing needs for income and social security. Options for assuring the income security of older persons, aside from family support, are gainful employment, social security benefits through an

individual's contribution to a superannuation or pension scheme, or welfare benefits provided by governments based on need. Unfortunately, large numbers of older persons in Asia (especially farmers, those in the urban informal sector and women whose main activity was raising a family) have never had the chance to make sustained payments into pension schemes.

Overall, pension coverage in Asia-Pacific, including non-contributory pensions, hovers around the global average of about 47 per cent, but falls sharply to just over 32 per cent if China is excluded. Developing countries in the region have made significant progress over the last decade, but in some countries, including Cambodia, Indonesia, Pakistan and Papua New Guinea, pension coverage is very low (less than 10 per cent of the older population). In some countries, the pensions available to many recipients are inadequate to cover basic living requirements.



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FAMILY AND MICROLEVEL IMPACTS OF DEMOGRAPHIC MEGATRENDS

Changing marriage and family patterns

Delay in marriage and family formation is increasing to a remarkable degree in East Asia and many South-East Asian countries, particularly among urban populations and better-educated women. An extended duration between puberty and entry into marriage, and the greater likelihood of meeting a potential spouse in longer periods of schooling and post-school employment make delayed and “self-choice” marriage more likely.

In South Asia, by contrast, marriage remains almost universal, early and overwhelmingly arranged by the extended family, though some changes are taking place. Child marriage remains prevalent in South Asian countries and to a lesser extent in some South-East Asian countries. Child marriage has its own issues, but so do delayed marriage and non-marriage. Many countries in the region face one of these issues; some face all of them simultaneously.

Non-marriage in East Asian countries is not dispersed evenly throughout society, but concentrated in two groups with problematic marriage prospects: men with little education and women with tertiary education. In these societies, delayed and non-marriage are important contributors to very low fertility, and unless and until marriage prevalence increases, it is unlikely that fertility will rise very much. An alternative would be more childbearing outside marriage.

Divorce is increasing in many countries; it is more prevalent among the less educated. Even where it is rare (for example, in most South Asian countries), this signifies not the prevalence of harmonious marriages but rather the cultural barriers to divorce.

Family as refuge or as a place of risk for women?

Too rosy a view of the traditional family is unwise. Gender-based violence, for example, is most commonly experienced within families. A gross violation of women’s human rights, it causes a range of financial and health issues for individuals, and imposes significant economic and social costs on society. Marital violence is extremely common in South Asia, where the prevalence of intimate partner violence is 41.7 per cent of ever-partnered

women, far higher than in East Asia (16.3 per cent) or South-East Asia (28 per cent). There is evidence, though, that in India at least, the incidence of spousal violence against women is decreasing. Domestic violence is highly prevalent in Pacific Island countries.

Studies in Bangladesh, Pakistan and elsewhere show a tendency for spousal violence to be more prevalent among poorer and less-educated groups. But it takes place across the whole socioeconomic spectrum. In a broader Asia-Pacific study, logistic regression analysis showed that, while low education and poverty had some independent effect on the incidence of domestic violence, factors such as the experience of childhood emotional abuse or neglect, having witnessed abuse of their mother and holding inegalitarian gender norms have a stronger independent effect on men’s likelihood of engaging in intimate partner violence.

Gender inequalities

A number of frequently used indicators of gender inequality tend to show a worse situation in South Asia than in other parts of the region, and in poorer than in richer countries.

Patriarchal social systems characterizing East and South Asia in particular generate son preference, which in turn is reflected in distorted sex ratios at birth and early childhood, and a large surplus of males in countries such as China, India and Viet Nam, and, more recently, Nepal. These distorted sex ratios have serious long-term social and familial consequences, and are being treated as important issues by policymakers.

Child marriage

The proportion of girls still marrying as children (below age 18) remains very high in Afghanistan, Bangladesh, India (especially the northern and eastern states), Lao People’s Democratic Republic and Nepal. There are at least five key problems with early, parent-arranged marriage. First, it is a violation of human rights. Second, early marriage is likely to result in early age at first childbirth, which can have adverse health consequences for both mother and child. Third, early marriage is typically a barrier to education and other opportunities that follow.

Fourth, women who marry very young, typically to a much older husband, are likely to have less status, agency and autonomy within the household. Fifth, and related to the fourth, there is a significant correlation between child marriage and violence.

Throughout the region, child marriage tends to be concentrated in poorer, less-educated populations, and can be expected to decrease with rising incomes and educational levels. The need to modify community attitudes is clear, however, particularly where child marriage is accepted as an appropriate way to manage girls' sexuality and fertility, and to avoid the possibility of shame falling on the family if girls' behaviour is seen to violate community norms.

The future of delayed marriage and family life

In many East and South-East Asian countries, there is an emphasis on quickly having a child after marriage. The rise in delayed marriage could thus in many cases be motivated by a reluctance to start families, given concerns about the increasing costs of childrearing, both the direct financial costs and the opportunity costs of women's interrupted career development; societal pressure on parents to produce successful children; and the difficulty of changing long-established gender roles within the household that place educated women interested in pursuing a career in an invidious position.



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The set of roles facing women in countries such as Japan and the Republic of Korea has been summarized in the concept of a “marriage package”: the expectation that women will take the key role in childrearing, housework and household management, and frequently, care of parents-in-law as they age, even if women work full-time. This discouraging picture, in particular in East Asian societies, is also common in South-East Asian countries such as Malaysia, Myanmar, Singapore and Thailand. As long as gender norms continue to place full responsibility for unpaid care work on women, and until there is greater state and family support for women’s dual role, women who are educated and who can support themselves will tend to delay marriage or even opt out altogether.

It is possible, but not certain, that other countries in South-East Asia and South Asia will follow the East Asian example of ultra-low fertility and massive retreat from marriage. As economic development proceeds in these societies, many shared elements are likely to push in similar directions: consumerism and rising expectations, the high financial and opportunity costs of children, insecurity of job tenure, competition in educating children and gender inequalities within the household.

Delayed marriage, and the tradition throughout Asia of children living at home until marriage, is resulting in a lengthening of the period in which young people remain at home, and issues about the roles in families and society of those who delay marriage or never marry. Another issue resulting from the delay in marriage is the extended period post-puberty in which intimate relationships are likely to develop, resulting in the need for effective sex education and contraception to be available to the unmarried. Because of conservative attitudes, official family planning programmes in the region typically have difficulty coming to terms with the need for counselling and services to be provided to unmarried youth in confidential, non-confrontational settings.

While in many parts of Asia-Pacific traditions and attitudes related to marriage, family relationships and gender roles appear inflexible, it may be unwise to underestimate the potential for rapid evolution. Traditions are being tested by the sheer pace of change in many aspects of life. Additional factors facilitating the transfer of new ideas comprise the ubiquity of the Internet, mobile phones and social media. Very rapid shifts in attitudes and behaviour are very real possibilities.

Ageing and the family

In Asian countries, older people continue to live with their children, though shares have declined significantly in China, Japan and the Republic of Korea. This probably reflects the tendency for older persons to prefer independent living in societies where they have sufficient economic resources. Among older persons, women are more at risk of poverty, for a number of reasons. For income, they tend to depend more than older men on social sources, spouses or relatives, or public provision.

In many parts of Asia, traditional family support systems for older persons are already under considerable strain, and this will increase as the ratio of older persons climbs sharply. Trends in ageing can be expected to affect family and social relationships in fundamental ways. The potential for inter-generational conflict cannot be ignored, nor can the fact that older people can be vulnerable to deprivation, exploitation and abuse in their own homes as well as in institutional facilities.

Will the old be neglected when children migrate to cities, leaving them behind? This depends on varying circumstances. Needed support can be broadly divided into three categories: financial, emotional and physical. Financial support can still be provided by absent children. Emotional support ideally requires face-to-face interaction, but technological advances and the widespread availability of cell phones have greatly enhanced the ability of migrant children to keep in touch with their older parents. It is mainly routine personal care that they are unable to supply. It has been shown that network family arrangements (living near a child rather than necessarily co-residing) are crucial for intergenerational support. In Myanmar, Thailand and Viet Nam, at least, only a small proportion of old people do not have a child living relatively close by. Traditional intrahousehold support systems are still able to function to some extent in these circumstances, although formal social protection systems need to be developed and strengthened.

Looking further ahead, the rapidly rising proportion of men and women in many East and South-East Asian countries who do not marry or have children foreshadows a situation where increasing numbers of older persons will not have any children to provide support.

Policy implications

Most Asia-Pacific countries are presently in the fortunate position of having more workers, and fewer older and younger persons dependent upon them, than at any point in history. This provides great opportunities for accelerated economic development, built on the foundation of strong human development.

The demographic dividend, and appropriate policies to take advantage of it, have helped Asia-Pacific countries to achieve considerable success in moving towards two of the key development goals—poverty reduction and the expansion of education, including for girls—that are central to the goals of the International Conference on Population and Development (ICPD) Programme of Action, the Millennium Development Goals and more recently the SDGs.

Is there a key policy priority for all Asia-Pacific countries? Certainly, all countries need to be working to raise the human capabilities of their populations, though specific policy issues will differ widely according to demographic and economic situations. Likewise, all governments need to manage their economies efficiently, minimize corruption, stress the generation of decent jobs, and work towards fully unleashing the potential of women in the workforce, and in political and economic decision-making. All countries face issues related to environmental sustainability, ageing (though the immediacy of ageing issues differs), and migration and urbanization. Finally, the emphasis in the 2030 Agenda on Sustainable Development on the most vulnerable and marginalized provides a challenge for the most economically advanced and the poorest countries.

A number of key differences in policy issues also exist, linked to fertility levels in the three groups of countries.

Group 1 countries (high fertility, TFR above 2.5)

For these high-fertility countries, and also for the high-fertility Indian states, key population policy should include the following: first, countering child marriage through all available means; second, keeping children (especially girls) longer in school, focusing particularly on disadvantaged communities; and third, improving family planning services to meet more of the unmet need for contraception. All of these policies are needed for multiple reasons and all support basic human rights. Cost-benefit analysis that considers not only economic consequences but also broader well-being, social cohesion and meeting the needs of the most disadvantaged would show very substantial benefits.

The other key policy challenges for this group of countries include taking advantage of the demographic dividend, conducting initial planning for an ageing population and improving the living conditions of poorer populations in rapidly growing cities.

Group 2 countries (near-replacement level fertility, TFR between 1.7 and 2.5)

Fertility levels and trends in these countries result in a high share of working-age people, which is conducive to social and economic development. Government policies should ensure they do not conflict with the principle, enunciated in the ICPD, of individuals' rights to choose how many children to have and when to have them. It is not difficult to think of appropriate policies that meet this proviso.

To take maximum advantage of the first demographic dividend, education and training must be given very high priority, so that the still-large cohorts moving into the working age are equipped to perform efficiently in productive sectors of the economy. Sound economic planning will be needed to ensure employment opportunities exist for better-trained people entering the workforce.

Group 2 countries will have slightly fewer school-age children (aged 5 to 17) in 2030 than in 2015. This provides great potential for both raising



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enrolment ratios and improving the quality of education, though the remaining tasks should not be underestimated. Secondary and higher education, where the focus of expansion now lies, are much more expensive per student than primary education. The challenge of narrowing the socioeconomic gap in educational attainment is enormous. Quality of education is often terrible in the schools serving the disadvantaged.

Child marriage is deeply entrenched in many Group 2 countries, notably Bangladesh, India and Nepal, and, to a lesser extent, in Indonesia and Iran. Practices need to be brought in line with accepted human rights standards to enable those marrying to have a say in their choice of partner. The key issue is with arranged marriages of children—those below the age of 18—in which the child has no say. Ineffective enforcement makes the legal minimum ages for marriage in countries such as Bangladesh, India, Indonesia and Nepal largely meaningless.

Other key policy challenges for this group of countries include improving access to needed reproductive health and family planning services, effectively channelling the aspirations of the growing middle class and developing effective strategies on ageing. All of these require policies that clearly and comprehensively incorporate gender dimensions.

Group 3 countries (low fertility, TFR below 1.7)

These countries are mostly experiencing a contracting workforce, and face shrinking populations. The key issues seen by most governments relate to their wish to raise fertility to forestall an accelerating decline of the labour force and total population, and the associated extreme ageing. There are many possibilities for dealing with these issues, though some of them raise dilemmas. For example, governments want women to be more actively involved in the workforce, but at the same time, want them to form families and have more children. Support for women's caregiving role is key if governments want to begin reconciling these objectives.

The main aim of pronatalist policies in low-fertility Asian countries is to support families and work-life balance, particularly for women who seek to balance having children with pursuing professional careers (or, for lower-income groups, more often with the need to supplement the

husband's earnings). There is little evidence that pronatalist policies have had a major impact in raising fertility in Asian countries. The problem is that without basic changes in norms related to family and gender matters, the dilemmas facing educated women in the region will remain largely unaddressed. Family policy needs to focus on more than the issue of the fertility rate. In the context of the 2030 Agenda objective of inclusive development, it needs to foster environments where families can live happily.

Governments of Group 3 countries will have to deal with the shares of elderly people almost trebling, in some cases, by 2050 (e.g., in China, the Republic of Korea, Singapore, Taiwan Province of China and Thailand). Such rapid growth of this population group at relatively low income levels in countries such as China and Thailand will provide an enormous challenge.

Building more inclusive societies and "leaving nobody behind"

The SDGs are based on noble ideas of building societies that are more peaceful and democratic, more inclusive and less violent. This is highly challenging for policy makers. Ways need to be found to ensure that social institutions more effectively support people's more altruistic inclinations and deter their inclinations towards negative, unfair and anti-social motivations and actions.

The interaction of demographic and other variables in achieving inclusive societies can be considered through a focus on interactions between poverty, poor educational outcomes, child marriage and high fertility. There is a very strong four-way association between these. Children from the poorest 20 per cent of households are far more likely to be out of school than their wealthier peers. Early marriage is more common for girls who do not go to school, or drop out early, and is likely to result in early childbearing. Considering that unmet need for family planning is also typically greater among the poorest 20 per cent of households, the "vicious circle" of poverty, linked to low educational attainment among poor parents, transmitted to their children through low educational enrolment rates, and exacerbated by high fertility, much of it unwanted, is striking. It is associations such as these that provide a clear challenge to governments motivated to build more inclusive societies and leave no one behind.





POPULATION AND SUSTAINABLE DEVELOPMENT: THE BROAD PICTURE

The world faces continuing, though slowing, population growth of about 1.1 per cent per year. In the Asia and the Pacific region, growth is a little slower, just under 1 per cent per year. But there are enormous differences among parts of the region. Average annual growth is about 0.4 per cent in East Asia, 1.1 per cent in South-East Asia, 1.2 per cent in South Asia and 1.4 per cent in Oceania (United Nations Population Division, 2019).

According to the United Nations medium population projection (*ibid.*), the world's population will rise from 7.71 billion in 2019 to 9.74 billion in 2050, an increase of 2.02 billion or 26 per cent. Massive growth is projected for sub-Saharan Africa, about 99 per cent, accounting for almost exactly half of the global total. Growth in Asia and the Pacific will be much slower at just over 13 per cent.

Asia and the Pacific was home to 4.29 billion people in 2019 or 56 per cent of the world's population. The number is expected to increase to about 4.86 billion by 2050. But the proportion of the world's population will decline from 56 per cent in 2019 to about 50 per cent by 2050.

The present report covers 26 countries and areas with populations exceeding 3 million, most of which are concentrated in East Asia, South-East Asia and South Asia. Collectively, they make up 99.9 per cent of the region's total population.

The report seeks to examine important linkages between demographic trends and sustainable development in Asia and the Pacific, focusing on the 2030 Agenda for Sustainable Development's overarching theme of "no one left behind". This provides a particular focus on the most vulnerable and marginalized people, which is also in keeping with the spirit of the International Conference on Population and Development (ICPD) Programme of Action, according to which the ultimate objective of all development planning should be improved human well-being grounded in the realization of people's rights and choices.

Economic growth and human development and their demographic underpinnings

Over the past several decades, Asia and the Pacific has experienced slowing population growth and economic dynamism. The success of the “tiger” economies from the 1960s onwards, followed by China’s transformation from the late 1970s and India’s economic liberalization a little more than a decade later, placed some parts of the region at the forefront of world economic development. In parallel, an equally striking demographic transition took place.

At the same time, major differences persist across countries, and in most cases, across groups of people within them. The differences were less marked in the 1950s, when most people in most Asian countries were very poor, and had relatively high mortality rates, high fertility rates and low levels of education. Since then, East Asia has moved well ahead of the other parts of the region in economic and social development. Its performance in raising the educational attainment of both women and men has been outstanding, and it has reached very low fertility levels. Progress in South-East Asian countries has been more varied, but overall economic growth has been significant. Fertility has fallen to around replacement level. South Asia has not performed as well in terms of either human development or economic growth. Between 1990 and 2017, the gross national income (GNI) per capita (expressed in purchasing power parity (PPP) or current international \$) has increased by 5.1 times in South Asia, compared with 10.5 times in what the World Bank refers to as East Asia-Pacific excluding high income countries.¹ But though fertility rates in South Asia declined more slowly than in East and South-East Asia up to the late 1980s, since then declines have been more rapid in South Asia, and by the late 2010s, overall fertility levels in South Asia were only slightly higher than in South-East Asia.

How have population patterns interacted with human development and economic growth trends, and how will these interactions play out in the future? This report will discuss these issues in detail. By way of introduction, it is important to highlight some key interactions.

Demographic trends strongly influence development. In the 1960s and 1970s, the Asia and the Pacific region experienced very rapid population growth, resulting from a wide gap between falling death rates and still-high birth rates. This led to the adoption of family planning programmes in many countries (Robinson and Ross, 2007). The development literature at the time emphasized that in economies with an unlimited supply of labour, the task of moving the economy’s centre of gravity away from the low-productivity sector (especially agriculture) into more productive sectors was crucial (Lewis, 1954; Fei and Ranis, 1964). Slowing the rate of increase in the labour force, as a lagged effect of declines in fertility, was seen as facilitating this movement.

The differential growth of various age groups—broadly, working-age people, and younger and older people—has a number of implications. An important one is the “demographic window of opportunity”, a period of variable duration but normally lasting more than half a century following a decline in fertility. During this time, the proportion of dependants to the working-age population decreases, remains low and finally begins to rise as the share of elderly increases. This “window of opportunity” can be turned into a “demographic dividend” if good use is made of the development opportunities it provides, and people as a whole are able to realize their reproductive rights and choices, as discussed in more detail later in this report.

Asia and the Pacific countries today are at different stages of benefiting from the demographic dividend. Countries where fertility declined earliest are experiencing rising dependency ratios as large cohorts pass from working age to old age, with relatively few younger people to replace them, thus increasing the share of older people in the population. Countries nearing replacement level fertility are mostly now benefiting from low and still declining dependency ratios. Countries where the total fertility rate (TFR) is still above 3 are in the early stages of a decline in dependency ratios.

Countries that take maximum advantage of the demographic dividend can better position themselves to support an ageing population. Japan and the Republic of Korea have succeeded in this respect. Further, the potential contribution

¹ These estimates are derived from the World Bank’s World Development Indicators, based on constant 2010 US dollars. The developing East Asia-Pacific region for the World Bank includes East Asia, South-East Asia and the Pacific, excluding Australia, the Democratic People’s Republic of Korea, Japan, New Zealand and the Republic of Korea.

of the demographic dividend to economic growth is very substantial. Regression studies and growth accounting exercises for East Asian countries (Bloom and Williamson 1998, Bloom and Finlay 2009, Mason 2001) find that approximately one-third of East Asia's growth—or 2 percentage points per year—can be explained by favourable demographic shifts that followed a decline in fertility.

There are actually two demographic dividends, which take place sequentially. The first is a direct consequence of the rise in the working-age share of the population. It is largely a consequence of a growing labour force supporting fewer children. Provided that additional job seekers find decent work (a very major proviso, not always met), average standards of living will be higher. The effect will be felt at the household level as well as at the economy-wide level. The second demographic dividend arises when faster growth of the working-age population leads to greater savings in the short run, and higher investment in human and physical capital and investment per worker in the long run (Ashraf et al., 2013; Mason et al., 2016).

While dividends can be significant, there is also the risk that benefits can be largely frittered away: with the first dividend by giving insufficient emphasis to investment in people's rights to be healthy and educated, and to sound macroeconomic policy emphasizing the creation of decent work; and with the second (among

other issues) by failing to maintain the pace of physical and human capital accumulation needed to spur labour productivity in countries with rapidly shrinking working-age populations.

Economic development also affects demographic trends. There are feedback loops between increases in income at both the national and household level, and the capacity to improve health conditions and keep children longer in school. Even what are often seen as consumption expenditures by households—improvements in the quality of housing, buying a motorbike or boat—can in turn feed into improvements in health and provide the means of getting children to school. These improvements in human development are, in turn, closely linked to fertility trends. Where women succeed in realizing their right to education and have an ability to make informed choices, for instance, fertility rates tend to decline (Lutz and Skirbekk, 2014).

Demographic trends influence the speed at which human development objectives are obtained, particularly improved health conditions and higher educational achievement. From both a macroeconomic and a household perspective, it is easier to improve health and raise education levels when fewer people need services, and there are fewer children per household. In turn, improved health and education feed back into demographic trends through lower mortality and fertility.



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TABLE 1:

Some basic development indicators, Asia and the Pacific countries and areas

Region and country	Gross national income (GNI) per capita (2017, PPP)	Human development index 2018**	Gender equity index 2012**	Total fertility rate (TFR) 2015-2020	Expectation of life at birth 2015-2020	Percentage of population living below income poverty line	Percentage of population in multidimensional poverty
EAST ASIA				1.65	77.8		
China	16,800	0.752	0.64	1.69	76.6	1.4	4.0
China, Hong Kong SAR	64,240	0.933	n.a.	1.33	84.6	*	*
Taiwan Province of China	n.a.	n.a.	n.a.	1.15	80.2	*	*
DPR Korea	n.a.	n.a.	n.a.	1.91	72.0	n.a.	n.a.
Mongolia	11,120	0.741	0.81	2.90	69.6	0.5	10.2
Japan	43,540	0.909	0.57	1.37	84.4	*	*
Republic of Korea	38,830	0.903	0.59	1.11	82.8	*	*
SOUTHEAST ASIA				2.22	72.5		
Cambodia	3,770	0.582	0.55	2.52	69.4	n.a.	34.9
Indonesia	11,910	0.694	0.62	2.32	71.4	6.5	7.1
Lao PDR	6,670	0.601	0.56	2.70	67.4	22.7	40.5
Malaysia	28,720	0.802	0.56	2.01	75.9	*	*
Myanmar	6,030	0.578	n.a.	2.17	66.8	6.4	38.3
Philippines	10,050	0.699	0.76	2.58	71.0	8.3	7.4
Singapore	90,760	0.932	0.69	1.21	83.4	*	*
Thailand	17,080	0.755	0.71	1.53	76.8	0.0	0.8
Viet Nam	6,460	0.694	0.70	2.06	75.3	2.6	5.0
SOUTH ASIA				2.40	69.4		
Afghanistan	1,990	0.498	0.15	4.56	64.3	n.a.	56.1
Bangladesh	4,040	0.608	0.55	2.05	72.2	14.8	41.1
India	6,950	0.640	0.37	2.24	69.3	21.2	27.5
Iran	20,920	0.798	0.51	2.15	76.4	*	*
Nepal	2,730	0.574	0.47	1.93	70.3	15.0	35.3
Pakistan	5,840	0.562	0.29	3.55	67.0	6.1	43.9
Sri Lanka	12,520	0.770	0.62	2.21	76.7	n.a.	n.a.
OCEANIA							
Australia	48,050	0.939	0.80	1.83	83.2	*	*
New Zealand	39,350	0.917	0.82	1.90	82.1	*	*
Papua New Guinea	4,040	0.544	0.60	3.59	64.2	n.a.	n.a.

