# **Chapter 1 Population Issues in the Twenty-First Century (Overview)**

## 1-1 Global population trends: hotspots of population issues

# 1-1-1 Global population trends – the direction of the population explosion

Although the twentieth century may be characterized as having been a period of scientific and technological advancement and economic growth, in terms of population it will surely go down in the history of humankind as the century of an explosive increase in the population. With the beginning of the demographic transition in developed regions around the middle of the eighteenth century, population growth rates started to rise, and the world's population of 950 million in 1800 grew to 1.65 billion in 1900. In the first half of the 1900s, the average annual population growth rate for the world increased to about 1%, and in 1950 the population increased to 2.51 billion. In the latter half of the twentieth century the world's population continued to increase at a rate that was nothing short of "explosive." The average annual population growth rate for the world jumped to 1.79% in the period from 1950 to 1955, and continued to increase until it reached the unprecedented rate of 2.04% in the period from 1965 to 1970. World population growth rates started to decline after 1970 (due to a decline in the population growth rate in China, a country representing one-fifth the world's population), but the global population rose above 5 billion in 1987 to reach 6 billion by 1999 (see Figure 1-1).

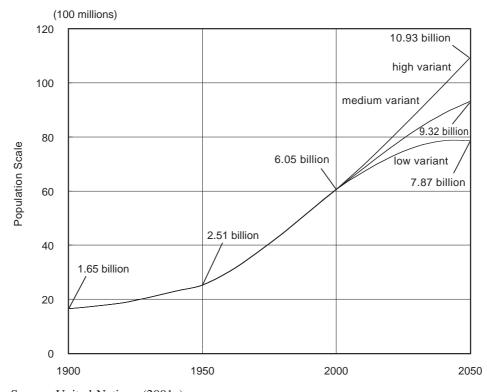


Figure 1-1 Estimated and Projected Population of the World

Source: United Nations (2001a)

In the 1990s, world population growth rates declined unexpectedly (the 1995-2000 annual rate was 1.35%). UN world population projections in 1990 estimated that the world's population would reach 10 billion by 2050, but subsequent revisions to the 2050 world population estimates were made every two years, and in 1998 the figure was revised to 8.9 billion. However, growth rates in the World Population Prospects for 2000 were revised upward somewhat, to a world population of 9.3 billion by 2050. The results of the recent forecast are a kind of warning to those who are overly optimistic. Although world population growth rates are clearly on a declining trend, the population base used in those annual calculations is still growing. Therefore, it is thought that the scale of annual population growth reached an annual average of 79 million from 1995-2000, and will continue at the 70 million level until around 2025. The global population explosion is still continuing.

# 1-1-2 Population trends in developing countries: a focus on Sub-Saharan Africa and South and West Asia

The principal reason for the recent unexpected decline in world population growth rates is the rapid and overall decline in fertility rates in developing regions. However, the discrepancies in the fertility rates (in this document measured by the total fertility rate (TFR)) among developing regions are growing. Fertility rates in Asia and Latin America declined steadily after 1970 with both reaching 2.7 in 1995–2000 (see Figure 1-2). Both regions are viewed as being in the last stage of an overall fertility transition. Regional disparities within Asia, however, are large, as East Asia, including China have already completed their fertility transition (TFR=1.8), and Southeast Asia is nearing the last stages (TFR=2.8), in contrast to South and West Asia, which are still in the intermediate stage (TFR=3.6 and 3.9 respectively). Meanwhile, while Africa overall is in the early stage of its fertility transition (TFR=5.3), Middle, East, and West Africa still have high fertility rates, exceeding 6.0 (TFR in Sub-Saharan Africa is 5.8) in contrast to North and South Africa, which are already in the intermediate stage of their transition. The hotspots for world population from the perspective of high fertility rates and population growth are primarily Africa, particularly Sub-Saharan Africa, and secondarily South and West Asia.

Africa, in particular the Sub-Saharan region (47 countries), is still in the early stage of its fertility transition, and continuing high fertility rates make it a breeding ground for poverty. The Republic of South Africa is the most serious target area in terms of population problems, not only from a reproductive health perspective considering that the AIDS epidemic affects one in nine people in this country, but also from a development perspective considering the insufficiently productive labor force.

The transition process experienced by East and Southeast Asia has not yet occurred in South Asia, including India and Pakistan. In particular, India, which will overtake China by the year 2050 as the world's most populous country, will become a population hotspot, where further efforts should be made to eradicate poverty, raise educational levels, implement social and economic reform, and so forth.

