# Introduction to Human Geography

Field Note Awakening to World Hunger



Figure 1.1

Kericho, Kenya. Tea plantations established by British colonists in western Kenya. © H. J. de Blij.

Dragging myself out of bed for a 9:00 A.M. lecture, I decide I need to make a stop at Starbucks. "Grande coffee of the day, please, and leave room for cream." I rub my eyes and look at the sign to see where my coffee was grown. Kenya. Ironically, I am about to lecture on Kenya's coffee plantations. Just the wake up call I need.

When I visited Kenya in eastern Africa, I noticed nearly all of the agricultural fields were planted with coffee or tea (Fig. 1.1). I also saw the poor of Kenya, clearly hungry, living in substandard housing. I questioned, "Why do farmers in Kenya grow coffee and tea when they could grow food to feed the hungry?" Through the process of answering this question, I learned a lot about the complexities of globalization. In a globalized world, connections are many and simple answers are few

### Chapter 1 Introduction to Human Geography UNITED STATE: ATLANTIC BAHAMAS OCEAN EL SALVADOR TRINIDAD & TOBAGO COSTA RICA PACIFIC OCEAN **AVERAGE DAILY CALORIE CONSUMPTION PER CAPITA** Over 3000 High Adequate 2500-2999 2000-2499 Low SOUTHERN OCEAN Below 2000 Very low 140° Data not available 3000 Kilometers 1000 2000 1000 2000 Miles Figure 1.2

Average Daily Per Capita Calorie Consumption, 2002. Data from: United Nations Food and Agriculture Organization Food Balance Sheets 2004. Note that this map (see Appendix A) is interrupted in the oceans, allowing for maximum clarity of detail on the landmasses.

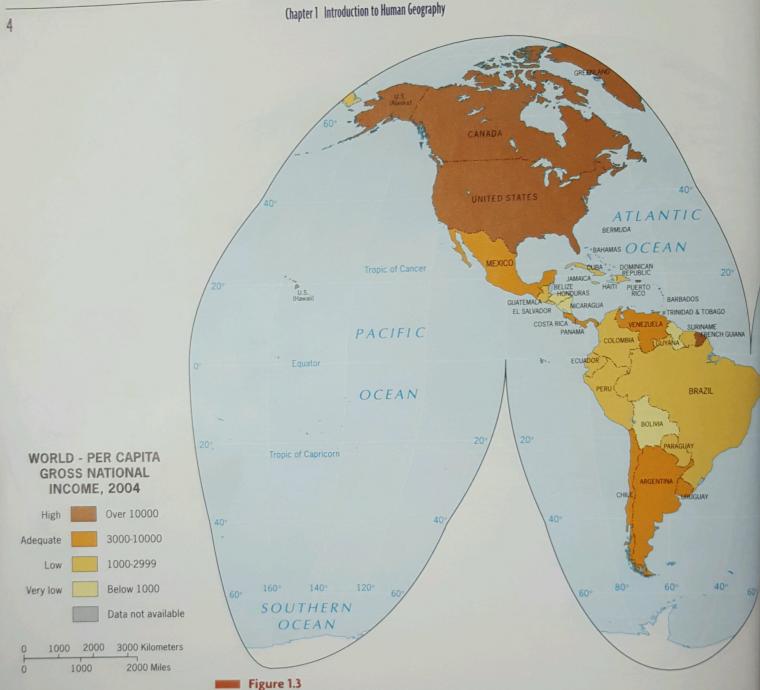
Major problems in the world, like hunger, may seem easy to solve. Take the total annual food production in the world, divide it by the world's population, and we have plenty of food for everyone. Yet, one-sixth of the world's population is seriously malnourished. The vast majority of the 1 billion malnourished people on Earth are women and children, who have little money and even less power.

<sup>&</sup>lt;sup>1</sup>Figure 1.2 reveals the wide range of caloric intake throughout the world. Various agencies monitor this index, but their categories differ, and, in recent years, the urgency of their reporting has diminished. As the map indicates, countries are usually grouped into four ranks ranging from high intake (usually over 3000 calories daily) to very low, or under 2000, but there is no agreement about adequacy. The World Bank regards 2500 calories as adequate, whereas the United Nations uses 2360 as its boundary between adequate and low intake. Such discrepancies (there are others when additional sources are consulted) should raise a caution when you consult Figure 1.2, which is based on data from 2004. The map may effectively portray the global situation by country in general terms. What the map does not reflect is also important: there are nutritional disparities within countries that cannot be shown at this level of scale. For example, diets in western India are superior to those in eastern India; the



Figure 1.2 shows how food consumption is currently distributed—unevenly. Comparing Figure 1.2 with Figure 1.3 shows that the wealthier countries also are the best-fed and that Subsaharan Africa (the part of Africa south of the Sahara Desert) is currently in the worst position, with numerous countries in the lowest categories.

