

# Chapter 3

## History and Geography:

### THE FOUNDATIONS OF CULTURE



#### CHAPTER OUTLINE

Global Perspective: Birth of a Nation—Panama in 67 Hours

Historical Perspective in Global Business

History and Contemporary Behavior

History Is Subjective

Manifest Destiny and the Monroe Doctrine

Geography and Global Markets

Climate and Topography

Geography, Nature, and Economic Growth

Social Responsibility and Environmental Management

Resources

Dynamics of Global Population Trends

Controlling Population Growth

Rural/Urban Migration

Population Decline and Aging

Worker Shortage and Immigration

World Trade Routes

Communication Links

#### CHAPTER LEARNING OBJECTIVES

What you should learn from Chapter 3:

- LO1** The importance of history and geography in understanding international markets
- LO2** The effects of history on a country's culture
- LO3** How culture interprets events through its own eyes
- LO4** How long-past U.S. international policies still affect customer attitudes abroad
- LO5** The effect of geographic diversity on economic profiles of a country
- LO6** Why marketers need to be responsive to the geography of a country
- LO7** The economic effects of controlling population growth and aging populations
- LO8** Communication infrastructures are an integral part of international commerce

## Global Perspective

### BIRTH OF A NATION—PANAMA IN 67 HOURS

#### The Stage Is Set

- June 1902 The United States offers to buy the Panama Canal Zone from Colombia for \$10 million.
- August 1903 The Colombian Senate refuses the offer. Theodore Roosevelt, angered by the refusal, refers to the Colombian Senate as “those contemptible little creatures in Bogotá.” Roosevelt then agrees to a plot, led by secessionist Dr. Manuel Amador, to assist a group planning to secede from Colombia.
- October 17 Panamanian dissidents travel to Washington and agree to stage a U.S.-backed revolution. The revolution is set for November 3 at 6:00 p.m.
- October 18 A flag, constitution, and declaration of independence are created over the weekend. Panama’s first flag was designed and sewn by hand in Highland Falls, New York, using fabric bought at Macy’s.

Philippe Jean Bunau-Varilla, a French engineer associated with the bankrupt French–Panamanian canal construction company and not a permanent resident in Panama, is named Panama’s ambassador to the United States.

#### A Country Is Born

- Tuesday, November 3 Precisely at 6:00 p.m., the Colombian garrison is bribed to lay down their arms. The revolution begins, the U.S.S. *Nashville* steams into Colón harbor, and the junta proclaims Panama’s independence.
- Friday, November 6 By 1:00 p.m., the United States recognizes the sovereign state of Panama.
- Saturday, November 7 The new government sends an official delegation from Panama to the United States to instruct the Panamanian ambassador to the United States on provisions of the Panama Canal Treaty.
- Wednesday, November 18 At 6:40 p.m., the Panamanian ambassador signs the Panama Canal Treaty. At 11:30 p.m., the official Panamanian delegation arrives at a Washington, DC, railroad station and is met by their ambassador, who informs them that the treaty was signed just hours earlier.

#### The Present

- 1977 The United States agrees to relinquish control of the Panama Canal Zone on December 31, 1999.
- 1997 Autoridad del Canal de Panama, the canal authority that will assume control from the U.S. Panama Canal Commission, is created.
- 1998 Panama gives a Chinese company the right to build new port facilities on both the Pacific and Atlantic sides, to control anchorages, to hire new pilots to guide ships through the canal, and to block all passage that interferes with the company’s business.
- January 1, 2000 “The canal is ours” is the jubilant cry in Panama.
- January 17, 2000 The Pentagon sees a potential Chinese threat to the Panama Canal.
- July 2002 China pressures Panama to extend diplomatic recognition to China and drop recognition of Taiwan.
- 2005 The Panama Canal is expected to reach maximum capacity by 2010. The administrative board proposes a \$5 billion expansion to add a parallel set of locks in response to the threat of a competing project to build canals or “multimodal” systems across Mexico’s Tehuantepec isthmus. Either expand or “run the risk of eventually becoming just a regional canal.”
- 2010 A project to double the capacity of the canal begins, scheduled to be completed in 2014.

This story is a good illustration of how history and geography can affect public and political attitudes in the present and far into the future. To the Panamanians and much of Latin America, the Panama Canal is but one example of the many U.S. intrusions during the early 20th century that have tainted U.S.–Latin American relations. For the United States, the geographical importance of the Panama Canal for trade (shipping between the two coasts via the canal is cut by 8,000 miles) makes control of the canal a sensitive issue, especially if that control could be potentially hostile. That a Chinese-owned company has operational control of both the Pacific and Atlantic ports and could pose an indirect threat to the Panama Canal Zone concerns the U.S. government. The recent history of U.S. conflict with China and the history of

Western domination of parts of China create in the minds of many an adversarial relationship between the two countries. Furthermore, some wonder if Panama would be reluctant to ask the United States to intervene at some future date, perhaps fearing that the Americans might stay another 98 years. Although the probability of China sabotaging the canal is slim at best, historical baggage makes one wonder what would happen should U.S. relations with China deteriorate to the point that the canal were considered to be in jeopardy.

Sources: Bernard A. Weisberger, “Panama: Made in U.S.A.,” *American Heritage*, November 1989, pp. 24–25; Juanita Darling, “‘The Canal Is Ours’ Is Jubilant Cry in Panama,” *Los Angeles Times*, January 1, 2000, p. A1; C.J. Scchexayder, “Spain–Mexico Team Outbids Panama Canal Competitors,” *Engineering News-Record*, January 4, 2010, p. 11.

### LO1

The importance of history and geography in understanding international markets

Here we begin the discussion of the Cultural Environment of Global Markets. *Culture* can be defined as a society’s accepted basis for responding to external and internal events. To understand fully a society’s actions and its points of view, you must have an appreciation for the influence of historical events and the geographical uniqueness to which a culture has had to adapt. To interpret behavior and attitudes in a particular culture or country, a marketer must have some idea of a country’s history and geography.

The goal of this chapter is to introduce the reader to the impact of history and geography on the marketing process. The influence of history on behavior and attitudes and the influence of geography on markets, trade, and environmental issues are examined in particular.

## Historical Perspective in Global Business

History helps define a nation’s “mission,” how it perceives its neighbors, how it sees its place in the world, and how it sees itself. Insights into the history of a country are important for understanding attitudes about the role of government and business, the relations between managers and the managed, the sources of management authority, and attitudes toward foreign corporations.

To understand, explain, and appreciate a people’s image of itself and the attitudes and unconscious fears that are reflected in its view of foreign cultures, it is necessary to study the culture as it is now as well as to understand the culture as it was—that is, a country’s history.

### History and Contemporary Behavior

### LO2

The effects of history on a country’s culture

Most Americans know the most about European history, even though our major trading partners are now to our west and south. Circa 2008, China became a hot topic in the United States. It was back in 1776 as well. In a sense, American history really begins with China. Recall the Boston Tea Party: Our complaint then was the British tax and, more important, the British prohibition against Yankee traders dealing directly with merchants in Canton. So it is worthwhile to dwell for a few moments on a couple of prominent points in the history of the fast burgeoning market that is modern-day China. James Day Hodgson, former U.S. Labor Secretary and Ambassador to Japan, suggests that anyone doing business in another country should understand at least the encyclopedic version of the people’s past as a matter

**1000** First millennium ends; Y1K problem overblown—widespread fear of the end of the world proved unfounded  
**1000** Vikings settle Newfoundland  
**1004** Chinese unity crumbles with treaty between the Song and the Liao, giving the Liao full autonomy; China will remain fractured until the Mongol invasion in the 13th century (see 1206)

**1025** Navy of Cholas in southern India crushes the empire of Srivijaya in modern Myanmar to protect its trade with China  
**1054** Italy and Egypt formalize commercial relations  
**1066** William the Conqueror is victorious over Harold II in the Battle of Hastings, establishing Norman rule in England and forever linking the country with the continent

**1081** Venice and Byzantium conclude a commercial treaty (renewed in 1126)  
**1095** First of the crusades begins; Pope Urban II calls on Europe’s noblemen to help the Byzantines repel the Turks; the crusaders’ travel, stories, and goods acquired along the way help increase trade across Europe and with the Mediterranean and Asia; eighth major crusade

ends—Syria expels the Christians  
**1100** Japan begins to isolate itself from the rest of the world, not really opening up again until the mid-19th century (see 1858)  
**1100** China invents the mariner’s compass and becomes a force in trade; widespread use of paper money also helps increase trade and prosperity

of politeness, if not persuasion.<sup>1</sup> As important examples we offer a few perhaps surprising glimpses of the past that continues to influence U.S.–Asia trade relations even today.

**First Opium War and the Treaty of Nanjing (1839–1842).** During the early 1800s, the British taste for tea was creating a huge trade deficit with China. Silver bullion was flowing fast in an easterly direction. Of course, other goods were being traded, too. Exports from China also included sugar, silk, mother-of-pearl, paper, camphor, cassia, copper and alum, lacquer ware, rhubarb, various oils, bamboo, and porcelain. The British “barbarians” returned cotton and woolen textiles, iron, tin, lead, carnelian, diamonds, pepper, betel nuts, pearls, watches and clocks, coral and amber beads, birds’ nests and shark fins, and foodstuffs such as fish and rice. But the tea-for-silver swap dominated the equation.

Then came the English East India Company’s epiphany: opium. Easy to ship, high value to volume and weight ratios, and addicting to customers—what a great product! At the time, the best opium came from British India, and once the full flow began, the tea-caused trade deficit disappeared fast. The Emperor complained and issued edicts, but the opium trade burgeoned. One of the taller skyscrapers in Hong Kong today is the Jardine-Matheson Trading House.<sup>2</sup> Its circular windows are reminiscent of the portholes of its clipper-ship beginnings in the opium trade.

In 1836 some high-ranking Chinese officials advocated legalizing opium. The foreign suppliers boosted production and shipments in anticipation of exploding sales. Then the Emperor went the opposite direction and ordered the destruction of the inventories in Canton (now known as Guangzhou). By 1839 the trade was dead. The British responded by sinking junks in the Pearl River and blockading all Chinese ports.

The “magically accurate” British cannon pointed at Nanjing yielded negotiations there in 1842. The Chinese ceded Hong Kong and \$21 million pounds to the British. Ports at Xiamen, Fuzhou, Ningbo, and Shanghai were opened to trade and settlement by foreigners. Hong Kong thus became the gateway to a xenophobic China, particularly for the past 50 years. Perhaps most important, China recognized for the first time its loss of great power status.

Ultimately the Opium War became about foreign access to Chinese trade, and the treaty of Nanjing really didn’t settle the issue. A second Opium War was fought between 1857 and 1860. In that imbroglio, British and French forces combined to destroy the summer palace in Beijing. Such new humiliations yielded more freedoms for foreign traders; notably, the treaty specifically included provisions allowing Christian evangelism throughout the realm.

**Taiping Rebellion (1851–1864).** One consequence of the humiliation at the hands of foreigners was a loss of confidence in the Chinese government. The resulting disorder came to a head in Guangxi, the southernmost province of the Empire. The leader of the uprising was a peasant who grew up near Guangzhou. Hong Xiuquan aspired to be a

<sup>1</sup>James Day Hodgson, Yoshihiro Sano, and John L. Graham, *Doing Business in the New Japan, Succeeding in America’s Richest Foreign Market* (Latham, MD: Rowman & Littlefield, 2008).

<sup>2</sup>In a very interesting paper, the authors argue that choices made by Jardine’s and Swire’s (trading houses) in Asia today, for example, are an outgrowth of strategic choices first in evidence more than a century ago! See Geoffrey Jones and Tarun Khanna, “Bringing History (Back) into International Business,” *Journal of International Business Studies* 37 (2006), pp. 453–68.

**1100** Inca Empire in the Andes begins to develop, eventually encompassing about 12 million people until its destruction by the Spanish in 1553; cities specialize in certain farming and trade with others for what they don’t make  
**1132** Corporate towns in France grant charters by Henry I to protect commerce

**1189** German merchants conclude treaty with Novgorod in Russia  
**1200** Islam is introduced by spice traders to Southeast Asia  
**1200** More than 60,000 Italian merchants work and live in Constantinople  
**1206** Genghis Khan becomes the Great Khan, controlling most of northern China; after his death in 1227, the Khan

clan conquers much of Asia by midcentury and promotes trade and commerce, reviving the ancient Silk Road that linked Chinese and Western traders  
**1215** The Magna Carta, a pact between the English king and his subjects, is signed by King John, who becomes subject to the rule of law

**1229** German merchants sign trade treaty with the Prince of Smolensk in Russia  
**1252** First gold coins issued in the West since the fall of Rome, in Florence  
**1269** England institutes toll roads  
**1270** Venetian Marco Polo and his father travel through Asia and the Middle East, becoming the first European



civil servant but failed the required Confucian teachings–based exam. When in Guangzhou for his second try at the exam, he came in contact with Protestant Western missionaries and later began to have visions of God.

After unking the exam for a fourth time in 1843, he began to evangelize, presenting himself as Christ’s brother. In the next seven years, he attracted 10,000 followers. In 1851, he was crowned by his followers as the “Heavenly King” of the “Heavenly Kingdom of Peace.” Despite their adopted label, they revolted, cut off their pigtailed in defiance of the ruling Manchus, and began to march north. With the fervor of the religious zealots they were, they fought their way through the capital at Nanjing and almost to Tianjing by 1855.

But then things started to unravel. Chinese opposition forces organized. Because foreigners appreciated neither Hong’s interpretation of the scriptures, nor his 88 concubines, nor his attacks on Shanghai, they formed another army against him. Hong took his own life just before the final defeat and the recapture of Nanjing.

Estimates of the death toll from the Taiping Rebellion stand between 20 and 40 million people. We repeat: 20–40 million Chinese lives were lost. By contrast, “only” 2 million were killed in the 1949 Communist Revolution. The Taiping Rebellion is the single most horrific civil war in the history of the world. Surely Hong Xiuquan was insane. Other rebellions also occurred in China during this time; the Muslim one in the northwest is most notable (1862–78). However, based on these events in the mid-1800s, it is easy to see why the Chinese leadership has remained wary of foreign influences in general, and religious movements in particular, even today.<sup>3</sup>

**History and Japan.** Trade with Japan was a hot topic in the United States in both the 1850s and the 1980s. Likewise, unless you have a historical sense of the many changes that have buffeted Japan—seven centuries under the shogun feudal system, the isolation before the arrival of Commodore Perry in 1853, the threat of domination by colonial powers, the rise of new social classes, Western influences, the humiliation of World War II, and involvement in the international community—you will have difficulty fully understanding its contemporary behavior. Why do the Japanese have such strong loyalty toward their companies? Why is the loyalty found among participants in the Japanese distribution systems so difficult for an outsider to develop? Why are decisions made by consensus? Answers to such questions can be explained in part by Japanese history (and geography).

Loyalty to family, to country, to company, and to social groups and the strong drive to cooperate, to work together for a common cause, permeate many facets of Japanese behavior and have historical roots that date back thousands of years. Historically, loyalty and service, a sense of responsibility, and respect for discipline, training, and artistry were stressed to maintain stability and order. **Confucian philosophy**, taught throughout Japan’s history, emphasizes the basic virtue of loyalty “of friend to friend, of wife to husband, of child to parent, of brother to brother, but, above all, of subject to lord,” that is, to country.

<sup>3</sup>N. Mark Lam and John L. Graham, *Doing Business in China Now, the World’s Most Dynamic Marketplace* (New York: McGraw-Hill, 2007).

traders to establish extensive links with the region

**1279** Kublai Khan unites China and creates the Yuan (Origin) dynasty; by the time he dies in 1294, he has created a unified Mongol Empire extending from China to eastern Europe

**1300** The early stirrings of the Renaissance begin in Europe as people are exposed to other cultures, primarily through merchants and trade; trade fairs are held in numerous European cities

**1315** A great famine hits Europe, lasting two years, more widespread and longer than any before

**1348** The Plague (the Black Death) kills one-fourth to one-third of the population in Europe (25 million people) in just three years, disrupting trade as cities try to prevent the spread of the disease by restricting visitors; it likely started in Asia in the 1320s; massive inflation took hold, because goods could only be obtained

locally; serfs were in high demand and began moving to higher wage payers, forever altering Europe’s labor landscape

**1358** German Hanseatic League officially forms by the Hansa companies of merchants for trade and mutual protection, eventually encompassing more than 70 cities and lasting nearly 300 years

**1375** Timur Lang the Turk conquers lands from Moscow to Delhi

**1381** English rioters kill foreign Flemish traders as part of the 100,000-strong peasant rebellion against Richard II, which was led by Wat Tyler in a failed attempt to throw off the yoke of feudalism

**1392** England prohibits foreigners from retailing goods in the country

**1400** Koreans develop movable-type printing (see 1450)

A fundamental premise of Japanese ideology reflects the importance of cooperation for the collective good. Japanese achieve consensus by agreeing that all will unite against outside pressures that threaten the collective good. A historical perspective gives the foreigner in Japan a basis on which to begin developing cultural sensitivity and a better understanding of contemporary Japanese behavior.

## History Is Subjective

### LO3

How culture interprets events through its own eyes

History is important in understanding why a country behaves as it does, but history from whose viewpoint? Historical events always are viewed from one's own biases and self-reference criteria (SRC), and thus, what is recorded by one historian may not be what another records, especially if the historians are from different cultures. Historians traditionally try to be objective, but few can help filtering events through their own cultural biases.<sup>4</sup>

Our perspective not only influences our view of history but also subtly influences our view of many other matters. For example, maps of the world sold in the United States generally show the United States at the center, whereas maps in Britain show Britain at the center, and so on for other nations.

A crucial element in understanding any nation's business and political culture is the subjective perception of its history. Why do Mexicans have a love-hate relationship with the United States? Why were Mexicans required to have majority ownership in most foreign investments until recently? Why did dictator General Porfirio Díaz lament, "Poor Mexico, so far from God, so near the United States"? Why? Because Mexicans see the United States as a threat to their political, economic, and cultural sovereignty.

