

# Africa South of the Sahara Today



## CHAPTER FOCUS

### Geographic Setting

The economy of Africa south of the Sahara, or sub-Saharan Africa, rests heavily on agriculture and the export of raw materials. Efforts to industrialize have been hindered by the legacy of colonialism, a lack of capital, and pressing environmental concerns.



### Geographic Themes

#### Section 1 Living in Africa South of the Sahara

**REGION** The one-crop economies created under colonialism discouraged the development of regional trade and transportation within sub-Saharan Africa.

▲ **Photograph:** Downtown Harare, Zimbabwe

#### Section 2 People and Their Environment

##### HUMAN/ENVIRONMENT

**INTERACTION** Over the past century, human interaction with the environment has contributed to the problem of hunger in Africa south of the Sahara.

# Living in Africa South of the Sahara

## SETTING THE SCENE

### Read to Discover . . .

- the major types of economic activities in sub-Saharan Africa.
- the obstacles that face industrial development of Africa south of the Sahara.
- how colonialism hindered the growth of transportation and trade in sub-Saharan Africa.
- the most common form of mass communication in Africa south of the Sahara.

### Key Terms

- cash crop
- commercial farming
- subsistence farming
- shifting farming
- sedentary farming

### Identify and Locate

Transvaal, Dar es Salaam, Great Uhuru Railroad, Shaba Province

Johannesburg, South Africa

Although my family has an automobile, most South Africans use public transport. Because of the unnatural policies of apartheid, vast portions of the population have been forced to live far from their places of work. Over the years, the train and bus services have not been able to keep up with the demand. Mini-bus taxis have become a major form of transport.

Maurice R. DeVries



**M**aurice DeVries describes recent advances in transportation in South Africa. He notes it is one area of life in sub-Saharan Africa that has undergone change in recent years. Likewise, Lydiah Macharia and her family in Kenya are coping with new situations. In Kikuyu tradition, Lydiah Macharia's father will leave his tea plantation to his sons. He broke with tradition, however, when he encouraged his daughters to follow careers. Two of Lydiah's sisters became doctors. Lydiah works as a labor manager for a railroad and has used her earnings to buy land in the Great Rift Valley.

### HUMAN/ENVIRONMENT INTERACTION

## Agriculture

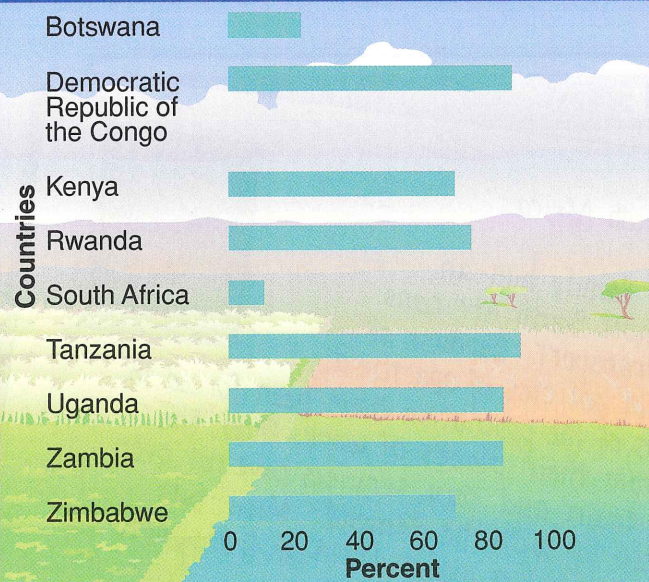
**L**ydiah Macharia hired several workers to till her land. She grows tea—one of Kenya's leading exports. Although Kenya is more industrialized than most nations in Africa south of the Sahara, its economy still relies on agriculture from which most Kenyans earn their living.

## Colonial Legacy

Most African nations still suffer from the economies created by colonial rule, which



## AGRICULTURAL WORKFORCE (SELECTED COUNTRIES)



### CHART STUDY



Agricultural workers make up a large part of the workforce of many African nations. What percentage of the Kenyan workforce is in agriculture?

Source: *Encyclopedia Britannica World Data*, 1998

they have tried to balance since gaining independence. Europeans used sub-Saharan Africa as a resource base. As a result, sub-Saharan Africans produced only one or two **cash crops**, or crops grown for a profit.

Ghana still depends heavily on the sale of cacao. Burundi depends on coffee. Such reliance on one product is filled with risks. An unfavorable growing season or a drop in prices on the world market can adversely affect a nation's entire economy.

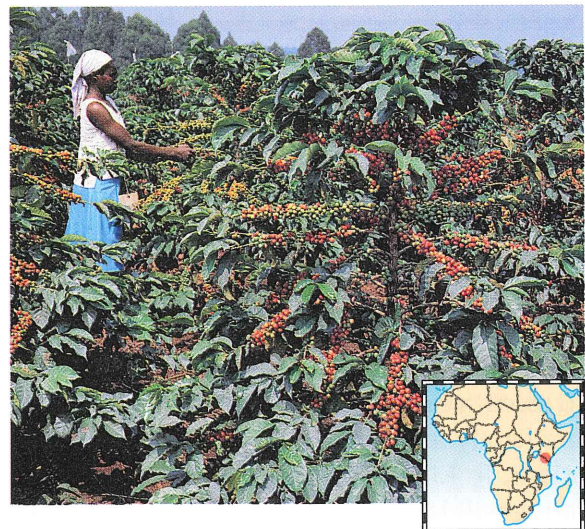
## Farming Methods

Only a few people work at **commercial farming**, or farming organized as a business. Most plantations that produce crops for export are owned, at least in part, by companies outside the region.

Despite their small number, commercial farms provide the bulk of cash crops in sub-Saharan Africa. The plantations that dot the region produce almost 75 percent of the world's palm oil, 80 percent of the peanuts, 75 percent of the cacao, and 66 percent of the world's sisal—a vegetable fiber used for making rope.

Most sub-Saharan Africans work at **subsistence farming**, or agriculture that provides just for the needs of a family or village. Some peoples, such as the Maasai, practice nomadic herding. Others support themselves by **shifting farming**, a method in which farmers move every one to three years to find better soil. Yet other farmers depend on **sedentary farming**, or farming conducted at permanent settlements. All farmers face problems caused by overgrazing, exhausted soil, and a lack of technology.

