

Fourth Edition

Global Issues

An Introduction

John L. Seitz
and Kristen A. Hite



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FOURTH EDITION

John L. Seitz and Kristen A. Hite

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*To those who serve the needs of others – humans, animals, and plants, all essential parts of our loved
but endangered planet*

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Foreword

In the 1950s and 1960s I (Seitz) went as an employee of the US government to Iran, Brazil, Liberia and Pakistan to help them develop. A common belief in those decades was that poverty causes people to turn to communism. As an idealistic young person, I was pleased to work in a program that had the objective of helping poor nations raise their living standards. After World War II the United States was the richest and most powerful country in the world. Many countries welcomed US assistance since it was widely believed that the United States could show others how to escape from poverty.

Disillusionment came as I realized that we did not really know how to help these countries relieve their widespread poverty. The problem was much more complex and difficult than we had imagined. Also, one of the main political objectives of our foreign aid program – to help friendly, noncommunist governments stay in power – often dominated our concerns.

And more disillusionment came when I looked at my own country and realized that it had many problems of its own that had not been solved. It was called “developed” but faced major problems that had accompanied its industrialization – urban sprawl and squalor, pollution, crime, materialism, and ugliness, among others. So, I asked myself, what is development? Is it good or bad? If there are good features in it, as many people in the world believe, how do you achieve them, and how do you control or prevent the harmful features? It was questions such as these that led me to a deeper study of development and to the writing of this book.

I came to recognize that development is a concept that allows us to examine and make some sense out of the complex issues the world faces today. Many of these issues are increasingly seen as being global issues. Because the capacity human beings have to change the world – for better or for worse – is constantly growing, an understanding of global issues has become essential. The front pages of our newspapers and the evening TV news programs remind us nearly daily that we live in an age of increasing interdependence. (The Introduction explains the creation of global issues.)

In this book the term “development” will be defined as economic growth plus the social changes caused by or accompanying that economic growth. In the 1950s and 1960s it was common to think of development only in economic terms. For many economists, political scientists, and government officials, development meant an increase in the per capita national income of a country or an increase in its gross national product (GNP), the total amount of goods and services produced. Development and economic development were considered to be synonymous. In the 1970s an awareness grew – both the less developed nations and the developed industrialized nations – that some of the social changes which were coming with economic growth were undesirable.¹ More people were coming to understand that for economic development to result in happier human beings, attention would have to be paid to the effects that economic growth was having on social factors. Were an adequate number of satisfying and challenging jobs being created? Were adequate housing, health care, and education available? Were people living and working in a healthy and pleasant environment? Did people have enough nutritious food to eat? Every country is deficient in some of these factors and, thus, is in the process of developing.

The definition of development I have given above is a “neutral” one – it does not convey a sense of good or bad, of what is desirable or undesirable. I have chosen this definition because there is no widespread agreement on what these desirable and undesirable features are. The United Nations no

defines human development as the enlarging of human capabilities and choices; in a year publication ranks nations on a human development index, which tries to measure national differences of income, educational attainment, and life expectancy.² The United Nations sees the purpose of development to be the creation of an environment in which people can lead long, healthy, and creative lives. Economists have traditionally used GNP or national income as the measures of economic development. My definition tries to combine both the economic and the social components into the concept of development. I find a neutral definition useful because development can be beneficial or harmful to people.³

In this book we will look at some of the most important current issues related to development. The well-being of people depends on how governments and individuals deal with these issues. We will first look at the issue of population, then move on to issues related to wealth and poverty, food and energy, the environment, and technology, and conclude with a consideration of the future.