Most citizens of the United States are mystified by such feelings. After all, the United States has always been Mexico's good neighbor. Most would agree with President John F. Kennedy's proclamation during a visit to Mexico that "Geography has made us neighbors, tradition has made us friends." North Americans may be surprised to learn that most Mexicans "felt it more accurate to say 'Geography has made us closer, tradition has made us far apart.'"<sup>5</sup>

Citizens of the United States feel they have been good neighbors. They see the Monroe Doctrine as protection for Latin America from European colonization and the intervention of Europe in the governments of the Western Hemisphere. Latin Americans, in contrast, tend to see the Monroe Doctrine as an offensive expression of U.S. influence in Latin America. To put it another way, "Europe keep your hands off—Latin America is only for the United States," an attitude perhaps typified by former U.S. President Ulysses S. Grant, who, in a speech in Mexico in 1880, described Mexico as a "magnificent mine" that lay waiting south of the border for North American interests.

United States Marines sing with pride of their exploits "from the halls of Montezuma to the shores of Tripoli." To the Mexican, the exploit to which the "halls of Montezuma"

<sup>4</sup>An example of such biases is the differing perceptions of Turkey by European Union members in deciding on Turkey's membership in the EU. See "Which Turkey?" *The Economist*, March 17, 2005.

<sup>5</sup>For an insightful review of some of the issues that have affected relations between the United States and Mexico, see John Skirius, "Railroad, Oil and Other Foreign Interest in the Mexican Revolution, 1911–1914," *Journal of Latin American Studies*, February 2003, p. 25.

**1404** Chinese prohibit private trading in foreign countries, but foreign ships may trade in China with official permission

**1415** Chinese begin significant trading with Africa through government expeditions—some believe they sailed to North America as well in 1421

**1425** Hanseatic city of Brugge becomes the first Atlantic seaport to be a major trading center

**1427** Aztec Empire is created by Itzcoatl; it will encompass about 6 million people before its destruction in 1519

**1430** Portuguese Prince Henry the Navigator explores west African coast to promote trade

**1441** Mayan Empire collapses as the city of Mayapán is destroyed in a revolt

**1450** Renaissance takes hold in Florence, its traditional birthplace

**1450** Gutenberg Bible is first book printed with movable type; the ability to mass produce books creates an information revolution

**1453** Byzantine Empire is destroyed as Muhammad II sacks Constantinople (renaming it Istanbul)

**1464** French royal mail service established by Louis XI

**1470** Early trademark piracy committed by Persians

who copy mass-produced Chinese porcelain to capitalize on its popularity in foreign countries

**1479** Under the Treaty of Constantinople, in exchange for trading rights in the Black Sea, Venice agrees to pay tribute to the Ottoman Empire

**1482** English organize a postal system that features fresh relays of horses every 20 miles

The Monumento de Los Niños Heroes honors six young cadets who, during the Mexican–American War of 1847, chose death over surrender. The Mexican–American War is important in Mexican history and helps explain, in part, Mexico’s love–hate relationship with the United States. (© Dave G. Houser/Corbis)



refers is remembered as U.S. troops marching all the way to the center of Mexico City and extracting as tribute 890,000 square miles that became Arizona, California, New Mexico, and Texas (see Exhibit 3.1). A prominent monument at the entrance of Chapultepec Park recognizes *Los Niños Heroes* (the boy heroes), who resisted U.S. troops, wrapped themselves in Mexican flags, and jumped to their deaths rather than surrender. Mexicans recount the heroism of *Los Niños Heroes*<sup>6</sup> and the loss of Mexican territory to the United States every September 13, when the president of Mexico, the cabinet, and the diplomatic corps assemble at the Mexico City fortress to recall the defeat that led to the “*despojo territorial*” (territorial plunder).

The Mexican Revolution, which overthrew the dictator Díaz and launched the modern Mexican state, is particularly remembered for the expulsion of foreigners—most notably North American businessmen who were the most visible of the wealthy and influential entrepreneurs in Mexico.

<sup>6</sup>When the United Nations recommended that all countries set aside a single day each year to honor children, Mexico designated April 30 as “Día de Los Niños.” Interestingly, this holiday often coincides with Saint Patrick’s Day celebrations, which include recognition of the San Patricios, the Irish-American battalion that fought with the Mexicans in the Mexican–American War. See Carol Sowers, “El Día de Los Niños Adds International Touch to Celebration,” *Arizona Republic*, April 29, 2005.

**1488** Bartolomeu Dias sails around the coast of Africa; this, along with the voyages of Christopher Columbus, ushers in the era of sea travel  
**1492** Christopher Columbus “discovers” the New World  
**1494** Portugal and Spain divide the unexplored world between them with the Treaty of Tordesillas  
**1500** Rise of mercantilism, the accumulation of wealth by the state to increase power, in western Europe; states without gold or silver mines try to control

trade to maintain a surplus and accumulate gold and silver; Englishman Thomas Mun was one of the great proponents in 1600, who realized that the overall balance of trade was the important factor, not whether each individual trade resulted in a surplus  
**1500** Slave trade becomes a major component of commerce  
**1504** Regular postal service established among Vienna, Brussels, and Madrid  
**1520** First chocolate brought from Mexico to Spain

**1521** Mexico is conquered by Hernán Cortés after Aztec ruler Montezuma is accidentally killed  
**1522** Magellan’s expedition completes its three-year sail around the world; it is the first successful circumnavigation  
**1531** Antwerp stock exchange is the first exchange to move into its own building, signifying its importance in financing commercial enterprises throughout Europe and the rising importance of private

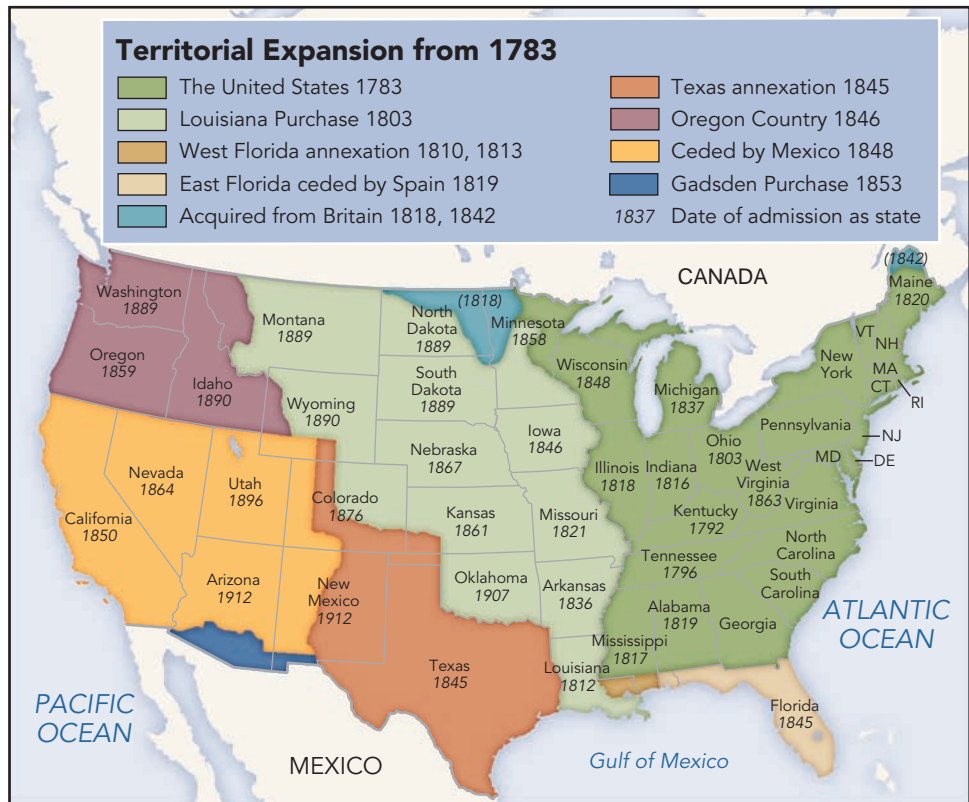
trade and commerce; Antwerp emerges as a trading capital  
**1532** Brazil is colonized by the Portuguese  
**1534** English break from the Catholic Church, ending its dominance of politics and trade throughout Europe, as Henry VIII creates the Church of England  
**1553** South American Incan Empire ends with conquest by Spanish; the Incas had created an extensive area of trade, complete with an infrastructure of roads and canals



**Exhibit 3.1****Territorial Expansion of United States from 1783**

The United States expanded westward to the Pacific through a series of financial deals, negotiated settlements, and forcible annexations. The acquisition of territory from Mexico began with the Battle of San Jacinto in 1836, when Texas staged a successful revolt against the rule of Mexico and became The Republic of Texas—later to join the Union in 1845. The Mexican War (1846–1848) resulted in Mexico ceding California and a large part of the West to the United States.

Source: From *Oxford Atlas of the World*, 10th ed., 2002. Reprinted with permission of Philip Maps.

**Manifest Destiny and the Monroe Doctrine**

**Manifest Destiny** and the Monroe Doctrine were accepted as the basis for U.S. foreign policy during much of the 19th and 20th centuries.<sup>7</sup> Manifest Destiny, in its broadest interpretation, meant that Americans were a chosen people ordained by God to create a model society. More specifically, it referred to the territorial expansion of the United States from the Atlantic to the Pacific. The idea of Manifest Destiny was used to justify the U.S. annexation of Texas, Oregon, New Mexico, and California and, later, U.S. involvement in Cuba, Alaska, Hawaii, and the Philippines. Exhibit 3.1 illustrates when and by what means the present United States was acquired.

The **Monroe Doctrine**, a cornerstone of early U.S. foreign policy, was enunciated by President James Monroe in a public statement proclaiming three basic dicta: no further European colonization in the New World, abstention of the United States from European

<sup>7</sup>Some say even into the 21st century. See “Manifest Destiny Warmed Up?” *The Economist*, August 14, 2003. Of course, others disagree. See Joseph Contreras, “Roll Over Monroe: The Influence the United States Once Claimed as a Divine Right in Latin America is Slipping away Fast,” *Newsweek International*, December 10, 2007.

**1555** Tobacco trade begins after its introduction to Europe by Spanish and Portuguese traders

**1557** Spanish crown suffers first of numerous bankruptcies, discouraging cross-border lending

**1561** Via Dutch traders, tulips come to Europe from Near East for first time

**1564** William Shakespeare is born; many of his plays are stories of merchant traders

**1567** Typhoid fever, imported from Europe, kills two million Indians in South America

**1588** Spanish Armada defeated by British, heralding Britain’s emergence as the world’s greatest naval power; this power will enable Britain to colonize many regions of the globe and lead to its becoming the world’s commercially dominant power for the next 300 years

**1596** First flush toilet is developed for Britain’s Queen Elizabeth I

**1597** Holy Roman Empire expels English merchants in retaliation for English treatment of Hanseatic League

**1600** Potatoes are brought from South America to Europe, where they quickly spread to the rest of world and become a staple of agricultural production

**1600** Japan begins trading silver for foreign goods

**1600** Britain’s Queen Elizabeth I grants charter to the East India Company, which will dominate trade with the East until its demise in 1857

**1601** France makes postal agreements with neighboring states

**1602** Dutch charter their own East India Company, which will dominate the South Asian coffee and spice trade

**1607** British colony of Jamestown built



political affairs, and nonintervention by European governments in the governments of the Western Hemisphere.

After 1870, interpretation of the Monroe Doctrine became increasingly broad. In 1881, its principles were evoked in discussing the development of a canal across the Isthmus of Panama. Theodore Roosevelt applied the Monroe Doctrine with an extension that became known as the **Roosevelt Corollary**. The corollary stated that not only would the United States prohibit non-American intervention in Latin American affairs, but it would also police the area and guarantee that Latin American nations met their international obligations. The corollary sanctioning American intervention was applied in 1905 when Roosevelt forced the Dominican Republic to accept the appointment of an American economic adviser, who quickly became the financial director of the small state. It was also used in the acquisition of the Panama Canal Zone from Colombia in 1903 and the formation of a provisional government in Cuba in 1906.

The manner in which the United States acquired the land for the Panama Canal Zone typifies the Roosevelt Corollary—whatever is good for the United States is justifiable. As the Global Perspective at the beginning of this chapter illustrates, the creation of the country of Panama was a total fabrication of the United States.<sup>8</sup>

According to U.S. history, these Latin American adventures were a justifiable part of our foreign policy; to Latin Americans, they were unwelcome intrusions in Latin American affairs. This perspective has been constantly reinforced by U.S. intervention in Latin America since 1945 (see Exhibit 3.2). The way historical events are recorded and interpreted in one culture can differ substantially from the way those same events are recorded and interpreted in another. From the U.S. view, each of the interventions illustrated in Exhibit 3.2 was justified. A comparison of histories goes a long way in explaining the differences in outlooks and behavior of people on both sides of the border. Many Mexicans believe that their “good neighbor” to the north is not reluctant to throw its weight around when it wants something. Suspicions that self-interest is the primary motivation for good relations with Mexico abound.<sup>9</sup>

History viewed from a Latin American perspective explains how a national leader, under adverse economic conditions, can point a finger at the United States or a U.S. multinational corporation and evoke a special emotional, popular reaction to divert attention away from the government in power. As a case in point, after the U.S. House of Representatives voted to censure Mexico for drug corruption, President Ernesto Zedillo came under pressure to

#### LO4

How long-past U.S. international policies still affect customer attitudes abroad

<sup>8</sup>For an interesting discussion of how past U.S. foreign interventions affect attitudes about U.S. involvement in Iraq, see “Anti-Americanism: The View from Abroad,” *The Economist*, February 17, 2005.

<sup>9</sup>Many Latin Americans’ relation with the Bush administration’s first-term pronouncements that the United States was looking south “not as an afterthought but as a fundamental commitment”—that a region “too often separated by history or rivalry and resentment” should prepare itself for the start of a “new era” of cooperation—soon became disappointment as the war on terror turned U.S. attention away from Latin America. Marcela Sanchez, “Bush, Looking Every Which Way but South,” *Washington Post*, January 6, 2005.

**1609** Dutch begin fur trade through Manhattan  
**1611** Japan gives Dutch limited permission to trade  
**1612** British East India Company builds its first factory in India  
**1620** *Mayflower* sails for the New World  
**1620** Father of the Scientific Revolution, Francis Bacon, publishes *Novum Organum*, promoting inductive reasoning

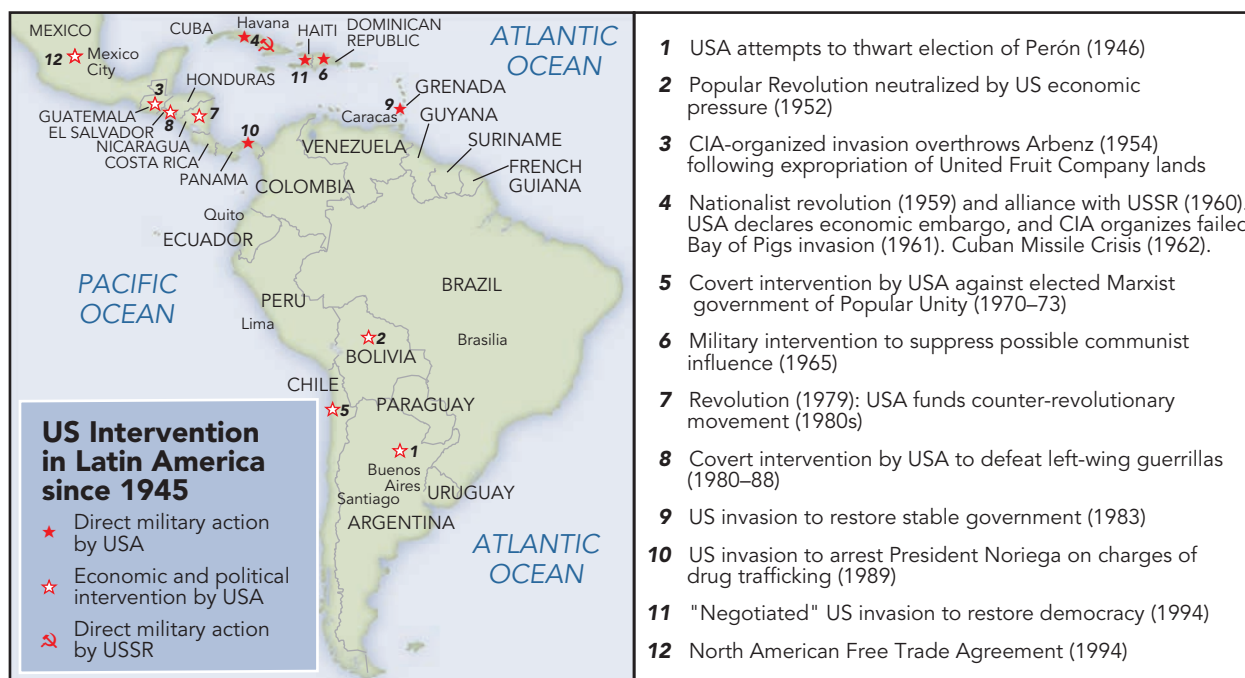
through experimentation and observation  
**1625** Dutch jurist Hugo Grotius, sometimes called the father of international law, publishes *On the Laws of War and Peace*  
**1636** Harvard University founded  
**1637** Dutch “tulip mania” results in history’s first boom-bust market crash  
**1651** English pass first of so-called Navigation Acts to restrict Dutch trade by forcing

colonies to trade only with English ships  
**1654** Spain and Germany develop hereditary land rights, a concept that will help lead to the creation of great wealth in single families and thus to the development of private commercial empires  
**1687** Apple falling on Newton’s head leads to his publication of the law of gravity  
**1694** The Bank of England is established; it offers loans to

private individuals at 8 percent interest  
**1698** First steam engine is invented  
**1719** French consolidate their trade in Asia into one company, the French East India Company; rival British East India Company maintains its grip on the region’s trade, however, and French revert to individual company trading 60 years later

## Exhibit 3.2

## U.S. Intervention in Latin America Since 1945



Source: From *Oxford Atlas of the World*, 10th ed., 2002. Reprinted with permission of Philips Maps.

take a hard stand with Washington. He used the anniversary of Mexico's 1938 expropriation of the oil industry from foreign companies to launch a strong nationalist attack. He praised the state oil monopoly Pemex as a "symbol of our historical struggles for sovereignty." Union members cheered him on, waving a huge banner that read: "In 1938 Mexico was 'decertified' because it expropriated its oil and it won—today we were decertified for defending our dignity and sovereignty." Apparently Venezuelan President Hugo Chavez was listening, based on his more recent nationalization of foreign oil company assets in the Orinoco River Basin<sup>10</sup> and his recent renaming of the country the Bolivarian Republic of Venezuela.<sup>11</sup>

<sup>10</sup>"Venezuela: Spirit of the Monroe Doctrine," *Washington Times*, June 10, 2007, p. B5; Brian Ellsworth, "Oil at \$100, Venezuela's Chavez Faces Industry Slump," *Reuters*, January 4, 2008.