The region's population is booming, and the majority of people lack the technology to increase food production. Chemical fertilizers and farm machinery would help boost crop yields, yet few nations can afford these aids to cultivation. Hunger has become a fact of life for countless subsistence farmers.



### Geographic Themes



#### Human/Environment Interaction: East Africa

Coffee, grown on plantations, is one of the most important agricultural products of East Africa. *Why is coffee considered a cash crop?*

HUMAN/ENVIRONMENT INTERACTION

# Forests and Seas

Forests cover almost 25 percent of Africa. These forests yield many valuable hardwood trees—Rhodesian teak, ebony, African walnut, and rosewood. Transportation systems and capital, however, are needed to develop a lumber industry. Currently, only coastal nations with rain forests export much lumber, accounting for less than 10 percent of the world's supply. The rain forests are also being cleared for farmland and fuel at an alarming rate. Their destruction has created a major environmental problem for the region and the world.

Commercial fishing has also developed slowly in sub-Saharan Africa. Few nations can afford to build fleets of ocean trawlers. The most profitable commercial fishing exists along the southwestern coast. Fish canned and exported from there include tuna, sardines, anchovies, and mackerel.

HUMAN/ENVIRONMENT INTERACTION

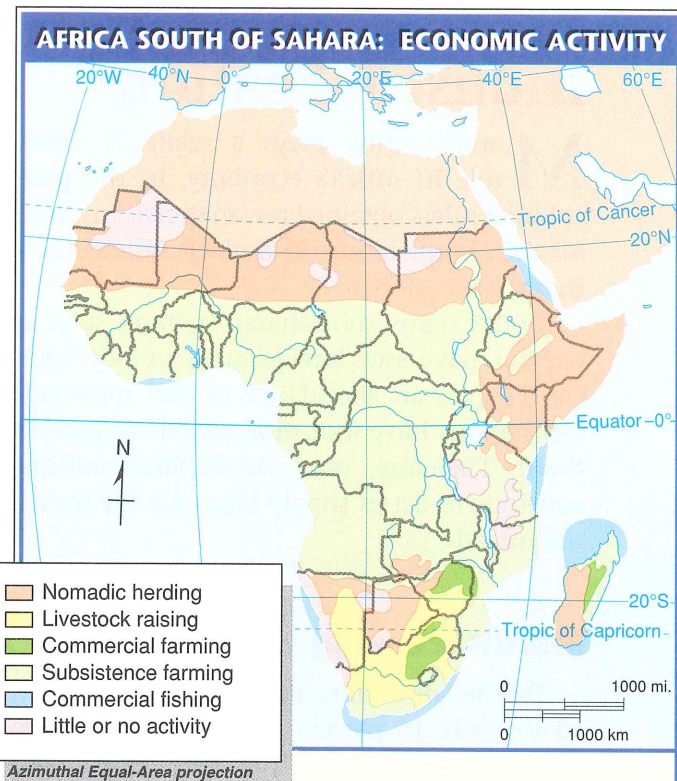
# Mining

Mining is an important—and difficult—economic activity in the region. Miners cope with hazardous conditions, long hours, and time away from their families.

Despite the risks thousands of black South Africans work in the mines. Their wages help support families in impoverished rural areas.

South Africa boasts a fortune of mineral wealth. A gold deposit more than 300 miles (483 km) long arcs across the Transvaal, a grassy plateau. It accounts for almost half of the world's known reserves of gold. South Africa is also a world leader in the production of gem diamonds, platinum, and minerals such as chromium, vanadium, and manganese.

South Africa's mineral wealth has made it one of the richest nations in the region, with a 1995 gross domestic product (GDP) of almost \$215 billion. Most profits, however, have gone



Azimuthal Equal-Area projection

## FOCUS ON GEOGRAPHIC THEMES



- 1. Region:** In which region of Africa is economic activity most developed?
- 2. Place:** What is the dominant economic activity in Somalia?
- 3. Region:** What type of farming is practiced in most of Africa?

to foreign investors or companies owned by white South Africans. Little money has trickled down to black South Africans. This has caused wide gaps in the standard of living. By the mid-1990s, for example, the average black South African household earned a yearly income of \$3,614 compared to \$21,707 enjoyed by the average white household.

Resources are not spread evenly over the region, causing economic imbalances and overdependence on a single resource. Most deposits lie along the Atlantic coast and south of the Equator. Guinea has one of the world's largest deposits of bauxite, the Democratic Republic of the Congo has large quantities of diamonds and important copper, and Nigeria has huge reserves of oil. Nigeria is the only sub-Saharan member of the Organization of Petroleum Exporting Countries (OPEC).



## PLACE

# Industrialization

**M**anufacturing plays a relatively small role in Africa's economy. In the past, colonial rulers obtained raw materials in Africa for their home industries and left Africa industrially undeveloped.

Today many sub-Saharan nations, such as Nigeria, have used foreign loans to industrialize. Despite an abundance of raw materials, few nations have industrial centers to process them. Therefore, most sub-Saharan nations continue to act as supply bases for the industrial world.

## Manufacturing

By the late 1990s, manufacturing accounted for only 15 percent of the region's entire GDP. Manufacturing, however, contributed between 35 and 45 percent of the GDP in South Africa, Swaziland, Zimbabwe, and Zambia. This was offset by the low industrial outputs of Uganda (7.4 percent), Niger (7 percent), and Guinea (5 percent).



### Geographic Themes

#### **Movement: Southern Africa**

Since independence, African countries have worked to improve means of transportation. *Why have landlocked countries sought to build railroads and pipelines?*

## Obstacles

Obstacles to industrialization include a lack of capital, political turmoil between or within nations, and not enough skilled workers or transportation systems. The region's great hydroelectric potential also remains largely untapped.

Such conditions have forced much of Africa south of the Sahara into a cycle of poverty. Nations spend scarce revenues on feeding an ever-growing population and rely heavily on trade with industrial nations, such as the United States, Japan, and the colonial powers of Europe.

To break this dependency, some nations have attempted to form regional trading associations such as the Economic Community of West African States (ECOWAS). Others have acted on their own. For example, Nigeria has tried to further its economic growth by lifting taxes on goods shipped by landlocked nations to its ports.

## MOVEMENT

# Transportation and Communication

**E**fforts by sub-Saharan Africa to develop good transportation or communication systems have not been highly successful. Outside of cities, few paved roads exist. In rural areas travelers have to search for telephones and often must use long-wave radio transmitters. Railway and airplane travel are the most successful means of spanning the region.

