CHAPTER 10

Development

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FIGURE 10.1 **Central Square, Timbuktu, Mali.** Sited along the Niger River on the edge of the Sahara Desert, Timbuktu was once a major trade center. Goods from the north, carried on camels, were traded with goods from the south brought in on boats. But in the sixteenth century, the development of sea trade routes on the west coast of Africa allowed traders to circumvent Timbuktu, and the city's central trade role declined.

Why does the name *Timbuktu* sound familiar? One reason is that centuries ago, the city was a well-known intellectual, spiritual, and economic center. Yet the contemporary urban landscape of Timbuktu provides few clues of its former glory (**Fig. 10.1**). What happened?

The city's wealth many centuries ago came from its strategic position along a major route across the Sahara desert used by traders of gold, salt, and other valuable commodities. With European exploration, colonization, and exploitation of Africa, trade patterns shifted. Port cities gained in importance with the development of sea trade routes established to ship enslaved Africans and gold from coastal Africa. Timbuktu lost its strategic position and a long period of decline began.

Timbuktu's story serves as a reminder that *where* a place is located can affect its economic fortunes—its development. But the "where" factor is not a simple one. Sometimes the presence of valuable raw materials can produce wealth. More often development prospects are shaped by a place's strategic position relative to other places and innovations, its relationship with other places, its political and economic past, and its access to capital. Development also takes place in the context of the capitalist world economy where structures and relationships help create high levels of uneven development.

In this chapter, we discuss some of the major theories of development. We also examine how geography affects development, considering the influence of structural features of the world economy and local circumstances. We also look at the geographical barriers to and costs of development within countries, and we consider why uneven development occurs not just across the globe but also within countries.

CHAPTER OUTLINE

10.1 Explain how development is defined and measured.

- Gross National Income
- Alternative Measures of Development

10.2 Describe the nature and limitations of development models.

- Traditional Models
- Alternative Approaches to Modeling Development

10.3 Explain major influences on development.

- Economic Arrangements
- Aid and International Financial Institutions
- Social Conditions
- Political Corruption and Instability
- Costs of Economic Development

10.4 Evaluate how political and economic institutions influence uneven development within states.

- The Role of Governments
- Islands of Development
- Creating Growth in the Periphery of the Periphery

10.1 Explain How Development Is Defined and Measured.

The economic and social geography of the modern world is a patchwork of contrasts. On some fields in equatorial America and in African forests, farmers practice **shifting cultivation** to grow root crops using ancient methods and hand tools. On the Great Plains of North America, in Ukraine, and in eastern Australia, farmers use expensive, modern machines to plow the land, plant seeds, and harvest grains. Farmers in Uzbekistan harvest cotton by hand on soil left salinized by over-irrigation in arid Central Asia. On the other hand, factory workers in Japan and South Korea work with high-tech robots to produce automobiles by the shipload for distribution to markets thousands of miles away.

Most people use the term *developed* to describe Japan and South Korea, in contrast to Uzbekistan. That notion of development originated with the **Industrial Revolution** and the idea that technology can improve the lives of people. Through advances in technology, people produce more food, create new products, and accrue material wealth. But these things do not necessarily bring happiness (see Chapter 14), social stability, or environmental sustainability. Development can be a narrow, sometimes controversial, indicator of the human condition.

Whatever the complexities, development has a great influence on places and people. It is therefore important to understand the different approaches taken to measuring development and assessing its advantages and disadvantages.

Gross National Income

Most measures of development focus on one of three factors: economic well-being, technology and production, or social welfare. Beginning in the 1960s, the most common way to measure economic well-being was to use the index economists created to compare countries: gross national product. **Gross national product** (GNP) is a measure of the total value of the officially recorded goods and services produced by residents of a country in a given year. It includes goods and services made both inside and outside a country's territory. It is therefore broader than **gross domestic product** (GDP), which includes only goods and services produced within a country during a given year.

Economists have increasingly turned to **gross national income** (GNI) as a measure of development. The GNI is a calculation of the monetary value of what is produced within a country, plus income received from investments outside the country, minus income payments to other countries around the world. GNI is seen as a more accurate way of measuring a country's wealth because it accounts for wealth generated by investments outside a country's borders.

In order to compare GNI across countries, economists must standardize the data. The most common way to standardize GNI data is to divide it by the population of the country, which yields a **per capita GNI** figure. In Japan the per capita GNI in U.S. dollars in 2017 was $38,550. In the United States it was $58,270. In Norway it was $75,990. But in India it was $1870, in Nigeria it was $2160, and in Indonesia, the world's fourth most populous country, it was $3540. This enormous range in per capita GNI reflects the wide gap between rich and poor.

Using GNI to measure wealth has several shortcomings. First, it includes only transactions in the **formal economy**, the legal economy that governments tax and monitor. Quite a few countries have a per capita GNI of less than $1000 per year—a figure so low it seems impossible that people could survive. A key component of survival in these countries is the **informal economy**, the uncounted or underground economy that governments do not tax and keep track of, including everything from a garden plot in a yard to the illegal drug trade. The informal economy is a significant element in the economies of many countries, but GNI statistics omit the informal economy entirely (see **Fig. 5.18**).

GNI per capita also tells us nothing about the distribution of wealth across the world or within a country (**Fig. 10.2**). The Middle Eastern oil countries of Kuwait and the United Arab Emirates (UAE) have per capita GNIs of $31,440 and $39,130 respectively, both ahead of Spain and New Zealand in 2017. However, these figures give us no hint of what proportion of the population participates in the country's economy, the average citizen's standard of living, or gaps between genders or among regions. The wealth generated by the formal economy in the UAE is not distributed evenly across the seven emirates that make up the country. Billionaires in the UAE own more than 40 percent of the economy, but there are only 6.5 of them per million people. Abu Dhabi, the emirate that dominates the banking and financial sector and the petroleum industry, generated roughly 14 percent of the country's GDP in 2017. Dubai, the next largest emirate, generated about 26 percent of the GDP. The Sharjah emirate accounted for 7.6 percent of the GPD, and the Qaywayn emirate generated less than 1 percent of the country's gross GDP.

Another limitation of GNI per capita is that it measures only outputs (i.e., production). It does not take into account the nonmonetary costs of production, which take a toll on the environment through resource depletion and pollution of air and water. Per capita GNI may even treat such matters as a plus. An example is the sale of cigarettes, which augments GNI. When cigarette use leads to sickness and hospitalization, the GNI figure grows further. Conversely, quitting smoking improves health and saves lives, but reduces money spent on cigarettes and health care, thus reducing the total production and the GNI in a country.

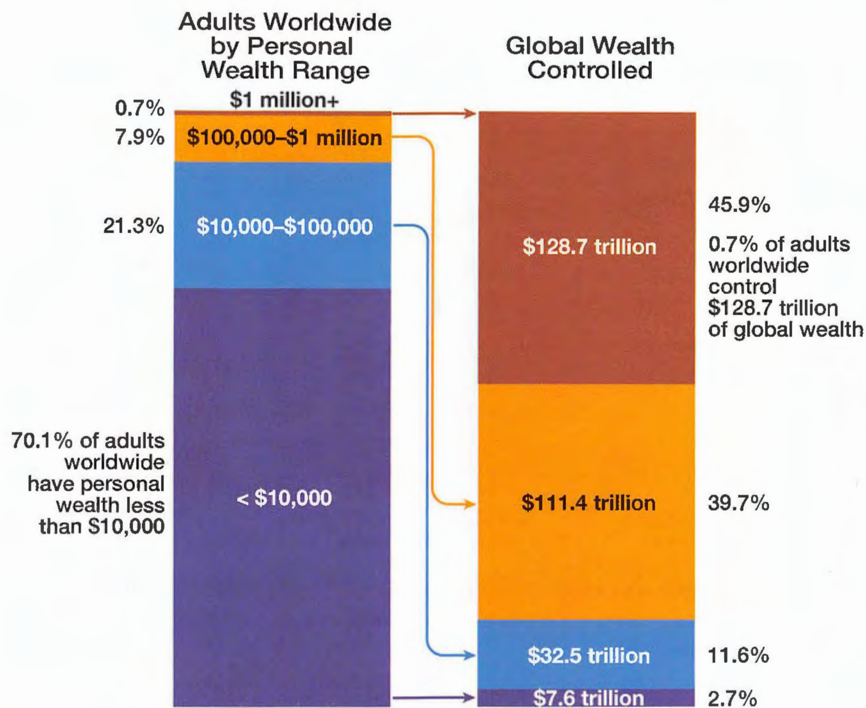

FIGURE 10.2 Concentration of Wealth Worldwide. More than 70 percent of adults worldwide have personal wealth less than $10,000, and they control less than 3 percent of global wealth. Less than 1 percent of adults worldwide have personal wealth more than $1 million, and they control more than 45 percent of global wealth.

Alternative Measures of Development

The limitations of GNI have prompted analysts to look for alternative measures of economic development, ways of measuring the roles that technology, production, transportation, and communications play in an economy. To measure the use of technology, we can look at the number of workers relative to the amount of production in a given sector. For example, in the 2017–2018 growing season, the United States produced roughly 1.7 times the amount of corn that China did. At the same time, it employed only about 1.63 percent of its labor force in the agriculture sector in 2018, whereas China employed about 16.45 percent of its labor force in agriculture. The large proportion of the labor force employed in agriculture shows that China still relies significantly on labor-intensive rather technologically intensive production methods.

In conventional development terms, a country with a high percentage of laborers engaged in the production of agriculture is less developed than one in which a high percentage of workers are involved in high-tech industries. Productivity per worker is examined by summing production over the course of a year and dividing it by the total number of persons in the labor force. The World Bank reported that, in the agricultural, forestry, and fishing sector, productivity per worker in the United States was $83,735 in 2016, whereas China's productivity per worker in that sector was $5325 the same year. A more productive workforce usually suggests a higher level of mechanization in production.

One good measure of access to technology is access to railways, roads, airports, telephones, radios, televisions, and so forth. **Figure 10.3** highlights some of the extraordinary differences in communications access, including access to the Internet, mobile cellular subscriptions, and telephone landlines around the world. The world average for Internet and mobile access is increasing, while the world average for landline access is declining.

Nonprofit and nongovernmental development agencies, including one called Living Cities, have called the mobile phone "the great equalizer." Yet evidence is mixed. In a 2014 study, analysts at Pew Research Center surveyed residents of 24 middle-income countries, including Turkey, Venezuela, Kenya, Brazil, and Nigeria. They found that while cell phones "are almost omnipresent in many nations," most people are still offline (Pew 2014). A high degree of correlation between income and Internet access (**Fig. 10.4**) means that instead of mobile phones equalizing Internet access for higher and lower income countries, the technology can either reinforce or exacerbate the **digital divide** between rich and poor. The Pew survey data also confirmed that people with college educations are more likely to have smartphones and thus mobile access to the Internet.

Another way to measure development is to compare the size of the working-age population with the number of older

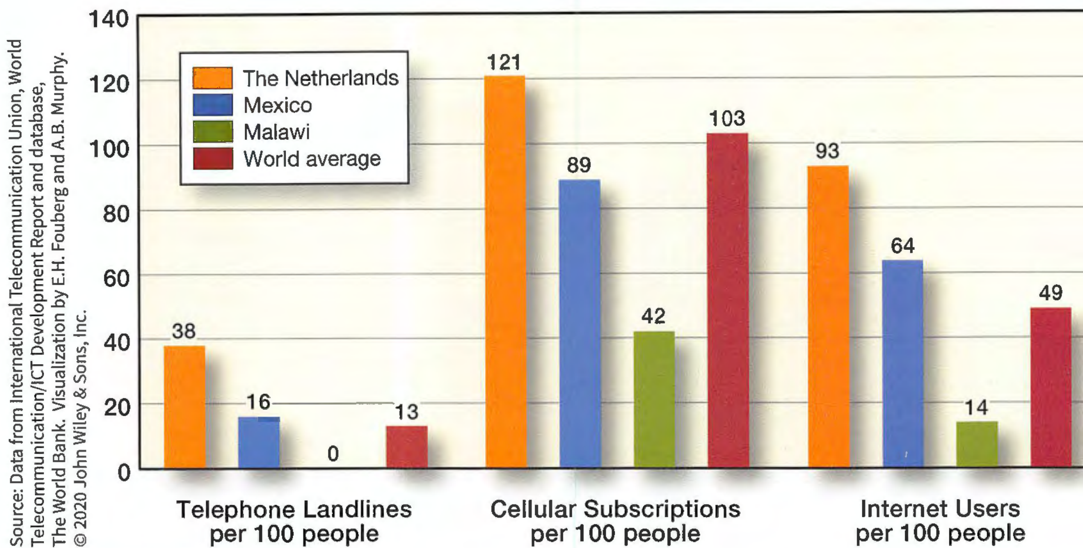

FIGURE 10.3 Differences in Communications Connectivity. While connection to telephone land lines may not be as important in the era of cellular phones, the pattern of differences is the same in all three forms of communication access.

or younger people in the society who are not contributing to the country's economy. The resulting **dependency ratio** measures the proportion of dependents in the population relative to every 100 people of working age.

The overall dependency ratio of young and old relative to the working-age population can be divided into an *older person dependency ratio* (population over the age of 64 relative to the working-age population) and a *younger person dependency ratio* (population ages birth to 14 relative to the working-age population). The older person dependency ratio (proportion of the population over age 64) is highest in Japan at 45, meaning that every group of 100 working-age adults (ages 15 to 64) is paying taxes to support 45 people over the age of 64 (**Fig. 10.5A**). Just behind Japan are several European countries, including Italy, Finland, and Portugal. The countries with high older person dependency ratios generally have high per capita GNIs, but the larger proportion of older adults in society can be a financial strain on the country. Aging populations in Japan and Europe require greater investments in health care, housing for the elderly, and retirement welfare (similar to Social Security in the United States).