<sup>11</sup>"Venezuela: Chavez's New Currency Targets Inflation," *Tulsa World*, January 1, 2008, p. A6.

**1725** Rise of Physiocrats, followers of the economic philosopher François Quesnay, who believed that production, not trade, created wealth and that natural law should rule, which meant producers should be able to exchange goods freely; movement influenced Adam Smith's ideas promoting free trade

**1740** Maria Theresa becomes empress of the Holy Roman Empire (until 1780); she ends

serfdom and strengthens the power of the state

**1748** First modern, scientifically drawn map, the *Carte Géométrique de la France*, comprising 182 sheets, was authorized and subsequently drawn by the French Academy; Louis XV proclaimed that the new map, with more accurate data, lost more territory than his wars of conquest had gained

**1750** Benjamin Franklin shows that lightning is a form of elec-

tricity by conducting it through the wet string of a kite

**1750** Industrial Revolution begins and takes off with the manufacture, in 1780, of the steam engine to drive machines—increased productivity and consumption follow (as do poor working conditions and increased hardships for workers)

**1760** Chinese begin strict regulation of foreign trade to last nearly a century when they permit Europeans

to do business only in a small area outside Canton and only with appointed Chinese traders

**1764** British victories in India begin Britain's dominance of India, Eastern trade, and trade routes

**1764** British begin numbering houses, making mail delivery more efficient and providing the means for the development of direct mail merchants centuries later

## CROSSING BORDERS 3.1

## Microsoft Adapts Encarta to “Local History”

Adapting to the local culture is an important aspect of strategy for many products. Understanding a country's history helps achieve that goal. Microsoft has nine different editions reflecting local “history” to be sure that its Encarta multimedia encyclopedia on CD-ROM does not contain cultural blunders. As a consequence, it often reflects different and sometimes contradictory understandings of the same historical events. For example, who invented the telephone? In the U.S., U.K., and German editions, it is Alexander Graham Bell, but ask the question in the Italian edition, and your answer is Antonio Meucci, an Italian-American candle maker whom Italians believe beat Bell by five years. For electric light bulbs, it is Thomas Alva Edison in the United States, but in the United Kingdom, it is the British inventor Joseph Swan. Other historical events reflect local perceptions. The nationalization of the Suez Canal, for example, in the U.S. edition is a decisive intervention by superpowers. In the French and U.K. editions, it is summed up as a “humiliating reversal” for Britain and France—a phrase that does not appear in the U.S. edition.

Although Microsoft is on the mark by adapting these events to their local historical context, it has, on occasion, missed the boat on geography. South Korean ire was raised when the South Korean island of Ullung-do was placed within Japan's borders and when the Chon-Ji

Lake, where the first Korean is said to have descended from heaven, was located in China. And finally, an embarrassed Microsoft apologized to the people of Thailand for referring to Bangkok as a commercial sex center, assuring the women's activists group that protested that the revised version would “include all the great content that best reflects its rich culture and history.”

Microsoft also bows to political pressure. The government of Turkey stopped distribution of an Encarta edition with the name Kurdistan used to denote a region of southeastern Turkey on a map. Hence Microsoft removed the name Kurdistan from the map. Governments frequently lobby the company to show their preferred boundaries on maps. When the border between Chile and Argentina in the southern Andes was in dispute, both countries lobbied for their preferred boundary, and the solution both countries agreed to was—no line.

But our fun stories about changes to Encarta must come to an end, because the online encyclopedia has itself become a topic of history. Microsoft folded the entire Encarta operation without explanation in 2009; most analysts agree Wikipedia simply did it in.

Sources: Kevin J. Delaney, “Microsoft's Encarta Has Different Facts for Different Folks,” *The Wall Street Journal*, June 25, 1999, p. A1; “Why You Won't Find Kurdistan on a Microsoft Map of Turkey,” *Geographical*, November 1, 2004; Nick Winfield, “Microsoft to Shut Encarta as Free Sites Alter Market,” *The Wall Street Journal*, March 31, 2009, p. B3.

These leaders might be cheered for **expropriation** or con scation of foreign investments, even though the investments were making important contributions to their economies. To understand a country's attitudes, prejudices, and fears, it is necessary to look beyond the surface of current events to the inner subtleties of the country's entire past for clues. Three comments by Mexicans best summarize this section:

History is taught one way in Mexico and another way in the United States—the United States robbed us but we are portrayed in U.S. textbooks as bandits who invaded Texas.

We may not like gringos for historical reasons, but today the world is dividing into commercial blocks, and we are handcuffed to each other for better or worse.

We always have been and we continue to be a colony of the United States.

**1773** Boston Tea Party symbolizes start of American Revolution; impetus comes from American merchants trying to take control of distribution of goods that were being controlled exclusively by Britain

**1776** American Declaration of Independence proclaims the colonies' rights to determine their own destiny,

particularly their own economic destiny

**1776** Theory of modern capitalism and free trade expressed by Adam Smith in *The Wealth of Nations*; he theorized that countries would only produce and export goods that they were able to produce more cheaply than could trading partners; he demonstrates that mercantilists were wrong: It

is not gold or silver that will enhance the state, but the *material* that can be purchased with it

**1783** Treaty of Paris officially ends the American Revolution following British surrender to American troops at Yorktown in 1781

**1787** U.S. Constitution approved; it becomes a model document for constitutions for

at least the next two centuries; written constitutions will help stabilize many countries and encourage foreign investment and trade with them

**1789** French Revolution begins; it will alter the power structure in Europe and help lead to the introduction of laws protecting the individual and to limited democracy in the region

**Geography and Global Markets** Geography, the study of Earth's surface, climate, continents, countries, peoples, industries, and resources, is an element of the uncontrollable environment that confronts every marketer but that receives scant attention.<sup>12</sup> The tendency is to study the aspects of geography as isolated entities rather than as important causal agents of the marketing environment. Geography is much more than memorizing countries, capitals, and rivers. It also includes an understanding of how a society's culture and economy are affected as a nation struggles to supply its people's needs within the limits imposed by its physical makeup. Thus, the study of geography is important in the evaluation of markets and their environment.

**LO5**

The effect of geographic diversity on economic profiles of a country

This section discusses the important geographic characteristics a marketer needs to consider when assessing the environmental aspects of marketing. Examining the world as a whole provides the reader with a broad view of world markets and an awareness of the effects of geographic diversity on the economic profiles of various nations. Climate and topography are examined as facets of the broader and more important elements of geography. A brief look at Earth's resources and population—the building blocks of world markets—completes the presentation on geography and global markets.

### Climate and Topography

Altitude, humidity, and temperature extremes are climatic features that affect the uses and functions of products and equipment. Products that perform well in temperate zones may deteriorate rapidly or require special cooling or lubrication to function adequately in tropical zones. Manufacturers have found that construction equipment used in the United States requires extensive modifications to cope with the intense heat and dust of the Sahara Desert. A Taiwanese company sent a shipment of drinking glasses to a buyer in the Middle East. The glasses were packed in wooden crates with hay used as dunnage to prevent breakage. The glasses arrived in shards. Why? When the crates moved to the warmer, less humid climate of the Middle East, the moisture content of the hay dropped significantly and shriveled to a point that it offered no protection.

**LO6**

Why marketers need to be responsive to the geography of a country

Within even a single national market, climate can be sufficiently diverse to require major adjustments. In Ghana, a product adaptable to the entire market must operate effectively in extreme desert heat and low humidity and in tropical rainforests with consistently high humidity. Bosch-Siemens washing machines designed for European countries require spin cycles to range from a minimum spin cycle of 500 rpm to a maximum of 1,600 rpm: Because the sun does not shine regularly in Germany or in Scandinavia, washing machines must have a 1,600 rpm spin cycle because users do not have the luxury of hanging them out to dry. In Italy and Spain, however, clothes can be damp, because the abundant sunshine is sufficient to justify a spin cycle speed of 500 rpm.

Different seasons between the northern and southern hemispheres also affect global strategies. JCPenney had planned to open five stores in Chile as part of its expansion into countries below the equator. It wanted to capitalize on its vast bulk buying might for its North American, Mexican, and Brazilian stores to provide low prices for its expansion into South America. After opening its first store in Chile, the company realized that the plan was

<sup>12</sup>The importance of geography in understanding global challenges that exist today is discussed in Harm J. DeBlij, *Why Geography Matters* (New York: Oxford University Press, 2005).

**1792** Gas lighting introduced; within three decades, most major European and U.S. cities will use gas lights

**1804** Steam locomotive introduced; it will become the dominant form of transport of goods and people until the 20th century, when trucks and airplanes become commercially viable

**1804** Napoleon crowns himself emperor, overthrowing the French revolutionary government, and tries to conquer Europe (after already occupying Egypt as a means of cutting off British trade with the East), the failure of which results in the redrawing of national boundaries in Europe and Latin America

**1807** Robert Fulton's steamboat is the first to usher in a new age of transport when his *Clermont* sails from New York to Albany

**1807** French Napoleonic Code issued and eventually becomes a model of civil law adopted by many nations around the world

**1807** U.S. President Thomas Jefferson bans trade with Europe in an effort to convince warring British and French ships to leave neutral U.S. trading ships alone

**1810** Frenchman Nicolas Appert successfully cans food and prevents spoilage



## CROSSING BORDERS 3.2

### Innovation and the Water Shortage, from Fog to Kid Power

When you live in Chungungo, Chile, one of the country's most arid regions with no nearby source of water, you drink fog. Of course! Thanks to a legend and resourceful Canadian and Chilean scientists, Chungungo now has its own supply of drinkable water after a 20-year drought. Before this new source of water, Chungungo depended on water trucks that came twice a week.

Chungungo has always been an arid area, and legend has it that the region's original inhabitants used to worship trees. They considered them sacred because a permanent flow of water sprang from the treetops, producing a constant interior rain. The legend was right—the trees produced rain! Thick fog forms along the coast. As it moves inland and is forced to rise against the hills, it changes into tiny raindrops, which are in turn retained by the tree leaves, producing the constant source of rain. Scientists set out to take advantage of this natural phenomenon.

The nearby ancient eucalyptus forest of El Tofo Hill provided the clue that scientists needed to create an ingenious water-supply system. To duplicate the water-bearing effect of the trees, they installed 86 “fog catchers” on the top of the hill—huge nets supported by 12-foot eucalyptus pillars, with water containers at their

base. About 1,900 gallons of water are collected each day and then piped into town. This small-scale system is cheap (about one-fifth as expensive as having water trucked in), clean, and provides the local people with a steady supply of drinking water.

In sub-Saharan Africa, inventive folks have come up with a new way to bring water up from wells. A life-changing and life-saving invention—the PlayPump water system—provides easy access to clean drinking water, brings joy to children, and leads to improvements in health, education, gender equality, and economic development in more than 1,000 rural villages in South Africa, Swaziland, Mozambique, and Zambia. The PlayPump systems are innovative, sustainable, patented water pumps powered by children at play. Installed near schools, the PlayPump system doubles as a water pump and a merry-go-round. The PlayPump system also provides one of the only ways to reach rural and peri-urban communities with potentially life-saving public health messages. Please see the accompanying pictures of a new solution to one of humankind's oldest problems.

Sources: “Drinking Fog,” *World Press Review*; “Silver Lining,” *The Economist*, February 5, 2000, p. 75; “UNESCO Water Portal Weekly Update No. 89: Fog,” April 15, 2005, <http://www.unesco.org/water/news/newsletter/89.shtml>; <http://www.playpumps.org>, 2008; Aliah D. Wright, “Dive into Clean Water,” *HRMagazine* 54, no. 6 (2009), p. 4.

not going to work—when it was buying winter merchandise in North America, it needed summer merchandise in South America. The company quickly sold its one store in Chile; its expansion into South America was limited to Brazil.<sup>13</sup>

Mountains, oceans, seas, jungles, and other geographical features can pose serious impediments to economic growth and trade. For example, mountain ranges cover South America's west coast for 4,500 miles, with an average height of 13,000 feet and a width of 300 to 400 miles. This natural, formidable barrier has precluded the establishment of commercial routes between the Pacific and Atlantic coasts. South America's natural barriers inhibit both national and regional growth, trade, and communication. Geographic hurdles have a direct effect on a country's economy, markets, and the related activities of

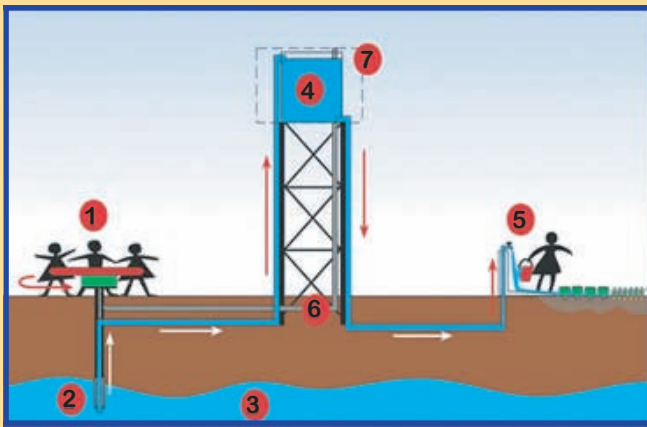
<sup>13</sup>Miriam Jordan, “Penney Blends Two Business Cultures,” *The Wall Street Journal*, April 5, 2001.

**1810** Following Napoleon's invasion of Spain and Portugal, Simón Bolívar begins wars of independence for Spanish colonies in Latin America, leading to new governments in Bolivia, Columbia, Ecuador, Peru, and Venezuela  
**1814** First practical steam locomotive is built by George Stephenson in England, leading to the birth of railroad transportation

in 1825 with the first train carrying 450 passengers at 15 miles per hour  
**1815** Napoleon defeated at Battle of Waterloo and gives up throne days later  
**1815** British build roads of crushed stone, greatly improving the quality and speed of road travel  
**1817** David Ricardo publishes *Principles of Political Economy and Taxation*, in which he

proposes modern trade theory: Comparative advantage drives trade; countries will produce and export goods for which they have a *comparative* advantage as opposed to Adam Smith's *absolute* advantage (see 1776)  
**1821** Britain is first to adopt gold standard to back the value of its currency  
**1823** U.S. President James Monroe promulgates the doctrine bearing his name that

declares the Americas closed to colonization in an attempt to assert U.S. influence over the region  
**1837** Reign of Britain's Queen Victoria begins; she oversees the growth of the British Empire and Britain's emergence as an industrial power (she dies in 1901)  
**1837** Electronic telegraph begins wide commercial use, transmitting information, including production orders, swiftly



While children have fun spinning on the PlayPump merry-go-round, (1) clean water is pumped (2) from underground (3) into a 2,500-liter tank, (4) standing seven meters above the ground. A simple tap (5) makes it easy for adults and children to draw water. Excess water is diverted from the storage tank back down into the base hole (6). The water storage tank (7) provides rare opportunities to advertise to outlying communities. All four sides of the tank are leased as billboards, with two sides for consumer advertising and the other two sides for health and educational messages. The revenue generated from this unique model pays for pump maintenance. Capable of producing up to 1,400 liters of water per hour at 16 rpm from a depth of 40 meters, it is effective up to a depth of 100 meters. See <http://www.playpumps.org>. (right: © Frimmel Smith/PlayPump)

communication and distribution in China, Russia, India, and Canada as well. As countries seek economic opportunities and the challenges of the global marketplace, they invest in infrastructure to overcome such barriers. Once seen as natural protection from potentially hostile neighbors, physical barriers that exist within Europe are now seen as impediments to efficient trade in an integrated economic union.

For decades the British resisted a tunnel under the English Channel—they did not trust the French or any other European country and saw the channel as protection. But when they became members of the European Union, economic reality meant the channel tunnel had to be built to facilitate trade with other EU members. Now you can take a bullet train through the Channel, but even a decade after it opened, its finances are still a bit shaky,<sup>14</sup> and recently, undocumented workers have tried to walk the underwater route to reach England.<sup>15</sup>

<sup>14</sup>Robert Lea, “Channel Rail Link Firm Heads for a Multi-Billion Break-Up,” *Evening Standard*, November 1, 2007, p. 28.

<sup>15</sup>“Illegals in the Channel,” *Daily Express*, January 4, 2008, p. 39.

**1839** Process for recording negative images on paper is introduced in England, the precursor to modern film technology  
**1841** Briton David Livingstone begins 30 years of exploring in Africa  
**1842** Hong Kong ceded to Britain with the Treaty of Nanjing following the Opium War; the city will become a financial and trading center for Asia

**1844** Chinese open five ports to U.S. ships  
**1847** First government-backed postage stamps issued by United States, leading to more certain and efficient communication by post  
**1848** John Stuart Mill publishes *Principles of Political Economy*, completing the modern theory of trade by stating that gains

from trade are reflected in the strength of the *reciprocal* demand for imports and exports and that gains would come from better terms of trade (see 1817)  
**1848** The Communist Manifesto, by Germans Karl Marx and Friedrich Engels, is issued; it will become the basis for the communist movements of the 20th century

**1851** First international world's fair held in London, showcasing new technology  
**1856** Declaration of Paris recognizes the principle of free movement for trade, even in wartime—blockades could only extend along the enemy's coast; it also establishes the practice of allowing the accession to treaties of nations other than the original signatories

This advertisement provides the only time we have seen a human vomiting to market a product. The product advertised treats altitude sickness. The billboard appears in the Lima, Peru, airport, targeting tourists traveling from sea level to Cuzco and Machu Picchu (pictured in the scenic background). Cuzco, the old Inca capital, rises more than 11,000 feet in altitude, and many foreign tourists visiting there suffer this particular sort of *tourista*.



