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Carl Haub

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Editor's Preface

Today, more than six billion people live on earth. If human population today amounted to only 1.6 billion, the same as at the beginning of the 20th century, many of the challenges for a sustainable future that now confront us would be vastly different. Demographic changes are closely intertwined in complex ways with nearly all critical questions facing humanity – be it the climate, the environment, food security, the fight against disease, or for social security and peace. Therefore, demographic trends are extremely significant and it is important to foster a broader knowledge of these changes and to heighten awareness of their consequences.

Institutions like the United Nations and the Population Reference Bureau (PRB) disseminate information on world population trends and developments to a wide variety of audiences, from the general public to government officials. Nonetheless, there is a demand for an annual update of global population dynamics that is both comprehensive and non-technical.

In the past, changes in the size or age and sex structure of a population took centuries to evolve and such changes often passed unnoticed. In contrast, the 20th century witnessed a series of major demographic developments that unfolded at record-breaking speed. The faster population changes occur, however, the more strongly they are felt. It is neither the growth nor the decline in numbers alone that pose the greatest challenges for societies in which they are occurring. It is the dynamics of demographic processes such as the unprecedented growth or aging of a society, its rising mortality due to HIV/AIDS, or its rapid urbanization. For that reason, this report emphasizes the dynamics of population change.

Besides the dynamics of population, it is the divergence in demographic trends that poses additional requirements for political and social strategies aimed at coping with population change. This issue gains importance when demographic developments in neighboring regions vary significantly or take different paths to growth or decline. These often very pronounced contrasts can paint an increasingly complex picture on a regional or national level or even below the national level.

World Population Dynamics Report 2002 is the first attempt to present these complex issues in an up-to-date and comprehensible format for a broad, interested readership. We are very grateful to have Carl Haub as author of this report. We invite you to share your comments and suggestions for future editions of the World Population Dynamics Report with us.

This report would not have been possible without the generous support of the William and Flora Hewlett Foundation, for which we are most grateful.

Hans Fleisch
Executive Director
Berlin-Institute for World Population and Global Development

Author's Preface

Only a few single phenomena are capable of "changing the world." Among those, we can easily count major political upheavals, environmental change, and the sheer growth in the number of earth's inhabitants. And, such monumental changes are often inevitably intertwined.

The *World Population Dynamics Report* is concerned with one of these fundamental factors: population change. It is a matter of numbers since increases in numbers can have profound effects. But population is more broadly defined. It is not just how many we are. How long do we live? How many youth in a population? How many elderly? Where do we live? Do we move from place to place? Do countries have policies to change population growth?

The century just past has seen more changes, it has been said, than any other in human history. Certainly, our knowledge of the world around us has multiplied a hundred, a thousand times. Events in distant countries can become common knowledge in a matter of minutes. Travel has become not a once in a lifetime experience, but a routine event, at least for some of us. Migrants from India now travel to North America, Africans to Europe, human movements unknown in our grandparents' time. Markets have expanded to the point where "globalization" has now become a cause celèbre.

These changes would be significant in their own right, but they have become magnified in the light of global population growth. The expansion in numbers has not, however, been equally distributed. It is not the traditional "world powers" that have seen their numbers swell. To the extent that numbers result in a shift of influence, that shift has been and will continue to be towards the populations of Africa, Asia, and Latin America. That is neither a good nor a bad thing. But it is reality.

Today, we are given an opportunity to understand the changes around us as communications rapidly increases. The *World Population Dynamics Report* will monitor those changes each year, describing the significant demographic events of the year and detailing where we stand. The report will do that by gathering information from a wide variety of sources, painting a complete portrait of the population of the planet and its development through births, deaths and the movement of peoples.

Carl Haub

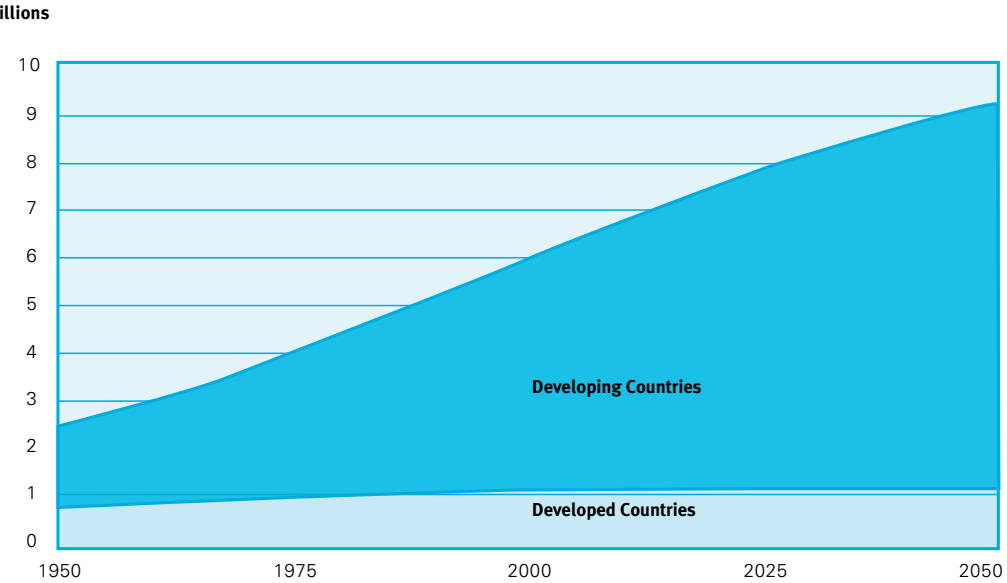
World Population Dynamics 2002

The 21st Century will feature a first-time occurrence in world history: virtually all population growth will be in the developing countries of Africa, Asia, and Latin America. Population growth will no longer be a phenomenon shared by all regions. Put quite simply, the Earth will be very different demographically at the end of this century from what it was at the beginning.

Beyond the shift in the balance of numbers itself, many of the implications of this new world are unknown. There will, of course, be significant increases in the demand for food, water, and energy in developing countries. Some of that increase will be due to growth in numbers and some will result from rising living standards. Indeed, there will likely be a tradeoff between the two. Much of the increase in resource demand will result from rising living standards, but that, in turn, will likely depend upon slowing population growth. It is argued that rapid population growth impedes development, particularly when it occurs in countries with few cash resources to cope with both population growth and the need to expand the delivery of health, education, and social services.

A key difference between demographic trends in this new century and the past century is the growing divergence not only between regions, but even within them. In the Middle East, where fertility was once uniformly high, there have been spectacular declines in birth rates in some countries, but none in others. Women in Iran, Tunisia, and Turkey now average less than three children each, while their counterparts in Saudi Arabia and Yemen maintain high levels of fertility of about six to seven children each. Although rural populations still grow in Africa, cities such as Lagos, Nigeria, which held but 288,000 residents in 1950, is projected by the UN to be about 13 million today. Monitoring trends such as these will be key to understanding population trends today and in the future.

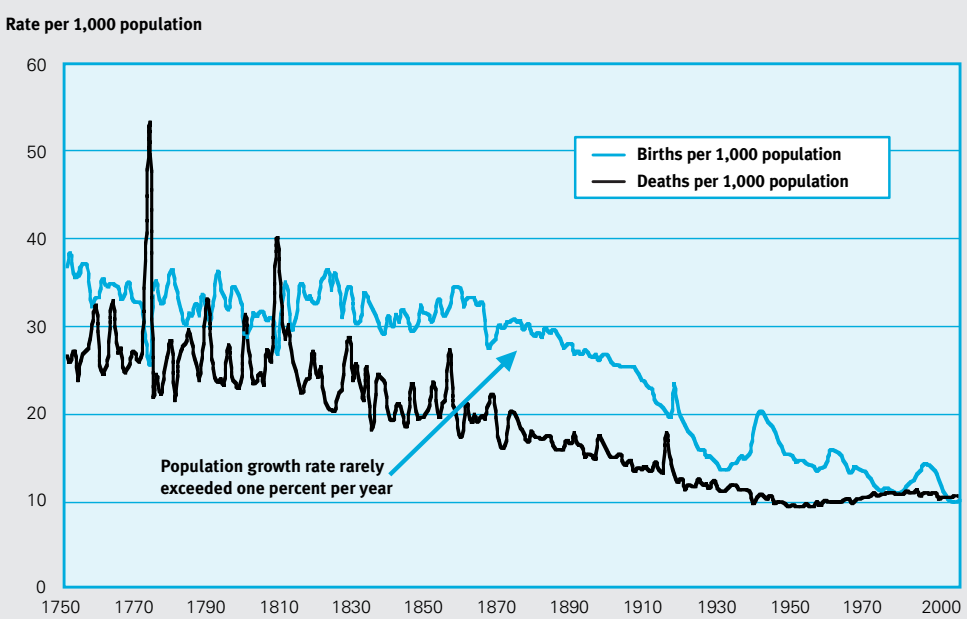
Fig. 1: Global Population Growth, 1950–2050
A Developing Country Phenomenon



Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

Figure 1 dramatically illustrates the vast difference in population growth between developed and developing countries, as they are today defined[1]. How did this situation come about? The answer lies in the very different way in which the "demographic transition" took place in the developed and developing countries.

Fig. 2: Sweden's 250 Year Demographic Transition, 1750–2000



Source: Statistics Sweden, www.scb.se

The theory of the demographic transition is quite simple. It merely states that countries begin with high birth and death rates and, during the course of modernization, proceed to low birth and death rates. Although the timing of that process can vary considerably from country to country, the overall pattern has been observed time and time again.

In the preindustrial era, all countries began with high birth rates. Little or no contraception was practiced and larger numbers of births were valued since they were needed for the family farm. Both infant and adult mortality were quite high from the lack of any type of modern health care as well as from poor methods of public health and sanitation. Death rates also fluctuated wildly as local crop failures brought starvation and epidemics struck without warning.

Then, as society urbanized and modernized, the need for large families began to wane. At the same time, simple public health measures and better food distribution

1 In the commonly-used United Nations definition, the "developing" countries are those in Africa, Asia, Latin America, and Oceania. Latin America includes Mexico and the Caribbean. The "developed" countries are those of Europe (including all of Russia) and North America, along with Australia, Japan, and New Zealand.

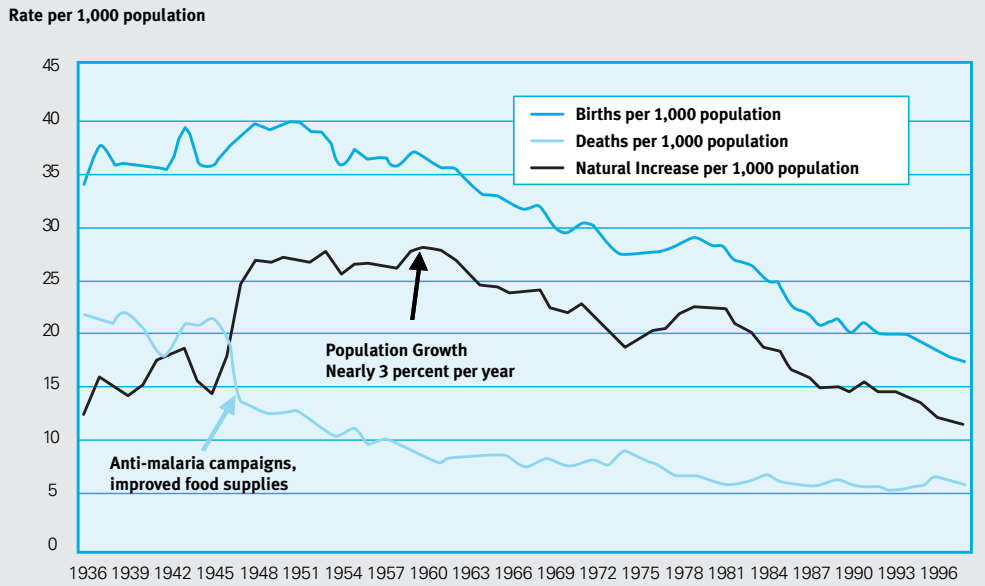
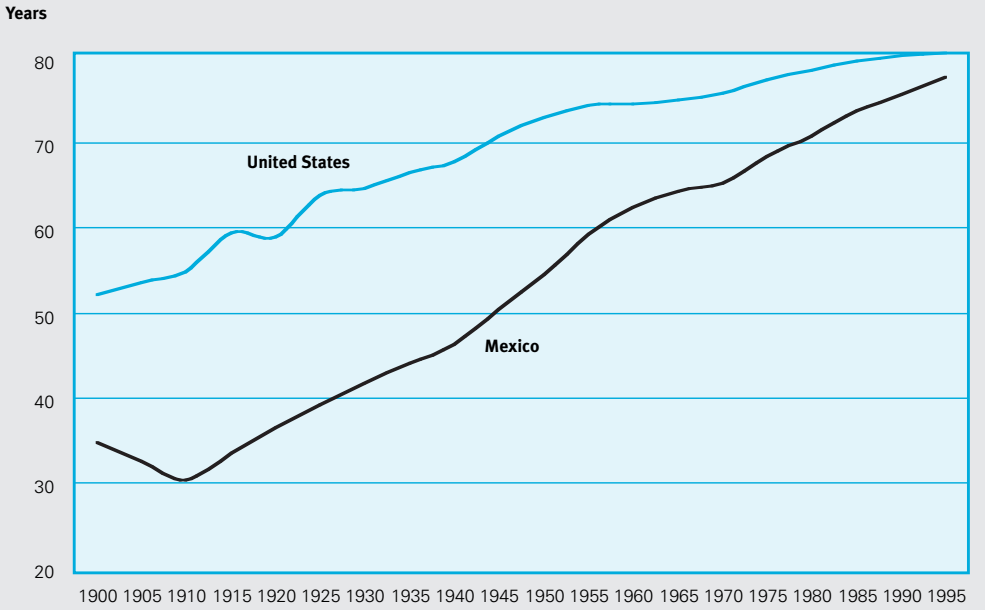


Fig. 4: Life Expactancy at Birth in the United States and Mexico, 1900–1995



Sources: United States: official data from the National Center for Health Statistics and the U.S. Census Bureau.
Mexico: official estimates after 1930, historical estimates 1900–1930

raised living standards and death rates began a long period of slow decline. Finally, during this centuries-long process, the rate of population was never very high, no more than 1.0 to 1.5 percent per year. Sweden's demographic history over the past 250 years illustrates this quite well.

Most developing countries remained in a nearly preindustrial condition well into the 20th Century. When the transition began, it was very different from the developed countries in that it happened much more quickly, particularly after World War II. Death rates fell sharply as methods of modern medicine and public health campaigns, well established in Europe and North America, spread abruptly. But, in most cases, societies remained largely agrarian and the traditional desire for large families did not change. As a result, the rate of population growth rose to heights never before seen, to nearly three percent or more, as the example of Sri Lanka clearly illustrates.

The graph (Fig. 4) comparing life expectancy trends in the United States and Mexico provides a dramatic comparison – by the end of the 20th Century, Mexico has nearly reached parity, closing the deficit of about 20 years around 1900.

Since about 1970, the birth rate has now declined in many developing countries, marking the second part of their transition. But, the future of global population depends upon how quickly – or how slowly – fertility in developing countries declines to levels comparable to those in developed countries.

Table 1: World Population 1900, 1950, and 2000 (millions)

			Percent of Total World Growth		Percent of Total World Growth
	1900	1950	1900 – 1950	2000	1950 – 2000
World	1,650	2,519	100	6,057	100
Developed Countries	543	814	31	1,191	11
Developing Countries	1,107	1,706	69	4,865	89

Source: 1900, author's estimates. 1950 and 2000, United Nations Population Division, *World Population Prospects: The 2000 Revision.*

Since 1950, the effect of rapidly declining mortality in developing countries, accompanied by much slower declines in birth rates, has changed the world to the point where developed countries, about one-third of global population in 1950, now account for one-fifth. Nearly 90 percent of world population growth since 1950 has been in the developing countries. The century just past holds a singular place in world history. In that 100 years alone, nearly three times as much population growth as had occurred in all of human history took place – and 80 percent of *that* growth took place in the last 50 years. Today, about 99 percent of population growth takes place in the developing countries.

The rapid pace of modern population growth is clearly shown by the "benchmark years," the years in which each billion was reached.

Table 2: Number of Years It Took to Add Each Billion to World Population

	Year reached	Years to add each billion
First Billion	about 1800	all of human history
Second Billion	1930	130
Third Billion	1960	30
Fourth Billion	1974	14
Fifth Billion	1987	13
Sixth Billion	1999	12

Population Dynamics

Country populations grow (or decline) largely in one way: by the difference between births and deaths. Migration in and out can also have an effect, but, in many countries, that effect is relatively small. The number of births is a result of childbearing preferences in the country, i.e., the number of children a woman bears in her lifetime, whether or not that pregnancy was wanted. The number of deaths results from two chief factors: the age structure of the population – the proportion in the older ages – and the overall level of mortality from disease and other causes.

Age structure is one of the more aspects in demography in that the number of deaths that occur is normally dependent on the number of elderly in the population and the number of future births depends on the number of young people below age 15 today. An "old" population, one with relatively few people below age 15, will have relatively few births in the future compared to a population with large proportions below 15 (35 to 50 percent). These three factors, births, deaths, and migration, combine with age structure to produce population change.

Vital Rates

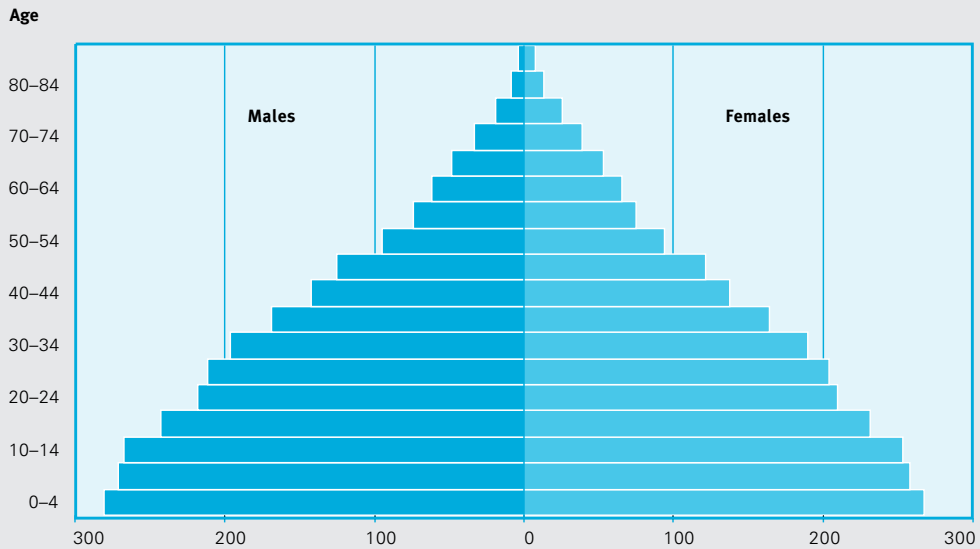
The level of the birth rate, or fertility, is most often expressed as a country's total fertility rate (TFR) , or the average number of children a woman can be expected to have in her lifetime at the pace of childbearing of a particular year. The TFR today varies from as low as only 1.1 children per woman (in some countries of Asia and Europe) to over seven children (particularly in Africa), the widest range in history. The level of the death rate, or mortality, is conveniently summarized by life expectancy at birth, or the average number of years a newborn baby can be expected to live. That normally rises during the child's lifetime as progress against various diseases is made. Sadly, it can also decrease, as has happened in countries severely affected by AIDS.

Ultimately, fertility, mortality, and migration combine their effects to produce population change:

$$P(2) = P(1) + \text{Births} - \text{Deaths} + \text{Immigrants} - \text{Emigrants}$$

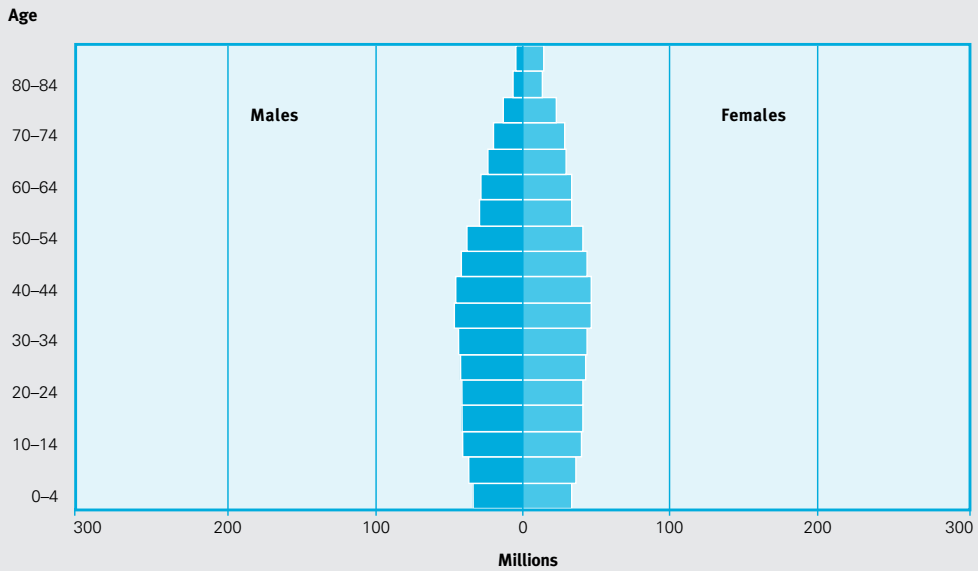
Or, the population at the end of the period, P(2), is the result of the population at the beginning of the period, P(1), plus the number of people entering, minus the ones leaving the country.

Fig. 5: Population of the Developing Countries in 2000: One-Third Below Age 15



Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

Fig. 6: Population of the Developed Countries in 2000: Shrinking Younger Age Groups



Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

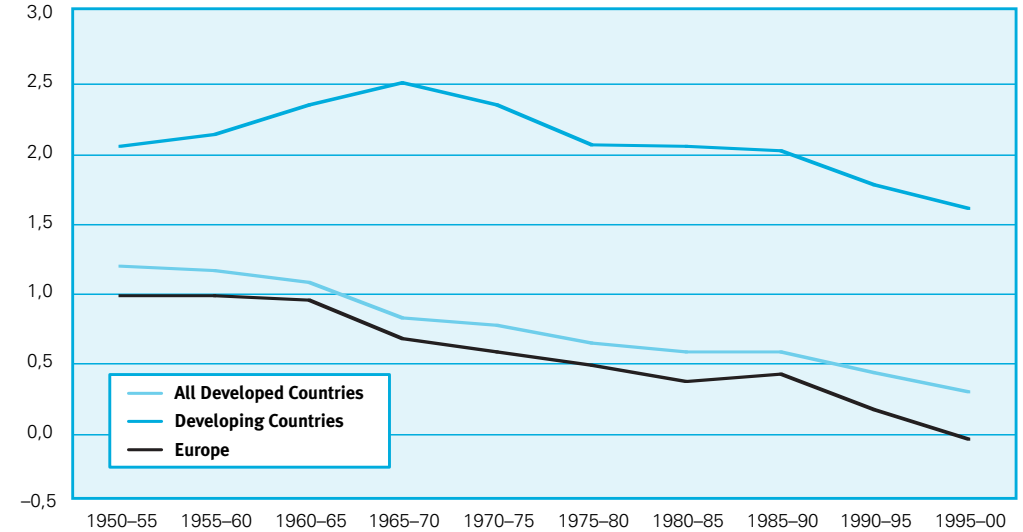
Age Structure

Today, country populations have more variation in age structure than ever before. In Africa, many countries have as much as 45 percent of their population below the age of 15, a result of high birth rates and very small proportions in the older ages. In developed countries, relatively few are below age 15, only 15 percent in the case of Italy, but one in four or higher are above the age of 60.

The cause of the unprecedented post-1950 population growth is evident in Figure 7, which clearly shows the result of rapidly rising life expectancy combined with high birth rates in developing countries. Population growth rates in developing countries rose to a rate during the 1960s that had never been seen previously. This rapid growth in population was of particular concern since it was taking place in the world's poorest nations. Concern over its effects mobilized some developing countries to take action. This required the establishment of population policies and family planning programs – often in societies where limiting the number of one's children was a new and not necessarily acceptable idea.

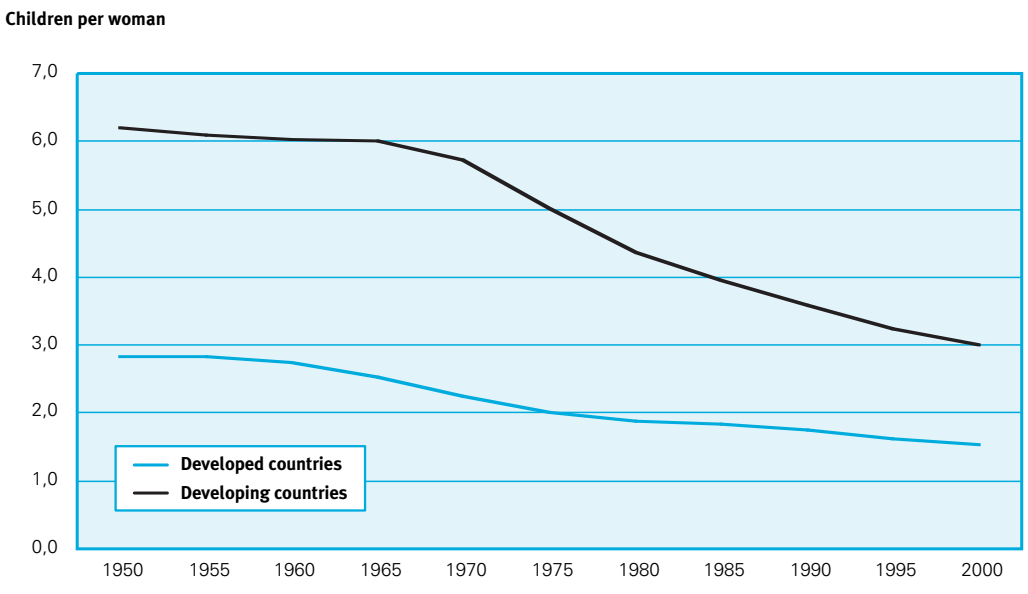
But many of these programs did have success as Figure 8 shows. Fertility fell – at a faster pace than it had ever done in developed countries – helped by the slowly spreading supply of modern contraceptive services. This is the "second transformation" of the developing world,

Fig. 7: Population Growth Rates, 1950–2000: A Vast Gap



Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

Fig. 8: Total Fertility Rates, 1950–2000: A Gradually Narrowing Difference



Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

a movement away from large families even without significant economic and social development.

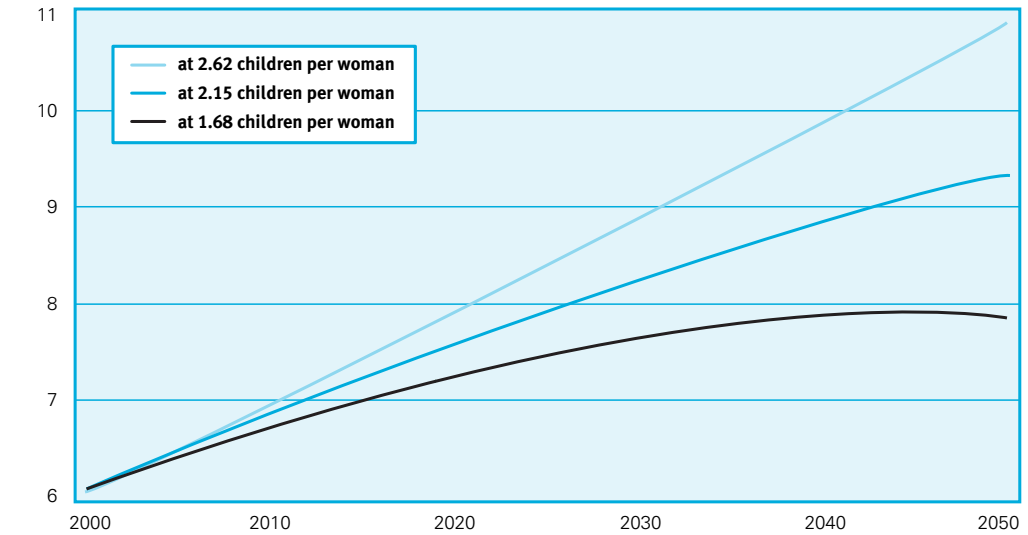
As dramatic as the decline in fertility has been, population growth is far from over. Still, some writers today say that the world's chief demographic problem is low, not high, birth rates. Is this true? It is true that birth rates throughout Europe are at extremely low levels, but the same does not hold for developing countries. The prospect of "zero population growth" remains elusive.

Prospects for the 21st Century

Today, we know that fertility rates are in decline in many developing countries and that their future population size will greatly depend on how quickly it falls in the next few decades. While birth rates have been historically difficult to predict, the projections of the United Nations Population Division give an excellent picture of future population trends under different possible scenarios.

Population projections are performed by beginning with a current population by sex and age and applying assumptions about the future path of the birth and death rate (fertility and mortality), as well as the effects of migration, if appropriate. A significant point in fertility is reached at the replacement level, when women average about two children each. If fertility were to remain at that level, population size would someday become stationary. Actual replacement level is about 2.1 children in countries with high life expectancy since there are about five percent more boy babies born than girl babies and not all women survive through

Fig. 9: Global Population in 2050: A Possible Difference of 1,6 Billion



Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

their childbearing years. Is replacement level the future for developing countries? Will couples in those countries have somewhat more than two children? Or will they follow the "European pattern" and have far fewer than two children? Since these questions cannot today be answered, the UN offers projections for all three of those possibilities.