This book is an introduction to a number of complicated issues. It is only a beginning; there is much more to learn. Readers who are intrigued by a subject or point made and want to learn more about it should consult the relevant note. The note will either give some additional information or will give the source of the fact we present. Consulting this source is a good place for the reader to start his or her investigation. After each chapter a list of readings gives inquisitive readers further suggestions for articles and books that will allow them to probe more deeply. Appendix 1 gives the student some help in organizing the material the book covers and the teacher some suggestions for teaching this material. Appendix 2 offers suggestions of relevant video tapes and disks, an important and interesting resource for those who want to understand these issues more deeply. Appendix 3 gives internet sources. Many organizations on the internet now have a large amount of information related to many of the issues covered in this book. The glossary contains a definition of many of the uncommon terms used in the book.

The world is changing rapidly and significant developments have taken place in many of the topics covered in this book since the third edition was prepared. The fourth edition has been thoroughly updated. A section on nuclear energy has been added since there is now a renewed interest in expanding this manner of producing energy.

Seven maps have been added to the book to help the reader locate many of the locations mentioned.

Global issues can be a depressing subject as the reader learns of the many serious problems that the world faces. To help counter this depression without “sugar coating” the issues, a highlighted box of an example of a positive action the reader can take will be presented in each chapter.

We would like to thank the following teachers who made useful suggestions for improving this edition: Edwin Clausen, Daemen College, USA; William Moseley, Macalester College, USA; Scott Anderson, State University of New York, Cortland, USA; Matthew Sparke, University of Washington, USA; Hans Holmen, Linköping University, Sweden; and Alan Gilbert, University College London, UK.

I (Seitz) would also like to thank Wofford College for an office. Offices are usually scarce on college campuses and I deeply appreciate Wofford allowing this retired professor to “hang around.” Martin Aigner, of Wofford’s Information Technology staff, performed great service in keeping my computer running, and my office mate, Don Scott, rescued me at times when my computer failed to follow my confused instructions. Finally, many thanks to Abigail Wilcox for her excellent proofreading.

Notes

[1](#) The term “less developed” refers to a relatively poor nation in which agriculture or mineral resources have a large role in the economy while manufacturing and services have a lesser role. The infrastructure (transportation, education, health, and other social services) of these countries is usually inadequate for their needs. About 80 percent of the world’s people live in nations such as this, which are also called “developing.” (Some of these countries are highly developed in culture and many such regions of the world had ancient civilizations with architecture, religion, and philosophy that we still admire.) Since many of the less (economically) developed nations are in the Southern Hemisphere, they are at times referred to as “the South.” During the Cold War these nations were often called the “Third World.” Industrialized nations are called “developed” nations. Most of them are located in the Northern Hemisphere, so they are called “the North.” Some organizations such as the World Bank also divide countries according to their level of income. The Bank considers low- and middle-income countries to be “developing” and high income countries to be “developed.”

[2](#) United Nations Development Programme, *Human Development Report 2004* (New York: United Nations Development Programme, 2004), p. 127.

[3](#) For a criticism of the Western concept of development see Ivan Illich, “Outwitting the ‘Developed Countries,’” in Charles K. Wilber (ed.), *The Political Economy of Development and Underdevelopment*, 2nd edn (New York: Random House, 1979), pp. 436–44. See also Lloyd Timberlake, “The Dangers of ‘Development,’ ” in *Only One Earth: Living for the Future* (New York: Sterling, 1987), pp. 13–22.

Introduction: The Creation of Global Issues

What causes an issue to become a “global issue”? Are “global issues” the same as international affairs – the interactions that governments, private organizations, and peoples from different countries have with each other? Or is something new happening in the world? Are there now concerns and issues that are increasingly being recognized as global in nature? It is the thesis of this book that something new indeed is happening in the world as nations become more interdependent. While their well-being is still largely dependent upon how they run their internal affairs, increasingly nations are facing issues that they alone cannot solve, issues that are so important that the failure to solve them will adversely affect the lives of many people on this planet. In fact, some of these issues are so important that they can affect how suitable this planet will be in the future for supporting life.