Another way to look at dependency is to measure the percentage of young people, ages birth to 14, relative to the working-age population. The World Bank reports these data as the younger person dependency ratio. Niger has the highest ratio, with 106 young people for every 100 working-age adults. All of the 10 countries with the highest younger person dependency ratio are in sub-Saharan Africa (**Fig. 10.5B**). Having a large proportion of young people in a country can also be a financial strain if countries invest in childcare, public education, immunization programs, and health care for children.

In addition to access to technology and dependency ratios, we can use many other statistics to measure social welfare, including literacy rates, infant mortality (Fig. 2.17), life expectancy (Fig. 2.20), undernourishment (Fig. 1.2), percentage of family income spent on food, and amount of savings per capita.

The United Nations calculates the Human Development Index (**Fig. 10.6**) to incorporate the "three basic dimensions of

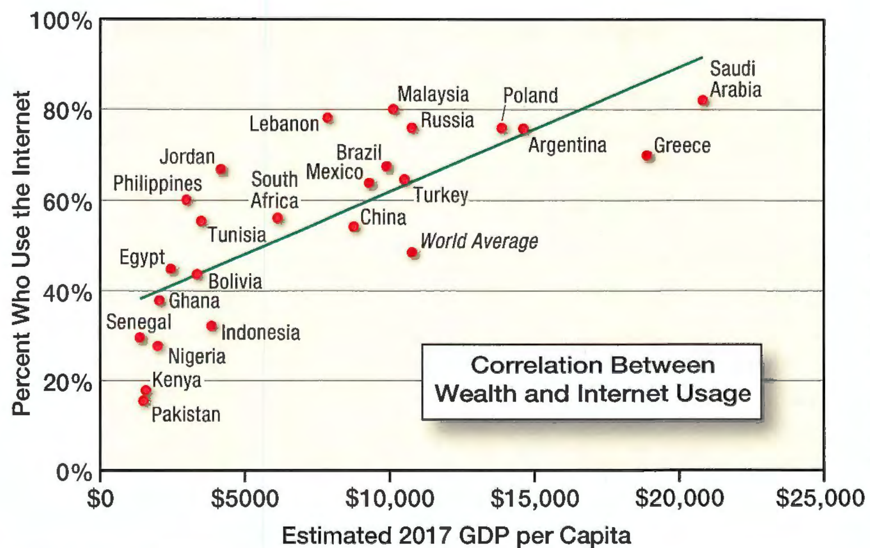

FIGURE 10.4 Correlation Between Income and Internet Access. The correlation between income and Internet access is positive and relatively high, with higher income countries having greater access to the Internet.

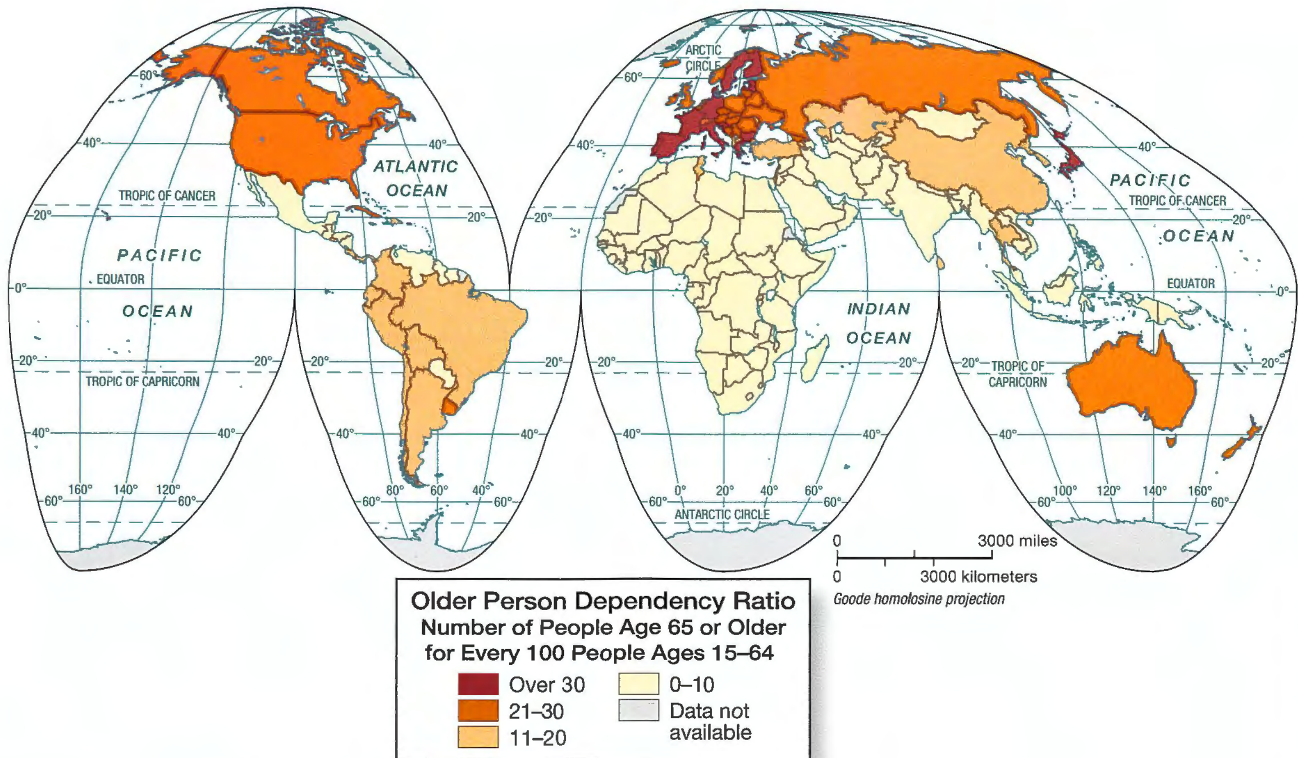

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FIGURE 10.5A Older Person Dependency Ratio. The older person dependency ratio is a measure of the number of people 65 and older relative to 100 working-age adults, between 15 and 64. The working-age adults in the formal economy contribute to a country's tax base, thereby supporting the older population of a country.

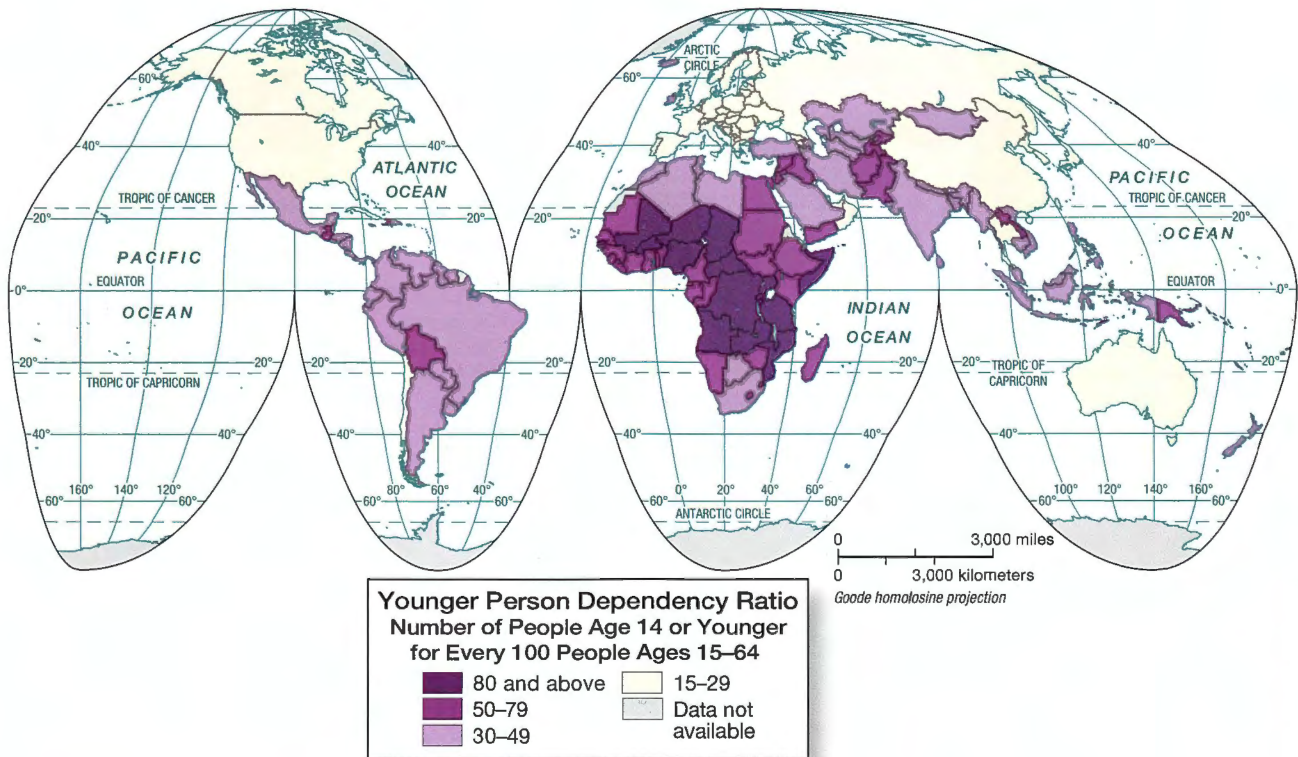

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FIGURE 10.5B Younger Person Dependency Ratio. The younger person dependency ratio is a measure of the number of people birth to age 14 relative to 100 working-age adults, between 15 and 64. The working-age adults in the formal economy contribute to a country's tax base, thereby supporting the younger population of a country.

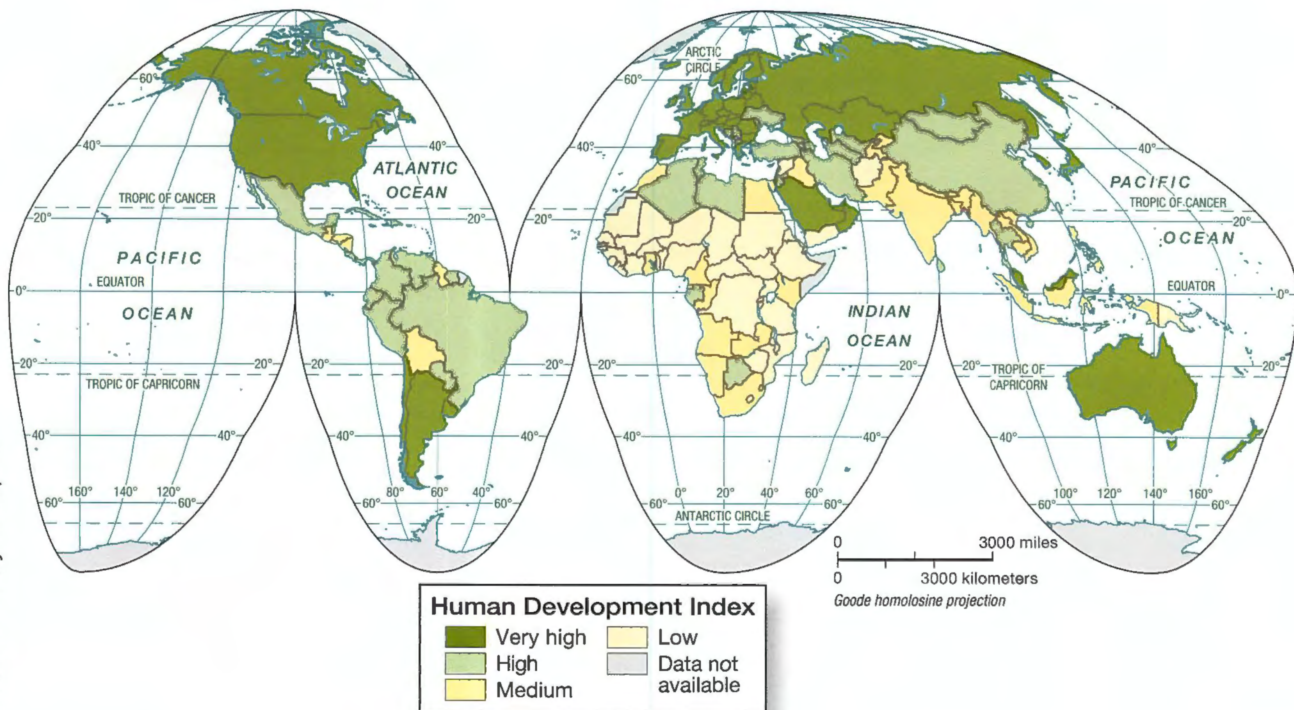
human development: a long and healthy life, knowledge and a decent standard of living." Several statistics, including per capita GDP, literacy rates, school enrollment rates, and life expectancy at birth, are included in the calculation of the Human Development Index.

