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Global Population Growth

Since ICOF discussed the issue of global population growth in November 1996, the number of people in the world has risen to more than six billion. The impact of disease and economic deprivation has raised concerns for the world's future demographic stability. Click here for the latest developments concerning this controversial issue.

It is difficult to imagine 5.7 billion of anything. A number that large brings to mind the stars, atomic particles or even a sizable chunk of the U.S. national debt, in dollars. For most Americans, the idea that the Earth is shared with that many other human beings is equally unfathomable. With a relatively low population density, in spite of its 265 million people, the U.S. is not a crowded country. The U.S. has been fortunate to escape most of the problems that surging population growth have brought to many other parts of the world.

The Earth's population is increasing, as is food production--for now. But scientists disagree on how long those two elements can keep pace. And what about the Earth's natural resources? How long will there be enough water, fertile soil, breathable air, trees and forests, and vital minerals? How can more environmental damage be prevented as the number of people grows?

Population growth also exacts social costs that affect all nations, regardless of their population. As income gaps between rich and poor nations grow, will peace and order be threatened throughout the world? Can wealthy nations continue to offer refuge to those fleeing famine, drought, environmental devastation and war elsewhere? Can and should rich countries reduce their disproportionately high use of resources and share them with poorer nations? Can resource and wealth imbalances be corrected justly and peacefully?

One other important question looms large in the debate on population: How many is too many? Is there, in fact, a population crisis? If so, is it a crisis of economics, caused by governmental incompetence?

Many environmentalists and biologists believe that the Earth's finite resources are already being strained to the limit. A large number of economists, however, contend that the Earth can support many billions more people, as long as human ingenuity and creativity continue to develop new ways to maximize resources and technology. Are more people simply a crushing burden? Or do they hold the key to solving the problems their numbers have created? Is the world's growing population a liability or an asset?

Population Measures Defined

Scientific examination of population growth began in the early 19th century with an English economist and teacher named Thomas Malthus. In his influential book, *An Essay on the Principle of Population,* published in 1798, Malthus unveiled a theory that the world's food supply would never keep up with surging population growth, and that periods of overpopulation would lead to a decline in living standards as a result of widespread famine and social unrest. [See 1996 Thomas Malthus, the Original Pessimist]

Malthus's theories, as well as those of other early demographers--scientists who study the size, distribution and composition of populations--were based on little hard evidence. The reason is the lack of reliable population data until recent times. As data from national censuses and civil and church registers have become available, they have been combined with more sophisticated statistical methods and computer technology to spur the growth of more precise demography.

As information became more easily available, demographers began to look at several key measures of population. The birth rate and death rate are usually expressed as the number of each per thousand people per year. Two other measures, migration rate and population growth rate, are also widely cited. But probably the most meaningful measures of a population are the total fertility rate (TFR) and life expectancy at birth.

The TFR is the number of children a woman is expected to have during her life. Countries with high fertility have birth rates as high as 50 per 1,000 in population per year. That represents a TFR of five to seven children per woman. Countries with low fertility have birth rates of 15 to 20 per 1,000. The TFR in those countries is about two. A TFR of about 2.1 is called replacement level fertility. That is the number of children each woman must have to maintain a country's population at the same level under low-mortality conditions, excluding the effects of immigration and emigration. The TFR is slightly higher than two (the number of children needed to "replace" the parents) to take into account children who die before reaching adulthood.

Life expectancy at birth is the average length of a person's life if living conditions and risks of death were to continue at the same level. One final measure is the infant mortality rate, the probability that a child will die in its first year of life. That measure is stated as a number per 1,000 births.

It is important to remember that population measures such as those are only as accurate as the information on which they are based. Although reasonably accurate censuses have been taken in the U.S. since 1790, and in other developed countries for as long, population measures for the past and in many developing countries today are best seen as fairly accurate estimates only.

With that caution in mind, it is interesting to compare population measures across time. In the preindustrial world, death rates probably averaged 30 to 40 per 1,000. Life expectancies of 25 to 35 years were the likely norm. In today's developed countries, death rates have fallen below 10 per 1,000, and life expectancies in some countries now approach 80 years.