The issues dramatize our increasing interdependence. The communications and transportation revolutions that we are experiencing are giving people knowledge of many new parts of the globe. We see that what is happening in far-off places can affect, or is affecting, our lives. For example, instability in the oil-rich Middle East affects the price of oil around the world and since many countries are dependent on oil as their main source of energy, the politics of oil becomes a global concern.

Many nations in the world are now dependent on other nations to buy their products and supply natural resources and goods they need to purchase in order for them to maintain their standard of living. An economic downturn in any part of the world that affects the supply and demand for products will affect the economic status of many other nations. This is an important part of globalization that will be discussed in chapter 2.

Even a global issue such as world hunger illustrates our increasing interdependence. A person might say that starving or malnourished people in Africa don't affect people in the rich countries, but even here there is a dependency. Our very nature and character depend on how we respond to human suffering. Some rich nations such as the Scandinavian nations in northern Europe give a much higher portion of their national wealth to poor nations for development purposes than do other rich nations such as the United States and Japan.

Global issues are often seen as being interrelated. One issue affects other issues. For example, climate change (an environmental issue) is related to an energy issue (our reliance on fossil fuels), the population issue (more people produce more greenhouse gases), the wealth and poverty issue (wealthy developed countries produce the most gases that cause climate change), the technology issue (technology can help us create alternative energy sources that produce less or no greenhouse gases) and the future issue (will the changes we are making in the earth's climate seriously harm life on the planet?). As we recognize these interrelationships, we realize that usually there are no simple solutions.

Interdisciplinary knowledge is required to successfully deal with the issues. The student or adult learner reading this book will be receiving information from multiple disciplines such as biology, economics, political science, environmental science, chemistry, and others. Neither the social sciences nor the physical sciences have the answers alone. Feel good about yourself, reader, because you are engaged in the noble task of trying to understand how the world really works. Complicated? Yes, of course. Impossible to discover? Certainly not. Just read seriously and carefully. It takes effort and you can keep learning throughout your life.

Perhaps, global issues were born on the day, several decades ago, when the earth, for the first time, had its picture taken. The first photograph of earth, which was transmitted by a spacecraft, showed our planet surrounded by a sea of blackness. Many people seeing that photograph realized that this blackness was a hostile environment, devoid of life, and that life on earth was vulnerable and precious. No national boundaries could be seen from space. That photograph showed us our home – one world – and called for us to have a global perspective in addition to our natural, and desirable, more local and national perspectives.

This book discusses *some* of the main current global issues of our time. The reader can probably identify others. During the reader's lifetime, humanity will have to face new global issues that will continue to surface. It is a characteristic of the world in which we live. Maybe our growing ability to identify such issues, and our increasing knowledge of how to deal with them, will enable us to handle the new issues better than we are doing with the present ones.

Chapter 1

Population

Prudent men should judge of future events by what has taken place in the past, and what is taking place in the present.

Miguel de Cervantes (1547–1616), Persiles and Sigismunda

The Changing Population of the World

The population of the world is growing. No one will be startled by that sentence, but what is startling is the rate of growth, and the fact that the present growth of population is unprecedented in human history. The best historical evidence we have today indicates that there were about 5 million people in the world about 8000 BC. By AD 1 there were about 200 million, and by 1650 the population had grown to about 500 million. The world reached its first billion people about 1800; the second billion came about 1930. The third billion was reached about 1960, the fourth about 1974, and the fifth about 1987. The sixth came in 1999 and the seventh in 2011. These figures indicate how rapidly the population is increasing. Table 1.1 shows how long it took the world to add each billion of its total population. A projection is also given for the next billion.

