

GLOBALIZATION AND DIVERSITY

SIXTH
EDITION

Geography of a Changing World

PRICE
LEWIS
WYCKOFF
ROWNTREE

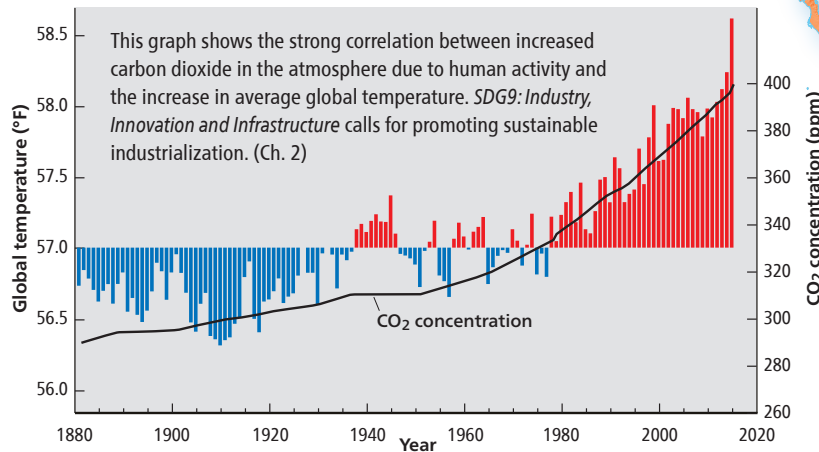
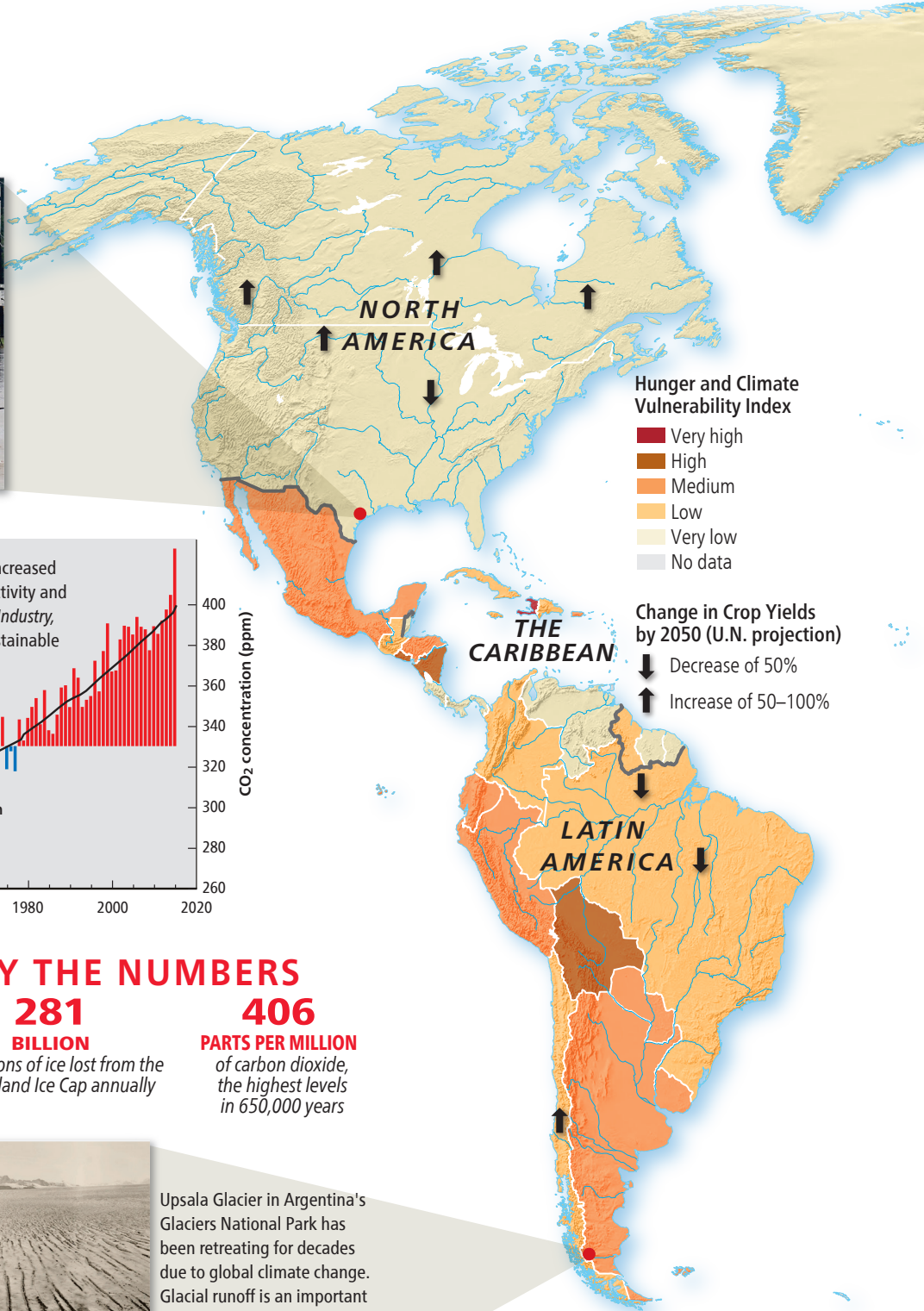


GLOBAL CLIMATE CHANGE, FOOD SECURITY, AND SUSTAINABLE DEVELOPMENT GOALS

Earth's temperature continues to rise due primarily to greenhouse gases (GHG) emitted by human activity. Corresponding environmental changes impact food production as farmlands are damaged or diminished. Food insecurity can lead to poverty, conflict, and mass migration as people look for better living conditions elsewhere.

In 2016, the United Nations adopted Sustainable Development Goals (SDGs) to tackle global issues like climate change and food security through 17 interconnected missions. SDGs challenge every country to promote better living conditions for all while protecting the planet.