From the days of Hannibal, the Alps have served as an important physical barrier and provided European countries protection from one another. But with the EU expansion, the Alps became a major impediment to trade. Truck traffic between southern Germany and northern Italy, which choked highways through some of Switzerland's most treacherous mountain roads and pristine nature areas, was not only burdensome for all travelers but becoming economically unacceptable. The solution, the 21-mile Loetschberg Tunnel, which opened in 2007, burrows under the Alps and trims the time trains need to cross between Germany and Italy from a three-and-a-half-hour trip to less than two hours. By 2014, the 36-mile Gotthard Tunnel will provide additional rail coverage for the area and be the world's longest rail tunnel.

## Geography, Nature, and Economic Growth

Always on the slim margin between subsistence and disaster, less-privileged countries suffer disproportionately from natural and human-assisted catastrophes.<sup>16</sup> The Haitian earthquake disaster of 2010 is perhaps the prominent example. Climate and topography coupled with civil wars, poor environmental policies, and natural disasters push these countries further into economic stagnation. Without irrigation and water management, droughts, floods, and soil erosion afflict them, often leading to creeping deserts that reduce the long-term fertility of the land.<sup>17</sup> Population increases, deforestation, and overgrazing intensify the impact of

<sup>16</sup>“Asia’s Tsunami: Helping the Survivors,” *The Economist*, January 5, 2005.

<sup>17</sup>See Map 2, “Global Climate,” in the World Maps section for a view of the diversity of the world’s climate. The climatic phenomenon of El Niño wreaks havoc with weather patterns and is linked to crop failures, famine, forest fires, dust and sand storms, and other disasters associated with either an overabundance or a lack of rain.

**1857** Russia and France sign trade treaty

**1858** Ansei Commercial Treaties with Japan open the formerly closed country to trade with the West (treaties follow “opening” of Japan to the West by American Matthew Perry in 1854)

**1860** The Cobden Treaty aims to create free trade by reducing or eliminating tariffs between Britain and France; also

leads to most-favored-nation status in bilateral agreements and eventually to multilateral agreements

**1860** Passports are introduced in the United States to regulate foreign travel

**1866** The principle of the electric dynamo is found by German Werner Siemens, who will produce the first electric power transmission system

**1866** The trans-Atlantic cable is completed, allowing nearly instant (telegraphic) communication between the United States and Europe

**1869** Suez Canal completed after 11 years of construction; the canal significantly cuts the time for travel between Europe and Asia, shortening, for example, the trip between Britain and India by 4,000 miles

**1869** First U.S. transcontinental rail route is completed, heralding a boon for commerce; first commercially viable typewriter patented; until computer word processing becomes common more than a century later, the typewriter enables anyone to produce documents quickly and legibly

**1873** United States adopts the gold standard to fix the international value of the dollar



drought and lead to malnutrition and ill health, further undermining these countries' abilities to solve their problems. Cyclones cannot be prevented, nor can inadequate rainfall, but means to control their effects are available. Unfortunately, each disaster seems to push developing countries further away from effective solutions. Countries that suffer the most from major calamities are among the poorest in the world.<sup>18</sup> Many have neither the capital nor the technical ability to minimize the effects of natural phenomena; they are at the mercy of nature.

As countries prosper, natural barriers are overcome. Tunnels and canals are dug and bridges and dams are built in an effort to control or to adapt to climate, topography, and the recurring extremes of nature. Humankind has been reasonably successful in overcoming or minimizing the effects of geographical barriers and natural disasters, but as they do so, they must contend with problems of their own making. The construction of dams is a good example of how an attempt to harness nature for good has a bad side. Developing countries consider dams a cost-effective solution to a host of problems. Dams create electricity, help control floods, provide water for irrigation during dry periods, and can be a rich source of fish. However, there are side effects; dams displace people (the Three Gorges Dam in China will displace 1.3 million people<sup>19</sup> while attracting tourists<sup>20</sup>), and silt that ultimately clogs the reservoir is no longer carried downstream to replenish the soil and add nutrients. Similarly, the Narmada Valley Dam Project in India will provide electricity, flood control, and irrigation, but it has already displaced tens of thousands of people, and as the benefits are measured against social and environmental costs, questions of its efficacy are being raised. In short, the need for gigantic projects such as these must be measured against their social and environmental costs.

As the global rush toward industrialization and economic growth accelerates, environmental issues become more apparent. Disruption of ecosystems, relocation of people, inadequate hazardous waste management, and industrial pollution are problems that must be addressed by the industrialized world and those seeking economic development.<sup>21</sup> The problems are mostly byproducts of processes that have contributed significantly to economic development and improved lifestyles. During the last part of the 20th century, governments and industry expended considerable effort to develop better ways to control nature and to allow industry to grow while protecting the environment.<sup>22</sup>

## Social Responsibility and Environmental Management

Nations, companies, and people reached a consensus during the close of the last decade: Environmental protection is not an optional extra; it is an essential part of the complex process of doing business. Many view the problem as a global issue rather than a national issue and as one that poses common threats to humankind and thus cannot be addressed by nations in isolation. Of special concern to governments and businesses are ways to stem the tide of pollution and to clean up decades of neglect.

<sup>18</sup>“Water Shortage Fears in Darfur Camps,” *All Africa*, December 10, 2007; “Northern Vietnam Likely to Face Water Shortages,” *Xinhua News Agency*, January 4, 2008.

<sup>19</sup>Anita Chang, “China: Three Gorges Dam Impact Not That Bad,” *Associated Press*, November 22, 2007.

<sup>20</sup>“Tourist Arrivals to Three Gorges Dam Hit New High in 2007,” *Asia Pulse*, January 8, 2008.

<sup>21</sup>Sandy Bauers, “Big Wake-Up to Global Warming,” *Philadelphia Inquirer*, December 24, 2007, p. D1.

<sup>22</sup>Visit <http://www.gemi.org> for information on the Global Environmental Management Initiative, an organization of U.S. multinational companies dedicated to environmental protection. Also see Keith Bradsher, “Hong Kong Utilities Agree to Pollution-Linked Rates,” *The New York Times*, January 10, 2008, p. C4.

**1875** Universal Postal Union created in Switzerland to provide for an international mail service

**1876** Alexander Graham Bell is granted a patent for the telephone, which will revolutionize communications

**1880** Thomas Edison creates first electric power station, after inventing the electric light in 1878, which lights New York City and starts a revolution in

culture and business—making a truly 24-hour day and paving the way for electronic machines

**1881** Zoopraxiscope, which shows pictures in motion, is developed

**1884** The basis for establishing standard time and measuring the longitude of any spot in the world is created with the designation of Greenwich,

England, as the prime meridian (0° longitude)

**1886** American Federation of Labor founded, becoming a model for workers around the world to unite against management and gain higher pay and better working conditions

**1901** Italian Guglielmo Marconi sends the first radio message; the radio could

be said to spark the start of globalization because of the speed with which information is able to be transmitted

**1903** First successful flight of an airplane, piloted by Orville Wright, takes place at Kitty Hawk, North Carolina

**1904** First vacuum tube is developed by John Fleming, allowing alternating current to become direct current and





Two kinds of economic progress, one with great collateral damage and one with much less. Large trucks are dwarfed by the 185-meter sluice gates of the Three Gorges Dam. China began filling the reservoir in a major step toward completion of the world's largest hydroelectric project. The level is expected to reach 135 meters (446 feet), inundating thousands of acres, including cities and farms along the Yangtze River. The second picture depicts Mongolian men as they view a small section of a huge solar energy project in their region. Perhaps still an eyesore for the locals, at least it is relatively energy efficient. (AP/Wide World Photos)

Companies looking to build manufacturing plants in countries with more liberal pollution regulations than they have at home are finding that regulations everywhere have gotten stricter. Many governments are drafting new regulations and enforcing existing ones. Electronic products contain numerous toxic substances that create a major disposal problem in landfills where inadequate disposal allows toxins to seep into groundwater. The European Union, as well as other countries, has laws stipulating the amount and types of potentially toxic substances it will require a company to take back to recycle. A strong motivator is the realization that pollution is on the verge of getting completely out of control.

China is now the world's top polluter in almost all respects.<sup>23</sup> By 2020 its **greenhouse-gas emissions** will be more than double the closest rival, the United States. An examination of rivers, lakes, and reservoirs in China revealed that toxic substances polluted 21 percent and that 16 percent of the rivers were seriously polluted with excrement. China has 16 of the world's 20 most polluted cities.<sup>24</sup> The very process of controlling industrial wastes leads to another and perhaps equally critical issue: the disposal of hazardous waste, a byproduct of pollution controls. Estimates of hazardous wastes collected annually exceed 300 million tons; the critical issue is disposal that does not simply move the problem elsewhere. Countries encountering increasing

<sup>23</sup>Sharon Begley, "Leaders of the Pack," *BusinessWeek*, November 30, 2009, pp. 46–51.

<sup>24</sup>Jim Yardley, "Consultant Questions Beijing's Claim of Cleaner Air," *The New York Times*, January 10, 2008, p. A3.

helping create widespread use of the radio

**1913** Assembly line introduced by Henry Ford; it will revolutionize manufacturing

**1914** The first war to involve much of the world begins with the assassination of Archduke Francis Ferdinand and lasts four years; construction of Panama Canal is completed, making trade faster and easier

**1917** Lenin and Trotsky lead Russian revolution, creating a living economic model that will affect trade (adversely) for the rest of the century

**1919** First nonstop trans-Atlantic flight completed, paving the way for cargo to be transported quickly around the globe

**1920** League of Nations created, establishing a model

for international cooperation (though it failed to keep the peace)

**1923** Vladimir Zworykin creates first electronic television, which will eventually help integrate cultures and consumers across the world

**1929** Great Depression starts with crash of U.S. stock market

**1930** Hawley-Smoot Tariff passed by U.S. Senate,

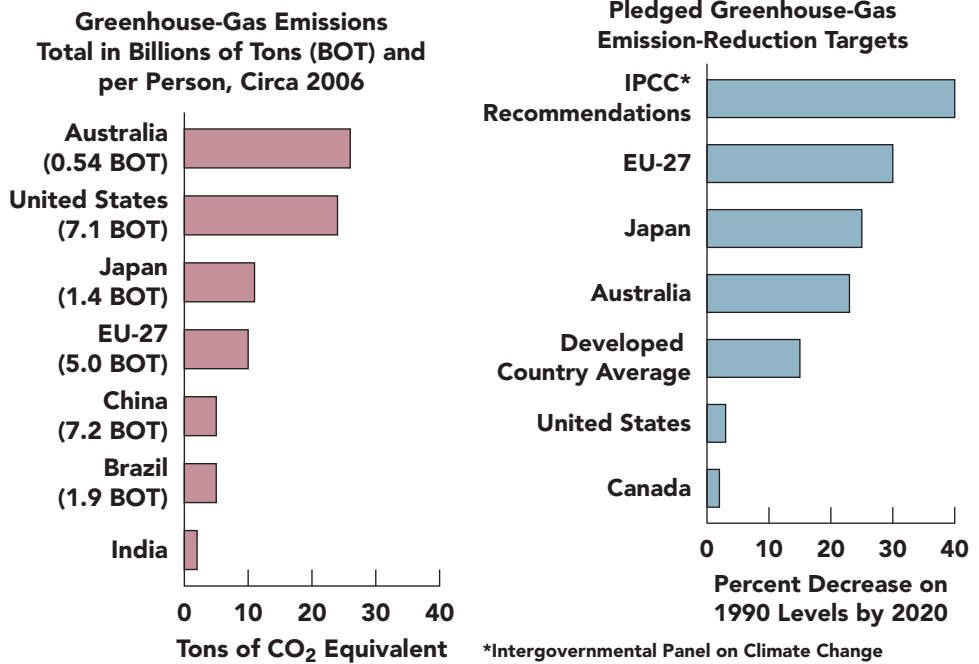
plunging the world deeper into the Great Depression

**1935** Radar developed in Britain; it will allow travel on ships and planes even when there is no visibility, enabling the goods to keep to a transport schedule (eventually allowing the development of just-in-time and other cost-saving processes)

**Exhibit 3.3**

A Comparison of Greenhouse-Gas Emission Rates and Pledges for Reductions

Source: Intergovernmental Panel on Climate Change



difficulty in the disposal of wastes at home are seeking countries willing to assume the burden of disposal. Waste disposal is legal in some developing countries as governments seek the revenues that are generated by offering sites for waste disposal. In other cases, illegal dumping is done clandestinely. A treaty among members of the Basel Convention that required prior approval before dumping could occur was later revised to a total ban on the export of hazardous wastes by developed nations. The influence and leadership provided by this treaty are reflected in a broad awareness of pollution problems by businesses and people in general.<sup>25</sup>

Governments, organizations, and businesses are becoming increasingly concerned with the social responsibility and ethical issues surrounding the problem of maintaining economic growth while protecting the environment for future generations. However, the commitment made by governments and companies varies dramatically around the world. For example, with one of the highest pollution rates on a per capita basis, the United States lags behind almost all major competitors in agreeing to greenhouse emission standards (see Exhibit 3.3).<sup>26</sup> The Organization for Economic Cooperation and Development, the United Nations, the European Union, and international activist groups are undertaking programs to strengthen environmental policies.<sup>27</sup> In many ways China, because it has the most urgent and greatest pollution problems, is leading the charge in new green technology.<sup>28</sup> Many large

<sup>25</sup>For a comprehensive view of OECD programs, including environmental issues, visit <http://www.oecd.org>.

<sup>26</sup>"Closing the Gaps," *The Economist*, December 5, 2009, pp. 18–19.

<sup>27</sup>William C. Clark, "Science and Policy for Sustainable Development," *Environment*, January–February 2005.

<sup>28</sup>Shai Oster, "World's Top Polluter Emerges as Green-Technology Leader," *The Wall Street Journal*, December 15, 2009, online.

**1938** American Chester Carlson develops dry copying process for documents (xerography), which, among other things, will enable governments to require that multiple forms be filled out to move goods  
**1939** World War II begins with German invasion of Poland; over 50 million people will die

**1943** The first programmable computer, Colossus I, is created in England at Bletchley Park; it helps to crack German codes  
**1944** Bretton Woods Conference creates basis for economic cooperation among 44 nations and the founding of the International Monetary Fund to help stabilize exchange rates

**1945** Atomic weapons introduced; World War II ends; United Nations founded  
**1947** General Agreement on Tariffs and Trade signed by 23 countries to try to reduce barriers to trade around the world  
**1948** Transistor is invented; it replaces the vacuum tube, starting a technology revolution

**1949** People's Republic of China founded by Mao Zedong, which will restrict access to the largest single consumer market on the globe  
**1957** European Economic Community (EEC) established by Belgium, France, West Germany, Italy, Luxembourg, and the Netherlands, the precursor to today's European Union

Here in São Paulo, Shell sells two kinds of fuel: alcohol made primarily from sugarcane and gasoline made from dirtier fossil fuels. Flexible-fuel engines in Brazilian cars can burn either kind of fuel or any mixture of the two. Although the price per liter is quite different, so is the mileage per liter. Brazilians make their choice of fuel based on the kind of driving they anticipate, city versus highway.



multinational companies such as Petrobras,<sup>29</sup> Walmart,<sup>30</sup> and Nike are not only cleaning up their own operations around the world but also pushing their suppliers to do the same.

The issue that concerns everyone is whether economic development and protection for the environment can coexist. **Sustainable development** is a joint approach among those (e.g., governments, businesses, environmentalists, and others) who seek economic growth with “wise resource management, equitable distribution of benefits and reduction of negative effects on people and the environment from the process of economic growth.” Sustainable development is not about the environment or the economy or society. It is about striking a lasting balance between all of these. More and more companies are embracing the idea of sustainable development as a “win–win” opportunity.<sup>31</sup> Responsibility for protecting the environment does not rest solely with governments, businesses, or activist groups; however, each citizen has a social and moral responsibility to include environmental protection among his or her highest goals.<sup>32</sup> This idea is particularly a problem in the United States, where consumers are often more interested in style than in sustainability,<sup>33</sup> public opinion polls favor growth over the environment,<sup>34</sup> and

<sup>29</sup>Jose Sergio Gabrielli de Azevedo, “The Greening of Petrobras,” *Harvard Business Review*, March 2009, pp. 43–47.

<sup>30</sup>Adam Aston, “Wal-Mart’s Green Stock,” *BusinessWeek*, May 25, 2009, p. 44.

<sup>31</sup>Visit <http://www.oecd.org>, the OECD Web site, for a directory and complete coverage of sustainable development.

<sup>32</sup>Visit <http://www.webdirectory.com> for the *Amazing Environmental Organization Web Directory*, a search engine with links to an extensive list of environmental subjects.

<sup>33</sup>Burt Helm, “Nike Goes Green, Very Quietly,” *BusinessWeek*, June 22, 2009, p. 56.

<sup>34</sup>“Who Cares?” *The Economist*, December 5, 2009, p. 15.

**1961** Berlin Wall is erected, creating Eastern and Western Europe with a physical and spiritual barrier  
**1964** Global satellite communications network established with INTELSAT (International Telecommunications Satellite Organization)  
**1965** *Unsafe at Any Speed* published by Ralph Nader, sparking a revolution in

consumer information and rights  
**1967** European Community (EC) established by uniting the EEC, the European Coal and Steel Community, and the European Atomic Energy Community  
**1971** First microprocessor produced by Intel, which leads to the personal computer; communist China joins the

United Nations, making it a truly global representative body  
**1971** United States abandons gold standard, allowing the international monetary system to base exchange rates on perceived values instead of ones fixed in relation to gold  
**1972** One billion radios on the planet

**1973** Arab oil embargo jolts industrial world into understanding the totally global nature of supply and demand  
**1980** CNN founded, providing instant and common information the world over, taking another significant step in the process of globalization started by the radio in 1901



A huge offshore discovery has the potential to make Brazil a new major petroleum exporter through its national oil company, Petrobras.<sup>35</sup>

(*The New York Times*, January 11, 2008, p. C1; © Edro Lobo/Bloomberg News/Landov)



high school students receive relatively little environmental education.<sup>36</sup> A recent study has also shown that governments with pluralistic constituencies may have relatively more trouble persuading important minority groups to agree to their environmental efforts.<sup>37</sup>

## Resources

The availability of minerals<sup>38</sup> and the ability to generate energy are the foundations of modern technology. The locations of Earth's resources, as well as the available sources of energy, are geographic accidents. The world's nations are not equally endowed, and no nation's demand for a particular mineral or energy source necessarily coincides with domestic supply.