The medium projection of the UN offers a projection of global population should the world birth rate in 2050 be very close to the replacement level of about two children per woman. In doing so, the UN is not predicting that two children will be the average. A benchmark scenario is simply provided to which other projections can be compared. Should the average be about two children (2.2 in developing countries, 1.9 in developed countries), world population would rise from today's 6.1 billion to 9.3 billion by mid-Century. This medium projection represents a 50 percent increase of the current world population, all of which will be in the developing countries.

The high projection assumes that the TFR will be one half child higher, about 2.6 (2.7 in developing countries, 2.3 in developed countries). Should that occur, world population would rise to almost 11 billion by 2050 and be growing by about one percent per year, not much less the 1.3 percent global growth rate of today.

Finally, the low projection assumes that fertility will be well below replacement level in 2050 at a birth rate of only 1.6 (1.7 in developing countries, 1.5 in developed countries). In that case, world population will rise to just under eight billion and will have just begun a very slow decline by 2050.

As far as mortality is concerned, it is generally assumed that life expectancy at birth will slowly rise worldwide as health conditions improve and infant mortality, in particular,

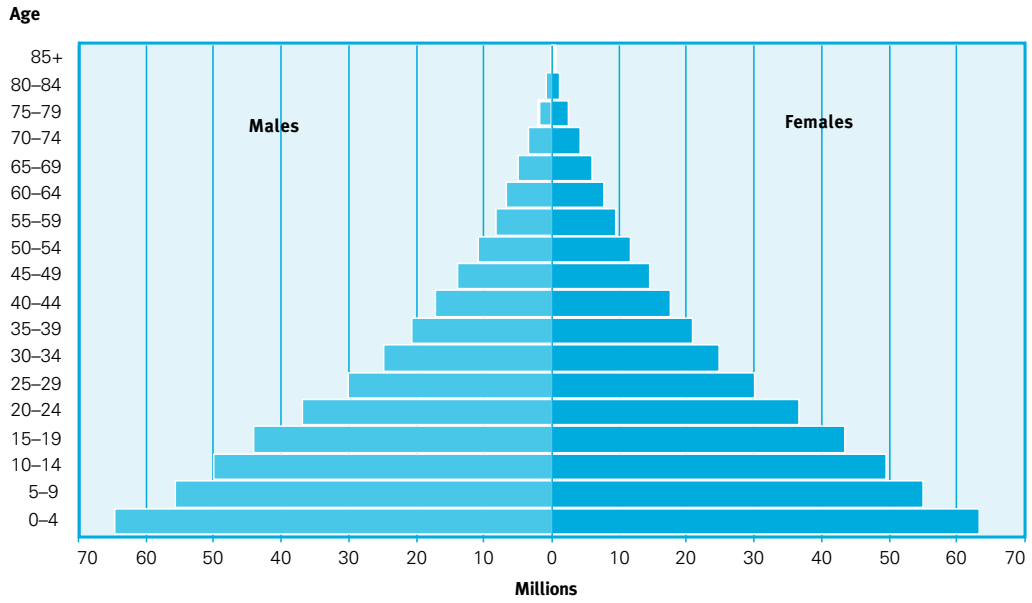
declines. Today, however, the rise of HIV/AIDS, especially in Africa, has changed that outlook in some countries.

How should one interpret the UN's projections? It is quite likely that none of the variants will result exactly at the global level, given the divergence in trends today and the very large difference in future population size that relatively small differences in the average number of children make. Africa, with its high current fertility, serves as an excellent example. In the most recent UN long-range projections (performed in 1998), Africa's population rises to a nearly stationary 2.3 billion by 2150 if women were to average 2.1 children. If, on the other hand, African couples were to show a preference for somewhat larger families in the long term, just one half child more, it would rise to 5.9 billion! Rather than judge world population prospects at the global level, one should consider the prospects for fertility decline at the regional level. One region might follow the path to the two-child family or less, while another's show a very different trend. In the following sections, the outlook for divergent trends can be considered.

Africa

For many years, the demography of Africa has been unique for two reasons: its very high fertility and very young age structure. That situation remains true today and is the reason that no other world region has as much potential for population growth. While those remain as demographic characteristics that set Africa apart, a third has now been added: AIDS. AIDS has drastically altered the outlook for some African countries, but the continent will nonetheless experience tremendous population growth even with the AIDS catastrophe.

Fig. 1: Africa's Population in 2000: 43 Percent Below Age 15



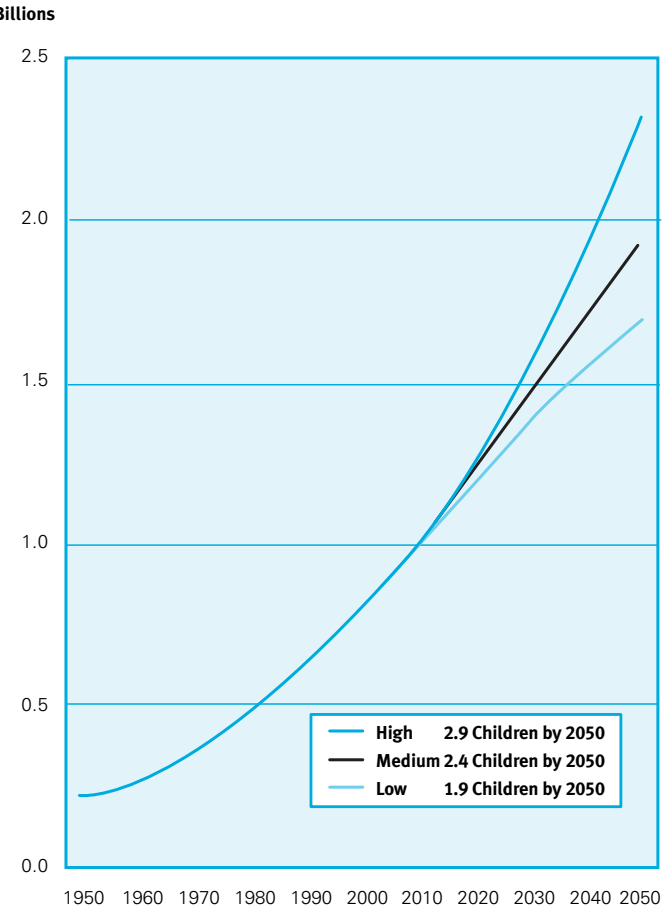
Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

The unusually young age structure of Africa itself assures long-term population growth on the continent. The United Nations projection for Africa anticipate an addition of 1.2 billion population by 2050 alone. That addition is the same as the entire population of today's developed countries. This projection includes the effect of higher AIDS mortality than previously thought. In many African countries, the number of tomorrow's parents (those below age 15) accounts for nearly half of the population. In Europe, only 15 percent of the population is below age 18. Thus, the process of slowing population growth — a stated goal of nearly every African government – must result from two processes: fertility decline which, in turn, gradually reduces the proportion of young people in the population.

The United Nations projections of population growth in Africa for the first half of this century and the conclusion of each projection variant is the same: rapid population expansion. The most commonly used projection, the medium series, results from the assumption that African women will average about 2.4 children by mid-century – equivalent to less than half

Fig. 2: Africa's Future Population Growth: No End in Sight Despite AIDS

Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

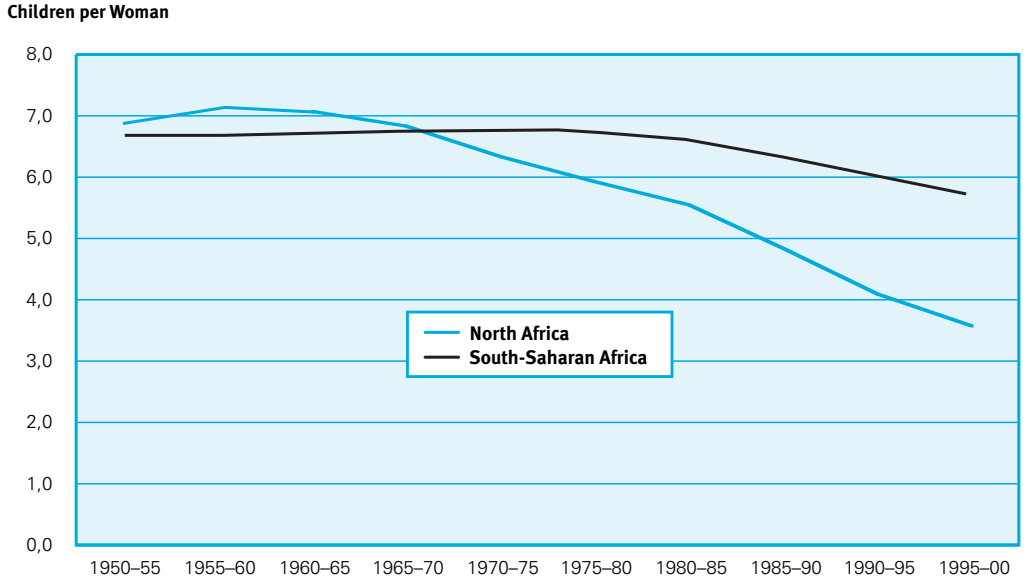


of today's fertility level. This medium projection recognizes that current fertility in Africa is quite high and contraceptive use rather low. Under this scenario, population growth in Africa will continue well into the 22nd Century, passing two billion before growth stops. The only way that African population growth will slow significantly in this century would be if fertility were to fall to less than two children by 2050, about that of France. Is such a fertility transformation possible? While many observers would doubt it, demography has often been full of surprises.

The first essential condition for slower population growth, birth rate decline, has barely begun in many counties of Africa, particularly sub-Saharan Africa (SSA). In large part, societies in sub-Saharan Africa are to this day considered "pretransitional." What are the prospects for fertility decline in Africa?

This was the subject of a United Nations Population Division conference in July of 2001, a conference motivated by the recognition that it may no longer be appropriate to project every population in sub-Saharan Africa by assuming that fertility decline will begin immediately or necessarily follow patterns observed elsewhere. Each region and country has its own backdrop of societal and family traditions, government policies and services, and economic development that encourages or discourages childbearing.

Fig. 3: Total Fertility Rates in Africa, 1950–2000: Slow Progress in Sub-Saharan Countries



Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

In Africa, fertility decline will have to take place in societies that are primarily patriarchal, place great value on perpetuating lineage, are often polygynous, and have strong kinship networks. When will African fertility begin a meaningful decline? Has it already?

The graph shows rather dramatically that there are two very different "worlds" of fertility in Africa. North of the Sahara, population growth has been treated as a serious national concern, particularly in Egypt, Morocco, and Tunisia. South of the Sahara, the picture is very different. The curve for sub-Saharan Africa shows some decline, but that decrease has been led by only a few countries, notably, Ghana, Kenya, South Africa, and Zimbabwe.

Fortunately, an increasing number of fertility surveys shed light on a subject that would be very difficult to answer without them. In Table 2, changes in fertility levels in Africa are shown for countries having at least two Demographic and Health Surveys (DHS). For the most part, the story is one of high birth rates and slow decline.

In only a few countries have African women adopted family planning in a significant way. Kenya, one of the few countries to achieve some substantial fertility decline, still has a TFR of nearly five children despite formulating a national population policy to slow growth as early as 1963. The country was watched by demographers anticipating fertility decline, but that did not begin until almost thirty years later. Uganda, whose TFR declined from about 7.4 in 1988 to 6.9 in 1995, would take over one hundred years to reach the "two-child" family.

One of the most significant outcomes of DHS surveys in Africa is that population projections for the continent are being rethought. Previously, it was assumed that fertility decline in Africa would begin quite soon where it has not yet been seen or would accelerate as the popularity of family planning spread. Demographers are now reevaluating that assumption and that, in fact, is why the 2000 UN conference on high fertility countries was convened.

Table 3: Fertility Trends in Africa

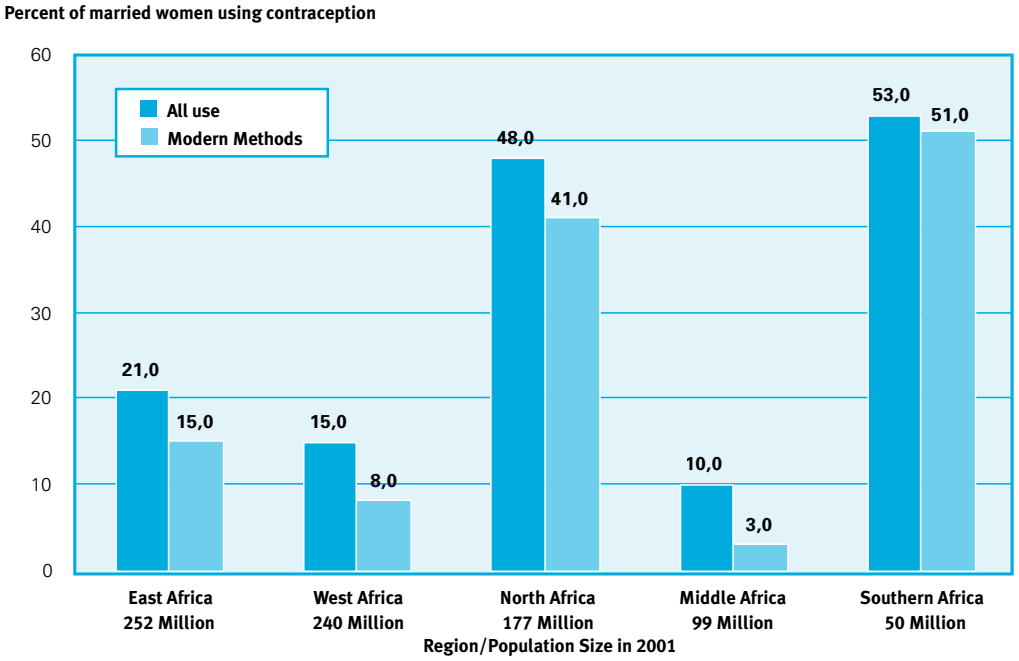
		TFR 15–49		TFR 15–49	Average Annual Change (in %)	Years between Surveys
Burkina Faso	1992	6.5	1999	6.4	–0.2	7
Cameroon	1991	5.8	1998	4.8	–2.7	7
Côte d'Ivoire	1994	5.3	1999	5.2	–0.4	5
Egypt	1995	3.6	2000	3.5	–0.4	5
Ghana	1988	6.4	1998	4.4	–3.7	10
Guinea	1992	5.7	1999	5.5	–0.5	7
Kenya	1989	6.7	1998	4.7	–3.9	9
Madagascar	1992	6.1	1997	6.0	–0.3	5
Malawi	1992	6.7	2000	6.6	–0.2	8
Mali	1987	7.1	1996	6.7	–0.6	9
Niger	1992	7.0	1998	7.2	0.5	6
Rwanda	1992	6.2	2000	5.8	–0.8	8
Senegal	1986	6.4	1997	5.7	–1.1	11
Tanzania	1992	6.2	1996	5.8	–1.7	4
Togo	1988	6.4	1998	5.2	–2.1	10
Uganda	1988	7.4	1995	6.9	–1.0	7
Zambia	1992	6.5	1996	6.1	–1.6	4
Zimbabwe	1988	5.4	1994	4.3	–3.8	6

Source: *Demographic and Health Surveys* (ORC Macro, www.macroint.com)

It does appear that Africa has, in fact, begun the transition to lower fertility, although the number of countries is limited. What factors favor fertility decline and which might block it? In many African cultures, a large number of children is highly prized as it ensures the lineage of the family and provides considerable prestige. Avoiding a birth may be seen as denying an ancestor a path to return. Extended kinship in these very rural societies means that the economic cost of a child to a couple is often not a consideration. Finally, decisions are rarely made as a couple in societies that are often male-dominated (and where women in general want to have less children than men).

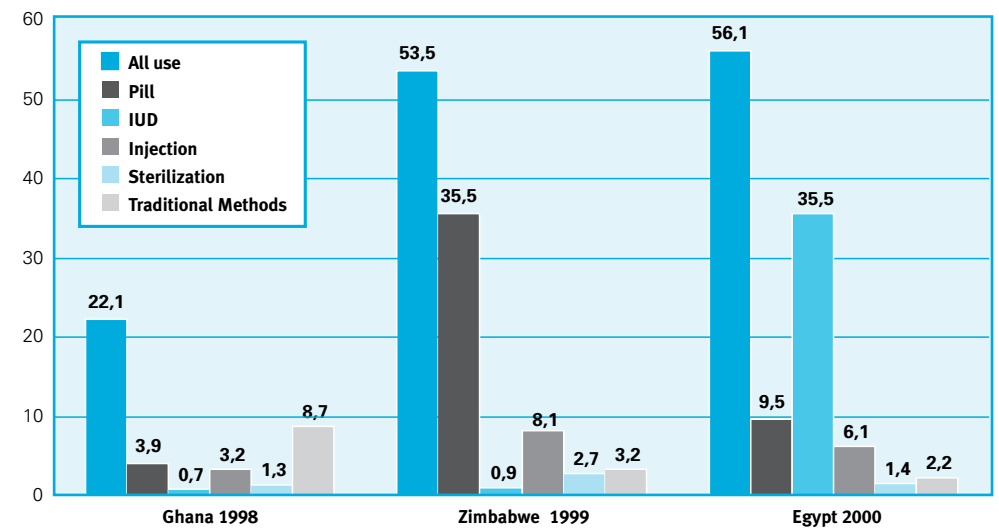
Still, nearly all African governments have now reversed their previous view that high fertility is desirable and have identified it as a serious impediment to raising health and living standards. But, the time lag between such policies and results is often a long one, particularly when the economic resources needed to establish family planning education programs – and to change attitudes – are lacking and frequent political disruption intervenes. The establishment of family planning programs will also require considerable expense for "supply," methods such as the pill or condom. These methods require an understanding on the woman's or man's part of their use, a regular supply, and the continued will to use them.

Fig. 4: Estimated Contraceptive Use in Africa, 1990s



Source: Population Reference Bureau, *2001 World Population Data Sheet*

Fig. 5: Contraceptive Use in Three African Countries: Supply Methods Predominate

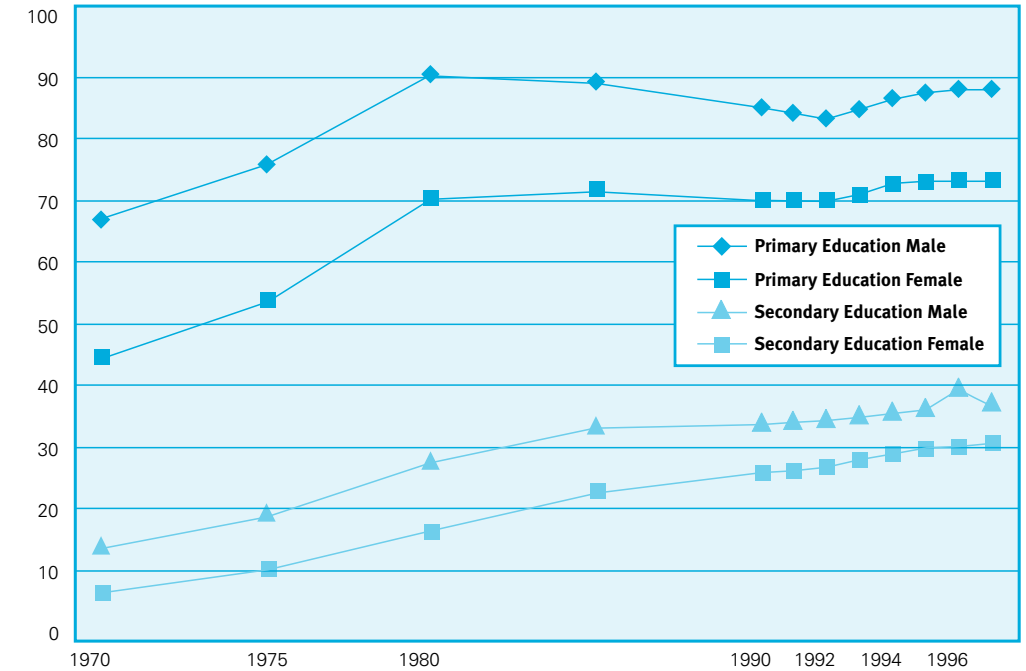


Source: *Demographic and Health Surveys*

The use of family planning in the African regions with the largest populations remains low. In sub-Saharan Africa, the only region with extensive use of contraception is Southern Africa, but that region's population is dominated by one country, South Africa. Elsewhere in in sub-Saharan Africa, family planning usage is infrequent and occurs primarily in urban areas.

What are the prospects for the spread of family planning in Africa? It is certainly true that a small number of countries have demonstrated that the acceptance of the idea of family limitation has begun, but there are many obstacles in addition to traditional attitudes towards the number of children and a woman's role in life. In many cases, government resolve will have to be strengthened and the difficult process of setting up a system of counseling and supply will have to be greatly expanded. In many cases, the funds for such programs may be lacking. Throughout Africa, women prefer temporary, or "spacing" methods such as the pill, injection, and intrauterine device (IUD). These methods require not only a regular and accessible source of supply but a commitment on the part of the couple to use them. However, the belated recognition of HIV/AIDS as a national calamity by many governments may accelerate family planning programs in ways that were not anticipated, increasing condom use and involving men to a much greater degree.

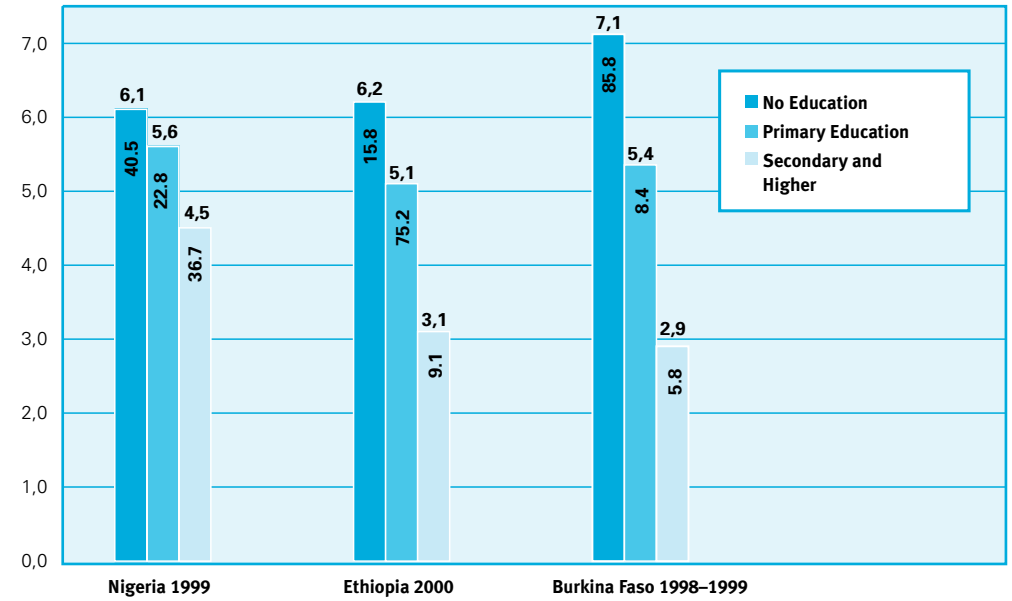
Fig. 6: Basic Education in Africa, 1970–1997: 30 Years of Progress But Levels Remain Low



Source: UNESCO *1999 Statistical Yearbook*

One of the most sensitive indicators of development is the progress made in education, given that even primary education provides the means for changing attitudes – particularly attitudes on the roles of men and women in society. Primary education provides literacy, an essential first step. According to UNESCO estimates, primary school enrollment rates rose considerably since 1970, although the increase slowed in the 1990s. Only South Asia shows a similar gap between enrollment of boys and girls as does Africa. Progress in secondary school enrollment is the lowest among the world's region, although the gap between boys and girls is less than in some other regions.

Fig. 7: Total Fertility Rate by Highest Grade Level Ever Attended

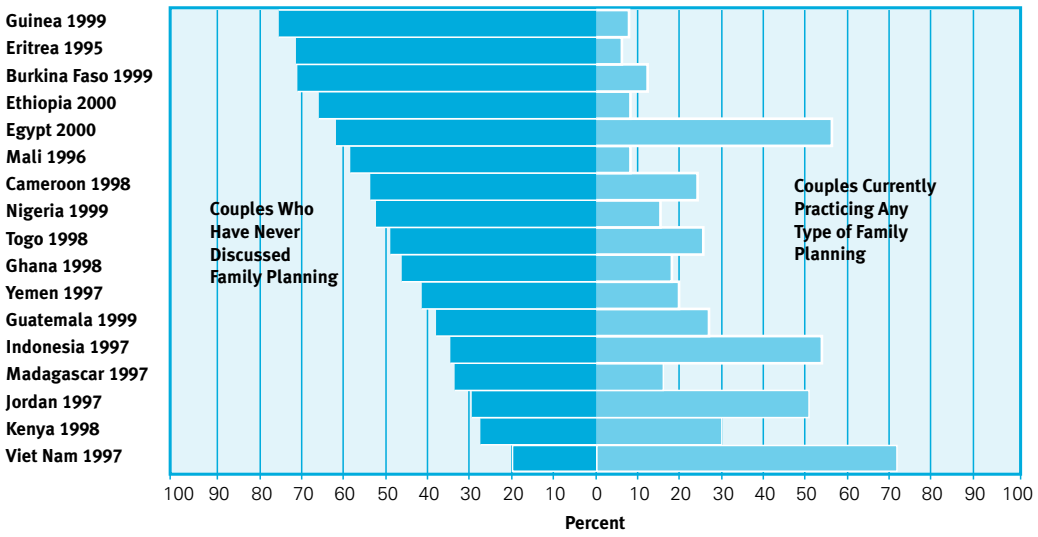


Source: *Demographic and Health Surveys*

Note: Figures in boxes are percent of all women interviewed ever attending a specific level

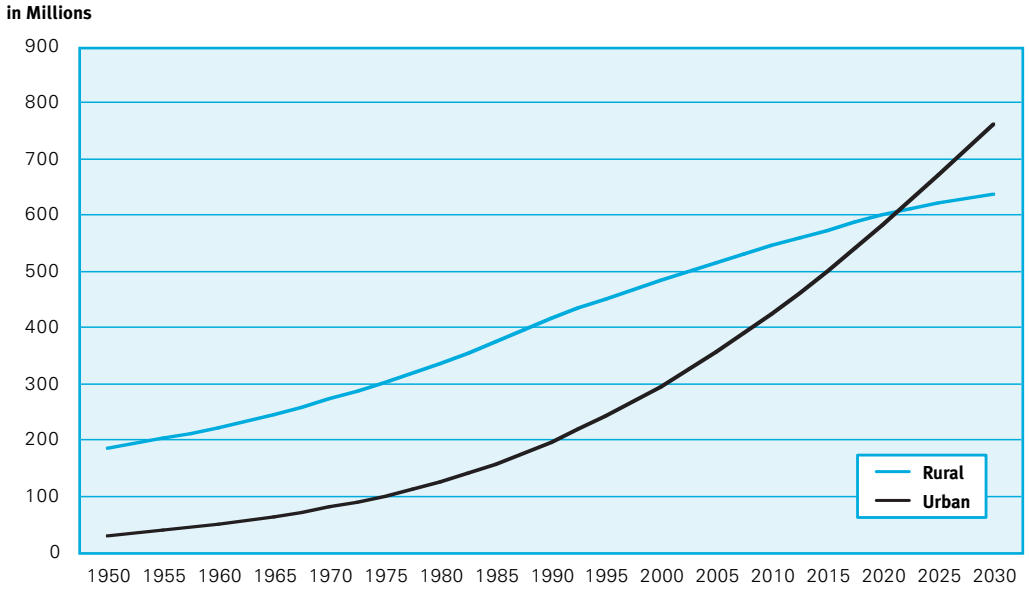
While population policies aiming at lowering the total fertility rate is not the primary reason for educating girls, the effect of rising education on women's empowerment and their decisions on childbearing is a frequently analyzed relationship. In the graph, the relationship between education and fertility is clear and it is one that is repeated in country after country. What is often not made clear is that the number of women with any education above primary in developing countries may be quite low. Women with secondary and higher education are often very different from the majority, perhaps residing in urban areas and with parents who are committed to educating daughters along with sons. Higher education and lower fertility therefore cannot be seen as a simple law of cause and effect but are rather elements of a generally higher socio-economic status. For the vast majority of the population, the cost of education is a serious obstacle and, oftentimes, sons will come first. Here, as always, statistics tell only part of the story. The social and cultural background of a country must always be considered as well.

