



The Geography of Africa South of the Sahara

MAIN IDEA

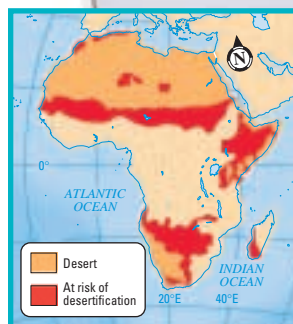
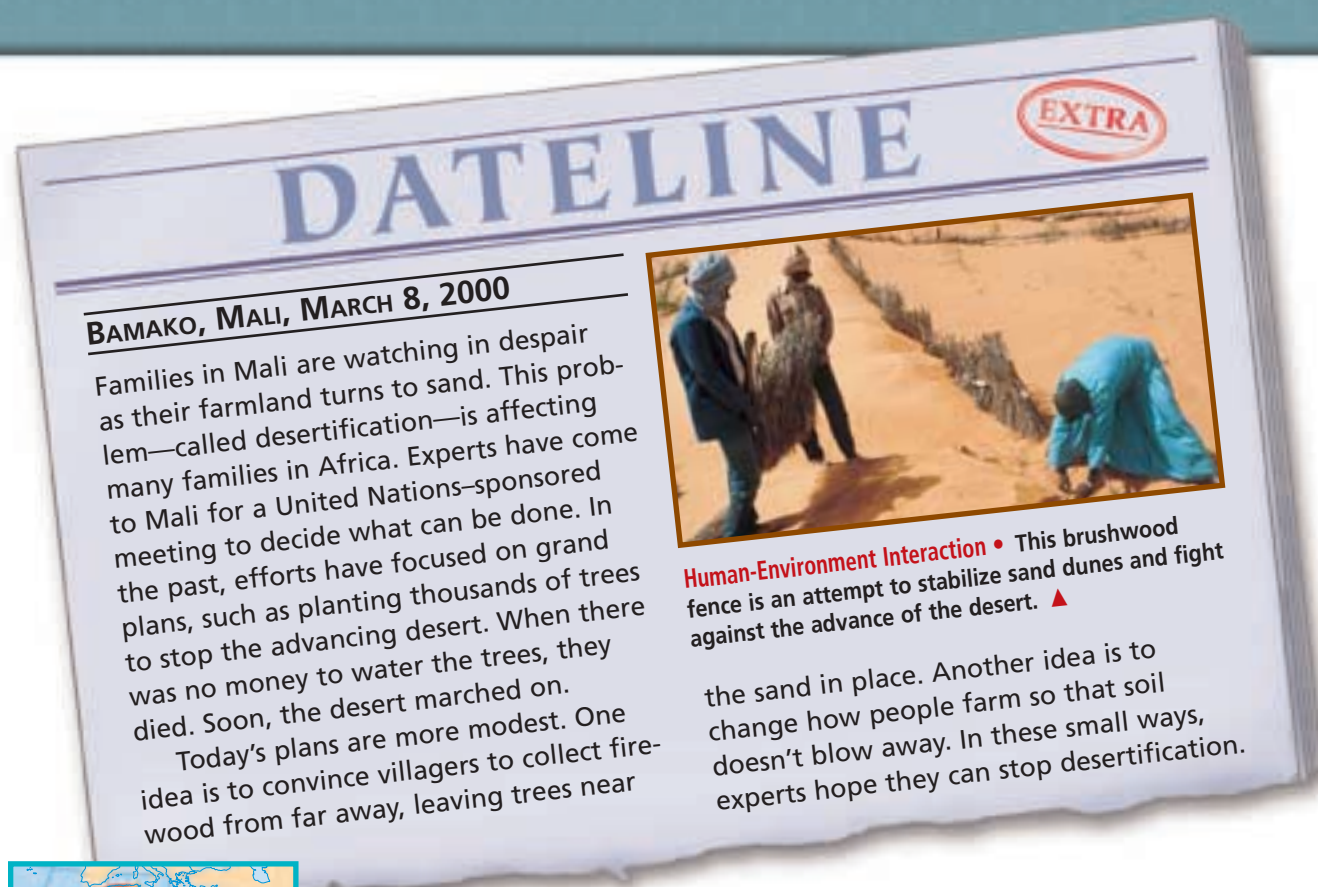
Africa south of the Sahara is a region with dramatically different landforms and climates. This provides for a variety of natural resources.