Today, infant mortality rates range from more than 100 per 1,000 births in less-developed countries (LDCs) to less than 10 in developed countries such as the U.S. and Canada. LDCs, also known as developing countries, are generally defined as nations that have not reached a basic level of industrialization and have not made widespread quality-of-life improvements such as implementing sewage systems and providing easy access to education and health care. Examples of LDCs include nearly all nations in Africa, the Middle East and parts of Asia.

The birth rate in Africa, the fastest-growing continent, was around 45 per 1,000 in 1990. The corresponding rate in Europe, the slowest-growing continent, was about 14 per 1,000. TFRs are above seven in some LDCs (Yemen, Niger, Ivory Coast and Uganda lead the world) and below two in developed European countries. (Spain has the world's lowest TFR, 1.2.) Currently, the average total fertility rate in LDCs, including China, is about 3.6, down by almost half since 1950. The TFR in the developed world averages about two.

The World's Population Today

Although there has never been an organized world census, demographers believe that about 5.7 billion people live on Earth. Carl Haub, director of information and education at the Population Reference Bureau in Washington, D.C., believes that that figure is reliable within 3% (that is, the world's population could be as much as 200 million higher than 5.7 billion, or 200 million less). The world's population has surged in the 20th century as health and living standards improved. Life expectancies are as much as 30 years higher than at the turn of the century, when about 1.7 million people were on Earth.

The average annual growth rate of the world's population is about 1.5%, or around 93 million people--the equivalent of adding a new country the size of Mexico each year. Average TFR is 3.1 children per woman. The world's birth rate is 25 per 1,000, and its death rate is nine per 1,000. Infant mortality stands at 25 per 1,000, while average life expectancy at birth is 62 years. (All measures are 1994 estimates.)

For a better understanding of the world's population, it is necessary to look beyond the numbers and examine where and how people live. Of those 5.7 billion people, all but about one billion live in LDCs. During 1995, fully 97% of the world's population growth took place in those countries. The poorest countries also generally have the highest infant-mortality, birth, death and total fertility rates and the lowest life expectancies.

Many of the poorest countries are also the most crowded, and they are increasingly unable to easily provide sustenance to their people. The highest population density in the world is in the poor Asian country of Bangladesh, which has 128 million people squeezed into an area the size of Michigan. Bangladesh has more than 2,100 people per square mile; Michigan, with a population of 9.32 million, has just 164 people per square mile.

The list of countries expected by the World Bank to grow the fastest over the next 35 years includes Oman, Niger, Yemen, Ethiopia and Angola, all poor, developing countries with serious environmental problems. During the same period, some of the world's wealthiest countries, led by Germany and Italy, are projected to actually lose up to 9% of their populations, excluding immigration. Those countries' populations are stable or declining because many women now choose to work instead of have children, and birth control is readily available.

Scenarios for the future are based on different possible TFRs. The United Nations prepares world population projections based on replacement level fertility, as well as on below-replacement, above-replacement and current TFRs. The U.N. projections do not take into account other factors that inhibit population growth, such as war, famine and disease. If all the countries of the world reach a replacement fertility level of 2.1, world population will stabilize at about 11 billion in the year 2150. An above-replacement-level TFR of 2.5 means 28 billion people. And a below-replacement TFR of 1.7, that of many developed countries, will result in slight drop to about five billion people. However, if the TFR remains at its current level of about 3.1, the year 2150 will dawn on 694 billion humans!

Fast Growth Explained

An often-cited statistic in demographic studies is this one: It took from the beginning of human history on Earth until the year 1800 to reach a world population of one billion. To reach the second billion took another 130 years. In 1960, after another 30 years, the third billion was added. But the fourth billion took only 14 years, and the fifth only 13. Subsequent billions will take only 11 years to add. Why has the world's population grown so fast in recent years?