Fig. 8: Couples Who Have Never Discussed Family Planning and Current Use of Familiy Planning



Source: *Demographic and Health Surveys*

Fig. 9: Africa: 38 Percent Urban in 2000, 55 Percent Urban in 2030



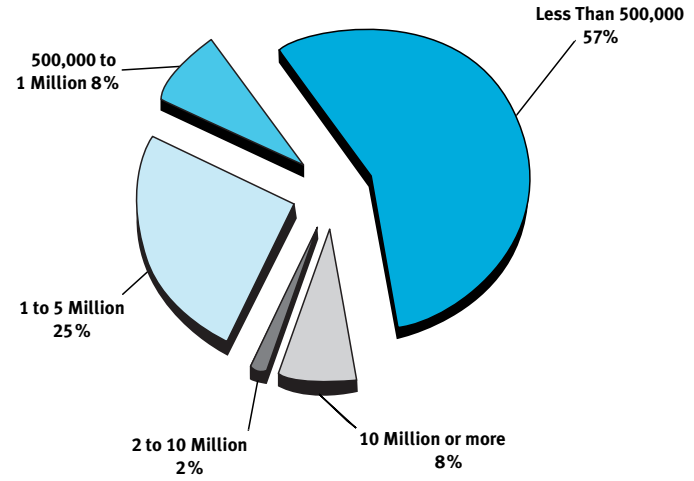
Source: United Nations Population Division, *World Urbanization Prospects: The 1999 Revision*

Informal education may play a greater role in women's ability to exercise control over their childbearing and have a far more immediate effect than formal schooling. Projects in Africa to encourage male involvement and couple's discussion of family planning have shown great promise. The graph (Fig. 8) illustrates the general tendency for family planning usage to rise the more couples discuss the often taboo subject.

One key indicator of development is urbanization, the rising part of a population living towns and cities. In Africa, this process differs from other regions in that both rural and urban populations are growing. In fact, Africa is the only region projected to have significant growth in the rural areas between now and 2030. The possible effects of "urbanization" must also be considered in the light of just what "urban" actually means in any country. It is tempting to visualize mega-cities such as Lagos or Mumbai (Bombay) when discussing urban populations but the reality is that the vast majority of the world's urban population lives in far smaller cities and market towns which may themselves have only a semi-urban nature. The move to urban areas does not necessarily signal an end to traditional lifestyles and values.

Fig. 10: Africa's Urban Population, 2000 by Size of Town or City

Source: United Nations Population Division, *World Population Prospects: The 1999 Revision*

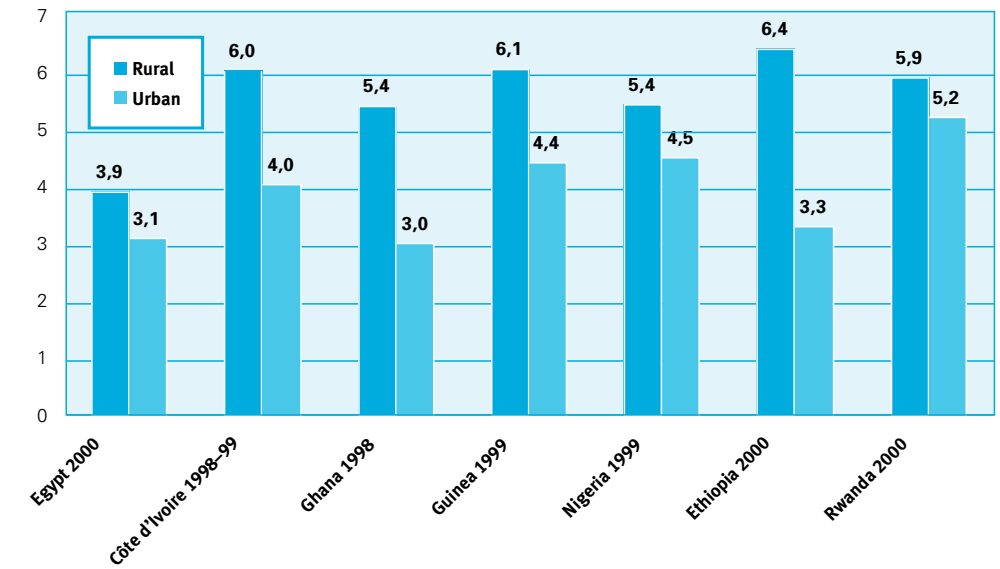


In many countries of the world, the urban population may be thought of as "non-agricultural" rather than one which resides in large urban agglomerations. For example, in Ethiopia, the population residing in localities of 2,000 or more is considered urban. This is a typical definition worldwide. In Africa, nearly 60 percent of the urban population live in places of less than 500,000 population, but the average place is far smaller.

Still, urban and rural residence often results in dramatic differences in fertility. Higher levels of education, more frequent media exposure, the cost of living, and easier access to family planning and health services clearly result in lower fertility in larger towns and cities. But, even here, the true character of urban population must be kept in mind when considering the possible future effects of urbanization on fertility levels. In Ethiopia, for example, the drop in fertility from a TFR of 6.4 children in the rural areas to 3.3 in urban zones is quite dramatic. But, Ethiopia's only large urban area is the capital, Addis Ababa, with about 2.6 million population. After that, city sizes drop to about 100,000 and less. In Rwanda, the urban/rural difference is much less, but even the capital, Kigali, has a population of only about 250,000. These realizations make it clear that fertility reduction in Africa will have to be accomplished primarily in rural zones.

Fig. 11: Rural and Urban Total Fertility Rates in Africa, end-1990

Average number of children per woman



Source: *Demographic and Health Surveys*

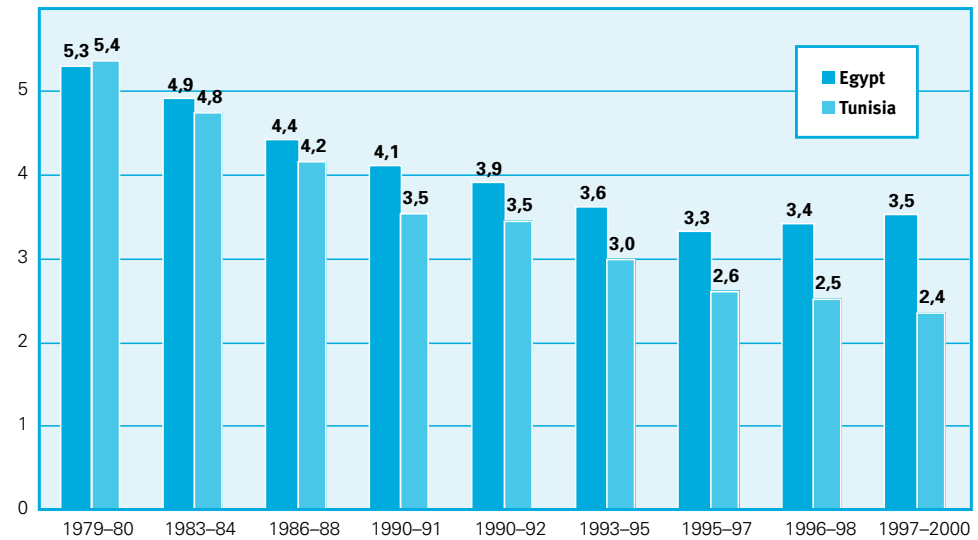
Note: The figures in brackets are the proportion of the population urban

How predictable are fertility declines? In Africa, several countries have experienced significant fertility decline after many years of population policy efforts. It has been observed that fertility decline in developing countries often begins with a sharp reduction as family planning is embraced by segments of society pre-disposed to plan their number of children, such as those in urban areas, with higher levels of education, and for whom large numbers of children are more of an economic burden. But, as time passes, fertility decline may stall. Reaching the "two child family" usually means that family planning must be practiced by all strata of society, a task that may be far more difficult. In Egypt, a country with a well-organized program of reproductive health services, substantial fertility decline took place throughout the 1980s, but has now come to an apparent end. In Tunisia, however, there has been no such "plateau level" and the TFR declined continuously so that it now approaches the replacement level.

Life expectancy at birth in Africa has historically been the world's lowest. At 54 years, it is on a par with Europe and North America around 1900. In 1950, it was a very low 35 years but rose to about 54 at present, due in part to decreases in infant mortality. Tragically, the slow progress made has now been halted throughout much of sub-Saharan Africa as a result of HIV/AIDS. The situation is such that, overall, life expectancy is projected to decrease in sub-Saharan Africa for the next 10 – 15 years. In the graph, the effect of AIDS in Botswana is quite evident, as that country's life expectancy is projected to fall from about 50 in 1996 to below thirty years about 2016. Egypt, virtually unaffected by AIDS, is projected to increase steadily, approaching 80 years by mid-Century.

Fig. 12: Fertility Decline in Egypt and Tunisia: Two Different Paths?

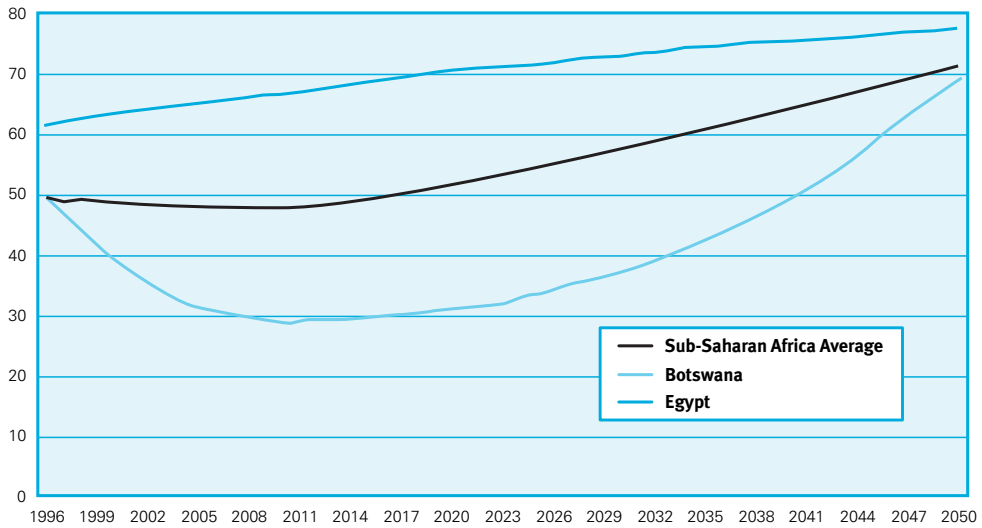
Average number of children per woman



Sources: Egypt: various surveys reported in *Egypt Demographic and Health Survey 2000*
Tunisia: interpolated from United Nations Population Division, *World Population Prospects: The 2000 Revision*

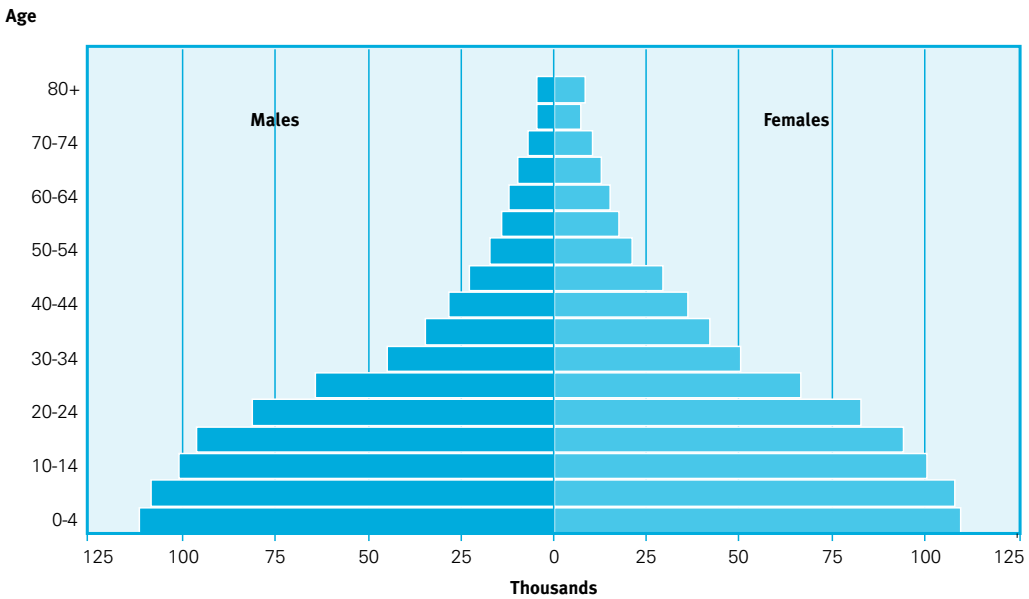
Fig. 13: Life Expectancy at Birth in Africa, 1996–2050

Years



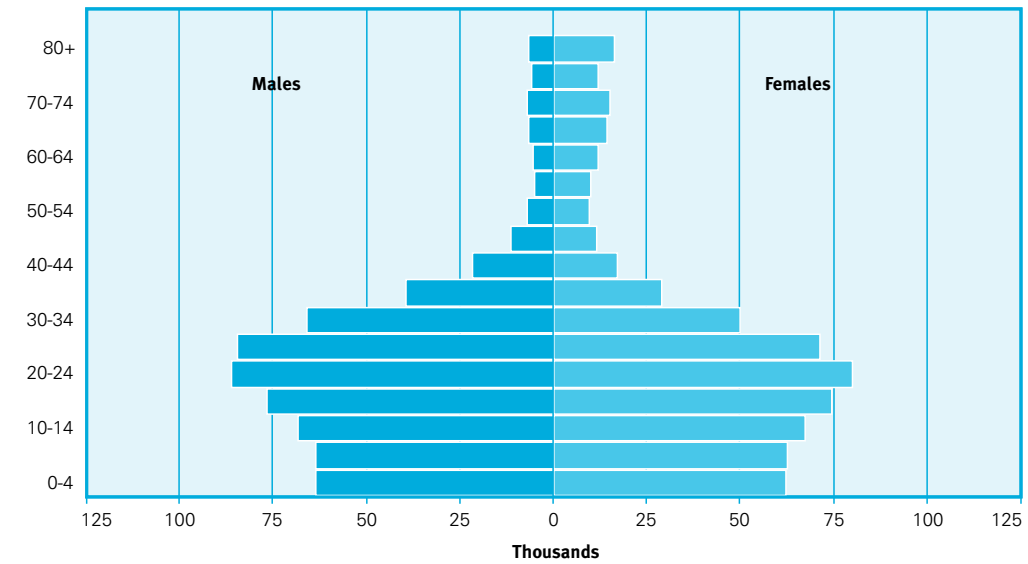
Source: U.S. Census Bureau, *International Data Base*

Fig. 14: Population of Botswana in 2000: A Normal Pattern by Age



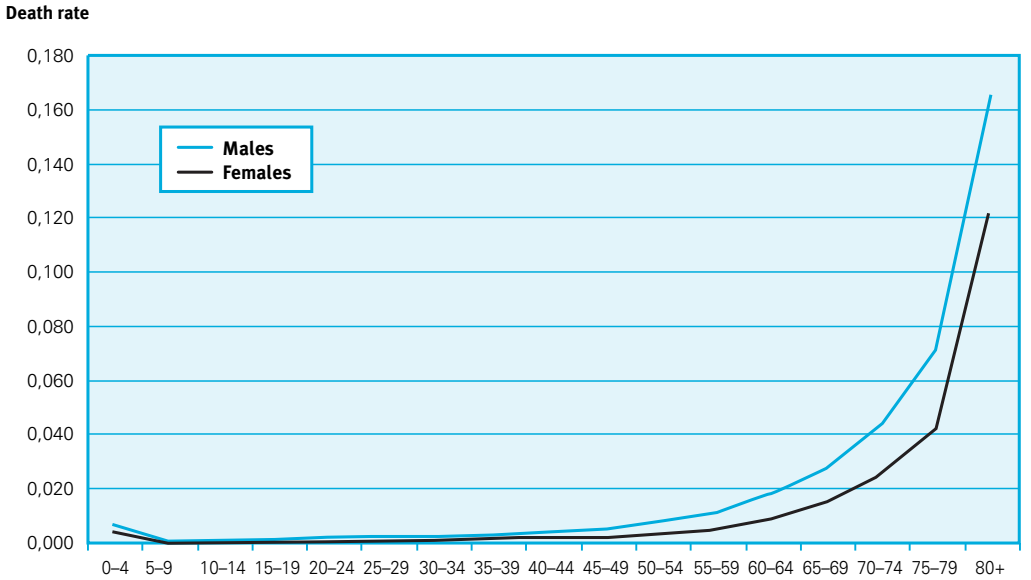
Source: U.S. Census Bureau, *International Data Base*

Fig. 15: Population of Botswana in 2025: Portait of a Nation Ravaged by AIDS



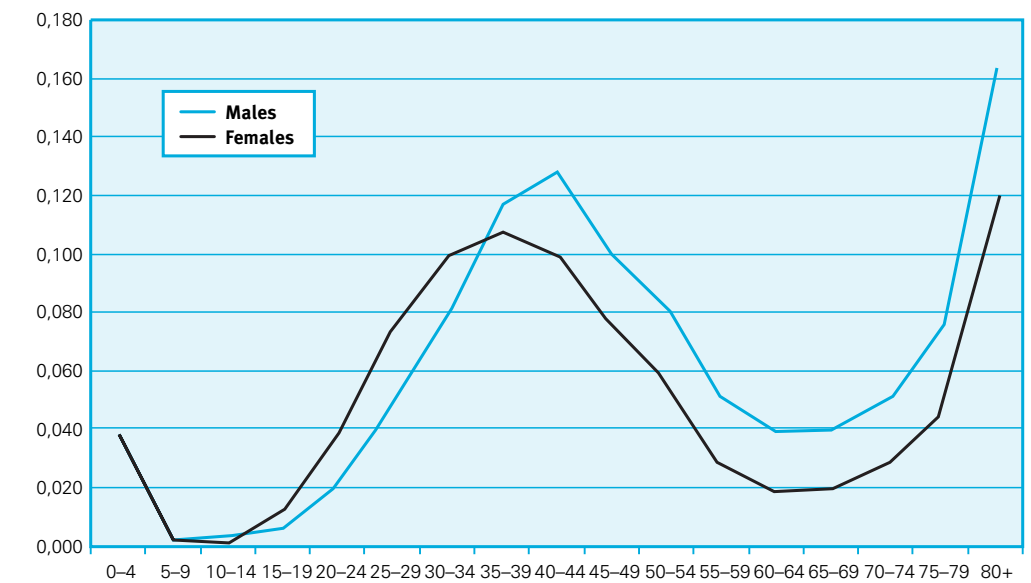
Source: U.S. Census Bureau, *International Data Base*

Fig. 16: Botswana 2010 Death Rates – No Aids Mortality



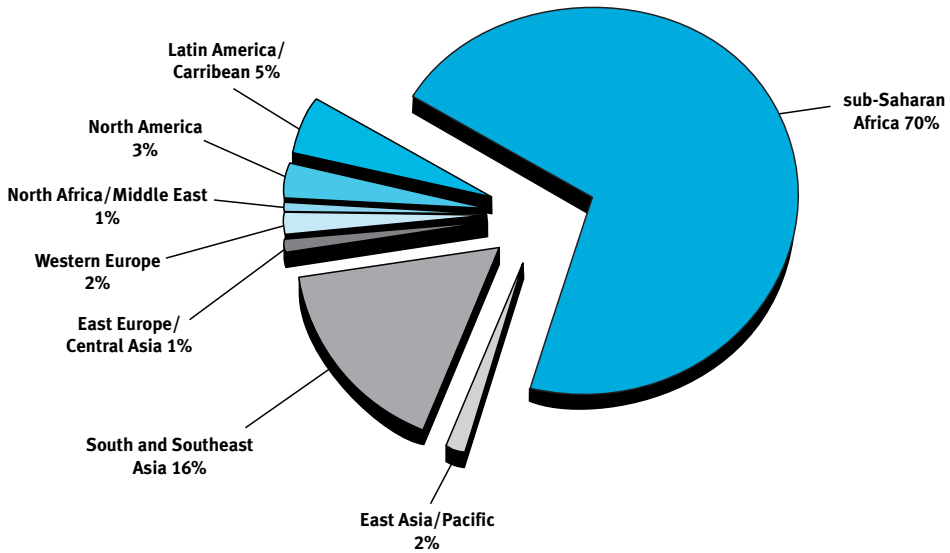
Source: U.S. Census Bureau, *International Data Base*

Fig. 17: Botswana 2010 Death Rates – with Aids Mortality



Source: U.S. Census Bureau, *International Data Base*

Fig. 18: World AIDS Cases: With 13 Percent of the World's Population, sub-Saharan Africa has 70 Percent of AIDS Cases



Quelle: World Health Organization

end-1999 estimates

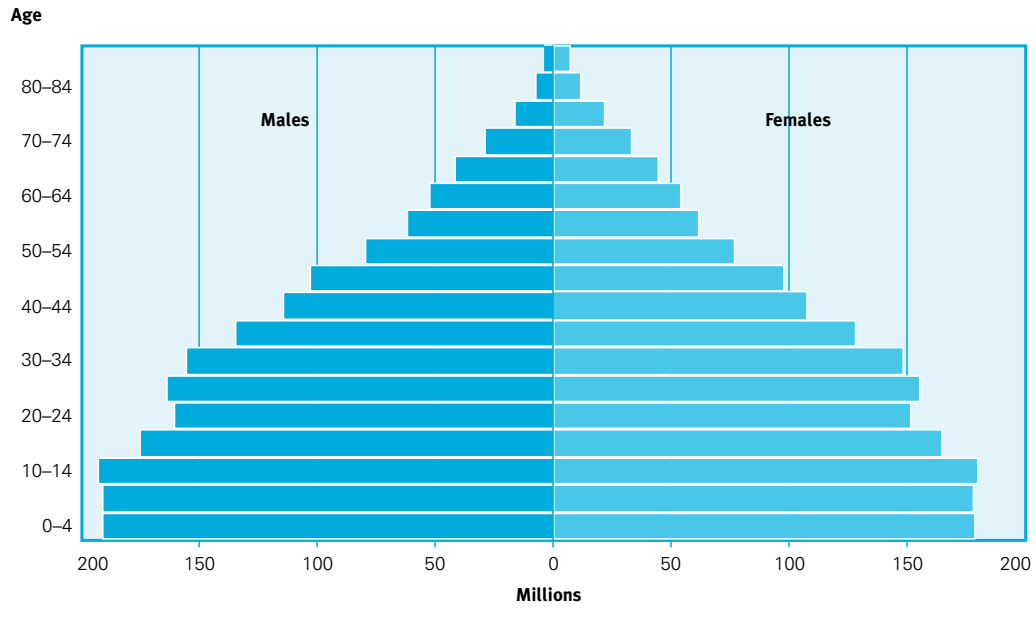
Age-sex pyramids of Botswana in 2000 and 2025 give a unmistakable picture of the devastation that AIDS is bringing to that country where an astoundingly high 36 percent of adults are believed to be infected. By 2025, the population ages 40 and over will be virtually wiped out, comprising only about 15 percent of the national total.

The first graph (Fig. 16) of death rates by age normally begins with a comparatively high death rate in the youngest ages due to infant and child mortality, followed by a very low rate throughout middle age, rising at the older ages. For that reason, it is often referred to as the "J-curve." The first graph shows a projection of Botswana's death rates in 2010 without any AIDS mortality. The second graph (Fig. 17) illustrates the disease devastating effect. The distortion to Botswana curve with death rates in the 30s and 40s nearly as high as in the 70s and 80s is appalling. This is thought never to have happened in world history and speaks volumes about the calamity of AIDS.

The extent of the AIDS problem in Africa is readily apparent when we consider that the continent, home to 13 percent of the world's population, has 70 percent of the global total AIDS cases. Rising AIDS prevalence has also become a concern in South Asia and Eastern Europe, but, in several countries of Africa, the damage has been done. The following countries suffer from about 20 percent or more of their populations infected: Botswana, Lesotho, South Africa, Namibia, Swaziland, Zimbabwe and Zambia. Until recently, only a handful of countries have waged successful anti-AIDS campaigns, particularly Ghana and Uganda, but the problem has largely been ignored by country leaders elsewhere. During 2000, however, many heads of state began to admit that there was a problem, raising hope that progress may finally be made.

Asia

Fig. 1: Asia's Population in 2000: Signs of a Declining Birth Rate



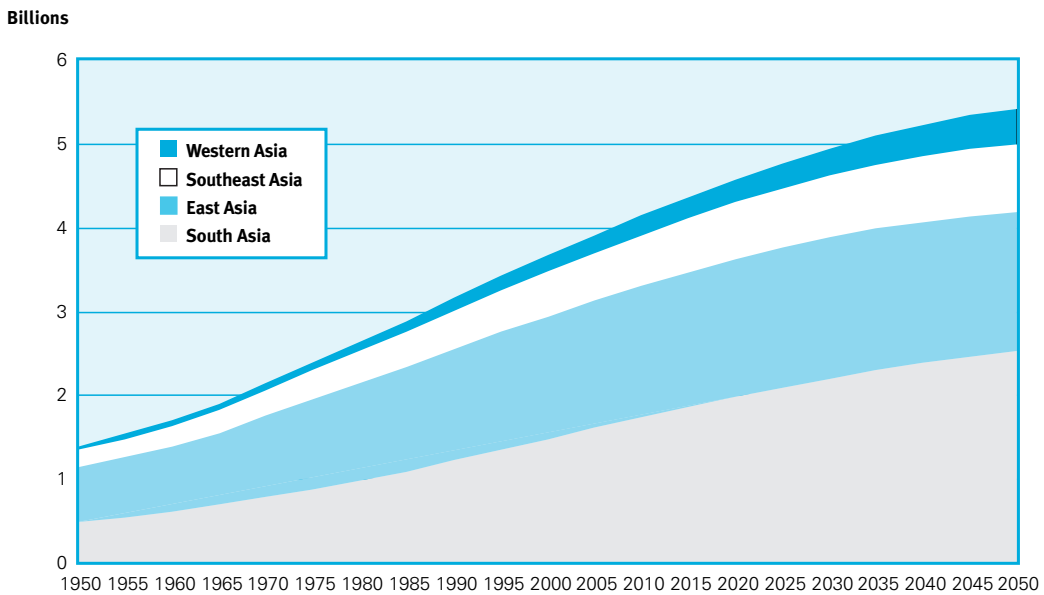
Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

Asia is simply earth's population giant. The population pyramid in the accompanying graph of Asia's 3.7 billion shows a population that is not only great in size but one that remains quite "young" with 30 per cent of the population below the age of 15. Still, the population of Asia now features one aspect that Africa does not – a clear reduction in the size of the youngest age groups compared to those above. Both age groups below the age of 10 are now estimated to be smaller than ages 10-14, the first sign in age structure of a population for which an eventual end to population growth is in sight. It should be emphasized that all statistics in Asia are heavily influenced by its two largest countries, China and India, with two-thirds of the continent's population. Minor changes in the development of their fertility levels therefore have major effects on the future population growth in Asia.

Numerically, Asia will likely add about 1.5 billion population by mid-Century. Overall, Asia's total growth will largely result from future trends in South Asia, in which India alone counted just over one billion residents in its census of March 2001. South Asia's addition to the global total should be about one billion, but that figure is very uncertain and will be dependent upon the future course of the birth rate in India's most populous states.

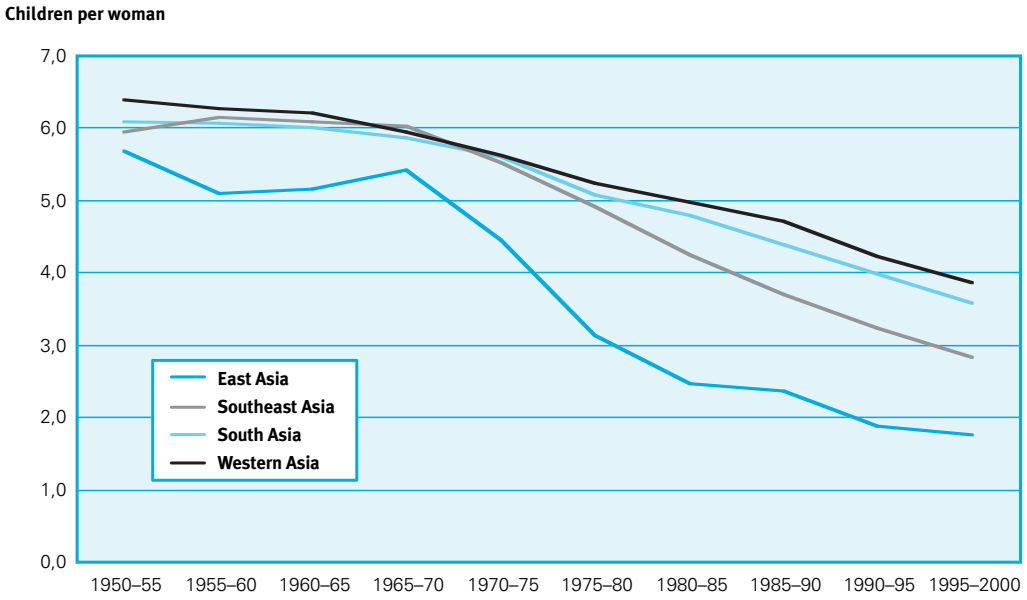
In the early 1950s, the total fertility rate in Asia was typically high for developing countries, at about six children per woman. China's stringent population policy in the late 1970s that forced as many couples as possible to have only one child has now reduced the TFR in China to about 1.8 children. But elsewhere in the region, fertility varies very widely both in its level and trend.