In 2015, the United Nations held a high-profile summit during which more than 150 world leaders adopted the Agenda for Sustainable Development. The goal is to improve the condition of the people in the countries with the lowest standards of human development. At the summit, world leaders recognized the principal barriers to economic development and identified key development goals to be achieved by the year 2030. They were:

1. No poverty
2. Zero hunger
3. Good health and well-being
4. Quality education
5. Gender equality
6. Clean water and sanitation
7. Affordable and clean energy
8. Decent work and economic growth
9. Industry, innovation, and infrastructure
10. Reduced inequalities
11. Sustainable cities and communities
12. Responsible consumption and production
13. Climate action
14. Life below water
15. Life on land
16. Peace, justice, and strong institutions
17. Partnership for the goals

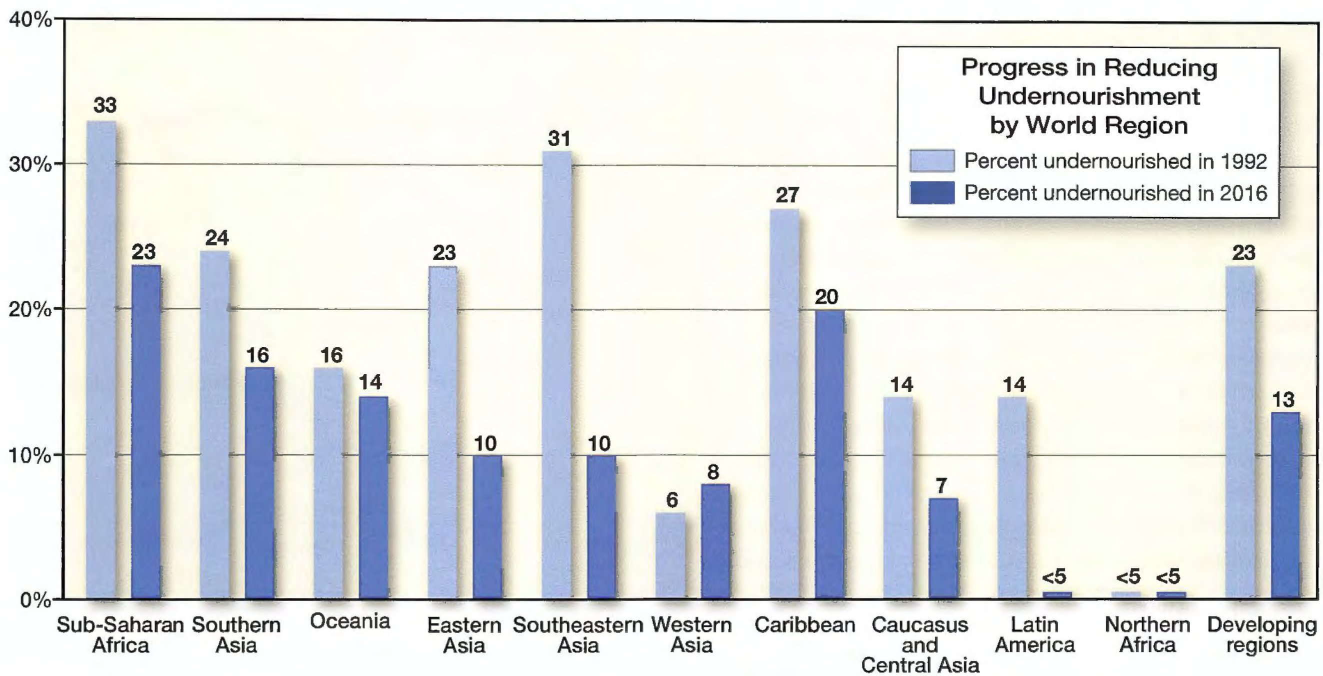
These **Sustainable Development Goals** represent a fairly high degree of consensus about the conditions that need to be changed to achieve economic development.

In 2018 the United Nations reported that progress had been made toward reducing undernourishment, but the degree of progress varied by world region. Reducing undernourishment is a goal the United Nations originally set in 2000 with its Millennium Development Goals. **Figure 10.7** plots the progress made toward that goal as of 2016. Progress has also been made in expanding access to clean water and education, but inequality is a worsening problem in many places. As for the goal of gender equality, the UN reported progress in the proportion of women in legislatures, but a lack of progress in the number of hours women spend on unpaid domestic labor. The UN reports that, "based on data between 2000 and 2016 from about 90 countries, women spend roughly three times as many hours in unpaid domestic and care work as men."



Data from: Human Development Index and its components, United Nations Development Programme. Visualization by E.H. Fouberg and A.B. Murphy. © 2020 John Wiley & Sons, Inc.

FIGURE 10.6 **Human Development Index.** The Human Development Index measures development beyond GNI or GDP by taking into account literacy, school enrollment, and other factors that contribute toward quality of life in a country.



Courtesy of: United Nations Millennial Development Goals, 2014. Updated 2016 data from The World Bank. Visualization by E.H. Fouberg and A.B. Murphy. © 2020 John Wiley & Sons, Inc.

FIGURE 10.7 Progress in Reducing Undernourishment by Region. The United Nations Millennium Development Goals sought to reduce undernourishment in each world region. According to these data, these goals were achieved in every region except Western Asia, where undernourishment actually rose between 1992 and 2016, from unrest in the region, including the war and ongoing conflict in Iraq and the civil war in Syria.

Looking across all of the maps showing different measures of development, it is clear that many countries come out in approximately the same position, no matter which measure is used. And all the maps and statistics share one fundamental limitation: They do not capture differences in development within countries, an issue we consider later in this chapter.

TC Thinking Geographically

To what degree is economic **development** a Western concept? How do Western notions of development affect what happens in world **regions** outside Europe and North America? If you addressed development at different **scales** from local to national to world regional, how would development goals and ideas for solutions vary?

10.2 Describe the Nature and Limitations of Development Models.

Governments, nongovernmental organizations, and international financial institutions (including the World Bank, the World Trade Organization, and the International Monetary Fund) use a variety of development models to understand how and why countries develop. The models, which seek to explain how countries move along a path to development, have influenced development policies around the world. But most of them have a Western bias. They assume that development occurs when the strategies that led to development in Europe and North America are pursued elsewhere. However, Western-inspired measures do not always have positive effects. Some measures designed to improve development in lower income countries, such as attracting industry and mechanizing agriculture, can lead to worsened social and environmental conditions for many people.

Traditional Models

The most influential classic development model is economist Walt Rostow's **modernization model**. Many theories of development grew out of the major decolonization movements of the 1960s. Motivated by a concern with how the dozens of newly independent countries in Africa and Asia would survive economically, Rostow looked at how the countries that were already economically powerful in the 1960s had gotten where they were.

Rostow's model assumes that all countries follow a similar path to development or modernization, advancing through five stages of development. In the first stage, the society is *traditional* and the dominant activity is subsistence farming. The social structure is rigid and technology is slow to change. The second stage brings the *preconditions of takeoff*. New leadership moves the country toward greater flexibility, openness, and diversification. These changes, in turn, lead to the third stage, *takeoff*. Now the country experiences something akin to an industrial revolution, and sustained growth takes hold. Urbanization increases, industrialization proceeds, and technological and mass-production breakthroughs occur.

Next, the economy enters the fourth stage, the *drive to maturity*. Technologies diffuse, industrial specialization occurs, and international trade expands. Modernization is evident in key areas of the country and population growth slows. Finally, some countries reach the final stage in Rostow's model, *high mass consumption*, which is marked by high incomes and widespread production of many goods and services. During this stage, a majority of workers enter the service sector of the economy.

Another name for Rostow's model (and other models derived from it) is the **ladder of development**. Visually, we can see his five stages of development as rungs on a ladder (**Fig. 10.8**), with each country climbing the ladder one rung at a time. The major limitation of Rostow's model is that it provides no larger context for development. Is a climb up the ladder largely dependent on what happens within one country? Or do we need to take into account all of the other countries, their places on the ladder, and how their actions and global forces affect an individual country's movement on the ladder? The theory also misses the particular conditions that can influence development decisions within an individual country, with no consideration of the role that cultural or political differences might play.

As these questions suggest, Rostow's development model does not pay much attention to the different geographical and historical circumstances that can affect what happens to places. Instead it treats countries as individual, autonomous units that simply move through the process of development at different times and at different speeds. It fails to consider the ability of some countries to influence what happens in other countries or the different positions countries occupy in the world economy. Japan moved from a rural, agrarian state to an urbanized, industrial one in a particular way during the

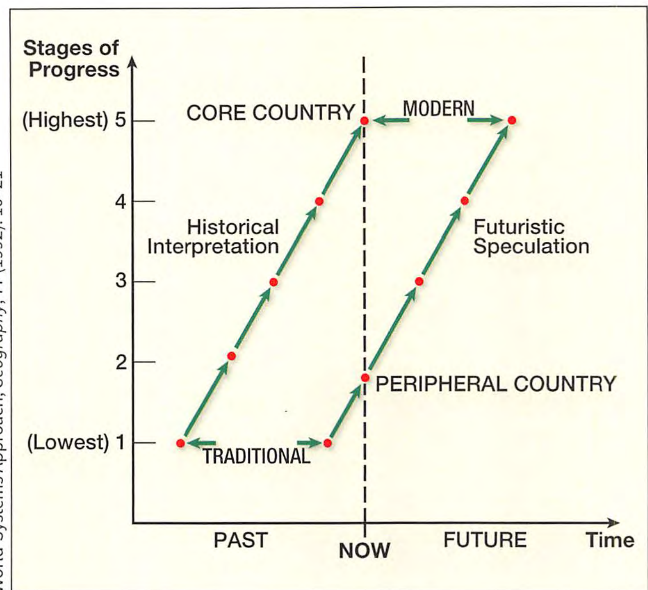


FIGURE 10.8 Rostow's Ladder of Development. This ladder assumes that all countries can reach the same level of development and that all will follow a similar path.

twentieth century. However, that does not mean that Mali will go through the same transition today, that it will do so in the same way.

Rostow's model also led many people to think of the world as divided into two basic economic realms: "developed" and "less developed." Those countries moving from the second to the first category were termed *developing*, and that term came to be used more widely in the late 1960s and 1970s as some lower income countries began to advance economically. Before long, all countries that were not viewed as developed were called "developing." Using the term *developing*, however, implies that countries are improving along each indicator of development: increasing per capita GNI, increasing productivity per worker, improving access to communications and technology, improving access to health care and clean water, and improving literacy rates for males and females.

Rostow's model is still influential, despite all its limitations. Even calling higher income countries "industrialized" and saying that lower income countries need to "industrialize" implies stages of development. It suggests that economic development can be achieved only by climbing the same ladder of development that the higher income countries have already climbed. Yet if a lower income country quickly industrialized today through foreign investment, it might not reap much economic benefit. In fact, it could experience severe environmental consequences. The higher income countries we call "industrial" today are really "postindustrial." Declining transportation costs and new approaches to production have moved the manufacturing of goods to other parts of the world. Many of the highest income countries have economies built on the service sector, not the industrial sector (see Chapter 12).

Alternative Approaches to Modeling Development

Development happens in **context**. To understand why some countries are poor and others are wealthy, we need to consider the role played by geographical context: the spatial organization, character, and history of a place and its interactions with the broader world.

Historically, ideas about government and economics diffused from Europe through the world as a result of colonialism, global trade, and the rise of capitalism. The Industrial Revolution and colonialism made colonies dependent on the colonizers. This relationship brought wealth to the colonizers. Even after colonialism ended, the economic, political, and social networks created through colonialism persisted. Goods and capital continued to flow from colonies to their former colonizers. The continuation of colonial relationships after formal colonialism ends is called **neocolonialism**. The term draws attention to the continuing ability of former colonial powers to control the economies of the lower income independent countries.

Development scholars have produced a number of alternative theories to explain the barriers to development under neocolonialism. These theories are called structuralist theories. A **structuralist theory** holds that difficult-to-change, large-scale economic arrangements shape what is possible for a country's development in fundamental ways. The world economy has a set of structural circumstances that make it very difficult for lower income countries to improve their economic situation. Such circumstances include the concentration of wealth in certain areas and unequal relations among places. Structuralists argue that less well-off countries face a very different set of development circumstances and different contexts than those faced by the countries of western Europe that were described in Rostow's model. Some even question whether it is possible for all countries to develop at the same time or whether structural circumstances require that some countries be on the bottom in order for others to remain on top.

Dependency Theory

Structuralists have developed a major body of development theory called **dependency theory**, which holds that the political and economic relationships between countries and regions of the world control and limit the economic development possibilities of lower income areas. Dependency theorists note, for example, that colonialism created political and economic structures that caused the colonies to become dependent on the colonial powers. They further argue that such dependency helps sustain wealth in developed regions and poverty in other areas, even after decolonization occurs.

Dependency theory is based on the idea that economic prosperity is difficult to achieve in regions and countries that have traditionally been dominated by external powers because a dependency relationship continues after independence. For example, 14 countries in Africa have used the CFA franc as their currency since 1945. They long tied the value of their currency to the value of the French franc, and they now tie it to the European Monetary Union's euro (France switched to using the euro in 2002). The economies of these 14 African countries are thus tied to the economy of the European Union—they rise and fall together. The CFA franc was set up before African countries gained independence starting in the 1950s and 1960s, and the former colonies (12 of the 14 were colonies of France) continue to use the CFA franc because their economies are based on the currency. Moreover, the countries are dependent on France in other ways because the French treasury and French parliament set policies that directly affect their economies.

Other types of dependency are important as well. Although the United States did not colonize Central and South America, several countries in the region now recognize that their economy is dependent on the United States and explicitly link their economy to the U.S. dollar. Indeed, more than 40 countries around the world peg the value of their currency to the U.S dollar, and ten countries have abandoned their currency and completely adopted the U.S. dollar. The process of adopting the U.S. dollar as a country's currency is called **dollarization**.

For the people of El Salvador, dollarization made sense because the economy of El Salvador depends on the economy of the United States (**Fig. 10.9**). Over 1.42 million Salvadorians live in the United States, and in 2016 they sent $4.6 billion in remittances to El Salvador. Because of this flow of American dollars to El Salvador, many transactions occurred in dollars

YURI CORTEZ/AFP/Getty Images

FIGURE 10.9 San Salvador, El Salvador. A bank employee loads an automatic teller machine (ATM) with U.S. currency in El Salvador, a country that underwent dollarization in 2001.

long before the official switch. The United Nations Development Program estimates that 22.3 percent of families in El Salvador receive remittances. In addition, over 40 percent of El Salvador's exports go to the United States. When the Federal Reserve Board in the United States controls the supply of dollars by altering the interest rates or when the U.S. economy enters a recession, the consequences are felt directly in El Salvador. The greatest disadvantage of dollarization is that it involves surrendering to the United States aspects of policymaking that affect the local economy. The biggest advantage of dollarization is stabilization of the country's currency because of the stability of the U.S. dollar.