In much of the underdeveloped world, human labor provides the preponderance of energy. The principal supplements to human energy are animals, wood, fossil fuel, nuclear power, and, to a lesser and more experimental extent, the ocean's tides, geothermal power, and the sun. Of all the energy sources, oil and gas contribute over 60 percent of world energy consumption.<sup>39</sup> Because of petroleum's versatility and the ease with which it is stored and transported, petroleum-related products continue to dominate energy usage.<sup>40</sup> (See Exhibit 3.4.)

<sup>35</sup>Alexi Barrinuevo, "Hot Prospect for Oil's Big League," *The New York Times*, January 11, 2008, pp. C1, C4.

<sup>36</sup>"Are U.S. Teenagers 'Green' Enough?" *Chronicle of Higher Education*, November 20, 2009, p. A4.

<sup>37</sup>Amir Grinstein and Udi Nisan, "Demarketing, Minorities, and National Attachment," *Journal of Marketing* 73, no. 2 (2009), pp. 105–22.

<sup>38</sup>"Global Copper Shortage Reaches 340,000t in H1," *China Industry Daily News*, September 21, 2007.

<sup>39</sup>Visit <http://www.eia.doe.gov> and search for "International Energy Outlook (most current year)" for details of production, use, and so forth.

<sup>40</sup>See Map 3, "Oil and Gas Production and Consumption," for a global view of the flow and uses of petroleum.

**1987** ISO issues ISO 9000 to create a global quality standard

**1988** One billion televisions on the planet

**1989** Berlin Wall falls, symbolizing the opening of the East to the West for ideas and commerce

**1991** Soviet Union formally abandons communism, as most formerly communist states move toward capitalism and

the trade it fosters; Commonwealth of Independent States (CIS) established among Russia, Ukraine, and Belarus

**1993** NAFTA ratified by U.S. Congress; European Union created from the European Community, along with a framework for joint security and foreign policy action, by the 1991 Maastricht Treaty on

European Union; the EEC is renamed the EC

**1994** The Chunnel (Channel Tunnel) is opened between France and Britain, providing a ground link for commerce between the continent and Britain

**1995** World Trade Organization (WTO) set up as successor of GATT; by 2000 more than

130 members will account for over 90 percent of world trade.

**1997** Hong Kong, a world trading and financial capital and bastion of capitalism, is returned to communist Chinese control; *Pathfinder* lands on Mars, and *Rover* goes for a drive but finds no one with whom to trade

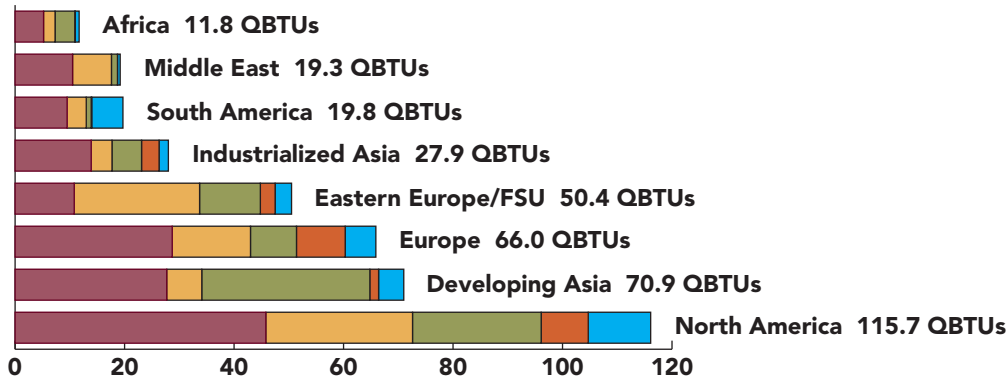


### Exhibit 3.4

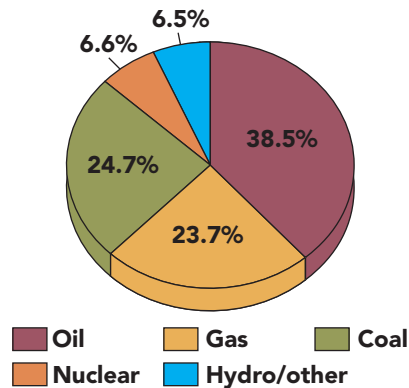
#### World Energy Consumption

Energy consumed by world regions, measured in quadrillion BTUs in 2001. Total world consumption was 381.8 quadrillion BTUs. The largest portion of the hydro/other category is hydroelectrical energy. Fuels such as wood, peat, animal waste, wind, solar, and geothermal account for less than 1.0 quadrillion BTUs in the other portion of the hydro/other category.

**Total World Energy Consumption  
By Region and Fuel (Quadrillion BTU)**



**Percentage of World Energy  
Consumption by Energy Sources**



Sources: Data compiled from "Introduction to World Geography," *Oxford Atlas of the World* (New York: Oxford University Press, 2003) and Energy Information Administration (EIA), *International Energy Outlook 2004* (Washington, DC, 2005), <http://www.eia.doe.gov/oiaf/ieo>.

Many countries that were self-sufficient during much of their early economic growth have become net importers of petroleum during the past several decades and continue to become increasingly dependent on foreign sources. A spectacular example is the United States, which was almost completely self-sufficient until 1942, became a major importer by 1950, and between 1973 and 2000 increased its dependency from 36 percent to over 66 percent of its annual requirements. If present rates of consumption continue, predictions are that by the mid-2000s the United States will be importing more than 70 percent

**1999** Euro introduced in 11 European Union nations, paving the way for the creation of a true trade union and trade bloc  
**1999** Seattle Round of WTO negotiations pits the United States versus the European Union, in the first great protest against globalization  
**1999** Control of the Panama Canal, a major trade lane, is returned to Panama

**2000** Second millennium arrives, predicted computer problems are a non-event  
**2001** September 11 terrorist attack on the World Trade Center in New York City and the Pentagon in Washington, DC; one billion mobile phones on the planet  
**2002** United States attacks Taliban in Afghanistan

**2003** United States attacks regime of Saddam Hussein in Iraq  
**2004** Great Indian Ocean tsunami kills 500,000 people  
**2006** One billion personal computers on the planet  
**2008** Beijing hosts the Olympics  
**2009** Great Recession causes largest decline in world

trade since World War II; even so, almost 4 billion mobile phone subscribers around the globe  
**2010** Earthquake in Haiti kills more than 200,000 people  
**2040** The United Nations' earliest estimate for the world population to begin shrinking due to the global decline of fertility



Cattle dung, which is used both as farmyard manure and, dried into cakes, as household fuel, is being carried to a local market in India. India's cattle produce enormous quantities of dung, which some studies suggest provide the equivalent of 10,000 megawatts of energy annually.



This Masai woman of Tanzania put to good use both cow dung and urine in building her hut pictured here in her family village (or boma). The semi-nomadic Masai graze their cattle during the day but enclose them within the acacia bush boma at night to protect them from predators.

of its needs, that is, more than 17 million barrels of oil each day. Exhibit 3.4 compares North American domestic energy consumption with other world regions. It is interesting to note that though North America is currently a major consumer of energy, industrializing Asia and the three industrialized areas (as shown in Exhibit 3.4) do not lag far behind. In fact, China has become the world's second-largest oil importer after the United States, and demand continues to grow rapidly.<sup>41</sup>

Since World War II, arguments about the limitless availability of seemingly inexhaustible supplies of petroleum have been prominent.<sup>42</sup> The dramatic increase in economic growth in the industrialized world and the push for industrialization in the remaining world have put tremendous pressure on Earth's energy resources. Unfortunately, as countries industrialize, energy sources are not always efficiently utilized. China, for example, spends three times the world average on energy (all sources) to produce one dollar of gross national product (GNP). In comparison with Japan, possibly the world's most efficient user of energy, where less than 5 ounces of oil is needed to generate \$1 in GNP, in China, approximately 80 ounces of oil is needed.<sup>43</sup> The reasons for China's inefficient oil use are numerous, but the worst culprit is outdated technology.<sup>44</sup>

The growth of market-driven economies and an increasing reliance on petroleum supplies from areas of political instability—the Middle East, the former Soviet Union, and Latin America—create a global interdependence of energy resources. The net result is a profound impact on oil prices and on the economies of industrialized and industrializing countries.

<sup>41</sup>Koh Chin Ling and Loretta Ng, "China's Crude Oil Imports Surge in March," *International Herald Tribune*, April 22, 2005.

<sup>42</sup>Stanley Reed, "Endless Oil," *BusinessWeek*, January 18, 2010, pp. 47–49.

<sup>43</sup>"Lessons from a Miser," *BusinessWeek*, April 11, 2005, p. 51.

<sup>44</sup>"Wasteful Ways," *BusinessWeek*, April 11, 2005, p. 50.

The location, quality, and availability of resources will affect the pattern of world economic development and trade well into the 21st century. In addition to the raw materials of industrialization, an economically feasible energy supply must be available to transform resources into usable products. As the global demand for resources intensifies and prices rise, resources will continue to increase in importance among the uncontrollable elements of the international marketer's decisions.

**Dynamics of Global Population Trends** Current population, rural/urban population shifts, rates of growth, age levels, and population control help determine today's demand for various categories of goods.<sup>45</sup> Although not the only determinant, the existence of sheer numbers of people is significant in appraising potential consumer markets. Changes in the composition and distribution of population among the world's countries will profoundly affect future demand. Moreover, it now appears that demand for goods worldwide can affect migration patterns as well, in a reversal of the traditional causal relationship. Specifically, the global financial crisis that began in 2008 appears to have caused a (perhaps temporary) reversal of migrations from urban to rural areas within countries and from developed back to developing countries internationally as employment opportunities dry up in response to the decline in demand for goods and services worldwide.<sup>46</sup>

Recent estimates place world population at more than 6.8 billion people, a number expected to grow to about 8 billion by 2050. However, seemingly small differences in assumptions about fertility rates can make big differences in growth forecasts. One possible scenario put forth by United Nations experts suggests the planet's population may peak at about 8 billion and then begin to decline after 2040. All scenarios agree though that almost all of the projected growth up to 2050 will occur in less developed regions.<sup>47</sup> Exhibit 3.5 shows that 85 percent of the population will be concentrated in less developed regions by 2050. The International Labor Organization estimates that 1.2 billion

<sup>45</sup>A book written in 1998 predicted the Great Recession of 2008–2009 ten years in advance, based on demographic projections of consumer demand. For a very interesting read, see Harry S. Dent, *The Roaring 2000s* (Touchstone: New York, 1998); also see John L. Graham, "2020 Is 23 Years from Now," *UCInsight*, Spring 1997, pp. 3, 13 for a similar, demographics-based prediction.

<sup>46</sup>Patrick Barta and Joel Millman, "The Great U-Turn," *The Wall Street Journal*, June 6, 2009, p. A1.

<sup>47</sup>See *World Population Prospects, The 2008 Revisions*, United Nations Economic and Social Affairs, <http://www.unpopulation.org>, 2010.

### Exhibit 3.5

World Population by Region, 2009–2050, and Life Expectancy at Birth, 2005–2010 (millions)

Source: *World Population Prospects, The 2008 Revision*, United Nations Economic and Social Affairs, [www.unpopulation.org](http://www.unpopulation.org), 2010. Reprinted with permission.

Regions	Population (in millions)		Life Expectancy at Birth
	2009	2050*	2005–2010
World	6,829	7,959	67.2
More developed regions**	1,233	1,126	77.1
Less developed regions†	5,596	6,833	65.6
Least developed regions‡	835	1,463	55.9
Africa	1010	1,748	54.1
Asia	4,121	4,533	68.9
Europe	732	609	75.1
Latin America	582	626	73.4
Northern America	348	397	79.3
Oceania	35	45	76.2

\*Lowest estimate among three provided.

\*\*More developed regions comprise all regions of Europe and Northern America, Australia, New Zealand, and Japan.

†Less developed regions comprise all regions of Africa, Asia (excluding Japan), and Latin America and the regions of Melanesia, Micronesia, and Polynesia.

‡Least developed regions, as defined by the United Nations General Assembly, include 48 countries, of which 33 are in Africa, 9 in Asia, 1 in Latin America, and 5 in Oceania. They are also included in the less developed regions.

jobs must be created worldwide to accommodate these new entrants through 2025. Furthermore, most of the new jobs will need to be created in urban areas where most of the population will reside.

## Controlling Population Growth

### LO7

The economic effects of controlling population growth and aging populations

Faced with the ominous consequences of the population explosion, it would seem logical for countries to take steps to reduce growth to manageable rates, but procreation is one of the most culturally sensitive uncontrollable factors. Economics, self-esteem, religion, politics, and education all play critical roles in attitudes about family size. All these considerations make the impact of China's long-term enforcement of its one-child policies most remarkable.<sup>48</sup>

The prerequisites to population control are adequate incomes, higher literacy levels, education for women, universal access to healthcare, family planning, improved nutrition, and, perhaps most important, a change in basic cultural beliefs regarding the importance of large families. Unfortunately, minimum progress in providing improved living conditions and changing beliefs has occurred. India serves as a good example of what is happening in much of the world. India's population was once stable, but with improved health conditions leading to greater longevity and lower infant mortality, its population will exceed that of China by 2050, when the two will account for about 50 percent of the world's inhabitants.<sup>49</sup> The government's attempts to institute change are hampered by a variety of factors, including political ineptitude<sup>50</sup> and slow changes in cultural norms. Nevertheless, the government continues to pass laws with the intended purpose of limiting the number of births. A novel example was a law that bars those with more than two children from election to the national Parliament and state assemblies. This rule would mean that many now in office could not seek reelection because of their family size.<sup>51</sup>

Perhaps the most important deterrent to population control is cultural attitudes about the importance of large families. In many cultures, the prestige of a man, whether alive or dead, depends on the number of his progeny, and a family's only wealth is its children. Such feelings are strong. Prime Minister Indira Gandhi found out how strong when she attempted mass sterilization of men, which reportedly was the main cause of her defeat in a subsequent election. Additionally, many religions discourage or ban family planning and thus serve as a deterrent to control. Nigeria has a strong Muslim tradition in the north and a strong Roman Catholic tradition in the east, and both faiths favor large families. Most traditional religions in Africa encourage large families; in fact, the principal deity for many is the goddess of land and fertility.

Family planning and all that it entails is by far the most universal means governments use to control birthrates, but some economists believe that a decline in the fertility rate is a function of economic prosperity and will come only with economic development. Ample anecdotal evidence suggests that fertility rates decline as economies prosper. For example, before Spain's economy began its rapid growth in the 1980s, families had six or more children; now, Spain has one of the lowest birthrates in Europe, an average of 1.24 children per woman. Similar patterns have followed in other European countries as economies have prospered.

## Rural/Urban Migration

Migration from rural to urban areas is largely a result of a desire for greater access to sources of education, healthcare, and improved job opportunities.<sup>52</sup> In the early 1800s, less than 3.5 percent of the world's people were living in cities of 20,000 or more and less than

<sup>48</sup>Maureen Fan, "Officials Violating 'One-Child' Policy Forced Out in China," *Washington Post*, January 8, 2008, p. A16.

<sup>49</sup>"India to Surpass China in Population," *ExpressIndia*, May 18, 2005.

<sup>50</sup>Anand Giridharadas, "A Buoyant India Dares to Ask: Is a Billion So Bad?" *International Herald Tribune*, May 4, 2005.

<sup>51</sup>V. K. Paghunathan, "3 Tykes and You're Out," *Straits Times*, April 11, 2003.

<sup>52</sup>Tor Ching Li, "Urban Migration Drains Asian Coffee Farms' Work Force," *Dow Jones Commodities Service*, December 13, 2007.



2 percent in cities of 100,000 or more; today, more than 40 percent of the world's people are urbanites, and the trend is accelerating. Once in the city, perhaps three out of four migrants achieve some economic gains.<sup>53</sup> The family income of a manual worker in urban Brazil, for example, is almost five times that of a farm laborer in a rural area.

By 2030, estimates indicate that more than 61 percent of the world's population will live in urban areas (up from 49 percent in 2005, with similar changes across all regions), and at least 27 cities will have populations of 10 million or more, 23 of which will be in the less developed regions. Tokyo has already overtaken Mexico City as the largest city on Earth, with a population of 26 million, a jump of almost 8 million since 1990.

Although migrants experience some relative improvement in their living standards, intense urban growth without investment in services eventually leads to serious problems. Slums populated with unskilled workers living hand to mouth put excessive pressure on sanitation systems, water supplies,<sup>54</sup> and social services. At some point, the disadvantages of unregulated urban growth begin to outweigh the advantages for all concerned.

Consider the conditions that exist in Mexico City today. Besides smog, garbage, and pollution brought about by its increased population, Mexico City faces a severe water shortage. Local water supplies are nearly exhausted and in some cases are unhealthy.<sup>55</sup> Water consumption from all sources is about 16,000 gallons per second, but the underground aquifers are producing only 2,640 gallons per second. Water comes from hundreds of miles away and has to be pumped up to an elevation of 7,444 feet to reach Mexico City. Such problems are not unique to Mexico; throughout the developing world, poor sanitation and inadequate water supplies are consequences of runaway population growth. An estimated 1.1 billion people are currently without access to clean drinking water, and 2.8 billion lack access to sanitation services. Estimates are that 40 percent of the world's population, 2.5 billion people, will be without clean water if more is not invested in water resources. Prospects for improvement are not encouraging, because most of the world's urban growth will take place in the already economically strained developing countries.

## Population Decline and Aging

While the developing world faces a rapidly growing population,<sup>56</sup> the industrialized world's population is in decline and rapidly aging.<sup>57</sup> Birthrates in western Europe and Japan have been decreasing since the early or mid-1960s; more women are choosing careers instead of children, and many working couples are electing to remain childless. As a result of these and other contemporary factors, population growth in many countries has dropped below the rate necessary to maintain present levels. Just to keep the population from falling, a nation needs a fertility rate of about 2.1 children per woman. Not one major country has sufficient internal population growth to maintain itself, and this trend is expected to continue for the next 50 years.