## Railroad Travel

Each day trains traveling the Kenya National Railroad leave Nairobi for coastal cities such as Mombasa. The 12-hour journey is considered one of the world's great train rides.

This world-famous railroad was built by the British before Kenyan independence. It spans the rugged terrain that separates the highlands from the coast to allow hauling of raw materials to port. Other colonial powers built railroads for the same purpose.



## Improving Transportation

Since independence, many obstacles have hindered efforts to improve transportation. Wars and lack of funds have caused a decline of existing highways and railroads. The region's size and unfavorable terrain have made it difficult to build new routes. The region also has few harbors and navigable rivers.

For most nations air travel has overcome geographic barriers. Government-owned airlines have set up international and domestic service. International airports are found in Addis Ababa, Ethiopia; Nairobi, Kenya; Johannesburg, South Africa; and Dakar, Senegal.

Landlocked nations have also sought ground routes to coastal ports. Oil is transported through pipelines across Tanzania, Zambia, Sudan, South Africa, and Nigeria.

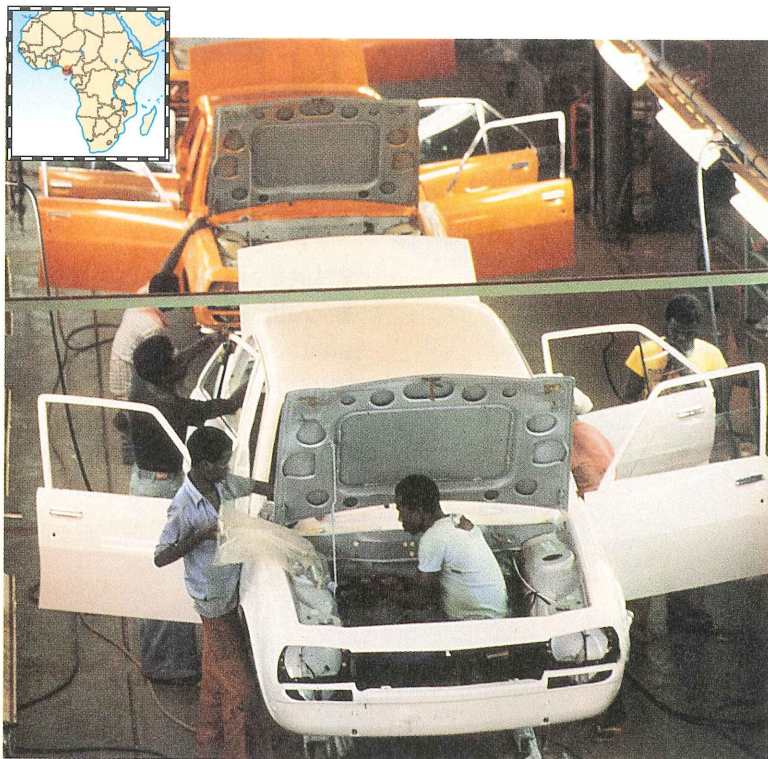
To transport freight, several nations have built railroads. The most successful is the Great Uhuru (Tanzam) Railroad. It connects the mineral-rich Shaba Province in southeastern Democratic Republic of the Congo to Dar es Salaam, Tanzania, a distance of about 1,153 miles (1,855 km). Many other overland routes, however, have been stopped or closed by warfare or a lack of funds.

## Mass Communications

The scarcity of newsprint and the low literacy rates have limited the number of newspapers and magazines printed in this region. Telephone service also is limited with the most extensive systems found in urban areas. In Chad only 1 out of every 1,209 people has access to a telephone. Even in Kenya, telephones average only about 1 per every 111 people.

The most effective means of communication in sub-Saharan Africa is radio. In Kenya, 1 out of 11 people owns a radio. In Chad, 1 out of 4 people owns one. Most important news is broadcast over the radio.

Television broadcasting, however, has grown slowly. Television stations offer a variety of programs, including popular reruns from the United States. Although televisions remain confined largely to urban areas, some governments are experimenting with television as an educational tool.



### Geographic Themes

#### Region: Nigeria

Factories in Nigeria produce a wide variety of goods. Manufacturing, however, employs only a small number of Nigerians. *What percent of Africa's GDP comes from manufacturing?*

### SECTION

## 1

### ASSESSMENT

#### Checking for Understanding

- 1. Define** cash crop, commercial farming, subsistence farming, shifting farming, sedentary farming.
- 2. Locating Places** Why do few transportation networks link sub-Saharan Africa as a region?
- 3. Human/Environment Interaction** What are the most common forms of agricultural production in Africa south of the Sahara?
- 4. Region** Why do sub-Saharan Africans share unequally in the region's mineral wealth?

#### Critical Thinking

- 5. Expressing Problems Clearly** What are the most critical obstacles facing economic development in Africa south of the Sahara?



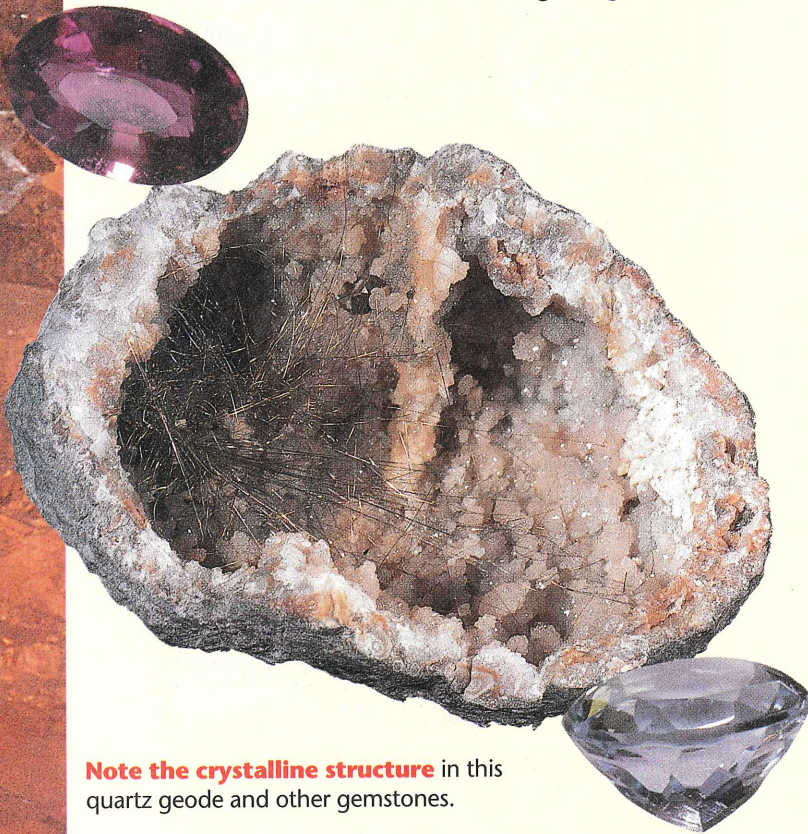
# Growing Crystals

Three of the world's top diamond-producing countries—South Africa, the Democratic Republic of the Congo, and Botswana—are located in Africa south of the Sahara. Diamonds and gemstones from these and other nations have a *crystalline* structure—a regular geometric pattern repeated over and over again.