Like modernization theory, dependency theory is based on generalizations about economic change that do not pay much attention to geographical differences in culture, politics, and society. Not every country is in the same situation at the same time, so countries cannot all follow the same path of development, as modernization theory would have it. Likewise, not every country is affected by a dependent relationship in the same way. Pegging a currency to or adopting the currency of a higher income country may be beneficial for one country but not for another.

World-Systems Theory

Development models—even dependency theory—tend to underplay geographical, historical, and political context. In reaction to that tendency, some geographers have embraced a development theory we have already encountered (see Chapter 8): Immanuel Wallerstein's **world-systems theory**. This theory incorporates attention to the role that space (geography) and time (history) play in the power relationships that exist in the world economy.

Wallerstein divided the world into a **three-tier structure:** core, periphery, and semiperiphery. The division helps explain the interconnections among places in the global economy. Recall that **core** processes generate wealth in a place because they require higher levels of education, more sophisticated technologies, and higher wages and benefits. When core processes are embedded in a place (such as the Telecom corridor in Richardson-Plano, Texas), wealth is generated for the people in that place. **Peripheral** processes, on the other hand, require little education, lower technologies, and lower wages and benefits. Producing agriculture by hand using little technology may generate a stable food supply in a place, but it does not have a significant impact on the larger formal economy.

Core regions are those in which core processes are grouped together. Core regions have achieved high levels of economic prosperity and are dominant players in the world economy. When peripheral processes are found in a place, the processes often generate little wealth for the people in that place. Periphery regions are areas where peripheral processes are concentrated. They are lower income regions that are dependent in significant ways on the core and do not have as much control over their own affairs, economically or politically. The **semiperiphery** exhibits both core and peripheral processes, with semiperipheral places serving as a buffer between the core and periphery in the world economy. Countries of the semiperiphery exert more power than peripheral regions but remain heavily influenced by core regions.

Dividing the world into cores, semiperipheries, and peripheries might seem to do little more than replace *developed*, *developing*, and *underdeveloped* with a new set of terms. But the core–periphery model is different from the modernization model because it holds that not all places can be equally wealthy in the capitalist world economy. World-systems theory also makes the power relations among places explicit and does not assume that socioeconomic change will occur in the same way in all places. It is thus sensitive to geographical context, at least in economic terms.

Geographer Peter J. Taylor uses the analogy of a school of tadpoles to demonstrate these ideas. He envisions different places in the world as tadpoles and explains that not all tadpoles can survive to develop into toads. Rather, those that dominate survive and the others perish. World-systems theorists see domination (exploitation) as a function of the capitalist drive for profit in the global economy. Thus, capitalists can move production from one place to another around the globe to enhance profits, but places that lose a production facility can suffer. Moreover, their coping capacity can be small if, as is often the case, they abandon traditional ways and shift to an export economy once external investment arrives.

Another benefit of Wallerstein's three-tier structure is that it focuses on *how* a good is produced instead of *what* is produced. Rostow looked at what is produced. He argued that in order to develop, a country needs to move from traditional agricultural production to industrial production. Wallerstein disagreed—arguing that a country can produce agriculture using core processes and gain wealth while another country can produce the very same agricultural product with peripheral processes and gain almost no wealth from it.

Generating wealth is not determined by *what is produced*; it depends on *how something is produced*. Farmers can grow cotton with simple tools or with $700,000 module-making cotton pickers. Using the $700,000 cotton picker produces more wealth because of all that went into it: Educated engineers designed it, laborers manufactured it, marketing professionals and salespeople sold it, the John Deere dealership received $700,000 for it, and the educated farmer employs the picker to increase productivity per worker.

Another reason why some geographers are drawn to world-systems theory is its potential applicability at multiple scales. For example, Los Angeles can be described as the core of the Southern California region; the Johannesburg area can be seen as the core of southern Africa; or the central business district can be studied as the core of São Paulo, Brazil.

TC Thinking Geographically

Compare and contrast Rostow's ladder of development, dependency theory, and Wallerstein's three-tier structure of the world economy. Describe the **commodity chain** of a specific good. How do differences in core and peripheral processes in the production of this good create **unequal exchange**?

10.3 Explain Major Influences on Development.

Regardless of which development theory you find the most persuasive, most of the theories accept that structures shape the world economy. These structures help to sustain the concentration of power in core states and entrenched poverty in peripheral states.

Economic Arrangements

The concentration of wealth and power in the global economic core that resulted from colonialism and early industrialization put economic actors in those places in the driver's seat. Increasingly powerful corporations developed with a global reach—transnational corporations—that had the ability to shape patterns of development through their investment strategies. Huge banana companies such as Chiquita, Del Monte, Dole, and Noboa could come into a country such as Ecuador, promote the development of vast banana plantations, and ultimately create an economy that was heavily dependent on a single commodity—meaning that development prospects were hostage to the ups and downs of the global banana market.

Manufacturing-oriented transnational corporations also influence development through the globe-spanning production networks they establish. To understand how the production of goods creates wealth in some areas but not in others, it is useful to understand the concept of a commodity chain and the role that places play in the chain of production. A **commodity chain** is a series of links connecting the many places of production and distribution that are involved in the creation of a final product that is bought and sold on the market. Consider an automobile sold in your hometown. It was likely assembled elsewhere using component parts that were made in dozens of different countries around the world. The component parts were most likely made using raw materials from yet other countries. And transport networks knit all of these places together. Each link along the car's commodity chain added value, producing differing levels of wealth for different places and people at each step in production.

In earlier times, what Timbuktu had to offer was the ability to coordinate and facilitate trade based on a geographic site where the Niger River turned north at the edge of the Sahara Desert. The river was the last major water source for those crossing the Sahara from south to north across what is now Mali and Algeria. Timbuktu was a **break-of-bulk** location, where goods traded on one mode of transport, camel, were transported to another mode of transport, boat. The points along the chain where materials and goods are traded change over time, directly impacting the prosperity of places.

Commodity chains today span the globe, and break-of-bulk locations are only one of many nodes along the chain. Places occupy different niches along commodity chains, and they do not all benefit equally from the production of a good. The generation of wealth depends on how production occurs at each step and who reaps most of the economic benefits from production. Sophisticated technology, high skill levels, extensive research and development, and high salaries tend to be associated with the segments of global commodity chains located in the core. The segments located in the periphery, by contrast, tend to be associated with low technology, less education, little research and development, and lower wages.

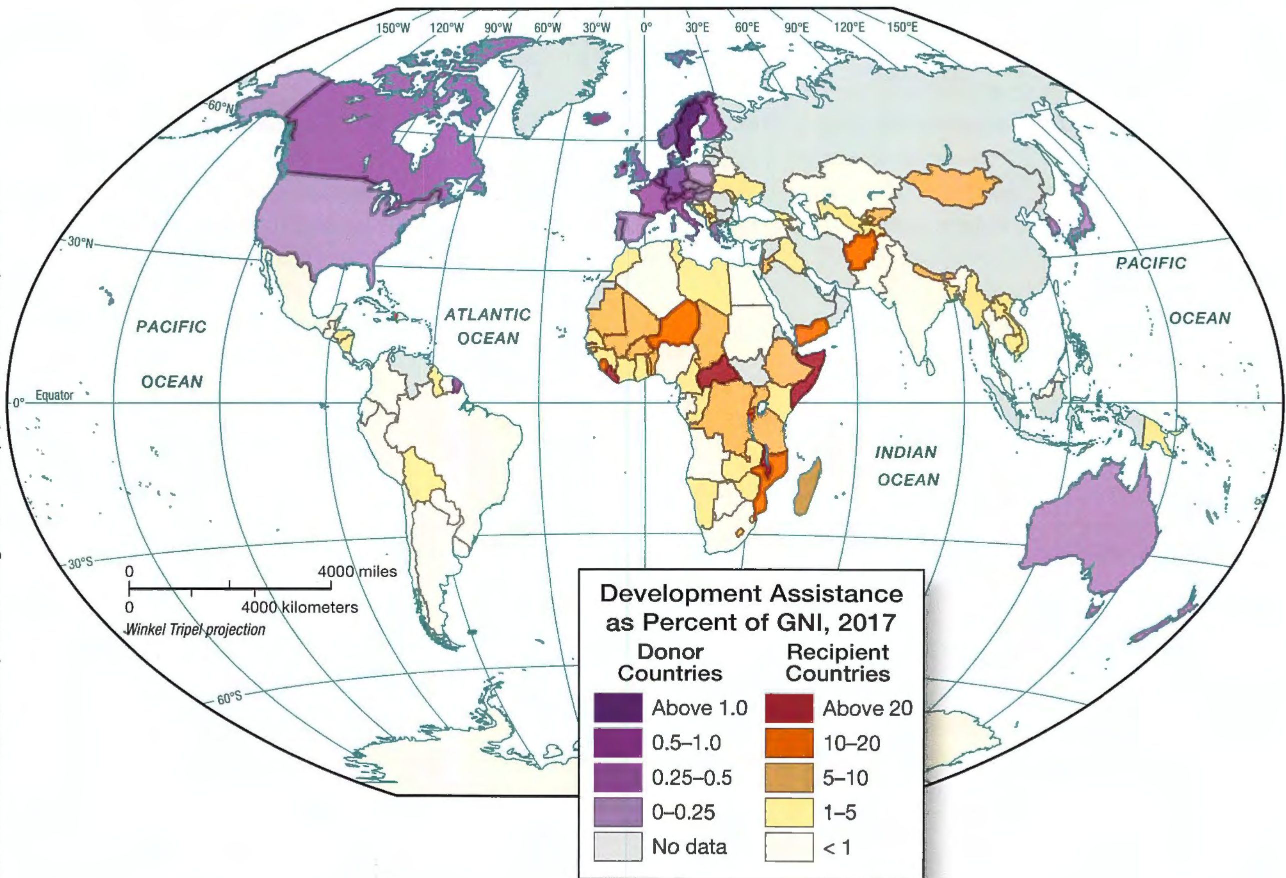
Aid and International Financial Institutions

A number of countries in the global economic core offer aid to lower income countries. **Figure 10.10** provides an overview of the geography of development assistance. The major donor countries are in North America, Europe, and East Asia, and they also include Australia and New Zealand. The main recipient countries are in Africa, southern Asia, Central America, and South America. China and the United States are the largest donors of foreign aid when measured by total dollars, but they are not among the top 10 donor countries when contributions are measured as a percentage of GNI (Fig. 10.10).

Foreign aid can serve as a catalyst for development, as was dramatically illustrated when the United States pumped $12 billion (some $100 billion in today's money) into western Europe after World War II in an effort to help the devastated region get back on its feet (the Marshall Plan). Aid initiatives, however, are rarely driven solely by concern for the well-being of others (altruism). Aid programs they also reflect the interests of donor countries. The Marshall Plan was not just about helping Europe recover from war. The United States wanted to build a strong transatlantic alliance and help Europe resist expanding Soviet influence.

Development assistance may be given to stop problems in the receiving country from impacting the donor country. For example, a donor country may give aid to stabilize a neighboring country with the hope of stopping or slowing the flow of migrants into the donor country. Donor countries may give development aid to gain access to markets in the receiving country or to exert political control over their government. Some donor countries approach development aid altruistically. They may believe all countries do better when the situation of lower income, struggling countries improves.

The interests of donor countries are the prime drivers in development aid, and donor countries may make aid decisions that harm recipient countries. For example, if a donor country ships food or clothing regularly, the steady supply of goods from the donor country will undermine domestic production. Agriculture and textile industries in the receiving country will have fewer customers and less incentive for production.



Source: Data from World Development Indicators: Aid dependency, The World Bank and Indicator 17.2.1: Net official development assistance (ODA) as a percentage of OECD-DAC donors' GNI, by donor countries (percent), United Nations. Visualization by E.H. Fouberg and A.B. Murphy. © 2020 John Wiley & Sons, Inc.

FIGURE 10.10 Development Assistance as a Percentage of GNI for Donor and Recipient Countries, 2017. Two sets of data are represented on the map. Donor countries are shown in the purple shades, with color intensity reflecting the percentage of GNI devoted to foreign aid. Recipient countries are shown in orange shades, with darker tones reflecting higher levels of aid relative to their GNIs.

International Financial Institutions: Western

International financial institutions create the assumptions, guidelines, policies, and structures for development. As World War II was winding down, the allied powers met in Bretton Woods (New Hampshire) to draw up a plan for the postwar economic world. Out of that conference came the World Bank and the International Monetary Fund (IMF)—international financial institutions aimed at promoting economic reconstruction, free trade, and stability in the global financial system. The World Bank initially focused on rebuilding Europe and has become a major source of development funds for lower income countries. The IMF is tasked with monitoring currency exchange rates and balance of payments in trade to create financial stability in global markets.

The United States and Europe are the dominant donors and influencers of the World Bank and IMF. The president of the World Bank is always an American, and the president of the IMF is always a European. The IMF and World Bank loaned substantial amounts of money to newly independent countries in Africa and Asia after World War II. Loans have typically been earmarked for large infrastructure projects like dams, highways, and airports.

Countries receiving loans were generally able to repay them until the world economy took a downward turn in the 1970s. The price of oil rose, and by the early 1980s commodity prices dropped. Rising oil prices make the production of goods more expensive, and falling commodity prices make it difficult to repay loans as the value of exports declines. The Third World Debt Crisis began as export revenue declined, the cost of oil increased, and state-run companies created in the 1960s and 1970s were found to be both inefficient and a drain on government funds.