Torrential rains from Hurricane Harvey flooded Houston in 2017. Global climate change may lead to more intense storms, threatening rural and urban places alike. *SDG11: Sustainable Cities and Communities* calls for more resilient, sustainable urban practices. (Ch. 3)



CLIMATE CHANGE BY THE NUMBERS

- 13.3 PERCENT** decrease per decade of Arctic ice since 1980
- 7 INCHES** of sea-level rise in the past 100 years
- 281 BILLION** metric tons of ice lost from the Greenland Ice Cap annually
- 406 PARTS PER MILLION** of carbon dioxide, the highest levels in 650,000 years

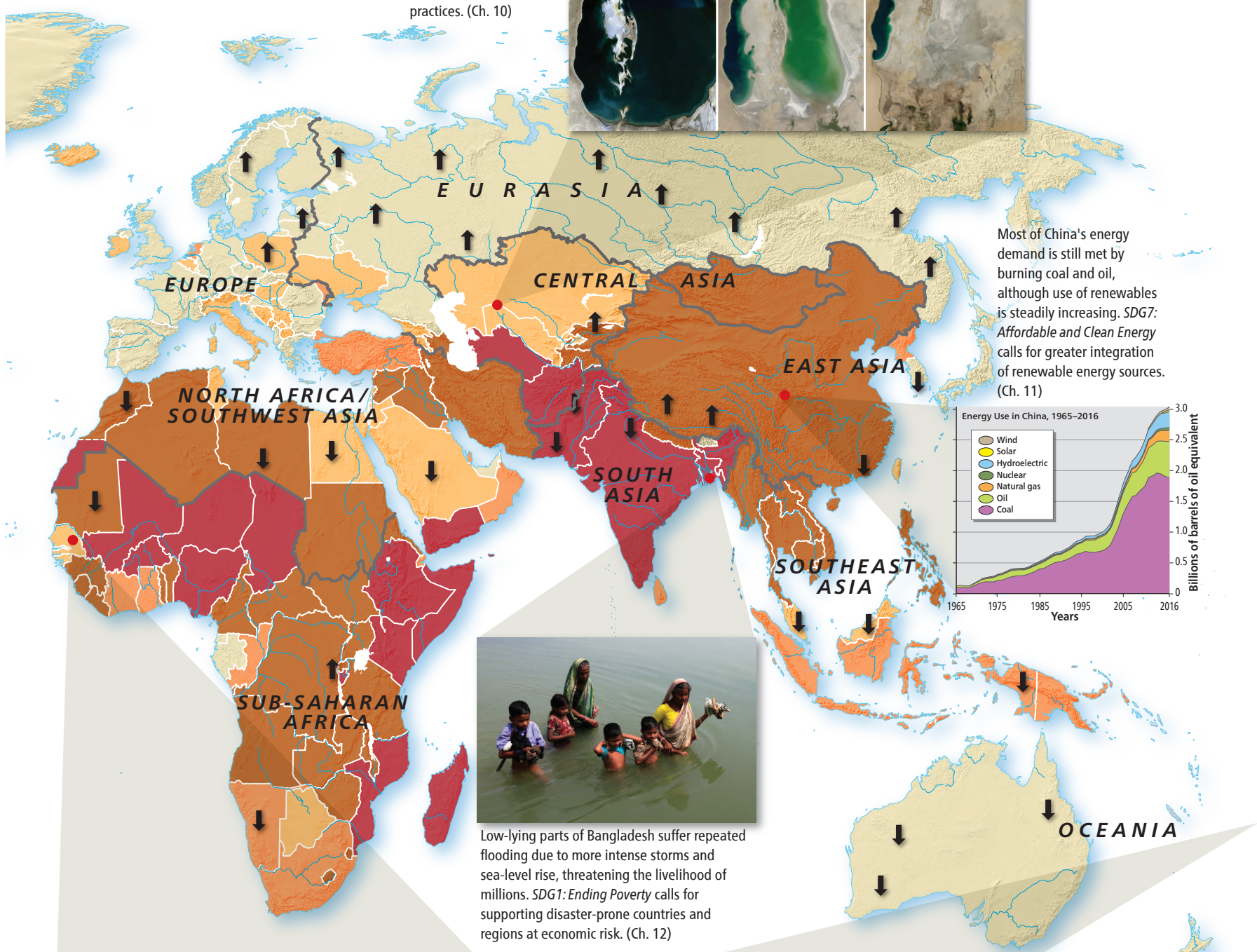
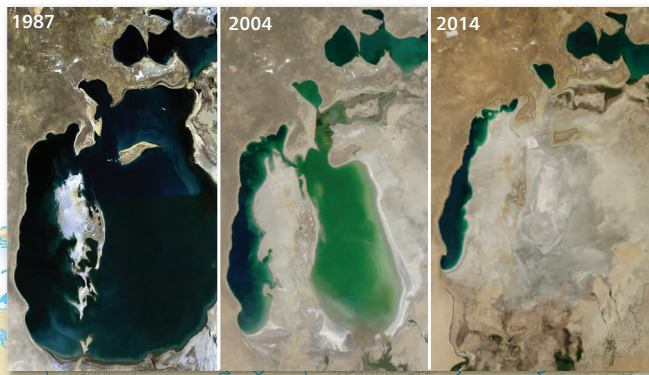


Upsala Glacier in Argentina's Glaciers National Park has been retreating for decades due to global climate change. Glacial runoff is an important water source for many regions. *SDG6: Clean Water and Sanitation* calls for better management of freshwater ecosystems. (Ch. 4)