Table 1.1 Time taken to add each billion to the world population, 1800–2046 (projection)

Source: UN World Population Prospects: The 2008 Revision

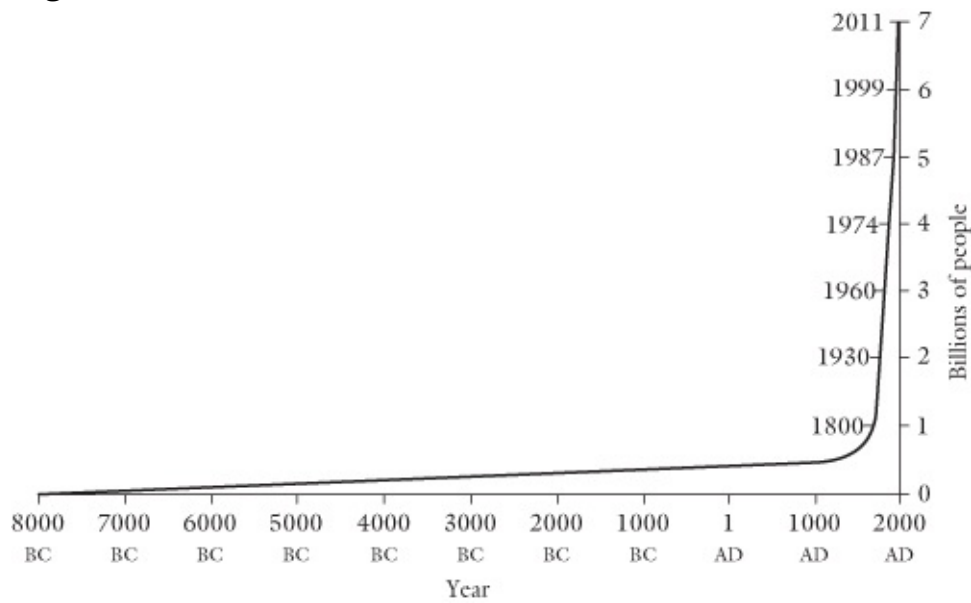
Date	Estimated world population (billions)	Years to add 1 billion people
1800	1	2,000,000
1930	2	130
1960	3	30
1974	4	14
1987	5	13
1999	6	12
2011	7	12
2024 (projected)	8	13
2046 (projected)	9	22

There is another way to look at population growth, one that helps us understand the uniqueness of our situation and its staggering possibilities for harm to life on this planet. Because most people born can have children of their own, the human population can – until certain limits are reached – grow exponentially: 1 to 2; 2 to 4; 4 to 8; 8 to 16; 16 to 32; 32 to 64; 64 to 128; and so on. When something grows exponentially, there is hardly discernible growth in the early stages and then the numbers show up. The French have a riddle they use to help teach the nature of exponential growth to children. It goes like this: if you have a pond with one lily in it that doubles its size every day, and which will completely cover the pond in 30 days, on what day will the lily cover half the pond? The answer is the twenty-ninth day. What this riddle tells you is that if you wait until the lily covers half the pond before cutting it back, you will have only one day to do this – the twenty-ninth day – because it will cover the

whole pond the next day.

If you plot on a graph anything that has an exponential growth, you get a J-curve. For a long time there is not much growth but when the bend of the curve in the “J” is reached, the growth becomes dramatic. Figure 1.1 shows what the earth’s population growth curve looks like.