The chief reason is not a rise in the birth rate, but a major decrease in the death rate. Modern advances in public health, medical care and food production have made it possible for all people to live longer, even though often fatal diseases like AIDS, malaria and tuberculosis persist. Demographers have noted an interesting phenomenon, which is experienced differently in developed and developing countries. In developed countries, improvements in public health, medicine and food availability were gradual. That gradual improvement coincided with a change in people's preferences away from large families. The shift from high fertility and death rates to lower, replacement-level ones is called demographic transition.

However, the life-lengthening improvements of modern science arrived suddenly in the developing world, beginning about 1950. Death rates fell even faster than in wealthy countries. But most people in developing nations have not yet changed their preference for large families. So, even though people have been living much longer, TFRs have remained high. The result has been a rapid rise in world population. It is that combination of the greatest growth in those countries that can least support it that has led to what biologist and author Paul Ehrlich in 1968 called "the population bomb."

The Pessimists' View

Ehrlich, along with others who consider overpopulation the world's most threatening problem, is a spiritual descendant of Malthus. When the pessimists mix together all the facts and figures cited earlier, they see a future of famine, environmental degradation, resource depletion and social chaos. On what basis do they make their judgment?

Many population pessimists view population within a biological framework. Based on studies of animal populations, they refer to an environment's so-called carrying capacity. That concept is the maximum number of organisms that a specific environment can support, given its resources. According to high-profile pessimists such as Lester Brown of the Worldwatch Institute, there are numerous signs that the Earth is approaching--or has already passed--its carrying capacity for human beings. Those signs include:

- a 12% drop in grain production per person from 1984 to 1993, after gains of 3% a year from 1950 to 1983
- a 9% drop in seafood catch per person from 1988 to 1993
- the near-capacity use of rangelands for grazing and of water for personal, agricultural and industrial purposes

Food-production levels per person reflect the growing number of people. As Malthus predicted, if population grows faster than food production, people will have less food to share. But food supply is not the only danger. Brown cites the build-up of pollutants in the air, water and soil that could cause environmental problems that limit population growth. His fears are echoed by a joint report from the American National Academy of Sciences and the Royal Society of London, released in 1992. The report began:

> *If current predictions of population growth prove accurate and patterns of human activity on the planet remain unchanged, science and technology may not be able to prevent either irreversible degradation of the environment or continued poverty for much of the world.*

Perhaps the most sobering aspect of that report's analysis of the state of the world's resources is that it is based on current consumption levels. Pessimists warn that, sooner or later, citizens of gigantic poor countries like China, India, Pakistan and Bangladesh will begin to strive for and ultimately reach the standard of living in developed countries. When they do, the demand on the Earth's resources will skyrocket, as will the environmental damage caused by those greater demands.

A comparison of the U.S. with India illustrates the potentially devastating results of increased demand for resources in LDCs. With a current population of about 940 million and an annual growth rate of 1.9%, India is expected to surpass China as the world's most populous country sometime early in the 21st century. Its per-capita gross domestic product (GDP) is $1,300, compared with $21,800 in the U.S. GDP, the most commonly used indicator of a nation's economic status, measures the total output of goods and services produced within a country's borders.

Despite having a population less than one-third the size of India's, the U.S. consumes 33 times more aluminum, 183 times more

natural gas and 385 times more pulpwood. If India's soon-to-be billion consumers begin to claim a share of those resources, the effect on world supplies could be enormous. Consider also the environmental effect of more cars, more factories, more coal-burning power plants, more municipal garbage and more crop irrigation using irreplaceable groundwater as Indians demand better transportation and more goods, services and food.

Social Chaos

Another hint of potential catastrophe can be found in African countries such as Rwanda, Somalia, Ivory Coast, Sierra Leone and Guinea (the latter two the world's two poorest nations, according to the U.N.). In those countries, says author Robert Kaplan, one finds "disease, overpopulation, unprovoked crime, scarcity of resources, refugee migrations, the increasing erosion of nation-states and international borders, and the empowerment of private armies, security firms and international drug cartels." In other words, the total breakdown of society seems to be occurring. The continuing ethnic violence in Rwanda and the starvation of hundreds of thousands of Somalis in recent years are caused in part, say the demographic doomsayers, by too many people competing for too few resources.