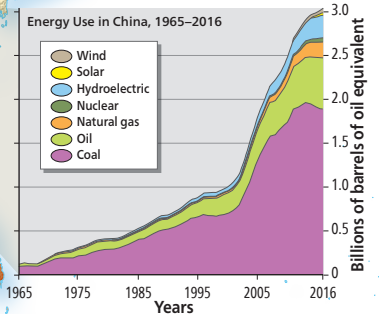
Map labels indicate Earth's 12 world regions, as defined by *Globalization and Diversity*

Sources: World Food Programme, United Nations FAO, World Health Organization, NASA, NOAA

The Aral Sea has been shrinking due to water diversion, devastating fisheries and farmlands. *SDG2: Zero Hunger* calls for sustainable agricultural practices. (Ch. 10)



Most of China's energy demand is still met by burning coal and oil, although use of renewables is steadily increasing. *SDG7: Affordable and Clean Energy* calls for greater integration of renewable energy sources. (Ch. 11)



Low-lying parts of Bangladesh suffer repeated flooding due to more intense storms and sea-level rise, threatening the livelihood of millions. *SDG1: Ending Poverty* calls for supporting disaster-prone countries and regions at economic risk. (Ch. 12)

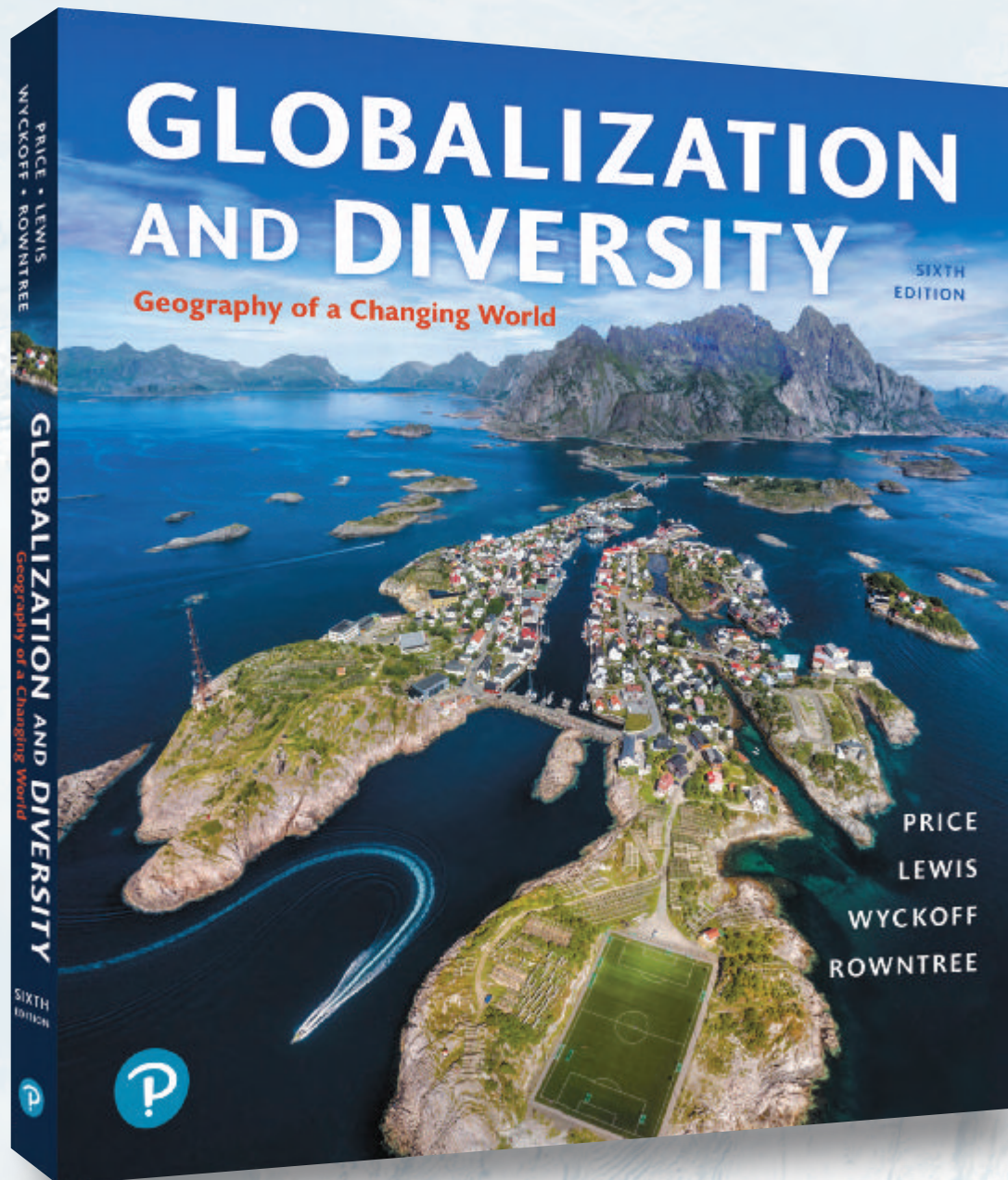


A Senegalese pastoralist moves his herd toward grass and water. Overgrazing combined with drought threatens food supplies in the Sahel. *SDG15: Life on Land* calls for halting and reversing land degradation. (Ch. 6)



Pacific Climate Warriors representing the island states of Oceania march in Bonn, Germany, to protest the loss of land due to sea-level rise. *SDG13: Climate Action* calls for all countries to support coordinated international responses. (Ch. 14)

Empowering Students to Address Global Issues



Globalization and Diversity, Sixth Edition

The sixth edition has a deep emphasis on humanitarian geography and sustainability, and encourages students to explore the sights, sounds, and tastes of world regions with embedded links to online digital resources.