## 1 Materials

- granulated sugar
- distilled water
- beaker
- hot plate
- thermal mitt
- large test tube and test-tube rack
- cotton thread
- toothpick
- cardboard
- table salt
- shallow pan
- magnifying glass



**Note the crystalline structure** in this quartz geode and other gemstones.

### Did You Know?

**T**he largest diamond ever discovered was the 3,106-carat

*Cullinan* diamond. It was found in 1905 in the Premier mine of present-day South Africa.



The sugar solution is heated before pouring it into the test tube. The salt solution, however, is not heated before pouring it into the shallow pan.

In this activity, you will demonstrate two methods of growing crystals.

## 2 Procedures

### Method One

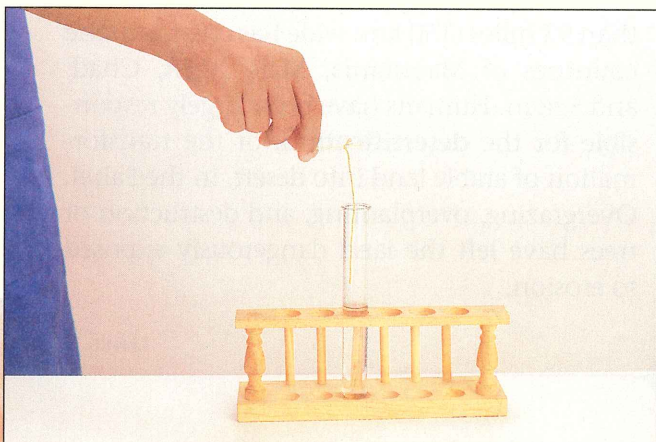
1. Mix a sugar solution of about 2100 g of sugar with 1000 mL of distilled water. Not all of the sugar will dissolve. Pour off the clear solution.
2. Pour the sugar solution into a beaker. Heat the beaker slowly on the hot plate.
3. Place the test tube in the test-tube rack. Using a thermal mitt to protect your hand, pour some of the hot sugar solution from the beaker into the test tube.

**CAUTION:** The liquid is hot. Do not touch the test tube without protecting your hands.

4. Tie the thread to the middle of the toothpick. Place the thread in the test tube, and let the toothpick rest across the top.
5. Cover the test tube with a piece of cardboard. Place the rack in a location where it will not be disturbed.

### Method Two

6. Now prepare a salt solution, mixing about 400 g of salt with 1000 mL of distilled water. Not all of the salt will dissolve. Pour off the clear solution.
7. Pour a thin layer of the salt solution into a shallow pan, then place the pan in a warm area of the room.
8. Leave both the covered test tube and the shallow pan undisturbed for one week.
9. At the end of one week, use the magnifying glass to observe each solution and see if crystals have formed.



### 3 Lab Activity Analysis

1. What happened to the salt water in the shallow pan?
2. Did this same process occur in the test tube? Explain.
3. What caused the formation of crystals in the test tube and in the shallow pan?
4. **Hypothesizing** How might the results of the experiment differ if you switched the salt solution with the sugar solution?

## 4 Find Out More

Find out how minerals are mined. Research strip mining, open pit mining, and room and pillar mining and their effects on the surrounding environment. Show the results of your research on a bulletin-board display.

◀ The thread should not touch the sides or bottom of the test tube.



# People and Their Environment



## SETTING THE SCENE

### Read to Discover . . .

- how hunger in Africa south of the Sahara is related to human interaction with the environment.
- the reasons many plants and animals in the region face destruction.
- the efforts sub-Saharan Africans have taken to offset decades of famine and war.

### Key Terms

- desertification
- deforestation
- extinction
- habitat
- poaching
- ecotourism

### Identify and Locate

Somalia, Horn of Africa, Madagascar, Serengeti Plain, Sahel

**I**n late 1992 a Somali woman named Muslima Aden Abdulrahman watched her mother and daughter die. A few days later, her 7-year-old son died. Muslima told a reporter:

*I have buried all my family. Almost everyone from my village is dead. I have no more tears left.*

Within weeks Muslima also died. Like her mother and children, she starved to death. During the early 1990s, more than 350,000 Somalis suffered the same fate. In recent times similar stories have come out of other nations south of the Sahara. Since the 1970s, starvation and poverty have become all too familiar experiences for millions of nomadic herders and subsistence farmers of the region.

### PLACE

## The Shadow of Famine

**T**he causes of famine in sub-Saharan Africa are complex and varied. As you have read, a booming population, a lack of capital, and overdependence on cash crops all contribute to food shortages. Two other factors also rob millions of sub-Saharan Africans of food—expansion of the desert and civil war.

### Desertification

In the past 100 years, a band of desert more than 93 miles (150 km) wide has crept into the countries of Mauritania, Mali, Niger, Chad, and Sudan. Humans have been largely responsible for the **desertification**, or the transformation of arable land into desert, in the Sahel. Overgrazing, overplanting, and destruction of trees have left the land dangerously exposed to erosion.



A series of recent droughts have added to the misery. Two droughts in the Sahel—one from 1968 to the early 1970s and one in the early 1980s—turned farmland into wasteland. They wiped out nearly half the area's cattle. As the 1990s ended, the United Nations Food and Agriculture Organization (FAO) reported that 40 percent of Africa's population was undernourished.