Another side effect of overpopulation is the explosive growth of cities in LDCs. Cities such as Calcutta, India, Mexico City, and Cairo, Egypt are ringed by immense shantytowns that house millions of people who have little access to pure water, electricity or sanitation. The United Nations Population Fund estimates that 30 million people worldwide move to cities each year from the countryside in an effort to improve their economic prospects, and many fail to find jobs. In China alone, 80 million people have fled rural areas in the last 12 years. The flight to the cities, caused mainly by lack of employment opportunities in the countryside, in turn means fewer farmers to produce food.

Another result of the flight to the cities is the loss of productive farmland around many cities, now occupied by squalid shantytowns. But the loss of farmland is not the only environmental damage from population pressures. The desire for more farm and grazing land, together with the need for fuel wood, has led to the destruction of forests on a massive scale. Soil erosion and desertification (the process in which arid, although agriculturally useful, regions become barren deserts) from overplowing and overgrazing, water pollution from pesticide and herbicide runoff, and the draining of nonrenewable underground water sources for irrigation have wreaked havoc in many areas of the world.

Refugees and Immigrants

Wealthy countries have been spared most of the ravages connected with population pressures. Cites such as Stockholm, Sweden, Montreal, Canada and Tokyo are not ringed by shantytowns, do not suffer from food or water shortages and are not ruled by bands of armed thugs. They are affected, however, in one way by the world's burgeoning population. Immigration to wealthier countries from those racked by poverty is expected to skyrocket, according to many population pessimists. Author Paul Kennedy notes that "the combination of poverty, rapid population growth, and environmental damage is a powerful destabilizing factor" and predicts "great waves of migration in the 21st century."

Kennedy points to specific borders where developed and poor countries meet, where migration pressures will be greatest. Those borders include the Mexico-U.S. border, where Mexico is growing more than three times faster than the U.S., and the northern and southern shores of the Mediterranean Sea, where growth in Europe is predicted to be less than one-twentieth of North Africa's over the next 25 years. Most developed countries, including the U.S., have already either tightened their immigration policies or are considering doing so. Pessimists say that aggressive efforts to keep out foreign immigrants may lead to heightened conflicts between richer and poorer nations, which frequently use emigration as a valve to release social pressure brought on by population growth.

Eventually, population pessimists say, the Earth's finite resources will not be able to support one more person. Before that time comes, steps will have to be taken to prevent it. The alternative is a catastrophe, they claim. In the words of Henry Kendall, a professor in the physics department at the Massachusetts Institute of Technology in Cambridge, Mass., "If we do not stabilize population with justice and humanity and mercy, then it will be done for us by nature, and it will be done brutally and without pity." But is there another way of looking at the issue of overpopulation?

The Optimists' Argument

When the biology-influenced population pessimists look at yet another child born in a desperately poor country, they see another mouth to feed. However, there is a group of observers who see things differently. They are population optimists, who often approach the issue from the perspective of economics. They point out that each new mouth to feed comes equipped with a brain and a pair of hands, which can be used to provide solutions to the world's problems, as well as buy products and services from the world's businesses. While not downplaying the short-term problems associated with overpopulation in certain areas of the world, the optimists rely on past achievements as evidence for their view and trust in the free-market economic system to find ways to support the Earth's growing population.