Fig. 2: Asia: Four Billion in Growth by 2050: Half of That in South Asia



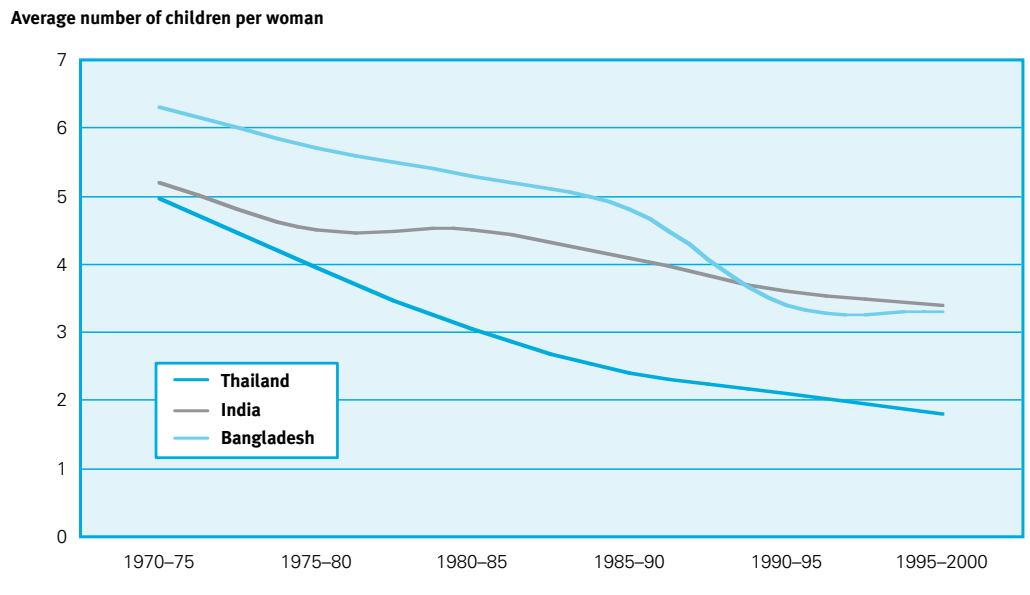
Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

Fig. 3: Total Fertility Rates in Asia, 1950–2000



Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

Fig. 4: Total Fertility Rate Decline in Bangladesh, India and Thailand



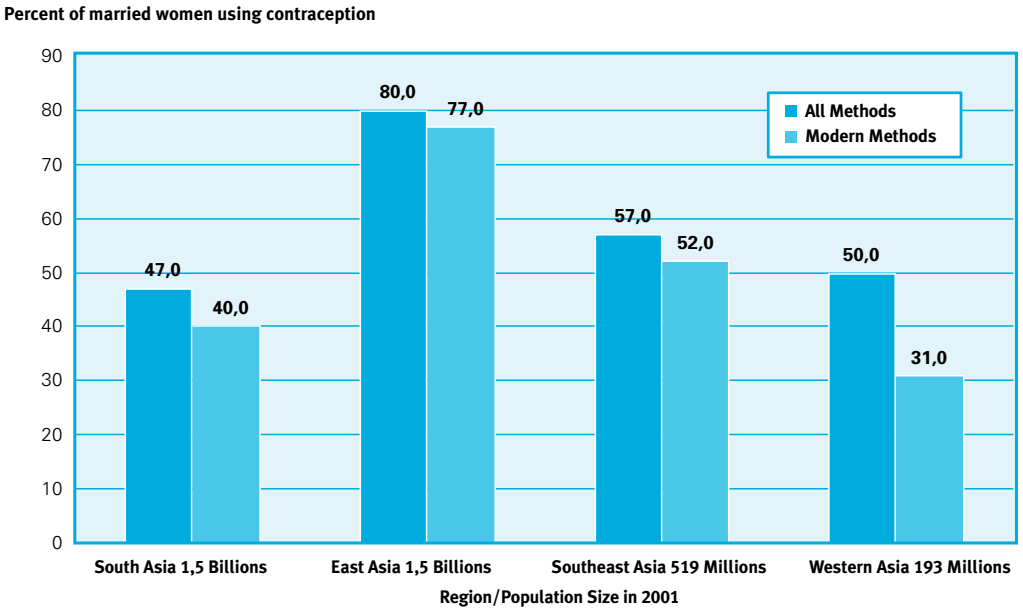
Source: United Nations Population Division, *World Population Prospects: The 2000 Revision;* Registrar General of India; *Bangladesh Demographic and Health Survey 1999–2000*

The wide variation in fertility in Asia is exemplified by the dramatic difference in trends among countries, illustrated here by Bangladesh, India, and Thailand. In Thailand, fertility decreased quickly to below the replacement level, largely due to a well-organized and innovative family planning program and a receptive population. India has the longest-running national policy to reduce population growth, initiated in 1952. But, in highly rural India, fertility decline came only slowly. In the late 1970s, infamous sterilization campaigns greatly reduced public acceptance of family planning and fertility decline stalled. Today, a more gradual decrease has begun, but the future is very much in doubt. Finally, in Bangladesh, fertility declined very slowly until the late 1980s, when it dropped rather sharply to a total fertility rate of about 3.5. Subsequent fertility surveys have shown that total fertility rate decline has now ceased entirely.

Contraceptive use in Asia has changed dramatically in the past twenty years, but shows the same large regional differences as fertility. East Asia, dominated by China, has the highest rate, followed by Southeast Asia. Moving to the west, however, family planning usage drops off dramatically. The significance of this difference can be appreciated when we realize that both South and East Asia today have the same population size, 1.5 billion, but South Asia is projected to add a billion by 2050, while East Asia's population will be approximately the same size.

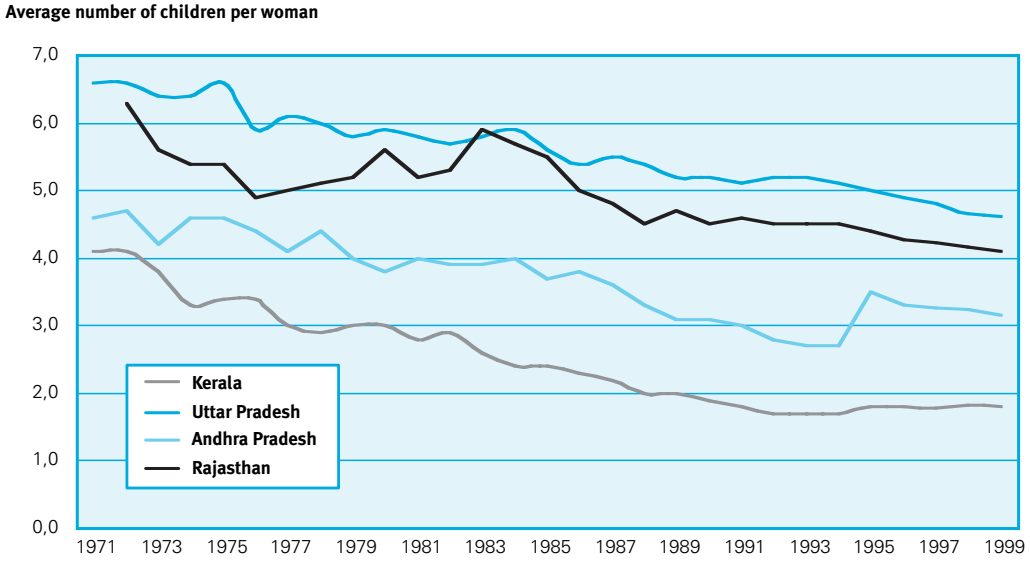
India serves as an excellent example of the need to consider fertility trends below the national level since national-level rates may obscure significant in-country variation. In the graph, Uttar Pradesh, with its 166 million population, has clearly lagged well behind states such as Kerala with a much smaller 32 million population. In fact, at the pace of TFR decline in the 1990s, Uttar Pradesh would not reach a two child family until about 2038. The most recent UN medium projections, however, assume that India's national average TFR will reach 2.1 by 2015-2020. Clearly, fertility decline in India's larger states must accelerate for there be

Fig. 5: Contraceptive Use in Asia, 1990s



Source: Population Reference Bureau, *2001 World Population Data Sheet*

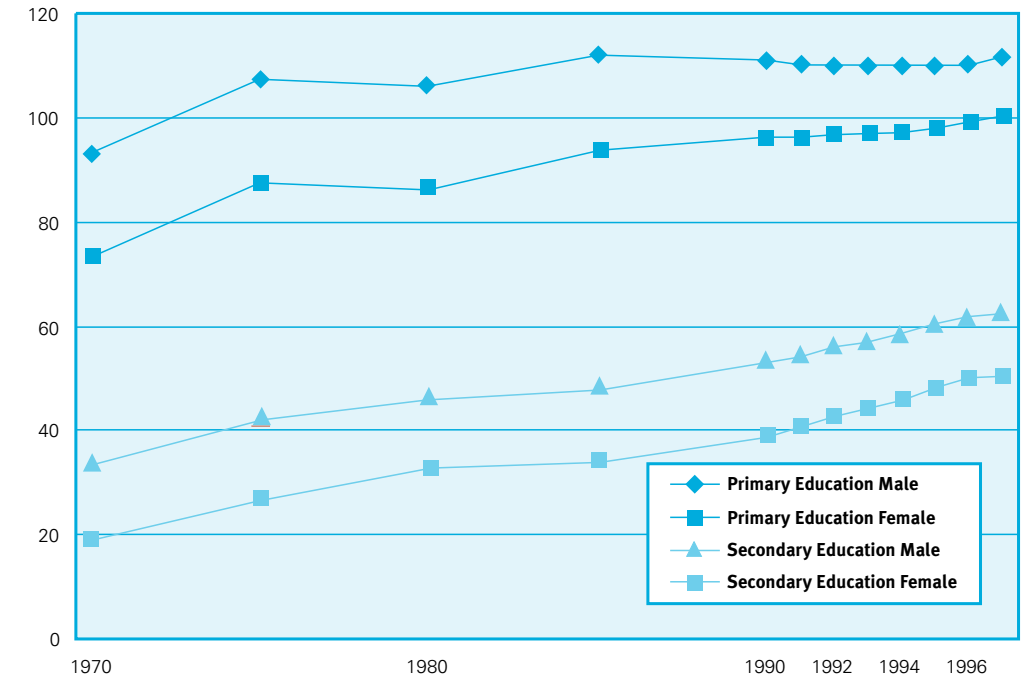
Fig. 6: Total Fertility Rates in Selected States of India, 1971–1999: A Pattern of Wide Divergence



Source: Registrar General of India

any possibility of the medium projection being realized. If that does not happen, the population of these larger states will grow well out of proportion to the other states, slowing the rate of fertility decline at the national average level. This will have an enormous impact on the population size of the country. Perhaps the magnitude of the task can be better appreciated when we realize that the rural population of Uttar Pradesh alone is 132 million, larger than that of Japan. Currently, the TFR in rural Uttar Pradesh is about five children per woman, a full child higher than in urban areas.

Fig. 7: Basic Education in Asia: A Wide Female Gap Remains

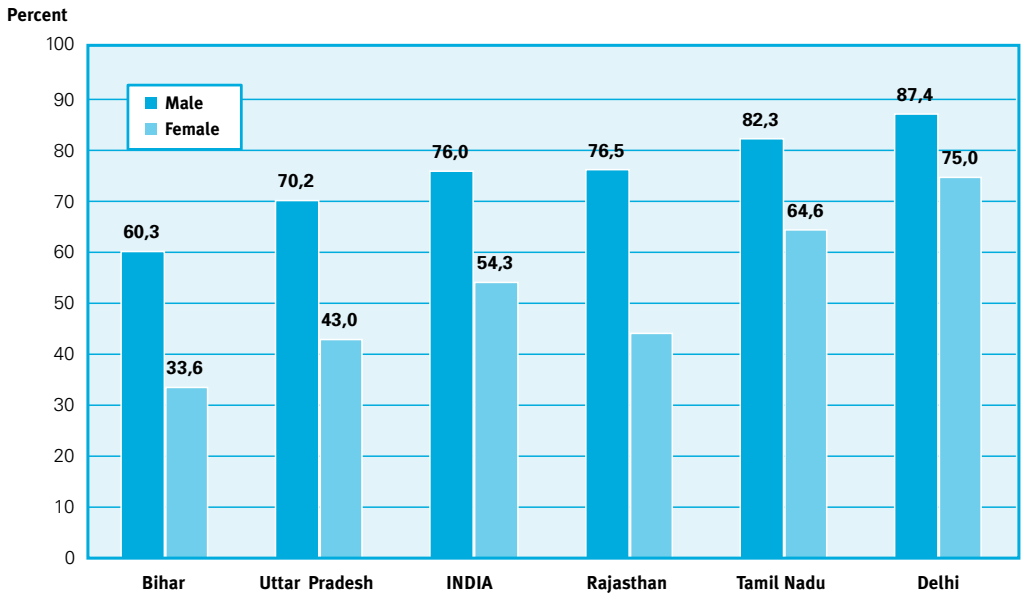


Source: UNESCO *1999 Statistical Yearbook*

Since 1970, education in Asia has seen gradual progress, but has lagged behind other developing country regions in the education of girls. This is particularly the case in South Asia, where about 54 percent of boys were estimated to have been enrolled in secondary school in 1997, compared to 36 percent of girls. In India, very large regional disparities are evident in male and female literacy rates in the northern „Hindi Belt" states of Bihar and Uttar Pradesh and in Rajasthan. Not coincidentally, these states have some of the country's highest fertility rates.

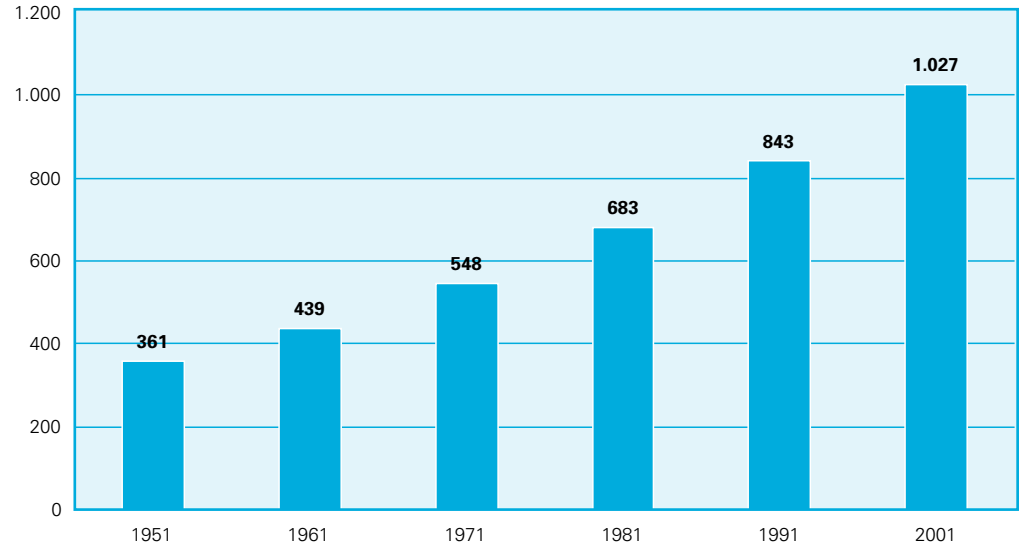
No country today has as much potential population growth as does India. Some perspective on India's size can be appreciated when we consider that the 0-4 male age group alone totals 60 million, slightly larger than the population of France and would qualify as the 20th largest country in the world by themselves. Each year, India adds about 17 million people, somewhat larger than that of the Netherlands. For that reason alone, India deserves special attention among the countries of Asia.

Fig. 8: The Gender Gap in India: Percent Literate, 2001



Source: *2001 Census of India*

Fig. 9: Population of India, 1951–2001



Source: Registrar General of India, *Census of India 2001, Provisional Population Totals*

Fig. 10: Population of India by State Compared to World Countries, 2001

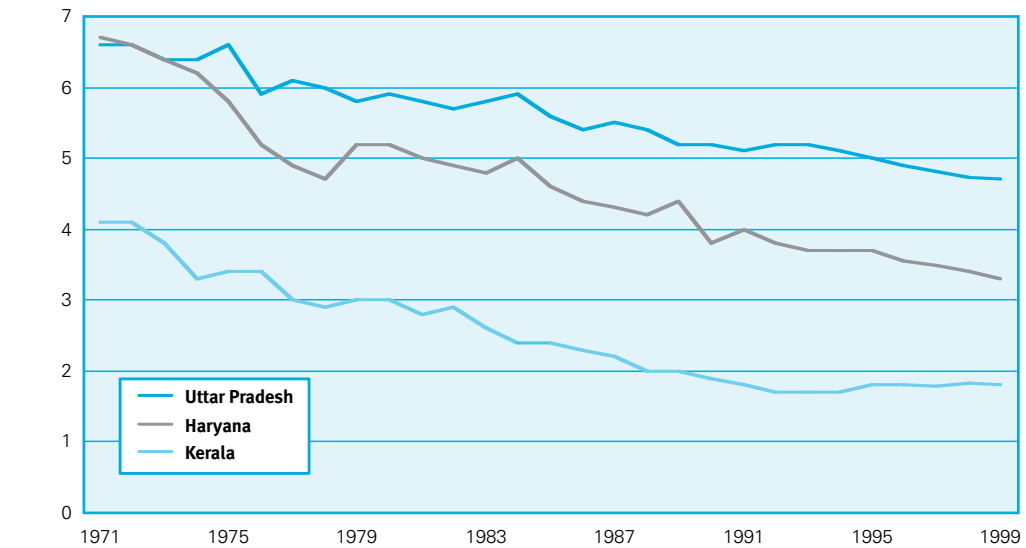
	Population 2001 (millions)		Population 2001 (millions)
1 China	1,273,3	14 BIHAR	82,9
2 India	1,033,0	15 Germany	82,4
3 United States	284,5	16 WEST BENGAL	80,2
4 Indonesia	206,1	17 Vietnam	79,8
5 Brazil	171,8	18 Philippines	77,2
6 UTTAR PRADESH	166,1	19 ANDHRA PRADESH	75,7
7 Pakistan	145,0	20 Egypt	69,8
8 Russia	144,4	21 Iran	68,4
9 Bangladesh	133,5	22 Turkey	66,3
10 Japan	127,1	23 Ethiopia	65,4
11 Nigeria	126,6	24 Thailand	62,4
12 Mexico	99,6	25 TAMIL NADU	62,1
13 MAHARASHTRA	96,8		

An additional appreciation of India's size can be obtained by ranking the states of India as if they were countries. Uttar Pradesh, in India's North, would be the world's sixth largest country at 166 million, larger than Pakistan and quite close behind Brazil. By 2025, Uttar Pradesh will likely be the world's fourth largest country, just behind the United States. No fewer than five of India's states would rank in the top twenty five of the world's nations.

The divergence of fertility rates in India is of key importance to the country's population future. The southern State of Kerala is well-known for having achieved replacement level fertility in the mid-1980s. But Kerala has long had a very literate population (94 percent of males and 88 percent of females are literate). Still, Kerala accounts for only three percent of the country's population. The Northern State of Uttar Pradesh is an example of a very populous State with low female literacy (only 44 percent) and a slower decline in TFR. Should the TFR decline in Uttar Pradesh show no sign of a more rapid decline in fertility, its population will grow more rapidly than projected and hold an ever-increasing share of the national total. The lag in fertility decline in Uttar Pradesh is even more evident when we compare it to neighboring Haryana which began at the same high level in 1971, but has now declined to 3.5 children per woman – about a full child less than in Uttar Pradesh (Fig. 11).

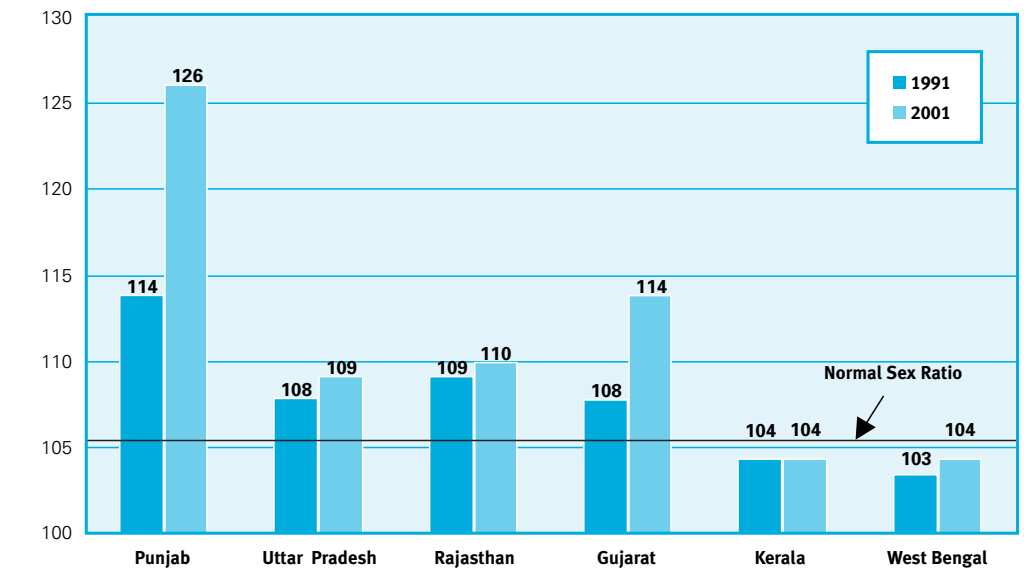
A particular concern in India and other Asian countries, such a China and South Korea, is the effect of the strong preference for sons on the number of boy vs. girl babies born. Gender imbalance has always been a concern in India, but methods of sex determination have now spread in the country, particularly in areas where incomes have risen. The most serious situation is in the Punjab, where the 2001 Census showed an alarming 126 boys below age six to 100 girls (Fig. 12). In August of 2001, the Punjab State Chief Minister spoke out saying that steps would be taken to prevent the aborting of female fetuses. But many practices, such as the illegal traditional dowry are difficult to prosecute. In fact, advertising signs in Punjab compare the low cost of abortion to the high cost of dowry!

Fig. 11: Total Fertility Rate in Three States of India, 1971–1999



Source: Registrar General of India

Fig. 12: Male Children Ages 0–6 Years per 1,000 Female Children Selected States of India, 1991 and 2001



Source: *2001 Census of India*

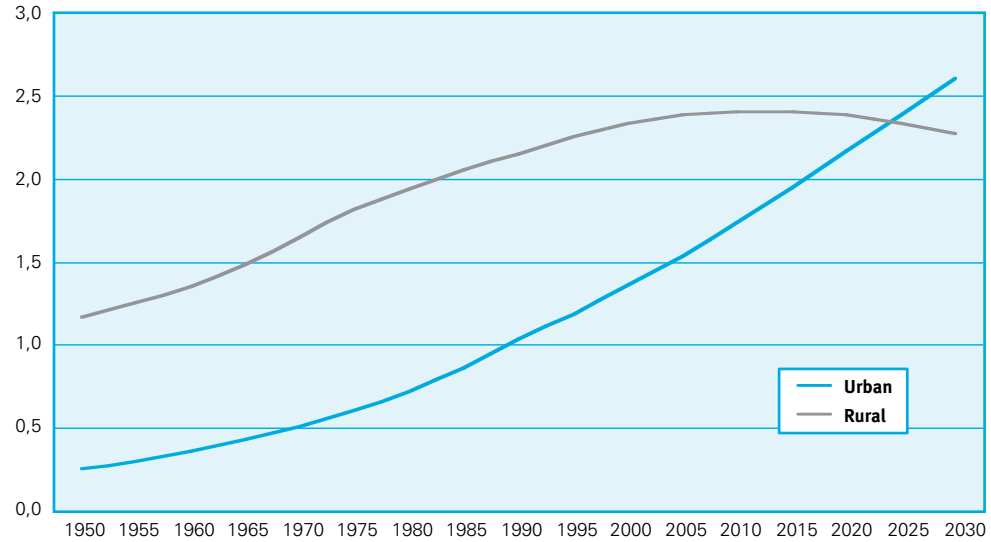
Reasons for Educating Boys and Girls in Madhya Pradesh, India

In India, the reasons for not valuing the birth of a girl baby are not imagined, but real. A girl baby will usually only grow up to leave the family house (often at an early age) and will cost the family in terms of dowry as well. A son can often be counted upon for life-time financial support:

"They all said they wanted to educate both their daughters and their sons. But the reasons...were different. They wanted to educate their daughters so that 'she will get some intelligence' and many mothers said that 'we do not want them to suffer as we did, she can at least write a letter when she is mistreated in her (in-law's) house.' For questions on their reason for educating a son, the standard answer given by most women was that 'if he is educated, he might get some job,' with an implication that this would provide them with security in their old age."

– from Manju Senpaty, *Gender Implications of Economic Reforms in the Education Sector in India: The Case of Haryana and Madhya Pradesh (1997)*

Fig. 13: Asia: 37 Percent Urban in 2000, 53 Percent Urban in 2030



Source: United Nations Population Division, *World Urbanization Prospects: The 2000 Revision*

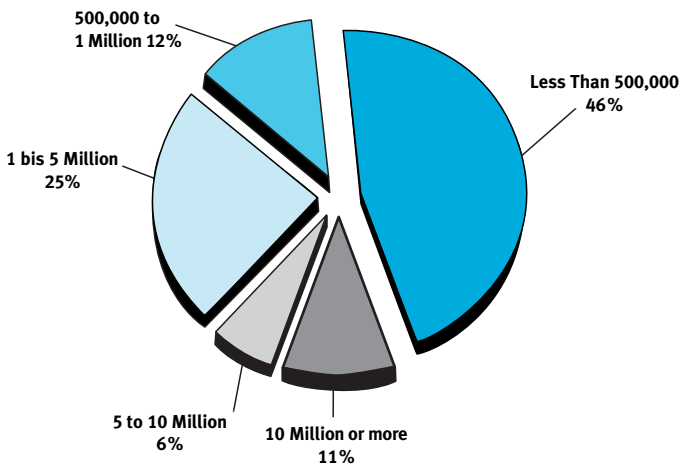
Asia has been undergoing a swift transformation from an almost completely rural population to one much more concentrated in towns and cities. United Nations projections suggest that this process will accelerate in the next thirty years until Asia is half urban by 2025. The transi-

tion to an urban society is one of the hallmarks of this new century. Mumbai (former Bombay, India) is projected to grow at 2.4 percent per year between now and 2015. A growth rate of 2.4 percent will double a population in only 29 years. Dhaka (Bangladesh), Karachi (Pakistan), and Jakarta (Indonesia) all have projected growth rates of three percent or more.

As in Africa, it should be remembered that, in Asia, urban does not mean mega-city. The distribution of the urban population by city size is essentially the same as in Africa, with about 11 percent of the urban population in cities of 10 million or more. Asia's mega-cities, although they account for only about four percent of the region's total population, are fast becoming even more important centers of commerce and catalysts for development.

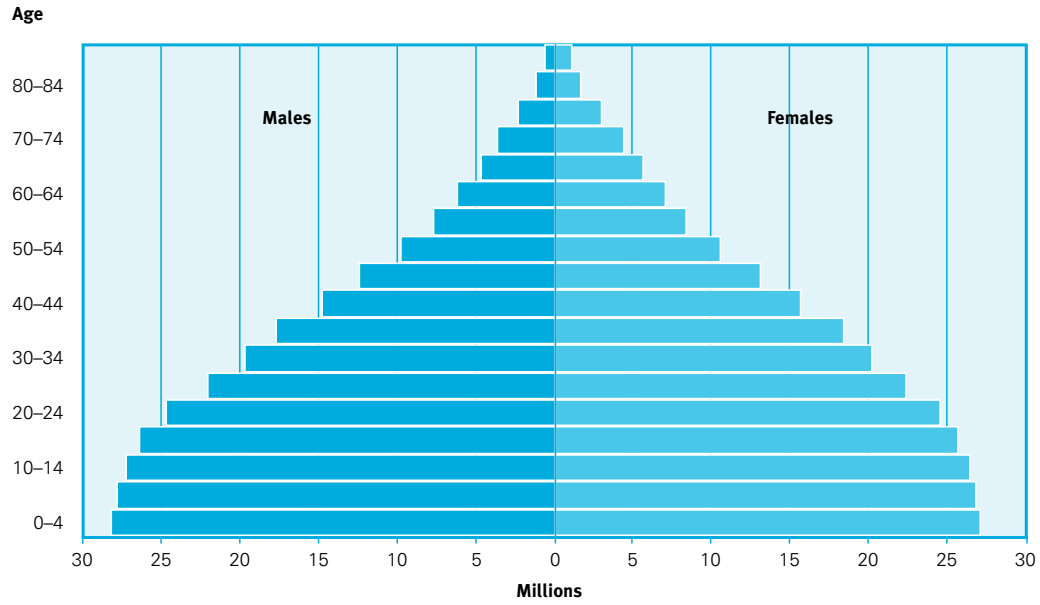
Fig. 14: Asia's Urban Population, 2000 by Size of City or Town

Source: United Nations Population Division, *World Population Prospects: The 1999 Revision*



Latin America

Fig. 1: Latin America/Carribean Population in 2000: Approaching the Transition



Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

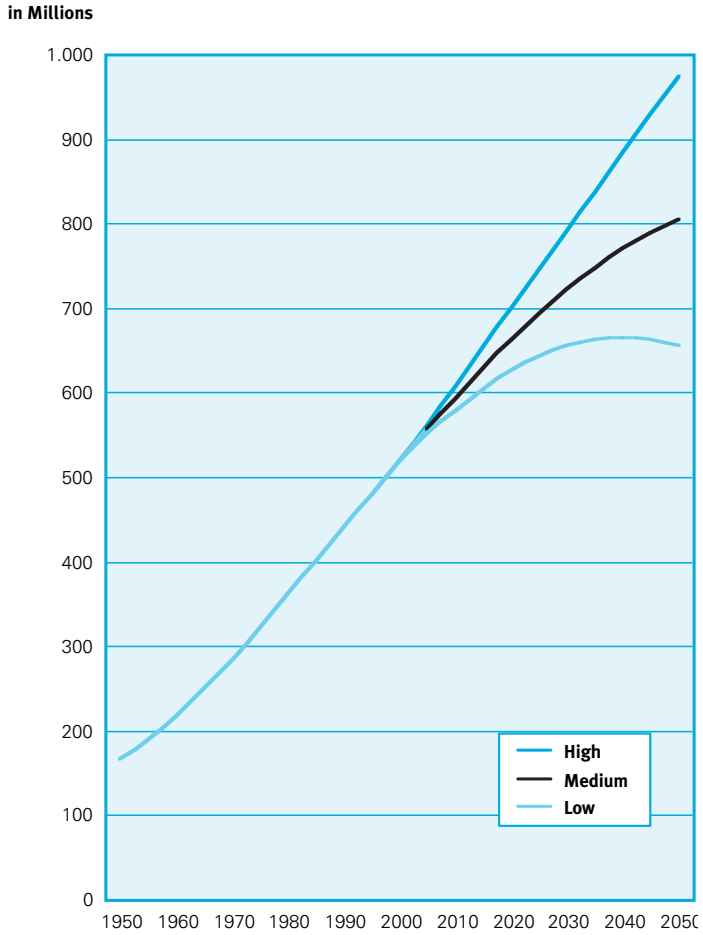
While Latin America's population pyramid is still quite young, the region is on the verge of reaching the transition to population stabilization. The region remains a mix, however, and there are real questions as to just what the preference for children might be. Latin America's pyramid is heavily influenced by Brazil, which today accounts for about one-third of the region's population. In Brazil, women now average about 2.4 children per woman. This has resulted in the percentage of Brazil's population below the age of 15 declining to about 30 percent today, but higher fertility in other countries may change Latin America's outlook.