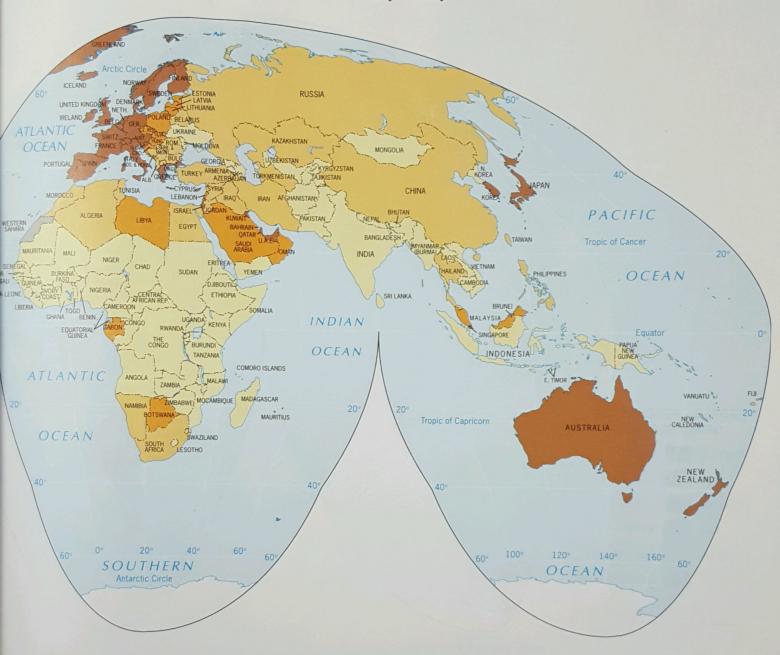
intake in northern parts of Sudan is substantially higher than that in its unstable south. Another factor not shown in Figure 1.2 is dietary balance. With few exceptions, the countries where caloric intake is low are also those where protein is in short supply. Recent studies have indicated that the first six months of life are critical in this respect: inadequate protein intake can damage brain and body for life. Moreover, the food sources that are richest in proteins—meat, fish, and dairy products—are in short supply where they are most needed. It takes food to raise the animals that produce meat, and that food cannot be spared to feed animals when it is needed to sustain the people themselves. And while fish may be obtainable in coastal areas, it becomes less available (and more expensive) in interior Africa and Asia. Thus, even people whose caloric intake is marginally adequate may still be malnourished, and what is often called hidden hunger occurs even in areas mapped as having "adequate calories."



Per Capita Gross National Income (GNI). Data from: World Bank, World Development Indicators 2004.

The major causes of malnourishment are poverty (inability to pay for food), the failure of food distribution systems, and cultural practices that favor men over women and children. Where food does reach the needy, its price may be unaffordable. Hundreds of millions of people subsist on the equivalent of one dollar a day, and many in the vast shantytowns encircling the world's cities must pay rent to landlords who own the plots on which their shacks are built. Too little is left for food, and it is the children who suffer most.

Is solving hunger as simple as each country growing enough food to feed its people? Do the best-fed countries have the most arable (farmable) land? Only 4 percent of Norway is arable land, and more than 70 percent of Bangladesh is arable land (Fig. 1.4). Despite this disparity, Norway is wealthy and well fed, whereas Bangladesh is poor and malnourished. Fortunately for the Norwegians,



they are able to overcome their inadequate food production by importing food. Unfortunately for the Bangladeshis, two-thirds of their country is flooded each year during monsoon season, making survival a daily question.

If a poor country has a small proportion of arable land, does that destine its population to a lifetime of malnourishment? It depends on the place. Of all the land classified as arable, some is much more productive than other. For example, only 8 percent of Kenya's land is arable, but the land in the western highlands is some of the most productive agricultural land in the world. Do the Kenyans simply not produce enough food on their lands? Is that what accounts for their malnutrition rate of over 30 percent? No, hunger in Kenya depends much more on what they produce, who owns the land, and how Kenya is tied into the global economy.