Figure 1.1 Population growth from 8000 BC to 2011 AD



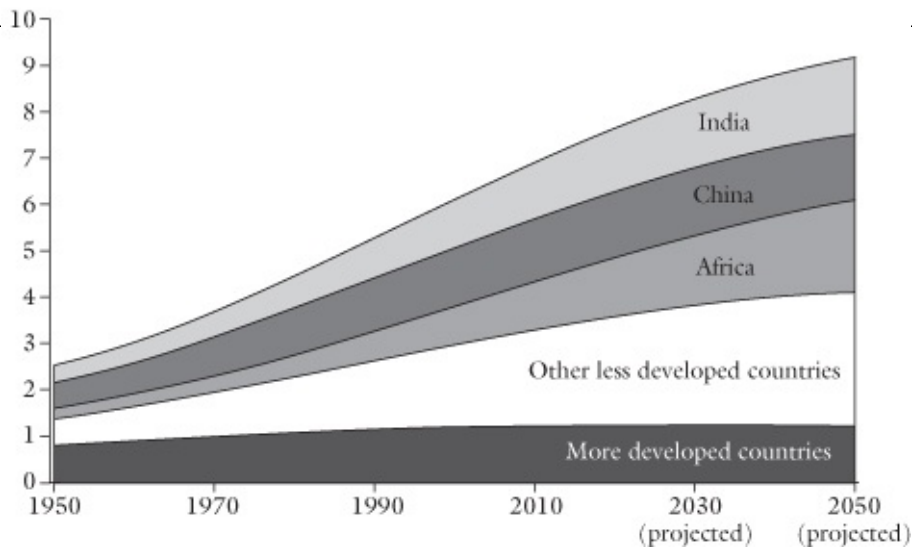
The growth of the earth’s population has been compared to a long fuse on a bomb: once the fuse is lit, it sputters along for a long while and then suddenly the bomb explodes. This is what is meant by the phrases “population explosion” and “population bomb.” The analogy is not a bad one. The world’s population has passed the bend of the J-curve and is now rapidly expanding. The United Nations estimates the world’s population reached 7 billion in 2011, shooting up from the estimated 2 billion in 1930.

Figure 1.2 shows that the largest growth in the future will be in the less developed countries of the world, with India, Africa, and China leading the way. At the end of the twentieth century about 80 percent of the people in the world lived in the developing countries. During the present century, nearly all of the growth in population will occur in the less developed countries. An ever-larger percentage of the world’s population will be relatively poor. In 1950 about two-thirds of the world’s people lived in the less developed countries. By 2000 this percentage had increased to about 80 percent and the United Nations projects that by 2050 about 85 percent of the earth’s population will be residing in the poor nations.

Figure 1.2 Population growth in less developed and more developed countries, 1950–2050 (projected)

Source: United Nations Population Division, *World Population Prospects: The 2006 Revision, Medium Variant (2007)*.

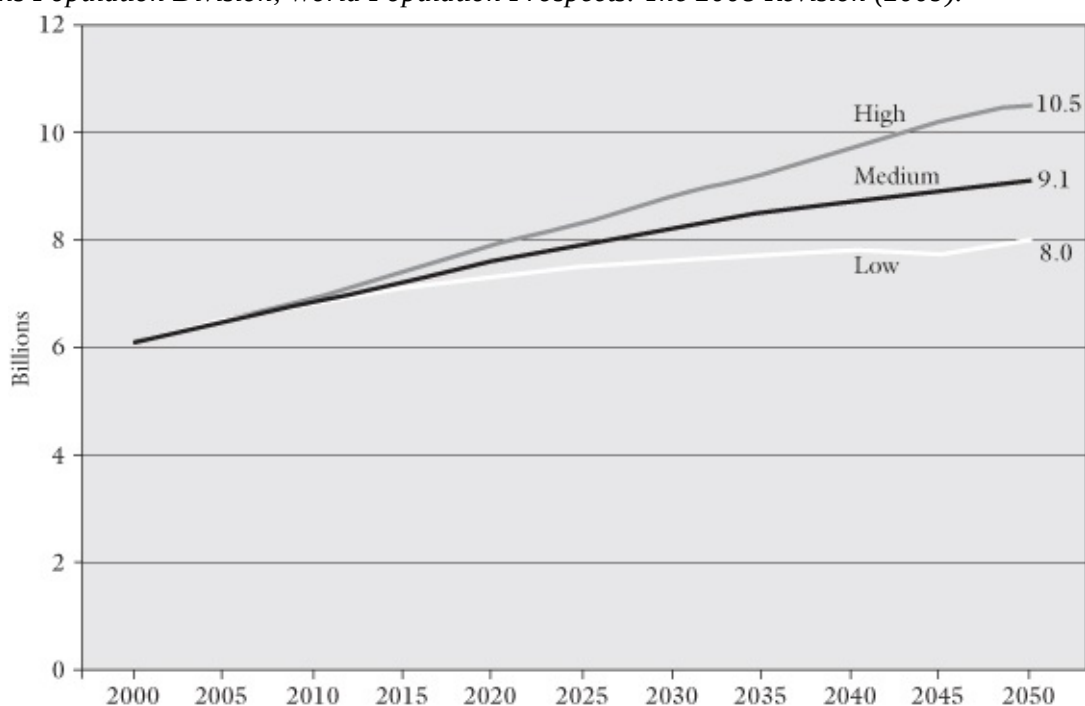
Population (billions)