*Not reported but extremely low

** Note that higher values for the Human Development Index and the Gender Equity Index indicate higher human development, and greater gender equity, respectively.

Sources: Gross national income, per capita: World Bank, International Comparison Program database.

Human development index: UNDP, 2018 Human Development Report, Statistical Annex, Statistical Table 1.

Gender Equity Index: Social Watch (<http://socialwatch.org>).

TFR and expectation of life at birth: United Nations Population Division, 2019, custom data acquired via website.

Percentage of population living below the income poverty line: UNDP, PPP \$1.90 a day, latest available year in the 2006-2016 period.

Percentage of population in multidimensional poverty: UNDP, 2018 Human Development Report, Statistical Annex, Statistical Table 6.



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The state of development in three sub-regions of Asia and the Pacific

Among Asia and the Pacific countries, basic indicators of development vary, as shown in Table 1. East Asia is in general ahead, followed by South-East Asia and South Asia. Across the region as a whole, however, there are wide differences among countries. South-East Asia in particular shows an enormous range between Singapore, one of the world's wealthiest countries; upper middle-income countries (Malaysia and Thailand); and several lower middle-income countries (Indonesia, the Philippines and Viet Nam), including poorer countries (Cambodia, Lao People's Democratic Republic and Myanmar). Rankings in terms of human development, which depends on economic advances as well as investments in health and education, tend to mirror economic differences, but far from perfectly. Bangladesh, Sri Lanka and Viet Nam, which have made consistent investments in health and education services, rank more highly on human development indices than on measures of income alone.

The ranking of countries in terms of proportions of people living in poverty bears a fairly close relationship to their ranking in terms of per capita income. Most major Asia and the Pacific countries have shown substantial declines in

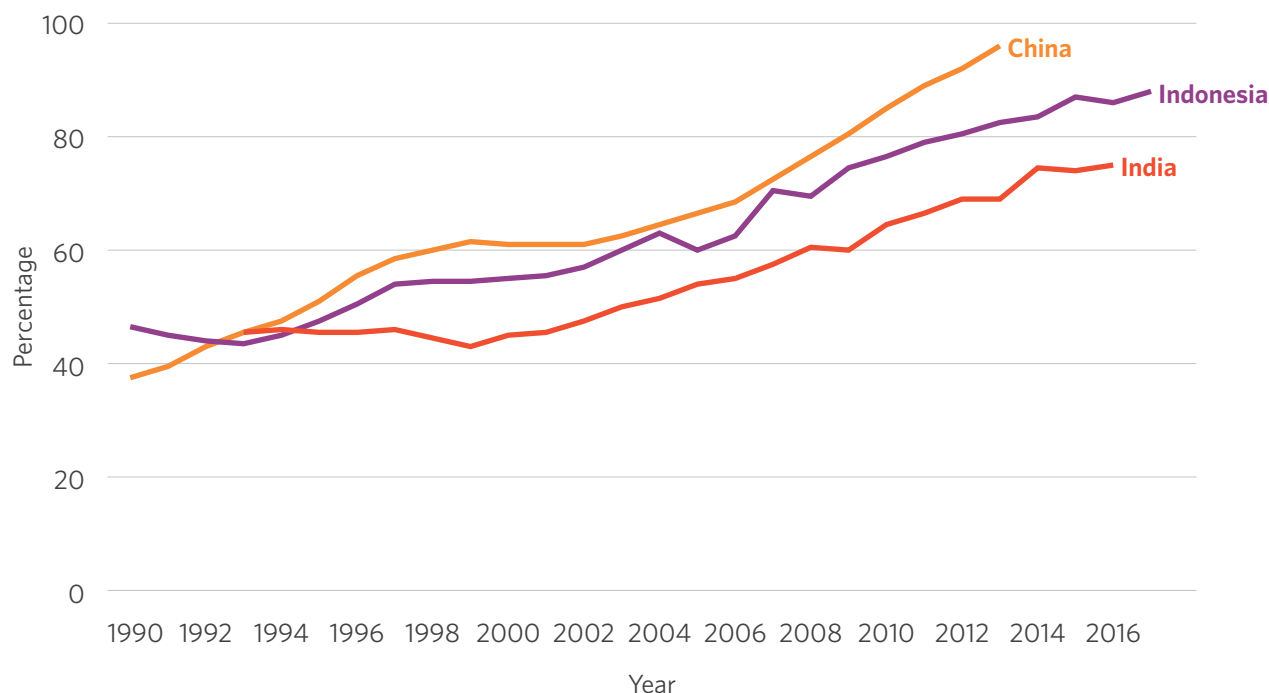
proportions living in poverty since around 1980, a trend consistent with their generally substantial overall economic growth. Using the poverty headcount measure of \$1.90 per day (purchasing power parity or PPP) of the World Bank, poverty levels in Bangladesh, India, Lao People's Democratic Republic and Nepal are higher than in other countries of the region. Poverty rates below 10 per cent are recorded in China, Mongolia, Philippines, Indonesia, Pakistan, Myanmar, Thailand and Viet Nam. The rate is below 5 per cent in China, Mongolia, and Viet Nam, and only just above zero in Thailand, although with issues around the comparability of data.

The three most populous countries of the region (China, India and Indonesia) contain 40 per cent of the world's population and 71 per cent of the population of Asia and the Pacific. China has 86 per cent of East Asia's population, India 71 per cent of South Asia's and Indonesia 41 per cent of South-East Asia's. A few brief comparisons of these countries will be useful in setting the scene.

Since 1980, China has sustained an average increase in GNI per capita of 9.1 per cent, India of 4.8 per cent and Indonesia of 3.7 per cent. While China's growth was remarkably rapid, the growth in India and Indonesia, too, was rapid enough to enable substantial reductions in poverty.

FIGURE 1:

Trends in gross educational enrolment ratios at secondary school level, China, Indonesia and India, 1990-2017



Source: Derived from the UNESCO UIS statistical database, see: data.uis.unesco.org.

The latest figures, for 2018, show China having attained a gross domestic product (GDP) per capita (in PPP terms) of \$18,120, Indonesia of \$13,176 and India of \$7,795.

The performance of these countries in terms of gross educational enrolment ratios at the secondary school level mirrors their relative ranking in terms of per capita GDP (see Figure 1). China has made remarkable progress in raising the ratio from less than 40 per cent in 1990 to very close to 100 per cent in 2013. Indonesia also made considerable progress, reaching a ratio of over 88 per cent in 2017, but India lagged by comparison. In terms of relative enrolments of males and females, though, India made good progress. Around 1990, females were only 36 per cent of secondary school students in India, 41 per cent in China and 45 per cent in Indonesia. By 2013, all three countries had reached a figure of around 47 to 48 per cent.

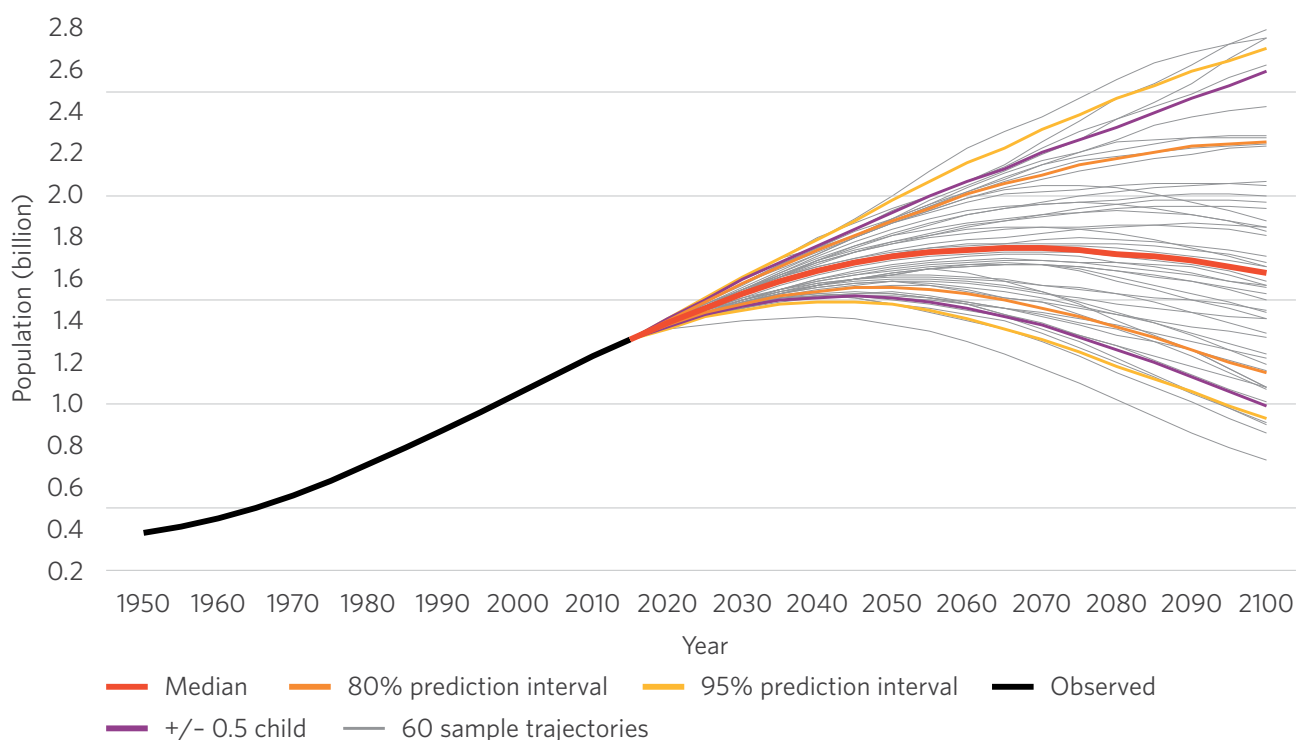
One key feature of development in Asia and the Pacific has been the rapid expansion of the middle class. Definitions of the middle class vary, but a 2010 report—defining it as those

with consumption expenditures of \$2 to \$20 per person per day in 2005 PPP dollars—found that in developing Asian countries, the middle class rose from 21 per cent of the population in 1990 to 56 per cent by 2008, a remarkable increase (Asian Development Bank, 2010). The numbers and proportions are much larger in China than in India, though growing rapidly in both countries. Countries with the largest middle classes as a population share are Malaysia and Thailand. It has been estimated that 88 per cent of the next billion entrants to the world's middle class will live in Asia, predominantly in China and India (Kharas, 2017).

The definition of the lower middle class including people consuming \$2 per day is very generous. Those consuming \$2 to \$4 per person per day are highly vulnerable to slipping back into poverty. This vulnerable group makes up more than half of the middle class in China and 75 per cent in South Asia. The Asian middle class has significantly lower income and spending relative to the Western middle class, although the growth of its expenditures has been remarkable, especially in China.

FIGURE 2:

United Nations' probabilistic projection of India's population



Source: United Nations, Department of Economic and Social Affairs, Population Division (2019) *World Population Prospects: The 2019 Revision*. <http://esa.un.org/undp/wpp/>

Population projections and their interpretation

The population projections used in this report are the medium projections from 2019 developed by the United Nations Population Division. Three points need to be kept in mind. The first is that the medium projection is just one of many that could be used; “probabilistic” population projections show a rapid divergence in total populations, and especially child and youth populations over time, depending on the assumptions used. See Figure 2 for India, as an example; projections for other countries show a similar “fanning out” of population size the further we look into the future. Of course, the “fanning out” is not as pronounced for the older population as it is for the child population, as differences in fertility levels do not begin to affect the size of the older population for many decades. On the positive side, we can project with considerable certainty the number of people who will be living until 2030, because most have been born already.

The United Nations' high and low projections, which in a deterministic way assume a difference in fertility of 0.5, a child more or less than in the medium projection, show a similar rapid divergence. The further ahead we look in time, the less certain we can be of the likely trend in population size and components. For the Asia and the Pacific region, from a 2019 starting point of nearly 4.3 billion, the high projection shows a 23 per cent increase by 2050, while the medium projection shows a 13 per cent increase and the low projection a 5 per cent increase. Further ahead in time, the range of uncertainty widens dramatically. By 2100, the high projection shows a 48 per cent increase over the 2019 figure, the medium projection a 0.8 per cent decline and the low projection a 32 per cent decline. Because of the increasing uncertainty of population trends beyond 2050, this report will concentrate mainly on trends up to that point.

A second point relates to uncertainty about the correct estimates of baseline populations and demographic variables. Though this is more

serious for African than for Asia and the Pacific countries, it is a problem for countries such as Afghanistan and Pakistan (the latter has recently had its first population census since 1998). For China, the United Nations Population Division has settled on a TFR figure of 1.62 for the 2005-2010 period and 1.64 for the 2010-2015 period. This is a substantial downward revision of the values in previous projections (though an upward revision of the value used in the 2017 *World Population Prospects*), but may still be on the high side. After rigorous analysis of available data, a leading Chinese demographer concluded that "... the real TFR of China in 2010 should be no more than 1.5, and the average TFR in the decade from 2000 to 2010 should be even lower" (Guo, 2016: 110).

A third issue is that there is a dearth of theory to guide assumptions about the future trajectory of populations in countries experiencing ultra-low fertility. An upturn in European fertility levels after their nadir in the decade following the mid-1990s and analysis of tempo effects² (Sobotka, 2017) underlie a widespread assumption, accepted in the United Nations projections, that completed family size will nowhere fall as low as the TFR did in some periods. As a consequence, period TFRs will increase. So far, the tempo effect is less pronounced in East Asian countries, however (Frejka, Sardon and Jones, 2010).

Demographic megatrends and the 2030 Agenda

Demographic megatrends from now until 2030 and beyond to 2050 have important implications for development. This report will focus on some of these, with an emphasis on exclusion and inequalities at the macro and micro levels. It will give particular attention to discussing how demographic trends are linked with attaining many of the global Sustainable Development Goals (SDGs), and with many of the synergies between various goals.

For a considerable time now, the ICPD Programme of Action has served as the

overarching framework for the activities of UNFPA and other agencies concerned with population issues. The 2030 Agenda and the Programme of Action converge across several goals, targets and indicators, including a commitment to universal access to sexual and reproductive health and reproductive rights as well as promotion of gender equality and the empowerment of women. The 2030 Agenda's broad framework of "people, planet and prosperity" is in a sense all-encompassing, although it has been argued that it does not give sufficient attention to integrating the impact of demographic change on sustainable development (Bongaarts, 2016; Herrmann, 2015: 15). Changes in the way individuals are integrated into family and social groups are also arguably underemphasized in the 2030 Agenda.

The 2030 Agenda sets out 17 SDGs and 169 targets. This is an ambitious set of objectives with complex interactions (Nilsson et al., 2016; Akhtar, 2015). Unlike the earlier Millennium Development Goals (MDGs), the SDGs apply to all countries of the world. Governments appear to be taking them very seriously, signifying a historically unprecedented effort that could change the course of global development.

The 2030 Agenda's overarching theme of "no one left behind" provides a particular focus on the most vulnerable and marginalized, which is also in keeping with the spirit of the ICPD Programme of Action. This provides an enormous challenge, however. Recent analyses (e.g., Picketty, 2014; Stiglitz, 2015; United Nations Department of Economic and Social Affairs, 2013) demonstrate just how unbalanced income distribution has become within many countries, even though inequality across countries seems to be slightly decreasing (Milanovic, 2016). There are many paradoxes here. For example, in both China and India, the incidence of poverty has definitely decreased, but inequality has widened. The same is true for Bangladesh, Indonesia and Viet Nam. With many people being left behind, it will be challenging to bring them into more inclusive development.

² Tempo effects are when the timing of childbearing over the lifecycle changes, for example, as a result of steady increases in average age at marriage for women. Postponement of births for this reason can lower the TFR below the cohort fertility rates that will result when women complete their reproductive period.

Feedback loops between demographic trends and the SDGs

What are the significant feedback loops between the SDGs and future population trends that could come with achieving the goals? One example—an extremely important one—entails linking educational and reproductive health goals. Girls who complete secondary school have a better chance of delaying marriage, greater knowledge and confidence, better access to paid work, and lower unmet need for family planning.

Educated women who can realize their reproductive rights and choices will stay healthier during and after their pregnancies, which strongly contributes to the health of their children and overall family well-being. “An extensive multi-level study covering all recent Demographic and Health Surveys (DHS) showed that maternal education is the single most important determinant of child survival at all levels and that its effects on child survival are clearly stronger than those of household wealth or income” (Lutz and Skirbekk, 2014: 23). As for the effect of education on fertility, “particularly in developing countries that are still in the midst of the fertility transition, the negative association is very strong” (ibid.: 25). Therefore, projections of educational levels should be an important component of assumptions about future trends in fertility.

On the whole, significant improvements in education have been observed in all Asia and the Pacific countries during their most marked periods of fertility decline, and relatively slow educational development has characterized those countries and regions where fertility decline has been slowest (Afghanistan, Pakistan and the higher-fertility states of India). Even so, the correlation between educational development and fertility is not perfect; in Indonesia, sharp improvements in the gross secondary school enrolment ratio were recorded over the 1970-

2000 period, along with rapid fertility decline, but educational development continued over the subsequent decade, when the fertility decline stalled.

Realizing or largely realizing the SDGs would undermine the strong assumption in the United Nations population projections of structural continuity, based on past trends extrapolated over the 21st century (Abel et al., 2016). World population growth could end earlier, and at a considerably lower level, than even the lower limit of the 95 per cent confidence interval around the latest probabilistic United Nations population projections (ibid.: 6).³ Of course, only time will tell the extent to which the SDG targets will be reached. If reached, the universal secondary education target, in combination with the realization of reproductive rights including through better access to family planning, could have positive feedback loops and facilitate the achievement of other SDG targets, and deliver a stronger and quicker demographic bonus.

Interactions between the different SDGs are intricate. Many investigations of synergies have begun, including work by the Organisation for Economic Co-operation and Development (OECD, as yet unpublished) on social sustainability. The concept of social sustainability can have a range of meanings, but its essence is perhaps captured as development (and/or growth) that is compatible with the harmonious evolution of civil society. It fosters an environment conducive to the compatible cohabitation of culturally and socially diverse groups, while at the same time encouraging social integration, with improvements in the quality of life for all segments of the population.

Both intergenerational and intragenerational equity are stressed in some definitions of social sustainability, as are the reduction of gender inequality and poverty.

³ The lower global population trajectory in the study by Abel et al. is mainly caused by the accelerated fertility declines associated with reaching the female education and reproductive health goals in Africa and Western Asia. The impact on projected population trends in Asia and the Pacific is considerably less.





DEMOGRAPHIC MEGATRENDS IN ASIA AND THE PACIFIC

Introduction

This chapter analyses 26 countries and areas⁴ in Asia and the Pacific with 2019 populations exceeding 3 million. The first thing to examine is where these countries are placed with respect to fertility transition. There is enormous variation in fertility between countries and within the largest countries. Countries will be shown along a “continuum” based on present fertility and how this is likely to evolve beyond 2030. Analysis of future trends will be based mainly on the latest projections of the United Nations Population Division.

For the region as a whole, success in lowering mortality rates has been remarkable. Life expectancy gained 30 years from 1950 to 2015 and is now above 70 years; further gains are expected. Infant mortality fell by 59 per cent between 1990 and 2015. Maternal mortality fell even more rapidly over the same period - by more than 60 per cent in more than half of the countries under discussion, including the most populated, China, India and Indonesia (WHO et al., 2015, annex 19). The main emphasis in the following discussion, however, will be on trends in fertility, because these changes have a greater effect on age structure than mortality changes.

⁴ Two of the entities included are not countries: China, Hong Kong SAR and Taiwan Province of China. Regular use of the term “countries and areas” to refer to such entities would take up too much space, so the term “countries” used throughout this report should be taken to mean “countries and areas”.

Fertility trends in Asia and the Pacific

Figure 3 shows countries arrayed by the year in which their TFR first descended below 2.3, or 10 per cent above “replacement” level. Replacement level—approximately 2.1—is the level at which population size and structure is assumed to eventually stabilize. For countries where TFR is still above 2.3, the year shown is the one in which the United Nations medium projections indicate a level of 2.3 being reached.

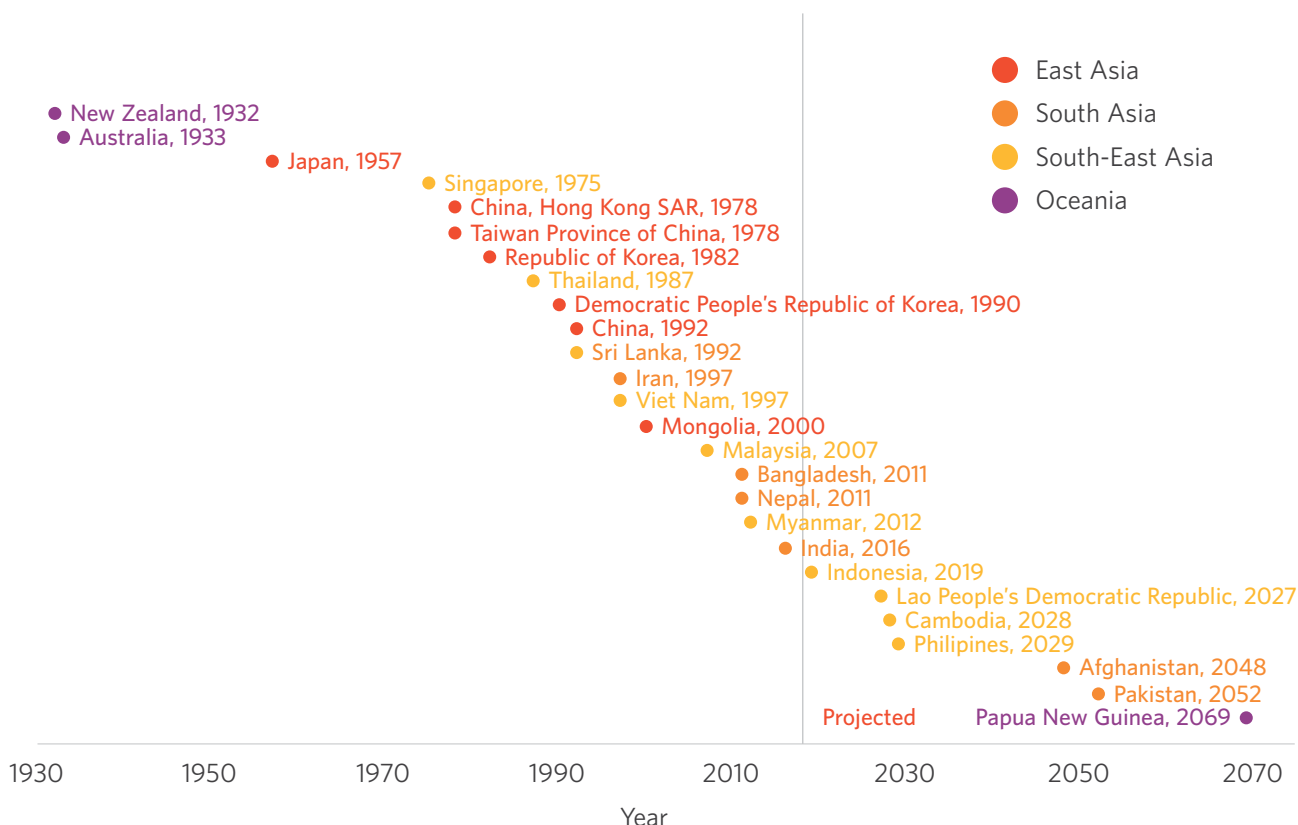
Australia and New Zealand experienced sub-replacement fertility during the Great Depression of the 1930s; their TFRs rose well above 3 in the 1950s, before sinking again. Japan’s fertility descended through replacement level in the late 1950s. The population structure in these three countries is therefore vastly different from that of the other countries of Asia and the Pacific, none of which reached near-replacement fertility for the first time before 1975.