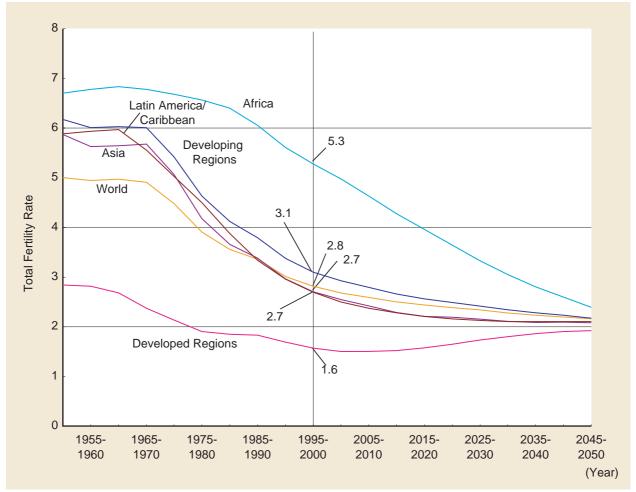


Figure 1-2 Total Fertility Rate for the Major Regions of the World – Trends and Prospects

Source: United Nations (2001a)

# 1-2 The earth at 10 billion – population growth and sustainable development

# 1-2-1 Population increases, economic development, and sustainable development

The unprecedented rapid population growth after WWII in developing regions gave rise to academic and policy interest in the relationship between population growth and economic development. Orthodox economists argued that if population growth from high fertility rates continues, resources are consumed in supporting the increasing child population, and economic development is held back because of setbacks in savings and investment. An interest in the environment was added to this line of argument in the early 1970s. In 1972 the Club of Rome's The Limits to Growth report suggested that if population and economic growth continued at the levels of the 1960s, the world would face a catastrophe brought about by the depletion of resources and environmental degradation. The orthodox argument was seen as almost axiomatic. However, it was observed to be a fact during the 1960s and 1970s that population growth rates and economic growth rates did not necessarily have a negative correlation in developing regions, and a revisionist theory emerged. This theory emphasized the

positive aspects of population growth, such as the fact that population growth itself spurs technological advancement and raises the standard of living, and that human beings are the "ultimate resource." It argued that while population growth may be a minus in the short-term, it is a plus for economic development in the long-term.

Disagreement about the relationship between population growth and economic growth still remains among economists. In the Asian NIEs that achieved the fastest economic growth among developing regions as well as in several ASEAN countries, a decline in fertility rates resulted in capital deepening (an increase in the capital-labor ratio) bringing about increased savings and capital formation, and this in turn led to economic growth (OGAWA, see Box 1-1).

### 1-2-2 Population growth and the supply of renewable resources

The most basic resources needed to support human life are water and food. The question is whether there will be a sufficient supply of these two resources in our twenty-first century world, particularly in developing regions, in which explosive population growth and economic advancement continue.

## (1) Population and water

The water supply situation was defined by Swedish hydrologist Malin Falkenmark as three different states: 1) adequate water, 2) water stress, and 3) water scarcity. According to her definition, the world as a whole is now in an adequate water state and will still be in 50 years. However, looking at the situation by region, North Africa and major portions of West Africa are in a water scarcity state, South and Central Asia are already in a water stress state, and future population growth, urbanization, food production increases along with advances in industrialization will result in a worsening of the water scarcity state. It is possible that such a water scarcity state could restrict economic development. The world's most populous countries, India and China, are currently in an adequate water state, but it is thought that before long India will be in a state of water stress, and China will approach the water stress state in 50 years. In these countries, efficiency in the utilization of water must be improved through measures such as the construction of dams and canals, changes to ensure that agriculture and industry are more water efficient, and policy efforts to prevent the contamination of water, which reduces its quality.

# (2) Population and food

Since the world population began increasing rapidly, many have started to be concerned about the

A country with 1,700 tons (m³) or more renewable fresh water available on an annual per capita basis has *sufficient water*, those with as much as 1,000 tons or more but less than 1,700 tons are in a state of *water stress*, and those with less than 1,000 tons are in a state of *water scarcity*.

question: "Just how many people can the earth support?" We have seen a variety of forecasts concerning population and food. Taking the world as a whole, if the current acreage used for cultivating grain (approx. 700 million hectares) yielded the equivalent amount per unit area as in Western Europe, it would be possible to support a population of 10 billion with yields that exceed the current per capita grain supply. Therefore, at least in theory, it is possible to provide for a world population that may reach 10 billion in the latter half of the twenty-first century. The problem with food is the same as water – a regional one. Per capita food production growth rates in Sub-Saharan Africa and South Asia are sluggish, and, at present, 30% of the population in Sub-Saharan Africa and over 20% of that in South Asia are suffering from malnutrition. Most countries in these regions are dealing with a great number of factors that restrict food production, problems such as difficulty increasing the cultivable land area, diminishing family farm area resulting from population growth, shrinking of the area of farmland due to soil depletion, the aforementioned water scarcity, water contamination and ineffective irrigation methods, and wastage in the storage and shipping of food. These countries are in need of measures to increase food production such as: land reform under a stable government, overseas assistance, effective management of water and farm/crop lands, and improvements in irrigation methods and in crop quality.

