

## **CHAPTER TWO GLOBAL POPULATION TRENDS**

### **LEARNING OBJECTIVES**

1. Become familiar with the basic historical facts of world population growth.
2. Understand how and why the world's population is distributed as it is around the globe.
3. Understand the current regional patterns of population size and growth in all parts of the world.
4. Comprehend the major regional demographic contrasts that exist today.

### **MAIN POINTS**

1. During the first 90 percent of human existence, the population of the world had grown only to the size of today's New York City.
2. Between 1750 and 1950, the world's population mushroomed from 800 million to 2.5 billion, and since 1950 it has expanded to more than 7 billion.
3. Despite the fact that humans have been around for tens of thousands of years, more than 1 in 10 people ever born is currently alive.
4. Early population growth was slow not because birth rates were low but because death rates were high; on the other hand, continuing population increases are due to dramatic declines in mortality without a matching decline in fertility.
5. World population growth has been accompanied by migration from rapidly growing areas into less rapidly growing regions. Initially, that meant an outward expansion of the European population, but more recently it has meant migration from less developed to more developed nations.
6. Migration has also involved the shift of people from rural to urban areas, and urban regions on average are currently growing more rapidly than ever before in history.
7. Although migration is crucial to the demographic history of the United States and Canada, both countries have grown largely as a result of natural increase—the excess of births over deaths—after the migrants arrived.
8. At the time of the American Revolution, fertility levels in North America were among the highest in the world. Now they are low, although not as low as in Europe.
9. The world's 10 most populous countries are the People's Republic of China, India, the United States, Indonesia, Brazil, Pakistan, Nigeria, Bangladesh, Russia, and Japan. Together they account for 59 percent of the world's population.
10. Almost all of the population growth in the world today is occurring in the less developed nations, leading to an increase in the global demographic contrasts among countries.

### **EXAMINATION QUESTIONS**

**Multiple-Choice** (Choose the single best answer—the page where the answer is found is indicated in parentheses)

1. The world's population at the time of the Agricultural (Neolithic) Revolution was approximately
  - a. 4 million. (26)
  - b. 40 million.
  - c. 400 million.
  - d. 4 billion.
2. Carrying capacity is lower for hunter-gatherers than for agriculturists because
  - a. their death rates are higher.

- b. they use the land extensively rather than intensively. (26)
  - c. they have fewer technological skills.
  - d. birth rates regularly exceeded death rates.
3. Between the third and fifth centuries A.D. the world's population declined somewhat, probably due to
- a. the impact of Indonesian volcanic eruptions.
  - b. higher mortality brought on by the early days of the Little Ice Age.
  - c. the collapse of the Roman Empire and famine and floods in China. (27)
  - d. the Irish Potato Famine.
4. Europe's population began to grow between 1650 and 1850 because of all of the following *except*
- a. the disappearance of the plague.
  - b. an increase in the birth rate. (27)
  - c. the introduction of the potato from the Americas.
  - d. changes in agricultural practices.
5. Two hundred years ago, the world's population was approximately
- a. 100 million.
  - b. 200 million.
  - c. 1 billion. (28)
  - d. 2 billion.
6. Current projections from the United Nations suggest that we could reach a population of 10 billion by approximately
- a. 2020.
  - b. 2040.
  - c. 2060. (28)
  - d. 2080.
7. The total population of the world is currently increasing by about \_\_\_\_\_ million people per year.
- a. 20
  - b. 40
  - c. 60
  - d. 80 (29)
8. The Persian chess board story illustrates the concept of
- a. the Queen as embodiment of female empowerment.
  - b. the power of doubling. (31)
  - c. logarithm growth.
  - d. carrying capacity.
9. Population growth was slow for most of human history because
- a. death rates were very high. (32)
  - b. abortion rates were very high.
  - c. people preferred small families.
  - d. low levels of technology always lead to low rates of growth.
10. The most important reason for the massive increase in the human population over the past 200 years is
- a. the Green Revolution that increased agricultural productivity.
  - b. the increase in the birth rate.
  - c. technology that has made it possible for humans to live in more places.
  - d. the decline in the death rate. (33)
11. If a country is thought to be on the verge of depopulation, it is probably located in
- a. North America.
  - b. Sub-Saharan Africa.
  - c. South Asia.
  - d. Europe. (34)
12. The total number of people who have ever lived throughout human history is probably about
- a. 10 billion.
  - b. 30 billion.
  - c. 60 billion. (34)
  - d. 90 billion.
13. At the peak of European migratory expansion in approximately 1930, people of European origin accounted for almost \_\_\_ of the world's population, but it has since dropped to about \_\_\_ percent.