1000 2000

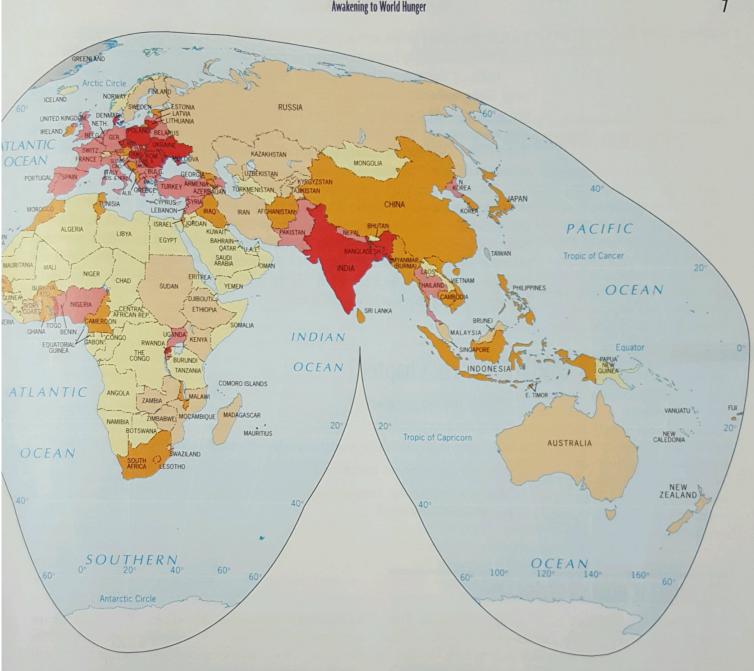
1000

2000 Miles

Figure 1.4 Percent of Land that is Arable (Farmable). Data from: United Nations Food and Agriculture Organization 2002.

The most productive lands of Kenya, those in the western highlands, are owned by foreign coffee and tea corporations. Driving through the open, luxurycrop covered slopes, I saw mostly Kenyan women working the plantations. The lowland plains are dotted by small farms, many of which have been subdivided to the point of making the land unviable. Here, an even higher proportion of the people working the lands are women, but the lands are registered to their husbands or sons because, by law, they cannot own them.

As I drove through the contrasting landscapes, I continued to question whether it would be better for the fertile highlands to carry food crops that could be consumed by the people in Kenya. I drove to the tea processing center and talked to the Kikuyu (manager) and asked him my question. He said that his coun-



try needed foreign income and that apart from tourism, exporting coffee and tea was the main opportunity for foreign income.

As part of the global world-economy, Kenya suffers from the complexities of globalization. With foreign corporations owning Kenya's best lands, a globalized economy that thrives on foreign income, tiny farms that are unproductive, and a gendered legal system that disenfranchises the agricultural labor force and disempowers the caregivers of the country's children, Kenya has multiple factors contributing to the poverty and malnutrition in the country.

To solve one of these problems raises another. If Kenyans converted the richest lands to cash crop production, how would the poor people be able to afford the crops? What would happen to the rest of Kenya's economy and the government itself if it lost the export revenue from tea and coffee? If Kenya lost its export revenue, how could the country pay loans it owes to global financial and development institutions?

Each of these questions requires its own path of geographic inquiry to answer. Geographers have a long tradition of **fieldwork**: they go out in the field and see what people are doing, and they observe how peoples' actions and reactions vary across space. We, the authors, have countless field experiences, and we will share these with you in order to illustrate that global processes have unique outcomes in different places.

Solving major global problems such as hunger or AIDS is complicated in our interconnected world. Each solution has its own ramifications not only in one place, but also across regions, nations, and the world. Our goals in this book are to help you see the multitude of interconnections in our world, to help you recognize the patterns of human geographic phenomena, to help you understand the uniqueness of place, and to teach you to ask and answer your own geographic questions about this world we call home.

# Key Questions For Chapter 1

- 1. What is human geography?
- 2. What are geographic questions?
- 3. Why do geographers use maps, and what do maps tell us?
- 4. Why are geographers concerned with scale and connectedness?
- 5. What are geographic concepts, and how are they used in answering geographic questions?

# WHAT IS HUMAN GEOGRAPHY?

Human geographers study people and places. The field of human geography focuses on how people make places, how we organize space and society, how we interact with each other in places and across space, and how we make sense of others and ourselves in our locality, region, and world.