Countries with TFRs between 2.5 and 1.7 lie in a demographic zone where population momentum can add considerably to population size, but continuation of fertility around this level (or, as generally assumed in projections, sinking gradually to lower levels), will lead in time to relatively small changes in population size and structure. Between 2015 and 2020, 12 of the 26 Asia and the Pacific countries under consideration had fertility levels in this range. Seven had fertility levels above 2.5 (three above 3) and the remaining seven were below 1.7.

Present fertility levels are dramatically different from those prevailing just two decades ago. While from 2015 to 2020 three countries had TFRs above 3, 25 years earlier - between 1990 and 1995 - there were 14 such countries, or more than half the countries under study. From 2015 to 2020, only Afghanistan had a TFR above 4; between 1990 and 1995, there were eight such countries.

FIGURE 3:

Asia and the Pacific countries and areas: year in which total fertility rate first fell below 2.3



Source: United Nations Population Division, 2019.



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The quarter century from 1975 to 2000 saw 11 countries reach near-replacement fertility (TFR 2.3 or below), and a further four had been added to this group by 2013. By the beginning of 2019, 19 of the 26 countries have reached near-replacement fertility or below. Another major country (Indonesia) is expected to join this group by 2020. By then, the only relatively populous countries in the region where fertility will remain well above replacement level will be Afghanistan, Pakistan and the Philippines.

Dealing with the region's three largest countries, China, India and Indonesia, as single units is in some ways misleading. Many of the states and provinces within these countries are very large (Uttar Pradesh in India, for example, would be the fifth most populous country in the world, lying behind Indonesia and Brazil). China's Guangdong province and India's states of Maharashtra and Bihar all have more than 100 million inhabitants, and their fertility levels and various indicators of development show considerable diversity.

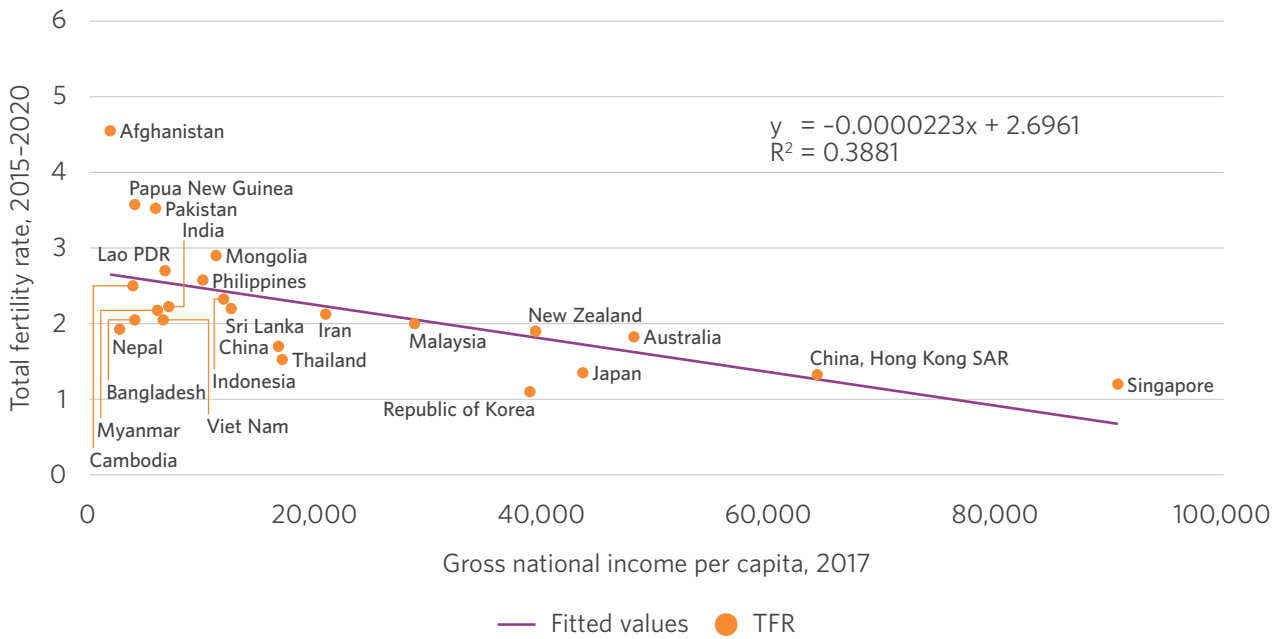
In India, the four southernmost states, along with Maharashtra, West Bengal, and a number of other states and territories, had below-replacement level fertility in 2011. These states accounted for 50 per cent of India's population.

At the same time, a TFR above 3 was recorded in Madhya Pradesh, Uttar Pradesh and Bihar. At the district level, the differences were even wider; the TFR varied from 5 in Khagaria district in Bihar to 1.1 in Kolkata district in West Bengal. While one-fifth of districts had reached a below-replacement level of fertility by 2011, about half the districts had a TFR of more than 3 (Mohanty et al., 2016). Thus, while most of the analysis in this report will be at the country level, these important subnational differences, particularly in the largest countries, need to be borne in mind, as they will have important implications for policies at the subnational level, and perhaps for national social and political cohesiveness.

In sum, although the region encompasses countries at all stages of demographic transition, the "centre of gravity" of fertility levels has shifted dramatically in just two decades, from high fertility to near-replacement fertility, with significant numbers of countries at very low levels. In very general terms, East Asia is furthest ahead in the demographic transition, with South Asia lagging and South-East Asia in between. Overall, high fertility is now confined to a few countries with TFRs above 3, although significant regions in India also still have high levels.⁵

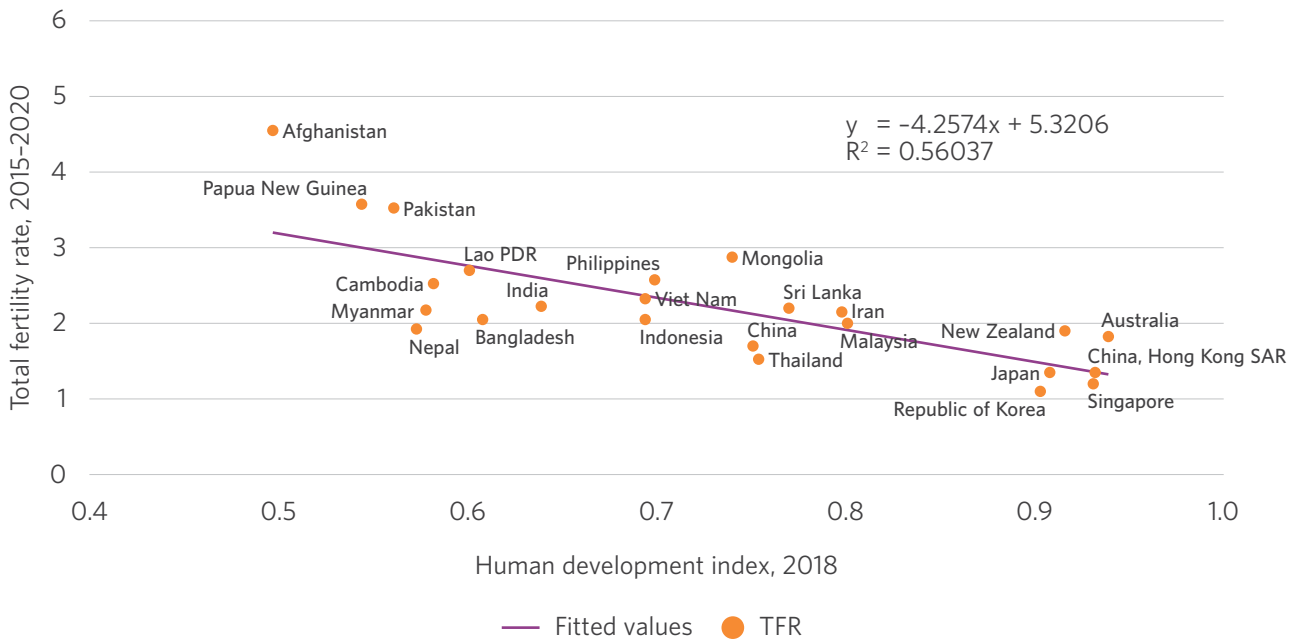
⁵ In contrast with India, none of the really populous provinces of Bangladesh, China or Indonesia have TFRs above 3.

FIGURE 4:
Relationship between TFR and GNI per capita (PPP), Asia and the Pacific countries and areas



Source: Author's calculations based on United Nations Population Division, 2019 for TFR and the World Bank's World Development Indicators for GNI per capita.

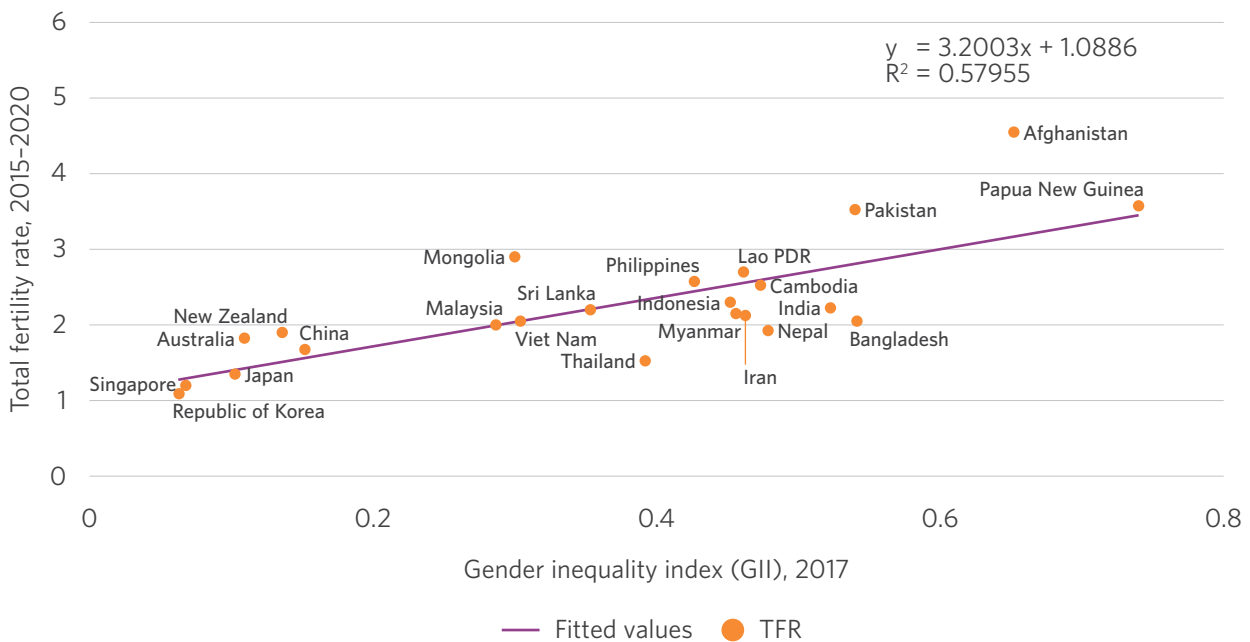
FIGURE 5:
Relationship between TFR and the Human Development Index, Asia and the Pacific countries and areas



Source: United Nations Population Division, 2019 for TFR and UNDP, 2018 for Human Development Index rankings.

FIGURE 6:

Relationship between TFR and the Gender Inequality Index, Asia and the Pacific countries and areas



Source: United Nations Population Division, 2019 for TFR and UNDP, 2018 for Gender Inequality Index rankings.

Correlates of fertility levels

The fertility levels in any given country tell a great deal about its level of economic and social development. In general, lower fertility is associated with higher economic development, but reverse causality is also apparent, where development leads to lower fertility. Many factors besides economic development, narrowly measured, are important, however. In recent times, fertility has fallen close to replacement level even in some very low-income countries, including Bangladesh, India and Myanmar.

As discussed in the previous chapter, women's fertility is systematically lower at higher levels of educational attainment. The negative relationship between education and fertility is particularly strong in countries like Pakistan that are in the middle of the demographic transition. Other variables including child mortality are also very important.

It is possible to study the relationship between levels of fertility and different measures of economic and human development: namely, GNI per capita (measured in PPP terms) and the Human Development Index, a composite index of

life expectancy at birth, mean and expected years of schooling, and GNI per capita.

Figures 4 and 5 show there is a much closer link between TFR and the Human Development Index than there is between TFR and per capita income. Indeed, the very wide range in fertility levels in countries with very low levels of per capita income is striking (Figure 4). Afghanistan and Papua New Guinea have far higher fertility than Bangladesh or Nepal, for example, although their per capita incomes are comparably low. Bangladesh has a much higher poverty rate than other countries with a comparable fertility level, and by the same token, countries with similar poverty rates typically had much higher levels of fertility than Bangladesh (UNFPA, 2015: 33).

Since income is one of the three components of the Human Development Index, the closer relationship between the index and fertility levels must reflect the health and education components, and the realization of people's rights and choices in these areas.

Another important relationship is between TFR and greater or lesser levels of gender equality. Figure 6 shows this relationship, using the

Gender Inequality Index. This indicates the extent to which achievements in reproductive health, empowerment and labour market participation are eroded by gender inequalities. Like all such indices, this one has its shortcomings. For example, it is argued that the combination of indicators comparing the relative performance of women vis-a-vis men with absolute women-specific indicators obscures the interpretation of an already complicated index and penalizes the performance of low-income countries (Permanyer, 2013). In any event, it is clear that, as with the Human Development Index, there is a much closer relationship between the Gender Inequality Index and fertility levels than between per capita income and fertility levels.

Projected population trends

United Nations medium projections show fertility continuing to decline in all countries with fertility above replacement level; the percentage decline tends to be greater with higher initial TFRs (see Table 2). For countries in the near-replacement fertility zone (TFR between 2.2 and 1.7), further declines are projected to the mid-21st century, although they are not as sharp as those projected

for the higher-fertility countries. For countries beginning with fertility below 1.7, increases in fertility are projected. This appears to reflect the assumption that tempo effects will tend to raise fertility in very low-fertility countries, along perhaps with an assumption that behavioural changes will also take place in countries with ultra-low fertility to counteract the steady contraction in population that they will begin to experience.

What are the key age structure changes that are more or less predictable? This question can be examined by considering projections not only of the total population, but also of key population groups such as children, youth, working-age people and the elderly, and some indicators (dependency ratios, etc.) that reflect the relative trends in these age groups. The uncertainty of future fertility trends affects projections of the child population immediately, but influences young, working-age and elderly people only after considerable delay. Notwithstanding the uncertainty of future mortality and international migration trends, and their possible effects on the other age groups of the population, the child population and child dependency ratios are subject to greater uncertainty in the near future than other components of the population.



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TABLE 2:

Fertility projections for Asia and the Pacific countries and areas: United Nations medium projection

Country	TFR 2015-2020	TFR 2030-2035	TFR 2045-2050	Percentage change 2015-2020 to 2030-2035	Percentage change 2015-2020 to 2045-2050
Afghanistan	4.56	2.91	2.26	-36.2	-50.4
Papua New Guinea	3.59	3.04	2.67	-15.3	-25.6
Pakistan	3.55	2.79	2.37	-21.4	-33.2
Mongolia	2.90	2.46	2.20	-15.2	-24.1
Lao People's Democratic Republic	2.70	2.15	1.88	-20.4	-30.4
Philippines	2.58	2.24	2.01	-13.2	-22.1
Cambodia	2.52	2.19	1.98	-13.1	-21.4
Indonesia	2.32	2.07	1.92	-10.8	-17.7
India	2.24	1.98	1.82	-11.6	-19.7
Sri Lanka	2.21	1.99	1.87	-10.0	-15.4
Myanmar	2.17	1.92	1.79	-11.5	-17.5
Iran	2.15	2.00	1.92	-7.0	-10.7
Viet Nam	2.06	1.97	1.92	-4.4	-6.8
Bangladesh	2.05	1.74	1.62	-15.1	-21.0
Malaysia	2.01	1.80	1.71	-10.4	-14.9
Nepal	1.93	1.62	1.55	-16.1	-19.7
DPR Korea	1.91	1.80	1.76	-5.8	-7.9
New Zealand	1.90	1.79	1.74	-5.8	-8.4
Australia	1.83	1.75	1.72	-4.4	-6.0
China	1.69	1.73	1.75	+2.3	+3.6
Thailand	1.53	1.42	1.51	-7.2	-1.3
Japan	1.37	1.45	1.55	+5.8	+13.1
China, Hong Kong SAR	1.33	1.54	1.65	+15.8	+24.1
Singapore	1.21	1.30	1.36	+7.4	+12.4
Taiwan Province of China	1.15	1.37	1.50	+19.1	+30.4
Republic of Korea	1.11	1.18	1.39	+6.3	+25.2

Source: United Nations Population Division, 2019, custom data acquired via website.

TABLE 3:

Projected changes in population size and age groups, 2019-2050, Asia and the Pacific countries and areas: United Nations medium projection

Country	TFR 2015-2020	Population 2019 (millions)	Percentage increase in total population		Percentage increase in numbers aged 0-14		Percentage increase in numbers aged 15-64		Percentage increase in numbers aged 65+	
			2019-2030	2030-2050	2019-2030	2030-2050	2019-2030	2030-2050	2019-2030	2030-2050
Afghanistan	4.56	38.0	26.4	34.5	8.3	-0.1	39.2	49.7	50.8	134.2
Papua New Guinea	3.59	8.8	22.0	32.6	12.7	14.2	25.8	37.5	49.1	98.9
Pakistan	3.55	216.6	21.4	28.5	11.0	3.5	25.6	36.1	46.8	95.3
Mongolia	2.90	3.2	15.2	19.7	3.4	0.8	16.3	18.4	84.2	108.6
Lao People's Democratic Republic	2.70	7.2	14.7	15.2	0.5	-13.3	19.6	18.9	49.4	114.3
Philippines	2.58	108.1	14.4	16.8	-0.8	-3.9	17.8	17.7	52.6	81.4
Cambodia	2.52	16.5	13.9	16.4	0.6	-5.8	17.1	16.7	55.7	103.3
Indonesia	2.32	270.6	10.6	10.6	-1.4	-7.1	10.4	5.7	61.5	91.1
India	2.24	1,366.4	10.0	9.0	-3.4	-12.3	11.8	8.1	43.3	74.9
Sri Lanka	2.21	21.3	3.3	-0.9	-8.9	-14.7	1.1	-7.6	42.0	45.3
Myanmar	2.17	54.0	8.2	6.5	-3.3	-10.4	8.8	4.9	48.4	65.3
Iran	2.15	82.9	11.8	11.3	1.8	-12.5	10.6	1.9	62.6	134.1
Viet Nam	2.06	96.5	8.0	5.2	-1.3	-14.6	4.9	-1.9	62.7	80.4
Bangladesh	2.05	163.0	9.8	7.6	-6.2	-21.1	12.5	4.0	56.2	129.7
Malaysia	2.01	32.0	13.0	12.3	5.3	-13.9	11.0	9.2	56.9	91.0
Nepal	1.93	29.9	16.7	5.8	-4.4	-28.3	23.7	8.5	42.9	90.6
Democratic People's Republic of Korea	1.91	25.7	3.8	-0.3	-0.2	-15.8	-0.3	-6.2	41.9	54.5
New Zealand	1.90	4.8	8.2	8.4	-0.8	-2.0	3.9	5.6	35.2	26.4
Australia	1.83	25.2	11.8	16.5	6.0	6.9	8.2	12.9	33.2	37.6
China	1.69	1,433.8	2.1	-4.2	-8.8	-14.5	-2.1	-15.0	43.8	47.9

TABLE 3:

Projected changes in population size and age groups, 2019-2050, Asia and the Pacific countries and areas: United Nations medium projection (continued)

Country	TFR 2015-2020	Population 2019 (millions)	Percentage increase in total population		Percentage increase in numbers aged 0-14		Percentage increase in numbers aged 15-64		Percentage increase in numbers aged 65+	
			2019-2030	2030-2050	2019-2030	2030-2050	2019-2030	2030-2050	2019-2030	2030-2050
Thailand	1.53	69.6	1.0	-6.3	-13.6	-18.8	-5.1	-17.9	52.3	41.6
Japan	1.37	126.9	-4.8	-12.4	-14.8	-8.4	-6.7	-23.4	3.6	6.9
China, Hong Kong SAR	1.33	7.4	7.8	0.3	22.2	-18.5	-6.7	-10.1	52.9	34.8
Singapore	1.21	5.8	7.9	2.3	7.8	-15.1	-5.3	-11.2	81.1	51.5
Taiwan Province of China	1.15	23.8	1.0	-6.7	1.0	-17.7	-9.6	-21.4	49.6	39.6
Republic of Korea	1.11	51.2	-0.1	-8.4	-16.1	-13.7	-9.8	-26.5	56.1	41.2

Source: United Nations Population Division, 2019, custom data acquired via website.

Table 3 shows the projected growth rates of the total population and of the three main age groups—0 to 14, 15 to 64 and 65-plus—for countries arrayed according to their TFR in the 2015-2020 period. Countries with the highest fertility are expected to experience the greatest growth in population until 2050. In general, the lower the starting level of fertility, the lower the increase in population is expected to be. However, in countries such as Australia and Malaysia, and to a lesser extent New Zealand and Singapore, considerable levels of net immigration are expected to prop up population growth rates. Japan will likely face continuing declines in population, while Republic of Korea, Thailand, Taiwan Province of China and China will see steady declines starting between 2025 (Republic of Korea) and 2031 (China).

Even in countries where fertility has reached near-replacement levels, or even below-replacement levels, considerable population growth is expected before it ceases, often around mid-century. The reason is “population momentum”—the effect of a pyramidal-shaped age structure inherited from times of higher fertility. In Figure 7, the age pyramids for four of the largest Asia and the

Pacific countries—China, India, Indonesia and Pakistan—illustrate this phenomenon.

In the Pakistan pyramid, each five-year age group is larger than the age group above it, which means that the age groups exiting as a result of mortality (mainly the older age groups) are much smaller than those entering the pyramid through births. Moreover, the size of the population of women of reproductive age is increasing constantly. Considerable population momentum is also apparent in the Indian and Indonesian pyramids, particularly at ages above about 40, though in both countries there has been a substantial slackening in the growth of the child population as a result of fertility declines. In China, the long-term effect of a fertility decline dating back over some decades is apparent in the general undercutting of the base of the pyramid.

Population momentum carries population growth forward for decades after fertility falls below replacement level. This can sometimes lead to delays in appropriate policy responses, as occurred in all East and South-East Asian countries reaching very low fertility levels (Jones and Hamid, 2015, Table 3.1).

FIGURE 7:

Age pyramids, selected Asian countries, 2015



Source: United Nations Population Division, 2015.

Projected trends in key subpopulations: children, youth, working-age people and the elderly

The UNDP study *How Changing Demographics Can Power Human Development* (UNDP, 2016) devotes three chapters to tracing expected trends in Asia and the Pacific in child and youth, working-age and elderly populations, and related issues. In the

present report, it is possible only to focus on a few key trends and issues as shown in Table 3.

The only countries where the number of children is expected to increase between 2019 and 2030 are those with the highest initial levels of fertility—for example, Afghanistan, Pakistan, Papua New Guinea and Mongolia (Australia, New Zealand, Malaysia and Singapore, as well as China, Hong

Kong SAR, are again exceptions, because of net migration). Even countries with initial TFRs in the 2 to 2.5 range are expected to experience declines in the child population, mainly because of assumptions of further declines in fertility. By the 2030-2050 period, declines in the child population are expected almost universally throughout the Asia and the Pacific region. The change from formerly very rapid increases in many countries to a cessation and indeed reversal of growth is of enormous significance for lowering dependency ratios and improving prospects for raising school enrolment ratios and increased investment in human development.