What are Latin America's population prospects? Surprisingly, the region's population future is very much in doubt, despite rather low fertility in some major countries, such as Argentina, Brazil, and Mexico. United Nations projections offer a wide range of possibilities and the answer lies in a delicate balance. If couples in Latin America have about two children, the population would rise from about 525 million today to over 800 million in 2050, but if their family size is somewhat higher, 2.6 children, a population of one billion with continued growth is also possible.

Fertility decline in Latin America began rather late, but began to accelerate during the 1970s. The total fertility rate decreased to about three to four children by the 1990s, but decline began to slow at that point. Demographers sometimes refer to this as the "Latin American pattern," a decrease from high fertility levels of five to seven children per woman downwards, but not to two children, the level needed for eventual population stabilization.

Fig. 2: Latin America 1950–2050: Nearing a Billion by 2050 or Beginning to Decline?

Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*



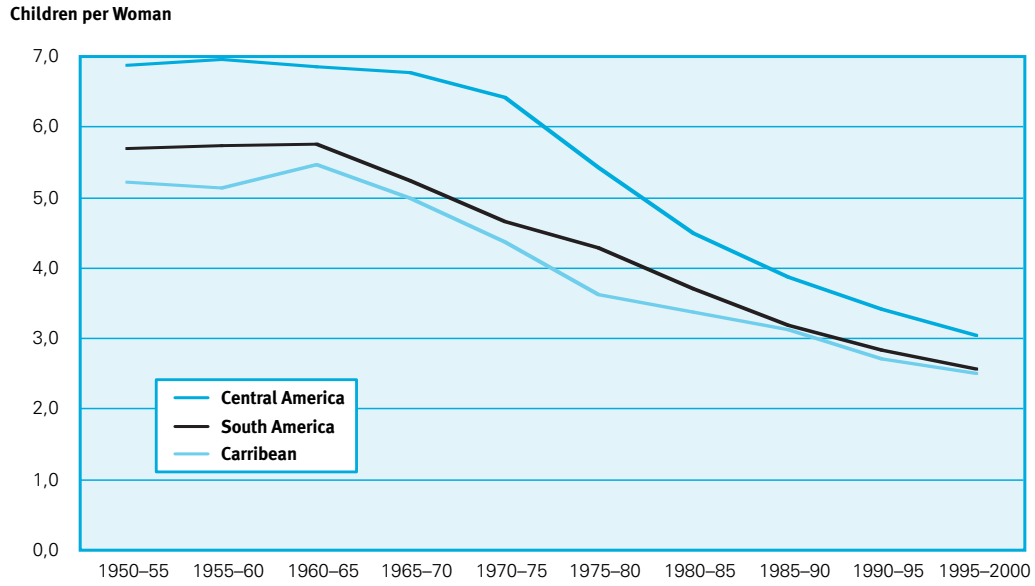
Argentina serves as an excellent example of the Latin America pattern, a relatively developed country with high education levels and with 90 percent of its population considered urban (Fig. 4). In 1948, Argentina had a crude birth rate of 25 births per 1,000 population, almost one half century later, that rate had fallen to just below 20. The pattern of fertility decline in Latin America has featured a tendency, in many cases, for fertility to decline below three children per woman, but rather than decline further to two children, level off above it.

The use of family planning in Latin America is the highest in the developing world (70 percent of couples), even when we consider that figures for Asia include China. In most countries, the majority of contracepting couples use female sterilization, although traditional methods, such as rhythm, predominate in Bolivia and Peru.

Education levels in Latin America are generally quite high, with nearly full enrollment in the primary grades. At the secondary level, Latin America is the only developing region where girls not only have parity with boys, but actually exceed them.

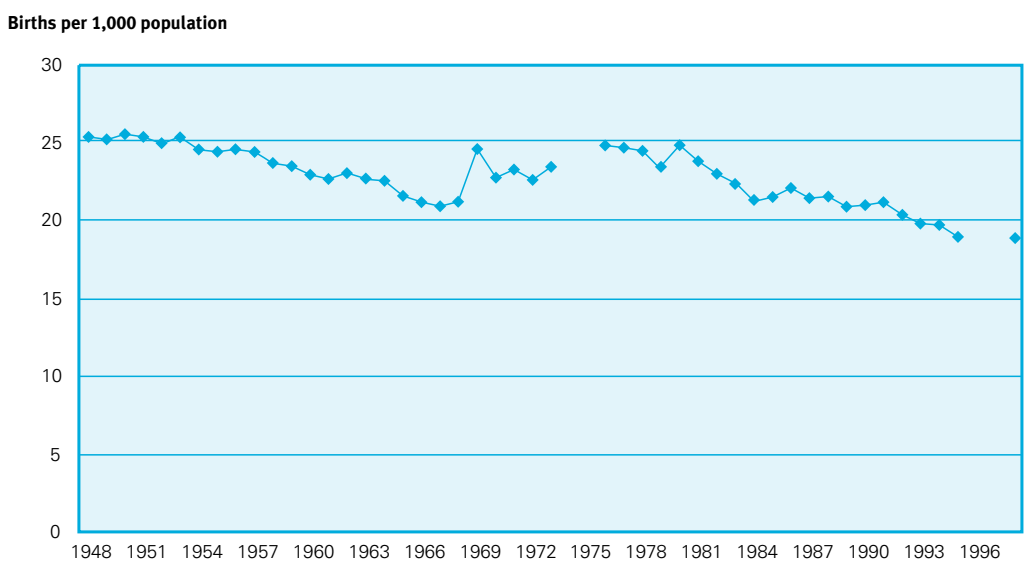
Latin America has easily been the most rapidly urbanizing region in the developing world. In 2000, the proportion of the population officially considered urban was more than twice

Fig. 3: Total Fertility Rates in Latin America/Carribean, 1950–2000



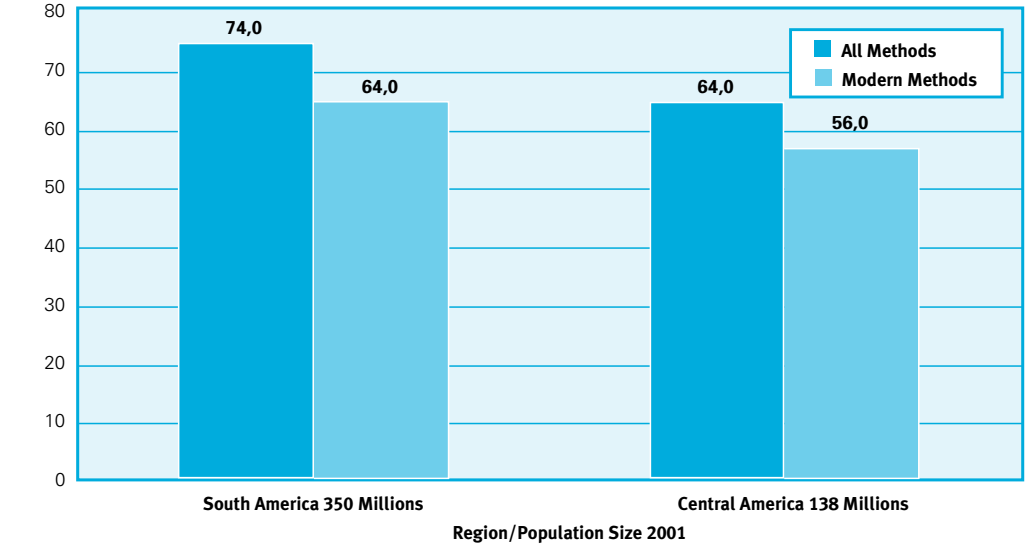
Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

Fig. 4: Birth Rate in Argentina, 1948–1998



Source: United Nations Population Division, *Demographic Yearbook, Historical Supplement 1948–1997,* and *Population and Vital Statistics Report, 1 January 2001*

Fig. 5: Contraceptive Use in Latin America/Caribbean, 1990s

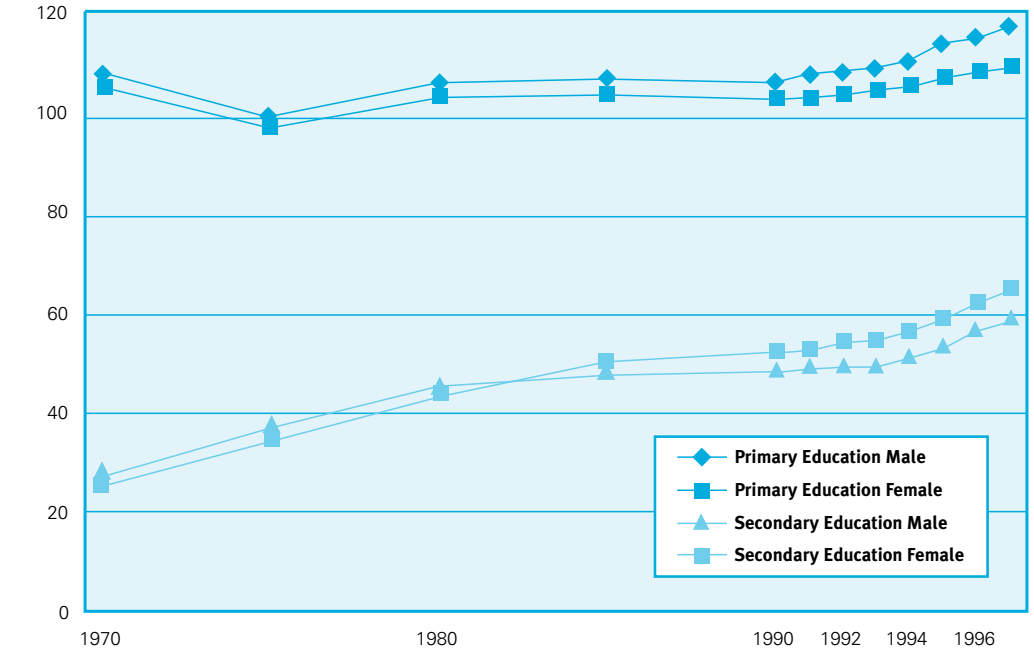


Source : Population Reference Bureau, *2001 World Population Data Sheet*

that of both Africa and Asia. In terms of numbers, growth in the rural population has been essentially nil for over thirty years. While the number of urban dwellers rose nearly 140 percent between 1970 and 2000 (from 163 to 391 million) the rural population essentially remained about the same size, increasing by only 5.8 percent (from 121 to 128 million).

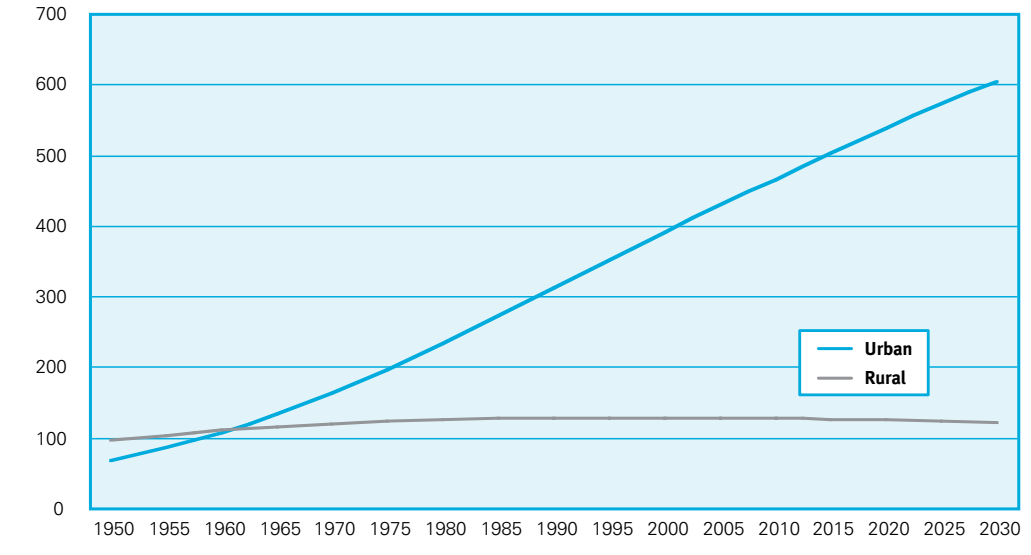
The region has the highest percentage of its urban population living in urban areas of 10 million or more of any developing region. United Nations estimates show that about 15 percent of the region's urban population lives in such "mega-cities" as Mexico City (18 million in 2000), Sao Paulo (also 18 million), and Buenos Aires (13 million).

Fig. 6: Basic Education in Latin America/Caribbean: The Only Developing Region Where Girls Have Parity with Boys



Source: UNESCO *1999 Statistical Yearbook*

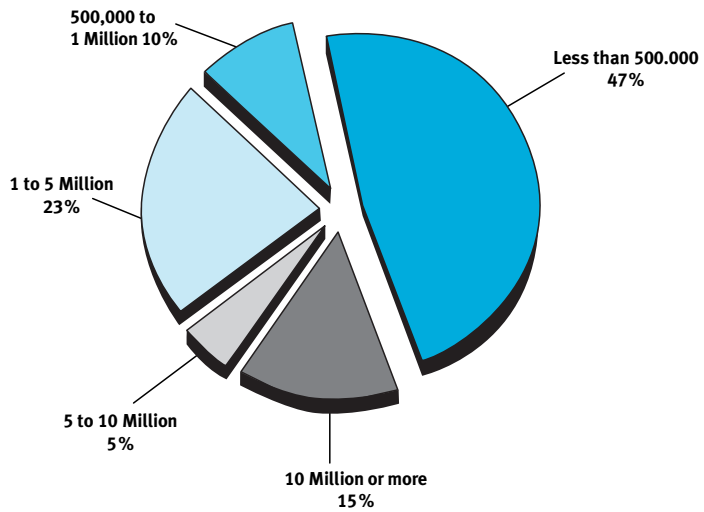
Fig. 7: Latin America/Caribbean: 75 Percent Urban in 2000, 83 Percent Urban in 2030



Source: United Nations Population Division, *World Urbanization Prospects: The 1999 Revision*

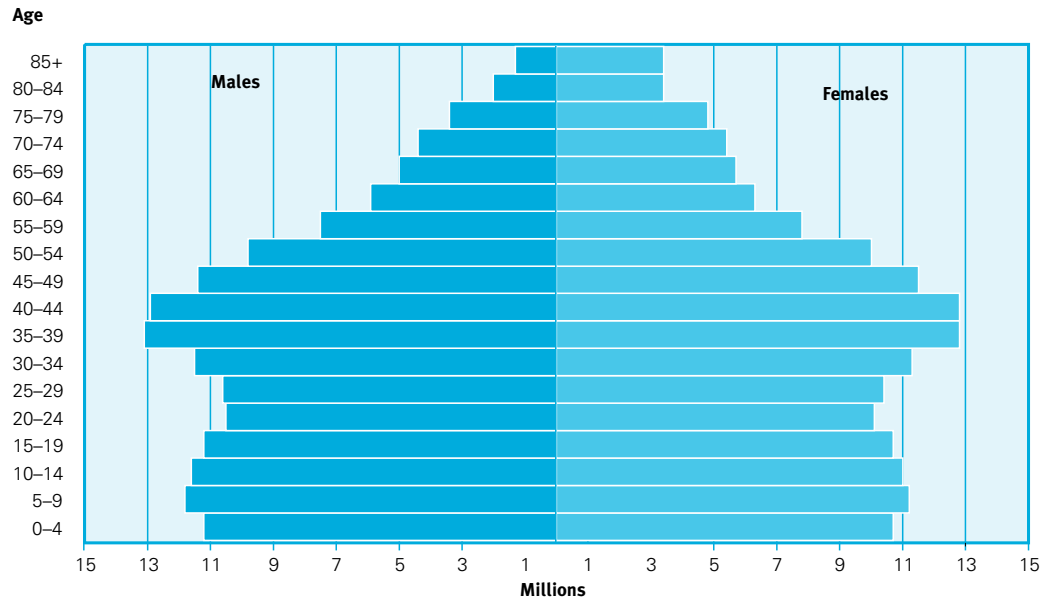
Fig. 8: Latin America/Caribbean Urban Population, 2000 by Size of Town or City

Source: United Nations Population Division, *World Population Prospects: The 1999 Revision*



North America

Fig. 1: North America's Population in 2000: Baby Booms and Baby Busts But No End to Growth

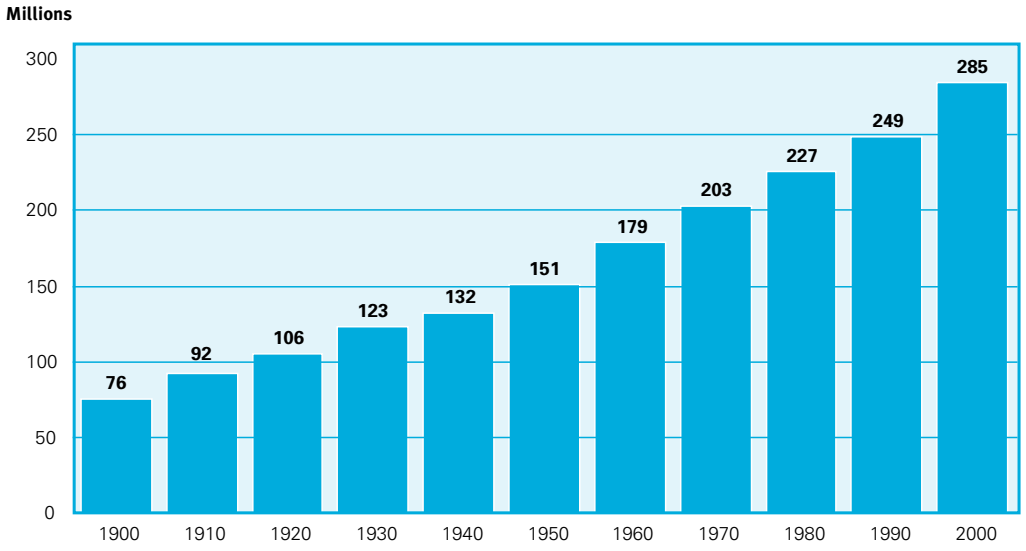


Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

Large swings in the birth rate have left their mark on the pyramid of North America, 90 percent of whose population lives in the US. The postwar "baby boom" of 1946 – 1964 produced a birth cohort of 75 million in the US, and its effects have been felt ever since. A booming economy during the 1950s, early family formation, and more traditional ideas of the roles of men and women are many factors that contributed to a sharp rise in births. A very similar pattern was observed in Canada and is clearly reflected in the "bulge" that peaks throughout ages 35 – 44 in the pyramid. The baby boom itself was quickly followed by the extraordinary baby bust of the 1970s. By the late 1960s, the feminist movement in the U.S. was well underway, with women questioning their traditional roles in society. This was followed by the oil crisis of the 1970s. That, and runaway inflation, necessitated that many households have two earners and the labor force was changed forever. The spread of modern contraception also meant that couples could plan their fertility and avoid "surprises."

To call the U.S. a developed country with developing country growth potential is no exaggeration. By 1950, the U.S. population had reached 150 million, about twice its size in 1900. Surprisingly, it nearly doubled again by the end of the past century. U.S. Census Bureau projections show the population rising to nearly 600 million at the end of this century, with the curve continuing to rise after that. In the graph (Fig. 3), the "medium" scenario assumes that fertility will remain stable at today's value of about two children per woman and that net immigration will also continue at today's level, about 800,000 per year. The effect of immigration is clearly evident in the graph below, which also includes a zero immigration assumption, assuming that immigration suddenly ceased altogether at the beginning of the period.

Fig. 2: Population of the U.S., 1900–2000



Source: U.S. Census Bureau

Fig. 3: The United States in the 21st Century: An Industrialized Country with Developing Country Growth

Source: U.S. Census Bureau (www. census.gov)

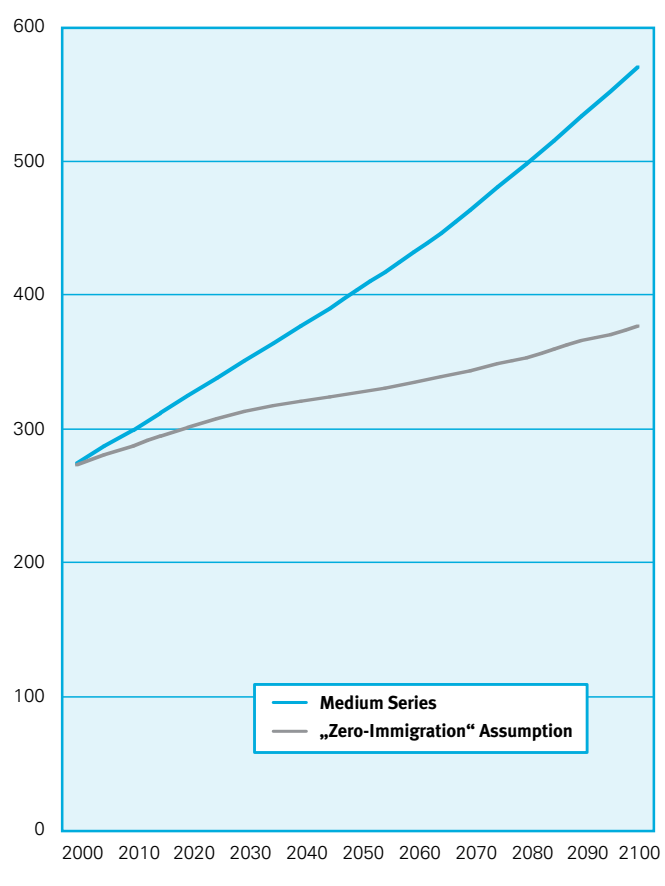
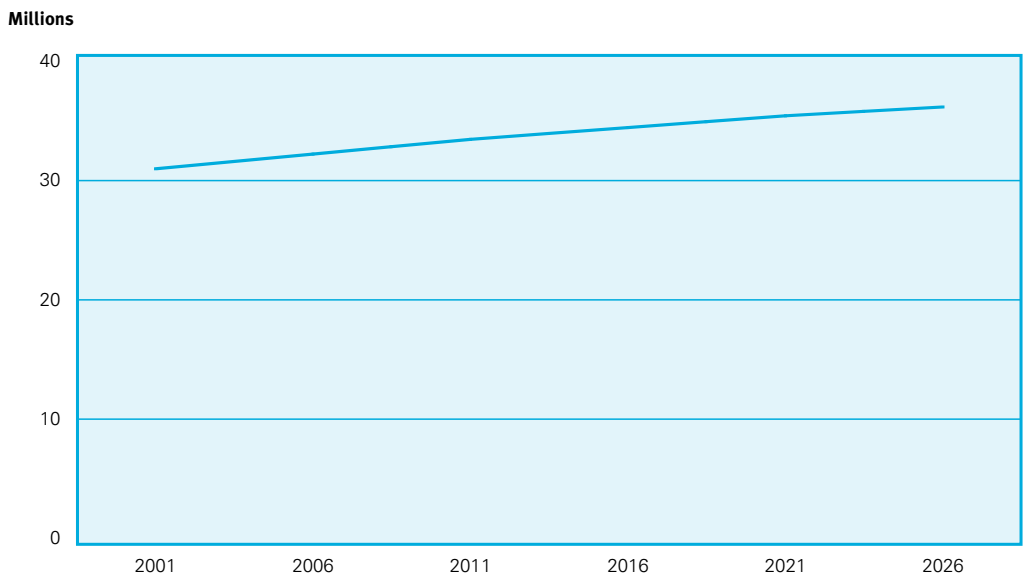


Fig. 4: Canada in the 21st Century: The Low Birth Rate Leads to Only Modest Growth



Source: Statistics Canada

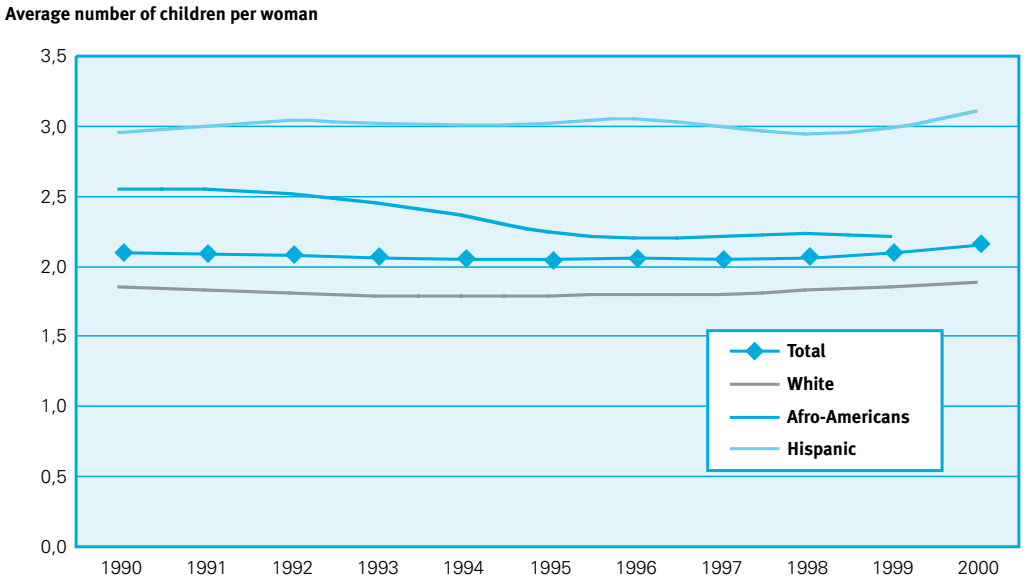
In Canada, the prospect for future growth is somewhat different. The U.S. and Canadian birth rates followed an almost identical path throughout most of the 20th Century, both recording birth rate declines during the Depression years of the 1930s, a sharp rise during the postwar baby boom, and another decline during the 1970s. But, the U.S. birth rate rose again in the late 1980s, returning to replacement level of just over two children per woman by 1990, where it has remained. Canada's TFR has now fallen to levels similar to some of the lowest in Europe, 1.4, although it continues to be a country open to immigration. Thus, there is likely to be a sharp difference in population growth between the two neighbors.

Fertility rates in the U.S. are another example of the divergence in trends observed in other countries and regions. The white population, typically referred to as the majority, has a TFR of 1.9, below replacement, but on a par with some of the highest TFRs in Europe, such as that of France. The TFR for other ethnic groups, particularly Hispanics, is much higher, often reflecting fertility of the home country. Hispanic Americans have averaged about three children per woman for many decades, suggesting that the wide difference between whites and Hispanics will continue for some time. During the 1990s, the TFR for Black, or African American, women decreased for the first time in many decades, partly due to a drop in teenage births.

The population of the U.S. has been undergoing a transformation since its very founding, as immigrants arrived first from Northern and Western Europe, than from Southern and Eastern Europe, and finally, after changes to immigration law in 1965, from Africa, Asia, and Latin America. The origins of the different groups varies from long term Hispanics in the Southwest to recent refugees from Africa and Asia. The result is that this "melting pot" society will virtually have no majority – defined as the white, non-Hispanic population in the pie charts – by 2050 (Fig. 7). Indeed many argue that, by 2050, the very concept of "majority" will cease to

exist. The 2000 Census count was about 7 million higher than expected and may change some assumptions about future immigration trends when the U.S. Census Bureau prepares new population projections.