How Geographers Help Make the World a Better Place

HUMANITARIAN GEOGRAPHY

Unmasking the Tragedy in Flint, Michigan



Figure 3.1.1 Rick Sadler

Rick Sadler, a geographer and GIS expert at Michigan State University, helped to uncover the roots of the water crisis that has recently plagued Flint, Michigan (Figure 3.1.1). In an effort to save money, the state directed the cash-strapped city to switch its water supply to the local Flint River in 2014. Tragically, the naturally more turbid water was not treated properly. Flint's new water supply corroded lead from delivery and home service lines, resulting in lead poisoning for thousands of residents, including many children. But initially, no one knew the source of the problem. A local pediatrician suspected that the elevated lead levels in Flint children were linked to Flint River water, and called on Sadler to examine the data.

Remapping the Data Sadler quickly realized that the data that state officials used were based on Flint ZIP codes, larger units that did not match city boundaries or represent the residents drinking the tainted water. "One-third of the addresses with a

Flint ZIP code weren't in the city," Sadler recalls, and used a different water source. Remapping the data by the actual street addresses of children with elevated lead levels revealed a strong correlation with use of Flint River water. These older homes often house lead pipes that proved vulnerable to corrosion and leaching. Sadler's evidence confirmed the cause of the poisoning.

A Flint native, Sadler has been interested in mapping "as long as I can remember" and enrolled in GIS courses as an undergraduate. After returning to Flint, he became known as "the map guy" while working with different community groups. Sadler says his heart is in issues relevant to the city: "The more I learned about issues that drove Flint's decline...the more I felt compelled to not

just understand them, but to uncover some of the spatial patterns—to use the tools that I had learned."

Based on Sadler's findings and intense public outcry surrounding the crisis, Flint returned to a safer water supply. Yet the crisis continues: less than 25 percent of the 26,000 affected lead-rich pipes had been upgraded by 2017, and contaminated water and its associated effects remain a daily challenge for thousands (Figure 3.1.2). Meanwhile, the spatial tools and geographic analysis that Sadler employed to confirm the source of the Flint tragedy have aided legal and criminal proceedings to address liability and seek environmental justice for affected residents.

Sadler notes that GIS is applicable to many public health issues, and that a geographer's multidisciplinary approach can be invaluable: "It's like being a goalie as opposed to being a forward. It's a special position that not everyone does, but it's absolutely essential."

1. Why do you think ZIP code zones are often used to map U.S. public health issues?
2. Find a map of local ZIP codes and argue why they may or may not be useful in studying environmental or social problems. What might be a better unit of analysis?



Figure 3.1.2 Flint Residents Receive Bottled Water

Volunteers from Full Gospel Churches in Michigan deliver bottled water to residents of Flint.

GOOGLE EARTH
Virtual Tour Video
flintzipcode.globe4all

NEW! Humanitarian Geography features demonstrate how geographic tools and approaches improve the human condition when confronted with current challenges such as natural disasters, disease outbreaks, crisis and humanitarian mapping, and Sustainable Development Goals (SDGs).

UPDATED! Working Toward Sustainability features explore how the theme of sustainability plays out across world regions, looking at initiatives and positive outcomes of environmental and cultural sustainability. All features are integrated with Quick Response (QR) links to Google Earth® Virtual Tour Videos.

WORKING TOWARD SUSTAINABILITY

Saving the Great Barrier Reef



Figure 16.1.1 Australia's Great Barrier Reef

Off the eastern coast of Australia, the Great Barrier Reef stretches for more than 1,900 miles (2,983 km) through the Coral Sea.

Scientists call it the world's single largest expression of a living organism. Stretching through the azure and turquoise-tinted waters of the Coral Sea for more than 1,466 miles (2,300 km) off the coast of Queensland, the Great Barrier Reef (GBR) includes more than 900 small islands and a myriad of underwater coral reefs (Figure 16.1.1). This remarkable ecosystem is home to 1,500 species of fish, 400 species of coral, whales, dolphins, sea turtles, sea eagles, terns, and plant species found nowhere else on Earth (Figure 16.1.2). Having more than 19,000 years to form, the reef has been a UN World Heritage Site since 1981, and much of the area is protected by Australia's Great Barrier Reef Marine Park.

Fighting for Survival Today, however, the GBR is in the fight of its life. Thanks to global climate change, the reef has lost more than half its coral cover since 1985, much of it damaged by warmer ocean temperatures that have accelerated rates of seawater acidification and coral bleaching. Bleaching occurs when the organisms experience increased stress from changing temperatures, light, or nutrient conditions. The stressed corals expel helpful algae, causing them to turn white. Bleached corals may survive but are more susceptible to disease and death.

Coastal development also has added to its watery woes: More intensive agriculture in Queensland has produced ocean-bound sediment and increased runoff of toxic agricultural chemicals. Recent plans for expanding coal-loading docks at Abbot Point include potentially dumping waste rock onto the reef, a practice sure to disrupt the purity of local waters. On a local note, the reef contributes to a huge tourist industry in Queensland, amounting to more than \$4 billion annually. That translates into powerful economic incentives that are actually counterbalancing preserving the reef's environmental health.

Adapting to Change Recently, the Australian government pledged over \$160 million toward improving reef water quality and toward innovations designed to slow future bleaching episodes. Farmers in nearby Queensland will be paid subsidies to limit runoff of harmful sediments and agricultural chemicals. Another area of investment is the development of a floating, sunscreen-like film that could protect

especially vulnerable reefs by limiting the harmful rays of direct sunlight (which hasten the bleaching process). Additional money has been allocated toward tapering the crown of thorns starfish, which has widely invaded delicate reef systems, making them even more vulnerable to bleaching and death. Scientists are also working to develop new genetic strains of coral that may be more resistant to global climate change and could be used to repopulate damaged settings.

Still, the long-term story for the GBR will probably hinge upon responsible coastline development along the Queensland coast as well as the further global-scale impacts of ocean warming and acidification that will no doubt affect the region in coming decades. In addition, better aerial surveillance (such as more satellite reconnaissance and use of high-tech drones) of the Marine Park may monitor rogue fishing vessels more effectively in the future. For now, the reef's survival

change in the balance, a giant poacher: child. For a long list of menacing human impacts that threaten the environmental health of the entire South Pacific.