## (3) Population and the environment

The world is experiencing a range of environmental problems such as acid rain, tropical forest destruction, decreasing biodiversity, desertification, contamination of the oceans, and destruction of the ozone layer, but the biggest problem from the standpoint of its ever-widening effects and intractability is global warming. While all of the effects of global warming are certainly not yet understood, it is at least considered that there is a connection to the warming of the seas and the melting of glaciers, which is causing sea levels to rise (0.88m in 100 years), resulting in the submersion of towns and villages in island nations and in coastal areas, a decline in agricultural and fishing yields from temperate climates to tropical climates, the frequent occurrence of unusual weather (severe storms, floods, droughts, and heat waves), the spread of infectious diseases, adverse impacts on tropical rainforests, desertification, and decreasing biodiversity. Since there is a close relationship between global warming and consumption of the energy that supports the overall economic activity of modern society, it will take a considerable amount of time until truly effective measures are taken internationally.

## (4) Can we avoid catastrophe for humankind?

Taking into consideration food and water alone, it may be possible to support the nearly 10 billion people projected to be living in this world at the end of the twenty-first century. However, as seen in the Limits to Growth model, if the proper measures to combat global environmental degradation, in

particular to combat global warming, are not taken, the results could be catastrophic for humankind and modern civilization. To avoid such a scenario, it is necessary to develop, and apply on a wide scale, energy-saving technologies, to develop and utilize effective alternative energy sources in place of fossil fuels, and create and implement immediately an international agreement on the reduction of greenhouse gases with every country on board. Developing countries need to be cognizant of the fact that striving for quick completion of the demographic transition and the resulting population stabilization will not only facilitate economic development in their own country, secure for them a stable water and food supply, and promote social development, but will also contribute to solving global environmental problems in the long run.

# 1-3 Paradigm shift to the human rights approach: the Cairo Conference's Program of Action

#### 1-3-1 From the Bucharest conference to the Mexico conference

The first intergovernmental conference on population, the World Population Conference, was held in Bucharest, Romania in 1974. A conflict ensued between western developed countries headed by the United States and the many developing and socialist countries. The Western countries called for government-led restrictions on population growth through family planning programs based on the idea that the population explosion in developing countries was holding back their economic development, while developing and socialist countries insisted that development itself was the best contraceptive and that what was important was not population control but economic development. The World Population Plan of Action was adopted as a result of compromises on both sides, and, although it incorporated the assertion of those who gave priority to development, the substance of the plan turned out to be one recommending more population control measures on the part of governments.

Ten years later, the International Conference on Population held in Mexico City (1984) adopted a recommendation for the further implementation of the World Population Plan of Action. The report included many recommendations concerning family planning programs, making it the first intergovernmental meeting in which family planning was internationally recognized.

The population policy strategies discussed at these two conferences assumed that rapid population growth generates constraints on resources and hampers economic growth, and therefore, in order to promote economic growth, it is necessary to restrict population growth and that government-led large-scale family planning programs are an effective means of achieving this purpose.

#### 1-3-2 Significance of the Cairo Conference's Program of Action – shift in population strategies

The 1994 Cairo Conference adopted a new 20-year Program of Action to replace the World Population Plan of Action. The IPCD Program of Action set itself apart from previous population

strategies by including 1) the use of the new concept of "reproductive health/rights (RH/R)," 2) emphasis on the importance of gender equality and women's empowerment, and 3) the incorporation of numerical and fund-raising targets, and is referred to as a paradigm shift to population policies that are based on a human rights approach.

The concept of reproductive rights was generated as part of the WHO Special Program that has continued since 1972 in an effort to gain a comprehensive understanding of health needs as they relate to the human reproductive process. Some of the aspects of the issue that come under the category of reproductive health are: (1) fertility regulation, (2) sterility, (3) sexual health, (4) safe motherhood, and (5) infant survival, growth, and development. More specifically, it includes family planning (contraception), the efficacy and safety of birth control methods, the development of new birth control methods, unwanted pregnancy, general abortion issues, problems arising from illegal abortion, measures for secondary sterility, treatment for sterility, female genital mutilation (FGM), sexually transmitted diseases (STDs), in particular HIV/AIDS, maternal death, and maternal and child health.

Reproductive rights is a concept whose inception arose in the feminist movement of the 1970s, without any linkage to the fields of medicine or health, and it expanded internationally through the 1985 UN International Women's Conference. The basis of this concept is that women have the right to decide whether or not to have children, and if so, when and how many to have. It means that women must be provided with the necessary information, education, and high quality service concerning the means with which to exercise such rights. It also asserts that male-female sexual relations should be based on the principles of equality, mutual respect, and responsibility, and includes a woman's right not to be forced into having sex.