Malcolm (Steve) Forbes, Jr., who briefly was a candidate for the 1996 Republican nomination for president, makes the case this way:

> *A growing population is not a drag on economic development. When combined with freedom, it is a stimulant....Free people don't "exhaust" resources. They create them. Wealth comes from human imagination and innovation.*

Population optimists consider people to be resources rather than burdens. Many blame restrictive or socialist government polices as the main cause of famine and other critical shortages in developing countries. Economist Julian Simon, the best-known of the population optimists, describes how economic freedom has addressed--and, he presumes, will continue to address--the problem of shortages:

> *More people, and increased income, cause problems (and shortages) in the short run. Short-run scarcity raises prices. This presents opportunity, and prompts the search for solutions. In a free society, solutions are eventually found. And in the long run the new developments leave us better off than if the problems had not arisen.*

The key is economic freedom, Simon argues. Prices must be allowed to rise and fall, and businesspeople must be allowed to reap profits on their investments. If a restrictive government in a LDC places unreasonable limits on the profit of, for example, a mining company that wishes to prospect for aluminum ore, the company may not go ahead with the project. As a result, citizens of the LDC will not get jobs, the LDC will not receive taxes, and the valuable resource will remain in the ground. State-of-the-art technology will not be brought to the developing country, its engineers will not learn the latest methods of extracting aluminum ore, and its people will not share in the profits from the mining operation, Simon contends.

Thomas Lambert, writing in *USA Today Magazine*, criticizes the pessimists' notion of a "Spaceship Earth" that is "launched with a countable amount of each resource and, hence, having less resources per passenger as the number of passengers increases." He argues instead that it is the service that a particular resource provides that is important, not the resource itself. For example, while the world's stock of whale oil for burning in lamps is indeed in very short supply, light--the service formerly provided by the oil--is not. That is because light is now provided by another method based on a different resource, using electricity produced by burning coal or oil, harnessing hydropower, or nuclear energy.

Forbes describes how a previously useless material can be put to use, becoming a resource. He says, "A century and a half ago...finding oil on a piece of property depressed its value because nobody knew what to do with the goo. Human ingenuity changed that--and how!"

Not only are new resources being found, say optimists, but older, more established resources may not even be in danger of running out. To support their belief, they refer to classic economic theory. As commodities become scarcer, their prices tend to rise. Therefore, if resources have become scarcer, their prices should be higher today than they were in the past. In fact, most commodities (such as petroleum) are cheaper today than they were several years ago, proving, say optimists, that they are not running out.

The most famous wager in the annals of population studies was made in 1980. Doomsayer Ehrlich bet optimist Simon $1,000 that the price of five basic metals would be higher in the year 1990. Ehrlich based his reasoning on the assumption that a rising population would increase demand for the resources. Ten years later, the metals all cost less. Ehrlich paid the money, although he did not concede that global scarcities were not forthcoming.

Does More People Equal Poverty?

Optimists have other reasons for their position. In reply to the pessimists' contention that the most crowded countries are the worst off, they name economic powerhouses like Japan, South Korea, Germany, Taiwan and the Netherlands, all of which have high population densities. Vice President Al Gore pointed out that Rwanda, the site of horrendous ethnic violence in recent years, is the most crowded country in Africa. But officials of the Roman Catholic Church, whose official doctrine stresses opposition to policies designed to limit population, replied that the population density of Japan, a structured and peaceful society, is much greater.

Optimists also dispute the belief that food production will not be able to keep up with population growth. Lambert argues that food production has outpaced population growth by about 1% each year since data were first tabulated in the late 1940s. He also claims that less than a third of the Earth's arable land is ever cultivated in a single year. In addition, says Lambert, agricultural innovations have actually lowered the amount of agricultural land in use in developing countries, while output has risen. Again, he says, the key is a functioning free-market system, in which rising food prices motivate farmers to produce more and encourage research and development of new agricultural methods, including biotechnology.

The population optimists assert that, in a free market, greater density actually spurs the economic growth needed to raise living standards. That occurs for several reasons, they maintain. First, a denser population encourages specialization, allowing people to develop their talents. Fewer people need, for example, to engage in subsistence farming. Someone could start a business and buy food instead of growing it. In that way, population growth encourages trade. Second, a denser population usually encourages better communication and transportation systems, which help spread ideas and technology. Third, a denser population creates a larger market, which allows entrepreneurs to take advantage of economies of scale and produce more goods at a lower unit cost.