1. How might economic development in Queensland pose a risk to the same time preserving the environmental health of the GBR?
2. Cite a fragile and protected environmental area in your region and briefly outline future prospects for its survival.



Figure 16.1.2 Great Barrier Reef's Diverse Ecosystem

This underwater view of the Great Barrier Reef features yellow sea fan corals, scorpionfish and other coral, and purple anemones [16].

GOOGLE EARTH
Virtual Tour Video
flintzipcode.globe4all

Connecting the Global to the Local



GLOBALIZATION IN OUR LIVES

Putin May Want to Be Your Friend

Russian operatives, Internet trolls, and hackers conducted a sustained campaign to influence the U.S. presidential election in 2016, according to the CIA, FBI, and the National Security Agency. These efforts included running anti-Clinton propaganda on Russian media outlets, hacking Democratic Party emails, and releasing these materials via WikiLeaks, and posting pro-Trump and politically divisive ads on a variety of social media that many of us use every day.

The abuse of social media platforms included Twitter, Facebook, Google, and Instagram, and was a reminder of the vulnerability of these virtual communities. More than 2700 fake Twitter accounts and 36,000 bots churned out pro-Trump tweets and political posts. Russian operatives purchased 80,000 Facebook ads that reached over 125 million users. The Russian-backed "Internet Research Agency" was the source of many of these bogus ads, but a lack of regulations and oversight at the time prevented many people from questioning

their veracity or sources.

Finally, Facebook CEO Mark Zuckerberg, aware that the Russians had outfoxed him, put in place more security measures designed to catch future abuses (Figure 9.4.1).

Russia's global reach into national elections is nothing new, but the pace of cyber-interference in the world of social media and computer hacking has accelerated since 2014. Russia has also used its superiority in the cyberworld to attempt to influence elections in the United Kingdom, Germany, France, and elsewhere. Has it worked? No one knows, but the next time you jump on your favorite social media site, you may be closer to your Russian comrades than you know.

1. What geopolitical advantages might Russians hope to gain by



▲ Figure 9.4.1 Mark Zuckerberg, Facebook CEO Following the 2016 U.S. Presidential election, Zuckerberg and Facebook were criticized after it was revealed that Russian operatives had misused American social media during the campaign.

Interfering with elections in western Europe and the United States?

2. Are you vulnerable to being influenced by unethical ads or posts on your social media sites? Why or why not?

NEW! Globalization in Our Lives features explore common familiar commodities, cultural norms, activities, or popular culture that could be in a college student's experience or social network, showing how globalization connects their behavior or consumption across world regions.

UPDATED! Exploring Global Connections

features describe unexpected and often surprising connections across world regions, leveraging recent events and coverage of cultural and environmental topics. All features are integrated with QR links to Google Earth Virtual Tour Videos.



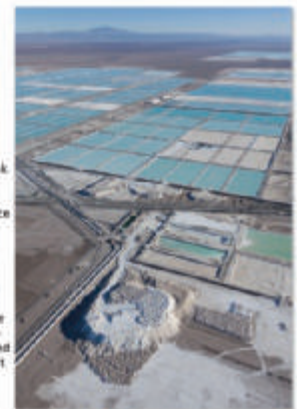
EXPLORING GLOBAL CONNECTIONS

South America's Lithium Triangle

High in a remote corner of the Andes, where Bolivia, Argentina, and Chile meet, is the largest known reserve of lithium in the world. This soft, silver-white metal is an essential element in lightweight batteries, like those that power cell phones and laptops. It is also a key metal for electric vehicle batteries and photovoltaic cells. Companies such as Tesla, Samsung, and Apple are keenly aware of the cost and scarcity of lithium, which could greatly benefit these developing economies. Yet possessing more than half of the world's lithium is only step one—being able to extract

it for global markets has been the challenge.

Lithium is found under salt flats in South America's Altiplano region, at elevations of up to 13,000 ft (Figure 4.4.1). Miners must extract the lithium-bearing brine from wells sunk deep below the salt crust and then deposit the liquid into evaporation ponds to let the sun do its work. Once sun-baked, the concentrate is taken for processing into lithium carbonate. South America's lithium boom thus far has been hindered by a lack of technology and capital, as well as



▲ Figure 4.4.3 Lithium Processing in San Pedro de Atacama, Chile In the high-Atacama desert, lithium-laden brine is pumped out of the ground and into evaporation ponds. Once dried, the powdery substance is shipped and processed into lithium.



▲ Figure 4.4.1 Lithium Mining in South America The largest lithium deposits in the world are found where Bolivia, Chile, and Argentina converge. Lithium is a critical metal for lightweight batteries used in cell phones and laptops.

national laws that designate lithium a strategic metal and therefore limit investment from foreign companies. Bolivia and Argentina have the largest known reserves, but Australia is the leading producer, followed by Chile. Chile rounds out the top five lithium source countries.

For decades, Chile has been the region's export leader, sending lithium carbonate primarily to manufacturers in South Korea, China, and Japan. The Atacama salt flats have the highest quality reserves, and ports such as Antofagasta are relatively close (Figure 4.4.2). Moreover, Chile's neoliberal policies have been more open to foreign investment in mining. Argentina is trying to catch up through

increased foreign investment in lithium extraction around Jujuy province. In 2016, it produced about half as much lithium as Chile. Bolivia, which may have the largest reserves under the Salar de Uyuni salt flat, has yet to become a significant producer. This is partly due to the state's tight control of the resource and the wariness of foreign investors to engage in this country, which is noted for nationalizing key resources such as natural gas. As far as Bolivians are concerned, they need only look to the nearby mountains of Potosí, where silver financed Spain's colonization of the Americas, to understand that owning a resource does not mean profiting from it.