As reproductive health/rights (RH/R) is now a central concept in the Cairo Program of Action, population policy has undergone a major shift, from a macro level (country level) to a micro level (individual level) viewpoint, and the subject of population policy itself has changed from governments to the individual, in particular to women. Specifically, family planning is not a means of achieving government population growth control objectives, but is rather a means by which people (especially women) can make decisions about pregnancy and childbirth. Family planning had previously been equated with birth control for married couples, but has now taken a broader view including issues concerning young unmarried people (adolescents) such as sex, pregnancy, childbirth, and birth control. It now emphasizes a tolerant stance toward abortion, including the recommendation that abortion be treated as a women's health issue. In addition to the fulfillment of reproductive rights, the Cairo Program of Action cited the principle that "advancing gender equality is the cornerstone of the solution to population issues" and at the same time set the achievement of gender equality and equity, as well as the empowerment of women, as important objectives of the Program of Action. Achievement of this type of gender equality, respect for women's reproductive rights, and achievement of reproductive health are all interdependent.

#### 1-3-3 Assessment of the Cairo Program of Action

A variety of assessments have been made since the Cairo Conference concerning the paradigm shift towards the human rights approach to international population strategy in the Program of Action (Yanagishita, see Box 1-3). However, there is no doubt that adoption of the concept of reproductive health/rights (RH/R) as the central theme of the Program of Action rectified many aspects of government-led family planning programs that had previously gone beyond what is appropriate (such as the implementation of programs that prioritized program objectives over women's needs and ones that emphasized the number of recipients of family planning while ignoring the quality of service).

It is obvious, however, that it is desirable for many developing countries to increase the prevalence of family planning, accelerate the fertility transition (and demographic transition), and stabilize the population as fast as possible in relation to the development of their economies, poverty reduction, the promotion of education, and conservation of the environment and natural resources. While the Cairo Program of Action does not ignore these points, it is undeniable that overall the message in these areas has been watered down compared to previous documents.

#### 1-3-4 Reproductive health/rights: trends and challenges

This section provides an overview of the conditions and challenges in developing countries, looking at the main elements of reproductive health/rights: family planning, and other elements.

#### (1) Expanding family planning and its challenges

First of all, in looking at the current state of family planning, it became clear from the results of the Demographic and Health Survey (DHS) conducted from the late 1980s that there is still a high level of unmet needs, as defined by the percentage of women who do not desire pregnancy but are who not using contraception despite the rapid increase in its use in developing regions in recent years. The central focus of family planning programs in developing countries today is the measurement of unmet needs and the provision of services to fulfill those needs. There has been criticism regarding the unmet needs approach saying that too much attention has been paid to increasing contraceptive prevalence while the viewpoints of the users (particularly women) has been ignored. Recommendations on this issue have been made recently in which cases of side effects and ineffective contraceptive methods used by men or women would be included in the definition of unmet needs. Some people have pointed out that for an increase in contraceptive prevalence, the most important aspect is not easy access to family planning services (supply side), but rather a reduction in the desired number of children (demand side). However, the implementation of family planning programs does increase people's knowledge about birth control, which more people perceive plays a critical role in the demographic transition.

#### (2) Other important elements

In looking at elements other than family planning (maternal health, abortion, reproductive health for adolescents, sexually transmitted diseases (STDs), gender discrimination, and sexual violence), there is an urgent need to improve maternal health from the standpoint that of the nearly 600,000 maternal deaths every year throughout the world, most occurring in developing countries. Abortion is also a serious problem and it is estimated that 90% of the annual 20 million unsafe abortions are performed in developing countries. Furthermore, meeting the reproductive health needs of adolescents, and at the same time raising the mother's age at first pregnancy and birth, will bring about a decline in fertility in developing regions that have high fertility rates. Each year, there are approximately 300 million cases of treatable STDs (gonorrhea, syphilis, and chlamydia) in the world, with the great majority occurring in developing countries. Sexually transmitted disease rates are five times higher for women than for men, with STDs being the cause of two-thirds of the cases of sterility, which is also a major issue. Finally, with respect to gender discrimination and sexual violence, female genital mutilation (FGM) has recently become the focus of attention as a form of sexual violence and a blatantly damaging traditional custom. Even now, two million are at risk of suffering from FGM every year. Recently there has been an increasing trend among women's movements to demand its abolition, and the elimination of FGM was also specifically included in the Cairo Conference Program of Action.

#### 1-4 Global aging

#### 1-4-1 Aging in the developed and developing world

The level of aging of the world's population (the proportion of the population that is 65 years old or over) was only 5.2% in the middle of the twentieth century and remained at the same level thereafter. However, the proportion started to increase around the mid-1980s and rose to 6.9% in 2000 (see Figure 1-3). According to UN projections, the aging of the world's population will accelerate as we enter the twenty-first century and the proportion of the aged population will increase to 16.4% by the middle of the century, just surpassing today's average aging levels in the developed regions. The proportion of the aged population in the developed world has risen from 7.9% in 1950 to 14.3% in 2000, and will continue to increase markedly, so that by the middle of the twenty-first century, it will surpass 25%. The proportion of the aged population in the developing world slowly grew from 3.9% in 1950 to 5.1% in 2000, and population aging is now finally starting to occur in developing countries. However, aging in such countries has continued to increase in the twenty-first century, and it is estimated to reach 14% by the year 2050, a level much like that of the current developed regions.