Finally, optimists frequently point out that numerous dire predictions about population growth have not come true. Beginning with Tertullian, a second-century Christian theologian who wrote, "Our numbers are burdensome to the world, which can hardly support us," through Malthus, to the doomsayers of today, forecasts of demographic disaster have proven false. So far, no worldwide disasters such as famines or resource depletion have occurred.

Ansley Coale of the Office of Population Research at Princeton University in Princeton, N.J., mocks gloomy predictions that do not take into account scientific and technological advances :

> *If you had asked someone in 1890 about today's population...he'd say 'There's no way the United States can support two hundred and fifty million people. Where are they going to pasture all their horses?'*

Is the population glass half full or half empty? Both sides agree in several important areas, although they disagree on the causes of the conditions. Optimists do not deny the reality of immense suffering, starvation and conflict in areas pressured by large populations and high growth. But they blame it on government corruption and incompetence in restricting the benefits of a free-market economy. Pessimists do not deny that corruption and incompetence contribute to the suffering. However, they argue that overpopulation and the resulting competition for scarce resources aggravate every problem--economic, social, medical and environmental--facing the world.

Solutions for Addressing Growth

Both optimists and pessimists have prescriptions for addressing the global population growth. The optimists, not surprisingly, find the answers in economics. In general, they trust in science to provide the knowledge needed to support billions more people and in enlightened governments to free economies so they can put the new science to work feeding, housing and employing the generations to come. An editorial in *Forbes* magazine put it this way: "People solve problems, and when there are more people, more problems get solved." If governments will stop hindering their geniuses from inventing ways to solve the world's problems, and stop preventing businesspeople from reaping their just rewards in marketing these inventions, the world will be able to support many more people than it does today, optimists argue.

Pessimists propose a variety of ways to address the world's population pressures. Some look at the successes of population-control attempts around the world and counsel more of the same. Among the programs that have reduced population growth in many countries is the wider availability of family-planning information and technology. That was a major focus of the 1994 U.N. Conference on Population and Development in Cairo, Egypt. [See 1996 U.N. Population Conference Centers on Stemming Growth]

The conference also spotlighted the need for empowering women. In countries where women have attained relatively high educational and employment levels, there are lower fertility rates, smaller families, lower infant-mortality rates and more use and acceptance of family-planning policies.

Other pessimists have called for a global perspective on what they call the population crisis and a coordinated international effort to solve it. Because all countries, even the wealthiest, will ultimately feel the effects of overpopulation, they say, all must contribute to the solution. LDCs have demanded that wealthy countries increase their financial support for developing ones, as well as rein in their consumption of the Earth's resources. A concerted effort requires the political will of different governments to take similar steps, and some pessimists doubt whether many countries have that will. Optimists, who are often critical of governments in other matters, seem to trust them in this case to institute the needed free-market reforms.

What Does the Future Hold?

Because of the different interpretations of the same set of facts, action to address the world's population growth may be delayed or even deemed unnecessary. However, some actions have already been taken and others seem likely. Among the current and expected developments:

- Reversing eight years of nonsupport, the administration of President Clinton (D) renewed U.S. financial support for the U.N.'s population-planning efforts and other similar international organizations. Aid had been stopped by previous Republican administrations because of opposition to funding programs that discussed abortion
- Along with several wealthy western European countries, the U.S. has moved to restrict immigration, caused at least in part by population pressures in poor countries
- Research on biogenetic engineering and other agricultural technology will continue, offering the hope of breakthroughs and improvements in food supply and distribution
- Since 1965, TFRs in developing countries, excluding China, have dropped from 6.0 to 4.2--halfway to replacement level of 2.1. Most demographers expect the fall to continue as poor countries improve education and employment, and open doors to women
- It seems unlikely that the flight to the cities in poor countries can be halted short of authoritarian measures. With cities like Mexico City, Lagos, Nigeria, Karachi, Pakistan and Sao Paulo, Brazil, growing faster than 3% a year, some metropolitan areas in LDCs will be home to as many as 40 million people in the next century.