Because no one knows for sure what the size of the earth's population will be in the future, the United Nations gives three projections: a high, medium, and low one, based on the possible number of children the average woman will have. Projections are educated guesses. The United Nations believes the middle projection is the most likely and most authors writing on the subject use that number. The population in the developed regions is expected to slowly grow to 1.3 billion in 2050 from 1.2 billion in 2008, with most of that growth in the United States and Canada due to immigration from less developed countries. The less developed countries are expected to increase from 5.5 billion in 2008 to 8.1 billion in 2050.¹ From 2010 to 2050 about one-half of the annual growth is expected to occur in nine countries – India, Pakistan, Nigeria, Ethiopia, the United States, the Democratic Republic of the Congo, Tanzania, China, and Bangladesh. (These countries are listed according to the size of their contribution to world population growth.) The largest growth is expected in India, which is likely to pass China by 2028 to be the largest country in the world, with 1.5 billion people. At that time India and China will account for about one-third of the world's population. Figure 1.3 gives the three growth projections by the United Nations up to 2050.

Figure 1.3 World population projections to 2050: three scenarios

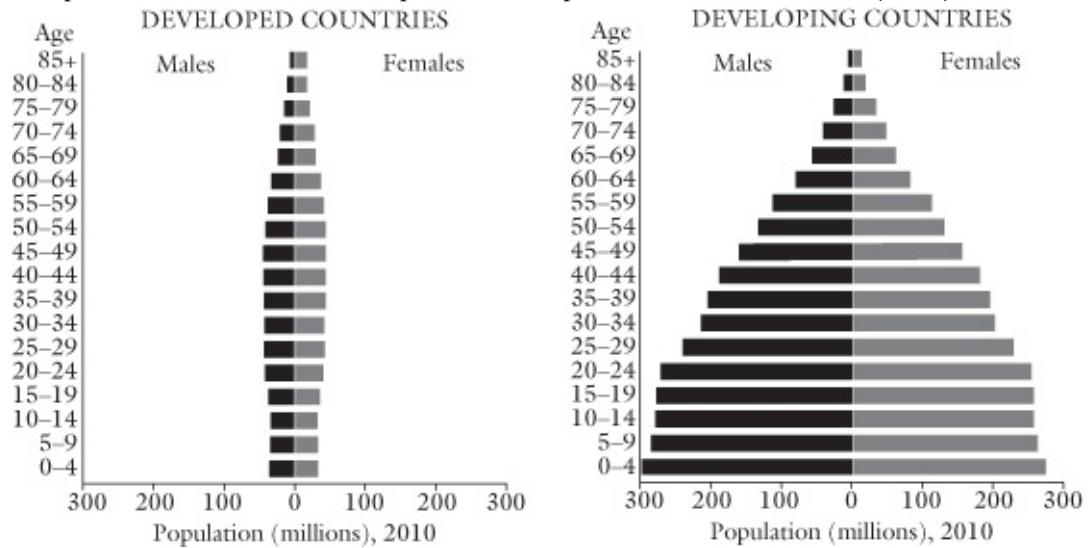
Source: United Nations Population Division, *World Population Prospects: The 2008 Revision* (2009).