At the same time that population growth is declining in the industrialized world,<sup>58</sup> there are more aging people today than ever before.<sup>59</sup> Global life expectancy has grown more in the past 50 years than over the previous 5,000 years. Until the Industrial Revolution, no more than 2 or 3 percent of the total population was over the age of 65 years. Today in the developed world, the over-age-65 group amounts to 14 percent, and by 2030, this group will reach 25 percent in some 30 different countries. Furthermore, the number of "old old"

<sup>53</sup>Diane Mosher, "Chinese Urban Migration Creates Opportunities for International Urban Planners," *Multi-Housing News*, April 2, 2007.

<sup>54</sup>"China Faces Worsening Water Woes," *Chicago Sun-Times*, March 24, 2005.

<sup>55</sup>"Nation Faces Water Shortage," *El Universal* (Mexico City), March 23, 2005.

<sup>56</sup>Gerald Tenywa and Ben Okiror, "Population Growth Highest around Lake Victoria," *All Africa*, November 1, 2007.

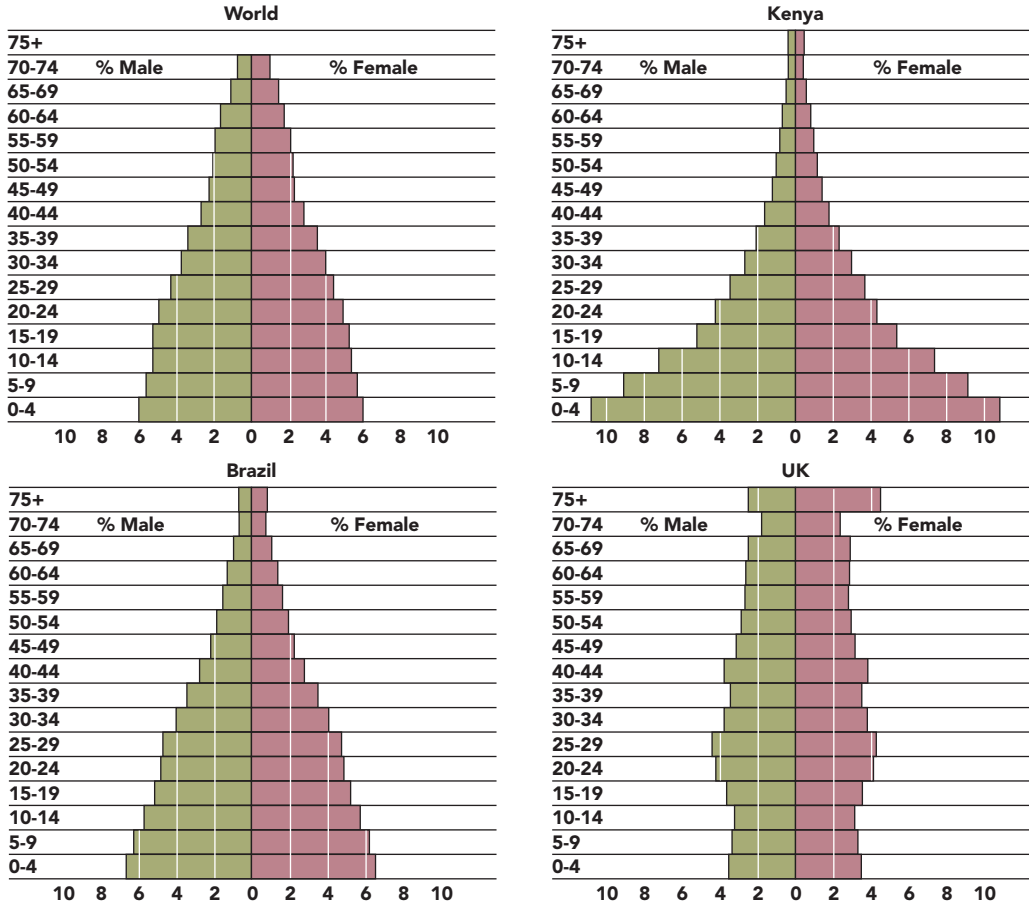
<sup>57</sup>There are apparent exceptions; see "Finland Sees Record-High Population Growth in 2007," *Xinhua News Agency*, January 1, 2008.

<sup>58</sup>"Russia's Population Shrinks by 208,000 in 10 Months," *Russia & CIS Newswire*, December 21, 2007.

<sup>59</sup>"China Population Ageing Rapidly," *Associated Press Newswires*, December 17, 2007.

### Exhibit 3.6

#### Age Density for World and Selected Countries



Source: From *Oxford Atlas of the World*, 10th ed., 2002. Reprinted with permission of Philip Maps.

will grow much faster than the “young old.” The United Nations projects that by 2050, the number of people aged 65 to 84 years worldwide will grow from 400 million to 1.3 billion (a threefold increase), while the number of people aged 85 years and over will grow from 26 million to 175 million (a sixfold increase)—and the number aged 100 years and over will increase from 135,000 to 2.2 million (a sixteenfold increase). Exhibit 3.6 illustrates the disparity in aging that is typical among less developed countries (Kenya), developing countries (Brazil), and an economically developed country (United Kingdom). Countries like Kenya, with a high proportion of young people, face high education and healthcare costs, whereas countries like the United Kingdom, with top-heavy population pyramids, face high pension and healthcare costs for the elderly with fewer wage earners to bear the burden.

Europe, Japan, and The United States epitomize the problems caused by an increasing percentage of elderly people who must be supported by a declining number of skilled workers. In 1998, Japan crossed a threshold anticipated with fear by the rest of the developed world: The point at which retirees withdrawing funds from the pension system exceeded the workers contributing to it. The elderly require higher government outlays for healthcare and hospitals,<sup>60</sup> special housing and nursing homes, and pension and welfare assistance, but the workforce that supports these costs is dwindling. The part of the world with the largest portion of people over 65 years is also the part of the world with the

<sup>60</sup>Ben Shankland, “Government of Colombia Tries to Sell Beleaguered Hospital Again,” *Global Insight Daily Analysis*, December 19, 2007.

## CROSSING BORDERS 3.3

### Where Have All the Women Gone?

Three converging issues in China have the potential of causing a serious gender imbalance:

- China, the world's most populous country, has a strict one-child policy to curb population growth.
- Traditional values dictate male superiority and a definite parental preference for boys.
- Prenatal scanning allows women to discover the sex of their fetuses and thereby abort unwanted female fetuses.

The first wave of children born under the one-child policy is reaching marriageable age, and there are far too few brides to go around. The ratio of males to females is unnaturally high, hovering around 118 boys for every 100 girls in 2005. Thus, men in their 20s have to deal with the harsh reality of six bachelors for every five potential brides. So what is a desperate bachelor to do?

The shortage has prompted some parents to acquire babies as future brides for their sons. Infants are considered more appealing because they are less likely to run away, will look on their buyers as their own parents, and are cheaper than buying a teenage bride. Buying a baby girl can cost as little as \$100 and won't result in the fines imposed on couples who violate birth control limits. Such fines can equal as much as six years' income.

Another alternative is to marry a relative. At age 20 years, with his friends already paired off, Liu found himself the odd man out. His parents, farmers in a small backwater village, could not raise the \$2,000 required to attract a bride for their son. Desperate, Liu's mother asked her sister for a favor: Could she ask Hai, her daughter, to be Liu's bride? Young women like Hai are not likely to defy their parents. And so Liu and Hai were wed.

Chinese officials are starting to worry about the imbalance and have announced a raft of new programs to reverse the trend. These offers include cash payments for couples who have a daughter and let her live, along with privileges in housing, employment, and job training. Some families with girls will also be exempt from paying school fees. Even though the government staunchly defends its one-child policy, it is experimenting with allowing couples whose first-born is a girl to have a second child. In the meantime and until the new policy results in more girls, today's 20-year-old men will just have to compete if they want a wife.

Sources: Nicholas Zamiska, "China's One-Child Policy Gets Wider Enforcement," *The Wall Street Journal Asia*, January 8, 2008, p. 10; Mark R. Rosenzweig and Junse Zhang, "Do Population Control Policies Induce More Human Capital Investment?" *Review of Economic Studies* 76, no. 3 (2009), pp. 1149–74.

fewest number of people under age 15 years. This disparity means that there will be fewer workers to support future retirees, resulting in an intolerable tax burden on future workers, more of the over-65 group remaining in the labor force, or pressure to change existing laws to allow mass migration to stabilize the worker-to-retiree ratio. No one solution is without its problems.<sup>61</sup>

### Worker Shortage and Immigration

For most countries, mass immigration is not well received by the resident population. However, a recent report from the United Nations makes the strongest argument for change in immigration laws as a viable solution. The free flow of immigration will help ameliorate the dual problems of explosive population expansion in less developed countries and worker shortage in industrialized regions.<sup>62</sup> Europe is the region of the world most affected by aging and thus by a steadily decreasing worker-to-retiree ratio. The proportion of older persons will increase from 20 percent in 1998 to 35 percent in 2050. The country with the largest share of old people will be Spain, closely followed by Italy. Recognizing the problem, Spain has changed immigration laws to open its borders to all South Americans of Spanish descent.<sup>63</sup> To keep the worker-to-retiree ratio from falling, Europe will need 1.4 billion immigrants over the next 50 years, while Japan and the

<sup>61</sup>J. T. Young, "Failure of Social Security Reform Mustn't Derail Personal Accounts," *Investor's Business Daily*, January 3, 2008.

<sup>62</sup>"Russian Immigration Rules Could Cause Worker Shortage," *Associated Press, Charleston Gazette*, January 16, 2007, p. P2D.

<sup>63</sup>"Spain Grants Amnesty to 700,000 Migrants," *Guardian Unlimited*, May 9, 2005.

## CROSSING BORDERS 3.4

### History, Geography, and Population Collide in America: Returning to Multigenerational Family Living

As pension systems, healthcare systems, and retirement plans continue to crumble under the weight of Baby Boom numbers, we all will need to rely more on the strength of family ties and remember the fundamental human characteristic of interdependence. The problem is that such remembrance is particularly hard for Americans, as opposed to all other peoples on the planet.

America started with The Declaration of Independence. On July 4, 1776, the founding fathers broke from the tyranny of England to form a new country. That document and the idea of independence represent the essence of being American and literally the most celebrated notion of the nation. Indeed, the goal of mainstream American parenting is to inculcate this notion into the thinking of children: We ensure they make their own beds, make their own lunches, wash their own clothes, do their own homework, drive their own cars, and so forth. How else can they become independent adults?

There are at least three problems with this American obsession with independence. First, it stigmatizes the burgeoning numbers of both boomerang kids and grandparents living with their grandchildren as families across America smartly reunite. According to the most recent U.S. Census figures, there are 22 million adult

children living with their parents and 6 million grandparents living in three-generation households, and both numbers are growing fast. Second, teaching independence actually hasn't worked anyway, as we will see next. And third, there is really no such thing as independence anyway. There is only interdependence.

This American overemphasis on independence is now being recognized by the most independent-minded of all Americans, CEOs. In Bill George's wonderful book, *Authentic Leadership*, he argues that the job of chief executive depends on six constituencies. Without surprise, the former CEO of Medtronic lists shareholders, employees, customers, vendors, and the larger community. But what is unique, and perhaps even revolutionary, in his list is his own family. He recognizes that his own success as a CEO in part depended of the quality of his family life. Thus, he organized his executive team and responsibilities such that he had time to attend kids's soccer matches and such. Remarkable!

Source: Sharon G. Niederhaus and John L. Graham, *Together Again, A Creative Guide to Multigenerational Living* (Lanham, MD: Evans, 2007); Sandra Timmerman, "Generational Reciprocity: What Does It Mean in the 21<sup>st</sup> Century?" *Journal of Financial Service Professionals* 63, no. 5 (2009), pp. 25–27; "Boomers: New Social Media Mavins," *Research Brief, Center for Media Research*, January 26, 2010, online.

United States<sup>64</sup> will need 600 million immigrants between now and 2050. Immigration will not help ameliorate the problem though if political and cultural opposition to immigration cannot be overcome.

The trends of increasing population in the developing world, with substantial shifts from rural to urban areas, declining birthrates in the industrialized world, and global population aging, will have profound effects on the state of world business and world economic conditions. Without successful adjustments to these trends, many countries will experience slower economic growth, serious financial problems for senior retirement programs, and further deterioration of public and social services, leading to possible social unrest.

## World Trade Routes

Trade routes bind the world together, minimizing distance, natural barriers, lack of resources, and the fundamental differences between peoples and economies. As long as one group of people in the world wants something that another group somewhere else has and there is a means of travel between the two, there is trade. Early trade routes were over land; later came sea routes, air routes, and, finally, some might say, the Internet to connect countries.

<sup>64</sup>US Tech Sector Eyes Immigration Bill Revival, Cites Worker Shortage," *Agence France-Presse*, June 9, 2007.



Climate change opens up a new trade route that may compete with the Panama Canal, cutting costly days off the travel time between Western Europe and Asia. Here a German commercial vessel follows a Russian icebreaker through the proverbial Northwest Passage.



Trade routes among Europe, Asia, and the Americas were well established by the 1500s. The Spanish empire founded the city of Manila in the Philippines to receive its silver-laden galleons bound for China. On the return trip, the ship's cargo of silk and other Chinese goods would be unloaded in Mexico, carried overland to the Atlantic, and put on Spanish ships to Spain. What we sometimes fail to recognize is that these same trade routes remain important today and that many Latin American countries have strong relationships with Europe, Asia, and the rest of the world that date back to the 1500s. The commodities traded have changed between the 1500s and today, but trade and the trade routes continue to be important. Today, instead of unloading goods in Mexico and carrying them on mule carts overland to the Atlantic, ships travel from the Pacific to the Atlantic via the Panama Canal. And ships too large for the canal unload their containers onto a railroad that crosses the Isthmus of Panama to be met by another container ship.<sup>65</sup>

Trade routes represent the attempts of countries to overcome economic and social imbalances created in part by the influence of geography. The majority of world trade is among the most industrialized and industrializing countries of Europe, North America, and Asia. It is no surprise that the trade flow, as depicted in Map 8 at the end of this chapter, links these major trading areas.

## Communication Links

### LO8

Communication infrastructures are an integral part of international commerce

An underpinning of all commerce is effective communications—knowledge of where goods and services exist and where they are needed and the ability to communicate instantaneously across vast distances. Continuous improvements in electronic communications have facilitated the expansion of trade. First came the telegraph, then the telephone, television, satellites, mobile phones,<sup>66</sup> the computer, the Internet, and combinations of them all.<sup>67</sup> Map 5 in the following pages illustrates the importance of fiber optic cable and satellites in providing global communications. Each revolution in technology has had a profound effect on human conditions, economic growth, and the manner in which commerce

<sup>65</sup>“Panama Canal Expansion Gets Environmental Approval,” *Journal of Commerce Online*, November 13, 2007.

<sup>66</sup>“Mobil Marvels, A Special Report on Telecoms in Emerging Markets,” *The Economist*, September 26, 2009, pp. 1–19.

<sup>67</sup>Rajesh Veeraraghavan, Naga Yasodhar, and Kentaro Toyama, “Warana Unwired: Replacing PCs with Mobile Phones in a Rural Sugar Cane Cooperative,” *Information Technologies & International Development* 5, no. 1 (2009), pp. 81–95.

functions. Each new communications technology has spawned new business models; some existing businesses have reinvented their practices to adapt to the new technology, while other businesses have failed to respond and thus ceased to exist. The Internet and mobile phone revolutions will be no different; they too affect human conditions, economic growth, and the manner in which commerce operates. As we discuss in subsequent chapters, the combination of the Internet and the dramatic increase in the mobile phone subscribers worldwide has already begun to shape how international business is managed. However, as the combinations of new technologies permeate the fabric of the world's cultures, the biggest changes are yet to come!<sup>68</sup>

<sup>68</sup>Ben Charny, "Steve Jobs Reveals New iPad Device," *The Wall Street Journal*, January 27, 2010, online.

## Summary

One British authority admonishes foreign marketers to study the world until "the mere mention of a town, country, or river enables it to be picked out immediately on the map." Although it may not be necessary for the student of foreign marketing to memorize the world map to that extent, a prospective international marketer should be reasonably familiar with the world, its climate, and topographic differences. Otherwise, the important marketing characteristics of geography could be completely overlooked when marketing in another country. The need for geographical and historical knowledge goes deeper than being able to locate continents and their countries. Geographic hurdles must be recognized as having a direct effect on marketing and the related activities of communications and distribution. For someone who has never been in a tropical rainforest with an annual rainfall of at least 60 inches (and sometimes more than 200 inches), anticipating the need for protection against high humidity is difficult. Likewise, someone who has never encountered the difficult problems caused by dehydration in constant 100-degrees-plus heat in

the Sahara region will find them hard to comprehend. Indirect effects from the geographical ramifications of a society and culture ultimately may be reflected in marketing activities. Many of the peculiarities of a country (i.e., peculiar to the foreigner) would be better understood and anticipated if its history and geography were studied more closely. Without a historical understanding of a culture, the attitudes within the marketplace may not be fully understood.

Aside from the simpler and more obvious ramifications of climate and topography, history and geography exert complex influences on the development of the general economy and society of a country. In this case, the study of history and geography is needed to provide the marketer with an understanding of why a country has developed as it has rather than as a guide for adapting marketing plans. History and geography are two of the environments of foreign marketing that should be thoroughly understood and that must be included in foreign marketing plans to a degree commensurate with their influence on marketing effort.