## Civil War

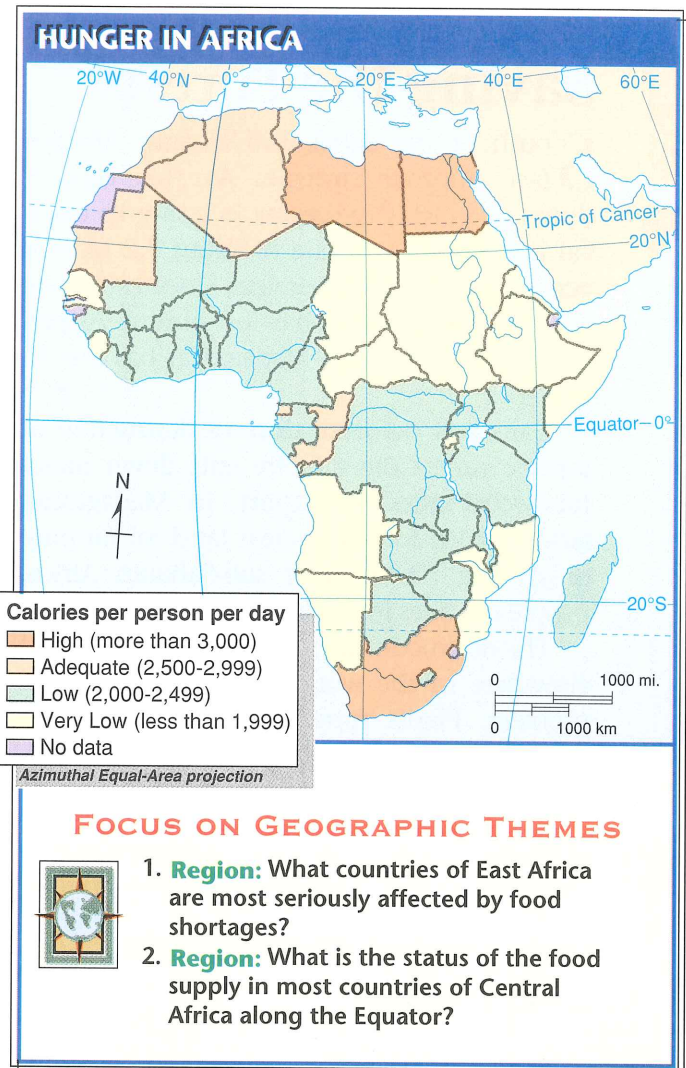
From the 1970s into the 1990s, civil war has been among the biggest human causes of famine on the Horn of Africa, the eastern bulge of land that juts into the Indian Ocean. In Somalia, for example, conflict and drought led to the starvation of hundreds of thousands of people. Other countries sent food, but the fighting kept much of the food from reaching the starving people. In 1992 the United States and other countries sent troops to protect the food supplies. The troops withdrew in 1995 after the worst of the famine ended. Armed Somali groups, however, still control parts of the country.

During the 1990s, ethnic conflict and food shortages in the East African country of Rwanda cost more than 500,000 lives. In addition, about 2 million refugees fled Rwanda and settled in camps on the borders of neighboring countries. By 1996, fighting had subsided enough for many refugees to return to their homes.

## PLACE

# Battling Hunger

To combat hunger sub-Saharan Africans have focused on 2 tasks—restoring their battered environment and keeping the peace. The examples of Ethiopia and Eritrea show how these efforts have borne fruit. For almost 30 years, rebellion tore Ethiopia apart. For equally as long, Eritrea fought to break free of Ethiopia. In the early 1990s Eritrea finally gained its independence. As farmers went back to their land, they sought to undo the



damage of drought and war. However, tensions still remain between Eritrea and Ethiopia.

To stop erosion, farmers in the northern Ethiopian province of Tigray terraced more than 250,000 acres (about 101,250 ha) of land. They also planted 42 million seedlings, or young trees, to hold soil in place. Using hand tools, they built earthen dams to store precious rain water. In 1992 fields in Tigray bloomed with crops such as barley, wheat, and a local grain called teff. In neighboring Eritrea farmers produced such abundant crops that the government reduced its requests for relief in 1993 by 50 percent.

The success of Ethiopia and Eritrea have held out hope for other nations. A sense of self-respect has returned. "We can make a good life," explained one Eritrean farmer with quiet pride. "All we need is rain and peace."

**HUMAN/ENVIRONMENT INTERACTION**

## Saving the Forests

South of the Sahel, sub-Saharan Africans face another struggle. As this century draws to a close, the region is losing its tropical rain forests at a rate of about 3.2 million acres (1.3 million ha) per year. Since 1900 Côte d'Ivoire (Ivory Coast) has lost almost 70 percent of its rain forest. Madagascar has lost 75 percent.

Causes of **deforestation**, or destruction of forests, vary. Côte d'Ivoire cuts down many hardwood trees for export. In Madagascar, farmers burn forests to clear land for farming or grazing. Throughout sub-Saharan Africa, people cut trees for fuel.

The destruction of rain forests in Africa and elsewhere in the world has created a global problem. Plants turn carbon dioxide (CO<sub>2</sub>) into oxygen. As the rain forests are destroyed,

the amount of CO<sub>2</sub> rises. This gas allows the sun's rays to reach the earth. Carbon dioxide also holds in much more heat than oxygen. As a result, deforestation has very likely made the planet hotter, affecting growing seasons, rainfall patterns, and sea levels.

Destruction of the rain forests has also placed many plant and animal species at risk. Of the 200,000 plant and animal species on Madagascar, almost three-fourths exist nowhere else in the world. Deforestation is also the reason more than 20 animal species on Madagascar face **extinction**, or disappearance, from the earth.