As LDCs continue to outstrip developed countries in growth, the gap between the world's haves and have-nots will widen and tensions will continue to rise. It remains to be seen if increased population will lead to greater technological innovation and accommodation, or if social chaos, economic and social disarray and famine will result.

Bibliography

Begley, Sharon. "Can More=Better?" *Newsweek* (September 12, 1994): 27.

Brown, Lester. "Earth Is Running Out of Room." *USA Today Magazine* (January 1995): 30.

Brown, Lester. "Full House." *New Perspectives Quarterly* (Fall 1994): 6.

Budiansky, Stephen. "10 Billion for Dinner, Please." *U.S. News & World Report* (September 12, 1994): 57.

Carpenter, Betsy; Watson, Traci. "More People, More Pollution." *U.S. News & World Report* (September 12, 1994): 63.

Chen, Victor. "Crisis of a Crowded World." *Audubon* (July-August 1994): 50.

Cockburn, Alexander. "Malthus and the Modern World." *The Nation* (April 11, 1994): 475.

Cooper, Mary. "Population Growth." *CQ Researcher* (July 16, 1993): 603.

Crossette, Barbara. "The Return of the City-State." *New York Times* (June 2, 1996): 4E.

Ehrenreich, Barbara. "The Bright Side of Overpopulation." *Time* (September 26, 1994): 86.

Ehrlich, Paul; Ehrlich, Anne. "The Population Explosion." *Amicus Journal* (Winter 1990): 22.

Facts On File World Digest (September 22, 1994). "U.N. Population Conference Held in Cairo": 675.

Forbes, Malcolm (Steve). "People Are an Asset, Not a Liability." *Forbes* (September 12, 1994): 25.

Gore, Al. "The Sole Remaining Superpower vs. the Population Bomb." *New Perspectives Quarterly* (Fall 1994): 16.

Haub, Charles. "Global and U.S. National Population Trends." *Consequences* (Summer 1995): 3.

Kaplan, Robert. "The Coming Anarchy." *Atlantic Monthly* (February 1994): 44.

Kennedy, Paul. "Overpopulation Tilts the Planet." *New Perspectives Quarterly* (Fall 1994): 4.

Lambert, Thomas. "What They Missed in Cairo: Defusing the Population Bomb." *USA Today Magazine* (January 1995): 33.

Landers, Jim. "A Crisis in Motion." *Dallas Morning News* (February 6, 1995): 1A.

Livernash, Robert. "China and India Shape Their Destinies." *Environment* (July/August 1995): 6.

MacFarquhar, Emily. "Population Wars." *U.S. News & World Report* (September 12, 1994): 54.

Mann, Charles. "How Many Is Too Many?" *Atlantic Monthly* (February 1993): 47.

Stranahan, Susan. "New Population Answers: Empowering Women." *International Wildlife* (May/June 1993): 12.

UN Chronicle (September 1994). "Empowering Women: An Essential Objective": 47.

Wright, Robin. "The Fuse Still Sizzles on World Population Bomb." *Los Angeles Times* (August 23, 1994): H1.

Contact Information

Information on how to contact organizations that are either mentioned in the discussion of global population growth or can provide additional information on the subject is listed below:

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Population Action International
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Worldwatch Institute
1776 Massachusetts Ave. N.W.
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Zero Population Growth
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Planned Parenthood Federation of America
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Internet: www.ppfa.org/ppfa

Keywords and Points

For further information about the ongoing debate over global population growth, search for the following words and terms in electronic databases and other publications:

LDCs
Fertility rates
Thomas Malthus
Population density
Worldwatch Institute
United Nations Conference on Population and Development

Global Population Growth Update

Since ICOF discussed the issue of global population growth in November 1996, the number of people in the world has risen to more than six billion, with India alone reaching the one billion mark. New findings concerning the toll taken by disease and economic deprivation, particularly in developing countries, sharpened concerns for the world's future demographic and political stability.