1. What are the factors that make Chile the leading South American exporter of lithium?

2. What are the products that you use that need lithium to function?



A Structured Learning Path to Support Today's Students



Physical Geography and Environmental Issues

China has long experienced severe deforestation and soil erosion, and its current economic boom is generating some of the world's worst pollution problems. Japan, South Korea, and Taiwan, however, have extensive forests and relatively clean environments.



Population and Settlement

Low birth rates and aging populations are found throughout East Asia. China is currently undergoing a major transformation as tens of millions of peasants move from impoverished villages in the interior to booming coastal cities.



Cultural Coherence and Diversity

Despite several unifying cultural features, East Asia in general and China in particular are divided along striking cultural lines. Historically, however, the entire region was linked by Mahayana Buddhism, Confucianism, and the Chinese writing system.



Geopolitical Framework

China's growing power is generating tension with other East Asian countries, while Korea remains a divided nation. As China's global influence grows, Japan, South Korea, and Taiwan are responding by strengthening ties with the United States.



Economic and Social Development

East Asia has been a core area of the world economy for several decades, with China undergoing one of the world's most rapid economic expansions. North Korea, however, remains desperately poor, plagued by widespread malnutrition.

UPDATED! Critical Themes of Geography

Following two unique introductory chapters, each regional chapter is organized into five thematic sections, making navigation and cross-regional comparisons easy for students and instructors. Themes include Physical Geography and Environmental Issues, Population and Settlement, Cultural Coherence and Diversity, Geopolitical Framework, and Economic and Social Development.

UPDATED! Region-specific Learning Outcomes in each chapter's opening pages outline the knowledge and skills that students should gain from each chapter.

LEARNING OBJECTIVES

After reading this chapter you should be able to:

- 11.1 Contrast the physical geographies of the islands of East Asia (Japan and Taiwan) and the mainland.
- 11.2 Describe the main environmental problems China faces today and compare them with environmental challenges faced by Japan, South Korea, and Taiwan.
- 11.3 Explain why China's population is so unevenly distributed, with some areas densely settled and others almost uninhabited.
- 11.4 Summarize the distribution of major urban areas on the map of East Asia and explain why the region's largest cities are continuing to grow.
- 11.5 Describe how religion and other systems of belief both unify and divide East Asia.
- 11.6 Explain the distinction between, and geographical distribution of, the Han Chinese and the other ethnic groups of China, paying particular attention to language.
- 11.7 Outline the geopolitical division of East Asia during the Cold War era and explain how that division still influences East Asian geopolitics.
- 11.8 Identify factors behind East Asia's rapid economic growth in recent decades and discuss possible limitations to continued expansion at such a rate.
- 11.9 Summarize the geographical differences in economic and social development found in China and across East Asia as a whole.

UPDATED! Two Review Questions at the end of each section help students check their comprehension as they read, and are followed by a listing of the key terms from each section, reinforcing the key concepts from each chapter section.

REVIEW

- 11.3 Why does East Asia import so much of its food and natural resources from other parts of the world?
- 11.4 Describe how the urban landscape of China is currently changing.

KEY TERMS anthropogenic landscape, hukou, urban primacy, megalopolis

REVIEW

- 11.9 How has the process of economic development been similar in Japan, South Korea, Taiwan, and China since the end of World War II, and how has it differed in each country?
- 11.10 Why do levels of social and economic development vary so extensively from the coastal region of China to its interior provinces?

KEY TERMS chaebol, laissez-faire, Special Economic Zone (SEZ), World Trade Organization (WTO), One Belt, One Road, social and regional differentiation, rust belt

Develop 21st Century Skills

NEW! 2-page Review, Reflect, & Apply Sections at the end of each chapter provide a robust interactive review experience, including a concise chapter summary, *Review Questions* that bridge multiple chapter themes, *Image Analysis* questions, new *Join the Debate* activities, new *Geospatial Data Analysis* activities, as well as QR links to *Geographers at Work* profiles.

NEW! Join the Debate presents two sides of a complex topic to engage students in active debate around the most critical topics of geography today. *Join the Debate* can be used for homework, group work, and discussions.

Geography of a Changing World

REVIEW, REFLECT, & APPLY

1

Summary

- Geography is the study of Earth's varied and changing landscapes and environments. This study can be done conceptually in many different ways, by physical or human geography and often topically or regionally—on by using a combination of all these approaches.
- Globalization affects all aspects of world geography with its economic, cultural, and political interconnectivity. However, despite how that globalization will produce a homogeneous world, a great deal of diversity is still

apparent. Geographers use various tools that draw on information gathered on the ground and by satellites to examine the world at all levels scales, from an increasingly thick to the entire planet.

- Human populations around the world are growing either quickly or slowly depending on natural increase and widely different migration patterns. Urbanization is also a major factor in settlement patterns as people continue to move from rural to urban locales.

Review Questions

- Define geography. Then define globalization and explain its relevance to understanding the world's changing geography.
- What are the benefits of GIS, GPS, and satellite imagery in being able to monitor change and improve sustainability in a given place?

Image Analysis

- The flow of investment capital to some parts of the planet is a feature of economic globalization. Which regions of the world receive relatively high foreign direct investment?

Join the Debate

Globalization is most often associated with economic activity, but it impacts all aspects of the world's physical and human landscapes. Global linkages are complex and can result in a variety of outcomes—some unexpected. Is globalization generally good or bad for the world and economic development?

Globalization advances social and economic development!

- Technological advances level the global playing field and allow more people to engage in economic activity and trade.
- With open markets, there are fewer barriers, increasing the efficiency of goods production and reducing the price of goods.
- Open economies tend to be more innovative and more adept at diversifying and have less greater inequality.

Globalization has negative consequences for development!

- As trade increases, wages decline and income inequality is exacerbated. Digital globalization increases efficiency but creates lower skilled jobs because less labor is required.
- A globalized all costs argument often accelerates depletion of natural resources and unsustainable development. Externalities is commonly price can lead to economic instability.
- The speed at which capital is transferred can lead to instability in global financial markets.