The working-age population (aged 15-64) is a very broad age group. During 2019-2030, numbers in this age group are expected to increase very rapidly in all countries with a starting TFR above 2.1, except Sri Lanka. The increase will slow over the 2030-2050 period in some of them—notably Indonesia and Myanmar—as cohorts born in times of declining fertility make their way into working age. Countries and areas that already had below-replacement fertility in the 2015-2020 period are expected to show only modest increases in the working-age population by 2030, and those with fertility far below replacement (China; China, Hong Kong SAR; Japan; the Republic of Korea; Taiwan Province of China, Singapore and Thailand) will experience a contraction expected to become more marked from 2030 to 2050.

Because of the very broad age range covered by the working-age population, it is important to divide it into its younger and older segments—for example, those aged 15 to 29 and those aged 30 to 64. The growth of these different segments can vary substantially, and the educational and other characteristics of younger and older segments are also likely to differ greatly. The younger segment will contract in size over the 2030-2050 period in countries such as Bangladesh, Indonesia and Myanmar, whereas the older segment will continue to increase substantially. The slow overall increase will be the balance between these contractions and rapid increases.

The youth population, of course, is important for many reasons other than its role in the labour force. The group aged 15 to 29 represents a “demographically dense” period during which people make decisions with far-reaching

demographic consequences, including those related to continuing education, leaving home, marrying and beginning a family, finding a job, not to mention involvement in political movements (Rindfuss, 1991). Implications extend over the life course, influencing trends such as levels of social integration and prospects for finding decent work. Some Asian populations have experienced a temporary “youth bulge” in which this age group’s share of the total population peaks—notably, Iran in the early 2000s, and Cambodia, Lao People’s Democratic Republic, Mongolia, Nepal and Pakistan recently or at present.

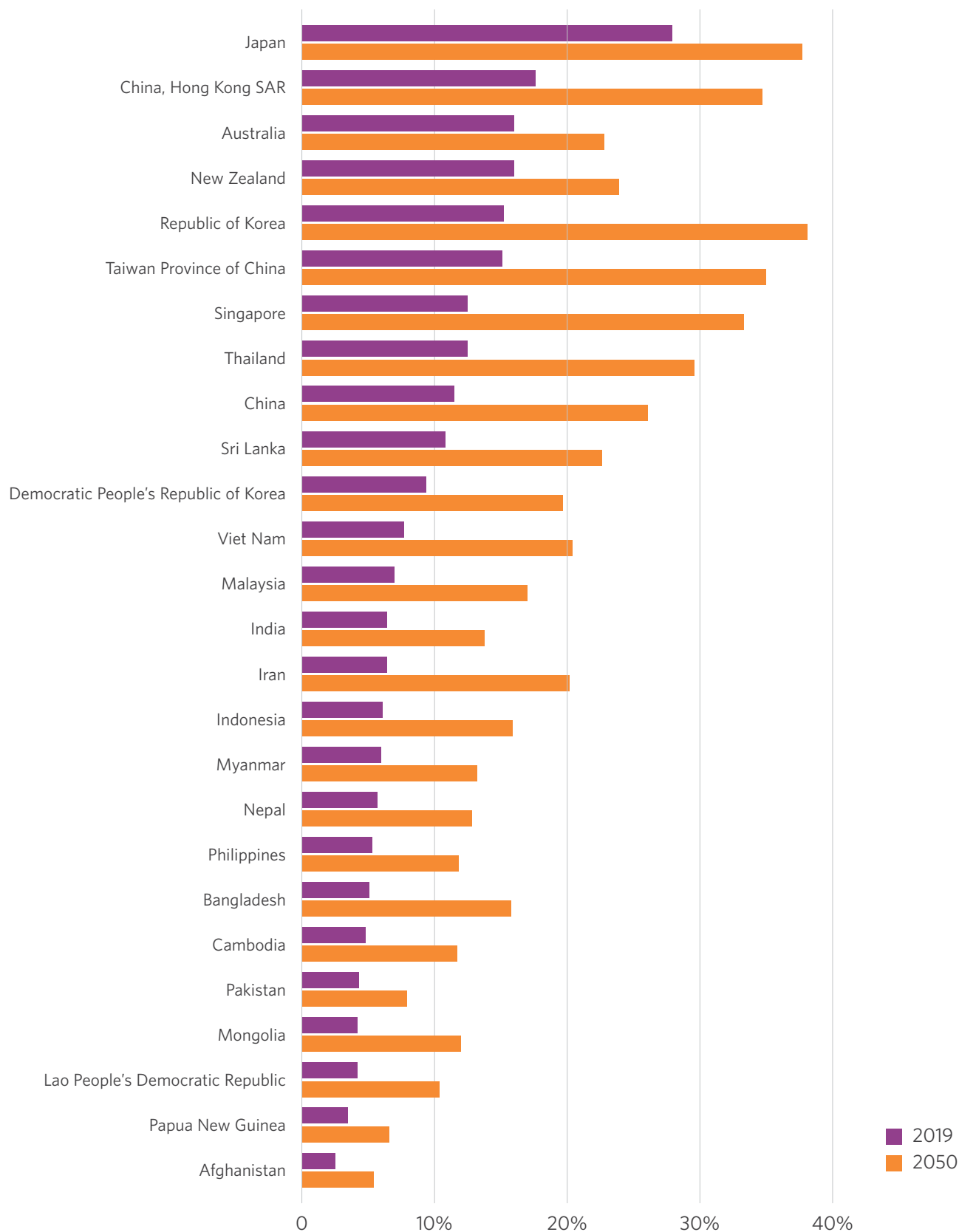
As for the older population—aged 65 and over—this is where the most dramatic changes of all are expected to take place. Irrespective of the initial level of fertility, the elderly population is expected to grow more rapidly than the rest of the population over coming decades. The only country where the increase in the elderly population will be relatively slow will be Japan—paradoxically, because Japan was already the most elderly population in the world in 2015, and this proportion could not rise much higher.

Figure 8 shows the projected trends in the proportion of the population aged 65 and over in Asia and the Pacific countries between 2019 and 2050. The differences between the higher and lower fertility countries are dramatic, not only in the base year (2019) but right up to the middle of the century. By 2050, none of the three countries with a 2015-2020 TFR above 3 will have reached an elderly population share of 8 per cent, whereas almost all of those starting with a fertility level below replacement will have an elderly population share exceeding 15 per cent. A number of the East Asian countries, as well as Singapore, will have an elderly population share of more than 30 per cent, considerably higher than anywhere in the world in 2019.

The process of population ageing in Asia and the Pacific is long-term and inexorable, though the speed of the process will vary greatly. Choosing as examples countries in the low fertility, medium fertility and higher fertility categories, the share of population aged 65 and over is projected to rise between 2019 and 2050 from 15.2 per cent to 38.1 per cent in the Republic of Korea, from 6.1 per cent to 15.9 per cent in Indonesia and from 4.3 per cent to 7.9 per cent in Pakistan.

FIGURE 8:

Population aged 65 and over as a percentage of total population, Asia and the Pacific countries and areas, 2019 and 2050



Source: United Nations Population Division, 2019, custom data acquired via website, medium projection.

The demographic dividend

Discussion of the demographic dividend will refer to the dependency ratio, a measure of the total dependent population over the working-age population. The usual convention is to add the population aged 0 to 14 to that aged 65 and over and divide by the population aged 15 to 64 (times 100). This, of course, is only a notional measure of dependency, because some children are already working before age 15, and many older people continue to work after age 65. Besides, many young people, particularly in the more advanced economies in East and South-East Asia, continue in educational institutions long after reaching age 15. And of course, many people in the main working ages are not in the labour force. For a region with such varied conditions, however, the dependency ratio as defined, while not ideal, gives a reasonable approximation of the balance between dependants and workers, and particularly how this changes over time.

In Figure 9, countries are arrayed according to the year when the dependency ratio first fell below 60, and a line for each country is drawn between that year and the year it increased (or is projected to increase) above 60 again. In between, the year when the dependency rate reached, or is projected to reach, its lowest level (usually between the mid-30s and the mid-40s) is also noted. Expressed another way, **that year is when the share of the working-age population reaches its highest point.** Values of the dependency ratio below 60 are considered to be a very favourable zone for development, provided that countries adopt appropriate health, education and labour market policies.

Figure 9 shows that the great majority of Asia and the Pacific countries currently have the potential to enjoy a demographic dividend, though some with the lowest fertility rates, or where fertility declined earliest, have passed the most favourable point of lowest dependency ratios (and Japan has already left the favourable period as a whole behind). Although some countries are witnessing rapid ageing, they are still in a phase where they can reap a first demographic dividend. Even China and Thailand still have another two decades to do so.

It is sometimes argued that the benefits of low dependency ratios end when these rates begin to rise through ageing. It is true that in some countries (for example, Bangladesh, China, India, Iran, the Republic of Korea and Thailand) the labour force begins to contract within 10

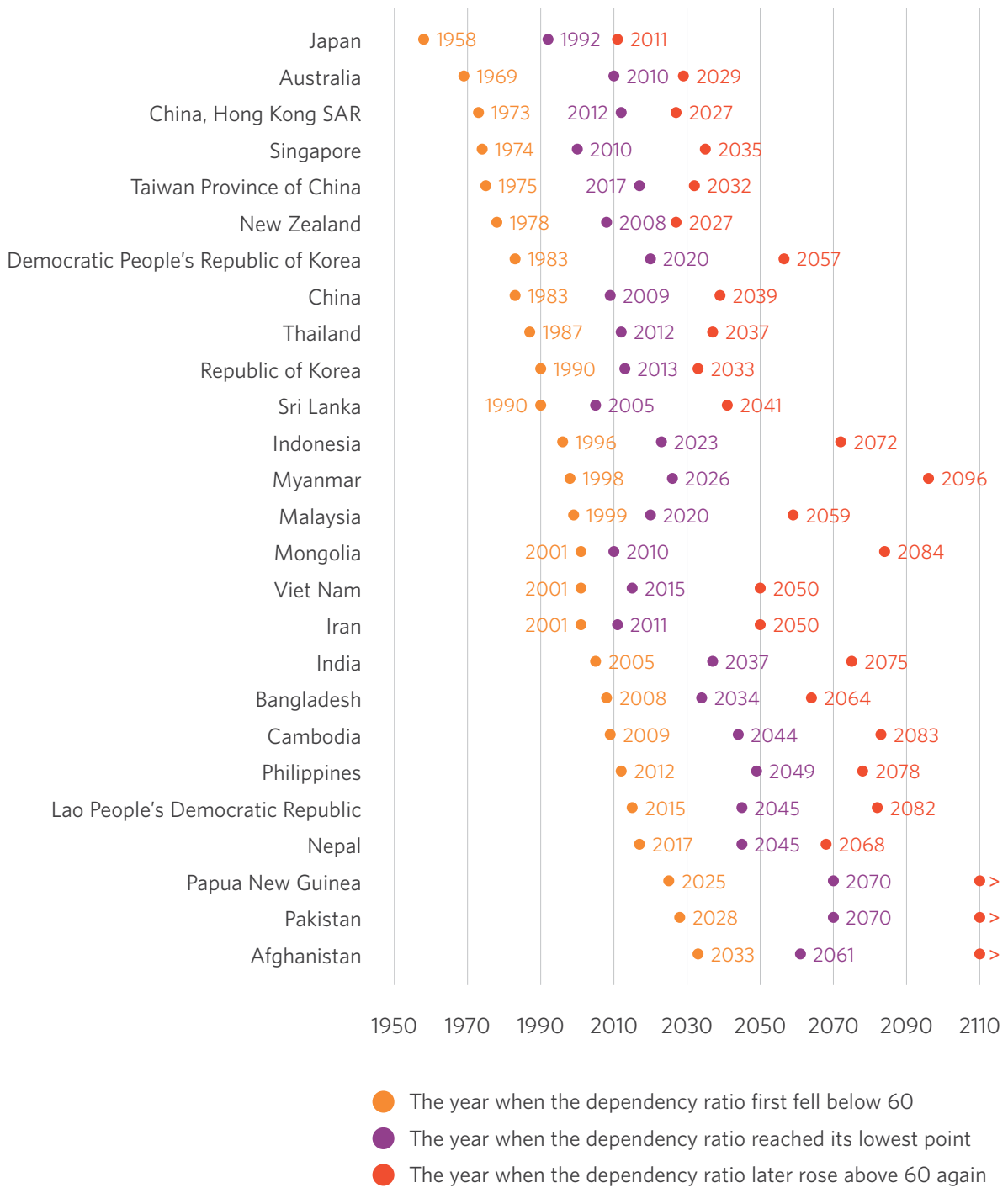
years after this point (UNDP, 2016, Table 2.1). But in other countries, it continues to increase for much longer (20 years in Sri Lanka, and 25 years in the Philippines and Viet Nam, for example). The key point is that the benefit does not suddenly end either when the dependency ratio begins to rise or when the working-age population begins to contract. The age structure only gradually becomes less favourable for development, and the time taken for the dependency ratio to climb from its lowest point to reach 60 is typically about 15 to 40 years. The age structure remains quite favourable for development during this period.

Once dependency has climbed back up to 60, the level from which it fell many decades earlier, countries can be expected to have fundamentally changed. They should now be relatively developed, with capital accumulation and technological progress providing a much greater capacity to manage a larger share of dependents. Effective realization of the first demographic dividend is the best way to prepare for population ageing and to increase the chances of realizing a second demographic dividend.

In Asia and the Pacific, even countries with the highest fertility are currently enjoying a decline in dependency ratios, though not yet to 60, which roughly indicates the level below which the age structure is considered most favourable for development. In some countries – Afghanistan, Pakistan and Papua New Guinea – the favourable period will run beyond the end of the 21st century. While this might be considered an advantage over countries where the dividend will end earlier, the benefits of a more favourable age structure have been delayed in these higher fertility countries, which currently face important development challenges, including in health and education.

It cannot be overemphasized that there is nothing automatic about the dividend. If burgeoning numbers of young workers entering the labour force find themselves unemployed, underemployed or in work not befitting their educational background, the dividend is unlikely to be realized. Given that unemployment is not a viable option for the very poor, analysis of the overall labour market needs to take into account not only unemployment and underemployment, but also “working poverty”. International Labour Organization (ILO) data show that while youth unemployment rates are relatively low by world standards in East and South Asia, they are slightly above the world average in South-East Asia. Working poverty rates for youth have been declining quite strongly throughout

FIGURE 9:
Period when the dependency ratio is below 60



Source: United Nations Population Division, 2019, custom data acquired via website.



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Asia, though they remain at close to 50 per cent in South Asia (ILO, 2016: 5-9, 38-39). While these data do not suggest a worsening capacity to reap the demographic dividend, they certainly should not be taken to understate the magnitude of the task ahead.

Two other key points need to be made. One is that when the fertility decline to below-replacement level is more rapid, the dependency ratio declines more rapidly and reaches a lower level. This can be seen in countries such as China, Iran and the Republic of Korea. A second point is that the make-up of the dependent population is very different when countries enter the favourable zone (dependency ratios below 60) compared to when they leave it. When they enter the zone, a much higher proportion of dependents are children; when they leave it, a much higher proportion are older people. The needs of these two groups are obviously very different.

How long do most countries stay in the favourable zone, with dependency ratios below 60? This varies greatly, depending on

the particular features of a given country's demographic history, but most countries were in the zone (or are expected to be in the zone) for between 50 and 60 years. Some (including Indonesia, Myanmar and the Philippines) are expected to remain in the zone for much longer—over 70 years.

Looking ahead, the great concern in the very low-fertility countries is the prospect of declining populations and extreme ageing. Entrenched very low fertility eventually results in population shrinkage. If TFR continues at 1.5, after temporary age distribution bulges are ironed out, the population will diminish by one-quarter each generation; at a fertility rate of 1.3, the contraction per generation will be over one-third, and the population will halve in size in about 45 years. In countries with a TFR of 1.6, this halving would take nearly 90 years. The Republic of Korea, Singapore and Taiwan Province of China have had TFRs below 1.3 for longer than a decade and a half; China, Hong Kong SAR for much longer still. In Japan, after a long time below this level, the TFR has climbed to above 1.4.

TABLE 4:

Largest projected declines in rural populations, Asia and the Pacific countries, 2019 to 2050

Country	Number, millions	Percentage
China	-291.1	-51.7
India	-114.5	-12.8
Indonesia	-31.2	-26.9
Bangladesh	-21.1	-20.1
Thailand	-14.2	-41.6
Viet Nam	-12.8	-20.8
Iran	-7.3	-35.7
Japan	-4.8	-45.3

Source: United Nations Population Division, 2018, custom data acquired via website.

Momentum resulting from age structure affects population decline just as it affects population increase. In the early stages, the decreases in population are not very great, but over time, as the age structure narrows at its base, downward momentum becomes more difficult to arrest. Thus despite the assumption of some increase in fertility, though not to near-replacement level, the United Nations medium projection (United Nations Population Division, 2019) shows the following percentage changes in the population of some of Asia's lowest-fertility countries over successive 15-year periods:

Country	2015-2030	2030-2045	2045-2060
Japan	-5.6	-9.1	-10.2
Republic of Korea	0.6	-5.2	-11.9
Thailand	2.4	-3.8	-8.8
China	4.1	-2.4	-6.7

East Asian governments are apprehensive about population decline, however, as were Western governments facing declines in the 1930s (Teitelbaum and Winter, 1985). One after another, governments of countries with ultra-low fertility have introduced a range of pronatalist measures (Jones, 2011, 2019).

Where will people be living?

In Asian countries with falling fertility levels and generally low death rates, international migration is playing an increasing role in changing population dynamics. In China, migration patterns greatly affect the degree of population ageing in different provinces or regions (Gu, 2014). Geographical differences in ageing in China, India and Indonesia appear to be affected much more by patterns of migration than by differences in fertility and mortality. In all three countries, populations in rural areas are older than in the cities, despite their higher fertility (Jones, 2016: 326).

One of the major demographic changes in Asia and the Pacific countries will be the types of localities where people are living. Though there is enormous intercountry variation in the level of urbanization, in the region as a whole, 47 per cent of the population was living in urban areas in 2015. This share is expected to increase to 55 per cent by 2030 (United Nations Population Division, 2018). Almost half (48 per cent) of the urban population lives in towns and cities with populations of less than 500,000, though some of these lie within mega-urban regions surrounding major cities. Of the world's 20 largest urban agglomerations, 11 are in the Asia and the Pacific region.⁶

The World Bank argues that there are considerable advantages in the growth of large urban agglomerations, where the peaks of productivity are located (The World Bank, 2009). This argument is not always convincing, given large slum populations, extreme traffic congestion, waste management problems, air and water pollution, and other environmental concerns faced by many of the region's largest cities, in a context of limited resources for dealing with these issues. But this may be an argument for more effective and pro-poor planning aimed at realizing people's rights and choices, rather than for containing the size of these urban agglomerations.

Despite continuing urbanization, rural populations are still growing overall in parts of Asia. Between 2019 and 2030, rural populations will increase slightly in South Asia, though they will decline in East and South-East Asia. Declines will be recorded throughout Asia between 2030 and 2050. The declines in some countries will be

⁶ The number would be 12 if a more appropriate estimate of the population of Jakarta's urban agglomeration had been used.

substantial, with China and Thailand seeing the largest contractions of rural populations in relative terms (Table 4). In China, the projected decrease in the rural population between 2019 and 2050 is almost 300 million people, an immense number.

Beneficial changes in the conditions of rural populations have occurred in ways that are not always recognized. Particularly important are developments in transportation and communication that have brought rural populations into much greater contact with what is going on throughout their country. Radio and television have played a major role. More recently, the mobile phone has revolutionized communications. The proportion of rural dwellers

in Bangladesh with access to a mobile phone rose from 29 per cent to 87 per cent in just seven years from 2007 to 2014, and in Indonesia from 31 per cent to 76 per cent in just five years between 2007 and 2012 (data from Demographic and Health Surveys). While these changes are of fundamental importance, on most indicators of well-being, including health, education and income, rural populations are disadvantaged in comparison with urban populations. In the context of the 2030 goal of “nobody left behind”, efforts to improve the conditions of rural populations need to be redoubled. There is a danger that as their share of the population declines, rural populations may end up relatively neglected in development efforts.

In short: demographic megatrends in Asia and the Pacific

- Population growth is continuing, but at rapidly decelerating rates: from 2 per cent per year in the 1970s to 1.5 per cent in the 1990s, 0.9 per cent today and probably 0.4 per cent by the 2030s.
- East Asia’s population is expected to start contracting around 2029; South Asia’s population will still be growing at 0.9 per cent per year at that time. South-East Asia is in between, with enormous differences between countries.
- Across Asia, life expectancy gained 30 years from 1950 to 2015, and is now above 70 years. The success in lowering mortality has been remarkable, and further gains are expected. Likewise, fertility fell by more than half in the short period between 1970 and 2000, and declines are continuing.
- A substantial proportion of people in the Asia and the Pacific region (about 40 per cent) live in countries where fertility has fallen to very low levels (TFR below 1.7), foreshadowing accelerating population contraction if these levels continue. A smaller proportion (about 6 per cent, rising to 14 per cent if the high-fertility states of India are added in) lives in countries or subregions where fertility remains high (TFR above 3), generating rapid population growth. The remaining population (more than half) live in countries where fertility is not far above or below population replacement level, with modest, but still considerable, population growth resulting mainly from population momentum.
- These different levels of fertility, and the history of how they were reached, are fundamentally important in understanding the changing age structures in the region. Most populations with ultra-low fertility levels are already experiencing contraction of their labour force. Most face population decline, and all confront sharp increases in the proportion of older persons.
- Most countries in the region currently have the high share of working-age people that is conducive to reaping the benefits of a demographic dividend, although they are at widely differing stages in moving through this period.
- Population ageing will be a universal feature of future trends; in every country, the older population will be increasing more rapidly than other age groups. While ageing raises many key planning issues, it is basically a sign of moving towards a situation where both mortality and fertility have reached low levels.
- While international migration tends to receive most attention, internal migration within Asia and the Pacific countries is much larger in volume and of increasing importance in population redistribution as natural population increases reach low levels.





MACROSOCIETAL LEVEL IMPACTS OF DEMOGRAPHIC MEGATRENDS

Based on the point they have reached in the fertility transition, there are three groups of countries in the Asia and the Pacific region:

- Group 1.** High-fertility countries (TFR above 2.5). This is a shrinking group, expected to be three fewer in 2030, and dominated in population size by Pakistan. These countries face significant population growth. They made up 9 per cent of the Asia and the Pacific population in 2019, projected to have fallen to 7 per cent by 2030. If the high-fertility states of India (Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan) are added, the share of this group in the total Asia-Pacific population in 2019 rises to about 21 per cent.
- Group 2.** Countries with near-replacement fertility (TFR between 1.7 and 2.5). This is a very large group, with 51 per cent of the Asia and the Pacific population in 2019, projected to rise to 87 per cent by 2030, because the Philippines is projected to move into this group from above and China from below.
- Group 3.** Countries with very low fertility (TFR below 1.7). This group accounted for 40 per cent of the Asia and the Pacific population in 2019, but is projected to fall to 6 per cent in 2030, because of the assumption in the UN projections that China's TFR will have increased to slightly above 1.7 by then. But if the population living in low fertility provinces of China and Indonesia and low fertility states of India were included, the proportion of population living in areas with TFR below 1.7 would undoubtedly rise well above 6 per cent.