## Key Terms

Opium wars  
Taiping rebellion  
Confucian philosophy

Manifest destiny  
Monroe doctrine  
Roosevelt corollary

Expropriation  
Greenhouse-gas  
emissions

Sustainable development

## Questions

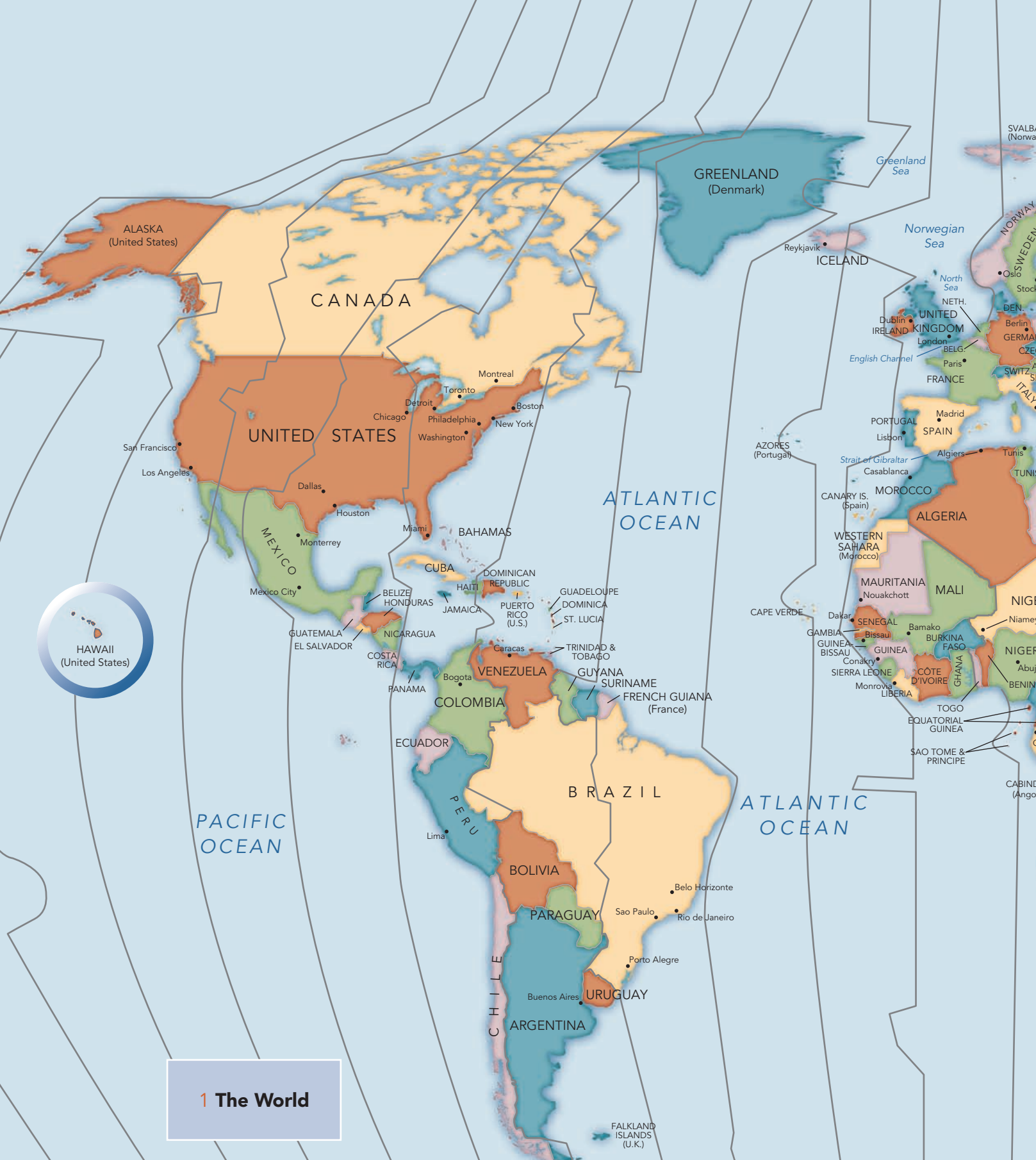
1. Define the key terms listed above.
2. Why study geography in international marketing?
3. Why study a country's history?
4. How does an understanding of history help an international marketer?
5. Why is there a love-hate relationship between Mexico and the United States?
6. Some say the global environment is a global issue rather than a national one. What does this mean?
7. Pick a country and show how employment and topography affect marketing within the country.
8. Pick a country, other than Mexico, and show how significant historical events have affected the country's culture.
9. Discuss the bases of world trade. Give examples illustrating the different bases.

10. The marketer “should also examine the more complex effect of geography on general market characteristics, distribution systems, and the state of the economy.” Comment.
11. The world population pattern is shifting from rural to urban areas. Discuss the marketing ramifications.
12. Select a country with a stable population and one with a rapidly growing population. Contrast the marketing implications of these two situations.
13. “World trade routes bind the world together.” Discuss.
14. Discuss how your interpretations of Manifest Destiny and the Monroe Doctrine might differ from those of a native of Latin America.
15. The telegraph, the telephone, television, satellites, the computer, mobile phones, and the Internet have all had an effect on how international business operates. Discuss how each of these communications innovations affects international business management.

# world maps

- 
- 1 The World**
  - 2 Global Climate**
  - 3 Oil and Gas Production and Consumption**
  - 4 Water**
  - 5 Global Communications**
  - 6 Global Terrorism**
  - 7 Religions**
  - 8 Global Economy and World Trade**





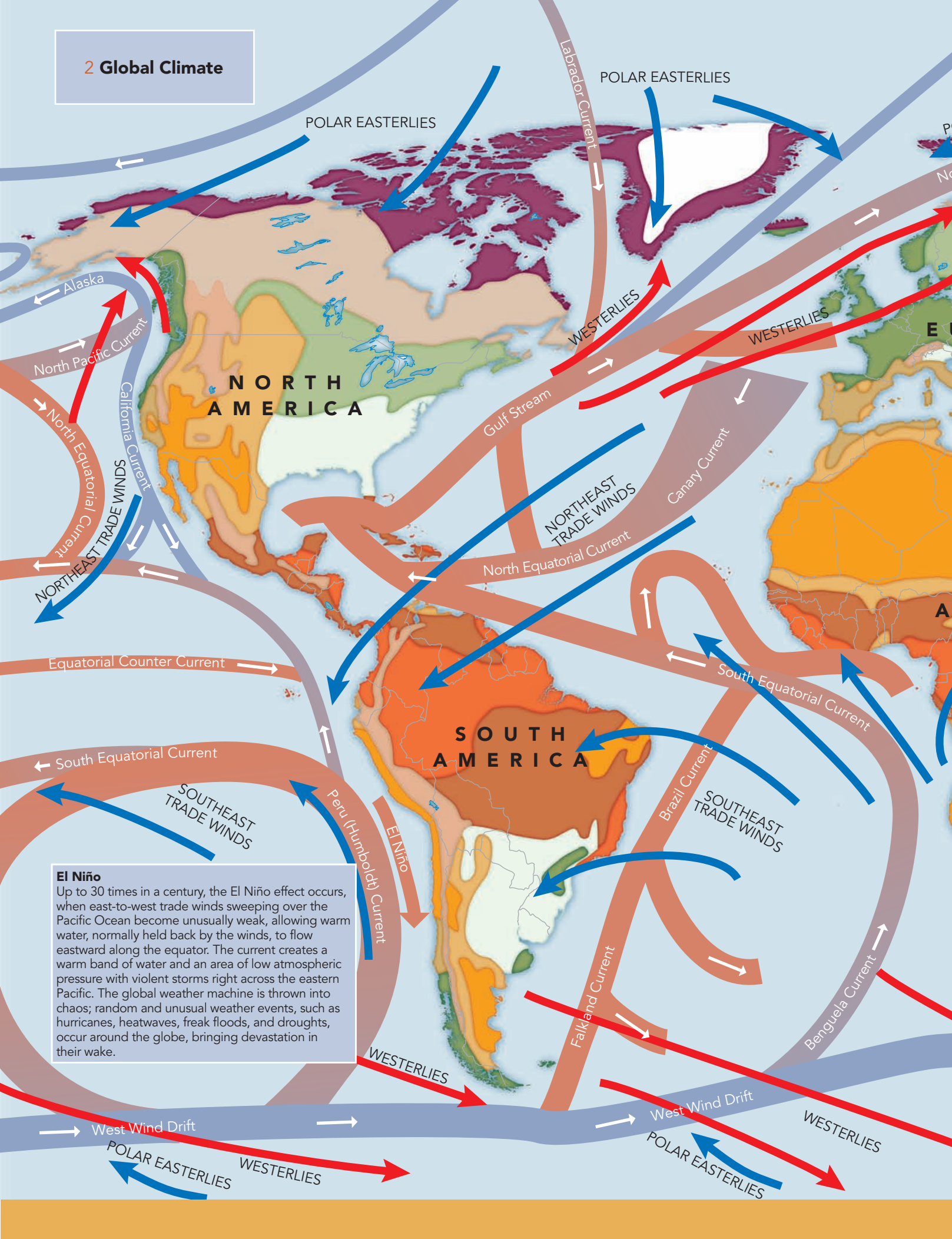
**1 The World**

3 A.M. 4 A.M. 5 A.M. 6 A.M. 7 A.M. 8 A.M. 9 A.M. 10 A.M. 11 A.M. 12 P.M. 1 P.M. 2 P.M. 3





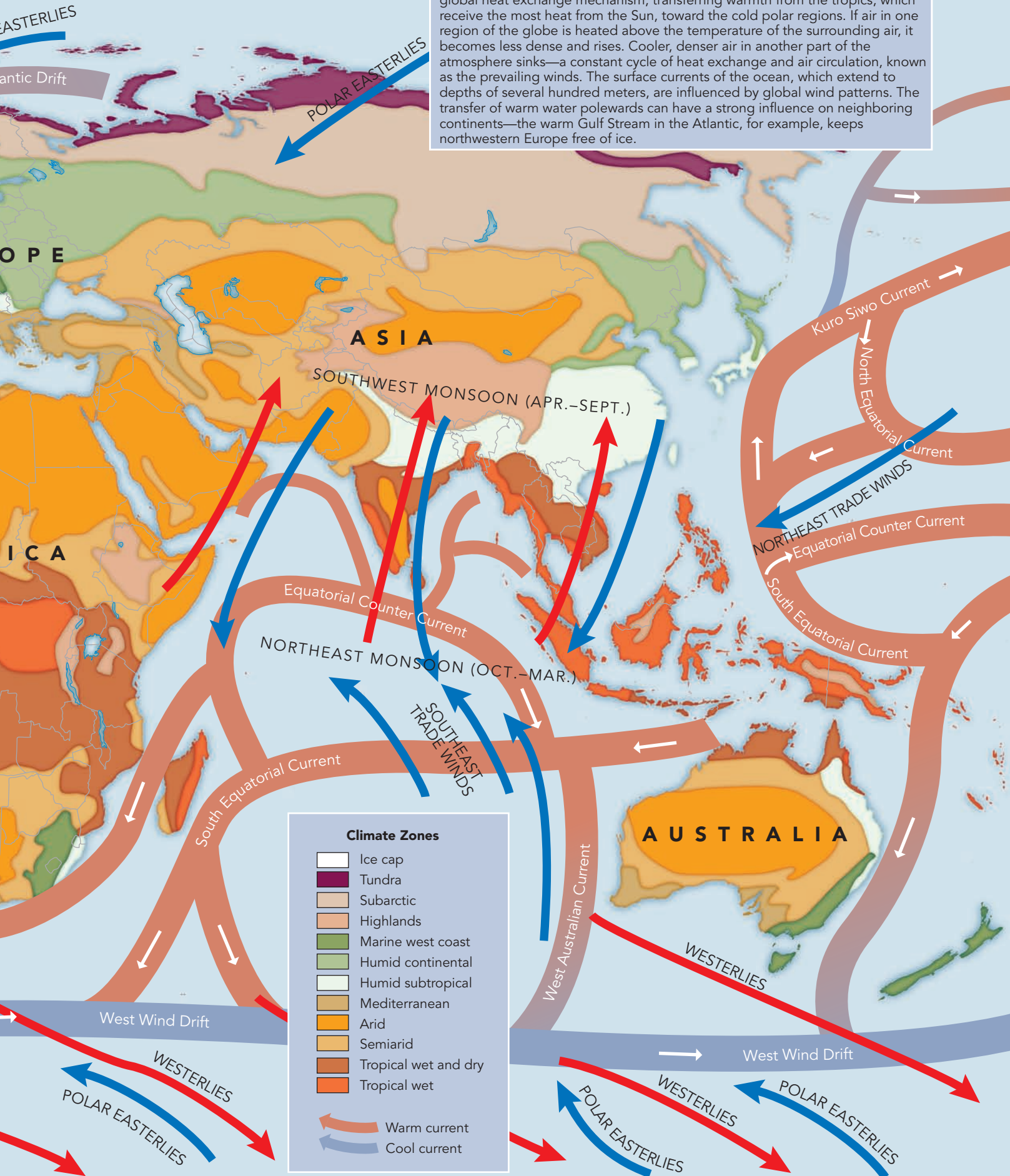
## 2 Global Climate



**El Niño**  
Up to 30 times in a century, the El Niño effect occurs, when east-to-west trade winds sweeping over the Pacific Ocean become unusually weak, allowing warm water, normally held back by the winds, to flow eastward along the equator. The current creates a warm band of water and an area of low atmospheric pressure with violent storms right across the eastern Pacific. The global weather machine is thrown into chaos; random and unusual weather events, such as hurricanes, heatwaves, freak floods, and droughts, occur around the globe, bringing devastation in their wake.

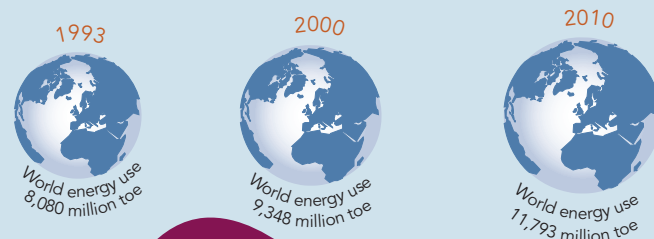
### Winds and currents

The winds and currents that circulate across the surface of the planet act as a global heat exchange mechanism, transferring warmth from the tropics, which receive the most heat from the Sun, toward the cold polar regions. If air in one region of the globe is heated above the temperature of the surrounding air, it becomes less dense and rises. Cooler, denser air in another part of the atmosphere sinks—a constant cycle of heat exchange and air circulation, known as the prevailing winds. The surface currents of the ocean, which extend to depths of several hundred meters, are influenced by global wind patterns. The transfer of warm water polewards can have a strong influence on neighboring continents—the warm Gulf Stream in the Atlantic, for example, keeps northwestern Europe free of ice.

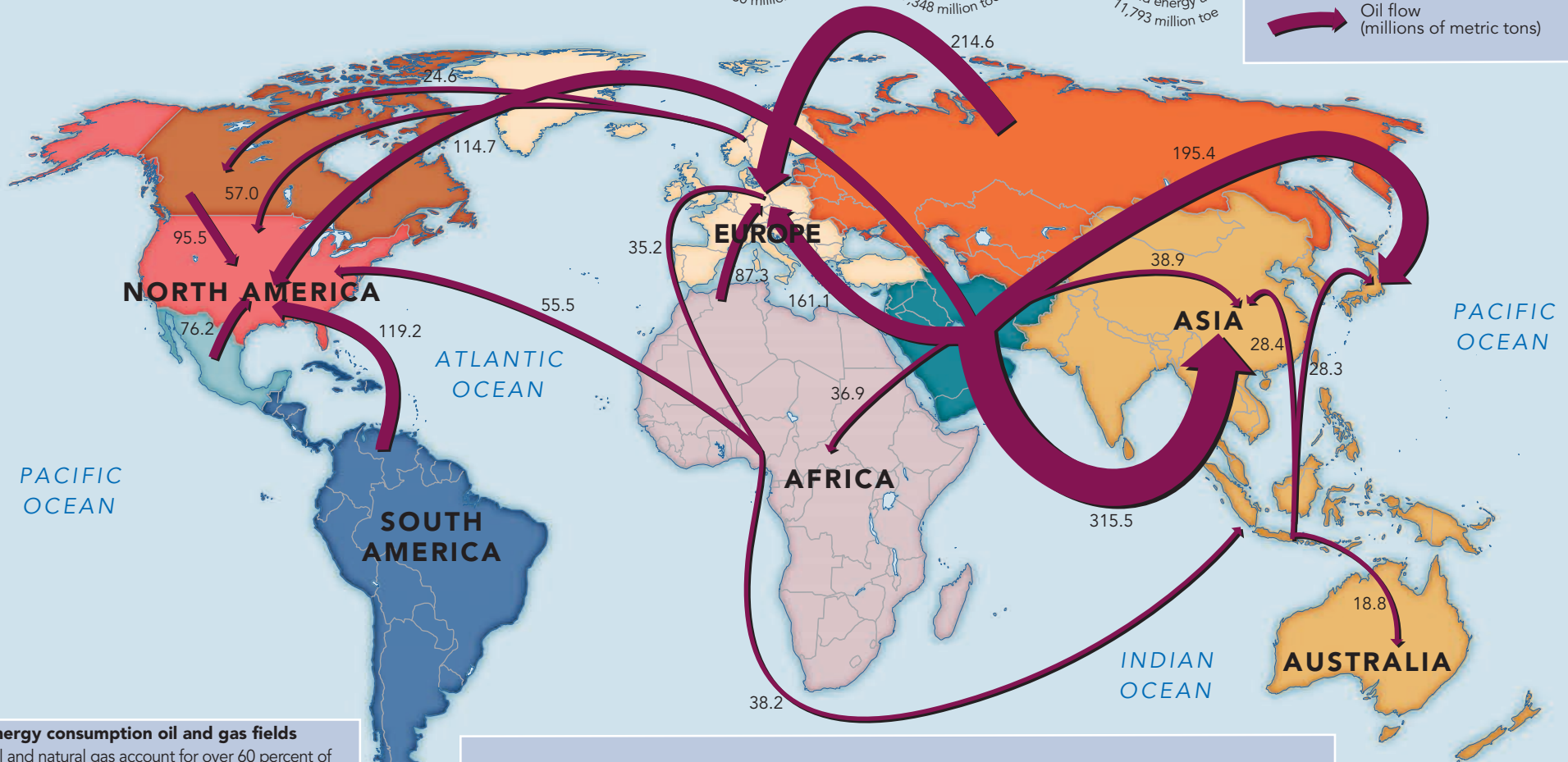




### 3 Oil and Gas Production and Consumption



Oil flow (millions of metric tons)



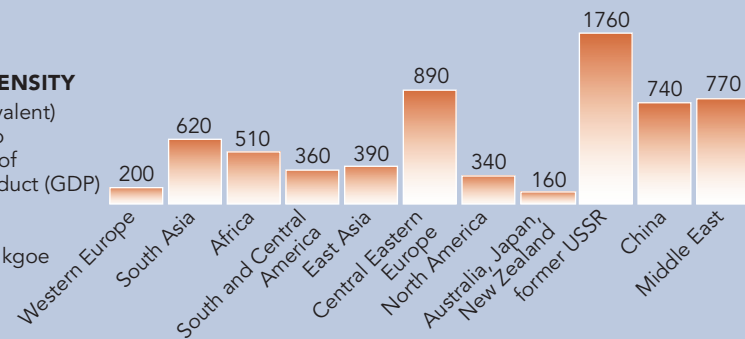
#### Energy consumption oil and gas fields

Oil and natural gas account for over 60 percent of energy consumption in the United States, and slightly less than that for the remainder of the world. Oil production peaked in the United States in 1970, and is expected to peak worldwide in the next ten years. Thus, a scarcity premium in the price of oil observed in 2004 may foretell tighter supplies in the future if demand growth continues unabated. Natural gas may be more plentiful than oil, but gas is costlier to transport, other than by pipeline, so there is much less world trade of it than there is for oil. Supply estimates have risen in recent decades as more effort has been made to find and market natural gas; and prices were unexpectedly low for most of the 1980s and 1990s. Gas is also the cheapest feedstock for making hydrogen, possibly the dominant energy carrier of the future.