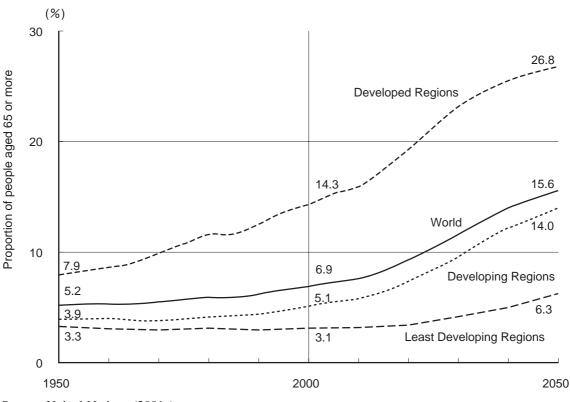


Figure 1-3 Population Aging of the Developed and Developing Regions of the World

Source: United Nations (2001a)

Looking more closely at the global aging situation, it is clear that there are major differences in the level of aging in the three regions of the developed world: Europe, North America, and Oceania. The proportion of people aged 65 or over in Europe is the highest, with a current level of 14.7% and an expected increase to 29.2% in the next 50 years. In contrast, the proportion in Oceania is currently 9.9%, with an increase that will slow to 18.0% in 2050. North America stands somewhere in between. Meanwhile, Asia and Latin America exhibit aging trends that will slightly exceed the average in developing regions and that are expected to come close to the levels in Oceania by 2050. However, the proportion of the aged population in Africa will continue at the 3% level until 2020 and finally reach 6.9% in 2050.

#### 1-4-2 Aging issues in the developing world

The main societal issue brought on by the graying of the population is how the increasing number of elderly will be supported, an issue faced by both developed and developing countries.

#### (1) Rate of aging

As a result of the fact that it took European countries at least 50 years to complete their fertility transition, the rate at which aging progressed in those countries was also gradual. Due to the fact that

Japan achieved its fertility transition mainly over a period of less than ten years following WWII, Japan inevitably faces having the highest rate of aging among all the developed countries. Similarly, in addition to Japan, the speed of the recent demographic transition in other East and Southeast Asian countries (Korea, Hong Kong, Taiwan, China, Singapore, and Thailand) has been much faster than that of the European countries, and for this reason they are also expected to experience an aging process that will occur at a much faster rate than the European countries. There is a good possibility that many developing countries that have yet to complete their fertility transition will in the end experience aging at a much faster rate than that of the European countries.

It goes without saying that the more gradual the rate of aging, the more time that can be devoted to preparing to deal with it (creating social systems to support and care for the elderly), while the faster the aging process, the more difficult it is to cope with it.

# (2) Economic development and the increasing graying of the population

Many developing countries will experience a 20–30 year period in which there is a relatively high proportion of young workers and a relatively light burden on them to support children and the elderly following a rapid fertility transition. This demographic condition is referred to as the "demographic bonus" and is a result of the fertility transition. If countries utilize this window of opportunity to further their economic development, just as Japan did during its high economic growth period, they will be able to adopt aging policies under an adequately developed economy. However, if they fail to do so, they will have to deal with the dual policy challenge of ensuring economic development and meeting the needs of an aging population.

#### (3) The effectiveness and limitations of extended families

The traditional family system of non-Western countries, including Japan, is the extended family. It is a common practice for elderly in these countries to spend their senior years living with and being dependent on their son's or daughter's family. However, as economic development continues to progress, young people are moving from the villages to the cities, the parental generation remaining in the villages forms a nuclear family household, and the children, now in the cities, form their own nuclear family household. When the parent's generation grows old, the family alone is no longer able to function sufficiently in the support and care of the elderly. In Japan as well, until the 1970s it was said that "the family is a latent asset in the country's welfare budget," and the family was expected to take responsibility for the support and care of the elderly. However, in the 1980s it became clearer that support and care of the elderly could not be sufficiently provided for by the family alone, and this grew into a strong call for the development and strengthening of a public system for the support and care of the elderly. It will also become necessary in developing countries to develop public systems for the support and care of the elderly – social welfare systems –concurrent with advancement of

economic development, urbanization, and aging.

#### 1-5 HIV/AIDS

## 1-5-1 Population and HIV/AIDS

HIV/AIDS is a major concern, not just from the perspective of reproductive health in valuing individual health and human rights, but also from a development standpoint in terms of its role in diminishing the labor force. This is a result of the fact that most people living with AIDS are in their reproductive years (15–49 years of age), and since most of the infected die after the onset of AIDS following a long incubation period, the decrease in the reproductive population greatly distorts the demographic pyramid. It is predicted that countries in which one-third to one-quarter of the population of productive age (15–64 years of age) is HIV positive will see dramatic reductions in this age group in the near future. Such a dramatic reduction in the population of productive age will have a significant impact on society by taking a toll not only on the country's economy, but also on household finances.