**HUMAN/ENVIRONMENT INTERACTION**

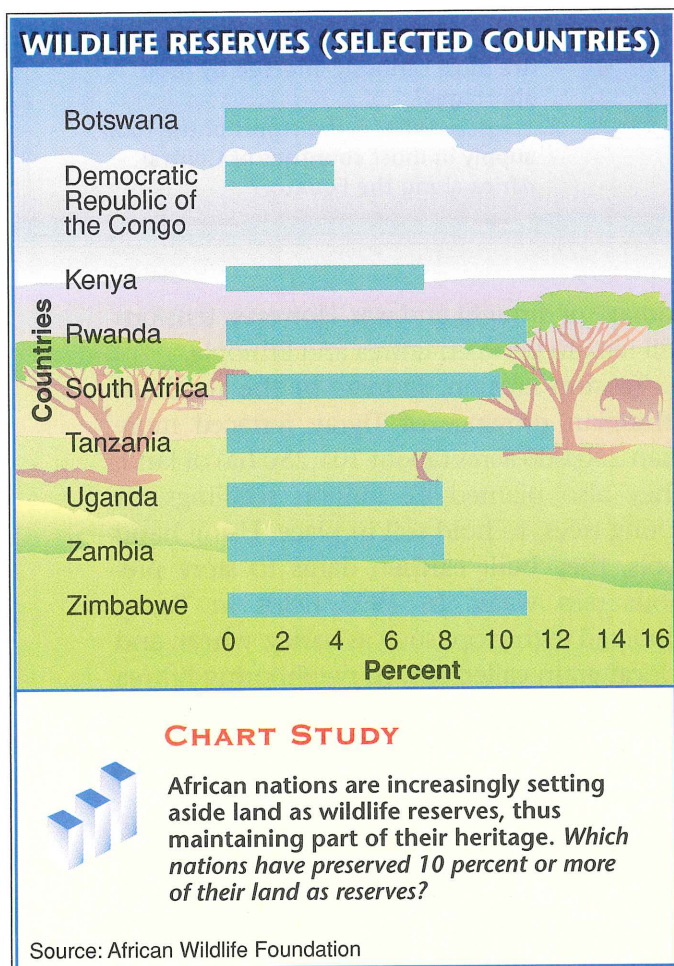
## Conflicts Over Land Use

Protection of rain forests and endangered wildlife have raised difficult questions about land use. As the population of Africa south of the Sahara grows, nomadic herders and farmers have increasingly cut into forests. They have also pushed onto savanna grasslands that provide homes to Africa's huge herds of game. The lands on which these herds thrive are the same lands needed to feed and house Africa's people.

At the beginning of the 1970s, almost 70,000 black rhinos roamed across sub-Saharan Africa. By the late 1990s, less than 3,000 could be found. Other endangered animals included the African elephant, Cape Mountain zebra, and mountain gorilla.

Such animals are endangered for a number of reasons. First, humans have pushed into the animals' natural **habitats**, or living areas. Second, in recent decades hunters in greater numbers have tracked down game for sport and profit. The rhino and elephant have suffered heavily from **poaching**, or illegal hunting. Rhino horns and ivory from elephant tusks bring high prices on the world market.

To save endangered species, some nations have created huge game preserves, such as Tanzania's Serengeti National Park, Kenya's Masai Mara, or Rwanda's Parcs des Volcans.





### Geographic Themes

#### Human/Environment Interaction: Madagascar Rain Forest

Many rare plant and animal species thrive in the rain forests of Madagascar, an island off the coast of southeast Africa. *What development poses a threat to their existence?*

These preserves lure millions of tourists into East Africa every year. **Ecotourism**, or tourism based on the environment, brought more than \$420 million into Kenya in 1994 alone.

Despite the profits earned from such preserves, many sub-Saharan Africans object to them. "People are too desperate," explained one park official. "They need food in their stomach." To win support for conservation, governments have tried to give rural peoples an economic stake in the preserves. Zimbabwe and Zambia, for example, use money from ecotourism to build local clinics and schools.

### REGION

## Toward the Future

In the 1950s and 1960s, sub-Saharan Africans won political independence. In the 2000s, their foremost task will be to win economic independence.

As sub-Saharan Africans look ahead to the next century, they are searching for ways to take charge of the region. Most agree that the time has come to shake off foreign dependency. Ugandan President Yoweri Museveni has issued a challenge to the region:

— — — — —

✦

*We have to go back to the year 1500 [prior to colonialism], where we left off building an African economy, able to produce its own food, its own tools, its own weapons. . . . In short, we have to rely on ourselves.*

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✦

### SECTION 2 ASSESSMENT

#### Checking for Understanding

1. **Define** desertification, deforestation, extinction, habitat, poaching, ecotourism.
2. **Locating Places** How has growth of the desert affected life in the Sahel?
3. **Region** What has been the connection between civil war and the famines since the 1970s?
4. **Human/Environment Interaction** What steps have sub-Saharan Africans taken to preserve the environment?

#### Critical Thinking

5. **Identifying Central Issues** What is the central issue involved in the debate over the creation of game preserves?



# TECHNOLOGY SKILLS

## Using a Database

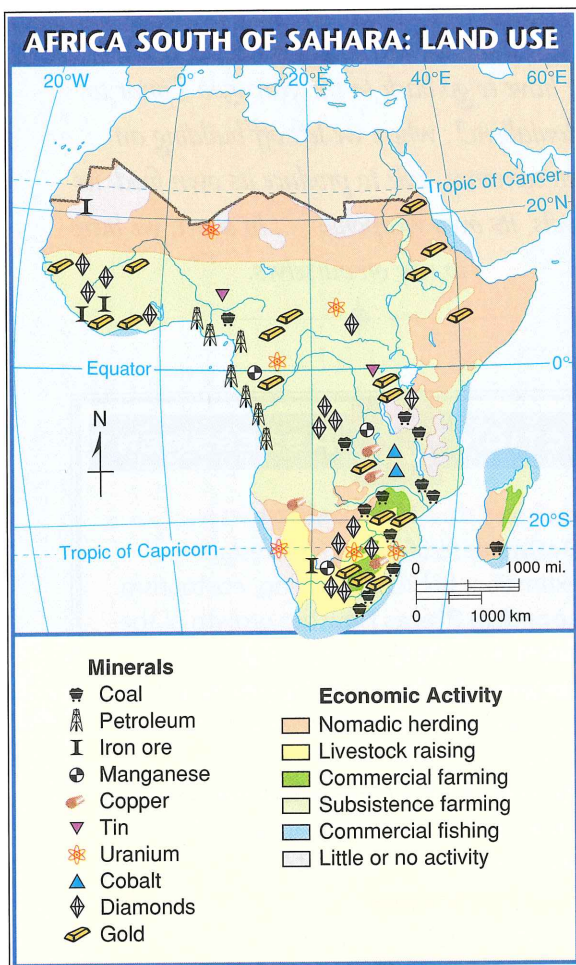
Have you ever collected baseball cards or cataloged the CDs in your collection? Do you keep a list of the names and addresses of your friends? If you have, then you have created a database—an organized collection of information on a given subject or topic.

### REVIEWING THE SKILL

An electronic database is stored in files on the computer, which makes it easy to find, add, delete, and sort information. In a database, one category of information is called a *field*. A field is given a name that describes in a general way the main subject or idea of the category. For example, if you were to convert the data in the map below into a database, you would have three fields: *Country*, *Minerals*, and *Economic Activity*.