#### 2010 ENERGY INTENSITY

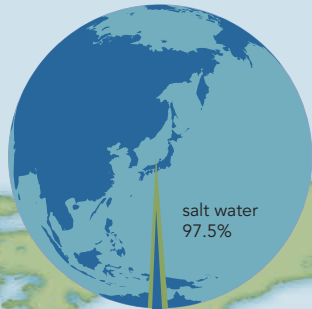
kgoe (kg of oil equivalent) of energy needed to produce US \$1,000 of Gross Domestic Product (GDP) projected 1996

World average: 370 kgoe



# 4 Water

THE WORLD'S WATER  
1993 percentages



salt water  
97.5%

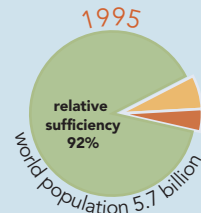
fresh water  
2.5%

69% glaciers  
and permanent  
snow cover

30% fresh groundwater

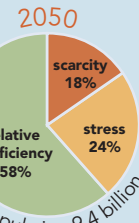
0.9%  
other, including  
soil moisture,  
ground ice, and  
swamp water

0.3%  
freshwater lakes  
and river flows



1995  
relative  
sufficiency  
92%  
World population 5.7 billion

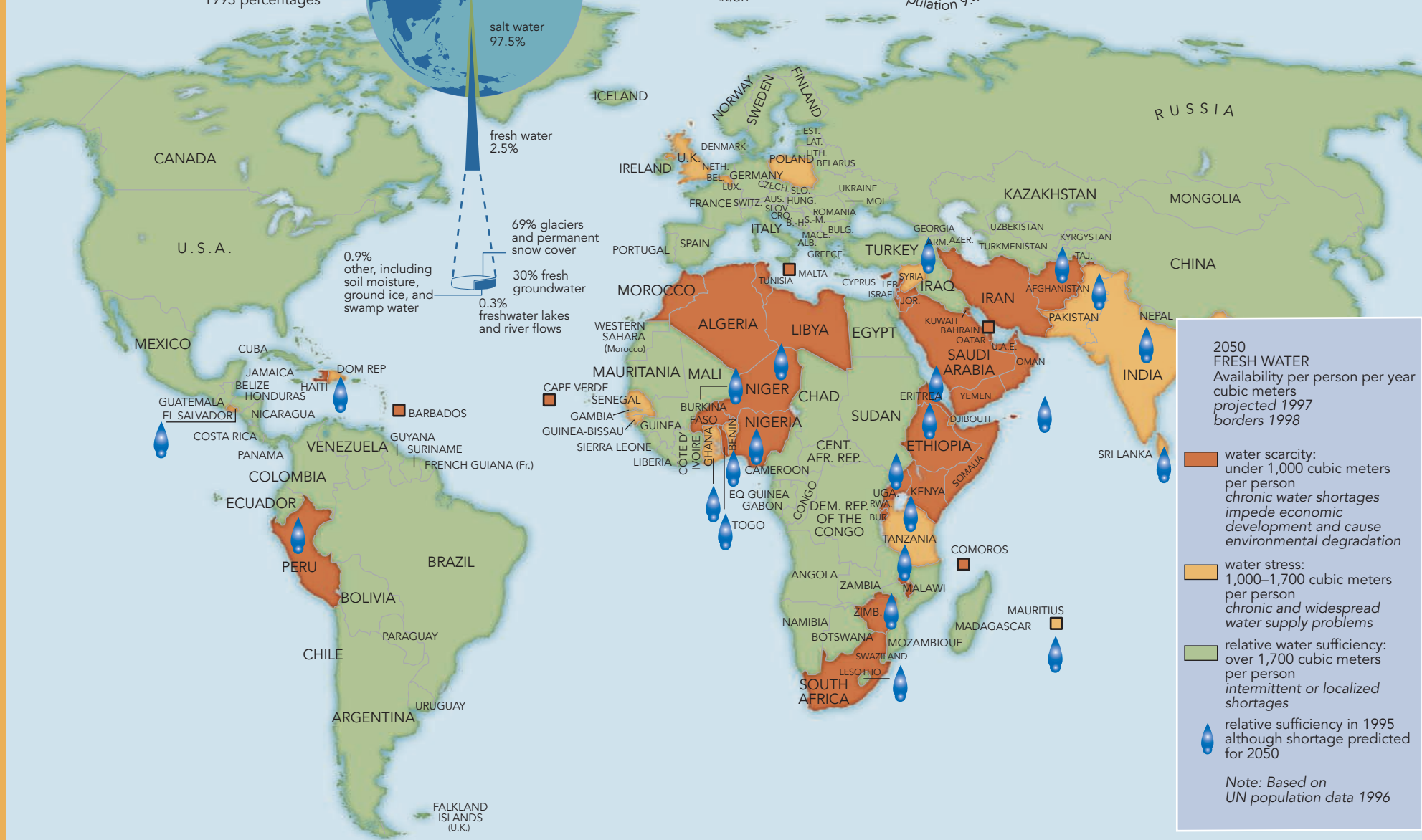
stress 5%  
scarcity 3%



2050  
relative  
sufficiency  
58%  
World population 9.4 billion

scarcity 18%  
stress 24%

WATER SHORTAGES  
proportion of world's population  
facing water shortages  
1995 and 2050

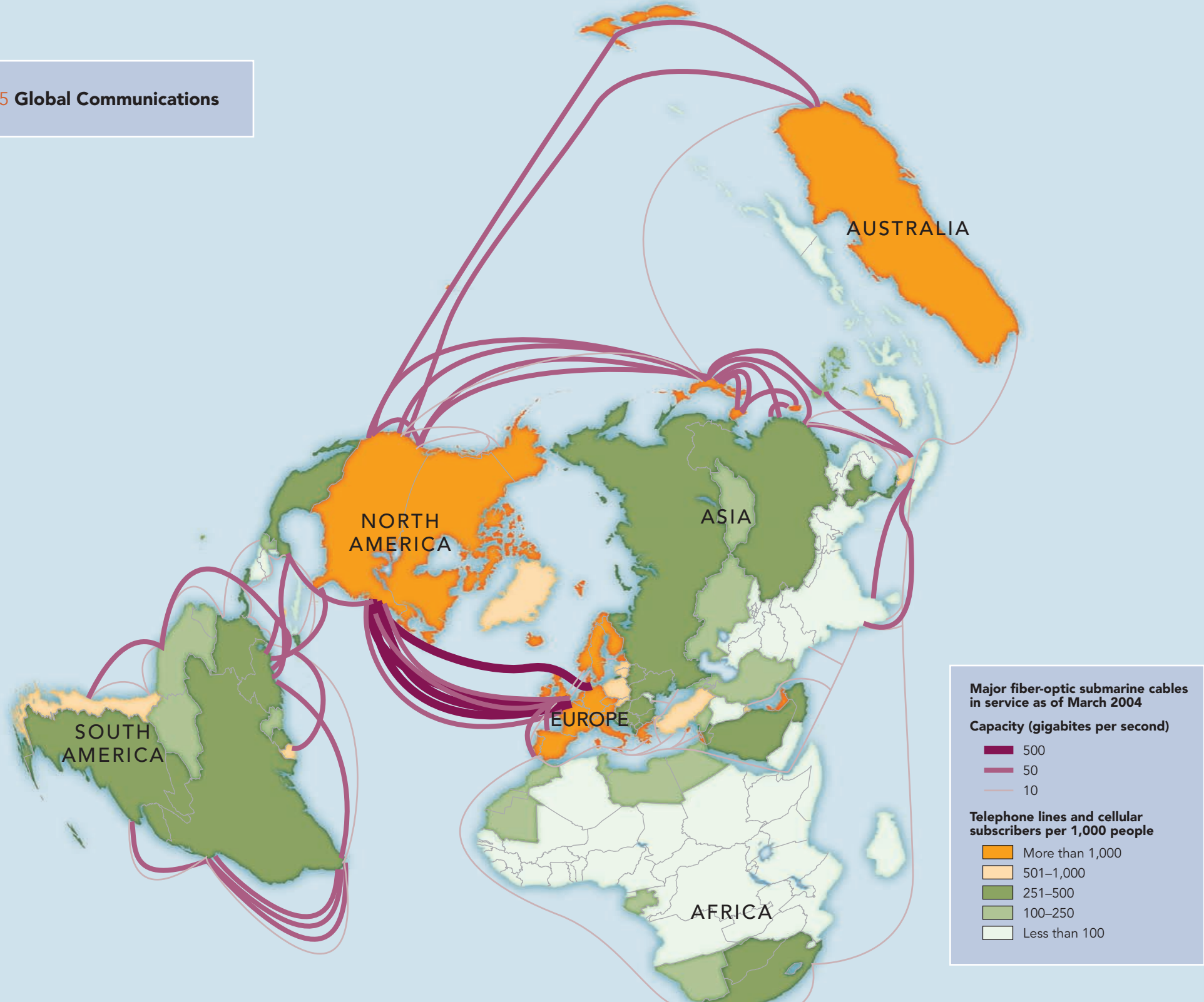


2050  
FRESH WATER  
Availability per person per year  
cubic meters  
projected 1997  
borders 1998

- water scarcity:  
under 1,000 cubic meters  
per person  
*chronic water shortages  
impede economic  
development and cause  
environmental degradation*
- water stress:  
1,000–1,700 cubic meters  
per person  
*chronic and widespread  
water supply problems*
- relative water sufficiency:  
over 1,700 cubic meters  
per person  
*intermittent or localized  
shortages*
- relative sufficiency in 1995  
although shortage predicted  
for 2050

Note: Based on  
UN population data 1996

## 5 Global Communications





## 6 Global Terrorism

### NORTH AMERICA

For decades North America was practically free from terrorist attacks. Huge casualties and national shock from the events of 9/11 instigated the war on terrorism.

### WESTERN EUROPE

Several countries have participated in the U.S.-led war on terrorism—but are concerned that they, too, have become actual or potential al Qaeda targets as a result.

### EURASIA

This is a key arena in the war on terrorism, with many countries receiving financial and military aid from the United States. Reaction from some Islamic groups is evident.

### ASIA

Conflict over Kashmir, tensions in Afghanistan and Pakistan, and al Qaeda presence in Southeast Asia combine to make this region a pivot in the war on terrorism.

### AFRICA

The presence of failed states and poverty raises concerns that some countries will become training and recruitment grounds for terrorist groups targeting Israel and the United States.

### MIDDLE EAST

The Israel-Palestine conflict; terrorist challenges to established regimes (such as Saudi Arabia's); and insurgency against an increased U.S. presence are volatile issues in the region.

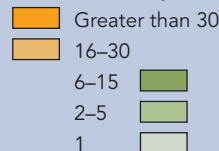
### SOUTH AMERICA

This area has seen more attacks than any other over the past few years, but with relatively few casualties. Kidnappings and attacks on U.S. oil interests predominate.



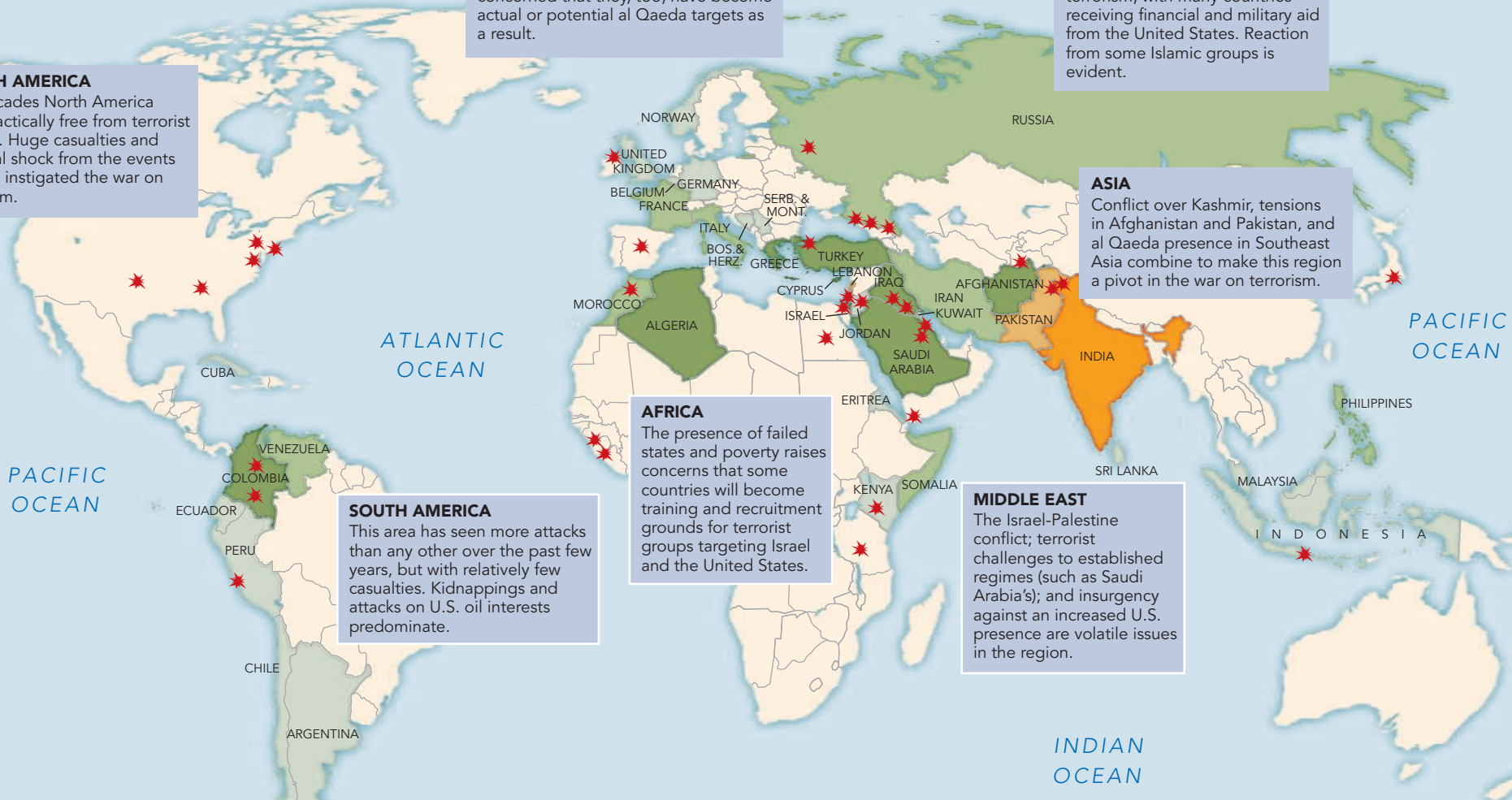
Selected major terrorist attacks, 1995–March 2004

### International terrorist incidents, 2003



### Terrorism

Contemporary terrorism has two major motivations; challenging the global role of the United States and national self-determination. The violent challenge to the global presence of the United States by al Qaeda is a relatively recent development that transcends state politics. A worldwide network of terrorist cells, more or less affiliated with al Qaeda, has targeted buildings and activities that represent Western economic, political, and cultural activity. The suicide attacks of September 11, 2001, targeted symbols of U.S. political and economic power. The bombing of a hotel in Bali targeted Australian youths on holiday in a Muslim country. A more traditional form of terrorism is ethno-national territorial politics within states. For example, terrorist activity in India, Pakistan, and the Middle East is dominated by the goal of national separation or self-determination.





## 7 Religions



### RELIGIONS

- Atheism (and Communism)
- Buddhism
- Hindu
- Muslim
- Traditional/Tribal
- Others
- Christian (Orthodox)
- Christian (no major sect)
- Christian (Protestant)
- Christian (Roman Catholic)

- Christian (no major sect), Muslim, Hindu
- Christian (Roman Catholic), Muslim, Traditional
- Christian (no major sect), Traditional, Buddhism
- Christian (no major sect), Muslim, Traditional
- Christian (no major sect), Traditional, Hindu, Muslim
- Christian (Orthodox), Muslim, Atheism
- Christian (no major sect), Christian (Roman Catholic), Hindu, Muslim, Others
- Christian (Roman Catholic), Muslim, Others
- Christian (Roman Catholic), Buddhism, Others

## 8 Global Economy and World Trade

### Trade flow

The circling paths of trade between continents show just how interconnected the world's economies truly are. The richest countries, such as those in North America, western Europe, and the Far East, trade mostly with each other, exchanging different varieties of similar goods such as automobiles. However, trade also flows between higher- and lower-income regions. In those cases, the high-income countries typically provide more complex goods, such as electronic equipment, while low-income countries provide primary goods such as minerals. Smaller, poorer countries are more likely to be dependent on exporting a single commodity, such as coffee or petroleum. In general, poor, labor-abundant countries tend to export labor-intensive goods, such as textiles and shoes, and the countries rich in arable land will export foods such as grains.