Meanwhile, the illness or death of the family's main wage earners will mean that children and the elderly will have to provide care and livelihood support for the AIDS victims. Consequently, the number of children who miss out on opportunities for education and the numbers of children and the elderly who engage in dangerous work for low wages will increase. When parents die of AIDS, children are left behind as AIDS orphans, and the effects on society, such as increased child labor and street children, are severe. There are already an estimated 14 million AIDS orphans worldwide.

# 1-5-2 World HIV/AIDS epidemic

According to 2001 year-end estimates, there were thought to be 40 million HIV cases worldwide (Figure 1-4). That year, estimates showed that 5 million people became newly infected worldwide, and the cumulative death toll to have been 30 million. Also, some 95% of all HIV cases are concentrated in developing countries.

The most serious situation is in Sub-Saharan Africa where more than 70% of the HIV victims in the world live. For 12 countries in this region, more than one in ten adults aged 15 to 49 was HIV positive at the end of 2001, and in some of these countries one in three or one in four adults is living with the disease. In these Sub-Saharan African countries, it is a generalized epidemic<sup>2</sup> in which most of the infections are through heterosexual activity. As a result, these countries are characterized by the fact that there are more infected women than men, and there is a sharply increasing number of babies

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Country-specific HIV/AIDS estimates compiled by teams led by the Joint United Nations Programme on HIV/AIDS (UNAIDS) classify the HIV epidemic into two different types: concentrated epidemics and generalized epidemics. A concentrated epidemic is one in which an HIV prevalence of 5% or more is observed within high risk behavior groups such as injecting drug users (IDU) and men who have sex with other men (MSM), but a less than 1% HIV prevalence in the general population. The generalized epidemic stage is one in which an HIV prevalence of 1% or more is observed in the general population and prevalence in high risk behavior groups is already high.

Adults and children estimated to be living with HIV/AIDS as of end 2001 Eastern Europe Western 1 million East Asia & Pacific America 940 000 Caribbean 1 million & South-East Asia 420 000 6.1 million Latin Africa Australia 28.1 million million 15 000 Total: 40 million

Figure 1-4 2001 Year-end HIV/AIDS Totals

Source: UNAIDS (2001)

who die of AIDS due to mother-to-child transmission as well as AIDS orphans whose parents have died of AIDS. In many countries in this region, it is thought that the peak period of mother-to-child transmission has already passed, but even now mother-to-child transmission levels remain high. Countries in this region are experiencing dramatic changes in terms of deaths, the crude death rate, and average life expectancy.

There is still a strongly-rooted prejudice against HIV/AIDS among some people. If countries and communities do not overcome discrimination and difficulty and work together to direct their efforts into the prevention of HIV and the care of those who are infected, the number of infected people will continue to increase and the future may be very bleak. AIDS is a major issue on which developing and developed countries must work together to find a solution.

## 1-6 International migration and increasing urbanization

# 1-6-1 International migration

Estimates<sup>3</sup> of the UN Population Division indicate that the total foreign-born population worldwide has increased markedly since 1965. That number grew rapidly from a worldwide figure of 75 million in 1965, to 84 million in 1975, and 105 million in 1985, and reached 120 million in 1990. It is estimated that at the beginning of this century approximately 150 million people will be living in countries other than their country of birth.

International migration is actively occurring throughout the world. The main regions of the world that are experiencing a population influx are concentrated in the developed regions such as Europe,

International migration is an area in which the development of statistics is lagging far behind and is therefore difficult to accurately assess. However, the foreign-born population (stock) of a country has been used as an indicator with which to understand the scale of migration.

North America and Oceania, and out-migration is occurring in developing regions such as Asia, Africa, and South America.

If the various reasons for and types of international migration are analyzed, it is found that there are those who migrate of their own free will, such as permanent settlers (permanent or semi-permanent), migrant workers, and illegal migrants. At the same time, there are refugees who had to move, but for whom the destination is not clear. The term "refugee" applies to people who are outside their country of nationality due to the fear of persecution for reasons of race, religion, nationality, membership of a particular social group, or political opinions.

International migration is an inevitable consequence of globalization. The question for a country of how many and what kinds of people to allow in involves a complicated entanglement of national sovereignty and individual rights, and does not have an easy answer. It is first necessary to clearly assess the actual international migration situation and then discuss the possible impacts and issues that may arise on the part of the sending and receiving countries. As aging progresses and fertility rates decline in Europe, countries will be faced with a need to accept a certain number of immigrants in order to maintain economic activities. In the near future, Japan will also be faced with this kind of situation. Under such circumstances, mutual cooperation between Japan and its neighboring developing countries may be needed for Japan's acceptance of foreign workers to care for the elderly.