Fig. 5: Total Fertility in the U.S., 1990–2000: Significant Differences by Ethnic Groups



Source: National Center for Health Statistics

Note: Rates for Whites and Blacks exclude Hispanics of those races

Fig. 6: U.S.Population, by Ethnic Group, 2000

Source: U.S. Census Bureau

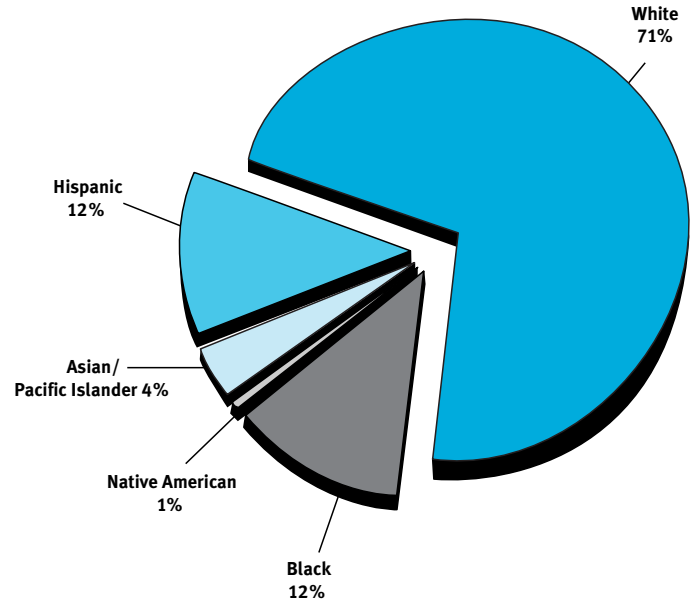
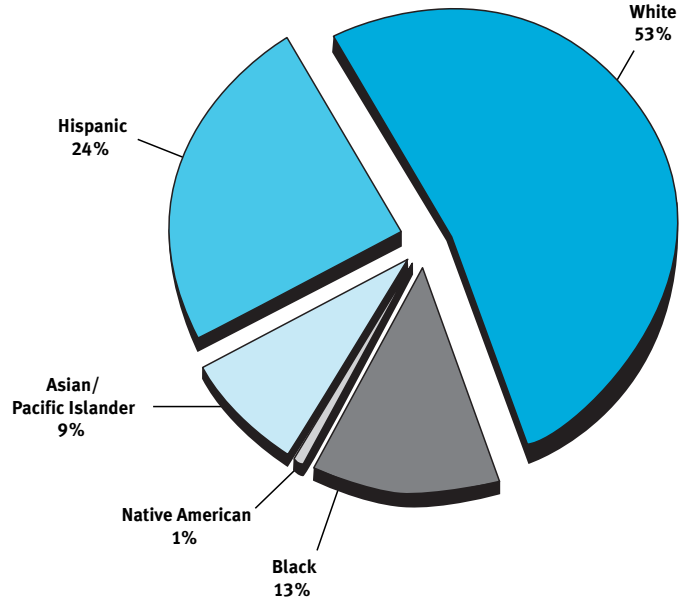


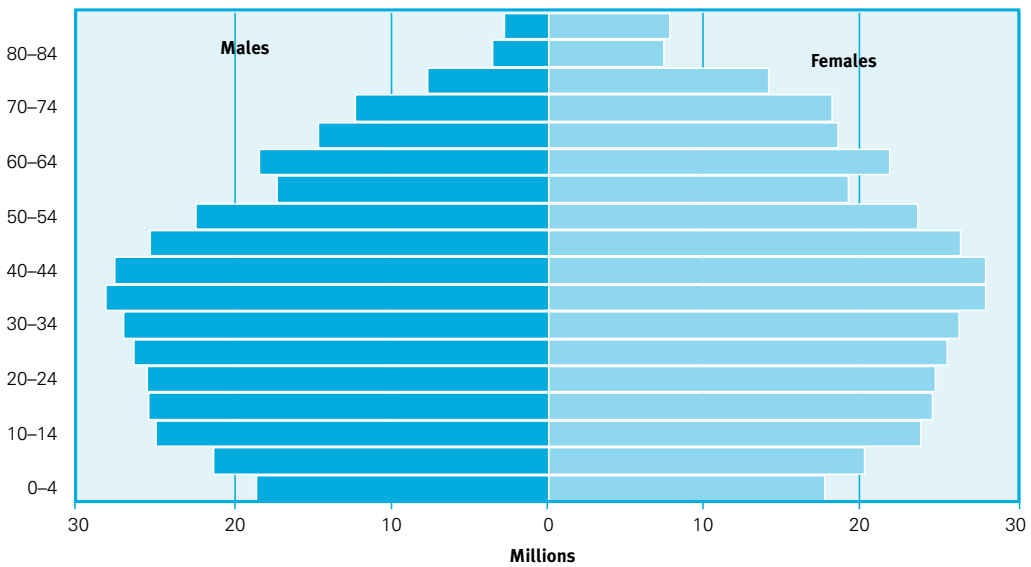
Fig. 7: U.S.Population, by Ethnic Group, 2050

Source: U.S. Census Bureau



Europe

Fig. 1: Europe's Population in 2000: Age Group 0–4 Only Two-Thirds of 35–39



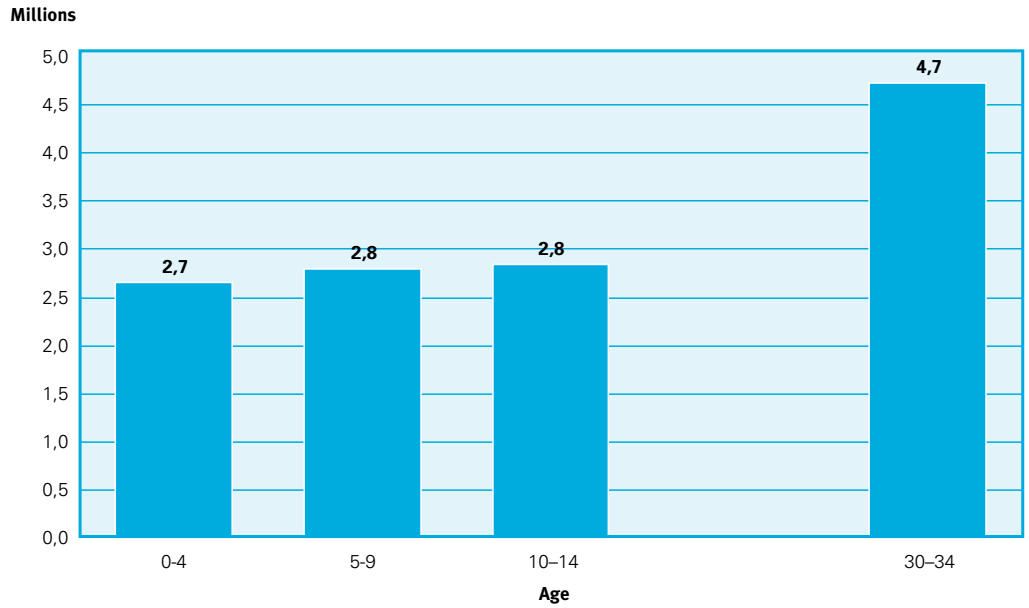
Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

Few population pyramids have as many stories to tell as that of Europe. The overall shape of the pyramid is virtually unprecedented in history. While there have been "baby busts" in the past, the unusually protracted period of extremely low birth rates in Europe since the 1970s has permanently altered the shape of Europe's age-sex distribution. Even more significantly, it has also altered the future of Europe's population in ways that were never anticipated.

Looking at the pyramid from the base, we can see the effects of particularly low fertility in Europe during the 1990s as the number of young people below age ten has been sharply curtailed. In fact, each age group from 30 – 34 is progressively smaller than the one below it. Several other interesting aspects can be observed, such as the drop in births during the Second World War (see ages 55 – 59) and the rather large dearth of males, ages 75 and higher due to excess mortality during the war. It is notable that many European health systems will soon have to cope with a new demand: rapidly rising numbers of elderly men in addition to the number of elderly women who have always been present due to the higher life expectancy of females generally. This is especially true in the European countries of the former USSR, where very low life expectancy and high mortality in World War II resulted in unusually small numbers of men in the older age groups.

Europe's age distribution poses particular problems for health and social security systems. The decline in the number of younger people in the population goes hand in hand with the rise of numbers of the aged to create serious problems for funding such systems, a matter of lively debate across the continent.

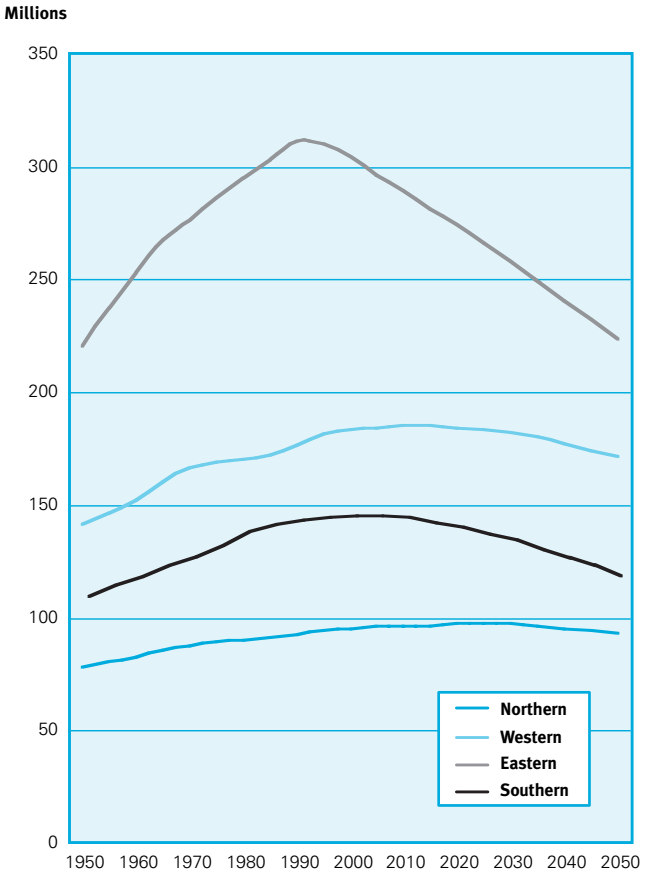
Fig. 2: Italy in 2000: Tomorrow's Parents Nearly Half in Number



Source: Council of Europe, *Recent Demographic Developments in Europe, 2000*

Fig. 3: Europe 1950–2050: A Half Century of Growth and a Half Century of Decline?

Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*



Italy serves as an excellent country-level example of the manner by which population decline can be "pre-programmed" (Fig. 2). Italy's birth rate, at an historic low of just 1.2 children per woman, now means that the youngest age groups – the parents of tomorrow – are only about half the size of those in the prime childbearing age group of 30-34. Italy's future population is not simply a matter of an increase in the birth rate. Even if the birth rate rises to a level that few now expect, say, two children per woman, Italy's population will decline from 57 million today to 46 million in 2050 and still be in decline at that point. Astoundingly, if Italy's TFR were to remain at today's level, Italy's population would drop to 40 million, with 45 percent of the population above the age of 60.

Fig. 4: Europe's Share of Global Population 1950

Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

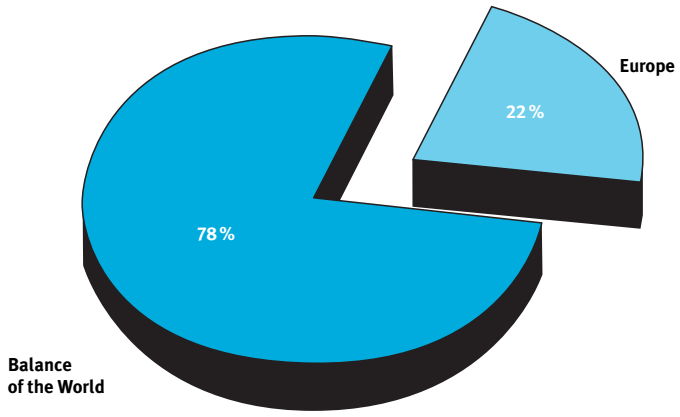
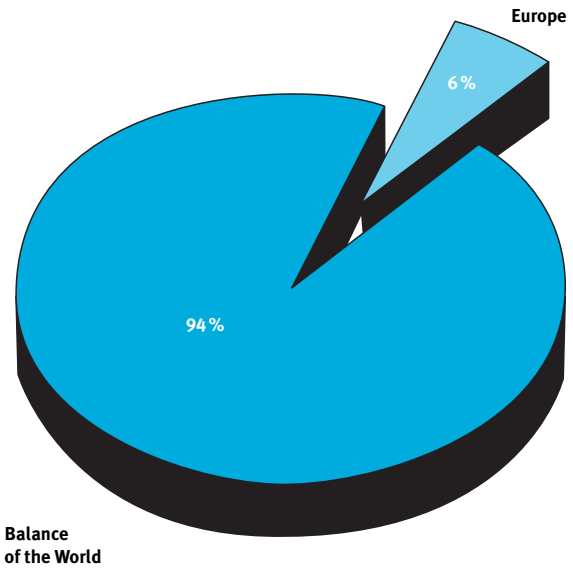


Fig. 4a: Europe's Share of Global Population 2050

Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*



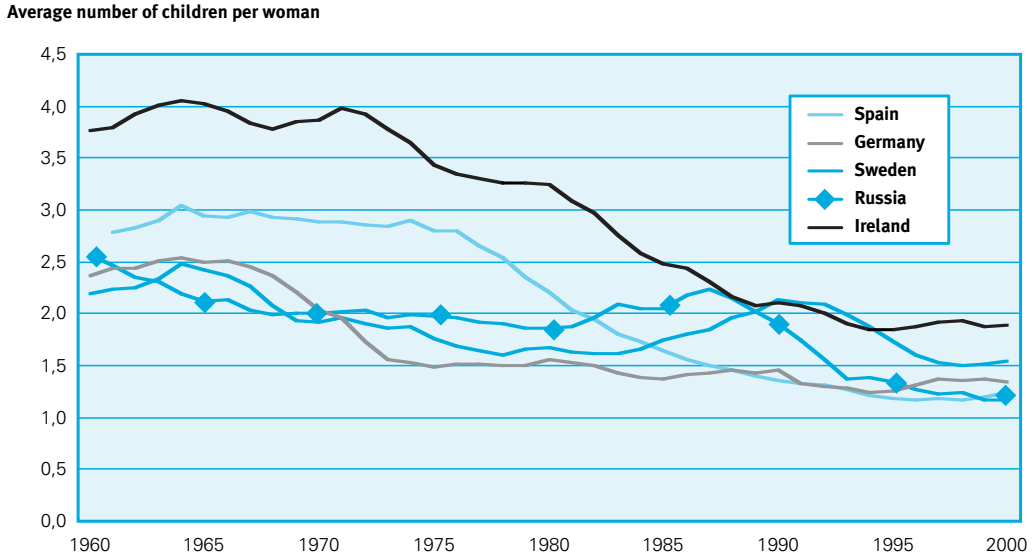
According to the United Nations medium projection, Europe's population will decline from 727 million in 2000 to 603 million by 2050.

The net result of Europe's low birth rate is that most scenarios project population decline in all four regions. The decline of Eastern Europe is especially dramatic. This region, half of whose population is in Russia, experienced rapidly plunging birth rates, most notably following the breakup of the former USSR and the economic disruption that political upheaval caused. Additionally, collapsing health systems have resulted in rising death rates in many countries of the former USSR and Eastern Europe.

It is important to note the graph below illustrates the UN's medium projection, which uses the assumption that birth rates will rise gradually throughout Europe, reaching an average TFR of 1.8 by 2050, up from 1.4 at present.

What will Europe's share of the global population be? From more than one in five world residents in 1950, Europe's population will likely comprise a mere 6 percent by 2050 (it is about 12 percent today). This UN projection assumes that annual net migration to Europe will average about 400,000 per year, although national policies on immigration are difficult to anticipate. Additionally, the assumption is made that the very low fertility prevalent throughout the continent will not continue, as noted above.

Fig. 5: Total Fertility Rate, Selected Countries of Europe 1960–2000

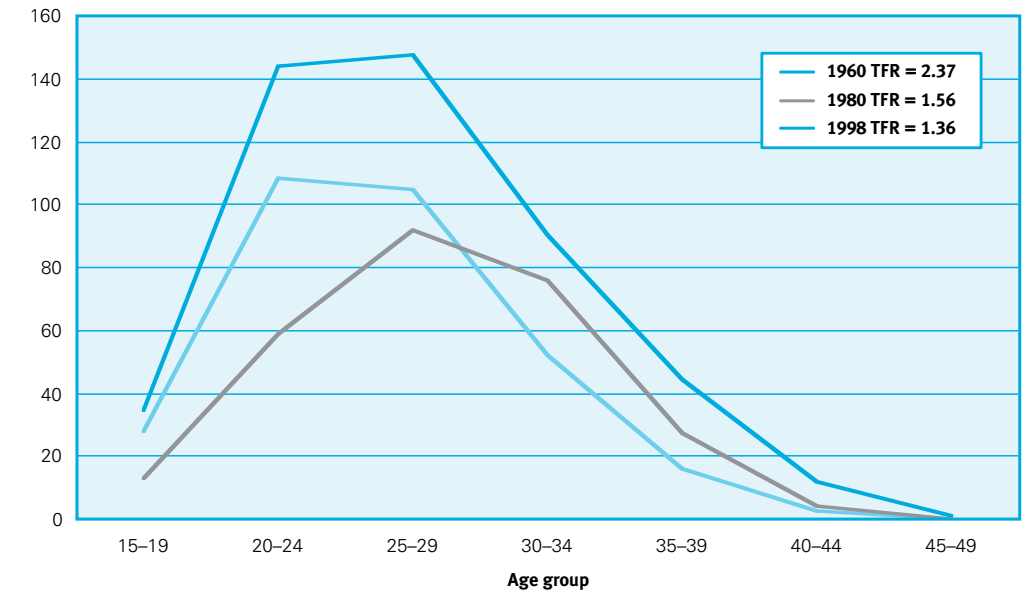


Source: Council of Europe, *Recent Demographic Developments in Europe*, *2000* national statistical offices and EUROSTAT

Given the key role of fertility in Europe's future, a closer look at recent trends is warranted. In the graph above, several countries that are representative of their region are shown. Very low fertility began in Western and Northern Europe, with countries such as Germany and Sweden receiving considerable press attention in the 1970s and 1980s. Southern European countries were late to join the trend to lower birth rates, but then did so quite swiftly. As a result, some of the world's lowest birth rates are now found in that region. In Russia, fertility had always been higher than in the West and plunged to its current low level quite late, in the 1990s. Ireland had been something of an exception on the European scene, with a very high birth rate

by any standard well into the 1970s and 1980s. But, by the 1990s, even Ireland had fallen below replacement. The most unusual case is that of Sweden, whose TFR rose sharply at the end of the 1980s and even rose briefly above replacement in 1991. This remarkable development was widely hailed in Europe, but the trend was temporary and somewhat artificial. In the late 1980s, changes to regulations providing for a woman's income during maternity leave made it very advantageous for Swedish couples to have a second child within 24 months of the first. Thus, those couples who had planned a second child all along did so much sooner than they might have otherwise. After 1990, the "timing effect" of those births had run its course, the economy turned sour, and the TFR fell once again. Ironically, Sweden's current birth rate of 1.5 is now the lowest in its history.

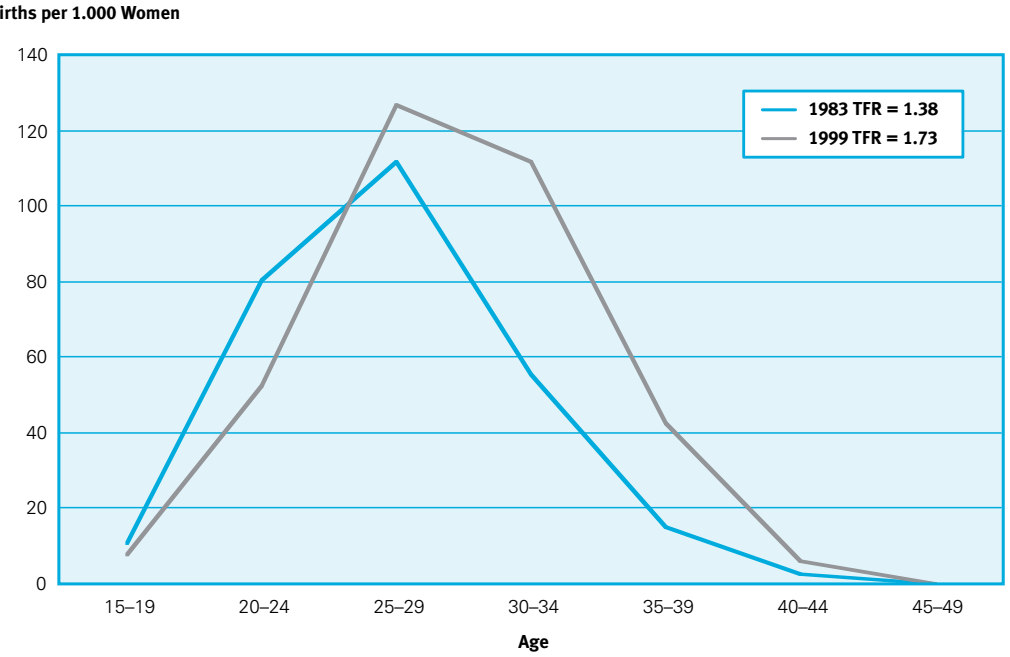
Fig. 6: Birth Rates by Age of Mother, Germany



Source: Council of Europe, *Recent Demographic Developments in Europe, 2000*

Along with the overall decline in fertility in Europe, there have been significant shifts in the age pattern of fertility. In the graph, birth rates by age of mother are shown for three different time periods in Germany. The pattern shown for 1960 might be considered "normal" in the sense that childbearing was traditionally concentrated in the early and late 20s and that the higher curve results in a TFR of 2.4, more than sufficient to maintain modest population growth. By 1998, childbearing in the early 20s had fallen drastically as women delayed childbearing. Different factors are cited in this sharp change in family formation, depending on the country: the cost of living, many more women opting for full-time careers, longer periods of education, insufficient family support allowances as well as support especially aiming at women, and changes in life outlook.

Fig. 7: Age Specific Birth Rates in Denmark, at the Low Point of Fertility and After the Effects of "Delayed Childbearing"



Source: Council of Europe, *Recent Demographic Developments in Europe, 2000*

The age pattern of fertility in Denmark serves as an excellent example of the shift in the age of childbearing and also as an example of how fertility might rise. Low birth rates in Europe are often attributed to "delayed" childbearing., i.e., fertility falls as women delay the onset of childbearing and then rises as they begin to have babies. In Denmark, the shift of the curve to the upper ages is very evident and it did, in fact, accompany an increase in the TFR. But Denmark has proven to be an exception in Europe and its TFR in 1999 of 1.73 was actually down from a peak of 1.81 in 1994.

What can be said regarding future fertility in Europe? For one, fertility decline generally seems to have run its course by the end of the 20th Century. Indeed, by 2000, there is some indication that a very modest recovery may be underway in some countries. Past trends and recent changes vary considerably by country, and especially among regions. Still, in the table below, an attempt has been made to classify the trend. As always, it must be kept in mind that birth rates can be rather volatile and any "recoveries" noted thus far could be quite temporary and brought to a swift end by any economic downturns. In addition, the TFR in several countries had risen to a higher level between the past low point and 2000, the most notable example of which is Sweden, as mention above.

In the table, the current 2000 TFR is compared to the low point for each country. In fact, it may be said that only three countries currently stand out as having truly notable increases in the TFR, Denmark, France, and the Netherlands. France's recovery has been very recent, with the TFR "jumping" by 0.1 in just one year, from 1999 to 2000. So, even here, recent trends are rather inconclusive. It does appear, however, that fertility has reached a "cellar" value in many of the wealthier countries of Europe but that there is scant evidence of a general rise.

Fig. 8: Looking at Western Europe's Most Recent Fertility Trends: Is a Recovery Underway?

		Low Point of TFR		High Point of TFR (if any)		TFR (2000)	Change from Low Point
		TFR	Year	TFR	Year		
Countries Evidencing Some TFR Recovery:	Denmark	1,38	1983	1,81	1994	1,76	0,38
	Netherlands	1,47	1983	na	na	1,72	0,25
	France	1,65	1993	na	na	1,89	0,24
	Norway	1,66	1984	1,93	1990	1,85	0,19
	Finland	1,59	1987	1,85	1994	1,73	0,14
	Belgium	1,51	1985	1,66	1991	1,65	0,14
	Portugal	1,40	1995	na	na	1,54	0,14
Countries with Little or No TFR Recovery:	Germany	1,24	1994	na	na	1,34	0,10
	Italy	1,15	1998	na	na	1,25	0,10
	Spain	1,17	1996	na	na	1,25	0,08
	Ireland	1,84	1995	na	na	1,89	0,05
	Austria	1,32	1999	na	na	1,32	0,00
	Great Britain	1,68	1999	na	na	1,64	–0,04
	Sweden	1,60	1978	2,11	1991	1,54	–0,06
	Switzerland	1,60	1978	na	na	1,50	–0,10

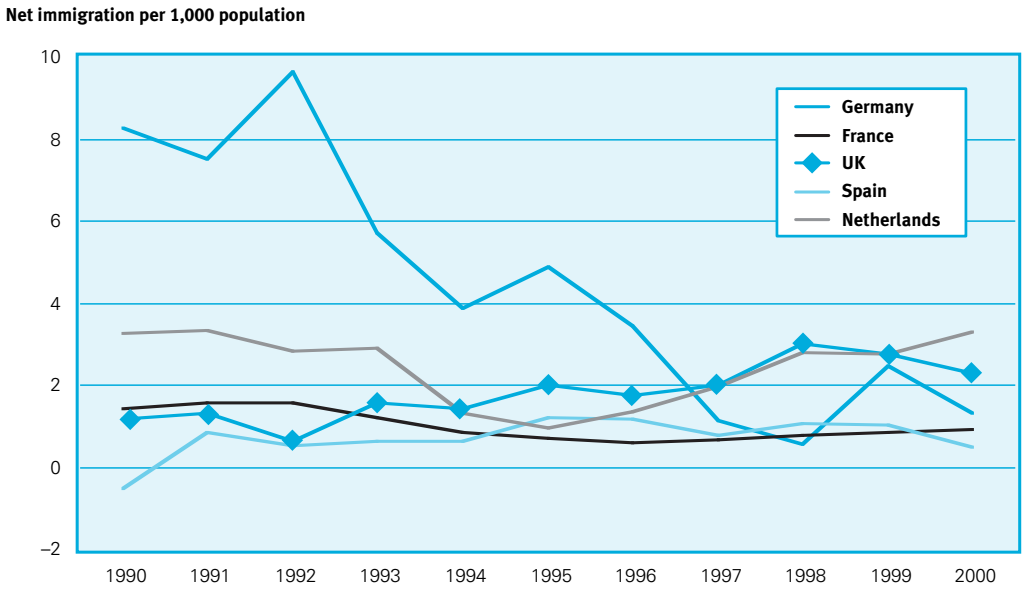
Sources: Council of Europe, *Recent Demographic Trends in Europe, 2000,* national statistical offices, EUROSTAT
Note: In the cases of Sweden, Switzerland, and the United Kingdom, the TFR in 2000 is the lowest in history or very close to it

For some European countries where low fertility has now caused deaths to exceed births, only immigration has forestalled population decline. Throughout the 1990s, there was a general downward trend in immigration, although the picture is very mixed. The German experience was radically different from other countries following the breakup of the USSR and Yugoslavia as well as the reunification of East and West Germany. Large numbers of refugees and asylees, in addition to "Aussiedler" (people of German heritage who had lived in other areas, especially Eastern Europe) sought permanent residence.

As the 21st century begins, there is considerable evidence that attitudes may be changing toward immigrants for several reasons. For one, it is recognized that labor force shortages are likely to result or that a shrinking labor force will mean fewer social taxes collected to support rapidly growing numbers of retirees. Labor shortages can also be acute in certain needed occupational fields, which can be quickly filled by immigrants. Still, although trends can be quite variable, there has been a very general downward trend in most countries during the 1990s and few European countries can match the rate of immigration in the U.S., at about 3.5 per 1,000 population.

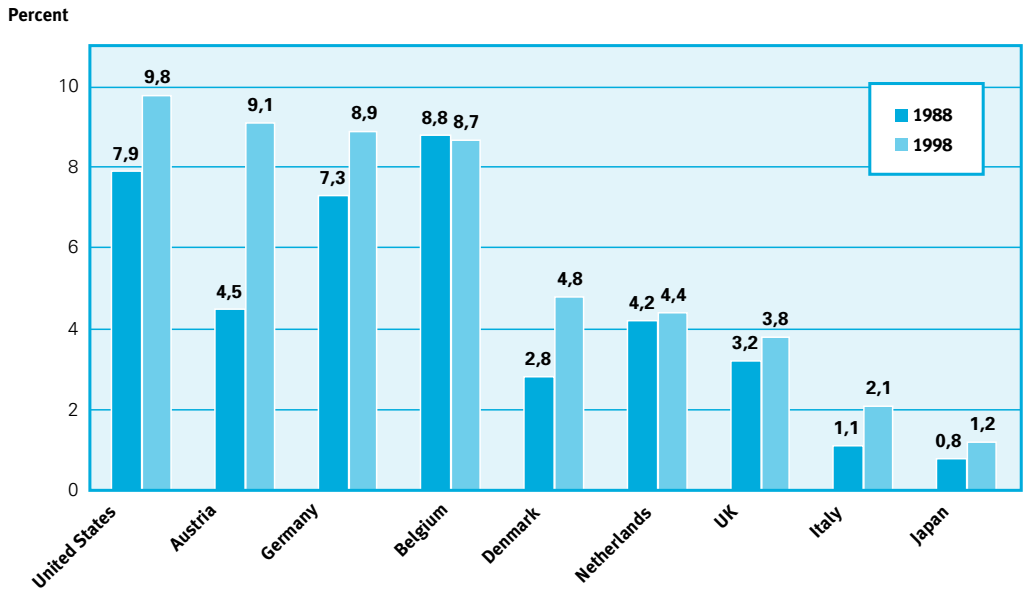
Foreign population is often defined differently from country to country, such as "foreign born" or "persons of foreign citizenship." Figure 10 shows changes in foreign population as collected by the OECD. Generally, the number of countries with significant numbers of foreign population is not large, but nearly every country shows an increase since the 1980s. Significantly, several countries now have percentages of foreign population that are quite close to that of the United States (defined as "foreign born"), a country well known as a "country of immigrants."