Group 1 countries are mainly located in South and South-East Asia, Group 2 countries in South and South-East Asia, also Group 3 countries in East Asia, plus Singapore and Thailand in South-East Asia.⁷

As shown in Table 5, the three groups face different issues in relation to prospects for overall population growth or decline. Population increase is expected in the remaining high-fertility countries, even assuming steady declines in fertility to lower levels. More moderate population growth is expected in Group 2 countries, though whether that growth will tip into a decline in the last half of the century depends very much on assumptions about fertility trends. For Group 3 countries currently experiencing ultra-low fertility, sharp population declines are expected, though the assumption in the United Nations medium projection that TFRs will gradually rise over

time to levels well above 1.5 limits the extent of such declines, which are much greater under the United Nations low projection. Even so, the declines projected for Japan and the Republic of Korea after mid-century are so large that they would very likely lead to a re-evaluation of their migration policies.

While the circumstances of each country are unique, and the issues they face differ accordingly, some broad generalizations can be offered about these three groups. For Group 1, the key population policy concerns relate to persisting large gaps in services, rights and choices. They need to expand education, foster gender equality and meet unmet need for family planning, among other essential sexual and reproductive rights. If these steps lead towards a demographic transition, these countries may begin to reap a demographic dividend.

TABLE 5:

Projected population increases, selected Asian and the Pacific countries, 2019-2100

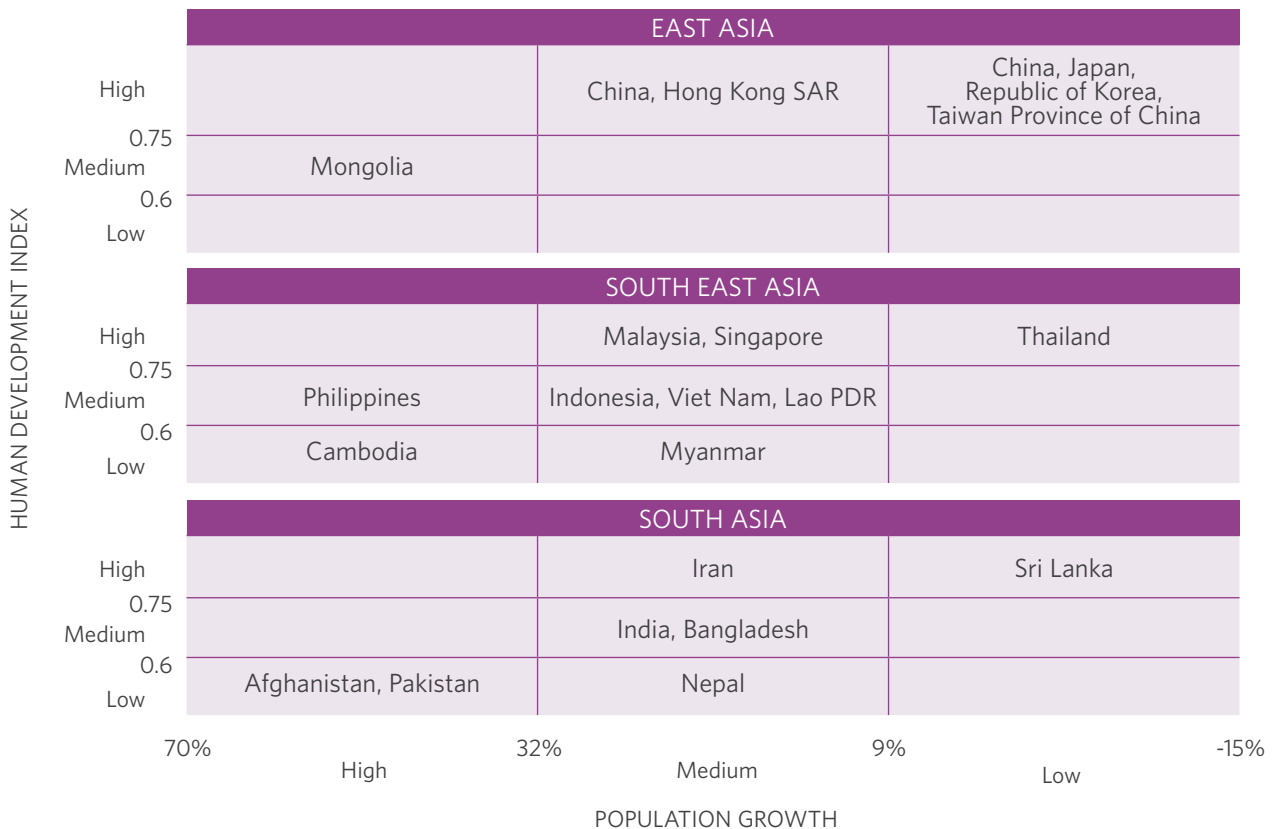
Country and initial fertility	Population ('000)			Percentage increase		
	2019	2050	2100	2019-2050	2050-2100	2019-2100
HIGH FERTILITY						
Afghanistan	38,042	64,683	74,938	70.0	15.9	97.0
Pakistan	216,565	338,013	403,103	56.1	19.3	86.1
NEAR REPLACEMENT						
India	1,366,418	1,639,176	1,450,421	20.0	-11.5	6.1
Indonesia	270,626	330,905	320,782	22.3	-3.1	18.5
Viet Nam	96,462	109,605	97,437	13.6	-11.1	1.0
ULTRA-LOW FERTILITY						
China	1,433,784	1,402,405	1,064,993	-2.2	-24.1	-25.7
Japan	126,860	105,804	74,959	-16.6	-29.2	-40.9
Republic of Korea	51,225	46,830	29,542	-8.6	-36.9	-42.3

Source: United Nations Population Division, 2019, medium projections.

⁷ Of the three countries of Oceania included in this report (because they meet the criterion of a population size of 3 million or above), two (Australia and New Zealand) are in Group 2, and one (Papua New Guinea) is in Group 1.

FIGURE 10:

Projected population growth 2019-2050 (percentage) for Asian countries and areas according to their 2018 Human Development Index



Source: United Nations Population Division, 2019 for population growth, and UNDP, 2018 for Human Development Index.

Group 2 countries could experience population increases or declines. Appropriate policies might include those aimed at assisting couples in making informed choices about balancing their family-building aspirations and their income-earning needs. Keeping in mind the 2030 Agenda’s focus on the most vulnerable and marginalized, ways in which the disadvantaged can be brought into the mainstream in terms of income, education, health and other aspects of human development should be a key emphasis. Preparing adequately for an ageing population is also crucial.

For Group 3 countries, key issues relate to rapid ageing. Rather than just adopting pronatalist policies, governments could consider other measures, such as initiatives fostering active ageing and promoting gender equality. Family change and its implications will necessarily occupy a central place in policy formulation, as will fundamental issues about the kind of economy and society that are desired, because these are issues deeply affecting family change and, in turn, population trends.

A further element in evaluating population-related issues is the relationship to human development. Figure 10 shows the countries of East Asia, South-East Asia and South Asia according to where they fit in three broad categories of projected population growth over the 2015-2050 period, and three broad categories of human development, as measured by the Human Development Index. In East Asia, there are no countries in the high population growth or low human development categories. South-East Asia shows a much more mixed picture for both projected population growth and human development. South Asian countries are more concentrated in the low human development category, with high or medium population growth, though both Iran and Sri Lanka have high human development. Countries with high population growth and low human development include one in South-East Asia (Cambodia) and two in South Asia (Afghanistan and Pakistan).

Expected demographic trends should not be viewed solely through an economic prism or only

in relation to human development indices. What are the implications for social sustainability? What will be the political impacts? Environmental and climate implications? The impact on human rights and gender inequality? And of course, how should we understand the multiple interactions among demographic trends, economic growth, human development and these other key variables?

The centrality of education

Educational advance is a central connection between demographic trends and social and economic development. As noted in Chapter 1, educational development, especially but not only for females, is a key determinant of trends in fertility and mortality. Future trends in population growth and structure will be fundamentally influenced by the speed with which the SDG on secondary education is achieved.

Looking at it from a different perspective, once demographic trends are taken as given, the extent to which they translate into positive or negative forces for economic and social development will also be strongly influenced by educational trends. The centrality of progress in female education in achieving development targets in a country such as Pakistan is recognized in many studies (e.g., Sathar et al., 2013). At the same time, education is not a panacea: the “Arab spring” showed the turmoil that a burgeoning youth cohort can create when its educational levels are improving but its aspirations are blocked.

Country comparisons of the effect of educational advances on democracy show that countries with more education tend to have a higher index of political rights. As for the associations within countries over time, modelling of the effect of education in relation to other variables for a set of 115 countries from 1970 to 2000 shows that total education levels and the level of female education relative to male education are significant drivers of improvements in democracy. The findings also suggest that average educational levels of older cohorts are particularly relevant for successful transitions to greater democracy (Lutz et al., 2010).

Rapid population ageing

Asia and the Pacific is currently home to 395 million persons aged 65 years of age and over, over half of the world’s older persons. By 2050,

of the world’s older persons, 58 per cent (899 million) will call the region home. Women currently constitute the majority of older persons, and 60 per cent of the “oldest old” population of 80 years and older.

Population ageing is an inevitable consequence of demographic transition. It should be viewed as a success story, notwithstanding challenging issues that emerge as populations age. Part of the challenge is that demographic transition has been so rapid in many Asia and the Pacific countries that they face population ageing at lower levels of socioeconomic development than was the case in developed Western countries that aged over a longer period of time. Even so, there is a need to counter excessive alarm about ageing. Certainly there are challenges to tackle in providing adequately for the needs of the burgeoning numbers of older persons in countries where the labour force is shrinking. But it is easy to exaggerate the issues. For one thing, tomorrow’s older population will not be like today’s. Educational levels are rising from cohort to cohort, and partly for this reason, the older population in the future will be healthier and more productive than today’s. For example, in Indonesia in 2010, only 13 per cent of those over age 65 had some secondary education. By 2050, this proportion will have risen to 56 per cent (Scherbov et al., 2014, Table 11.14). The rise will be sharper for women than for men.

The large National Transfer Accounts research programme in 40 countries finds that while fertility well above replacement level would typically be most beneficial for government budgets, fertility near replacement level would be most beneficial for standards of living when the analysis includes the effects of age structure on families as well as governments. Although low fertility will place fiscal pressures on government programmes and very low fertility undermines living standards, moderately low fertility and modest population decline favour higher material standards of living (Lee and Mason, 2014).

Even in Japan, the country with the highest proportion of old people in the world, real income per capita has continued to grow over the past 25 years, with the exception of two periods, coinciding with the 1997-1998 Asian financial crisis and the more recent global financial and economic crisis. From 2012 to 2015, real GDP per person in Japan grew by an annual average of 1.4 per cent, a more rapid rate of growth than in OECD countries (1 per cent) or European Union countries (0.7 per cent).



Such evidence will not necessarily ease the concerns of government planners dealing with ageing populations. At a macro level, the clear implications are a rising demand for health services, growing requirements for long-term care, and growing needs for income and social security. Though on average, the older population at any given age is increasingly healthy over time, a rapid upturn in the need for medical care at ages above 60 is seen everywhere. Thus the rapidly rising proportion of older persons in the population spells increasing need for health services. Likewise, the requirements for long-term care for those suffering from disabilities affecting mobility will inevitably increase substantially (Mujahid, 2006: 31-32).

With regard to the need for income support, although the Asian tradition of provision of financial support by the offspring and younger

relatives to parents and older relatives remains strong, it is nevertheless weakening. The financial support a relatively shrinking young population would be able (or willing) to provide for the elderly can be expected to gradually dwindle. Options for assuring the income security of older persons must therefore be considered. The three main alternatives or supplements to family support are gainful employment, social security benefits through an individual's contribution to a superannuation or pension scheme, and welfare benefits provided by government based on need. Unfortunately, large numbers of older persons in Asia (especially farmers and those in the urban informal sector) have never had the chance to make sustained payments into pension schemes. This is particularly the case for older women, because a higher proportion have never been employed or have spent long periods outside the workforce due to caregiving responsibilities.

It is very difficult to briefly summarize the state of pension systems in Asia and the Pacific countries, given enormous intercountry variation and the complexity of pension schemes. Most countries have contributory pension schemes, but they reach only around 20 per cent of the elderly, generally those with better employment and more means. As a step towards universal public pension coverage, many countries have established some form of publicly funded social pension, varying in coverage, sufficiency and cost. In the context of rapid ageing, low coverage of contributory pension schemes, a large informal sector and weakening of traditional family support systems, these are crucial. Overall, pension coverage, including non-contributory pensions, hovers around the global average of about 47 per cent, but falls sharply to just over 32 per cent if China is excluded.

Developing countries in the region have made significant progress over the last decade, but in some countries, including Cambodia, Indonesia, Pakistan and Papua New Guinea, pension coverage is very low (less than 10 per cent of the older population). In some countries, pensions are often inadequate to cover basic living requirements. Women are even more poorly covered than men in part because of their lower representation in sectors of the workforce typically covered by pensions. The proportion of GDP allocated to public non-health social protection expenditure for older people in Asia and the Pacific was 2 per cent in 2010-2011, significantly below the global mean (UNDP, 2016a: 130-136).

In studying ageing, it is conventional to use either age 65 or age 60 as the cut-off point at which a person is considered old. Neither is very meaningful. For one thing, in the agricultural sector (and the urban informal sector) in most Asian societies, people tend to work until they can no longer do so. The notion of a particular retirement age is not relevant to them. An alternative is to define older persons as those who have the same remaining life expectancy (for example, 15 years of remaining life, which was actually the remaining life expectancy of 65-year-olds in many low-mortality countries in the 1960s) (Scherbov et al., 2014: 574). By doing so, our perspective on ageing changes considerably. If remaining life expectancy of 15 years according to life tables is used as the old-age threshold, the proportion of elderly does not rise nearly as rapidly as when the conventional cut-off of, say, 65 years of age is used, because life expectancy is increasing over time. Thus for China, using this measure, the old-age threshold in 2010 was

65.6, but by 2050, it would be 71.9. For India, the corresponding figures are 63.4 and 70.2, and for Indonesia, 63.4 and 70.5 (ibid., Table 11.7).

This alternative measure better reflects the improvement over time in the health, freedom from disability and better capacity to keep working of those reaching a particular age, such as 65. Counting as “old” only those whose life expectancy is less than 15 years, the proportion of those aged 65 and over who are “old” declines in Asia from 94 per cent in 2010 to 72 per cent in 2030 and to 62 per cent in 2050. In China, the same proportion falls from 95 per cent in 2010 to 67 per cent in 2050; in India, from 100 per cent to 65 per cent; and in Indonesia from 100 per cent to 66 per cent (ibid., Table 11.12). The reconceptualization of what it means to be elderly enables us to be somewhat more optimistic about countries ageing than is commonly the case.

Interactions between demographic and environmental changes

Population-environmental relationships are said to be “dynamic, reciprocal and highly variable” (Curran and Derman, 2012: 186). Assessments of the environment in Asia and the Pacific typically find that “land, air and water resources are being exploited unsustainably and that the integrity of many ecological systems that are needed to support human populations are threatened by human activities and pollution” (Hayes, 2014: 74). Anthropogenic climate change, a global environmental problem, is affecting human well-being via various pathways: extreme weather events such as storms and floods, effects on ecosystems, sea-level rise and environmental degradation. Temperature and humidity changes are expected to affect agricultural production and the spread of certain diseases.

Population dynamics are intimately bound up in these developments, as both cause and consequence. For example, massive urban population growth is contributing to an increasing proportion of the region’s greenhouse gas emissions. Better urban design and policy could make for much more energy-efficient cities, for example, by enforcing new building codes; developing more energy-efficient use of space for work, living and recreation; and reducing dependence on private cars. As it stands, however, urban sprawl is converting agricultural land to urban areas and roads, changes which are far more permanent and irreversible than those

associated with earlier patterns of conversion of forest to agricultural land.

Patterns of production and consumption prove to be more important than the number of people in achieving a world where present and future generations can be sustained.⁸ Nevertheless, further population growth, in tandem with the rising expectations of the growing Asian middle classes as well as poverty reduction efforts, will put additional pressures on the planet unless more efficient and “greener” ways of providing people with decent lives can be found (UNFPA, 2012b: 6).

Urban environments provide a stark contrast between the living conditions of the poor and the wealthy, not only in terms of their quality of life, but also in terms of their exposure to environmental hazards. The poorest urban populations are likely to live in informal settlements in hazard-prone areas, placing them at greatest risk for a range of environmental threats. Asian cities are already feeling the immediate impacts of climate change. For example, rising temperatures affect the working conditions and health of low-income workers, and changing disease patterns are exacerbating health challenges.

Asian megacities are very much on the firing line in relation to environmental challenges. One study examined city elevation, population distribution and types of flood protection, combined with forecasts of sea level rise, ground sinking due to groundwater depletion, population growth, GDP trends and flooding costs. It found that of the 20 most vulnerable cities in the world, 12 were in Asia. These cities were, in order of vulnerability, Guangzhou, Mumbai, Kolkata, Shenzhen, Ho Chi Minh City, Jakarta, Chennai, Surat, Zhanjiang, Bangkok, Xiamen and Nagoya (Hallegatte et al., 2013). Planning for these cities needs to give much more emphasis to environmental and climate change considerations, keeping at the forefront the needs of the most disadvantaged.

The role of international migration

Though it certainly cannot match the volume of internal migration, international migration among Asian countries and between these countries and

the rest of the world is substantial, and has major implications for sustainable societies. Six Asian countries—Bangladesh, China, India, Pakistan, the Philippines and Viet Nam—are among the world’s top 10 recipients of remittances. International migration is too complex an issue to be discussed in detail in this report. The patterns and issues are well summarized in a number of studies (for example, Asian Development Bank Institute, OECD and ILO, 2014).

Migration flows are driven by demographic and wage disparities; insecurity and civil unrest are other major causes (Abbasi-Shavazi et al., 2018). Movement of workers could potentially offset shortages of labour in some parts of Asia, including in certain professional and skilled categories, but actual patterns are greatly affected by barriers to the free movement of labour, and by attitudes and policies in labour-receiving countries. Among members of the Association of Southeast Asian Nations (ASEAN), 97 per cent of all intra-ASEAN migrants go to Malaysia, Singapore and Thailand; a goal of the freer (not free) flow of skilled labour is being pursued (Sugiyarto and Agunias, 2014). But the modest nature of the objective of facilitating the flow of skilled labour serves to underline the strong barriers.

Countries such as Australia, Malaysia and Singapore have long followed policies encouraging international migrants to meet labour needs (though the nature of their migration policies differs enormously). The countries perhaps most in need of workers (notably, Japan and the Republic of Korea) have to some extent allowed labour migrants to come without them gaining permanent residence. Thailand has been open to workers coming from poorer neighbouring countries such as Lao People’s Democratic Republic and Myanmar.

In Japan, the number of foreign workers nearly doubled between 2012 and 2017 to 1.3 million, though they only account for 2 per cent of the total workforce. The Government is stressing mobilizing more women and elderly people in the workforce, and is slightly increasing its intake of highly skilled “immigrants”. “Replacement migration” to offset declines in population size and the working-age population would need to be significant, however (United Nations Population Division, 2001).

⁸ The relationships are complex; see UNESCAP, 2015.





FAMILY AND MICROLEVEL IMPACTS OF DEMOGRAPHIC MEGATRENDS

Changing marriage and family patterns

As countries proceed through demographic transition, many changes take place in the structure and functioning of families. These are both causal and consequential. A key causal connection is between delayed marriage and fertility decline, though both can frequently be traced back to other “upstream” causal factors. Consequential effects of declining fertility include smaller families and changing intrafamily relationships. Such changes are of great importance yet tend to be neglected.

Delay in marriage and family formation is increasing to a remarkable degree in East Asian and many South-East Asian countries, particularly among urban populations and better educated women (Jones, 2018; Jones and Yeung, 2014). In general, there is a wide gulf separating marriage patterns in East and South-East Asia, on the one hand, and in South Asia, on the other. In East and South-East Asia, the extended duration between puberty and entry into marriage, and the greater likelihood of meeting a potential spouse in extended periods of schooling and post-school employment, are conducive to delayed and “self-choice” marriage (Thornton and Fricke, 1987). Arranged marriage has largely disappeared, though to posit a dichotomy between arranged marriage and love marriage is far too simplistic. Parental control has gone, but parental influence remains, and the endorsement by parents of a young adult’s marriage plans remains a norm even in self-choice marriage.

In South Asia, marriage remains almost universal, early and overwhelmingly arranged by the extended family; in India, almost all marriages take place endogamously within caste. Caste-based inequalities continue to hold sway in the formation of social networks and access to opportunities (Basu and Desai, 2016: 18-19). But in South Asia, too, changes are evident. For example, in an increasing proportion of marriages, the young woman has at least some degree of involvement in the selection of her husband (Jejeebhoy et al., 2013). Also on the rise is the role of females in job-seeking city-ward migration in countries such as Bangladesh and India (Jones et al., 2016: 50, 60-63).

Another difference between South Asia and the parts of Asia further east is that union formation outside of official marriage is very rare in South Asia but somewhat more common elsewhere. In Japan and the Philippines, there is evidence of fairly high and increasing incidence of cohabitation, and there, and in some other countries, attitudinal change more accepting of cohabiting relationships has been recorded. Even in East and South-East Asia, however, cohabitation remains generally rare, and childbearing in cohabiting relationships even rarer (Frejka et al., 2010, fn. 10).

Figures 11 and 12 demonstrate the enormous differences in marriage patterns across the region, based on two key indicators. Figure 11 shows the percentage of ever-married females at ages 15 to 19.⁹ In South Asia, although proportions have fallen very substantially, they remain much higher than in most countries of South-East Asia. In East Asia, child marriage (under age 18) has virtually disappeared. In the first decade of the 21st century, however, sharp declines in the percentages of children married in India and Pakistan, and slight increases in Indonesia, Thailand and Viet Nam, have resulted in a degree of convergence across these five countries.

For some countries, Figure 12 is the obverse of Figure 11. In Japan and the Republic of Korea, where early marriage rarely occurs, very high and rising proportions of women aged 30 to 34 remain unmarried. Conversely, in Bangladesh, India and Pakistan, where early marriage remains prevalent, only a tiny proportion of women remain single at ages 30 to 34. Indonesia shows the same pattern, although delayed marriage is certainly more prevalent there than in the South Asian countries. Between these extremes lie a number of countries where early marriage is prevalent, and delayed marriage is also common: Myanmar, the Philippines and Thailand are in this category. China has its own pattern: there is almost no child marriage, marriage is concentrated in the 20s and almost all women marry by the time they reach 30, though delayed marriage is becoming more common in the large cities. India also has a pattern of compressed ages at marriage, but the compression is more between ages 14 and 25, with a particularly tight clustering between ages 17 and 19 (Desai and Andrist, 2010: 675).

Because of hypergamy—women tending to marry up in terms of educational or income level—non-marriage in East Asian countries is not dispersed evenly throughout society, but concentrated in two groups with problematic marriage prospects: men with little education and women with tertiary education (Jones, 2018, Table 19.3). Changing age structures, educational levels and migration patterns have led to the situation where these two groups face a shortage of potential partners in the categories in which they would traditionally have married (Jones, 2007: 462-466). Another reason for the marriage gap for men with little education is gender-biased sex selection.

Child marriage has its own issues, and so do delayed marriage and non-marriage, as discussed below. While some countries in the region face one of these issues, others face multiple issues simultaneously (see box 1).

⁹ This statistic needs to be interpreted carefully. It is a cross-sectional figure, showing the current marital status of those in the age range 15 to 19 at the time of the census. If 40 per cent of this age group is ever-married, this does not mean that 60 per cent of women marry only at ages 20 and above. Many women aged 15 to 19 at any particular time are aged 15, 16 or 17, and the fact that they are not yet married does not necessarily mean that they will not marry before reaching age 20. Thus, if 40 per cent of women aged 15 to 19 are ever-married, this probably implies that a majority of the women in this cohort marry in their teens.