High growth rates will take place in the less developed countries because a large percentage of the population consists of children under the age of 15 who will be growing older and having children themselves. If we plot the number of people in a country according to their ages, we can see clearly the difference between rapidly growing populations, which most less developed nations have, and relatively stable or slowly growing populations, which the more developed nations have. Figure 1.4 shows the difference between the populations of the more developed countries and less developed countries. The age structure of the more developed countries is generally column shaped, while the age structure of the less developed countries is usually pyramid shaped.

Figure 1.4 Population by age and sex in developed and less developed countries 2010 (projected)

Source: United Nations Population Division, *World Population Prospects: The 2008 Revision (2009)*.



Another major change occurring in the world's population is the movement of people from rural areas to urban areas. Although this is happening throughout the world, the trend is especially dramatic in the developing world, where people are fleeing rural areas to escape the extreme poverty that is common in those areas, and because the cities seem to offer a more stimulating life. Mostly it is the young people who go to the cities, hoping to find work and better living conditions. But all too often jobs are not available in the cities either. These rural migrants usually settle in slums on the edges of the big cities. At current rates the populations in these informal settlements will double every 10 to 15 years. It is hard to imagine a city like Calcutta getting any bigger. In 1950, when I visited it, it had a population of about 4 million, and thousands of these people lived permanently on the streets; in 1990 it had a population of about 13 million and an estimated 400,000 lived on the streets.² If the present rate of growth continues, it will have a population of about 17 million by 2015. Table 1.2 gives the world's ten largest cities in 1950 and 2000 and the projected ten largest for the year 2015.³ Note that eight of the ten largest cities in the year 2015 are expected to be in the less developed countries. Tokyo and New York are the exceptions – whereas in 1950 only three of the ten were in the poorer countries (Shanghai, Buenos Aires, and Calcutta).

Table 1.2 Ten largest cities^a in the world, 1950, 2000, and 2015 (projection)

Source: (for 2015 projections) UN Population Division, *World Urbanization Prospects: The 2009 Revision*

<i>Population in 1950 (millions)</i>	<i>Population in 2000 (millions)</i>	<i>Population in 2015 (projected) (millions)</i>			
New York, US	12	Tokyo, Japan	26	Tokyo, Japan	27
London, UK	9	Mexico City, Mexico	18	Delhi, India	24
Tokyo, Japan	7	São Paulo, Brazil	18	Mumbai (Bombay), India	22
Paris, France	5	New York, US	17	Sao Paulo, Brazil	21
Moscow, USSR	5	Buenos Aires, Argentina	16	Mexico City, Mexico	20
Shanghai, China	5	Los Angeles, US	13	New York-Newark, US	20
Essen, Germany	5	Calcutta, India	13	Shanghai, China	18
Buenos Aires, Argentina	5	Shanghai, China	13	Calcutta, India	17
Chicago, US	5	Dhaka, Bangladesh	13	Dhaka, Bangladesh	17
Calcutta, India	4	Delhi, India	12	Karachi, Pakistan	15

^a Formally called “urban agglomerations” in UN publications.

Plate 1.1 Rural migrants often settle in urban slums in developing nations (*United Nations*)