Fig. 9: Immigration to Europe, 1990–2000



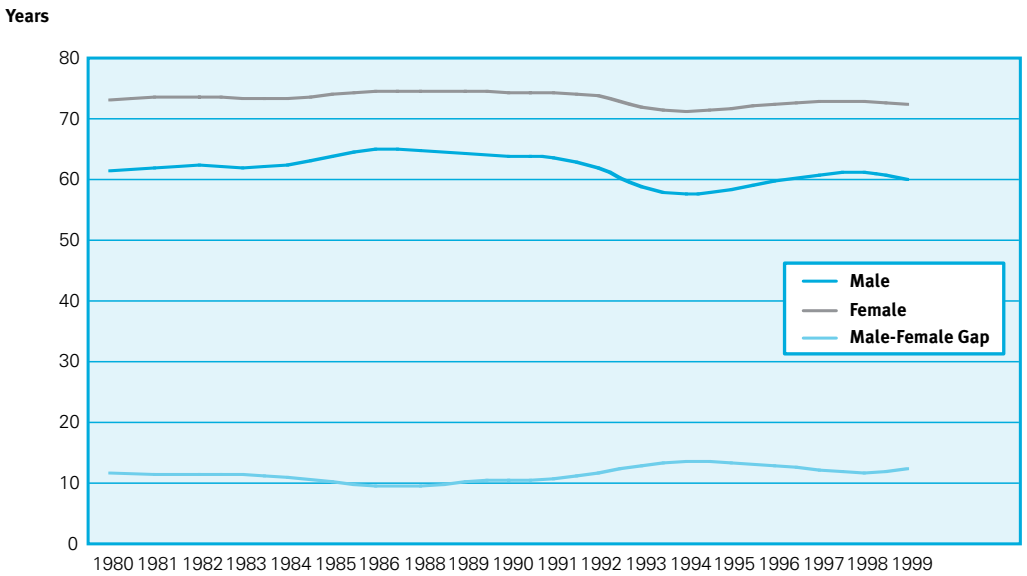
Source: Council of Europe, *Recent Demographic Developments in Europe, 2000,* EUROSTAT

Fig. 10: Foreign Population, 1988 and 1998



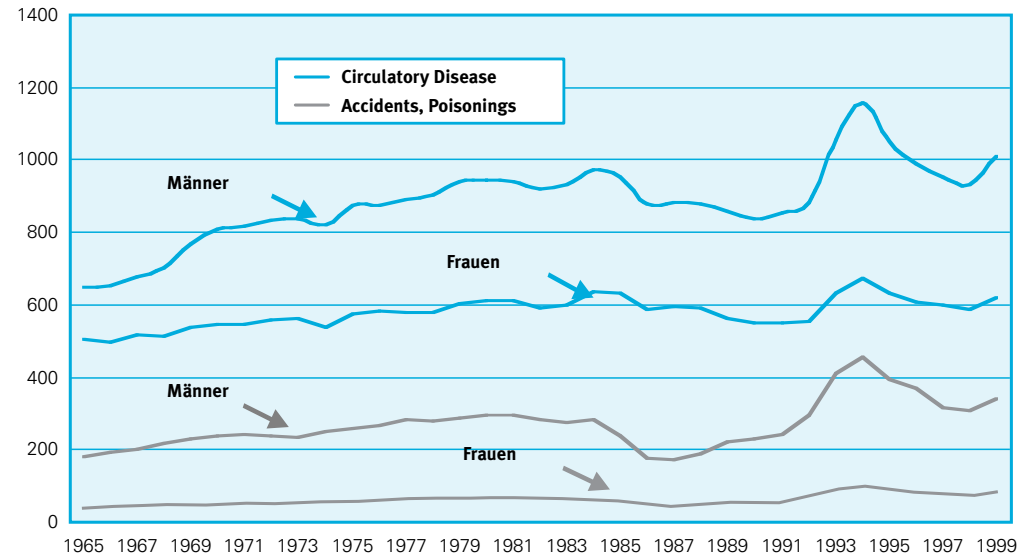
Source: OECD

Fig. 11: Life Expectancy at Birth, Russia 1980–1999



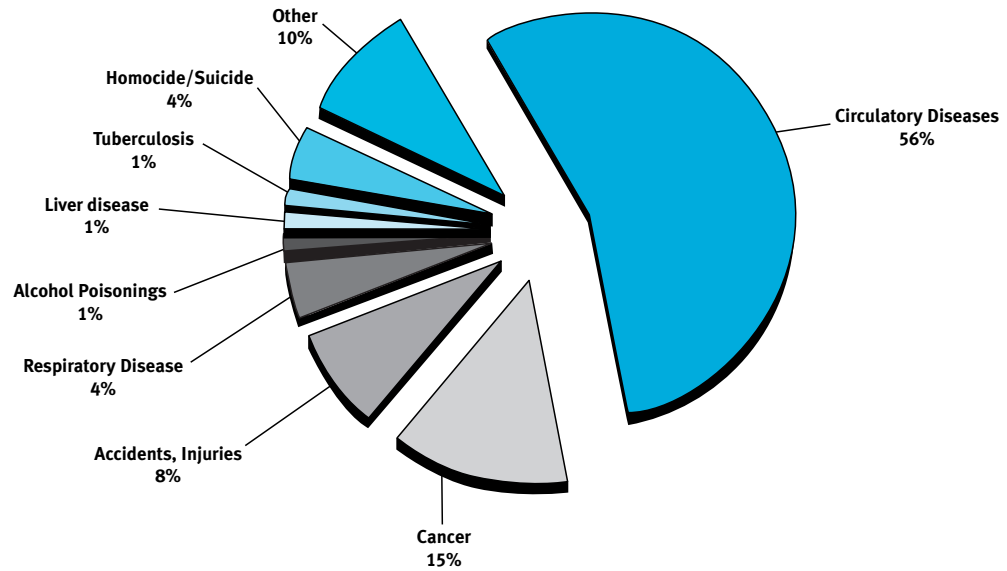
Source: GOSKOMSTAT, *The Demographic Yearbook of Russia 2000*

Fig. 12: Major Causes of Death, Russia 1965–1999



Source: GOSKOMSTAT, *The Demographic Yearbook of Russia 2000*

Fig. 13: Causes of Death, Russia 1965–1999



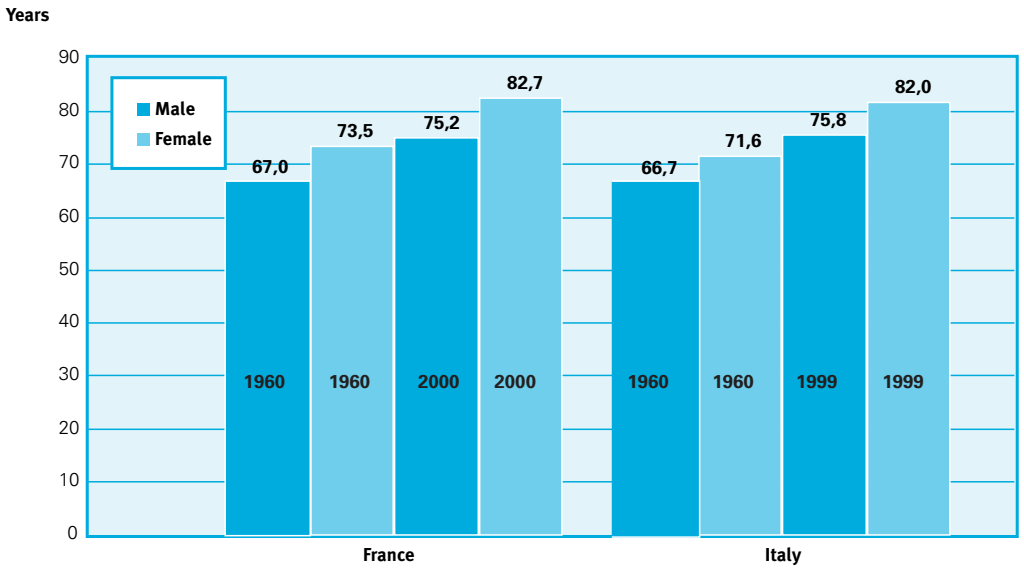
Source: GOSKOMSTAT, *The Demographic Yearbook of Russia 2000*

While falling fertility has been a major demographic story throughout Europe, rising mortality has been an unfortunate one in the East. In Russia, life expectancy at birth had risen to respectably high levels by 1980, about 62 for men and 73 for women, although well below that of western Europe. Throughout the 1980s, life expectancy remained relatively stable. In the wake of the breakup of the USSR, however, the phenomenon of declining life expectancy in a country considered industrialized began. By the early 1990s, life expectancy for men dropped to about 58 years, about the same level as the United States in 1910. Some recovery was recorded in the mid-1990s, but yet another decrease was recorded in the late 1990s.

Although such causes of death as alcoholism and suicide receive the most media attention, the biggest killer in Russia is circulatory disease. The rise in deaths from circulatory disease following the collapse of the Soviet Union is an unheard-of consequence and something rarely seen in modern times. Many reasons are given, including the lack of medicines for the treatment of hypertension, stress caused by the loss of jobs, and the end of what had seemed to be a secure and pre-determined future. For males, deaths from accidents may often be alcohol-related, particularly when we note that accidents fell during the 1980s anti-alcohol campaigns of the Gorbachev era.

The rise in anticipated length of life throughout the industrialized world has been one of the major demographic developments of the past 100 years. In Europe, a life expectancy at birth of over 80 years for females is not uncommon and there is considerable debate over just how high the expected length of life can go. A particularly sharp increase is expected in the population of the "oldest old," – age 80 and over – which in 2000 numbered about 69 million, one percent of the world total. By 2050, this group will number 379 million and rise to four percent of global population.

Fig. 14: Life Expectancy at Birth, France and Italy



Source: Council of Europe, *Recent Demographic Developments in Europe, 2000*

Few topics attract more attention and debate in Europe than the aging of the population and the implications it will have for pension security. The future will certainly see the proportion above actual retirement age rise to unprecedented proportions. In the charts (Fig. 15a), the UN medium projection anticipates a full 36 percent of the population above 60 in Western Europe. This projection also assumes a rise in fertility from a TFR of 1.5 today to 1.8 by 2050. But, even if fertility were to rise to the replacement level by 2050, the proportion over 60 will still rise to 33 percent. Thus, an aging society seems inevitable in Europe.

Fig. 15: Western Europe's Population by Age, 2000

Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*

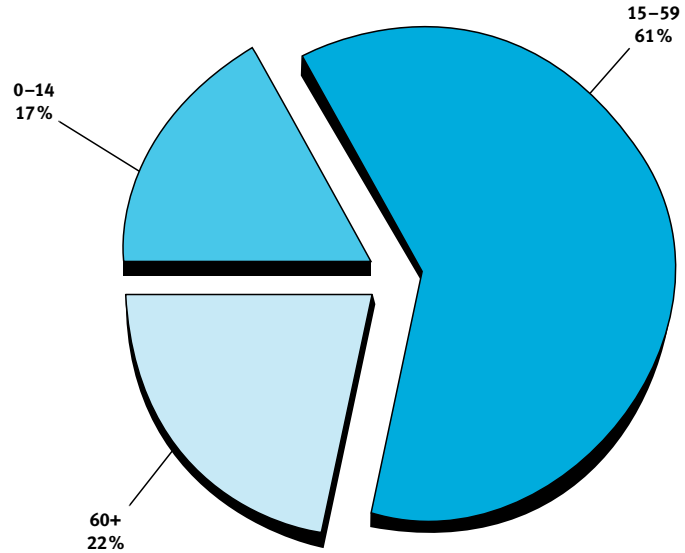
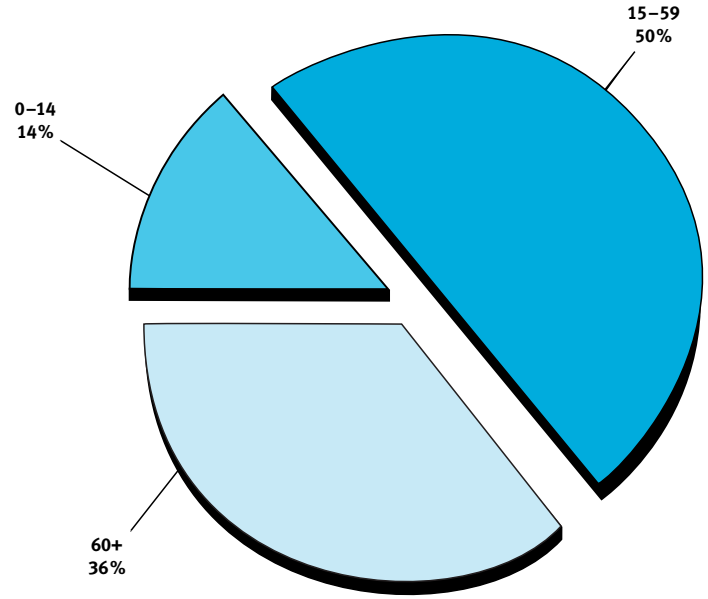


Fig. 15a: Western Europe's Population by Age, 2050

Source: United Nations Population Division, *World Population Prospects: The 2000 Revision*



Conclusion

The first edition of the *World Population Dynamics Report* gives a picture of a world undergoing constant demographic change, change that highlights the rapidly diverging paths in population trends not only among the world's regions, but within those regions and even within countries. The 20th Century launched the world into a series of demographic changes that are likely never to be repeated. By far its most significant feature was the elimination of a large menu of diseases that today are virtually unknown, such as smallpox, epidemic influenza, and yaws. Consider, for a moment, our experience with mortality in the past:

Abraham's mother died when she was thirty-five and he was nine. Prior to her death, she had three children: Abraham's brother died in infancy and his sister died in her early twenties. His first love, Anne, died at age nineteen. Of the four sons born to Abraham and his wife Mary, only one survived to maturity. Clearly, a life with so many bereavements was very different from most of our lives today.

But this was not the Biblical Abraham, but Abraham Lincoln, the US president of the mid-19th Century. Today, infant mortality is virtually non-existent in the industrialized countries and has fallen to historically low levels in many developing countries. Life expectancy at birth has reached 80 years in some countries and continues to rise, absent high prevalence of AIDS. The decline in death rates in the developing countries after 1950 resulted in population growth rates that had never before been seen, the primary reason why the 21st Century saw the world begin with 1.6 billion people and end it with 6.1.

Following the mortality revolution, a major change took place in fertility. Social changes produced birth rates in industrialized countries whose levels are now so low that they were never anticipated and are certain to result in populations that decline in size even as they see proportions of elderly rise. That, in turn, caused all of global population growth to shift to the developing countries. But, at the same time, concern over rapid population growth also caused birth rates to decline in the majority of developing countries, even those which lacked significant economic development.

What of the future? It is clear that the 21st Century will see some conclusion to the population story begun in the 20th and result in a world that would barely be recognizable in 1900. The key issue has been, and remains, the future course of fertility in developing countries. It is that that will determine if we leave the 21st Century with a global population of 7 billion or 15 billion, or some other number. As fertility declines in some developing countries, but not in others, divergent trends will emerge and provide us with clues to what the future will hold.

Looking to the world of the next few decades, what can we foresee?

- The continuance of low birth rates in Europe and North America with true "recovery" highly dependent on support for families and women as well as on the economic and political outlook that couples perceive.
- Sustained growth of population in the developing countries with growth concentrating more and more in those countries with weak population policies and/or little resources to implement them.
- Immigration. Until such time as the economies of developing countries no longer "push" emigrants to seek a better life elsewhere, migration will continue to rise. Rising pressure through migration from outside as well as declining population sizes within will sustain the debates that will rage in parliaments and the media of industrialized countries about just what their policies towards admitting foreigners should be.
- AIDS. Will countries, especially in Africa, react in time to curb this insidious killer? No disease has emerged in modern times with its potential to change population growth or decline prospects as has this.

Our intention, with this Report, is to keep the reader informed on the direction demographic trends are actually taking each year. While demographic change is but one of the factors that will shape our 21st Century world, it affects many of our policy decisions and is itself affected by world events. We hope that you have found this Report useful and informative and look forward to your comments as to the direction it should take in future editions.

Glossary

Crude Birth Rate (CBR)
The annual number of births per 1,000 population. Currently, it varies from a very low 8 per 1,000 in several countries of the former Soviet Union (such as Latvia and Ukraine) to 50 in several African countries (such as Angola and Mali). In virtually every country, a high crude birth rate indicates a high level of the total fertility rate (see) and a low crude birth rate indicates a low level of the total fertility rate. Only where the age-sex structure of a population is unusual, such as that caused by high immigration of male workers in Persian Gulf states, will the crude birth not a be a good indicator of fertility.

Crude Death Rate (CDR)
The annual number of deaths per 1,000 population. The crude death rate is heavily influenced by the proportion of elderly in a population and is not, by itself, a good indicator of the overall level of health and mortality in any particular country. For example, life expectancy at birth (see) in Sweden is a high 80 years, but its crude birth rate is 11 per 1,000. In Nicaragua, life expectancy is considerably less, 68 years, but the crude death rate is only 6, due to a much higher proportion of young people in the population.

Rate of Natural Increase
The difference between the crude birth and death rate, conventionally expressed as a percentage. Thus, for Pakistan, with a crude birth rate of 39 and a crude death rate of 11:

39 – 11 = 28. When divided by 10 = 2.8 percent

The rate of natural increase can, of course, also be negative. For Russia,

8 – 15 = – 7. When divided by 10 = – 0.7 percent

Population Growth Rate
The rate of natural increase adjusted for the effects of net immigration or emigration, if any.

Life Expectancy at Birth
The average number of years a newborn baby can be expected to live given the mortality rates prevalent in the year of its birth. During the course of one's lifetime, the number of years one can be expected to live often rises as progress is made against disease. Life expectancy at birth is greatly affected by the level of the infant mortality rate and by deaths from AIDS, which remove people from the population at early ages.

Age-Sex Structure of a Population
The composition of the population by age groups, typically five year age groups such as 0 – 4, 5 – 9 up to some terminal age group such as 85+, and by sex. Very young populations have as much as 45 – 50 percent of their population in the age groups below 15, while "old" populations today have 15 – 17 percent of their populations age 65 and over. Age-sex structure is often illustrated by a horizontal bar graph referred to as a "population pyramid."

Total Fertility Rate (TFR)
A summary measure that gives the average number of children a woman would bear during her lifetime, assuming that the birth rate of a given year remains constant. For example, if women in France were to have children at the same rate that all women in France did during 2000, the average French woman would have 1.9 children during her lifetime.

Replacement Level Fertility
The number of children per woman that will ultimately result in a population that neither increases nor decreases in size. Typically, this is about two children per woman, or per couple. When a couple has two children, they simply "replace" themselves, not increasing or decreasing the size of each successive generation. Expressed in terms of the total fertility rate, replacement level fertility is 2.06 in countries with high life expectancy. The additional ".06" is due to the fact that, worldwide, there are about five percent more male babies born than female (the "sex ratio at birth") and to the fact that not all women live to the end of their childbearing years (conventionally assumed to be 15 – 49). In countries with low life expectancy, replacement level fertility can be as high as 3.0 children because relatively large numbers of women do not survive until the end of their childbearing years.

Enrollment Rates
The percentage of children and youth enrolled in a given level of education, such as primary and secondary. Gross enrollment rates (used in this report) are calculated by dividing all students enrolled in a given level by the population appropriate for that level, typically 6 – 11 for the primary school. Since enrollment often includes children who repeat grades, gross enrollment rates can exceed 100 percent. Net enrollment rates only include enrolled students of the appropriate age for the level, but are less available due to the more detailed data needed to calculate them.

Infant Mortality Rate (IMR)
The annual number of deaths to infants under age one per 1,000 births in the year. The infant mortality rate is often considered a good indicator of health conditions in any country.

Life Expectancy at Birth

	Both (in years) 1995–2000	Male (in years) 1995–2000	Female (in years) 1995–2000
World	**65.0**	**62.9**	**67.1**
More developed regions	74.9	71.1	78.6
Less developed regions	62.9	61.4	64.5
Less developed regions excluding China	60.9	59.5	62.2
AFRICA	51.4	50.3	52.4
Sub-Saharan Africa	48.6	47.6	49.6
Eastern Africa	45.7	44.8	46.5
Burundi	40.6	39.6	41.5
Comoros	58.8	57.4	60.2
Djibouti	45.5	43.9	46.9
Eritrea	51.5	50.1	53.0
Ethiopia	44.5	43.6	45.4
Kenya	52.2	51.2	53.2
Madagascar	51.6	50.5	52.8
Malawi	40.7	40.7	40.7
Mauritius	70.7	66.9	74.8
Mozambique	40.6	39.4	41.8
Réunion	73.8	69.4	78.3
Rwanda	39.4	38.7	40.2
Somalia	46.9	45.4	48.5
Uganda	41.9	41.4	42.5
United Republic of Tanzania	51.1	50.0	52.3
Zambia	40.5	40.9	40.1
Zimbabwe	42.9	43.2	42.7
Middle Africa	48.9	47.5	50.2
Angola	44.6	43.3	46.0
Cameroon	50.0	49.1	50.8
Central African Republic	44.3	42.7	46.0
Chad	45.2	43.9	46.4
Congo	50.9	48.8	53.1
Democratic Republic of the Congo	50.5	49.2	51.9
Equatorial Guinea	50.0	48.4	51.6
Gabon	52.4	51.2	53.7
Northern Africa	64.6	63.0	66.1
Algeria	68.9	67.5	70.3
Egypt	66.3	64.7	67.9
Libyan Arab Jamahiriya	70.0	68.3	72.2
Morocco	66.6	64.8	68.5
Sudan	55.0	53.6	56.4
Tunisia	69.5	68.4	70.7
Western Sahara	61.4	59.8	63.1
Southern Africa	55.4	52.9	57.9
Botswana	44.4	43.8	44.7
Lesotho	51.2	50.7	51.6
Namibia	45.1	44.9	45.3
South Africa	56.7	53.9	59.5
Swaziland	50.8	49.3	52.2
Western Africa	50.0	49.3	50.7
Benin	53.5	51.8	55.3
Burkina Faso	45.3	44.2	46.2
Cape Verde	68.9	65.5	71.3
Côte d'Ivoire	47.7	47.4	48.1
Gambia	45.4	44.0	46.8
Ghana	56.3	55.0	57.6
Guinea	46.5	46.0	47.0
Guinea-Bissau	44.1	42.7	45.5
Liberia	48.1	47.1	49.0
Mali	50.9	49.8	51.8
Mauritania	50.5	48.9	52.1
Niger	44.2	43.9	44.5
Nigeria	51.3	51.0	51.5
Senegal	52.3	50.5	54.2
Sierra Leone	37.3	36.0	38.6
Togo	51.3	50.1	52.6
ASIA	65.8	64.3	67.4
Eastern Asia	70.9	68.7	73.4
China	69.8	67.9	72.0
China, Hong Kong SAR	79.1	76.5	82.0
China, Macao SAR	78.5	76.1	80.8
Democratic People's Republic of Korea	63.1	60.5	66.0
Japan	80.5	77.0	83.8
Mongolia	61.9	59.9	63.9
Republic of Korea	74.3	70.6	78.1
South-central Asia	61.5	61.0	62.0
Afghanistan	42.5	42.3	42.8
Bangladesh	58.1	58.1	58.2
Bhutan	60.7	59.5	62.0
India	62.3	61.9	62.6
Iran (Islamic Republic of)	68.0	67.3	68.8
Kazakhstan	64.1	58.6	70.0
Kyrgyzstan	66.9	62.8	71.1
Maldives	65.4	66.3	64.5
Nepal	57.3	57.6	57.1

	Both (in years) 1995–2000	Male (in years) 1995–2000	Female (in years) 1995–2000
Pakistan	59.0	59.2	58.9
Sri Lanka	71.6	69.0	74.7
Tajikistan	67.2	64.2	70.2
Turkmenistan	65.4	61.9	68.9
Uzbekistan	68.3	65.3	71.3
South-eastern Asia	65.3	63.2	67.5
Brunei Darussalam	75.5	73.4	78.1
Cambodia	56.5	54.3	58.5
East Timor	47.5	46.7	48.4
Indonesia	65.1	63.3	67.0
Lao People's Democratic Republic	52.5	51.3	53.8
Malaysia	71.9	69.6	74.5
Myanmar	55.8	53.6	58.3
Philippines	68.6	66.5	70.7
Singapore	77.1	74.9	79.3
Thailand	69.6	66.7	72.6
Viet Nam	67.2	64.9	69.6
Western Asia	67.9	65.8	70.0
Armenia	72.4	69.3	75.4
Azerbaijan	71.0	67.2	74.5
Bahrain	72.9	71.1	75.3
Cyprus	77.8	75.5	80.0
Georgia	72.7	68.5	76.8
Iraq	58.7	57.2	60.3
Israel	78.3	76.3	80.2
Jordan	69.7	68.5	71.0
Kuwait	75.9	74.1	78.2
Lebanon	72.6	71.1	74.1
Occupied Palestinian Territory	71.4	69.8	73.0
Oman	70.5	69.2	72.0
Qatar	68.9	68.1	70.6
Saudi Arabia	70.9	69.9	72.2
Syrian Arab Republic	70.5	69.4	71.6
Turkey	69.0	66.5	71.7
United Arab Emirates	74.6	73.3	77.6
Yemen	59.4	58.2	60.4
EUROPE	73.2	69.1	77.4
Eastern Europe	68.2	63.0	73.6
Belarus	68.5	62.8	74.4
Bulgaria	70.8	67.1	74.8
Czech Republic	74.3	70.9	77.7
Hungary	70.7	66.3	75.1
Poland	72.8	68.6	77.0
Republic of Moldova	66.6	62.8	70.3
Romania	69.8	66.5	73.3
Russian Federation	66.1	60.2	72.5
Slovakia	72.8	68.8	76.8
Ukraine	68.1	62.7	73.5
Northern Europe	76.7	73.9	79.6
Channel Islands	77.6	75.2	79.9
Denmark	75.9	73.4	78.3
Estonia	70.0	64.3	75.6
Finland	77.2	73.4	80.7
Iceland	78.9	76.6	81.3
Ireland	76.1	73.5	78.8
Latvia	69.6	63.7	75.4
Lithuania	71.4	66.1	76.7
Norway	78.1	75.2	81.1
Sweden	79.3	76.8	81.8
United Kingdom	77.2	74.7	79.7
Southern Europe	77.0	73.7	80.2
Albania	72.8	69.9	75.9
Bosnia and Herzegovina	73.3	70.5	75.9
Croatia	73.3	69.3	77.3
Greece	78.0	75.4	80.7
Italy	78.2	75.0	81.4
Malta	77.6	74.9	80.2
Portugal	75.2	71.6	78.8
Slovenia	75.0	71.1	78.6
Spain	78.1	74.6	81.8
TFYR Macedonia	72.7	70.6	74.8
Yugoslavia	72.2	69.9	74.6
Western Europe	77.7	74.3	80.9
Austria	77.7	74.4	80.7
Belgium	77.9	74.7	81.1
France	78.1	74.2	82.0
Germany	77.3	74.0	80.3
Luxembourg	77.0	73.6	80.1
Netherlands	77.9	75.1	80.5
Switzerland	78.6	75.4	81.8
LATIN AMERICA AND CARIBBEAN	69.3	66.1	72.6
Caribbean	67.5	65.0	70.2
Bahamas	69.1	64.8	73.5
Barbados	76.4	73.7	78.7
Cuba	75.7	74.2	78.0
Dominican Republic	67.3	65.3	69.9
Guadeloupe	77.3	73.6	80.9
Haiti	52.0	49.1	55.0
Jamaica	74.8	72.9	76.8

	Both (in years) 1995–2000	Male (in years) 1995–2000	Female (in years) 1995–2000
Martinique	78.8	75.5	82.0
Netherlands Antilles	75.5	72.5	78.4
Puerto Rico	74.9	70.4	79.6
Saint Lucia	73.0	70.3	75.6
Trinidad and Tobago	73.8	71.5	76.2
Central America	71.0	68.2	73.9
Belize	73.6	72.4	75.0
Costa Rica	76.0	74.3	78.9
El Salvador	69.1	66.5	72.5
Guatemala	64.0	61.4	67.2
Honduras	65.6	63.2	68.7
Mexico	72.2	69.5	75.5
Nicaragua	67.7	65.7	70.4
Panama	73.6	71.8	76.4
South America	68.9	65.5	72.5
Argentina	72.9	69.7	76.8
Bolivia	61.4	59.8	63.2
Brazil	67.2	63.5	71.4
Chile	74.9	72.3	78.3
Colombia	70.4	67.3	74.3
Ecuador	69.5	67.3	72.5
French Guiana	75.0	71.4	79.3
Guyana	63.7	59.8	67.8
Paraguay	69.6	67.5	72.0
Peru	68.0	65.9	70.9
Suriname	70.1	67.5	72.7
Uruguay	73.9	70.5	78.0
Venezuela	72.4	70.0	75.7
Northern America	76.7	73.8	79.6
Canada	78.5	75.7	81.3
United States of America	76.5	73.6	79.4
OCEANIA	73.5	71.0	76.1
Australia/New Zealand	78.4	75.6	81.2
Australia	78.7	75.9	81.5
New Zealand	77.2	74.5	79.9
Melanesia	58.7	57.6	60.0
Fiji	68.4	66.6	70.3
New Caledonia	74.0	71.5	76.7
Papua New Guinea	55.6	54.8	56.7
Solomon Islands	67.4	66.4	68.7
Vanuatu	67.2	66.0	69.0
Micronesia	71.8	69.7	74.2
Guam	73.5	71.4	76.0
Polynesia	70.3	67.7	73.3
French Polynesia	71.7	69.4	74.4
Samoa	68.5	65.4	72.0