WHY IT MATTERS NOW

Tourists come from all over the world to explore this region's natural landscapes.

TERMS & NAMES

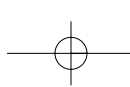
plateau
Great Rift Valley
Sahel
desertification
drought
savanna
nonrenewable resource
renewable resource



Region • More than half of Africa is desert or dry land. ▲

The African Continent

The natural changes in Africa's lands, such as desertification, affect its people. Africa is roughly three times the size of the United States. About 225 million years ago, Africa was the center of Earth's only continent, called Pangaea (pan•JEE•uh). Pangaea began to break up into separate continents that drifted apart over many millions of years. The piece that became Africa stayed where it was. Africa's shape has changed very little over time.



Landforms of Africa South of the Sahara

Africa has two major land types: lowlands and highlands. Locate the two regions on the Unit Atlas map on page 278. The lowlands are in the north and west, and the highlands are in the south and east. Several peaks rise out of the highlands of Kenya and Tanzania. The highest is Mount Kilimanjaro. The name *Kilimanjaro* comes from the Swahili (swah•HEE•lee) phrase *kilima njaro*, which means “shining mountain.” From the sweltering rain forest below, Kilimanjaro looks as though it is shining in the sun. That’s because its peak is snowcapped all year even though Kilimanjaro sits almost on the Equator.

BACKGROUND

Mount Kilimanjaro is a volcanic massif, or large, independent mountain mass. It is made up of three distinct parts: Kibo, Mawensi, and Shira. Kibo is still actively volcanic and, as the highest peak, has a permanent ice cap.

Plateaus Look again at the Unit Atlas map on page 278. Most of Africa south of the Sahara—both highlands and lowlands—lies on a high plateau. A **plateau** is a raised area of relatively level land. The African plateau rises from coastal plains along much of the north and west coastlines. Steep cliffs line much of the southern and eastern coasts, rising sharply from the Atlantic and Indian oceans. The east side of the plateau is higher than the west, at about 5,000 feet above sea level. The western plateau averages about 1,500 feet above sea level.

Region • The Congo Basin is drained by the 2,900-mile-long Congo River (also called the Zaire River). ▼

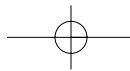


Place • Mount Kenya, at 17,058 feet, is the second highest mountain in Africa. It is an extinct volcano. ▼



Region • The Great Rift Valley is nearly 4,000 miles long. It is 9,850 feet below sea level at its deepest point. ►





Vocabulary

rift: a deep crack formed when plates of Earth separate

Rifts The tectonic plates on which Africa sits have been slowly pulling apart for 50 million years. The separation of the plates has been forming a series of broad, steep-walled valleys called rifts. The rifts make up the **Great Rift Valley**, which stretches from the Red Sea to Mozambique. Locate the valley on the Unit Atlas map on page 278. The Great Rift Valley will become larger and larger as East Africa pulls away from the rest of the continent. Eventually, East Africa may become an island. The island of Madagascar was formed in this way. Look again at the map on page 278 to find where Madagascar fit before it broke away.