Key Terms

antipodes area (p. 300)
 choropleth map (p. 104)
 isolationism (p. 211)
 core-periphery model (p. 210)
 cultural assimilation (p. 214)
 cultural imperialism (p. 10)
 cultural syncretism (p. 211)
 culture (p. 205)
 decolonialization (p. 322)
 demographic transition model (p. 210)
 diversity (p. 148)
 economic migrant (p. 224)
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 formal region (p. 6)
 functional region (p. 31)
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 gender inequality (p. 310)
 gender roles (p. 28)
 geographic information systems (GIS) (p. 91)
 geography (p. 9)
 geographers (p. 29)
 globalization (p. 8)
 global positioning system (GPS) (p. 95)
 globalization (p. 8)

gross domestic product (GDP) (p. 340)
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 human trafficking (p. 32)
 industrialization (p. 340)
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 latitude (longitude) (p. 15)
 less developed country (LDC) (p. 35)
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 Sustainable Development Goals (p. 19)
 territory (p. 30)
 transition (p. 324)
 transnational geographic system (geography) (p. 9)
 total fertility rate (TFR) (p. 200)
 urban primary laborers (UPL) (p. 211)
 urbanization (p. 211)
 World Bank (p. 31)
 World Trade Organization (WTO) (p. 320)




Figure D1 Global Connection A busy shopping mall in Guangzhou, China.

GeoSpatial Data Analysis

MapMaster as a Development Measure. Many different indices try to measure relative development, levels of globalization, and overall well-being. In the last decade, there has been an increased effort to measure happiness and understand the causes for happiness and misery. Take a look at the World Happiness Report for 2018 (http://worldhappinessreport.com/2018). The report uses 2013–2017 data from the Gallup World Poll and focuses on happiness at the national level as well as analyze the happiness of citizens who move within and between countries.

Click on the report's Chapter 2 link to review Figure 2.2, which ranks the happiness of 156 countries, and Figure 2.4, which ranks the happiness of immigrants worldwide within the surveyed countries. Then go back to the main page and click on the Online Data Explorer 2 link to download a dataset for these measures.

Open MapMaster 2.0 in the Mapping Geography Study Area. Prepare and import the happiness data (click on the Table 2.1 tab at the bottom of the dataset) to map the world's 10 largest countries, and answer these questions:

- Which are these countries' leaders? What variables make up this happiness measure? How can you explain the relative happiness of these countries?
- Now consider the world's 10 largest countries discussed in the tables in our chapter. Where do these countries fall in the happiness ranking? Is there any relationship between GNI per capita as shown in Table 1.2 and relative happiness?
- Now map the happy areas of foreign-born individuals within the surveyed countries (data from Table 2.4 in the Happiness Report, click the 2.4 tab in the dataset).
- In which countries on the happiness index most happy? Least happy? Are these immigrants happier than the domestic born or not? Can you explain what you observe?

NEW! GeoSpatial Data Analysis activities send students to online data sources to collect, prepare, and analyze spatial data using MapMaster 2.0.

80

41

The Sights, Sounds, & Tastes of World Regions

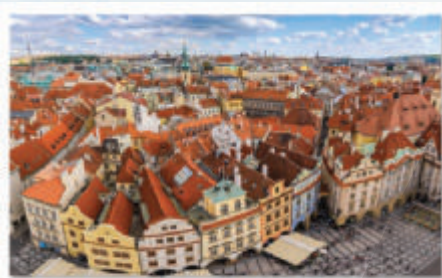
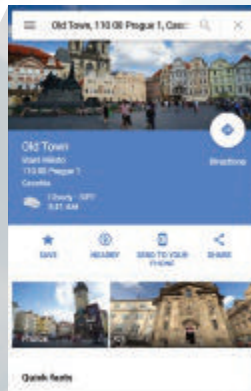


Figure 9.8 The Cultural Landscape Despite globalization, the world's landscapes still have great diversity, as seen in Prague, Czechia (Czech Republic). Red tile roofs, three-to-four-story buildings, organic street patterns, and open squares all signify the historic capital city. Geographers use the cultural landscape concept to better understand how people interact with their environment.

Explore the **SIGHTS** of Prague
<https://www.youtube.com/watch?v=...>



NEW! Sights of the Region features link photos and maps to dynamic online Google Maps that include community contributed photos, empowering students to explore the places and spaces that make up world regions.

Figure 3.16 Glacier Calving in Antarctica As Earth's climate warms, Antarctica's massive ice sheet is losing volume. Here, a large piece of ice is calving—breaking off—a glacier into the neighboring Southern Ocean.

Explore the **SOUNDS** of a Calving Glacier
<https://www.youtube.com/watch?v=...>



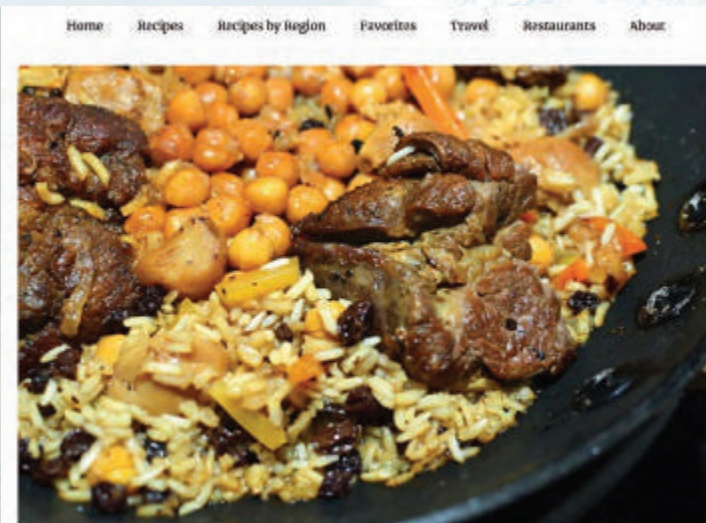
VEDMA GLACIER
 Massive Glacier Wall Collapse

NEW! Sounds of the Region features give students access to audio of regional music, language, and nature.