A *record* is a group of fields that are all related to the same topic or idea. For example, all the fields—Country, Minerals, Economic Activity—referring specifically to Madagascar in the map below make up one record. (See also the map on page 410.) This record, then, would state that Madagascar has coal as a mineral, and its economic activities include commercial farming, subsistence farming, and nomadic herding. These same fields make up the record for South Africa, the record for Chad, the record for Burkina Faso, and so on. Together, all the records make up the database.

The first step in creating a database is to obtain a database management system (DBMS)—special software developed for record keeping. It provides instructions on how to define and name your fields according to the type of information they hold. A field that holds letters, for example, is a text field. A field that holds numbers is a number field. After entering the information, you give commands to the computer telling it what to do with the data, and it follows your commands.



### PRACTICING THE SKILL

Using the political map on page 410 and the map on this page, enter the minerals and economic activities for 10 countries into an electronic database. Then answer the questions that follow.

1. If you sorted the data alphabetically, which record would appear first?
2. If you sorted your records according to economic activity, which field would appear most often?
3. If you sorted your records according to petroleum as an export, which countries would appear?

For additional practice in using a database, see **Practicing Skills** on page 464 of the **Chapter 22 Assessment**.

**1**

SECTION

**Living in Africa  
South of the Sahara**

KEY TERMS

cash crop (p. 452)  
commercial farming  
(p. 452)  
subsistence farming  
(p. 452)  
shifting farming  
(p. 452)  
sedentary farming  
(p. 452)

SUMMARY

- Most sub-Saharan nations depend on the export of one or two cash crops.
- The majority of sub-Saharan Africans work as subsistence farmers.
- Mineral deposits, as well as the profits from their export, are spread unevenly throughout Africa south of the Sahara.
- Industrialization is hindered by a lack of capital and a shortage of skilled workers.
- To reduce foreign dependence some nations are developing regional trade and transportation systems.



Coffee plantation in Kenya

**2**

SECTION

**People and Their Environment**

KEY TERMS

desertification (p. 458)  
deforestation (p. 460)  
extinction (p. 460)  
habitat (p. 460)  
poaching (p. 460)  
ecotourism (p. 461)

SUMMARY

- Desertification, drought, and war have contributed to hunger in sub-Saharan Africa.
- In the 1990s Ethiopia and Eritrea took steps to restore their battered environment.
- Destruction of the rain forests is a global problem.
- Increasing human population and hunting has placed some African wildlife at risk of extinction.
- To win rural support of game preserves, some nations have shared the profits of ecotourism.
- As sub-Saharan Africans head into the next century, they hope to win economic independence.



A lemur in the Madagascar rain forest



## Reviewing Key Terms

Choose the vocabulary term that best completes each of the sentences below. Write your answers on a separate sheet of paper.

- cash crops (p. 452)
- commercial farming (p. 452)
- subsistence farming (p. 452)
- shifting farming (p. 452)
- desertification (p. 458)
- deforestation (p. 460)
- extinction (p. 460)
- habitat (p. 460)
- poaching (p. 460)
- ecotourism (p. 461)

### SECTION 1

1. Crops raised and sold for a profit are known as \_\_\_\_\_.
2. \_\_\_\_\_ supports the needs of an individual family or village.
3. Farmers who practice \_\_\_\_\_ move often to more fertile soil.
4. Farming established as an organized business is \_\_\_\_\_.

### SECTION 2

5. \_\_\_\_\_ threatens to destroy the rain forests.
6. The illegal hunting of endangered animals is known as \_\_\_\_\_.
7. Tourism based on the environment is known as \_\_\_\_\_.
8. An animal's living area is its \_\_\_\_\_.
9. The disappearance of a plant or animal from the earth is \_\_\_\_\_.
10. Transforming arable land into desert is \_\_\_\_\_.

## Reviewing Facts

### SECTION 1

11. What are the key cash crops exported from this region?
12. What factors have discouraged a lumber industry in Africa?

13. What economic imbalances affect mining in sub-Saharan Africa?
14. Why has this region been slow to industrialize?
15. How did colonialism affect transportation in Africa?
16. Why is radio the most effective form of mass communication?

### SECTION 2

17. Why did foreign troops intervene in Somalia in 1992?
18. What are some of the causes of deforestation in the region?
19. How have some rural farmers conserved the region's wildlife?

## Critical Thinking

20. **Making Generalizations** How has political instability in Africa south of the Sahara contributed to its lack of capital?
21. **Analyzing Information** Based on the quote by Yoweri Museveni on page 461, what is one leading cause of current economic problems?



## Geographic Themes

22. **Region** What economic traits do many nations of sub-Saharan Africa share?
23. **Human/Environment Interaction** How has the human population boom affected the region's wildlife?



## Practicing Skills

### Using a Database

With the help of a world almanac or the Internet, create a database of at least 10 sub-Saharan African countries. Make separate fields for Country name, Number of telephones, Number of automobiles, Number of televisions, and Literacy rate.

**Using the Unit Atlas**

- Refer to the Unit Atlas on pages 412–413.
24. What resources are mined in Zambia?
  25. What country is the world's largest producer of gold and gem diamonds?

**Projects**

**Individual Activity**

Using the *Readers' Guide to Periodical Literature*, research Somalia after the 1992 arrival of foreign troops. Write a news story about your findings.

**Cooperative Learning Activity**

Working in groups, research endangered animals in Africa south of the Sahara. Present your findings on an outline map.

**Writing About Geography**

**Argumentation** Review material about the debate over African game preserves. Decide whether more or less land should be set aside for big game. Present your arguments.

**Technology Activity**

**Creating Your Own Web Site**

Select an endangered animal discussed in this chapter. Research and write a report on the history of the animal's endangerment and what is being done to protect the species. Use the Internet to find groups dedicated to the preservation of the animal, and incorporate this information, as well as art, photographs, and a map, into your report. Place the report on your own Web site.