- a. 35; 16 (35)
  - b. 35; 26
  - c. 20; 10
  - d. 20; 5
14. The five most populous countries in the world account for about \_\_\_\_ percent of the world's total population.
- a. 10
  - b. 25
  - c. 50 (37)
  - d. 70
15. The United States is currently the third most populous nation, but UN projections suggest that by 2050 it will be overtaken by
- a. Nigeria. (38)
  - b. Indonesia.
  - c. Pakistan.
  - d. Bangladesh.
16. At about the time of the American Revolution, the United States had a birth rate that was
- a. very similar to the birth rate in England at the time.
  - b. already lower than that of any currently developing nation.
  - c. higher than birth rates even in Sub-Saharan Africa at that time.
  - d. comparable to the highest national birth rates in the world today. (41)
17. Population growth in Mexico was very rapid until recently because of a substantial delay in
- a. its fertility decline. (43)
  - b. its mortality decline.
  - c. migration out of the country to the United States.
  - d. improving agricultural productivity.
18. An important demographic consequence of below-replacement-level fertility in Europe is that
- a. European countries have all been actively recruiting immigrants to fill in the younger ages.
  - b. European countries are aging. (44, 46–48)
  - c. the status of women has risen dramatically.
  - d. taxes have risen sharply in order to pay benefits to the elderly.
19. The most populous predominantly Muslim country in the world is
- a. Egypt.
  - b. Saudi Arabia.
  - c. Pakistan.
  - d. Indonesia. (51)
20. Although Europe is most often pointed to when the discussion turns to low fertility, the other major region of the world with very low fertility is
- a. Latin America.
  - b. East Asia. (53)
  - c. North America.
  - d. South Asia.

### **True-False**

1. The Agricultural Revolution beginning 10,000 years ago led to a growth in population. T (26)
2. The United Nations projects that the population of the world will double again over the next 40 years. F (29)
3. Declining mortality, not rising fertility, is the cause of the “population explosion.” T (33)
4. The least developed countries in the world are growing faster than the less developed or more developed nations. T (33)
5. The majority of people ever born are alive at this moment. F (34)
6. Nearly 4 in 10 humans live either in China or on the Indian subcontinent. T (37)
7. India's demography is so diverse that some of its southern states actually have fertility levels that are below replacement. T (50)
8. The drop in fertility in China is largely a result of its one-child policy. F (53)

9. China may be the first country in demographic history to grow old before it grows rich. T (54)
10. Fertility is so low in Japan that it seems to have its own “one-child policy.” T (62)

### ESSAY/CLASS DISCUSSION QUESTIONS

1. Describe what you think might be the typical day in the life of a person living in a world where death rates and birth rates are both very high. How might those demographic imperatives influence everyday life? How would “culture” be different from today as a result?
2. The media in the United States and Europe regularly have stories about the impact of low fertility slowing down population growth in these countries. If you were asked to be on a TV talk show commenting on such a story, how would you respond?
3. Migration of people into other countries is a major part of the demography of the modern world. How do you think the world of 2050 will look demographically as a consequence of the trends currently in place?
4. Even without migration, the world will look very different in 2050 than it did in 1950. Analyze Table 2.2 in terms of the idea that “the past is a foreign country.”
5. How would you explain the regional patterns that are very observable with respect to global demography? Are European countries more like each other than they are like Asian countries? Is Africa unique demographically? Are national boundaries therefore meaningless when it comes to population trends?

### WEBSITES SUGGESTED FOR THIS CHAPTER

<http://www.gapminder.org/videos/dont-panic-the-facts-about-population/> Hans Rosling is a Swedish academic—Professor of International Health at Karolinska Institute in Sweden and co-founder and chairman of the Gapminder Foundation (gapminder.org). In this program prepared for BBC in 2013 he talks about the current world population situation. Check out his other population-related talks because he does a nice job of explaining things visually.

<http://chinadatacenter.org> Although not an official government website, there is a great deal of useful demographic information about China available at the University of Michigan’s China Data Center.

<http://censusindia.gov.in> You don’t have to take anybody else’s word for what’s happening demographically in India. This Indian census website is in English and has lots of data for the country and its regions.

<http://sedac.ciesin.columbia.edu/data/collection/gpw-v3> The Gridded Population of the World is a database created from censuses, surveys, satellite imagery, and other sources, producing a very realistic picture of population density and other characteristics at the global level. Regional maps and data are also available at this website.

<http://www.ornl.gov/sci/landscan/> LandScan is another globally gridded set of population data, designed at the Oak Ridge National Laboratory for the U.S. government as a way of evaluating the population anywhere in the world at risk of potential disasters.

<http://www.worldpop.org.uk> The WorldPop project was initiated in October 2013 to combine the AfriPop, AsiaPop, and AmeriPop population mapping projects. It aims to provide an open-access archive of spatial demographic datasets for Central and South America, Africa, and Asia to support development and health applications. The methods used are designed with full open access and operational application in mind, using transparent, fully documented and shareable methods to produce easily updatable maps with accompanying metadata.

And, of course, look for the latest items related to this chapter posted on my blog:

[http://weekspopulation.blogspot.com/search/label/Global Population Trends](http://weekspopulation.blogspot.com/search/label/Global%20Population%20Trends)

### OTHER RESOURCES

For the past few years, I have routinely shown the video “World in the Balance—The Population Paradox” during the first or second week of class. It was produced in 2004 as part of the NOVA series on Public Television. Global demographics change slowly enough that the basic ideas are still very current, and students appreciate the visuals. It

is available at <http://www.pbs.org/wgbh/nova/worldbalance/>.