Advances in communication and transportation technologies are making places and people more interconnected. Only 100 years ago, the fastest modes of transportation were the steamship, the railroad, and the horse and buggy. Today, we can cross the globe in record time, with easy access to automobiles, airplanes, and ships. Aspects of popular culture, such as fashion and architecture, are making many people and places look more alike. Despite all these changes encouraging us to be more alike, our world still encompasses a multitude of ways in which people identify themselves and others. The world still consists of a jigsaw of countries, a collage of religions, a Babel of thousands of languages, and a hodgepodge of settlement types, with each of these elements constantly in

flux and each influencing the others. All of these human attributes come together in different ways around the globe to create a world of endlessly diverse places and people. Understanding and explaining this diversity is the mission of human geography.

The word "globalization" is all around us. To make sense of this phenomenon, we first need to define it. **Globalization** is a set of processes that are increasing interactions, deepening relationships, and heightening interdependence without regard to country borders. It is also a set of outcomes that are felt from these global processes—outcomes that are unevenly distributed and differently manifested across the world.

All too often, discussions of globalization focus on the pull between global—seen as a blanket covering the world—and local—seen as a continuation of the traditional despite the blanket of globalization. Geographers are in a place to understand globalization as much more than this. When geographers look at the outcomes of globalization as being distributed unevenly, they are not only talking about the local. Geographers use scale to understand the interrelationships among local, regional, national, and global. What happens at the global scale affects the local, but it also affects the regional and national, and similarly the processes at these scales impact the global. To reduce the world to local and global is to miss much. In this book, we study globalization, and we use scale to understand the effects of globalization and the things that shape globalization (see the discussion of scale later in this chapter).

Globalizing processes occur at the world scale; these processes disregard country borders and include global financial markets or even global environmental change. However, the processes of globalization do not magically appear at the global scale: what happens at other scales (local, regional, national) helps create the processes of globalization and shape the outcomes of globalization. For example, the global media players like Time-Warner and Viacom work mainly in global cities (the local scale) to create global processes of media production and flows.

Some argue that understanding globalization is critical to understanding the world today, whereas others maintain that globalization is overhyped. As geographers Ron Johnston, Peter Taylor, and Michael Watts explain, "Whatever your opinion may be, any intellectual engagement with social change in the twenty first century has to address this concept seriously, and assess its capacity to explain the world we currently inhabit." We integrate the concept of globalization into this textbook because processes at the global scale and processes that disregard country borders are clearly changing human geography. At the same time, as we travel the world and continue to engage in fieldwork and research, we are constantly reminded how different places and people are—processes at the local, regional, and national scales continue to change human geography and shape globalization.

No place on Earth is untouched by people. As people explore, travel, migrate, interact, play, live, and work, they make places. People organize themselves into communities, nations, and broader societal networks, establishing political, economic, religious, linguistic, and cultural systems that enable them to function in space. People adapt to, alter, manipulate, and cope with their physical geographic environment. No environment stands apart from human action. Each place we see is affected by and created by people, and each place reflects the culture of the people in that place over time.

THINKING SEOGRAPHICALLY

Imagine and describe the most remote place on Earth you can think of 100 years ago. Now, describe how globalization

has changed this place and how the people there continue to shape it—to make it the place it is today.

# WHAT ARE GEOGRAPHIC QUESTIONS?

Geographers study human phenomena such as language, religion, and identity, and they also study physical phenomena, such as landforms, climate, and environmental change. Geographers also examine the interactions between humans and environment. Human geography is the study of human phenomena on Earth, and **physical geography** is the study of physical phenomena on Earth. Geographers are trained in studying both the human and physical worlds, but most focus on one more than the other. We ask similar questions but focus on different phenomena.

Geographer Marvin Mikesell defined geography in shorthand as the "why of where." Why and how do things come together in certain places to produce particular outcomes? Why are some things found in certain places but not in others? To what extent do things in one place influence those in other places? To these questions, we add "so what?" Why does it matter that things are different across space? What role does a place play in its region and in the world, and what does that mean for the people? Questions such as these are at the core of geographic inquiry—whether human or physical—and they are of critical importance in any effort to make sense of our world.