Figure 9.23 Osh This savory Central Asian dish—a mix of rice, meat, vegetables, and spices—is a common sight in Moscow as immigrants from Uzbekistan, Tajikistan, and Kyrgyzstan bring their Central Asian food traditions to the Russian capital.

Explore the **TASTES** of Uzbek Food
<https://www.youtube.com/watch?v=...>



NEW! Tastes of the Region features help students explore the geography and politics of food in each region, and include links to regional dishes and recipes.

MapMaster 2.0: Geospatial Tools in Your Hands

UPDATED! Mastering Geography is the teaching and learning platform that empowers you to reach every student. By combining trusted author content with digital tools developed to engage students and emulate the office-hour experience, Mastering personalizes learning and improves results for each student.



NEW! MapMaster 2.0 Interactive Map Activities Inspired by GIS, MapMaster 2.0 allows students to layer various thematic maps to analyze spatial patterns and data at regional and global scales. Now fully mobile, with enhanced analysis tools, MapMaster 2.0 allows students to upload their own data and geolocate themselves within the data. This tool includes zoom and annotation functionality, with hundreds of map layers leveraging recent data from sources such as the PRB, the World Bank, NOAA, NASA, USGS, United Nations, the CIA, and more. Available with assessment in Mastering Geography.

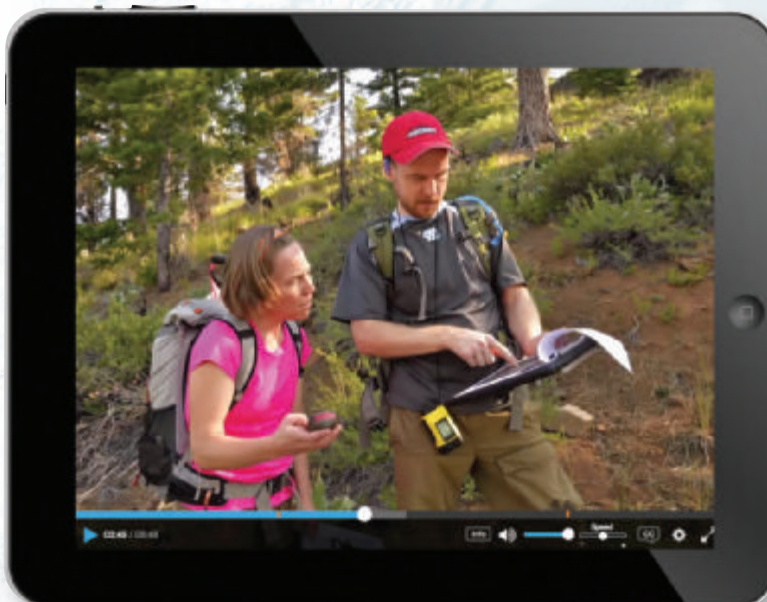


Transport Your Students to World Regions



NEW! Google Earth Virtual Tour videos give students brief narrated spatial explorations of places and people around the world, covering critical themes such as globalization and sustainability.

NEW! Video Activities from sources such as the BBC, Financial Times, and Television for the Environment's *Life* and *Earth Report* series are included in Mastering Geography. These videos provide students with applied real-world examples of geography in action, a sense of place, and allow students to explore a range of locations and topics.



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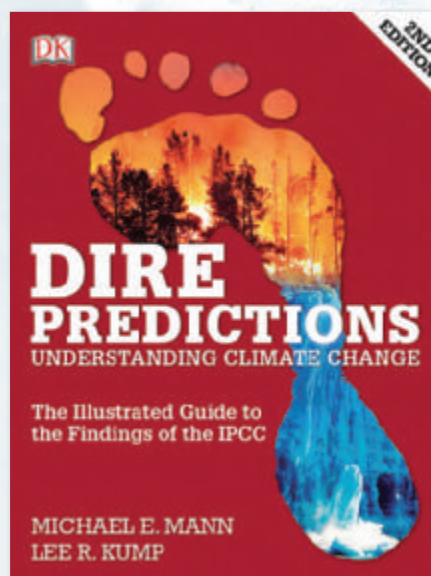
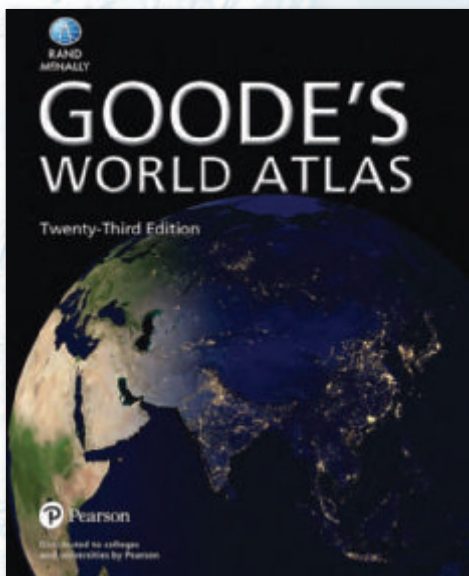
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- PowerPoint Clicker Questions
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- TestGen Computerized *Test Bank*, which includes all the questions from the *Test Bank* in a format that allows you to easily and intuitively build exams and quizzes

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- *Instructor Resource Manual* in Microsoft Word and PDF formats
- *Goode's World Atlas*, 23rd Edition
- *Dire Predictions: Understanding Climate Change*, 2nd Edition by Mann and Kump



GLOBALIZATION AND DIVERSITY



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GLOBALIZATION AND DIVERSITY

**GEOGRAPHY
OF A
CHANGING
WORLD**

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