Population Size

Total Mid-Year Population (in Million)	1950	2000	2050
World	2,519,495	6,056,715	9,322,251
More developed regions	813,574	1,191,429	1,181,108
Less developed regions	1,705,921	4,865,286	8,141,143
Less developed regions excluding China	1,148,997	3,582,849	6,668,910
AFRICA	220,888	793,627	2,000,383
Sub-Saharan Africa	176,776	650,573	1,760,359
Eastern Africa	65,278	250,318	691,116
Burundi	2,456	6,356	20,218
Comoros	173	706	1,900
Djibouti	62	632	1,068
Eritrea	1,140	3,659	10,028
Ethiopia	18,434	62,908	186,452
Kenya	6,265	30,669	55,368
Madagascar	4,230	15,970	47,030
Malawi	2,881	11,308	31,114
Mauritius	493	1,161	1,426
Mozambique	6,198	18,292	38,837
Réunion	248	721	1,002
Rwanda	2,120	7,609	18,523
Seychelles	34	80	145
Somalia	2,264	8,778	40,936
Uganda	5,210	23,300	101,524
United Republic of Tanzania	7,886	35,119	82,740
Zambia	2,440	10,421	29,262
Zimbabwe	2,744	12,627	23,546
Middle Africa	26,316	95,404	340,645
Angola	4,131	13,134	53,328
Cameroon	4,466	14,876	32,284
Central African Republic	1,314	3,717	8,195
Chad	2,658	7,885	27,732
Congo	808	3,018	10,744
Democratic Republic of the Congo	12,184	50,948	203,527
Equatorial Guinea	226	457	1,378
Gabon	469	1,230	3,164
Sao Tome and Principe	60	138	294
Northern Africa	53,302	174,150	303,555
Algeria	8,753	30,291	51,180
Egypt	21,834	67,884	113,840
Libyan Arab Jamahiriya	1,029	5,290	9,969
Morocco	8,953	29,878	50,361
Sudan	9,190	31,095	63,530
Tunisia	3,530	9,459	14,076
Western Sahara	14	252	599
Southern Africa	15,581	49,567	56,942

Total Mid-Year Population (in Million)	1950	2000	2050
Botswana	389	1,541	2,109
Lesotho	734	2,035	2,478
Namibia	511	1,757	3,662
South Africa	13,683	43,309	47,301
Swaziland	264	925	1,391
Western Africa	60,411	224,189	608,125
Benin	2,046	6,272	18,070
Burkina Faso	3,960	11,535	46,304
Cape Verde	146	427	807
Côte d'Ivoire	2,775	16,013	32,185
Gambia	294	1,303	2,605
Ghana	4,900	19,306	40,056
Guinea	2,550	8,154	20,711
Guinea Bissau	505	1,199	3,276
Liberia	824	2,913	14,370
Mali	3,520	11,351	41,724
Mauritania	825	2,665	8,452
Niger	2,500	10,832	51,872
Nigeria	29,790	113,862	278,788
Saint Helena	5	6	10
Senegal	2,500	9,421	22,711
Sierra Leone	1,944	4,405	14,351
Togo	1,329	4,527	11,832
ASIA	1,399,170	3,672,342	5,428,170
Eastern Asia	672,483	1,481,075	1,665,197
China	554,760	1,275,133	1,462,058
China, Hong Kong SAR	1,974	6,860	9,648
China, Macao SAR	190	444	527
Democratic People's Republic of Korea	10,815	22,268	28,038
Japan	83,625	127,096	109,220
Mongolia	761	2,533	4,146
Republic of Korea	20,357	46,740	51,560
South-central Asia	498,367	1,480,868	2,538,781
Afghanistan	8,151	21,765	72,267
Bangladesh	41,783	137,439	265,432
Bhutan	734	2,085	5,569
India	357,561	1,008,937	1,572,055
Iran (Islamic Republic of)	16,913	70,330	121,424
Kazakhstan	6,703	16,172	15,302
Kyrgyzstan	1,740	4,921	7,538
Maldives	82	291	868
Nepal	8,502	23,043	52,415
Pakistan	39,659	141,256	344,170
Sri Lanka	7,483	18,924	23,066
Tajikistan	1,532	6,087	9,763
Turkmenistan	1,211	4,737	8,401
Uzbekistan	6,314	24,881	40,513
South-eastern Asia	178,073	522,121	800,302
Brunei Darussalam	48	328	565
Cambodia	4,346	13,104	29,883
East Timor	433	737	1,410
Indonesia	79,538	212,092	311,335
Lao People's Democratic Republic	1,755	5,279	11,438
Malaysia	6,110	22,218	37,850
Myanmar	17,832	47,749	68,546
Philippines	19,996	75,653	128,383
Singapore	1,022	4,018	4,620
Thailand	19,626	62,806	82,491
Viet Nam	27,367	78,137	123,782
Western Asia	50,247	188,277	423,888
Armenia	1,354	3,787	3,150
Azerbaijan	2,896	8,041	8,897
Bahrain	116	640	1,008
Cyprus	494	784	910
Georgia	3,527	5,262	3,219
Iraq	5,158	22,946	53,574
Israel	1,258	6,040	10,065
Jordan	472	4,913	11,709
Kuwait	152	1,914	4,001
Lebanon	1,443	3,496	5,018
Occupied Palestinian Territory	1,005	3,191	11,821
Oman	456	2,538	8,751
Qatar	25	565	831
Saudi Arabia	3,201	20,346	59,683
Syrian Arab Republic	3,495	16,189	36,345
Turkey	20,809	66,668	98,818
United Arab Emirates	70	2,606	3,709
Yemen	4,316	18,349	102,379
EUROPE	548,207	727,304	603,328
Eastern Europe	220,199	304,172	222,740
Belarus	7,745	10,187	8,305
Bulgaria	7,251	7,949	4,531
Czech Republic	8,925	10,272	8,429
Hungary	9,338	9,968	7,486
Poland	24,824	38,605	33,370
Republic of Moldova	2,341	4,295	3,577
Romania	16,311	22,438	18,150
Russian Federation	102,702	145,491	104,258
Slovakia	3,463	5,399	4,674
Ukraine	37,298	49,568	29,959
Northern Europe	78,094	95,076	92,801
Channel Islands	102	144	120

Total Mid-Year Population (in Million)	1950	2000	2050
Denmark	4,271	5,320	5,080
Estonia	1,101	1,393	752
Faeroe Islands	32	46	55
Finland	4,009	5,172	4,693
Iceland	143	279	333
Ireland	2,969	3,803	5,366
Isle of Man	56	75	81
Latvia	1,949	2,421	1,744
Lithuania	2,567	3,696	2,989
Norway	3,265	4,469	4,880
Sweden	7,014	8,842	7,777
United Kingdom	50,616	59,415	58,933
Southern Europe	108,997	144,935	116,871
Albania	1,215	3,134	3,905
Andorra	4	86	193
Bosnia and Herzegovina	2,661	3,977	3,458
Croatia	3,850	4,654	4,179
Gibraltar	21	27	21
Greece	7,566	10,610	8,983
Holy See	1	1	1
Italy	47,104	57,530	42,962
Malta	312	390	400
Portugal	8,405	10,016	9,006
San Marino	15	27	30
Slovenia	1,473	1,988	1,527
Spain	28,009	39,910	31,282
TFYR Macedonia	1,230	2,034	1,894
Yugoslavia	7,131	10,552	9,030
Western Europe	140,916	183,121	170,916
Austria	6,935	8,080	6,452
Belgium	8,639	10,249	9,583
France	41,829	59,238	61,832
Germany	68,376	82,017	70,805
Liechtenstein	14	33	39
Luxembourg	296	437	715
Monaco	20	33	38
Netherlands	10,114	15,864	15,845
Switzerland	4,694	7,170	5,607
LATIN AMERICA AND THE CARIBBEAN	166,995	518,809	805,560
Caribbean	17,039	37,941	49,817
Anguilla	5	11	23
Antigua and Barbuda	46	65	73
Aruba	57	101	242
Bahamas	79	304	449
Barbados	211	267	263
British Virgin Islands	6	24	39
Cayman Islands	6	38	89
Cuba	5,850	11,199	10,764
Dominica	51	71	72
Dominican Republic	2,353	8,373	11,959
Grenada	76	94	105
Guadeloupe	210	428	479
Haiti	3,261	8,142	13,982
Jamaica	1,403	2,576	3,815
Martinique	222	383	413
Montserrat	14	4	11
Netherlands Antilles	112	215	259
Puerto Rico	2,218	3,915	4,835
Saint Kitts and Nevis	44	38	34
Saint Lucia	79	148	189
Saint Vincent and the Grenadines	67	113	138
Trinidad and Tobago	636	1,294	1,378
Turks and Caicos Islands	5	17	39
United States Virgin Islands	27	121	167
Central America	36,961	135,129	220,229
Belize	69	226	392
Costa Rica	862	4,024	7,195
El Salvador	1,951	6,278	10,855
Guatemala	2,969	11,385	26,551
Honduras	1,380	6,417	12,845
Mexico	27,737	98,872	146,651
Nicaragua	1,134	5,071	11,477
Panama	860	2,856	4,262
South America	112,995	345,738	535,515
Argentina	17,150	37,032	54,522
Bolivia	2,714	8,329	16,966
Brazil	53,975	170,406	247,244
Chile	6,082	15,211	22,215
Colombia	12,568	42,105	70,862
Ecuador	3,387	12,646	21,190
Falkland Islands (Malvinas)	2	2	4
French Guiana	25	165	503
Guyana	423	761	504
Paraguay	1,488	5,496	12,565
Peru	7,632	25,662	42,122
Suriname	215	417	418
Uruguay	2,239	3,337	4,249
Venezuela	5,094	24,170	V42,152
Northern America	171,615	314,113	437,619
Bermuda	37	63	79
Canada	13,737	30,757	40,407
Greenland	23	56	62

Total Mid-Year Population (in Million)	1950	2000	2050
Saint Pierre et Miquelon	5	7	9
United States of America	157,813	283,230	397,063
OCEANIA	12,620	30,521	47,191
Australia/New Zealand	10,127	22,916	30,941
Australia	8,219	19,138	26,502
New Zealand	1,908	3,778	4,439
Melanesia	2,105	6,482	14,213
Fiji	289	814	916
New Caledonia	65	215	397
Papua New Guinea	1,613	4,809	10,980
Solomon Islands	90	447	1,458
Vanuatu	48	197	462
Micronesia	153	516	1,080
Guam	60	155	307
Kiribati	32	83	138
Marshall Islands	13	51	85
Micronesia (Federated States of)	32	123	269
Nauru	3	12	26
Northern Mariana Islands	7	73	216
Palau	6	19	39
Polynesia	236	606	958
American Samoa	19	68	172
Cook Islands	15	20	27
French Polynesia	61	233	372
Niue	5	2	2
Pitcairn	0	0	0
Samoa	82	159	223
Tokelau	2	1	1
Tonga	41	99	125
Tuvalu	5	10	16
Wallis and Futuna Islands	7	14	19

Population Growth Rates (Births (CBR)/Deaths (CDR) per 1,000 Population)

	CBR 1995–2000	CDR 1995–2000	Growth Rate (in %) 1995–2000
World	22.5	9.0	1.35
More developed regions	11.2	10.2	1.35
Less developed regions	25.4	8.8	1.62
Less developed regions excluding China	28.8	9.4	1.88
AFRICA	38.7	14.1	2.41
Sub-Saharan Africa	41.7	15.8	2.55
Eastern Africa	43.0	17.5	2.67
Burundi	43.1	21.3	0.89
Comoros	38.9	9.5	2.95
Djibouti	40.7	18.0	2.96
Eritrea	40.9	14.0	2.75
Ethiopia	44.6	19.0	2.55
Kenya	35.4	12.1	2.32
Madagascar	44.0	14.7	2.94
Malawi	47.2	22.2	2.42
Mauritius	17.1	6.7	0.83
Mozambique	44.7	22.4	2.31
Réunion	19.9	5.7	1.67
Rwanda	42.4	21.7	8.48
Somalia	52.3	18.5	3.56
Uganda	50.4	20.3	2.95
United Republic of Tanzania	40.4	13.3	2.58
Zambia	43.8	20.7	2.46
Zimbabwe	37.4	18.0	1.91
Middle Africa	46.0	16.2	2.61
Angola	51.0	20.2	2.94
Cameroon	37.6	14.8	2.28
Central African Republic	39.6	19.1	2.10
Chad	48.4	19.6	3.15
Congo	44.5	14.7	2.96
Democratic Republic of the Congo	47.7	15.0	2.56
Equatorial Guinea	43.2	16.5	2.68
Gabon	37.8	15.8	2.63
Northern Africa	27.6	7.5	1.86
Algeria	25.7	5.7	1.82
Egypt	26.2	6.8	1.82
Libyan Arab Jamahiriya	26.4	4.7	2.13
Morocco	26.8	6.6	1.87
Sudan	36.1	12.2	2.13

	CBR 1995–2000	CDR 1995–2000	Growth Rate (in %) 1995–2000
Tunisia	18.7	6.7	1.12
Western Sahara	34.3	9.5	3.34
Southern Africa	27.8	11.5	1.61
Botswana	33.6	17.0	1.61
Lesotho	35.0	14.6	1.69
Namibia	37.6	17.6	2.06
South Africa	26.7	10.8	1.57
Swaziland	35.6	14.0	2.04
Western Africa	42.3	15.1	2.67
Benin	42.8	13.1	2.66
Burkina Faso	46.7	17.9	2.32
Cape Verde	31.8	6.4	2.30
Côte d'Ivoire	36.0	15.4	2.14
Gambia	40.4	18.5	3.11
Ghana	34.0	10.8	2.20
Guinea	45.7	18.2	2.13
Guinea-Bissau	44.8	20.4	2.14
Liberia	50.1	16.6	7.07
Mali	49.9	18.5	2.68
Mauritania	43.5	15.4	3.16
Niger	55.4	20.7	3.46
Nigeria	41.7	14.1	2.74
Senegal	39.5	13.0	2.54
Sierra Leone	49.5	26.4	1.53
Togo	40.5	13.9	3.27
ASIA	22.3	7.9	1.41
Eastern Asia	15.6	7.0	0.84
China	16.2	7.0	0.90
China, Hong Kong SAR	10.3	5.5	1.99
China, Macao SAR	10.8	4.3	1.30
Democratic People's Republic of Korea	18.6	10.4	0.82
Japan	9.8	7.6	0.26
Mongolia	24.3	8.1	0.97
Republic of Korea	13.7	5.5	0.78
South-central Asia	27.9	9.2	1.81
Afghanistan	47.6	22.0	2.64
Bangladesh	31.4	9.8	2.12
Bhutan	36.2	9.8	2.60
India	26.2	9.0	1.69
Iran (Islamic Republic of)	23.5	5.3	1.69
Kazakhstan	16.9	10.0	–0.54
Kyrgyzstan	23.2	7.6	1.51
Maldives	37.0	6.9	3.02
Nepal	36.3	11.2	2.40
Pakistan	37.9	10.8	2.66
Sri Lanka	17.4	6.1	0.96
Tajikistan	28.8	6.7	1.17
Turkmenistan	28.6	7.2	2.36
Uzbekistan	24.4	6.2	1.76
South-eastern Asia	23.8	7.4	1.58
Brunei Darussalam	22.2	3.0	2.18
Cambodia	38.1	10.8	2.80
East Timor	29.4	14.8	–2.60
Indonesia	22.5	7.5	1.41
Lao People's Democratic Republic	38.2	14.1	2.38
Malaysia	25.2	4.8	2.09
Myanmar	26.5	11.8	1.48
Philippines	28.4	5.5	2.03
Singapore	14.2	4.9	2.90
Thailand	19.6	6.1	1.34
Viet Nam	21.5	7.0	1.40
Western Asia	28.9	6.7	2.28
Armenia	11.2	7.3	0.14
Azerbaijan	16.1	6.2	0.91
Bahrain	19.0	3.5	2.21
Cyprus	13.9	7.4	1.05
Georgia	11.7	9.4	–0.34
Iraq	36.5	9.9	2.70
Israel	21.4	6.3	2.43
Jordan	34.3	4.6	2.90
Kuwait	15.9	2.2	2.48
Lebanon	20.3	5.4	1.97
Occupied Palestinian Territory	41.8	5.0	3.83
Oman	35.3	4.3	3.29
Qatar	20.0	3.9	1.99
Saudi Arabia	34.9	4.4	3.49
Syrian Arab Republic	30.3	4.3	2.59
Turkey	23.5	6.5	1.62
United Arab Emirates	16.0	3.6	2.05
Yemen	51.4	9.9	4.17
EUROPE	10.1	11.5	–0.04
Eastern Europe	9.2	13.4	–0.38
Belarus	9.2	13.4	–0.28
Bulgaria	8.0	14.3	–1.12
Czech Republic	8.8	10.9	–0.11
Hungary	9.8	14.0	–0.49
Poland	10.5	9.9	0.01
Republic of Moldova	12.3	11.8	–0.20

	CBR 1995–2000	CDR 1995–2000	Growth Rate (in %) 1995–2000
Romania	10.3	12.0	–0.22
Russian Federation	8.8	14.3	–0.36
Slovakia	10.8	9.9	0.13
Ukraine	8.9	14.7	–0.78
Northern Europe	11.7	10.8	0.23
Channel Islands	12.0	11.0	0.10
Denmark	12.4	11.6	0.35
Estonia	8.7	13.3	–1.26
Finland	11.3	9.6	0.25
Iceland	15.4	6.9	0.87
Ireland	14.2	8.6	1.05
Latvia	7.7	13.4	–0.77
Lithuania	10.2	11.2	–0.10
Norway	13.1	10.1	0.50
Sweden	10.0	10.6	0.03
United Kingdom	12.0	10.8	0.27
Southern Europe	10.0	9.8	0.18
Albania	21.2	5.5	–0.32
Bosnia and Herzegovina	10.5	7.4	3.02
Croatia	11.7	10.9	0.09
Greece	9.5	9.8	0.30
Italy	9.1	10.4	0.08
Malta	12.6	7.7	0.63
Portugal	11.3	10.6	0.20
Slovenia	9.1	9.9	–0.02
Spain	9.2	9.2	0.09
TFYR Macedonia	14.7	8.2	0.71
Yugoslavia	12.4	10.4	0.01
Western Europe	10.7	10.0	0.23
Austria	10.1	9.9	0.08
Belgium	10.8	9.9	0.22
France	12.4	9.4	0.37
Germany	9.3	10.7	0.09
Luxembourg	12.8	9.4	1.28
Netherlands	11.9	8.8	0.52
Switzerland	10.3	9.4	0.15
LATIN AMERICA AND THE CARIBBEAN	23.1	6.5	1.56
Caribbean	20.8	8.2	1.07
Bahamas	21.1	6.8	1.44
Barbados	12.9	8.3	0.37
Cuba	13.1	7.1	0.42
Dominican Republic	24.6	6.3	1.68
Guadeloupe	17.2	6.0	0.90
Haiti	31.9	13.4	1.59
Jamaica	21.6	5.9	0.83
Martinique	14.8	6.2	0.59
Netherlands Antilles	16.1	6.2	0.99
Puerto Rico	16.1	7.7	1.03
Saint Lucia	24.0	5.7	1.14
Trinidad and Tobago	14.0	5.9	0.50
Central America	26.5	5.4	1.85
Belize	28.5	4.5	2.17
Costa Rica	23.3	3.8	2.48
El Salvador	27.7	6.1	2.04
Guatemala	36.6	7.4	2.64
Honduras	33.5	6.6	2.64
Mexico	24.6	5.1	1.63
Nicaragua	35.3	5.6	2.72
Panama	22.5	5.1	1.64
South America	22.1	6.7	1.51
Argentina	19.9	7.9	1.26
Bolivia	33.2	9.1	2.33
Brazil	20.3	7.1	1.33
Chile	19.9	5.6	1.36
Colombia	24.5	5.8	1.77
Ecuador	25.6	6.0	1.97
French Guyana	30.6	4.4	3.50
Guyana	23.7	8.4	0.47
Paraguay	31.3	5.4	2.59
Peru	24.9	6.4	1.73
Suriname	20.2	6.0	0.39
Uruguay	17.6	9.4	0.73
Venezuela	24.9	4.7	2.02
Northern America	14.2	8.4	1.04
Canada	11.9	7.3	0.93
United States of America	14.5	8.5	1.05
OCEANIA	18.2	7.5	1.37
Australia/New Zealand	13.7	7.2	1.11
Australia	13.4	7.1	1.15
New Zealand	14.9	7.6	0.94
Melanesia	32.9	9.3	2.26
Fiji	25.9	5.6	1.16
New Caledonia	21.4	4.9	2.18
Papua New Guinea	34.0	10.6	2.34
Solomon Islands	39.6	5.3	3.44
Vanuatu	33.7	6.1	2.67
Micronesia	30.9	5.4	2.16
Guam	28.4	4.7	1.42
Polynesia	24.6	5.3	1.11
French Polynesia	21.5	4.9	1.67
Samoa	29.0	6.0	0.02

Fertility and Mortality Rates

	TFR 1995–2000	IMR 1995–2000
World	2.8	59.6
More developed regions	1.6	8.3
Less developed regions	3.1	65.3
Less developed regions excluding China	3.6	70.3
AFRICA	5.3	91.2
Sub-Saharan Africa	5.8	97.0
Eastern Africa	6.1	103.1
Burundi	6.8	120.0
Comoros	5.4	76.3
Djibouti	6.1	116.6
Eritrea	5.7	89.3
Ethiopia	6.8	114.8
Kenya	4.6	64.7
Madagascar	6.1	100.2
Malawi	6.8	139.8
Mauritius	2.0	18.5
Mozambique	6.3	136.7
Réunion	2.3	9.0
Rwanda	6.2	121.9
Somalia	7.3	122.3
Uganda	7.1	106.5
United Republic of Tanzania	5.5	81.3
Zambia	6.1	93.6
Zimbabwe	5.0	65.0
Middle Africa	6.4	98.2
Angola	7.2	126.2
Cameroon	5.1	87.3
Central African Republic	5.3	101.2
Chad	6.7	122.5
Congo	6.3	72.1
Democratic Republic of the Congo	6.7	90.6
Equatorial Guinea	5.9	107.7
Gabon	5.4	87.7
Northern Africa	3.6	57.7
Algeria	3.3	50.0
Egypt	3.4	50.8
Libyan Arab Jamahiriya	3.8	27.8
Morocco	3.4	52.2
Sudan	4.9	85.9
Tunisia	2.3	30.3
Western Sahara	4.4	64.5

	TFR 1995–2000	IMR 1995–2000
Southern Africa	3.3	63.0
Botswana	4.4	73.9
Lesotho	4.8	108.1
Namibia	5.3	78.5
South Africa	3.1	58.2
Swaziland	4.8	86.9
Western Africa	5.9	96.0
Benin	6.1	87.7
Burkina Faso	6.9	99.1
Cape Verde	3.6	55.6
Côte d'Ivoire	5.1	89.0
Gambia	5.2	125.3
Ghana	4.6	68.6
Guinea	6.3	124.2
Guinea-Bissau	6.0	130.8
Liberia	6.8	111.4
Mali	7.0	130.3
Mauritania	6.0	105.6
Niger	8.0	136.1
Nigeria	5.9	88.1
Senegal	5.6	62.4
Sierra Leone	6.5	165.4
Togo	5.8	83.1
ASIA	2.7	59.3
Eastern Asia	1.8	38.5
China	1.8	41.4
China, Hong Kong SAR	1.2	4.2
China, Macao SAR	1.2	8.9
Democratic People's Republic of Korea	2.1	45.1
Japan	1.4	3.5
Mongolia	2.7	65.8
Republic of Korea	1.5	7.9
South-central Asia	3.6	76.1
Afghanistan	6.9	164.7
Bangladesh	3.8	78.8
Bhutan	5.5	62.9
India	3.3	72.5
Iran (Islamic Republic of)	3.2	44.0
Kazakhstan	2.1	44.8
Kyrgyzstan	2.9	43.2
Maldives	5.8	46.4
Nepal	4.8	82.6
Pakistan	5.5	95.3

	TFR 1995–2000	IMR 1995–2000
Sri Lanka	2.1	22.9
Tajikistan	3.7	56.6
Turkmenistan	3.6	54.8
Uzbekistan	2.9	41.0
South-eastern Asia	2.8	47.5
Brunei Darussalam	2.8	9.6
Cambodia	5.3	83.4
East Timor	4.4	135.0
Indonesia	2.6	48.4
Lao People's Democratic Republic	5.3	96.6
Malaysia	3.3	11.6
Myanmar	3.3	92.2
Philippines	3.6	34.4
Singapore	1.6	4.9
Thailand	2.1	25.4
Viet Nam	2.5	40.1
Western Asia	3.9	48.9
Armenia	1.4	16.9
Azerbaijan	1.9	32.5
Bahrain	2.6	16.4
Cyprus	2.0	8.1
Georgia	1.6	19.4
Iraq	5.3	91.7
Israel	2.9	6.3
Jordan	4.7	26.6
Kuwait	2.9	12.3
Lebanon	2.3	20.0
Occupied Palestinian Territory	6.0	24.0
Oman	5.9	26.6
Qatar	3.7	13.6
Saudi Arabia	6.2	25.0
Syrian Arab Republic	4.0	26.9
Turkey	2.7	45.7
United Arab Emirates	3.2	12.0
Yemen	7.6	73.8
EUROPE	1.4	9.8
Eastern Europe	1.3	15.1
Belarus	1.3	12.5
Bulgaria	1.1	15.2
Czech Republic	1.2	5.8
Hungary	1.4	9.6
Poland	1.5	10.0
Republic of Moldova	1.6	20.5
Romania	1.3	22.1
Russian Federation	1.2	16.7

	TFR 1995–2000	IMR 1995–2000
Slovakia	1.4	8.6
Ukraine	1.3	15.3
Northern Europe	1.7	6.0
Channel Islands	1.5	5.8
Denmark	1.7	5.9
Estonia	1.2	11.1
Finland	1.7	4.4
Iceland	2.0	4.7
Ireland	1.9	6.6
Latvia	1.1	15.6
Lithuania	1.4	10.7
Norway	1.8	4.8
Sweden	1.5	3.5
United Kingdom	1.7	5.9
Southern Europe	1.3	8.4
Albania	2.6	28.3
Bosnia and Herzegovina	1.4	15.0
Croatia	1.7	10.1
Greece	1.3	6.6
Italy	1.2	5.6
Malta	1.9	7.7
Portugal	1.5	6.6
Slovenia	1.2	6.1
Spain	1.2	5.7
TFYR Macedonia	1.9	18.2
Yugoslavia	1.8	14.8
Western Europe	1.5	5.2
Austria	1.4	5.4
Belgium	1.5	4.4
France	1.7	5.5
Germany	1.3	5.0
Luxembourg	1.7	6.6
Netherlands	1.5	4.6
Switzerland	1.5	5.1
LATIN AMERICA AND CARIBBEAN	2.7	35.6
Caribbean	2.5	37.9
Bahamas	2.4	18.7
Barbados	1.5	12.4
Cuba	1.6	7.5
Dominican Republic	2.9	40.6
Guadeloupe	2.1	8.3
Haiti	4.4	68.3
Jamaica	2.5	21.9
Martinique	1.8	7.0
Netherlands Antilles	2.1	14.2

	TFR 1995–2000	IMR 1995–2000
Puerto Rico	2.0	11.0
Saint Lucia	2.7	14.3
Trinidad and Tobago	1.7	14.3
Central America	3.0	32.9
Belize	3.4	32.5
Costa Rica	2.8	12.1
El Salvador	3.2	32.0
Guatemala	4.9	46.0
Honduras	4.3	37.1
Mexico	2.8	31.0
Nicaragua	4.3	39.5
Panama	2.6	21.4
South America	2.6	36.7
Argentina	2.6	21.8
Bolivia	4.4	65.6
Brazil	2.3	42.1
Chile	2.4	12.8
Colombia	2.8	30.0
Ecuador	3.1	45.6
French Guiana	4.1	31.9
Guyana	2.5	56.2
Paraguay	4.2	39.2
Peru	3.0	45.0
Suriname	2.2	29.1
Uruguay	2.4	17.5
Venezuela	3.0	20.9
Northern America	2.0	7.4
Canada	1.6	5.5
United States of America	2.0	7.6
OCEANIA	2.4	26.1
Australia/New Zealand	1.8	5.6
Australia	1.8	5.4
New Zealand	2.0	6.6
Melanesia	4.4	57.9
Fiji	3.2	19.6
New Caledonia	2.6	7.2
Papua New Guinea	4.6	69.0
Solomon Islands	5.6	24.0
Vanuatu	4.6	32.5
Micronesia	4.3	21.5
Guam	4.0	11.0
Polynesia	3.2	19.5
French Polynesia	2.6	9.7
Samoa	4.5	29.8