The World Bank and the International Monetary Fund stepped in to lend more money to help borrower countries out of the Third World Debt Crisis. These loans came with conditions. Borrower countries had to agree to implement economic and governmental reforms, including privatizing government entities, opening themselves to foreign trade, reducing tariffs, and encouraging foreign direct investment. These loans are known as **structural adjustment loans**. By the early 1990s, the set of policies associated with them came to be known as the **Washington Consensus**.

Opponents of the Washington Consensus argue that such policies support and protect core country economies at the expense of peripheral and semiperipheral economies. Countries had limited options to reject structural adjustment loans because the cost of servicing debts (repayments plus interest)

often exceeded revenues from the export of goods and services (**Fig. 10.11**). Borrower countries also needed to demonstrate that they were repaying their debts as well as restructuring their economies. The intention was to attract multinational corporations that could offer employment to their people and investment in their economies.

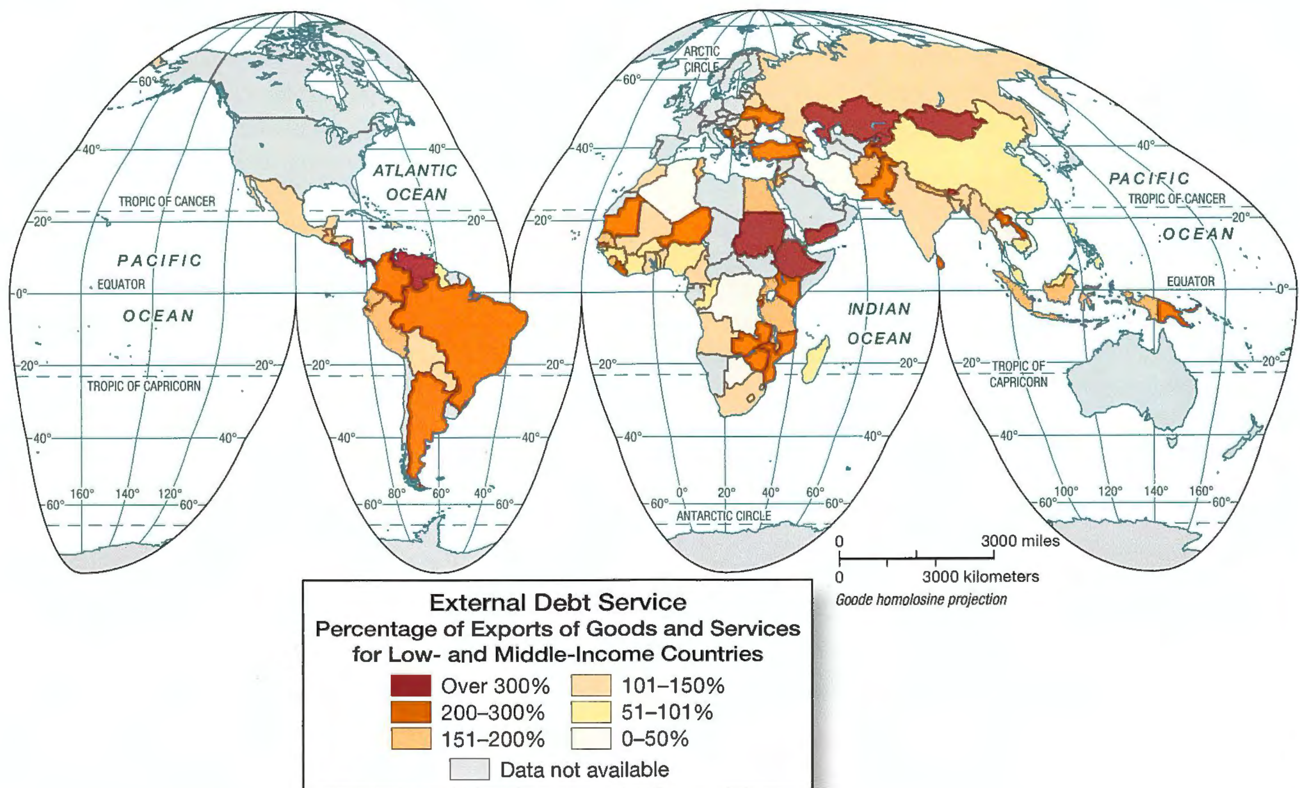
Structural adjustment loans were part of a larger trend toward **neoliberalism** in the late twentieth century. Neoliberalism is a variant of the neoclassical economic idea that government intervention into markets is both inefficient and undesirable. Neoliberals resist government intervention wherever possible. That way of thinking was at the heart of the structural adjustment conditions that were attached to loans and refinancing programs. Neoliberal ideas spurred a trend toward transferring economic control from states to the private sector. As a result, the size of the public sector in a number of countries shrank. Corporate control expanded, and state and regional governments had less control over their economic destinies.

High debt obligations and related neoliberal reforms contributed to the economic and political crisis in Argentina at the end of 2001 and beginning of 2002. Argentina privatized some government activities in the 1990s and took out loans, which led to short-term economic growth in the 1990s. In 1999, however, a recession hit Argentina, and by 2000 the country had a debt equal to 50 percent of its GDP (Blustein 2003) (**Fig. 10.12**). The IMF extended emergency loans in 2000 and again in 2001. Coupled with unchecked government spending and corruption, Argentina's economy experienced a meltdown, and the country defaulted on its debt in 2002. More than half the population of 38 million ended up in poverty (McCarthy 2007).

By 2005, internal economic growth and aid from Venezuela put Argentina in a position to work out a complex debt restructuring plan that pulled the country back from the brink. Argentina's agricultural economy bounced back in 2010 with the rise of corn and soy prices. Its struggles with loans are far from over, however. In 2018, Argentina requested $50 billion from the IMF to help manage a worsening inflation crisis amid serious doubts about its ability to pay back debt. Countries in Argentina's position find themselves in a severely disadvantaged position when it comes to attracting future external investment. If a substantial number of countries were to default at the same time, a global economic crisis could ensue that would work to the disadvantage of almost everyone.

International Financial Institutions: Chinese

In recent years, the World Bank and the IMF have backed away from some of their more controversial lending practices—showing a greater concern for the social and environmental implications of development funds. But with the rise of China, development finance is no longer primarily a Western game. In 1994, the China Development Bank was established under Chinese governmental control. Since then, a variety of



Source: Data from Central government debt, total (% of GDP), The World Bank. Visualization by E.H. Fouberg and A.B. Murphy. © 2020 John Wiley & Sons, Inc.

FIGURE 10.11 **External Debt Service as a Percentage of Exports of Goods.** Repaying loans, let alone paying the interest on the loans, is more difficult for countries with large debt and low income from exports. Exports create revenue for a country that can help them pay back loans.

Author Field Note Watching the Upheaval of the Economy in Buenos Aires, Argentina.

"Arriving in Argentina during the political and economic upheavals that had begun in 2001, I saw signs of dislocation and trouble everywhere. People asking for money pursued pedestrians on the once-fashionable Avenida Florida. Banks had installed protective shutters against angry crowds demanding return of their frozen and devalued deposits. A bus trip on the Patagonian Highway turned into an adventure when masked protesters carrying rocks and burning rags stopped vehicles and threatened their occupants. Newspapers carried reports of starvation in Tucumán Province – in a country capable of producing seven times the food its population needs."

– H. J. de Blij

© H.J. de Blij

FIGURE 10.12 Buenos Aires, Argentina.

other Chinese banks with international reach have come on the scene, turning China into a major player in the international development arena. Indeed, the four largest banks in the world, as measured by total assets, are Chinese. The biggest bank in the world is ICBC (Industrial and Commercial Bank of China), followed by China Construction Bank, Agricultural Bank of China, and the Bank of China. These banks are called the "Big Four" and are all owned by a holding company that is owned by the government of China. The Big Four banks have locations all over the world (**Fig. 10.13**). In addition to these enormous financial institutions, the China Development Bank and the Export-Import Bank of China now provide as much development financing to less developed countries as the World Bank does.

Greg Elms/Lonely Planet Images/Getty Images

FIGURE 10.13 Hong Kong. This scene shows both the global financial role Hong Kong plays and the history of the place. The Bank of China tower is on the left. The Cheng Kong Centre in the middle back houses a major Hong Kong-based multinational conglomerate. The HSBC Bank building, housing a UK bank that first entered Hong Kong in 1865, is on the right. In the foreground is the Legislative Building, built during the British colonial era.

China's development funding is appealing to many countries because they see the loans as having no strings attached—loans do not require governments to follow structural adjustments. While Chinese development funding is helping to meet the infrastructure needs of many countries, a heavy emphasis on large infrastructure and energy projects (coal-burning power plants and large dams designed to produce hydroelectricity) means that Chinese development assistance carries with it serious environmental costs. In Bangladesh, for example, Chinese-financed coal plants have worsened air pollution and created health problems (to say nothing of their contribution to global climate change). And large Chinese-financed hydroelectric plants along the Mekong River have reduced fish stocks and threatened people's livelihoods.

While Chinese development loans come without strings attached in terms of having to change government operations, they come with serious financial and political consequences when borrowers become trapped in debt and cannot repay loans. Each investment in China's Belt and Road Initiative (BRI, see Chapter 8, **Fig. 8.25**) benefits Chinese financial lenders (including the Big Four banks), Chinese development companies (including China Development Bank and the Export-Import Bank of China), Chinese infrastructure and construction companies (including China Harbor Engineering Company—also owned by the Chinese government), and even Chinese workers who are transported temporarily to work on major construction projects. Because Chinese companies build the projects, they hire the workers, and they hire Chinese workers instead of locals, depriving locals of construction jobs.

When countries cannot repay loans from BRI projects, the government of China steps in and takes ownership. The President of Sri Lanka, Mahinda Rajapaska, took enormous loans from Chinese lenders and the China Harbor Engineering Company to build a state-of-the-art port in Sri Lanka during his 2005–2015

term in office. When the president was voted out in 2015, the new Sri Lankan government inherited an unpayable debt. The Sri Lankan government negotiated with the Chinese and the end result was handing over the brand-new, Chinese-funded port to China. China now owns Sri Lanka's port , which sits on 15,000 acres of land, for the next 99 years. While the agreement to hand over the port "erased roughly $1 billion in debt for the port project," Sri Lanka continues to accrue debt to China as they take additional loans with high interest rates (*New York Times* 2018).

While the Chinese loans do not have official strings constraining governments, Chinese investors have worked to influence election outcomes in borrower countries. In Sri Lanka, Chinese financial institutions contributed at least $7.6 million to Rajapaska's 2015 campaign. An internal investigation in Sri Lanka found that checks from an account controlled by the Chinese port development project paid for gifts to voters and supporters as well as "two checks totaling $1.7 million," which were delivered by volunteers to Rajapaska's home (*New York Times* 2018). Rajapaska lost the 2015 election but became politically active again, along with his brother, in 2018. Chinese investment ratcheted up almost immediately, with Ritz Carlton and JW Marriott hotels, financed by Chinese companies, going up next to the port (**Fig. 10.14**).

China's BRI projects, the global influence of Chinese banks, and Chinese development organizations are changing the structures and face of global economic development. The impacts of development financing—whether from Chinese or Western sources—will not be the same everywhere. Conditions within countries also matter. Lack of education, poverty, corrupt leadership, political instability, and disease can all hamper development. It is possible to get into the chicken-or-egg debate here: Did the interconnections that characterize the world economy create these conditions, or do these conditions help create the structures of the world economy? Many people think that neither argument can stand alone, but understanding both structures and conditions is important.

Paula Bronstein/Getty Images News/Getty Images

FIGURE 10.14 Colombo, Sri Lanka. The Colombo deep sea port is a project in the Chinese Belt and Road Initiative. Sri Lanka handed ownership of the port over to China in 2015 when they could not repay the debt. The government continues to take loans from China and as of 2019, owes Chinese financial institutions an estimated $5 billion for the port, a new airport, and a new railroad, with interest growing each year. The new buildings going up are Ritz Carlton and JW Marriott hotels, which are projects financed by Chinese investors.

Social Conditions

Across the global periphery, as much as half the population is 15 years old or younger (see Fig. 10.5B), making the supply of adult, taxpaying laborers low relative to the number of dependents. Low life expectancies and high infant and child mortality rates stem from inadequate nutrition. Despite the UN's efforts to achieve the Sustainable Development Goals, just under one in four children worldwide had stunted growth in 2017; they do not receive enough calories to grow as tall as they should be for their age.

Peripheral countries have little access to public sewage systems, clean drinking water, and health care making economic development all the more difficult. According to the United Nations, 159 million people still rely on unsafe drinking water from rivers, ponds, and unprotected wells and springs, and close to 900 million people still practiced "open defecation" in 2018. Open defecation spreads disease and is found most often in South Asia, Oceania, and sub-Saharan Africa (UN 2014).

Lack of access to education is also a major problem in the periphery. However, the number of children in the periphery enrolled in primary school, both boys and girls, has increased since 2000, thanks to governmental efforts to extend education. For example, the government of Rwanda eliminated fees for primary education in 2003. Doing so guaranteed six years of primary and three years of secondary school for all children. Then two years later, the government started distributing funds to schools based on the number of students they were educating. Rwanda successfully increased the proportion of students attending school through grade 6, reporting a 95 percent enrollment rate (Republic of Rwanda 2014). Growing education so quickly makes it difficult to establish quality education, however. The United Nations Development Program reported in 2014 that only 5 percent of Rwandan students met or exceeded reading goals and that a majority did not meet numeracy goals. Nevertheless, Rwandan officials continue to work to improve access to education, and recently they supported a 5 percent increase in money allocated to education.