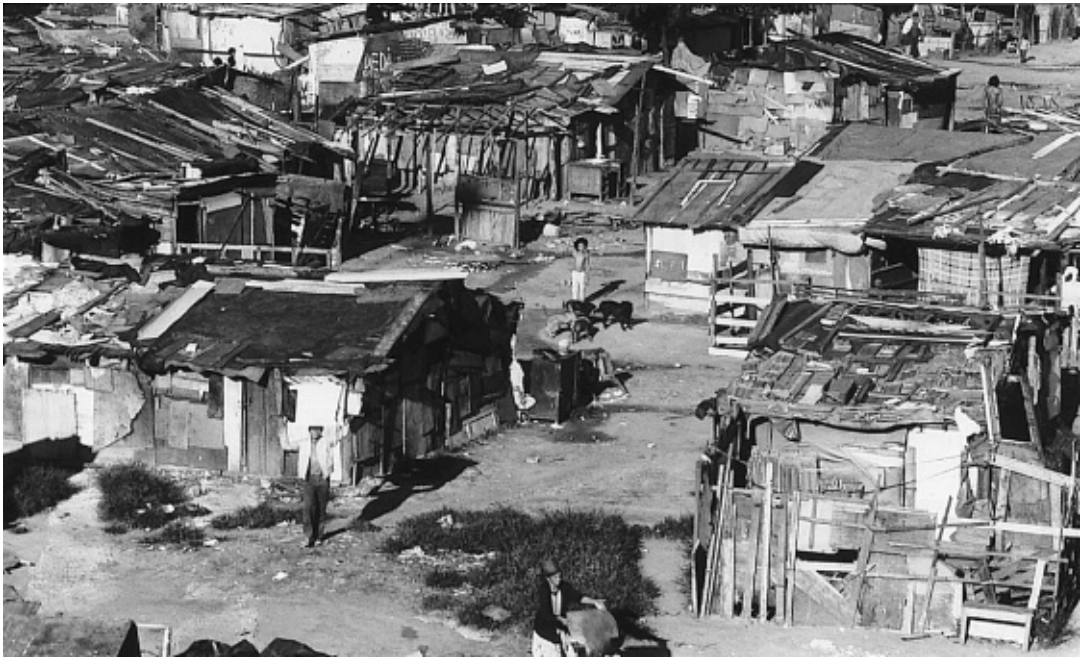


Plate 1.2 Growing cities in less developed nations often have a mixture of modern and substandard housing (*United Nations*)



Note also the increased size of the cities. Cities with over 5 million people are sometimes called “megacities.” In 1950 Buenos Aires and Shanghai were the only cities in the developing world with at least 5 million people. By 2005 there were about 60 megacities in the world with the majority of them being in the less developed nations. Many of these cities had vast areas of substandard housing and serious urban pollution, and many of their residents lived without sanitation facilities, safe drinking water, or adequate healthcare facilities.

The Most Innovative City in the World: Curitiba, Brazil

Curitiba, Brazil, has been called the most innovative city in the world. City officials from around the world visit Curitiba to learn how this city, with relatively limited funds, has been tackling urban problems. By using imaginative, low-cost solutions and low technology, Curitiba has created a pleasant urban life that many cities in the more developed nations have yet to achieve. Here is how the city achieved this.

Transportation The city has made public transportation attractive, affordable, and efficient. Instead of building a subway, which the city could not afford, it established a system of extended, high-speed buses, some carrying as many as 275 passengers, on express routes, connecting the city center with outlying areas. Many people own cars in Curitiba but 85 percent of the commuters use public transportation. This has reduced traffic congestion and air pollution. There are 30 percent fewer cars on city streets than you would expect from the number of cars owned by its residents.

Trash collection Poor people are encouraged to collect recyclable trash in the areas where they live and turn it in for food. In 1995 the city gave out about 350,000 Easter eggs, 25,000 Christmas cakes, and 2 million pounds of food in exchange for trash. About 70 percent of its trash is recycled, one of the highest rates in the world.

Education Small libraries have been built throughout the city in the shape of a lighthouse. Called Lighthouses of Learning, they provide books (many schools in Brazil have no books), an attractive study room, and, in a tower, a strong light and guard to make the area safe.

Health Curitiba has more health clinics – that are open 24 hours a day – per person than any other city in Brazil.

Environmental education The Free University for the Environment was built out of recycled old utility poles next to a lake made from an old quarry. Short courses on how to make better use of the environment have been designed for contractors, merchants, and housewives. Taxi drivers are required to take a course there in order to get their licenses.

Governmental services Colorful, covered Citizenship Streets have been built throughout the city to bring government offices to where the people live and shop. Here people can pay their utility bills, file a police complaint, go to night court, and get a marriage license. Vocational courses are offered for \$1 a course.

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