BOX 1:

Marriage and fertility in Thailand

Thailand has joined the ranks of countries with very low fertility, as its TFR has fallen to about 1.5. This is partly the result of greatly delayed marriage for many women and a rising proportion who never marry, and partly the result of small family size among women who do marry. As in the wealthy countries of East Asia and also in neighbouring Myanmar, the proportion of women remaining single at age 35 to 39—and therefore unlikely to have children—has increased remarkably: to 14.6 per cent in 2010. Delayed and non-marriage are particularly evident in the mega-urban region of Bangkok and especially among women with tertiary education.

The 2010 Population Census revealed that in the Bangkok mega-urban region,* fertility has fallen to ultra-low levels. A TFR of about 0.9 is lower than that recorded in Seoul, Tokyo, Singapore, Taipei, and China, Hong Kong SAR, although in Beijing, Shanghai and Tianjin, the rates may be even lower.

What has led to delayed marriage and low fertility? It is apparently related to the rapidly rising levels of education in Thailand; young female tertiary education graduates now greatly outnumber male graduates, making it hard to find suitable marriage partners. Other factors are improved labour market opportunities for women, particularly in the big city, and the difficulty women face in combining market work with raising a family.

To quote from a recent UNFPA report, “Traditional Thai society dictates that women are to care for their homes and families, including both children and ageing relatives. However, the change in women’s roles outside of the home have not translated into cultural adaptation with men adopting larger domestic responsibility and few families can afford to survive on a single income, especially in urban areas. This has consequences for decisions on family formation, as well as childcare quality” (UNFPA Thailand Country Office, 2015: 26). These issues also play out in countries such as Japan, Malaysia, the Republic of Korea and Singapore.

But there is another trend that sharply differentiates Thailand from these other countries: namely, the high and increasing prevalence of teenage marriage and early childbearing. In 2010, 22 per cent of women aged 20 to 24 reported having married before the age of 18, while only about 12 to 14 per cent of women in older age groups did so. Though the fertility rate at ages 15 to 19 declined from above 40 per 1,000 in the early 1990s to 32 per 1,000 around 2000, it then rose sharply to rates above 50 per 1,000 between 2008 and 2013. Adolescent pregnancy rates are considerably higher, because many adolescent pregnancies are aborted (UNFPA Thailand Country Office, 2014).

These trends are unexpected and disturbing. Why are they happening? This is a difficult question to answer. It does not appear to be common for parents to force adolescent girls to marry, but it is likely that unintended pregnancies frequently result in the marriage of pregnant girls. The young women who are giving birth tend to come from more disadvantaged groups, and to be among those who drop out of school early or have to travel to other places to attend school.

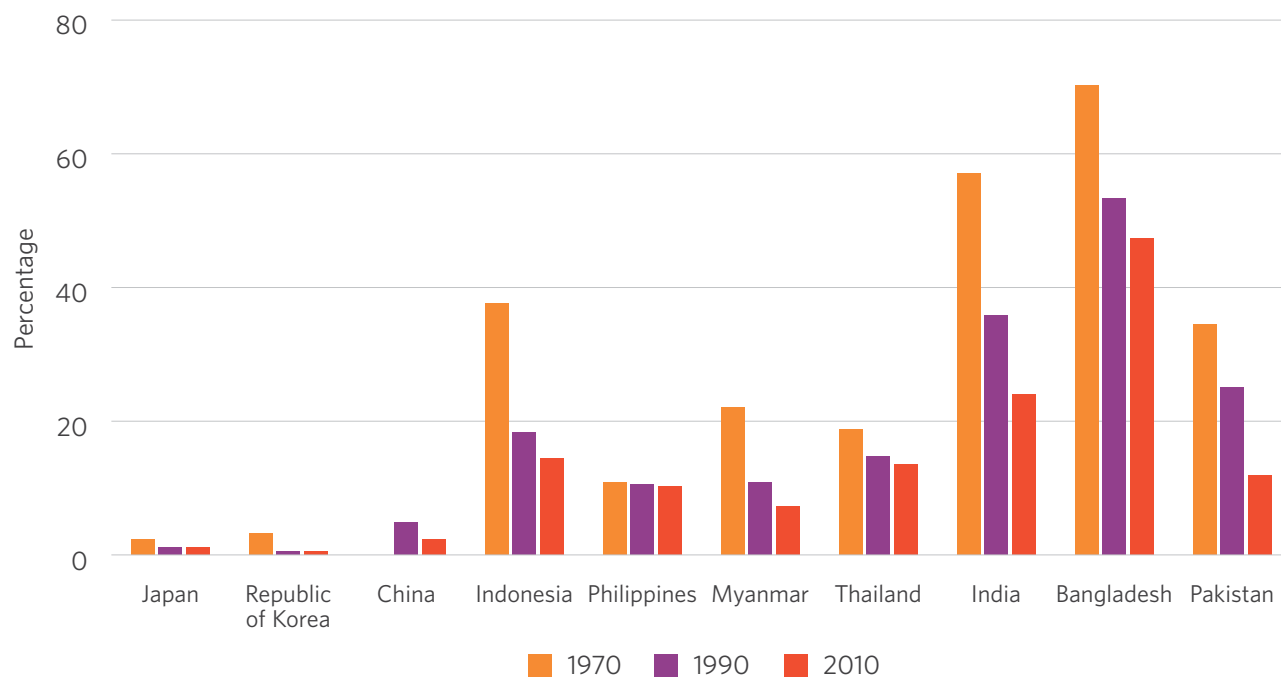
Other factors appear to include inadequate and ineffective sex education, lack of adolescent-friendly reproductive health facilities and changing social norms. The detrimental effect of early and unplanned pregnancies on the health, education, family relationships and future prospects of many young women underlines the need for well-directed policies aimed at effective sex education and reproductive health support for young people.

Unlike many other countries in Asia-Pacific, Thailand faces two kinds of concerns related to changing marriage and family: the effects of delayed and non-marriage and very low fertility, and the consequences of adolescent marriage and childbearing. Many other countries experience one of these issues but not both. The Thai case aptly illustrates how every country confronts its own issues relating to population and the family.

* Bangkok metropolis and the neighboring provinces of Samut Prakan, Nonthaburi, Pathum Thani, Chonburi, Nakhon Pathom and Samut Sakhon.

FIGURE 11:

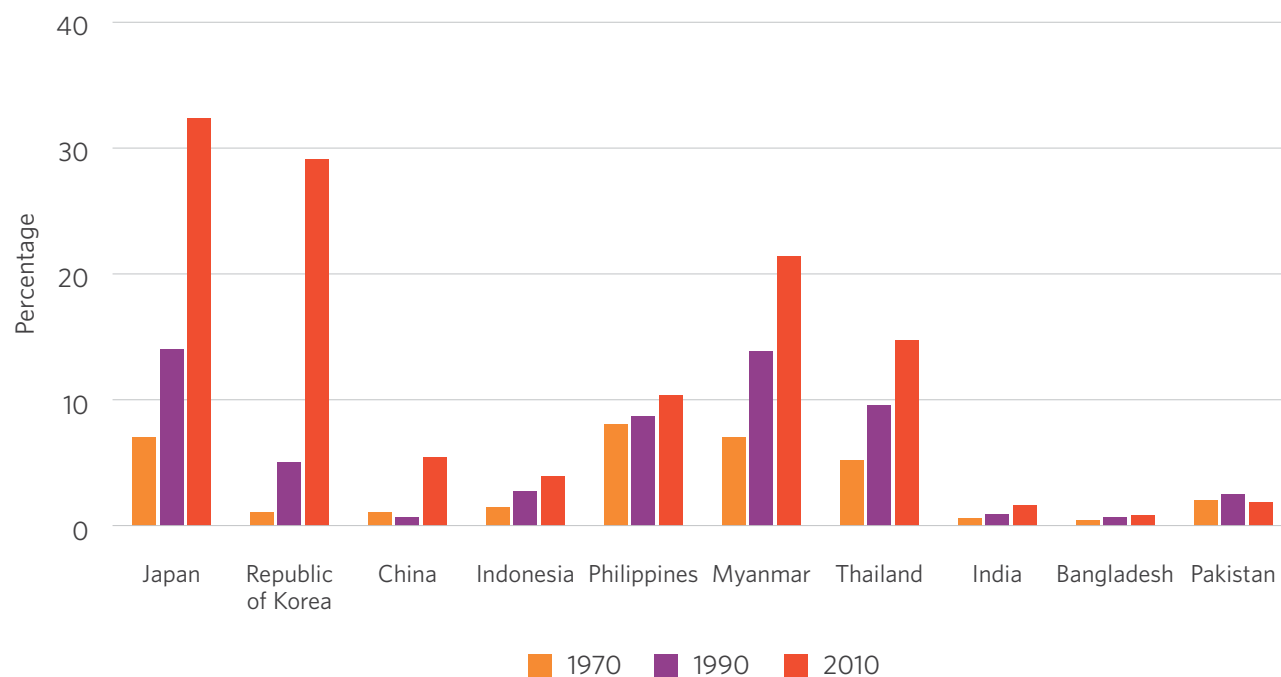
Percentage of females ever married at ages 15 to 19, various Asian countries: 1970, 1990 and 2010



Source: United Nations Population Division, 2015.

FIGURE 12:

Percentage of females never married at ages 30 to 34, various Asian countries: 1970, 1990 and 2010



Source: United Nations Population Division, 2015.

Marriage and fertility

In both economically more and less advanced countries, marriage patterns are related to fertility, but not always in ways expected. Continued very early marriage in Bangladesh has not prevented fertility from falling almost to replacement level, and below it in some districts. Nor is the arranged marriage system preventing fertility from reaching and going below replacement level in many states of India.

In East Asian societies, delayed and non-marriage are important contributors to the very low fertility now prevailing, and unless and until marriage prevalence increases, it is unlikely that fertility will increase very much. An alternative would be more childbearing outside marriage.¹⁰ Among Western countries, only those with high levels of non-marital fertility have managed to maintain TFRs in the zone of 1.7 or more, or increase them to this level. This could mean that East Asian countries are unlikely to climb back to levels approaching 1.7 unless non-marital fertility becomes much more acceptable. Are higher levels of non-marital fertility likely to emerge in these countries? The tentative answer is no, though social change can occur quite rapidly, particularly in the age of social media and instant communication. The issue is also relevant for Asian countries with fertility around or just below replacement level—Bangladesh, India, Indonesia, Malaysia, Myanmar and Viet Nam.

Family as refuge or as place of risk for women?

Asian governments give priority to family as the cornerstone of society. They therefore tend to be alarmed by many changes in family types and functions that are observable throughout the region. Yet too rosy a view of the traditional family is unwise. Ideally, the family provides an environment where warm and intimate relationships are enjoyed, where children are raised in safety, and the benefits of a multi-person economic unit are enjoyed. Dysfunctional families, however, are only too common. Gender-based violence is most commonly

experienced within the family, exploitation of children happens, and decision-making power is frequently concentrated in the hands of one person. At times of crisis, child marriage can be driven by concerns around the security of girls as well as economic imperatives.

In South Asia, 41.7 per cent of ever-partnered women have experienced intimate partner violence, compared to 16.3 per cent in East Asia and 28 per cent in South-East Asia. There is evidence in India that the incidence of spousal violence against women is decreasing, however. Among ever-married women aged 15 to 49, the proportion who had ever experienced spousal violence fell from 37.2 per cent in 2005-2006 to 28.8 per cent in 2015-2016 (Government of India, Ministry of Health and Family Welfare, 2016: 6).¹¹

In Bangladesh, a 2015 survey that measured five forms of violence—physical, sexual, economic, emotional and controlling behaviour—found that almost three-fourths (72.6 per cent) of ever-married women experienced one or more such forms of violence by their husband at least once in their lifetime, and 54.7 per cent experienced violence during the last 12 months. Restricting the discussion to partner physical violence, almost half (49.6 per cent) of women had experienced this over their lifetime, and 20.8 per cent during the last 12 months. More than 40 per cent of women experiencing lifetime partner physical or sexual violence suffered from injuries as a result of that violence (Bangladesh Bureau of Statistics, 2016: xviii).

Studies in Bangladesh, Pakistan and elsewhere show a tendency for spousal violence to be more prevalent among poorer and less-educated people. But such violence takes place across the whole spectrum of socioeconomic groups. In a broader Asia and the Pacific study, logistic regression analysis showed that, while low education and poverty had some independent effect on incidence of domestic violence, factors such as experience of childhood emotional abuse or neglect, having witnessed abuse of their mother, and inequalitarian gender norms have a stronger independent effect on men's likelihood of engaging in intimate partner violence (Fulu et al., 2013, Table 6.1).

¹⁰ Although cohabitation is increasing in Japan and probably elsewhere in East Asia, the proportion of births taking place outside marriage is less than 2 per cent in Japan, the Republic of Korea and Singapore, and less than 3 per cent in Taiwan Province of China.

¹¹ While the figures on domestic violence appear very precise, obtaining accurate reports on such matters is very difficult, and this needs to be kept in mind in interpreting the data.

The social system in the major South Asian countries is typically patriarchal, patrilineal and patrilocal, characterized by inegalitarian gender relations (though predominantly Buddhist Sri Lanka is somewhat of an exception—see Asian Development Bank, 2015a: 1). In marrying off their daughters, parents may prioritize their welfare, but many other considerations may also intrude, including broader family issues and even the narrow self-interest of the key decision-makers. In poor Indian or Bangladeshi families, there are clear benefits to the parents in getting a daughter married off early, particularly as dowry payment tends to rise for girls remaining unmarried beyond what, in many societies, would be considered a very early age. In India, marriage is a far more alienating experience for brides from the northern and eastern regions than from the south and west, because of the practice of child marriage and marrying girls into a distant village; even if closer, they largely lose contact with their natal family. Conjugal relations are not close in these regions; it is said that “it is more important to know who your mother-in-law will be than who your husband will be”.

The arranged marriage system in South Asian countries, closely linked to child marriage, appears to be related to the high level of domestic violence. Arranged marriage of children in itself is in direct contravention of one of the key rights of women articulated in the United Nations Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (United Nations, 1979). As age at marriage increases, there appears to be a degree of erosion of this system. A large study in India focusing on married women aged 15 to 24 documents the emergence of semi-arranged marriages, especially in the south and west of the country, where young women are given the chance to meet their proposed husband and give their consent (Jejeebhoy et al., 2013).¹² This study found that young women in semi-arranged marriages were more likely to be protected from marital violence than those in which they had no say and no contact with the husband before the wedding. Presumably, fully arranged marriages were more common in the case of child marriages (below age 18) than at older ages.

Gender inequalities

While the family is the locus of many gender inequality issues, public policymakers and planners have increasingly begun to realize their broader implications when it comes to concerns such as raising women’s labour force participation rates. Violence against women is not only a gross violation of women’s human rights, but causes a range of financial and health problems for individual victims, and imposes significant economic and social costs. It may be a better predictor of state peacefulness, both internally and internationally, than level of democracy, wealth or prevalence of extremist ideologies (Hudson et al., 2012).

Wide gender gaps in Asia, particularly in South Asia, limit the prospects for demographic dividends, which require high levels of women’s labour force participation, and ability to realize their rights and make choices related to education and fertility. The situation is captured in the Gender Development Index and the Gender Equity Index.¹³ For the region as a whole, the gender gap according to the 2017 Gender Development Index is highest in Afghanistan and lowest in Mongolia and Viet Nam. According to Social Watch’s Gender Equity Index for 2012, East Asia and the Pacific scored much better (0.69) than South Asia (0.39). Another measure, the Gender Inequality Index, shows the extent to which achievements in reproductive health, empowerment and labour market participation are eroded by gender inequalities, and, more than the Gender Development Index, reflects cultural values that may underlie gender discrimination. Values for this index are presented in Figure 13. In 2017, South Asia scored 16.7 per cent higher than the global average, indicating widespread discrimination, while East Asia and the Pacific were 29.3 per cent lower than the global average. Papua New Guinea had the highest figure, followed by Afghanistan. In general, the Gender Inequality Index is higher in South Asian countries, and in countries with lower levels of human development (UNDP, 2018, Table 5).

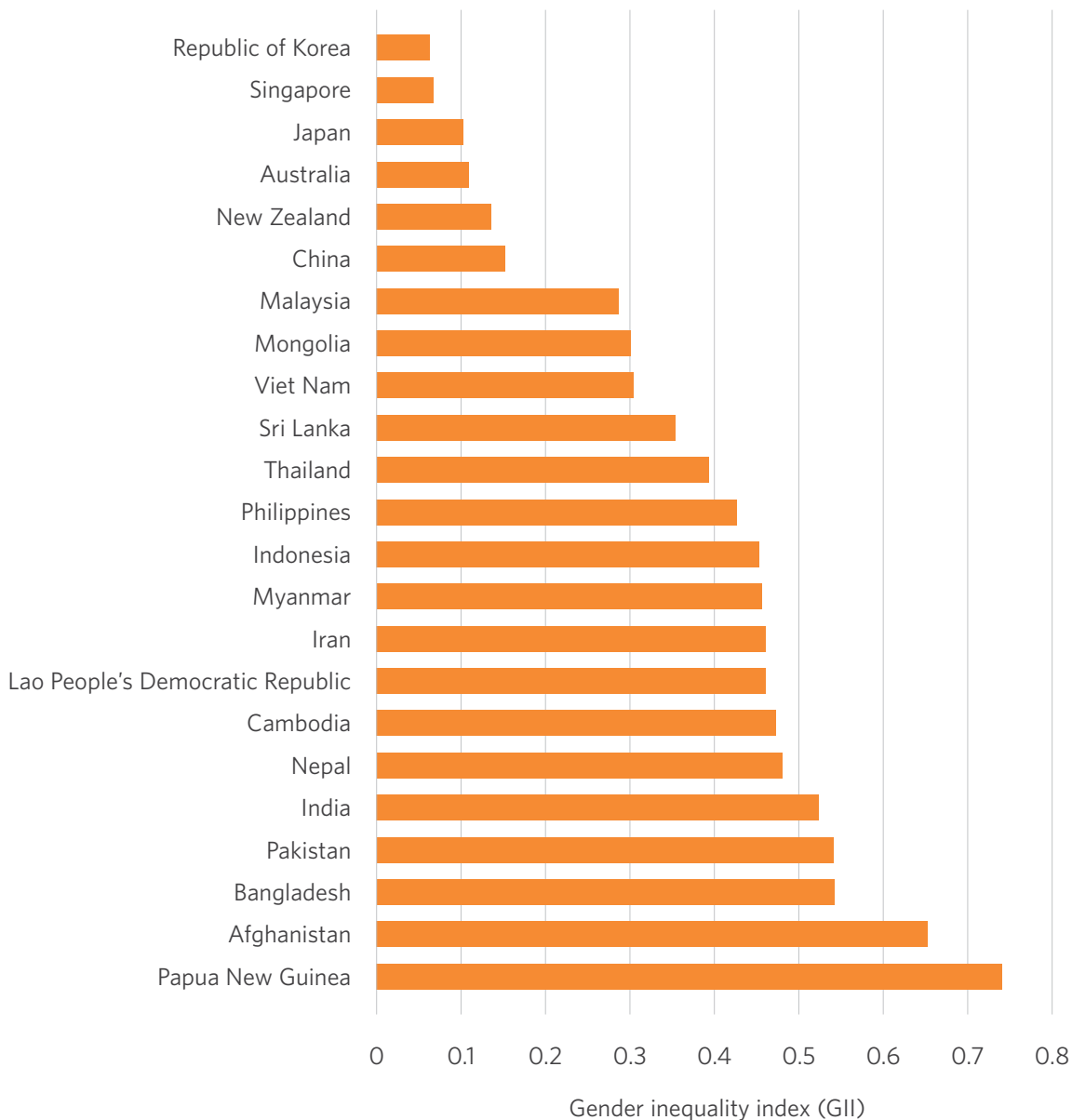
Patriarchal social systems generate son preference, which in turn is reflected in distorted

¹² In the north and east of India, 91 per cent of young women had a family-arranged marriage in which they had no effective say in the choice of husband; in the south and west, this percentage fell to 52 per cent. Most of the others had a semi-arranged marriage. A much rarer form of marriage, self-arranged or love marriage, accounted for 2 per cent of marriages in the north and east, and 9 per cent in the south and west (Jejeebhoy et al., 2013, Table 1).

¹³ For detailed discussion of these and other indexes of gender inequality, see Klasen, 2007.

FIGURE 13:

Gender Inequality Index, Asia and the Pacific countries, 2017



Source: UNDP Human Development Report, 2018.

sex ratios at birth and early childhood, and a large surplus of males in China, India and Viet Nam, and, more recently, Nepal (Guilmoto, 2012, 2015). This used to be the case in the Republic of Korea as well. Some South Asian countries show an above-normal ratio of female to male deaths of children under five. Distorted sex ratios have serious long-term social and familial consequences, and are being treated as important issues by policymakers.

Maternal mortality

High levels of maternal mortality are a gender-specific issue, since only women are subject to this tragedy which cuts short their life around the time of childbirth and impacts the entire family and community. Between 1990 and 2015, women's situation in this regard improved markedly in the Asia-Pacific region, because although the MDG target of a 75 per cent



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reduction in the maternal mortality ratio (MMR)¹⁴ was met by only four countries in the region, more than half the countries achieved a very substantial reduction of more than 60 per cent. Nevertheless, there is still a long way to go, as almost one third of the world's maternal deaths occur in Asia and the Pacific. Countries such as Afghanistan (MMR estimated as 396 per 100,000 live births in 2015), Nepal (258), Papua New Guinea (215), Lao PDR (197), Bangladesh, Pakistan, India and Myanmar (all in the 170s) will face a difficult task in meeting the SDG target of an MMR of less than 70 by 2030 (WHO et al., 2015). In large middle income countries, like India and Indonesia, the absolute number of maternal deaths is extremely high and the provincial disparities staggering.

The MMR is higher for women living in rural (especially isolated) areas and among poorer communities. The major complications that account for nearly 75 per cent of all maternal deaths are severe bleeding (mostly after childbirth); infections (usually after childbirth); high blood pressure during pregnancy; complications from delivery; and unsafe abortion. Most maternal deaths are preventable, as the health-care solutions to prevent or manage complications are well known. If all women have access to antenatal care in pregnancy, skilled care during childbirth, and care and support in the weeks after childbirth, MMR can be reduced to very low levels. The extent to which priority is given to ensuring such care is provided will determine countries' degree of success in lowering maternal mortality further.

¹⁴ A maternal death (the numerator of the MMR) is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management.

Child marriage

The continued prevalence of child marriage in some Asia and the Pacific countries is one of the most important gender issues. In South Asia, although there has been a decline over time in the proportion of females aged 15 to 19 who are married, the proportion still marrying as children remains very high in Afghanistan, Bangladesh, India (especially the northern and eastern states) and Nepal. Lao People's Democratic Republic has the highest incidence of child marriage in South-East Asia.

The legal age at marriage for women in India has been 18 since 1929. Yet as recently as 2015-2016, 26.8 per cent of women aged 20 to 24 were married before age 18. While this figure is clearly unacceptably high, considerable improvement has taken place. In 2005-2006, the figure was 47.4 per cent (Government of India, Ministry of Health and Family Welfare, 2016). The states with the highest rates of child marriage, starting from the highest, are West Bengal, Bihar, Jharkhand, Rajasthan, Andhra Pradesh and Assam. Notably, in 2015-2016, none had as high a percentage married before age 18 as the all-India figure in 2005-2006. The ranking of states with the earliest marriage changed considerably from a decade earlier, when Rajasthan had the highest level of child marriage, Uttar Pradesh was in fourth place and West Bengal was fifth.