Governments have used innovative policies to promote education, including financial incentives for families to enroll and send their children to school. Historically, children would drop out of primary school or have low attendance so they could help their family by working in farms and factories, or providing child or elderly care at home. Children in peripheral countries often have to pay a fee for attending school, and in some places girls drop out of school to earn wages to pay school fees for their brothers. Cash transfer policies seek to undermine this practice by providing a financial incentive to enroll in school and attend regularly. Yet the problem persists—particularly in rural areas,

Mario Tama/Getty Images News/Getty Images

FIGURE 10.15 Rio De Janeiro, Brazil. The parents of the children in this photograph credit Bolsa Familia with assisting them in purchasing a new home after their previous home was condemned. Bolsa Familia has reduced extreme poverty in Brazil from 13 percent of the population to 7 percent of the population.

where girls from lower income families are the least likely to attend primary school (United Nations 2014).

Brazil's Bolsa Familia conditional cash transfer program is a particular success. It began in the 1990s, and former president Lula da Silva expanded the scope of the program in 2003. Bolsa Familia pays families in cash under the condition that their children enroll and attend school (children cannot miss more than 15 percent of classes) and that they receive medical checkups. One fourth of Brazil's families, 11.1 million families (46 million people) are enrolled in the program. Brazil credits the program with bringing "36 million Brazilians out of extreme poverty" (Barnes 2013).

Bolsa Familia is held up as a model for economic development, as it gives people with lower incomes the ability to choose how to spend their financial assistance instead of living within the constraints of separate programs designed to address different aspects of poverty (**Fig. 10.15**). Conditional cash transfer programs have the added benefit of increasing school attendance for girls and boys. However, in the wake of the 2018 election of Jair Bolsonaro as Brazil's president, Bolsa Familia was targeted for budget cuts based on the argument that it encourages overdependence on the government. The program operates in all 5570 municipalities in Brazil, so Bolsonaro will need to weigh his targeted budget cuts with how extensive a network the Bolsa Familia program has woven.

South Africa's conditional cash transfer program has led to an increase in the number of children receiving primary education. However, many of the schools are in poor condition, and the quality of education is below par. Data from South Africa's national literacy and numeracy tests reveal that "only 15 percent of 12-year-olds (sixth graders) scored at or above the minimum proficiency on the language test," and in math, only 12 percent were proficient (*The Economist*, South Africa 2012). At the end of 2016, the South African government lowered the passing grade for math to 20 percent to make it easier for students to continue their education, despite evidence that the system as a whole poorly served students. Although South Africa needs 25,000 new qualified teachers each year, less than half that number enter the system. The South African economy in turn suffers because schools do not produce enough graduates to fill the jobs that require education.

Lack of education for girls is made worse by the assumption that girls should only leave their homes (and communities) when they marry and contribute to their husband's family. These types of assumptions, when taken to an extreme, feed into the human **trafficking** of girls and young women, who are seen as less important than boys and are treated as financial drains because of the assumption that their earning potential is limited. Mike Dottridge, a modern antislavery activist, explains that tracking happens when "adults and children fleeing poverty or seeking better prospects are manipulated, deceived, and bullied into working in conditions that they would not choose."

Trafficking is not usually considered slavery because the family does not sell a child. Instead, the family sends the child away with a recruiter in the hopes that the child will earn money to send home. Trafficked children are often taken to neighboring or nearby countries that are wealthier and where demand for domestic servants is high. Dottridge explains that the majority of trafficked children are girls and that the majority of girls are "employed as domestic servants or street vendors," but some are trafficked into the commercial sex trade (see Chapter 3).

Political Corruption and Instability

Political corruption and instability can greatly impede economic development. In peripheral countries, a wide divide often exists between the very wealthy and the poorest of the poor. In Kenya, for example, the wealthiest 0.1 percent have more wealth than the bottom 99.9 percent. The disenfranchisement of the poor and the competition among the rich for control of the government can lead to extreme political instability within a state. Kenya experienced this problem in 2007–2008, when roughly 1300 people died as a result of violence around a presidential election. Kenya's presidential election in 2017 proved less violent, but it was still controversial. After high courts found irregularities in the vote, a new election went forward. The incumbent president, who had lost in the earlier annulled vote, ended up retaining the presidency only after his opponent withdrew.

Many countries in the periphery and semiperiphery have struggled to establish and maintain democracies in the wake of decolonization. The governments that emerged often reflected the political and social hierarchies of the colonial period. Some failed, some were overthrown by military coups, and some saw power fall into the hands of a dictatorial strongman. Many countries in the periphery and semiperiphery have alternated repeatedly between quasi-democratic and military governments. Some argue that without considerable wealth, maintaining a liberal democracy is all but impossible.

Looking at international news on any given day will reveal a story somewhere that demonstrates the link between economic stability and political stability. In Afghanistan, economic

woes represent one of the greatest threats to the stability of the U.S.-supported government in Kabul. More than half of the population is impoverished. The government also lacks the funds to invest in development. Foreign aid has provided some help, but the flow of aid has been variable and the amount is insufficient to address the country's searing economic problems. Many analysts see this as a key impediment to achieving stability in Afghanistan. As *The Economist* once noted, "poverty helps the Taliban."

In places where poverty is rampant, politicians often become corrupt, misusing aid and exacerbating the plight of the families with lower incomes. In Zimbabwe, the year 2002 left many people starving, as poor weather conditions created a meager harvest. The country's ruling party, ZANU-PF, headed by Robert Mugabe, demanded that Zimbabweans who registered for the "food for work" program had cards demonstrating membership in the ZANU-PF political party. As conditions worsened in subsequent years, the Mugabe government faced increasing resistance. A potential challenger, Morgan Tsvangirai, emerged in 2008, but members of his opposition party were killed and the challenger was harassed. And after a contested election that many believe Tsvangirai won, a power-sharing agreement came into effect that kept Mugabe as president and made Tsvangirai the prime minister. Some stability returned, but not for long. In late 2017 Mugabe faced impeachment and ceded power to his hand-picked vice president, Emmerson Mnangagwa. Mnangagwa was declared the winner of a contested election in 2018, and Mugabe died in 2019. Zimbabwe faces enormous political and economic challenges going forward.

The Zimbabwe case shows that in low income countries, compromised leaders can stay in power for decades. Circumstances and timing need to work together to allow a new government to come to power. When governments become excessively corrupt, other countries and nongovernmental organizations sometimes withdraw development aid to the country. Yet when this happens, everyday people often bear the brunt of hardship. And even when aid is provided, it is sometimes mismanaged, and it is almost never sufficient to meet basic needs or reverse a trajectory of hardship.

Costs of Economic Development

Economic development changes a place. To increase productivity, whether industrial or agricultural, people transform the environment. As countries industrialize, air and water often become more polluted. And pollution is not confined to industry. The pesticides and herbicides that are used in intensive agriculture have negative impacts on soil and groundwater. Tourism can be just as difficult on the environment because it taxes the existing infrastructure beyond its capacities. The costs of tourism often stretch far beyond the environment, affecting ways of life and fundamentally altering the cultural landscape.

Costs of Industrialization In their efforts to attract new industries, many governments in the periphery and semiperiphery have set up special manufacturing export zones called export processing zones (EPZs) or special economic zones (SEZs). These zones offer favorable tax, regulatory, and trade arrangements to foreign firms. By 2006, 130 countries had established 3500 such zones, and many of these had become major manufacturing centers (Engman et al. 2007). Two of the best known of these zones are the Mexican maquiladoras and the special economic zones of China (discussed in Chapter 9). Governments locate such zones in places with easy access to export markets. **Maquiladora** zones in Mexico are mainly sited directly across the border from the United States, and the special economic zones of China are located near major ports (**Fig. 10.16**). These zones typically attract a mix of manufacturing operations, depending on the skill levels of the labor force and the available infrastructure.

The maquiladora program started in 1965 when the Mexican government designated the region of northern Mexico as a maquiladora district. It became a place where raw materials could be shipped into Mexico, manufactured into goods, and then sent back to the United States free of import tariffs. U.S. corporations relocated manufacturing plants to Mexico to take advantage of the program. Although the maquiladora phenomenon started in 1965, it did not really take off until the 1980s, when American companies recognized the expanding wage and benefit differences between U.S. and Mexican workers and began relocating to the maquiladora district in northern Mexico. Competition from other parts of the world has since led to the closing of some plants. However, some 3000 maquiladoras continue to function. They employ more than 1 million workers and account for 50 percent of Mexico's exports.

Mexican maquiladora plants produce goods such as electronic equipment, electrical appliances, automobiles, textiles, plastics, and furniture. The plants are controversial in both Mexico and the United States. Corporations that have relocated there avoid the employment and environmental regulations that are in force just a few miles to the north. Many maquiladora factories hire young women and men for low pay and few, if any benefits. They work in repetitive jobs, sometimes in environmentally questionable conditions.

In 1992, the United States, Mexico, and Canada established the North American Free Trade Agreement (NAFTA), which prompted further industrialization of the border region. NAFTA took effect January 1, 1994. In addition to manufacturing plants, it facilitated the movement of service industries from the United States to Mexico, including data-processing operations. Most of the new plants are located in two districts: Tijuana on the Pacific Coast—linked to San Diego across the border—and Ciudad Juarez on the Rio Grande across from El Paso, Texas.

In 2018, the United States-Mexico-Canada Agreement (USMCA) replaced NAFTA, but not much has changed. Violent crime remains a serious problem in Ciudad Juarez, even as El Paso remains comparatively safe. The slums of Tijuana are a world apart from much of San Diego. In both Ciudad Juarez and Tijuana, Mexican drug cartels compete for control (see Fig. 11.32), creating instability in northern Mexico. Instability makes economic development more difficult. In response, Mexicans continue to migrate to the United States, despite the tightly controlled border.

Data from: International Labor Organization. Visualization by E.H. Fouberg and A.B. Murphy. © 2020 John Wiley & Sons, Inc.

FIGURE 10.16 Special Economic Zones. Manufacturing in China is centered on Special Economic Zones (SEZs). Exports per province are highest in the east, in and around SEZs, and lowest in western China.

Costs of Agricultural Intensification In peripheral countries, agriculture typically focuses on personal consumption or on production for a large agricultural conglomerate. Where zones of larger-scale, modernized agriculture have developed in the periphery, foodstuffs are produced for the foreign market and often have minimal impact on the impoverished conditions of surrounding areas. Little is produced for the local marketplace because distribution systems are poorly organized and many locals are unable to pay for foodstuffs.

A turn to commercial agriculture can have multiple economic, social, and ecological effects. Most traditional farmers work small, fragmented plots of land, and what they produce does not generate much income. Even on larger plots of land, many farmers only have access to simple tools and equipment. They tend to grow grains, root crops, and fruits and vegetables. Yields per unit area are low, and subsistence modes of life prevail.

The introduction of large-scale commercial agriculture into this mix can make it more difficult for small-scale farmers to compete in the sale of their products. They do not often have access to the fertilizers and pesticides used in commercial agriculture. Social relations are often strained as well. There are major wealth disparities between the few who benefit from agricultural modernization and the many who do not. Moreover, the combination of expanding land devoted to commercial agriculture and worsening economic conditions for traditional farmers can push these farmers into ever more marginal lands.

The ecological effects of the latter tendency can be severe. Soil erosion is commonplace in many peripheral areas. Severe soil erosion in places with dry or semiarid climates around deserts results in extreme degradation of the land and the spread of the desert into these lands. Although the expansion and contraction of deserts can occur naturally and cyclically, the

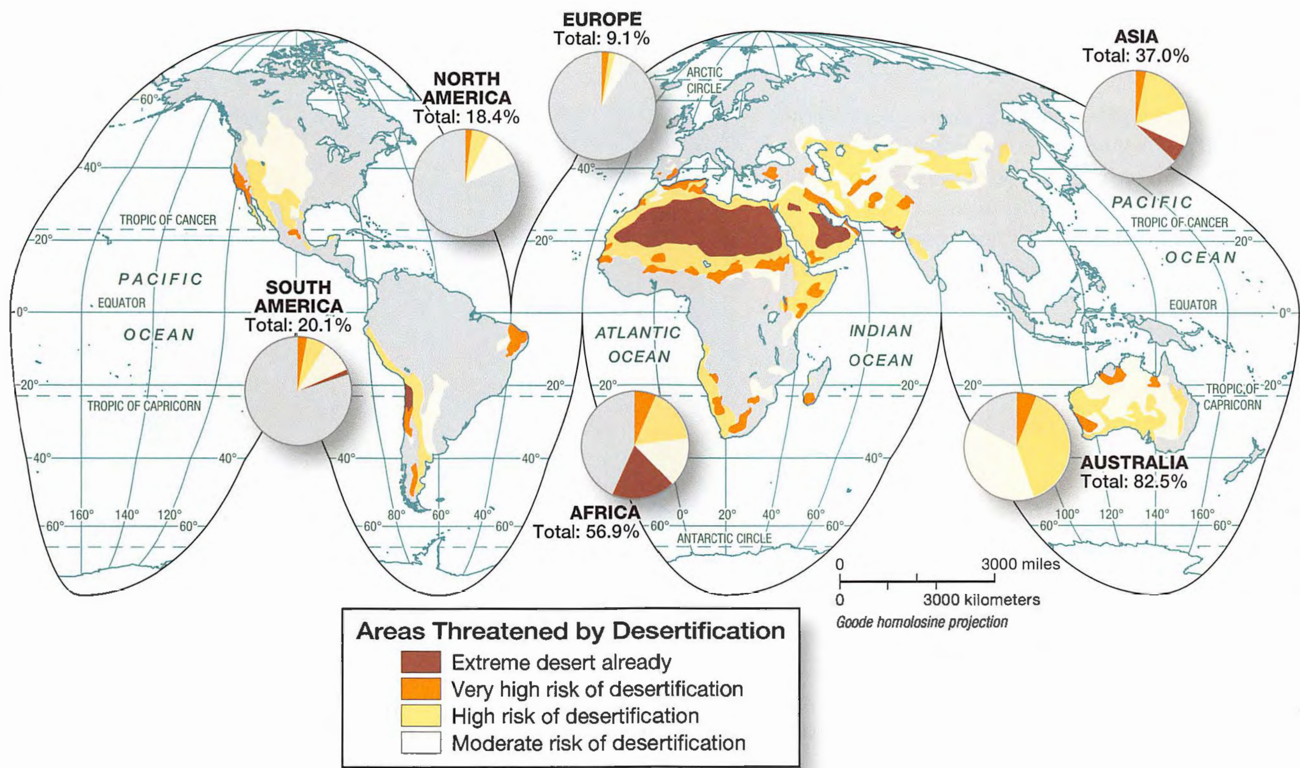


FIGURE 10.17 Areas Threatened by Desertification. Deserts expand and contract cyclically, but nature's cycles can be distorted by human intervention. This map shows areas threatened or affected by desertification.

process of **desertification** often results from humans destroying native vegetation and eroding soils through the overuse of lands for livestock grazing or crop production.