- A mid-1999 United Nations (U.N.) conference, held to review progress in limiting global population growth in the five years since the 1994 world population conference in Cairo, Egypt, strengthened the Cairo recommendations in the areas of abortion, family planning and education. [See 1999 Facts On File United Nations: U.N. Approves Population Program]
- India launched a new program in 2000 to cut population growth, establishing a special fund to promote family planning. The country's population reached an estimated one billion in May of that year and was expected to exceed 1.25 billion by the year 2016 and to surpass China's by the middle of the 21st century.
- According to U.N. Population Fund calculations, global population growth was slowing: although the world's population reached the six billion mark in October 1999 (or July, according to U.S. Census Bureau estimates), it was projected to approach only 8.9 billion by the year 2050, below previous estimates. Reasons for the downward revision included falling birth rates and an increased death toll attributed to AIDS. [See 1998 Facts On File Other International News: U.N. Lowers Population Forecast, 1999 Facts On File Other International News: Population Estimate Hits Six Billion, 1999 Facts On File United Nations: Slower Population Growth Reported]
- According to a series of mid-2000 reports by U.N. organizations, an estimated 343 million people worldwide were infected with the AIDS virus, and half the 15-year-olds in the parts of southern Africa hardest hit by AIDS were expected to ultimately die of the disease, even if infection rates declined; if infection rates remained at current levels, at least two-thirds of the 15-year-olds in some countries would die. Dire economic consequences were predicted for countries with high rates of infection, since the adult work force would be substantially reduced in size. Another concern was the potential for food shortages created by the growing spread of AIDS in rural areas, where fewer social and health services

were available to ease its effects. The U.S. government in early 2000 designated the global AIDS epidemic a threat to national security, since AIDS-caused population decimation and widespread impoverishment threatened to destabilize societies and governments in developing countries, raising the risk of "revolutionary wars, ethnic wars" and "genocides." [See 1997 Facts On File Other International News: U.N. Releases Revamped AIDS Survey, 2000 Facts On File AIDS: U.S. Calls World Epidemic a Security Threat, 2000 Facts On File AIDS: Report Shows Global HIV Infection Increase]

- Tuberculosis, responsible for some two million deaths annually around the globe, was identified as a resurgent threat by the World Health Organization, which reported in 2000 that 11% of tuberculosis cases worldwide involved strains of the disease resistant to current drugs. [See 1997 Facts On File International Health: Report Warns of Drug-Resistant TB, 2000 Facts On File Global Health: Rise in Drug-Resistant Tuberculosis Seen]
- Another aspect of demographic change to draw policy makers' attention was the relative aging of the population of many developed countries. A U.N. report in early 2000 pointed out that because of the growth of the retired population and the shrinking of the workforce that supports pensioners, maintaining current living standards would require either sharply raising the retirement age or allowing massive immigration of foreign workers. Looking forward to the year 2050, for Japan to keep its 1995 ratio of workers to pensioners, it would need to take in 10 million immigrants a year or raise the retirement age to 77. In the 15 European Union countries, which were expected to show a population decline to 330 million from 375 million, this issue was more urgent than in the U.S., where the population was projected to grow to nearly 350 million from 280 million people.
- A U.N. report pinpointed Eastern Europe as the part of the world where birth rate declines were most widespread at the close of the 20th century, a development reflecting the economic upheavals and lifestyle changes that followed the collapse of communism in the region. Even if birth rates improved somewhat, populations in the area were expected to fall a third by 2050.
- The evolving demographic structure and welfare of the world's population as pictured by the U.N.'s annual Human Development Report bore a mixed character. According to the year 2000 edition, considerable progress was being made in some regards--the previous two decades saw the proportion of underweight children in the poorer nations drop to 27%, down from 37%, while the proportion with access to clean water surged past 70%, up from 13%. Nevertheless, a hundred million children around the globe were living on the streets, and 1.2 billion people made do on less than a dollar a day. For the seventh year in a row, Canada topped the U.N.'s Human Development Index, which measures quality of life. The U.S. also ranked high, despite possessing the highest poverty rate (reflective of a comparatively high prevalence of functional illiteracy) among the 18 richest countries. The bottom 10 countries on the index were all in Africa.

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