#### 1-6-2 Urbanization

# (1) Increasing urbanization

The world's population more than doubled from 2.5 billion in 1950 to 6.1 billion in 2000 (with an average annual growth rate of 1.8%). During the same period, the population of cities nearly quadrupled from 750 million to 2.7 billion (with an average annual growth rate of 2.6%). Consequently, the rate of urbanization (the ratio of the population living in cities to the total population) rose from 30% in 1950 to 44% in 2000. Nearly half of the world's population currently live in cities.

According to recent UN population projections, global urbanization will progress even more in the period from 2000 to 2030. During this period, annual growth rates for the world's population are estimated to be 1.0%, but the population living in cities will grow at a rate of more than double this. During the period from 2000 to 2030, the urban population of developing countries is estimated to grow at a rate of 2.4% annually. Conversely, the rural population of developed countries will dwindle at an average annual rate of 1.1%. As a result, the rate of urbanization worldwide that was 30% in 1950 will double to 60% in 2030.

However, when considering the problems accompanying the future urbanization of developing countries, it is important to take into account not only the average annual growth rates of the urban population, but also the increase in the absolute population. During the period of 1950 to 1975, when

the urban population growth rates of developing countries peaked at 4%, the population increased by 500 million people. Even though the growth rate of this population during the 30 years period from 2000 to 2030 may drop to 2.4%, the population will still grow by 2 billion people. It is estimated that during this period of time the world's population will grow by 2.2 billion people. That fact is that most of this population growth will be in urban areas of developing countries.

## (2) Challenges of and measures for dealing with urbanization

The principal factor in the urbanization of developing countries is not necessarily the influx of population from rural to urban areas as is generally thought, but is the natural growth in cities themselves with the exception of Asia in the 1980s. This trend is particularly strong in countries with low rates of economic development. For this reason, policies are required that have an impact on natural population growth in cities.

In addition, the primary social problem accompanying urbanization that occurs with economic growth is an increase in the poorest segment of the population in cities. It is safe to say that in the near future many people living in poverty will be concentrated in cities. The future increases in those living with HIV in cities is another matter of concern. In major cities in developing countries, the long-standing situation in which mortality rates are lower in cities than rural areas is starting to reverse.

Policies that have attempted to restrict urbanization up to this point have failed across the board, and countries are now becoming more and more aware of the importance of the role played by major cities in their economy, society, and culture. As a result, urbanization policies are starting to become more comprehensive policies that target urban issues. In other words, the direction is to start creating more desirable policies, such as ones that will assist newcomers to cities in adjusting to them.

#### Box 1-1 Japan's population trends and economic development

#### Naohiro Ogawa, Nihon University

The demographic transition theory is one of the lessons we have learned historically from the experiences of developed countries. It is a theory in which economic development brings about a shift from high to low birth and death rates. This view based on the demographic transition theory regarding Japan's post-war economic development has been common among Japanese economists. However, what I would like to emphasize is the fact that it is the decline in birth rates that induced economic growth, not the other way around. In other words, as a result of Japan's birth rate being halved in the 10 years from 1947 to 1957, families had more economic resources available for household savings, which in turn served to revive Japan's devastated economy through public investment. Then, at the beginning of the 1960s the baby boom generation entered the workforce in large numbers, contributing to the miraculous economic growth performance.

The economic gain induced by such a fertility reduction is referred to as a "demographic bonus." A demographic bonus is created from a combination of two factors: 1) a process in which a fast fertility decline results in reduced household consumption, consequently leading to increased family savings and public investment, and 2) despite the decline in fertility, the productive population continues to increase for some time. For developing countries, the utilization of this "demographic bonus" is an extremely important factor in placing them on a sustained economic growth path.

The regions in East and Southeast Asia that effectively utilized their demographic bonuses experienced rapid economic growth in the latter half of the twentieth century. Salient examples of successful cases in these regions include Japan, South Korea, Singapore, Thailand, Taiwan, and Indonesia. They did so through a process that involved a complex web of factors such as health, human capital investment, advancement of women in the workforce and society, equalization of income distribution, and family planning programs. In particular, in recent research by demographic economists, equalization of income distribution in Asia – which is equalized to a much greater extent than other developing regions – is being treated as a major factor for facilitating economic growth as it promotes the dissemination of compulsory education and primary health and brings about the augmentation of human capital.

Currently, Indonesia is approaching the phase in which it can enjoy the demographic bonus, Thailand and Taiwan are nearing the peak of theirs, and Japan is at the end of its window of opportunity. For those countries entering the demographic bonus phase, it is essential that they approach it knowing that the window of opportunity is relatively short, and they should endeavor to effectively turn the fruits of that bonus toward economic development.

# Box 1-2 Reproductive health/rights (RH/R) and population

#### Machiko Yanagishita, Josai International University

Reproductive health/rights (RH/R) is an important concept for women's health and human rights that started appearing in places like UN documents from the 1960s. Reproductive health is not simply limited to maternal health, but is about health in sexuality and parenting throughout one's lifetime, and includes adolescent health, the prevention and care of STD's including HIV/AIDS, measures against unsafe abortions, and menopause. Reproductive rights are about the basic right of a woman to decide freely and responsibly how many children to have and when to have them, and the right of access to knowledge and services about safe and effective contraceptive methods that meet a woman's individual needs. It goes on, however, to include the elimination of discriminatory social practices and violence that are detrimental to women's reproductive and sexual health.