Desertification has hit Africa harder than any of the other continents (**Fig. 10.17**). In sub-Saharan Africa over the last 50 years, more than 270,000 square miles (700,000 km^2) of farming and grazing land have become desert, extending the Sahara Desert to the south. Some of the African desertification is partly a result of climate change (Chapter 13), but human factors matter as well. The problem comes not only from traditional farmers and ranchers turning marginal, semiarid lands into farm and ranch lands. Lands that are available for farming or ranching are also being turned over to intensive agricultural production. The result is further degradation of the land, outmigration, and in some cases conflict.

Costs of Tourism

All development strategies have pros and cons, as is well illustrated by the case of tourism. Peripheral island countries in the Caribbean region and in Oceania have become leading destinations for millions of tourists from richer states. Tourism is now one of the major industries in the world and has surpassed oil in overall economic value (see Chapter 12). While tourism can bring employment to peripheral countries, it can also have serious negative effects on cultures and environments.

To develop tourism, the "host" country must make substantial investments in infrastructure, including airports, cruise ports, roads, and communication systems. High-end hotels, swimming pools, and man-made waterfalls are typically owned by large multinational corporations, not locals. The multinational corporations earn enormous profits, most of which are sent back to owners, shareholders, and executives outside of the country. Tourism can create local jobs, but they are often low paying, and most do not offer job security. In tourist zones, employees sometimes work two or three jobs to break even.

Tourism frequently strains the fabric of local communities as well. The invasion of lower-income communities by wealthier visitors can lead to resentment. Tourism can also have the effect of altering, and even debasing, local culture (see Chapter 4), which is adapted to suit the tastes of visitors.

In many instances, tourism fosters a "demonstration effect" among locals that encourages them to behave in ways that may please or interest visitors, but that is viewed negatively by the local community. Tourists build expectations of what they will see and how they will experience local cultures, which creates ideas of authenticity that may or may not exist. Local cultures constantly change, and communities and people within a culture may behave differently or have different values than the authentic ideal created and reinforced by tourism. Some tourism workers consider employment in the tourist industry degrading because it demands performances of culture to meet tourist expectations and displays of servitude to tourists that locals find offensive.

A flood of affluent tourists may be appealing to the government of a lower-income country whose elite have a financial stake in the hotels where they can share the pleasures of the wealthy. But local entrepreneurs have difficulty tapping into tourist

Author Field Note Seeing Inequality in Jodhpur, India

"Walking by a group of tent shelters put up by locals lacking brick and mortar homes, I was struck by the contrast with the palace in the background at the top of the hill, which once housed a royal family. The palace in the background was acquired by the Taj Hotel franchise, which is part of one of India's largest business conglomerates: The Tata Group. It has been turned into one of the finest, most luxurious hotels in India—attracting a wealthy clientele from around the world. The cost of spending a single night in the hotel must be more than the families living in the foreground can make in a year, if not more."

– A. B. Murphy

Photo by A.B. Murphy. © 2020 John Wiley & Sons, Inc.

FIGURE 10.18 **Jodhpur, India.**

revenues. Powerful multinational corporations and national governments limit the opportunities of local, small-scale operators. Instead, they favor mass, prearranged tourist destinations that isolate tourists from the local cultures and communities.

Overreliance on tourism can also leave an economy vulnerable if shifting economic circumstances cause a sharp decline in the number of tourists, or if natural disasters hit. Because many tourist destinations in lower-income countries are beach attractions, natural hazards such as the 2017 hurricane that swept across the Caribbean island of St. Maarten can destroy the linchpin of a country's economy. The country must deal with the after effects and cope with rebuilding tourist destinations while the flow of tourist-related income has stopped.

Growing recognition of the cultural and environmental impacts of tourism has led to the rapid growth of *ecotourism*. Ecotourism focuses primarily on fragile natural areas; the goal is to organize small-scale tourist experiences that involve minimal environmental disruption and that are sensitive to the well-being of local people. In the words of the International Ecotourism Society, the goal is to "build environmental and cultural awareness and respect." Many people see ecotourism as a positive alternative to mass tourism. Nonetheless, ecotourism does not avoid all the environmental and social costs of mass tourism. Most ecotourism operations are foreign owned, there are environmental costs to bringing people to remote areas and showing them around, and the presence of outsiders inevitably influences the lives of local people.

Whatever form tourism takes, the associated cultural landscape is frequently a study in harsh contrasts (**Fig. 10.18**). Gleaming hotels tower over modest, often poor housing; luxury liners glide past poverty-stricken villages; opulent meals are served in hotels while, down the street, children suffer from malnutrition. If the tourist industry offered real prospects for sustained economic progress in low-income countries, such circumstances might be viewed as temporary, unfortunate byproducts. However, in many cases the evidence points in the other direction.

TC Thinking Geographically

Reading back through Chapter 4 on local cultures and the section on **tourism** in this part of the chapter, explain why tourism can be problematic for the sustainability of local cultures. Specifically, consider how **authenticity** undermines the sustainability of local cultures.

10.4 Evaluate How Political and Economic Institutions Influence Uneven Development Within States.

Poverty is not confined to the periphery. Core countries have regions and peoples that are markedly poorer than others. On the Pine Ridge Indian Reservation in the northern Great Plains of the United States, unemployment hovers at 80 percent, and American Indians on the reservation live in poverty, with a per capita income of under $8000. Other countries of the core have similar regions where peoples' economic lives do not improve when the country's economy grows. In Europe,

areas of isolation and stagnation persist—particularly in the east. At the same time, some areas within peripheral countries are experiencing rapid economic growth. In each of these cases, local conditions differ markedly from those found in surrounding areas.

Regional contrasts in income are a reminder that per capita GNI does not capture important aspects of economic development. Any statistic that is derived for an entire country hides economic variations within the country. Peripheral countries are marked by severe regional disparities. In Chapter 9, we discussed the stark contrasts between higher income and lower income within the cities of Central and South America and of Africa. When viewed at the scale of the state, major cities (particularly capitals) and their surroundings often look like islands of prosperity. Modern buildings, factories on the outskirts, and modern farms tend to be nearby. In some cases, roads and rails lead to a bustling port, where luxury automobiles are unloaded for use by the privileged elite, and raw materials or agricultural products from the country are exported to points around the world. In these core areas within peripheral countries, the rush of "progress" may be evident. If you travel a few miles into the countryside or into a different neighborhood, however, you will see a very different picture.

The Role of Governments

The contrasts between rich and poor areas are not simply the result of differences in the economic endowment of places. Government policy affects development patterns as well. Governments influence the geography of wealth through tariffs, trade agreements, taxation arrangements, land ownership rules, environmental regulations, and more. Government policies shape patterns of development within states—between urban and rural areas and also among different sectors of the economy. Governments alone do not determine patterns of wealth and poverty, but they are usually part of the picture.

Consider the case of the Ninth Ward in New Orleans, which was devastated by Hurricane Katrina in 2005. On its surface, what happened to the Ninth Ward was the result of a natural disaster. But the flooding of that part of New Orleans was also a consequence of government decisions made decades ago to build levees and settle flood-prone areas. The concentration of people living there also resulted from policies affecting housing, the construction of businesses, and the like. Once the hurricane hit, many looked to government to rebuild the devastated section of the city, but rebuilding was slow and spotty (**Fig. 10.19**).

Every government policy has a geographical expression, meaning that some regions are favored whereas others are not. When policies come together to favor some regions over others, uneven development is the result. Moreover, uneven development often becomes worse over time as wealthy areas grow wealthier and poorer areas stagnate.

Consider the contrasting outcomes of U.S. agricultural policy in parts of rural Wisconsin and rural Appalachia. In rural Wisconsin, farmers typically hold college degrees, usually from land-grant universities, in plant and animal sciences and in agribusiness. A farmer may run a highly mechanized dairy farm in which each cow has a barcode that is used to record a range of data about that particular cow. The data include any medical attention the cow has needed, how much milk the cow is producing, and when the cow last calved. The farmer feeds the cow a diet geared toward improving or maintaining milk production. When the cow ambles over to the trough to feed,

Author Field Note Reconstructing the Ninth Ward in New Orleans, Louisiana

"As I walked through the Lower Ninth Ward of New Orleans more than two years after Hurricane Katrina, it seemed as if the natural disaster had just happened. Street after street of devastated, vacant buildings was all the eye could behold—many still bearing the markings of the emergency crews that had moved through the neighborhood in the wake of the hurricane, showing whether anyone had died inside. It struck me that reconstruction would require a public commitment on the order of what occurred in Europe after World War II, when cities reduced to rubble by bombing were rebuilt almost from scratch. No such commitment ever materialized, but some progress has been made in recent years. Census data shows a city that is slightly smaller and slightly wealthier than the pre-Katrina city, with a somewhat reduced African American population and a modestly expanding number of Hispanics."

– A. B. Murphy

Photo by A.B. Murphy. © 2020 John Wiley & Sons, Inc.

FIGURE 10.19 **Lower Ninth Ward, New Orleans.**

a sensor reads the cow's barcode and automatically mixes the correct balance of proteins, carbohydrates, and nutrients for the cow, dispensing them into the trough for the cow to eat. If the cow has already eaten that day, the computer dispenses nothing into the trough, and the cow is left to amble away.

In parts of rural Appalachia, by contrast, hardscrabble farming is the norm. Farmers have limited education, and there is little mechanization. In short, life in some of the lowest income parts of rural Appalachia is a world apart from life on a modern Wisconsin dairy farm. Locational and economic facts influence those differences, but so do government policies: subsidies for particular agricultural pursuits, funding to promote the development of particular technologies, and the like. Wisconsin supports its $26 billion dairy industry, and the University of Wisconsin receives major grants and corporate funding to improve dairy farming.

Government policy can also help reduce uneven development. In the case of Appalachia, the United States Congress created an Appalachian Regional Commission in 1965 to address poverty in the region. The Commission put together a program of government investment in roads, schools, health-care facilities, and water and sewer systems that promoted development in parts of the region. Significant areas benefited from these policies, although pockets of deep poverty remain.

Returning to a consideration of commodity chains can also help us understand the role governments play in uneven development—both within and between states. Though written more than 15 years ago, economist Pietra Rivoli's 2005 book *The Travels of a T-Shirt in the Global Economy* still offers relevant insight into the influence governments have on the distribution of wealth between and within states. Rivoli grabs a T-shirt out of a bin at a Walgreens in Florida, buys it, and then traces its production back through the commodity chain to see how it ends up in her hands. The cotton for her T-shirt was grown in West Texas, where the cotton lobby (the political arm of America's cotton producers) effectively politicked for governmental labor programs and price supports that help the industry grow cotton and sell it at predictable prices. From West Texas, the cotton bale reaches China by ship. There it is spun into thread and woven into fabric. Women from rural China work in state-owned factories set up in regions that are slated for economic development—cutting and sewing T-shirts and keeping the textile machines in good repair. The women are considered cheap labor, earning about $100 per month.

The T-shirts are then shipped to the United States for sale. In an attempt to protect T-shirts produced in America with higher labor costs from those produced in China, the United States government has established quotas on how many items from various clothing categories can be imported into the United States from China and other countries. An unintended consequence of the quota system has been a "quota market" that allows countries to buy and sell their U.S. quota numbers to producers in other countries (an illegal but common practice). Instead of trading in quotas, some production facilities have moved to places where quotas and cheap labor are available—places such as Sri Lanka, Poland, and Lesotho. Rivoli describes how one producer of cotton shirts has moved around the world:

> The Esquel Corporation, today the world's largest producer of cotton shirts, started in Hong Kong in the late 1970s, but, unable to obtain quota to sell to the United States, shifted production to mainland China. When the United States tightened Chinese shirt quotas in the early 1980s, Esquel moved production to Malaysia. When Malaysian quota also became difficult to obtain, Esquel moved yet again, this time to Sri Lanka. The globe hopping continued, with the Chinese shirt producer setting up operations in Mauritius and Maldives.

The point is that quota laws, like other policies made by governments, as well as international financial institutions such as the World Trade Organization and the International Labor Organization, affect whether and how regions can produce and exchange goods on the world market.

Islands of Development

In both periphery and core, governments often invest heavily in expanding the economy of the capital city so that it can act as a showcase for the country. Capital cities are home to government buildings and jobs. They often house universities, museums, heritage centers, convention centers, and the headquarters of large corporations. After gaining independence, many former colonial states spent lavishly on their capitals. Such spending was not essential to political or economic success, but the money was spent because the states wanted to showcase their independence and future potential. They wanted to create a national treasure. European colonizers provided the model that had been followed elsewhere, having themselves already directed significant wealth in earlier times to building grand capital cities: The United Kingdom's London, France's Paris, and the Netherlands' Amsterdam.