Waterways of Africa South of the Sahara

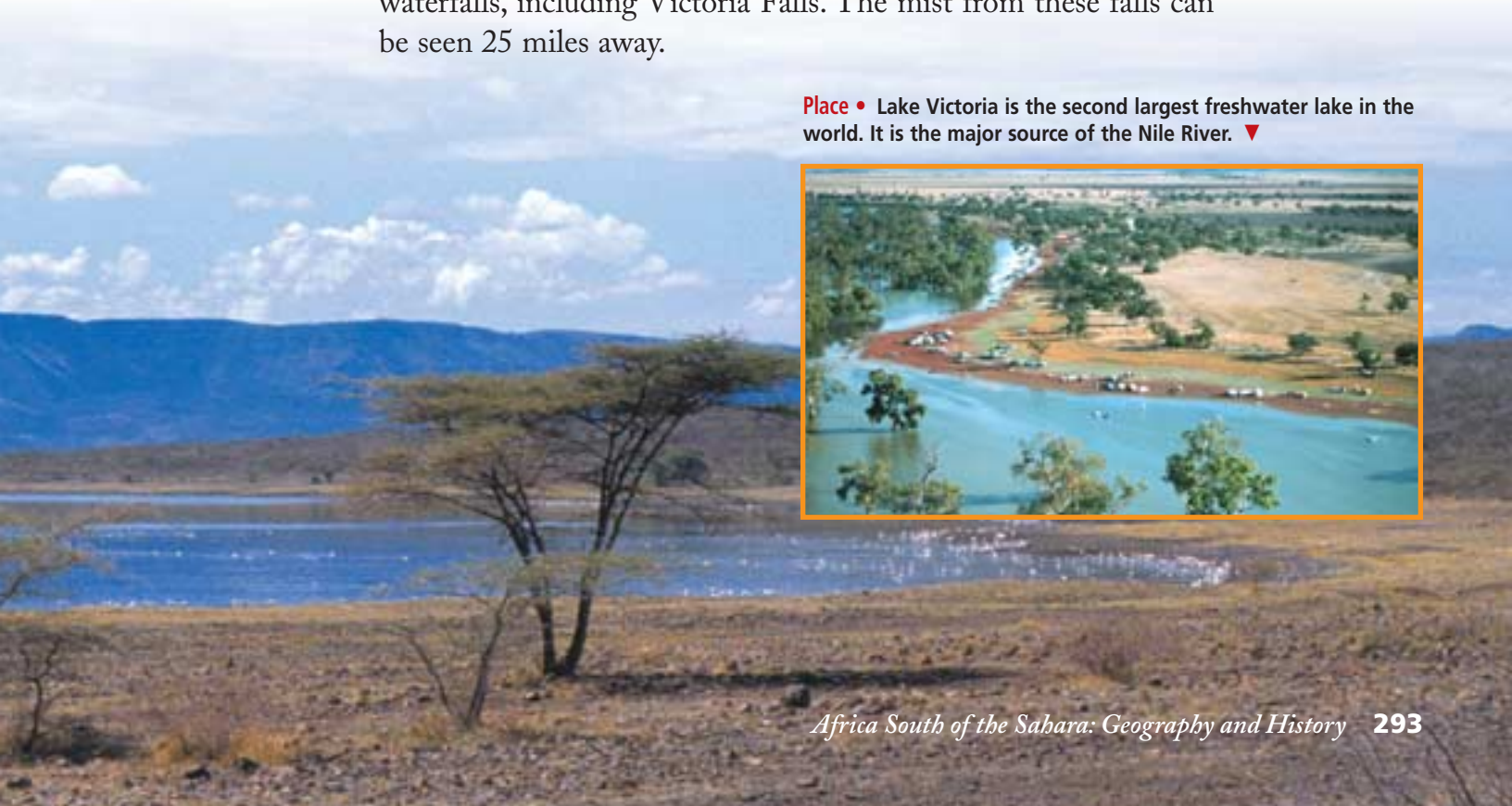
Reading Social Studies

A. Summarizing
What are some benefits provided by Africa's lakes and rivers?

Parts of the Great Rift Valley have filled with water to form huge lakes, such as Lake Tanganyika. Africa's largest lake, Lake Victoria, is pictured at the bottom of this page. It lies in a shallow basin between two rift valleys on the borders of Uganda, Kenya, and Tanzania. Lakes and rivers provide fresh water and fish. However, waterfalls and rapids make boat travel difficult.

Rivers Many of Africa's rivers have exceptional features. The Nile River, flowing northward out of the mountains of central Africa, is the world's longest river. The Okavango River crosses Angola, Namibia, and Botswana before emptying into marshes north of the Kalahari Desert. The Zambezi River features many powerful waterfalls, including Victoria Falls. The mist from these falls can be seen 25 miles away.

Place • Lake Victoria is the second largest freshwater lake in the world. It is the major source of the Nile River. ▼





Africa's Deserts

Desert	Area (sq. mi)	High Temp.	Annual Rainfall
Sahara	3,320,000	136°F	1" to 5"
Kalahari	360,000	115°F	<5" south; more northeast
Namib	52,000	over 100°F	0.5" to 2"

SKILLBUILDER: Reading a Chart

- Place** • Which desert is the largest?
- Place** • Which desert is the hottest?

Many Climates

Four major climatic regions of Africa south of the Sahara are desert (arid), semiarid, tropical, and equatorial. The different temperatures and amounts of rainfall affect which plants and animals live in each region.

Desert and Semiarid Regions Desert climates are found in the Sahara to the north and the Namib (NAH•mihb) and Kalahari to the south. These areas have little rain, high temperatures, and few plants and animals. Around the desert areas are semiarid regions that also have high temperatures but have more rainfall than the deserts.