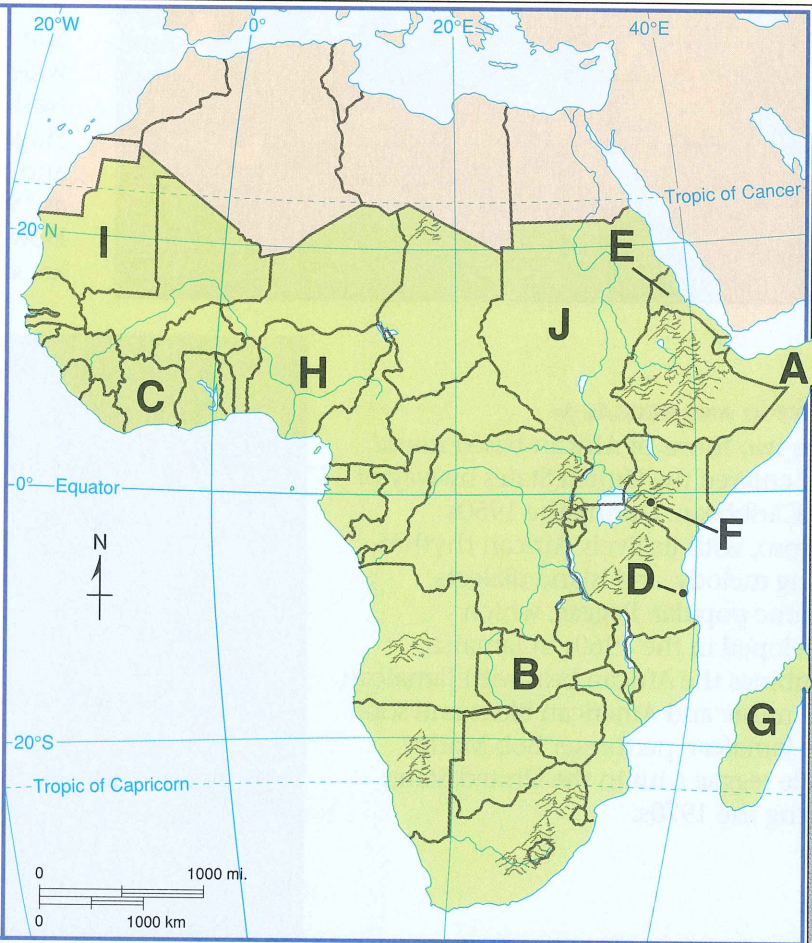


**Locating Places**

**AFRICA SOUTH OF THE SAHARA:  
PHYSICAL/POLITICAL  
GEOGRAPHY**

Match the letters on the map with the places and physical features of Africa south of the Sahara. Write your answers on a separate sheet of paper.

1. Mauritania
2. Nigeria
3. Madagascar
4. Eritrea
5. Côte d'Ivoire
6. Sudan
7. Zambia
8. Nairobi
9. Dar es Salaam
10. Somalia

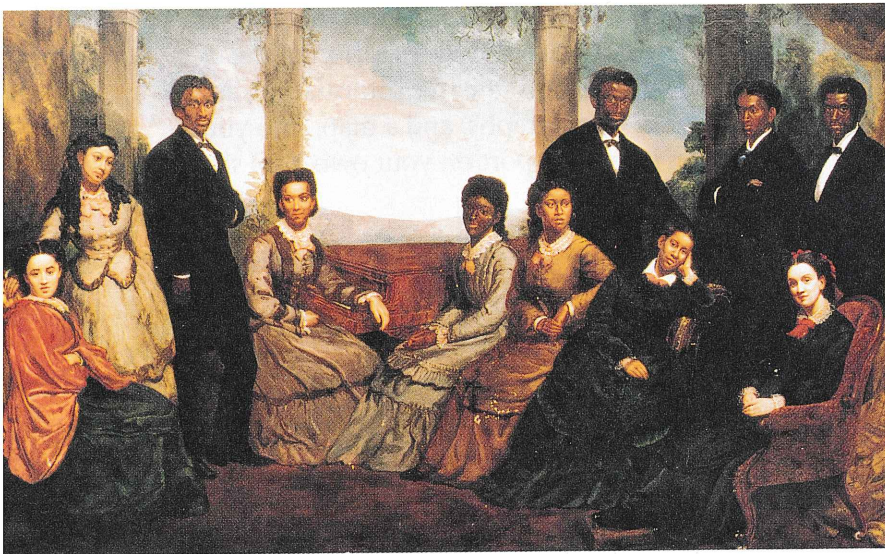




## *Africa South of the Sahara and the United States*

### **THE BEAT GOES ON**

**S**trong rhythms form the core of African music—the music of the peoples who live south of the Sahara. Strong African rhythms beat through many kinds of American music, enriching our musical heritage.

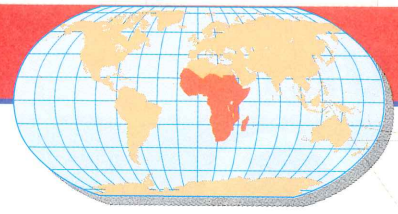


◀ **SPIRITUALS** were the earliest American music with an African rhythm. Deeply emotional religious songs, spirituals developed in the southern United States among enslaved Africans who added the rhythms of their lost homeland to southern biblical preaching. Spirituals became famous worldwide after the 1870s, when Nashville's Fisk University Jubilee Singers toured the United States and Europe. Today spirituals, such as "Swing Low, Sweet Chariot," "Go Down, Moses," and "Deep River," are standards of American music.

#### **CALYPSO AND REGGAE ▶**

were two forms of African-based music that entered the United States by way of the Caribbean. During the 1950s calypso, with its lively African rhythm, lilting melody, and island dialects, became popular. Reggae, which developed in the 1960s in Jamaica, combines the African beat with Jamaican folk music and American blues and soul. The Jamaican performer Bob Marley made reggae a hit in the United States during the 1970s.





◀ **RAGTIME AND DIXIELAND** arose out of blues and jazz in the early 1900s. Jazz quartets led to big band jazz in the 1920s. In 1932, bandleader Duke Ellington introduced “swing,” jazz with an easy-going, relaxed rhythm. The “boogie woogie” beat also appeared in the 1930s.

**ROCK 'N' ROLL** ▶

made its entry in the mid-1950s when blues composer and singer Chuck Berry heightened the beat and turned out a new sound. Rock and roll led on through soul of the late 1960s and heavy metal of the 1970s. From the 1970s and into the 1990s, the African beat exploded into the insistent recurring rhythmic pattern of rap.



▼ **BLUES AND JAZZ** became popular after 1900. Blues is a highly creative personal statement, a musical response to an experience or circumstances of life. Like blues, jazz is also a highly creative musical form, because it allows the performer complete freedom to invent and vary a piece of music as it is played.



**Checking for Understanding**

1. What kinds of music have developed from African roots?

2. **Movement** How was the African beat brought to the United States?