One of the reasons that this concept began to emerge in the population development field was the international movement for women's rights. Reproductive rights have become defined through the Declaration on the Elimination of Discrimination against Women (1969), the UN Decade for Women (1975-1985) that was aimed at the advancement of women, and the women's health movement as part of the feminism of the 1970s, and then the increased awareness of violence and traditional customs as human rights violations in the early 1990s. The enjoyment of reproductive health (including sexual health) was adopted as a new part of reproductive rights at the Cairo Conference in 1994.

Another part of the process of change has been the shift in the development field from economic development to human development. The economic development theory that poverty would disappear as a result of economic growth has failed, and there is now a call to value social development and citizen participation. It has been documented that investment in the general population, in particular in health, education and gender equity and equality is the key to achieving the stabilization of population growth and sustainable development. There is an increasing awareness that in addressing population issues in developing countries, what is needed is not population control from a macro-level standpoint, but a gender perspective that considers the low status of women in developing countries and recognizes that it is essential to support women's autonomy and empowerment.

Under these movements, there has been increased awareness of the importance of reproductive health/rights (RH/R) in addressing population issues, but there has been much debate following the Cairo Conference about the shift in approach toward population development assistance. There are a range of criticisms of the significance of reproductive health/rights (RH/R) and women's empowerment approaches such as: will this micro-level level approach really be a timely solution to the imminent population issues that exist on a global scale; is macro-level population control not necessary after all; are Western feminist groups having too much influence on international population policies; since women's underlying issues of health and rights are a part of the problem of poverty so should we not first solve this problem; will this not dilute the program efforts thus far to increase contraceptive prevalence rates by diverting a the limited amount of funds from financially-strapped donor countries to a broad range of reproductive health services; and will the new approach be difficult not only from a practical methodology standpoint, but also from the standpoint of program evaluation? While the reproductive health/rights approach is drawing plenty of debate, the perspective itself represents a historically necessary direction that has brought the needs, rights, and health of women, to the center of population development issues.

#### Box 1-3 Population, family, and economy in the Middle East

#### Junko Fujita, Sagami Women's University

It is a fact that we are undoubtedly facing the risk of a population explosion. While it is absolutely imperative for us to develop population policies to avoid such an explosion, measures to attain this purpose should not be standardized as they have been in the past. The Islamic world is centered on the "umma" (community) system, and national systems have a back-seat existence at best. This is intrinsically different from the Western society, in which the country is the cornerstone of a society, and communities are secondary.

An area that shows this difference clearly is the traditional economy. Trade is conducted through negotiation in the traditional markets of the Islamic world, and is not based on the one price law like the fixed price economy of capitalistic markets. That is because the economy strongly favors variety over uniformity. Also, with respect to "people," "commodities," and "money" which are the mediums of economic activity, the individuality of people is always superior in Islamic systems and is never threatened by commodities or money that can be converted equivalently as in the case of capitalism.

For Muslims, individuals and families are the foundation of social life, and natural needs are never disregarded because of other criteria or standards. In other words, differences in individuals, and the family life based on them, are the foundation of their lives, and any discussion of population policy that does not take this fundamental fact into consideration will not be accepted systemically into the Islamic Middle East.

In solving population issues, we must respect the basis of people's perceptions rather than trying to introduce new ways of thinking from the outside or the product of other societies' livelihoods. In the Islamic world, where the differences between people and commodities are valued, the theory that restricting the number of children born is necessary in order to solve the world's poverty and social hardships will be hard for people to accept. One of the region's main characteristics is that people have a stronger tendency to marginalize national directives, and will instead make judgments and decisions based on individual and family concerns. The basic unit in Islamic society is the family, and it is important to view the culture with the awareness that an individual remains a part of the family unit from birth until death.

Even in the Islamic Middle East, however, various countries have begun to implement their own strategies to adapt to the world around them. For example, criminal law in Egypt prohibits abortion, and the women who break the law, as well as those who assist them, will be punished. However, there is a provision allowing abortions when the woman's health is at risk. In Tunisia and Turkey, however, early abortions are unconditionally permitted just at the request of the pregnant woman. Abortion for women who have had five or more children became allowed in Tunisia in 1965, and provisions were made to allow unconditional abortions within the first three months of pregnancy in 1973. Turkey approved abortion within the first 10 weeks of pregnancy in 1983. These examples show clearly that there are technically major differences. Each of these countries are practicing Islam based on their own social, political, historical and religious traditions, and in light of these differences, we must come to a deeper understanding of the special circumstances of the region. In order to do so, it is essential that we understand the nature and function of Islamic law, as well as gain a comprehensive understanding of the main themes of the special characteristics of the cultural and social traditions that have been built up based on it.