In Nepal, the 2016 Demographic and Health Survey showed that, although early marriage had been considerably more common for women currently in their 30s and 40s, even among those aged 20 to 24, 39.5 per cent had married by age 18 (at that time, the legal minimum age at marriage) and 7 per cent by age 15. In Bangladesh, too, the legal age of marriage for women is 18, but the 2014 Demographic and Health Survey found that 59 per cent of women aged 20 to 24 were married before age 18. There has been a steady decline in the proportion married before age 18, however, from 81 per cent among women currently aged 45 to 49.

In Indonesia, socioeconomic survey data for 2013 show that the proportion of women aged 20 to 24 who married before age 18 was 14 per cent. While this is well below the figure recorded in 2007 (22 per cent) and far lower than the figures in Bangladesh and India, in all three countries (and indeed in many other countries in the region) there is a significant gap between law and practice relating to child marriage. Since 1974, the legal age at marriage for girls in Indonesia

has been 16. In the decade after that, more than 10 per cent of girls were still being married before that age, with the figure falling to about 3 per cent by the early years of the 21st century. Why are such marriages still taking place? One reason is that in some cases, the girl is pregnant, and marriage is seen as the only way to preserve family honour. Another is that parents, religious teachers and officials responsible for registering such marriages do not accept that there should be any age limit for girls to marry. In some cases, there is no valid birth certificate for the girl, and therefore no way for the official authorizing the marriage to verify her age.

There are at least five key problems with early, parent-arranged marriage. First, there is a human rights dimension. Article 16 of the Universal Declaration of Human Rights states that "marriage shall be entered into only with the free and full consent of the intending spouses". Second, early marriage is likely to result in early age at first childbirth, which can have adverse health consequences for both mother and child. Third, early marriage is typically a barrier to education and to other opportunities that education opens up. Fourth, women who marry very young, typically to a much older husband, "are likely to have less power, status, agency and autonomy within the household. In fact, men may choose younger brides for this very reason" (Jensen and Thornton, 2003: 10). Fifth, and related to the fourth, there is a significant correlation between child marriage and violence (UNFPA, 2012a: 13).

Throughout the region, child marriage tends to be concentrated in poorer, less educated populations, and can be expected to decrease with increasing incomes and educational levels, even if community attitudes do not change. The need to modify community attitudes is clear in many cases, however, particularly where child marriage is accepted as an appropriate way to manage girls' sexuality and fertility, and to avoid the possibility of shame falling on the family if girls' behaviour is seen to violate community norms.

The future of delayed marriage and family life

How can we explain the upsurge in delayed and non-marriage in the wealthier countries of East and South-East Asia? From a woman's perspective, given the stress on quickly having a child after marriage in these societies, delay

in marriage could in many cases be motivated by reluctance to start families by those worried about problems in bearing and raising children. Briefly stated, these problems include, first, the increasing costs of childrearing, both the direct financial costs and the opportunity costs of women's interrupted career development; societal pressure on parents to produce successful children (sometimes referred to as the "educational arms race", as in Anderson and Kohler, 2013), which deters both marriage in the first place and childbearing by married couples; and the difficulty of changing long-established gender roles within the household that place educated women interested in pursuing a career in an invidious position. As stated by Eun (2007: 61), with regard to the Republic of Korea,

"...family norms regulating family life remain within a male-centred and female-subordinated structure. 'Second shift' is mandatory for Korean women regardless of their educational achievement or professional careers."

The set of roles facing women in countries such as Japan and the Republic of Korea have been summarized in the concept of a "marriage package": the expectation that women will take the key role in childrearing, housework and household management, and frequently, care of parents-in-law as they age, even if they work full-time (Bumpass et al., 2009). This discouraging picture of the decisions facing better-educated women, in particular, in East Asian societies, is not so different from the situation faced by their counterparts in South-East Asian countries such as Malaysia, Myanmar, Singapore and Thailand. As long as gender norms continue to place full responsibility for unpaid care work on women, and until there is greater state and family support for women's dual role, those women who are educated and who can support themselves will tend to delay marriage, or even opt out altogether.

Whether, when and whom to marry are very fundamental life decisions, which will continue to deeply affect not only the lives of the individuals involved, but also broader demographic trends. No longer can it be assumed that marriage and family-building is the fundamental life goal of the great majority of young people in East Asian countries. In the Republic of Korea, for example, in 2009, only 23.4 per cent of single men and 16.9 per cent of single women considered it necessary to marry, and among currently

married women, the proportion agreeing that "having a child is a must" dropped from 73.7 per cent in 1997 to 46.3 per cent in 2012 (Lee and Choi, 2015: 119). Will other countries in South-East Asia and South Asia follow the East Asian example of ultra-low fertility and massive retreat from marriage? This is not certain, given the vastly different circumstances between and within countries in this region. The pace of fertility decline is uneven, and heterogeneity in marriage patterns is pronounced (Jones and Yeung, 2014). As economic development proceeds in these societies, however, many shared elements are likely to push in similar directions: consumerism and rising expectations, high financial and opportunity costs of children, job insecurity, the educational "arms race" and gender inequalities within the household.

The declines in fertility and increases in age at marriage occurring almost universally throughout the Asia and the Pacific region have important implications for many aspects of family life. The average size of families is shrinking, making the distribution of children across families different from the distribution of adults. In the low-fertility countries of East Asia, many people are not marrying at all, and some of those marrying are not having any children. Where TFR has fallen below 1.5, half of all women have at most one child, which does not necessarily mean that most children are growing up as only children. Women with larger families contribute disproportionately to the average family size. In China, because of its unique policies, the proportion of children growing up in one-child households is no doubt higher than in other countries, but widespread concerns about the negative consequences of this for children and society (in particular, the idea that they will grow up overly self-centred) require more evidence and research.

Delayed marriage, and the tradition throughout Asia of children living at home until marriage, is resulting in considerable extension of the period in which young people remain at home. For example, in Japan, 64 per cent of unmarried men and 71 per cent of unmarried women in their 20s were living with parents in 2005 (Bumpass et al., 2009: 225). In many of these settings, the role of such singles tends to be disparaged (for example, by the common term "parasite singles" in Japan), and the expected roles in family and society of those who delay marriage or never marry are still being worked out. The proportion of 30-somethings remaining single is now so great in some countries, however, that they can no longer be considered aberrant by their societies.

Another issue resulting from the delay in marriage is the extended period post-puberty in which intimate relationships are likely to develop, resulting in the need for effective sex education and for contraception to be available to the unmarried where needed. Because of conservative attitudes, official family planning programmes typically have difficulty coming to terms with the need for counselling and services to be provided to unmarried youth in confidential, non-confrontational settings. Where this does not happen, more unwanted pregnancies will occur, in many cases endangering life through unsafe abortions, and closing off many life options for youth involved.

Divorce is increasing in many countries; it is more prevalent among the less educated. Even where it is rare (for example, in most South Asian countries), this signifies not the prevalence of harmonious marriages but rather the cultural barriers to using divorce to end a disharmonious marriage. In the slums of Delhi and Dhaka, separation is more common than divorce, but this can seriously disadvantage the women concerned. In the Republic of Korea, where

divorce rates rose sharply from 1998 to 2002, the rise appeared to be partly related to the Asian financial crisis, but also to an erosion of the stigma attached to divorce and a decline in the consensus that for the sake of the children, parents should not divorce (Dommaraju and Jones, 2011: 733). Similar attitudinal changes appear to be taking place in other countries as well, for example, in Iran and Singapore.

Other elements of family change include increased cohabitation in some countries (e.g., Japan and the Philippines) and an increase in single-person households. The latter are far more prevalent in the wealthy East Asian countries than elsewhere in Asia. While widows remain a major group of one-person households, “the rising prevalence of one-person households in Asia is mainly fuelled by the increase of young urban adults who live alone as a consequence of delayed or declining marriage, increasing divorce, and increasing geographic mobility” (Yeung and Cheung, 2015: 1099). The implications of these trends for Asian family life and social sustainability over coming decades require careful analysis.



Rapid shifts in attitudes

While many traditions and attitudes related to marriage, family relationships and gender roles appear very traditional and inflexible, it may be unwise to underestimate the potential for rapid change. For one thing, traditions are being tested by the sheer pace of change in many aspects of life. The Republic of Korea, for example, has seen rapid economic development, educational advances and the near-total urbanization of the country in just two generations. In this context, it is not so hard to understand the dramatic change in two aspects of family life: the sharp increase in age at marriage and non-marriage, and the sharp rise in divorce rates. In many other countries, too, the situation from the grandparents' generation to the current children's generation has changed dramatically.

Although many traditions may still be preserved in such a situation, there are additional factors facilitating the transfer of new ideas: the ubiquity of the Internet, mobile phones and social media. Even in times before these means of communication were so prevalent, cases can be noted where long-standing conventions collapsed with remarkable rapidity, particularly when economic incentives came into play, and female education was increasing. One such case was the widespread movement of young, single Malay women from rural areas into factory employment in Malaysian cities in the 1970s. Another was the movement of young, single Bangladeshi women from rural areas into garment industry employment in cities in the late 1990s and early 2000s. In both of these societies, this trend flew in the face of conservative Islamic attitudes requiring young women to remain at home until married. In both cases, male pride on the part of fathers and brothers was frequently hurt, but the clear benefits to the family of taking advantage of the earning power of these young women undercut the objections. In the case of Malaysia, at exactly the same time, the average age at marriage of young women was rising rapidly, and parental arrangement of marriage was in heavy retreat (Jones, 1994: 144-149). These examples should alert us to the possibilities of very rapid shifts in attitudes and behaviours in certain circumstances.

Ageing and the family

The great majority of people aged 60 and over are perfectly capable of living independent lives and looking after themselves. As age increases, though, the likelihood of needing care of some kind increases. In Thailand, for example, in 2007, the percentage of people who indicated that they could take care of themselves was 94 per cent of those aged 60 to 64. By ages 75 to 79, this figure fell to 83 per cent, and among those over 80, only two-thirds indicated that they could take care of themselves (NESDB and UNFPA, 2011: 57).

In Asian countries, older people have normally continued to live with their children. Data for a large number of South-East Asian countries and three South Asian countries (India, Nepal and Pakistan), mostly for years around 2000, show that for age groups above 65, the percentages of both males and females living with at least one child is mostly above 60 per cent in the South-East Asian countries and around 70 per cent in the South Asian countries. These percentages tend to dip slightly for males at ages above 80, but if anything to rise slightly for females at these ages. In East Asia, too, percentages living with children remain well above the levels in Western countries, though they have declined significantly in China, Japan and the Republic of Korea (UNDP, 2016: 128), probably reflecting the tendency for older persons to prefer independent living in societies where older persons have sufficient economic resources.

Among older persons, women are more at risk of poverty, for a number of reasons. First, they are considerably more likely than men of the same age to be widowed. Men tend to marry women younger than themselves, and are more likely to die before their spouses. After losing a spouse, it is much more common for men to remarry than for women to do so. Secondly, women are less likely than men to have been in paid employment, have been paid less if working in the formal sector, and have tended to be concentrated more in the less remunerative agricultural and informal sectors. Older men have more income from a greater variety of sources than older women, including pension schemes and investments. Older women tend to depend more on social sources for income,

from spouses or relatives, or through public provision. Women who are widowed, divorced, separated or never married, or who do not have children, are particularly vulnerable to poverty in old age (UNDP, 2016: 126). And while increasing life expectancy among men tends to lower the widowhood rate for women, most of the other sources of vulnerability tend to be on the rise.

In many parts of Asia, traditional family support systems for older persons are already under considerable strain, and this will intensify as the ratio of older persons increases sharply, not only in countries as a whole, but also at the individual family level. The trends in ageing can be expected to affect family and social relationships in fundamental ways. The potential for intergenerational conflict cannot be ignored, nor can the fact that “older people can be highly vulnerable to deprivation, exploitation and abuse, including in their own homes as well as in institutional facilities” (UNDP, 2016: 128).

There is a strong connection between urbanization, ageing and migration. In Indonesia, the pattern of ageing by province and district reflects not only long-term fertility trends, but also migration patterns. Some provinces with low fertility have low proportions of older people because they experience the in-migration of young people (Arifin and Ananta, 2016). In many places, migration of young people to the cities leaves rural areas with many older persons lacking younger family members. Declining fertility makes it less likely that older persons will have adult children residing nearby. In Thailand, 87 per cent of older persons with four or more living children had an adult child at least living in the same locality, compared with 72 per cent of those who had only two living children and 66 per cent of those who had only one living child (NESDB and UNFPA, 2011: 55).

Particularly when children migrate to cities, leaving older people behind, will the latter be neglected? This depends on circumstances. The kinds of support needed can be broadly divided into three categories: financial, emotional and physical. Financial support can still be provided by absent children; emotional support ideally requires face-to-face interaction, but technological advances in communications,

especially widespread availability of cell phones, have greatly enhanced the ability of migrant children to keep in touch with their older parents (Knodel, 2014). It is only routine personal care that they are unable to supply. In any case, it has been shown that network family arrangements (living near a child rather than necessarily co-residing) are crucial for intergenerational support, and in Myanmar, Thailand and Viet Nam, at least, only a small proportion of old people do not have a child living relatively close by (Teerawichitchainan et al., 2015: 110). Thus the traditional intrahousehold support systems are still able to function to some extent in these circumstances, although formal social protection systems need to be developed and strengthened.

Looking further ahead, the rapidly rising proportion of men and women in many East and South-East Asian countries who do not marry or have children foreshadows a situation where increasing numbers of older persons will not have any children to provide support.

International migration flows and family issues

The family dimensions of international labour migration need to be kept in mind, because this kind of migration has important ramifications, both positive and negative, for family stability and well-being. The economic contribution to the family is often very positive, but the long absences of either the husband or wife can contribute to marital instability and problems for the children, even extreme risks in some cases.

Over the past two decades, international marriage migration has been on the increase, with a predominant pattern of men in wealthier countries such as Japan, Singapore and Taiwan Province of China marrying brides from poorer countries such as China, the Philippines and Viet Nam, frequently through the services of commercial matchmaking agencies. The men involved are frequently those who are disadvantaged in local marriage markets (Jones, 2012). There are many issues involved in this pattern, not least of which are vulnerability to violence and abuse given high levels of inequality and dependence.





POLICY IMPLICATIONS

Most Asia and the Pacific countries are presently in the fortunate position of having more workers, and fewer older and younger persons dependent upon them than in any point in history. This provides great opportunities for accelerated, inclusive and sustainable human development. According to a recent UNDP report, the so-called demographic dividend accounted for about 42 per cent and 39 per cent of economic growth in developed and developing Asia and the Pacific countries, respectively, between 1970 and 2010 (UNDP, 2016: 1).

The interconnectedness of human and economic development, and of these with demographic transition, which in turn can produce a demographic dividend, is apparent. As shown in Figures 4, 5 and 6 in Chapter 2, human development and the realization of people's rights and choices is more closely associated with fertility levels, and thus with the demographic dividend, than economic development. This is not to deny the importance of economic growth, but rather to stress that human development—and the benefits it brings—does not have to wait for economic growth, as the experience of a number of countries and regions within countries (e.g., Kerala and Tamil Nadu in India) has demonstrated.

The demographic dividend and appropriate policies to take advantage of it have helped Asia and the Pacific countries achieve considerable success on two key development goals—poverty reduction and the expansion of education, including to remove gender inequalities in education—that are central to the goals of the ICPD Programme of Action, the MDGs and now the SDGs. Successful policies need to be recognized and enhanced, and their relevance for other countries carefully assessed. A consistent pattern in the region is that countries that have made concerted efforts to realize sexual and reproductive health and rights have seen falling fertility rates accompanied by declines in poverty and higher levels of educational attainment.

Governments find it challenging to formulate and apply public policies to support people effectively across different age groups, all the more so when population dynamics shift rapidly. The 2030 Agenda calls for much more, however: namely, a different political and socioeconomic mindset, one that promotes inclusive and cohesive societies with the overarching theme of leaving no one behind. The hope that governments will single-mindedly follow such goals implies, first, that political leaders and the bureaucracy that serves them will be truly focused on the well-being of the population. Without this, progress in improving the living conditions of the most marginalized sections of society is possible but likely to be limited.

Policy needs to address real issues, and Asia and the Pacific's rapidly changing demography means that these differ from what they were just a few decades ago. Writing in 2012, Donaldson and McNicoll noted that up to that point, policy research on Asia's demographic transition had been:

"...overwhelmingly concerned with detailing the consequences of rapid population growth and measures to lower fertility. ... Looking ahead, the now radically changed demographic landscape calls for a new agenda of policy research. Prominent among emerging population related problems are: rapid population ageing with its major implications for inter-age transfers; changing marriage and family patterns underlying ultra-low fertility and possible population decline; and demographic adaptation to the new environmental conditions likely to be generated by climate change."

(Donaldson and McNicoll, 2012: 119).

Their agenda cannot be faulted, and although they recognize that other emerging population-related issues could readily be added to such a list, and that continuing trends such as urbanization and international migration may well take on heightened significance, the three population-related issues they mention, which have already been addressed in earlier chapters, will be among the core considerations in the current discussion of policy implications. It is important to emphasize that:

"...changes in population dynamics are not intrinsically "good" or "bad" for human well-being: it is only in specific contexts of the linkages between population dynamics and sustainable development that it can be ascertained whether they will hinder or promote well-being. What typically makes the difference is whether policymakers can adjust existing institutional arrangements in order to transform dysfunctional contradictions between population trends and development goals into productive synergies."

(Hayes, 2014: 57).

Promoting gender equality and enabling women to actively participate in the economy and social, political and cultural life more broadly is one of the most important measures any country can take. This applies both to countries with young populations and those with an ageing population and concerns around a labour shortage. Though

the situation of women has improved in many countries of the region, laws, institutions and social norms still need to catch up. In some countries, women's situation remains highly disadvantaged, a major brake on economic and social development. Some past achievements are under threat because of a rise in conservatism and stress on traditional family values.

One other overarching point should be noted before moving on to potential policy directions. Given the widely differing demographic and economic circumstances in Asia and the Pacific countries, leveraging these through international migration has considerable potential. For example, there is scope for labour-intensive industries to shift from East Asian to South Asian countries, or migration (permanent or temporary) could increase from countries with growing working-age populations to countries where the number of workers is falling, with migrants often helping to deliver non-tradeable services, such as elder care. Given how vulnerable migrants are to exploitation, strong emphasis would be needed on guaranteeing human rights under any new migration arrangements

The policy issues will be discussed below in relation to the three groups of countries identified in Chapter 3, based on their fertility levels:

Group 1. High-fertility countries (TFR above 2.5)

Group 2. Countries with near-replacement level fertility (TFR between 1.7 and 2.5)

Group 3. Low-fertility countries (TFR below 1.7)

But first, is there a key policy priority for **all** Asia and the Pacific countries? In terms of some general principles, a few points can be made. All countries need to work on raising the human capabilities and realizing the rights of their populations, though specific policy issues will differ widely according to demographic and economic situations. Likewise, all governments need to manage their economies efficiently, minimize corruption and stress the generation of decent work. Fully empowering women—in the workforce, in political and economic decision-making, and through eliminating violence against women—remains a challenge for all countries. All face issues related to environmental sustainability, ageing (though the immediacy of ageing varies greatly), and migration and urbanization. Finally, the emphasis in the 2030 Agenda on the most vulnerable and marginalized challenges the most economically advanced and poorest countries alike.

Key policy issues for Group 1 countries (TFR above 2.5)

Countries included: Afghanistan, Cambodia, Lao People's Democratic Republic, Mongolia, Pakistan, Papua New Guinea and the Philippines

For these high-fertility countries, and also for the high-fertility Indian states, different approaches to population policy relate to the features of individual countries, as highlighted in the box on Bangladesh and Pakistan.

Three key components are clear: first, countering child marriage through all available means; second, keeping children (especially girls) longer in school, focusing particularly on disadvantaged communities; and third, improving family planning services to reduce the unmet need for contraception. Emphasis in education policy should be not just on keeping children longer in school but also on improving the quality of education. Such educational developments, beyond their own inherent value, will also counter child marriage and have broader effects in supporting informed choices about fertility. All of these policies back the realization of basic human rights. Cost-benefit analysis factoring in economic consequences, social cohesion and meeting the needs of the most disadvantaged would show very substantial benefits. For one thing, unmet need for family planning is typically greater among more disadvantaged groups.

Taking advantage of the demographic dividend

As shown in Figure 9, these countries are at a relatively early stage of benefiting from the potential demographic dividend; the dependency ratio is not expected to fall below 60 until into the 2020s in Afghanistan, Pakistan and Papua New Guinea. As their fertility falls to around replacement level, they will enter the most favourable period for benefiting from the demographic dividend.

Although these countries face considerable challenges in raising educational enrolment ratios, including due to the continued increase in numbers in the school-going ages, it is most important that they put every effort into boosting attendance and the average years of schooling of young people who will be entering the labour

force. Given the serious inequalities in access to education between boys and girls in some Group 1 countries, particular emphasis needs to be paid to girls' education. Equally important will be the need for sound economic planning and strategies to provide meaningful employment and tap the enormous potential of the burgeoning numbers of working-age people. Anything less than robust expansion of job opportunities for cohorts entering the labour force risks placing these countries in the dangerous situation of a missed demographic dividend, disaffection among youth and the potential for serious political unrest.

Child marriage

Arranged marriage systems are deeply entrenched in countries such as Afghanistan and Pakistan. If those marrying have no say in the choice of a partner, the custom directly contravenes one of the key rights of women articulated in CEDAW, which has been ratified in both countries. In Afghanistan, according to the Afghanistan Independent Human Rights Commission, between 60 and 80 per cent of marriages are forced.

Efforts to continue raising the marriage age may reduce child marriage and therefore the incidence of forced marriage, since the lack of choice is inherent to the former. The legal minimum age at marriage for girls is 16 in both countries, so raising it to 18 would be an important step, followed by effective enforcement. Lengthened periods of education for girls would also contribute to delaying age of marriage. But fundamental to achieving sustained reductions in child and other forms of forced marriage must be efforts to change community attitudes, perhaps in cooperation with NGOs and other civil society organizations.

In addition to its human rights aspects, ending child marriage could increase labour force participation and earnings for women, thus contributing to the elimination of extreme poverty. Strong intergenerational effects might include a reduction in child mortality and stunting. Lower prevalence of stunting as well as better educated mothers will in turn improve the education of children and their productivity and earnings later in life (The World Bank and International Monetary Fund, 2016: 156).

Reproductive health and family planning

Reproductive rights are only met if populations have ready access to reproductive health and family planning services. The specifics of how to improve the availability of such services differ by country, but two principles apply everywhere: first, the need for ready access, particularly for disadvantaged groups; second, the need for effective contraceptive choice. There is sometimes a bias against long-acting contraceptive methods on the grounds that their promotion could lead to coercion. But long-acting methods are what many women most need and want, especially poor women who can ill afford to miss work or who have difficulty reaching health facilities. Pakistan faces a decline in long-acting methods, however. These are frequently not available to potential users in Papua New Guinea, where the unmet need for family planning was over 40 per cent in 2006. If low usage of long-acting methods reflects the preference of clients, then there is no issue, but if it is due in part to bias on the part of planners and suppliers, then steps need to be taken to ensure that such methods are effectively part of the services on offer.

Policy on ageing

The share of older people in Group 1 countries remains low, though it is already increasing. While the growth of the population aged 65 and over will be very considerable in the 2015-2030 period in some of these countries (as it will be for all other age groups), the period of most rapid growth will be after 2030 (see Table 3). Given the many immediate issues facing Group 1 countries, ageing is not at the top of the list. This does not mean that they can ignore ageing. They could take initial steps to develop appropriate pension systems, initiate training in gerontology, and support families in caring for older family members.