In many countries of the global economic periphery and semiperiphery, the capital cities are by far the largest and most economically influential cities in the state (i.e., primate cities, discussed in Chapter 9). Some newly independent states have built new capital cities away from the colonial headquarters to separate themselves from their colonizers. Their cities are meant to bring together diverse groups and to reflect their common culture. Economic development might begin to extend into the interior of the state, or help establish control over a region with a population whose loyalties to the state might be in question.

Nigeria moved its capital from Yoruba-dominated Lagos along the coast to an ethnically neutral territory in the center of the state: Abuja. Malawi moved its capital from Zomba, deep in the south, to more central Lilongwe. Pakistan moved the capital from the colonial headquarters of Karachi to

Islamabad in the far north. The move symbolized the country's reorientation toward its historically important interior and north. Brazil moved its capital from coastal Rio de Janeiro to centrally located Brasília to direct attention to the huge, sparsely populated, yet poorly integrated interior. More recently, Kazakhstan moved its capital from Almaty in the south to Astana in the north, partly to be closer to Russia and the center of the possibly restless Russian population. Malaysia has also recently moved its capital from the colonial capital of Kuala Lumpur to a completely new center called Putrajaya, about 25 miles (40 km) to the south. The Malaysian government decided to build a new, ultramodern seat of government to symbolize the country's rapid economic growth (**Fig. 10.20**).

Corporations can also make cities focal points of development by concentrating corporate activities in a particular place. Often, corporations build up the cities near the resources they are extracting or near manufacturing centers they have built. Multinational oil companies create subsidiaries in countries of the periphery and semiperiphery, creating or expanding cities near oil reserves. For example, Elf and Shell, two oil companies based in Europe but with major operations in Gabon, run ElfGabon and ShellGabon in the Central African country. The oil companies took the small colonial town of Port Gentil and turned it into a city that the locals call "oil city." The oil companies built housing, roads, and stores, and provide much of the employment in the town (**Fig. 10.21**).

When a government or corporation builds up and concentrates economic development in a certain city or small region, geographers call that place an **island of development.** In Chapter 3, we identified islands of development in the periphery and semiperiphery, and discussed why people migrate to these places from lower income areas. The hope for jobs drives many migrants to move to these islands of comparative prosperity (see Fig. 3.8).

EXTREME-PHOTOGRAPHER/E+/Getty Images

FIGURE 10.20 **Putrajaya, Malaysia.** Putrajaya is the newly built capital of Malaysia, replacing Kuala Lumpur.

Creating Growth in the Periphery of the Periphery

One of the greatest challenges to development is creating development opportunities outside of islands of development. In the most rural, impoverished regions of lower income countries, some nongovernmental organizations try to improve the plight of people. **Nongovernmental organizations (NGOs)** are not run by state or local governments. Rather, NGOs operate independently, and the term is usually reserved for entities that operate as nonprofits. Thousands of NGOs operate in the world today, from churches to charities such as Heifer International. Each NGO has its own set of goals, depending on the primary concerns outlined by its founders and financiers (**Fig. 10.22**).

Author Field Note — Building an Island of Development in Port Gentil, Gabon

"Before the 1970s, Gabon's principal exports were manganese, hardwoods, and uranium ores. The discovery of oil off the Gabonese coast changed all that. This oil storage tank at the edge of Port Gentil is but one reminder of a development that has transformed Gabon's major port city –and the economy of the country as a whole. Oil now accounts for 80 percent of Gabon's export earnings, and that figure is climbing as oil prices rise and new discoveries are made. But how much the average citizen of Gabon is benefiting from the oil economy remains an open question. Even as health care and infrastructure needs remain unmet, the French publication *L'Autre Afrique* listed Gabon's recently deceased ruler as the African leader with the largest real estate holdings in Paris."

– A. B. Murphy

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FIGURE 10.21 **Port Gentil, Gabon**

Guest Field Note Interviewing Female Guest Workers in Sukabumi, Indonesia

Rachel Silvey
University of Toronto

My own research is based on fieldwork in Indonesia as well as ongoing engagement with students in the United States. The women pictured here collaborated with me on a research/activism project for migrant women workers in Indonesia. The woman on the left ("Rina") had returned from working in Saudi Arabia as a domestic worker for two years. She wanted to return to Saudi Arabia for another contract to earn more money for herself and her family, but she was concerned about her rights and her safety. She had been employed by a person she considered fair and reasonable, but she had heard from friends and neighbors that many migrants had experienced serious abuses while abroad. The woman pictured on the right ("Sorani") is an Indonesian activist who works in support of migrant rights. She discussed with Rina and me her strategies for mobilizing political change, and she helped us to see possibilities for building transnational alliances among American and Indonesian workers, students, and activists. Based on these interviews, as well as many years of working with migrant women working in factories in Indonesia, my own research has increasingly sought to understand the ways in which we in the United States, as scholars, students, workers, and consumers, can better serve global justice.

© Rachel Silvey

FIGURE 10.22 **Sukabumi, West Java, Indonesia**

Some countries have so many NGOs operating within them that they serve as what *The Economist* (1998) calls "a parallel state, financed by foreigners and accountable to nobody." For example, thousands of NGOs operate within the country of Bangladesh at any time, focusing mainly on the rural areas and villages of the state. But the NGO phenomenon can mask the depth of problems some places face. In the wake of the 2010 earthquake in Haiti, one respected British newspaper, *The Guardian*, reported that there was approximately one NGO per 1000 people in Haiti, but that much of the money funneled through these NGOs never reached the people most affected by the earthquake.

One type of NGO program that has found some success in less prosperous countries is the microcredit program. The idea behind a microcredit program is to give loans to people with low incomes, particularly women, to encourage the development of small businesses. Programs either have women in the village guarantee each other's credit, or they make future lending to others contingent on repayment by the first borrowers. With repayment rates hovering at 98 percent, **microcredit programs** can finance themselves, and many NGOs offer such programs (**Fig. 10.23**).

Photo by A.B. Murphy. © 2020 John Wiley & Sons, Inc.

FIGURE 10.23 **Bwindi, Uganda.** Women walk by a microcredit agency that works to facilitate economic development in the town.

By providing microcredit to women, NGOs can alter the gender balance in a region, giving more fiscal power to women. Some microcredit programs are credited with lowering birth rates in parts of developing countries and altering the social fabric of cultures by empowering women. Successful microcredit programs also help reduce malnourishment, as women with incomes can feed themselves and their children.

Microcredit programs have been less successful in places with high mortality rates from diseases such as AIDS. If the borrower is unable to work or if the family has medical and funeral bills, the borrower is much more likely to default on a microcredit loan. People in the poorest parts of the periphery experience a multitude of challenges. These include, but are not limited to, disease, corrupt governments, high mortality rates, high fertility rates, and disruptions from natural hazards. When people in the periphery experience one or more of these challenges, the goal of economic development takes a back seat to daily survival.

TC Thinking Geographically

Define islands of **development**. Using **site** and **situation**, explain where islands of development are located in Africa and why they are located there (see Fig. 3.8). Explain the role islands of development play in **migration** within world regions.

Summary

10.1 Explain How Development Is Defined and Measured.

1. Levels of development are often determined by looking at a country's *gross national product* (the total value of the officially recorded goods and services produced and sold in the country in a given year). *Gross national income* (GNI) is a more meaningful indicator, because it includes income received from investments outside the country, minus income payments to other countries around the world. Measures of this sort are most meaningful when they are looked at on a per capita basis. Their value is limited by the fact that they only capture what is happening in the formal economy.
2. A variety of alternative measures of development are increasingly popular. These measures capture such factors as access to technology, the size of the working-age population in relation to the total population, health, education, and levels of inequality.
3. The United Nations has promulgated a set of 17 Sustainable Development Goals. These represent a fairly high degree of consensus about the conditions that need to be changed to achieve economic development, and they are increasingly influencing development initiatives.

10.2 Describe the Nature and Limitations of Development Models.

1. Walt Rostow's *modernization model* has had a significant influence on thinking about development. It assumes that all countries follow a similar path to development or modernization, advancing through five stages of development.
2. Rostow's model led many people to think of the world as divided into two basic economic realms: developed and less developed (originally underdeveloped). More recent approaches to development proceed from the idea that not all states can or will move through stages of development in the same way. The argument is that development prospects are shaped by the political-economic context within which individual states find themselves, and those contextual circumstances will affect how and whether development takes places. This way of thinking led to structuralist theories of development, including *dependency theory* and *world-systems theory*.

10.3 Explain Major Influences on Development.

1. The economic niche a country occupies in the world economy has an important influence on development. Economic arrangements influence that niche, including commodity chains (the links connecting places of production and distribution that are involved in the creation of a final product). So do the initiatives of governments and government-supported international institutions, which together have a significant influence on international investment, foreign aid, and development financing.
2. Governments influence development through the investments they make, the alliances they form, the trade deals they negotiate, and the purchases they make. They also influence development through development assistance and support for international financial institutions and investment banks. Development assistance sometimes can have positive effects in lower-income countries (that is not always the case), but the assistance that is offered usually reflects the interests of donor countries. Countries in North America and western/central Europe long dominated the development assistance landscape, but China has recently become a major player.
3. Many countries struggle to promote development in the face of high levels of public debt. The public debt of many lower-income countries comes from structural adjustment loans made by organizations such as the World Bank. When countries are not in a position to repay their debt, the terms of repayment are renegotiated. In most cases, countries are obliged to undertake reforms that reflect the turn toward neoliberalism in the late twentieth century. Neoliberalism is based on the idea that government intervention into markets is both inefficient and undesirable, and should be resisted wherever possible. There are growing critiques of this way of thinking, but it is still quite influential.
4. The social conditions within countries greatly influence development prospects. Among the most important factors are access to health and clean water, the presence or absence of political corruption, and the educational opportunities that are available to a country's inhabitants, including girls and women.
5. Economic development changes places, in some cases for the worse. It can bring environmental pollution, it can produce greater inequalities, and it can undermine traditional cultural practices and values.

10.4 Evaluate How Political and Economic Institutions Influence Uneven Development Within States.

1. Poverty is not confined to the periphery. Core countries have some regions and peoples that have markedly lower income than others. Governments influence patterns of wealth through such mechanisms as taxation arrangements, land ownership rules, and environmental regulations.
2. Governments often invest heavily in expanding the economy and infrastructure of the capital city so that it can act as a showcase for the country. These cities can serve as islands of development, as can strategic investment in other places within a country.
3. Nongovernmental organizations (NGOs) play a significant role in development. Through initiatives such as microcredit programs, NGOs bypass state governments in the effort to promote development. Some of these initiatives have promoted development, but NGO involvement can sometimes mask the depth of problems certain places face.

Self-Test

10.1 Explain how development is defined and measured.

1. Gross national product (GNP) is a measure of:

a. the value of officially recorded goods and services that are produced and exchanged within a country.

b. the income earned from goods and services produced inside a county, plus external investments.

c. the total economic value of all goods and services produced and exchanged within a country, including the informal economy.

d. all of the above.

2. The *digital divide* refers to:

a. the generational divide between younger people who grew up with smartphones and computers and older people who did not.

b. the divide between those with access to widely available technologies (e.g., smartphones) and those with access to high-end technologies (e.g., supercomputers).

c. the unequal access to telecommunication technologies by people with higher incomes and lower incomes.

d. the divide between those who use technology developed in the United States and those who use technology developed in China.

3. Which of the following statements is true regarding the progress that has been made toward achieving the United Nations' Sustainable Development Goals?

a. Substantial progress has been made in reducing the number of hours women spend on unpaid domestic labor.

b. Little progress has been made in expanding access to clean water.

c. Substantial progress has been made in reducing extreme poverty.

d. Substantial progress has been made in reducing inequality.

10.2 Describe the nature and limitations of development models.

4. Rostow's modernization model assumes that:

a. former colonies will experience different development challenges than countries that were never colonized.

b. all countries follow a similar path to development.

c. modernization is most likely to happen in countries that have weakly developed agricultural sectors.

d. the power relations between countries have a significant impact on development potential.

5. True or False: Many of the higher income countries we call "industrial" today are really "postindustrial."

6. ____________ is based on the idea that the world is divided into a three-tier structure (core, periphery, and semiperiphery) that influences development prospects.

a. The UN Sustainable Development Agenda

b. The Washington Consensus

c. Dependency theory

d. World-systems theory

7. Which of the following countries is typically thought to be part of the semiperiphery?

a. Japan

b. Australia

c. Mexico

d. Rwanda

10.3 Explain major influences on development.

8. Which of the following statements about Western-dominated development financing is true?

a. It is largely driven by altruism.

b. It is largely driven by neoliberal ideas.

c. It is largely driven by a desire to insulate Western economies from the wider world.

d. It is largely driven by a desire to counteract Chinese influence.

9. The largest donors of foreign development assistance in the world, as measured by total dollars spent, are:

a. the United States and Japan.

b. the United States and Germany.

c. China and the United States.

d. China and Australia.

10. Maquiladora zones in Mexico are mainly sited:

a. directly across the border from the United States.

b. near Pacific ports with access to shipping coming from Asia.

c. in and around Mexico City (the capital).

d. in the south across the border from Guatemala.

11. True or False: Unlike agricultural intensification and the development of special manufacturing export zones, tourism represents a development strategy with little environmental impact.

10.4 Evaluate how political and economic institutions influence uneven development within states.

12. Uneven development is influenced by:

a. taxation rates.

b. land ownership rules.

c. tariffs.

d. all of the above.

13. True or False: Commodity chains are one of the few products of economic globalization that are largely unaffected by governmental regulation.

14. Which of the following is an example of an "island of development"?

a. A microcredit program created by an NGO in a rural community

b. A production facility established by a transnational corporation in a new place

c. A new capital city established in a central location

d. A levy constructed to protect an area from flooding and associated economic ruin