If geography deals with so many aspects of our world, ranging from people and places to coastlines and climates, what do the various facets of this wide-ranging discipline have in common? The answer lies in a term that both human and physical geographers use: **spatial**. Whether they are human geographers or physical geographers, virtually all geographers are interested in the spatial arrangement of places and phenomena, how they are laid out, organized, and arranged on the Earth, and how they appear on the landscape.

Mapping the **spatial distribution** of a phenomenon is typically the first step to understanding it. By looking at a map of how something is distributed across space, a geographer can raise questions about how the arrangement came about, what processes create and sustain the particular **pattern** of the distribution, and what relationships exist between different places and things.

#### Maps in the Time of Cholera Pandemics

In medical geography, mapping the distribution of a disease is the first step to finding its cause. In 1854, Dr. John

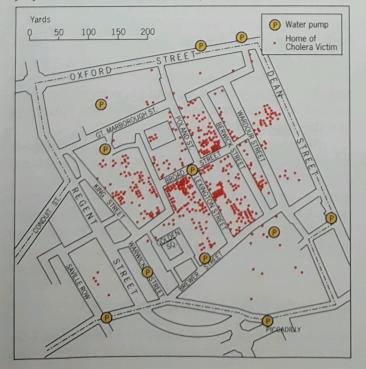
Snow, a noted anesthesiologist in London, mapped cases of cholera in London's Soho District. Cholera is a term used to denote a set of diseases in which diarrhea and dehydration are the chief symptoms.

Cholera is an ancient disease and was confined to India until the beginning of the nineteenth century. In 1816 it spread to China, Japan, East Africa, and Mediterranean Europe in the first of several pandemics, a worldwide outbreak of the disease. This initial wave abated by 1823, but by then the very name cholera was feared throughout the world, for it had killed people everywhere by the hundreds, even thousands. Death was horribly convulsive and would come in a matter of days, perhaps a week, and no one knew what caused the disease or how to avoid it.

Soon a second cholera pandemic struck. It lasted from 1826 to 1837, when cholera crossed the Atlantic and attacked North America. During the third pandemic, from 1842 to 1862, England was severely hit, and cholera again spread into North America.

When the pandemic that began in 1842 reached England in the 1850s, cholera swept through the Soho District of London. Dr. Snow mapped the Soho District, marking all the area's water pumps—from which people got their water supply for home use—with a P and marking the residence of each person who died from cholera

Figure 1.5
Cases of Cholera in the Soho District of London, England, 1854. Adapted with permission from: L. D. Stamp, The Geography of Life and Death, Cornell University Press, 1964.



with a dot (Fig. 1.5). Approximately 500 deaths occurred in Soho, and as the map took shape, Snow noticed that an especially large number of those deaths clustered around the water pump on Broad Street. At the doctor's request, city authorities removed the handle from the Broad Street pump, making it impossible to draw water there. The result was dramatic: almost immediately the number of reported new cases fell to nearly zero. Snow's theory about the role of water in the spread of cholera was confirmed.

Dr. Snow and his colleagues advised people to boil their water, but it would be a long time before his advice reached all those who needed to know, and in any case many people simply did not have the ability to do so.

Cholera has not been defeated completely, however, and in some ways the risks have been rising in recent years rather than falling (Fig. 1.6). In the teeming shantytowns of the growing cities of the developing world, and in the refugee camps of Africa and Asia, cholera remains a threat. Until the 1990s, major outbreaks remained few and limited (after remaining cholera-free for a half century, Europe had its first reappearance of cholera in Naples in 1972), and Africa reported most cases. But an outbreak in the slums of Lima, Peru, in December 1990 became a fast-spreading epidemic (regional outbreak of a disease) that, though confined to the Americas, touched every country in the hemisphere, infected more than 1 million people, and killed over 10,000.

Hygiene prevents cholera, but contaminated water abounds in much of the tropical world's cities. A cholera vaccine exists, but it remains effective for only six months, and it is costly. Dr. Snow achieved a victory through the application of geographical reasoning, but the war against cholera is not yet won.

The fruits of geographical inquiry were life-saving in this case, but they typically go further in life-understanding. Geographers want to understand why people do different things in different places and how the relationship between people and the physical world varies across space.

#### **The Spatial Perspective**

Geography, and being geographically literate, is much more than memorizing places on a map. In this sense, the disciplines of geography and history have much in common. History is not merely memorizing dates. To understand history is to appreciate how events, circumstances, and ideas came together at particular times to produce certain outcomes. Knowledge of how events have developed over time is thought to be critical to understanding who we are and where we are going.