Key policy issues for Group 2 countries (TFR between 1.7 and 2.5)

Countries included: Australia, Bangladesh, Democratic People's Republic of Korea, India, Indonesia, Iran, Malaysia, Myanmar, Nepal, New Zealand, Sri Lanka and Viet Nam.

The majority of people in Asia and the Pacific live in this large group of countries, under very diverse conditions. While the specifics differ from country to country, some generalizations can be suggested.

Taking advantage of the demographic dividend

All of these Group 2 countries currently lie in a favourable zone in terms of their age structure. It is clear what they need to do to take maximum advantage of the first demographic dividend. First, education and training must be given very high priority, so that the still-large cohorts moving into working ages can work efficiently in productive sectors of the economy. Second, sound economic planning needs to open employment opportunities accommodating the better-trained people entering the workforce.

In maximizing returns from the demographic dividend, education and health policy are crucial. Overall, Group 2 countries will have slightly fewer school-age children (aged 5 to 17) in 2030 than they had in 2019. This provides enormous potential for both raising enrolment ratios and improving the quality of education. Many Asia and the Pacific countries in the past succeeded in raising their enrolment ratios while their school-age population was increasing; the process should be much more straightforward now that the target group in most cases is roughly unchanged or actually contracting in size.

The remaining task should not be underestimated, of course. Secondary and higher education, where the focus of expansion now lies, are much more expensive per student than primary education. The challenge of narrowing the socioeconomic gap in educational attainment is enormous. Quality of education is low in the schools serving the disadvantaged. In poorer and more isolated rural areas of countries such as Bangladesh and Indonesia, teacher absenteeism, lack of essential materials, poor toilet facilities and even lack of running water deter parents from continuing to send their children, especially daughters, to school (on Indonesia, see Suryadarma and Jones, 2013). Dealing with these issues will require a high level of motivation on the part of governments, and good governance in the ministries overseeing educational development. Preschool education has an important potential role in providing

BOX 2:

Contrasting actions on population and development in Bangladesh and Pakistan

Before 1971, present-day Bangladesh and Pakistan were two wings of the same country. Their past is intimately shared. Both countries have recently been “promoted” from low-income to lower-middle-income ranks by the World Bank. Yet Bangladesh lags Pakistan in per capita income levels and elimination of poverty. In 2017, Pakistan recorded a per capita income of \$5,840, but Bangladesh only \$4,040, based on GNI per capita (PPP). On poverty, in 2015, Pakistan had 3.9 per cent of its people living on less than \$1.90 per day, whereas Bangladesh, in 2016, had 14.8 per cent.

The story further diverges in terms of human development and gender equality, where Bangladesh is clearly ahead:

	Bangladesh	Pakistan
Human Development Index	0.608	0.562
Gender Development Index	0.881	0.750
Global Gender Gap (rank)	48	148

Source: UNDP, 2018.

Part of the reason for Bangladesh’s higher ranking is that it has done much better in improving education and health. The infant mortality rate in Pakistan is more than twice as high as in Bangladesh. Bangladesh is ahead in overall secondary and tertiary school enrolment ratios, and well ahead in the female/male ratio at secondary level.* It has done much better than Pakistan in raising the female labour force participation rate, and in microcredit and other programmes to help women progress economically.

A remarkable difference between the two countries is that the fertility rate in Bangladesh has fallen almost to replacement level, whereas in Pakistan it remains well above 3. As the most densely populated country on earth (apart from a few city states), with an impoverished population, Bangladesh’s planners realized the need to lower

fertility rates. Bangladesh’s First Five-Year Plan after independence from Pakistan stated that “no civilized measure would be too drastic” to achieve a reduction in population growth (UNPFA, 2015: 29).

By contrast, political leaders in Pakistan did not take a firm stance about lowering fertility and rates of population growth. Pakistan’s family planning programme has been beset by problems of inadequate resources, organizational issues and obstacles to a greater role for the private sector. This is reflected in the contraceptive prevalence rate, which is twice as high in Bangladesh as in Pakistan. Unmet need for family planning is 17 per cent in Pakistan but 14 per cent in Bangladesh. Pakistan has disturbingly high contraceptive discontinuation rates.

In both countries, there has been a decline in the use of long-acting methods although these are greatly needed by poor women in inaccessible areas. Both countries need to provide a wider range of methods and facilitate informed choice.

One aspect where Bangladesh is seriously behind is in lowering the rate of child marriage.

Pakistan’s demographic situation, stemming from its delay in reducing fertility rates, results in the need for policies to address issues of three kinds. First, a higher population growth rate requires expansion of infrastructure and services to serve a larger population. Second, a higher growth rate of the school-aged population makes it harder to achieve educational goals. Third, a less favourable age structure for economic development stems from having a smaller share of working-age people. To make matters more challenging, a low percentage of women in the workforce reinforces the disadvantage of the smaller working-age group.

Facing the future, both countries need a mix of massive investments in education, efforts to meet the unmet need for contraception, and good governance, oriented especially towards assisting the disadvantaged. This could achieve major spin-offs in realizing the overarching objectives of improving well-being and “leaving nobody behind”.

* Pakistan has a higher female/male ratio than Bangladesh at the tertiary level, however. These are mainly students from elite backgrounds, as children from poor families have great difficulty in completing secondary education.

opportunities for children from disadvantaged backgrounds to get a head start, thus levelling the education playing field. But unfortunately, preschool education in reality often reinforces the advantage of better-off socioeconomic groups.

One issue facing many of the Group 2 countries in matching their educational and labour market planning is that cohorts moving into the groups aged 15 to 19 and 20 to 24 are already—or will soon be—smaller than the cohorts that preceded them. It is crucial to educate these younger cohorts well, but if the larger cohorts that preceded them were not very well educated, that will provide a drag on development during the many decades they remain in the workforce. Out-of-school education programmes for adult populations rarely achieve much, but on-the-job training and learning by doing in the workplace can be important measures. Strategies to maximize their potential should be adopted.

Child marriage

Child marriage is entrenched in many Group 2 countries, notably Bangladesh, India, Nepal, and to a lesser extent, Indonesia and Iran. The policy issues already discussed for Group 1 countries are therefore equally applicable. The key need is to bring practices in line with accepted human rights standards. CEDAW has been ratified by India, Indonesia and Nepal, and acceded to by Bangladesh, though not by Iran. The legal minimum age at marriage for girls is 13 in Iran, 16 in Indonesia, and 18 in India and Bangladesh. It has been raised from 18 to 20 in Nepal. Ineffective enforcement undercuts these legal minimum ages, however. Moreover, a new law in March 2017 in Bangladesh allows exceptions to the minimum age of 18 in “special cases” or “in the best interest” of the adolescent. Lengthened periods of education for girls would contribute to delaying age at marriage. But more direct efforts by governments, NGOs and civil society to change community attitudes supporting child marriage are also needed to achieve sustained reductions.

Reproductive health and family planning

As outlined for the Group 1 countries, two priorities are ready access to reproductive

health and family planning services, particularly for disadvantaged groups, and effective contraceptive choice. Serious shortcomings remain in many Group 2 countries on both these counts. Limited accessibility can relate to aspects such as a lack of service points in more isolated areas, limited attention to reproductive health and family planning services by health workers with multiple responsibilities, or imposition of payments deterring the poor from accessing services. In Bangladesh and Indonesia, long-acting methods are a declining share of the contraceptive mix, a pattern that may reflect the preference of clients, but again should be free from bias among planners and providers.

Where family planning services are lacking, rates of induced abortion tend to be higher. While rates in Asia appear to have fallen between 1990 to 1994 and 2010 to 2014, the decline was not statistically significant (Gutmacher Institute, 2016). Many abortions occurred in Group 2 countries. Because poor and rural women tend to depend on the least safe methods and providers, they are more likely than other women to experience severe complications from unsafe abortion. Not only are there negative consequences for women’s health, but also complications that may reduce women’s productivity, increasing the economic burden on poor families and resulting in considerable costs to public health systems. Policy to reduce the ill-effects of induced abortion should focus on enlarging access to contraceptive methods, improving post-abortion care, and ensuring that safe abortions are available within the bounds of the law.

Policy towards the growing middle class

As discussed in Chapter 1, the growing middle class is an important element of the population in Group 2 countries such as India, Indonesia and Malaysia. The aspirations of the middle class can make an important contribution to development if channelled in the right way. The demand for quality education and higher quality consumer goods, and a focus on social media can open possibilities for harnessing aspirations to demand greater government accountability and expand altruistic involvement in development activities through NGOs and community organizations.

Policy on ageing

Governments of Group 2 countries will have to deal with sharp increases in the numbers and percentages of people over age 65 by 2030, continuing to 2050. Rapid population growth at relatively low income levels will provide an enormous challenge. “Business as usual”—in policy terms, reliance on family to care for the needy elderly—will no longer work. Governments will have to play an increasing role in provision of both income support and physical care. What are the budgetary implications, and effects on family structure and cohesion?

As already noted, the National Transfer Accounts provide evidence that material standards of living can be maintained and increased in the face of ageing populations. This should not lead to complacency in facing the issues, however. As noted earlier, the proportion of GDP allocated to public non-health social protection expenditure for older people in Asia and the Pacific was 2 per cent, significantly below the global mean. Most Group 2 Asia and the Pacific nations “are severely under-prepared to support and protect their older people. Existing old-age social protection systems generally have low and uneven coverage, and limited benefits. Challenges vary, but for most countries, the top priorities are to expand coverage, raise benefits, and do so in an equitable and sustainable way” (UNDP, 2016: 127; see also Park and Estrada, 2013). In Myanmar, there is no state-provided retirement income (Gietel-Basten et al., 2016: 202). Health systems will also need to adapt, to prepare for the increased burden of mortality resulting from the changing age structure. Morbidity and mortality from non-communicable diseases—80 per cent of which are cardiovascular diseases, cancers, diabetes and chronic respiratory diseases—will increase greatly. Preventive health programmes to lower the incidence of these diseases will need to be pursued vigorously.

Because social insurance programmes, including pension schemes, have limited coverage in Group 2 countries, older people face significant risks of impoverishment unless they have accumulated adequate savings and wealth. This is especially the case for the generation who are old now and those recently entering or about to enter old age, because they spent their working lives when their

countries were at a lower level of development, and may have lacked basic capabilities to build wealth and prepare for old age.

There is a clear need to incorporate gender dimensions of ageing in public policy, based on women’s longer lifespan, greater vulnerability resulting from gender discrimination and fewer opportunities to benefit from contributory pension schemes. Older women tend to depend more on social sources for income, whether on spouses or relatives, or through public provision. Women who are widowed, divorced, separated or never married, or who have no children, are particularly vulnerable to poverty in old age (UNDP, 2016: 126). And while favourable trends in mortality are tending to lower the percentages who are widowed, other factors exacerbating vulnerability, such as divorce, non-marriage and childlessness, are all increasing in these countries. Another issue entails care policies aimed at a fair sharing of care responsibilities. Women’s currently unfair share of unpaid care work means many will leave or take long absences from paid work, which undercuts their savings, access to pensions and other means to prepare for ageing.

Key policy issues for Group 3 countries (TFR below 1.7)

Countries and areas included: China; China, Hong Kong SAR; Japan; the Republic of Korea; Singapore; Taiwan Province of China and Thailand

Some Asian countries with fertility rates far below replacement level have engaged in pronatalist policies. This is true of Japan, the Republic of Korea, Singapore and Taiwan Province of China. Thailand has recently joined this group, and China, after a decade-long exchange between government officials and academic demographers over the need to abandon the modified one-child policy (Feng et al., 2012), finally did so in 2015.¹⁵

The family and the labour market

In East Asian countries, economic development is given priority in planning, but family matters increasingly intrude at all levels. Economic

¹⁵ In Iran, although it is a Group 2 country with fertility very close to replacement level, pronatalist measures were introduced over the 2006-2012 period. More extreme pronatalist measures proposed in a draft bill in Parliament have not been carried out (McDonald et al., 2015).

development planners find themselves having to come to terms with labour market issues highly related to demographic trends: a rapidly contracting labour force in countries such as China, Japan, the Republic of Korea and Thailand as a result of ultra-low fertility levels; the need for adjusting the mix of full-time and part-time work as women try to deal with the demands of market work, raising a family and perhaps caring for older family members; and many policy issues on matters of maternity/paternity leave, compassionate leave, flexible working hours and childcare provision, which in the past were barely on the radar of policy makers or employers. The very low fertility that led to the emergence of these issues in the first place is likely to persist unless they are dealt with effectively and comprehensively.

Changing women's roles provides one of the biggest issues for policy related to demographic trends. Educational advances have opened up opportunities for women to work and be financially independent, which helps explain the changing marriage market. Governments in the low-fertility countries want women to be more actively involved in the workforce to help counter its contracting numbers of workers, but at the same time, want them to form families and have more children. Support for women's caregiving role is key if governments want to reconcile these two objectives.

Some Western countries appear to have done fairly well in meeting both objectives through an appropriate policy mix, and such examples need to be carefully studied. Encouraging men to play a greater role in housework and child-raising needs to be part of the solution. Also, governments want families (in other words, women of middle age) to care for older family members. This may work for the majority of older persons, who do not require any special assistance, but for frail or disabled older family members, women who are in the full-time workforce cannot provide intensive care. Other concerns relate to a potentially additional contribution to the unfair burden of unpaid care work that many women already carry. Most governments in the region need to pay more attention to these major policy issues.

Population contraction

The very low-fertility countries face many issues. One is that fertility is unlikely to rebound to anywhere close to replacement level in the foreseeable future, so policy will have to deal with

the reality of a smaller population (the labour force has already been contracting for some time) in the absence of large-scale immigration. There are many possibilities for dealing with these issues, including technological improvements and productivity growth, as well as bringing more women into the labour force and enabling more workers to remain in the workforce as they grow older (though the question "do we live to work, or work to live?" cannot be ignored).

The main aim of the pronatalist policies in low-fertility Asian countries is to support families and work-life balance, particularly for women who seek to reconcile child care with professional careers (or, for lower-income groups, more often with the need to supplement the husband's earnings). What are referred to in East Asia as pronatalist policies do not differ much from what are referred to in European countries as family policy (see Basten, 2015: 78). Amelioration of the financial cost of raising children has gone furthest in Singapore, though even there, it is unlikely that the childbearing decisions of parents will be greatly affected (Jones and Hamid, 2015). Other factors inhibiting marriage and childbearing, discussed in the previous chapter, remain.

There is little evidence that pronatalist policies have had a major impact on raising fertility in Asian countries, just as there is little evidence in Europe that family policies are likely to have a large direct impact on fertility (Thévenon and Gauthier, 2011). The problem is that without basic changes in norms related to family and gender matters, the dilemmas facing educated women in the region will remain largely unaddressed (McDonald, 2002, 2009). It is hard to envisage fertility increasing very much in the region unless some elements of the "marriage package" already discussed are modified, or unless it becomes more acceptable to have children outside marriage. And although these kinds of issues characterize the wealthy East Asian countries in particular, they are also evident among the growing middle classes in South-East Asian countries—and indeed, in countries such as India.

Family policy needs to address more than the issue of the fertility rate. In the context of the 2030 Agenda objective of inclusive development, there is a need to cultivate environments where families can live happily. In attempting to devise an appropriate population policy, the Government of the Republic of Korea has faced challenges to basic motivations to maximize economic growth. The flight from marriage and extremely low fertility are undoubtedly related

to what from some points of view are very positive features of Korean society: an almost obsessive concentration on education, marked by outstanding performance in international tests of mathematics and reading. But these coexist with universal use of cram schools by secondary school students, high youth suicide rates, and strong pressure on parents, particularly mothers, to ensure that their children succeed. The persistence of traditional gender roles at the household level puts further pressure on Korean women wanting to pursue a career to take advantage of their very high levels of education. Getting the right balance in family policy in such a context is not easy.

Two Korean researchers clearly stated the issues facing the Government in its efforts to increase fertility rates from among the world's lowest:

"Fertility behaviour is closely intertwined with overall socio-economic conditions, which means that efforts to raise fertility need to address aspects of the economy and society that either encourage or discourage marriage and parenthood. Government efforts should include programs to help men and women balance work and family life, improvements in maternity and childcare leave, expansion of flexible working conditions, and programs that foster family-friendly work environments, alleviate the economic burden of child rearing, support safe and healthy pregnancy and child-birth, establish a system of diverse and high-quality childcare, and provide safe environments for children – all in an integrated manner."

(Lee and Choi, 2015: 121).

These specific programmes would only address part of the problem, which, as the authors themselves note, includes the high cost of housing and education, and the economic uncertainty facing young people as they enter the workforce.

Migration policy

Countries such as Australia and Singapore have used merit-based immigration policies to ensure that the population and labour force continue to grow, and that the quality of the labour force, and its fitness for dealing with the

emerging economic situation, improves. Citizens of countries such as Japan and the Republic of Korea, on the other hand, find the prospect of increasing heterogeneity undesirable. Their governments will have a much harder time if they choose to introduce immigration programmes. Any new measures would need to be introduced cautiously to "test the waters" of public acceptance.

Policy on ageing

Governments of Group 3 countries will have to deal with percentages of elderly populations almost trebling, in some cases, by 2050 (e.g., in China, the Republic of Korea, Singapore, Taiwan Province of China and Thailand). Such rapid growth at relatively low income levels in countries such as China and Thailand will provide an enormous challenge. While policy in these countries tends to emphasize the family as the first line of support for the older population, reliance on family alone to care for the needy elderly may no longer work. Governments will have to play increasing roles in providing both income support and physical care, and plan for budgetary implications, and effects on family structure and cohesion.

As already noted in relation to Group 2 countries, material standards of living can be maintained and increased in the face of ageing populations, but this should not lead to complacency. Health systems in Group 3 countries have already had to adapt to ageing populations, but further adaptations to the increasing share of old-age diseases in national burdens of disease will be essential as ageing continues. Preventive health programmes to lower the incidence of non-communicable diseases in older age groups will need to be pursued vigorously, focusing not only on the current older population but also on age groups soon to enter older ages.

The gender dimensions of ageing will need to be incorporated effectively into public policy, given women's longer lifespan and greater vulnerability resulting from gender discrimination, low rates of participation in the labour force and fewer opportunities to benefit from contributory pension schemes. While favourable trends in mortality tend to lower rates of widowhood, other factors increasing vulnerability—divorce, non-marriage and childlessness—are all on the rise in Group 3 countries.

Environmental policy

Sustained economic growth has consequences associated with migration, urbanization and increased consumption, all of which have major consequences for sustainable development. For all countries, sustainable development requires pursuing economic growth that is inclusive and reduces poverty, and using natural resources sustainably and without destroying life-support systems.

The efficiency of energy use, for example, depends greatly on spatial planning and the design of urban infrastructure. Urban planning should seek to limit energy-inefficient urban sprawl and reliance on private cars, and revise building codes towards more energy-efficient use of space. Planning of new urban areas should focus on reducing the use of fossil fuels, with benefits for health, and in terms of amenities and quality of life.

“Given the significant overlap between climate change vulnerability and urban poverty, poor communities should be actively supported in efforts to strengthen resilience. Urban poor communities can do much to reduce their vulnerability, especially when local government and other key urban actors understand their needs and are ready to support them. The main goal should be to proactively integrate poverty reduction efforts with climate change-related interventions. This is not a trade-off. Pro-poor approaches to urban climate resilience that are holistic, flexible and participatory are also an effective way to foster inclusive and sustainable urban development.”

(UNESCAP and UN-Habitat, 2015: 147).



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Building more inclusive societies and “leaving nobody behind”

The SDGs are geared towards building societies that are more peaceful and democratic, more inclusive and less violent. This is challenging. The tendency towards individual self-centredness and prioritization of the well-being of the immediate family rather than considerations of justice, empathy with the disadvantaged and community cohesion are key barriers. What is the way forward? Aside from the utopian hope that individual motivation can somehow become more altruistic, ways need to be found to ensure that social institutions more effectively support altruistic inclinations, and deter negative, unfair and anti-social motivations and actions.

There are data-based claims in a provocative book (Hudson et al., 2012) that improving women’s status in a number of respects is one key, proving a predictor of peacefulness. Inequality in family law, by contrast, is associated with low levels of peace and internal stability. Further, countries that greatly diverge between law and actual societal practices concerning women also diverge between official commitments and actual compliance with international treaties and agreements. Many examples in the book are drawn from the Asia and the Pacific region, particularly South Asia. Demographic aspects feature prominently: maternal mortality, child nutrition, marriage arrangements, autonomy within marriage, polygyny and divorce.

The interaction of demographic and other variables in realizing desirable development outcomes and inclusive societies can be considered through a focus on links among poverty, poor educational outcomes, child marriage and high fertility, where there is a very strong four-way association. The Sustainable Development Goals Report 2016 notes:

“Survey data from 63 low- and middle-income countries between 2008 and 2012 show that children of primary school age from the poorest 20 per cent of households were more than four times as likely to be out of school as their richest peers. Children, especially girls, from households headed by someone with less than a primary education were more than four times as likely to be out of school as children from households headed by someone with a secondary or higher education.”

(United Nations, 2016: 8).

Early marriage is more common for girls who do not go to school or drop out early, and is likely to result in early childbearing. Considering that unmet need for family planning is also typically greater among the poorest 20 per cent of households, the “vicious circle” of poverty, linked to low educational attainment among poor parents, transmitted to their children through low educational enrolment rates, and exacerbated by high fertility, much of it unwanted, is striking.

Poverty is a multidimensional problem that needs to be tackled in multiple ways. Strong efforts to ensure that children from poor households can pursue education from preschool to high school, and that poor households have effective access to contraceptive methods that will enable them to avoid unwanted pregnancies should be two crucial elements of any poverty alleviation strategy. To cite Montgomery et al., 1999, the “quality/quantity trade-off” (i.e., between a large number of children, raised with little investment in their education and other aspects of human development, and fewer children, with more investment in each child) needs to become a meaningful choice for parents who are otherwise denied it through the lack the opportunities to secure quality education for their children as well as means to avoid unwanted pregnancies. As stressed by Bongaarts (2016), family planning needs to be reclassified as a development intervention, and a health and human rights intervention, to give it the high national and global priority it deserves.

There are many examples of the risks of exclusion related to demographic characteristics. One is the risk of leaving out the elderly. Another entails the very limited educational prospects for poor children living in isolated areas. Another is the deliberate exclusion of labour migrants from regular community life. In these situations and many others, gender discrimination imposes additional forms of marginalization on women and girls. Policies to improve inclusiveness must be carefully thought through. For example, while some teachers and health workers will agree to serve in disadvantaged and isolated areas for altruistic reasons, others will need financial incentives such as hardship allowances.



CONCLUSION



Countries in Asia and the Pacific have made remarkable progress in economic growth and human development over the past few decades, closely related to their success in moving towards demographic stability. But this stability in the aggregate masks considerable instability at the sub-regional and individual country levels, with some countries facing rapid population growth, some facing population decline, and a larger number located in a zone where future population growth will result mainly from demographic momentum, not from fertility above replacement level. There are certain commonalities in development policies needed to realize people's rights and choices, and to link demographic trends effectively with economic and human development as well as environmental sustainability, while leaving "nobody behind". But the diversity of Asia and the Pacific country situations means that policies to take maximum advantage of their demographic situation to achieve sustainable development have to be tailored according to individual country contexts.

This new policy research agenda, while varying across countries, needs to be consistent with the original vision inspiring the ICPD, and with strengthening and giving enhanced direction to that vision as well as to the objectives of the 2030 Agenda and the SDGs. Demographic trends are integral to meeting many of the goals, and must be taken seriously in this regard.



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