The **Sahel** (suh•HAYL) is a semiarid region south of the Sahara. This area is experiencing **desertification**—a process by which a desert spreads. **Drought**, or the lack of rain, is one cause of desertification. The lack of rain causes fewer plants to grow. Without plants, soil blows away, leaving a dry, barren landscape. Other causes are overgrazing and overuse of the land for farming. People in Africa and around the world are trying to stop this process because a lack of enough arable land contributes to the widespread hunger in many African countries.

Tropical and Equatorial Regions The tropical climate extends from the semiarid areas toward the Equator. There is a rainy season of up to six months, and the rest of the year is dry.

Savannas, found in both semiarid and tropical areas, are flat grasslands with scattered trees and shrubs. More than 4.5 million square miles of Africa are savannas. Many African animals, including lions, elephants, giraffes, and zebras, live on these grasslands.

The equatorial region has two rainy seasons and two brief dry seasons each year. Located at the Equator, this climate has high temperatures year-round and annual rainfall of 50 to 60 inches.

Citizenship IN ACTION

Helping the Hungry Since 1977, a global volunteer organization called the Hunger Project has been working to end hunger in developing nations. In Africa, where poverty and hunger are widespread, the Hunger Project is sponsoring the African Woman Food Farmer Initiative.

So far, the program has loaned money to more than 14,000 women farmers like this one, in eight countries. The initiative has also provided health, nutrition, and literacy training for 9,000 more women in agriculture.



Reading Social Studies

B. Analyzing Issues How does the great area of desert and semiarid land impact the lives of many Africans?



Rain forests with trees as tall as 195 feet grow here. Many animals, including the chimpanzee, gorilla, hippopotamus, and African gray parrot, live in the rain forest.

Resources of Africa South of the Sahara

Region • In 1866, a child found a pebble on the banks of a river in South Africa. The pebble turned out to be a 21-carat diamond! ▼



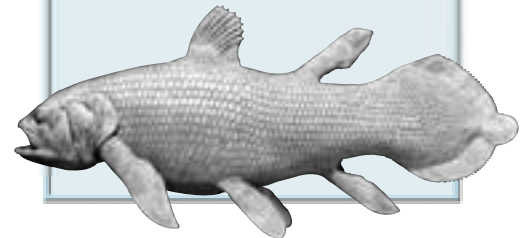
Africa is rich in mineral resources, such as gold and diamonds, that form over hundreds of millions of years. Other plentiful minerals are copper, tin, chrome, nickel, and iron ore. **Nonrenewable resources**, such as copper and diamonds, cannot be replaced or can be replaced only over millions of years.

Renewable resources can be used and replaced over a relatively short time period. The renewable resources of this region include trees used to make wood products, cocoa beans, cashew nuts, peanuts, vanilla beans, coffee, bananas, rubber, sugar, and tea. Africa's natural wildlife and historic sites are important resources that draw tourists from all over the world.

Strange but TRUE

The Fish That Did Not Die In 1938, off the coast of South Africa, some fishermen caught something surprising. The blue fish in their net was 5 feet long, weighed about 127 pounds, and had several rows of small, pointed teeth. The fishermen had never seen anything like it. Nor, according to scientists, should they have.

The fish, a coelacanth (see•luh•KANTH), was thought to have been extinct for 70 million years. Now here was proof that it wasn't. However, they aren't plentiful. It wasn't until 1952 that a second live coelacanth was found. Only a few hundred exist today.



SECTION 1 ASSESSMENT

Terms & Names

1. Identify: (a) plateau (b) Great Rift Valley (c) Sahel (d) desertification
(e) drought (f) savanna (g) nonrenewable resource (h) renewable resource

Taking Notes

2. Use a chart like this one to list some of this region's renewable and non-renewable resources.

Renewable Resources	Nonrenewable Resources

Main Ideas

3. (a) Describe the landforms and waterways of Africa.
(b) Describe four climatic regions of Africa south of the Sahara.
(c) Explain the differences between renewable and nonrenewable resources. Give examples of each.

Critical Thinking

4. Using Maps

Look at the map of Africa on page 280. Has the Great Rift Valley affected modern political boundaries in Africa? Explain your answer.

Think About

- the location of the Great Rift Valley
- current national borders in Africa

ACTIVITY -OPTION-

Draw a **commemorative stamp** honoring a climatic region or landform in Africa south of the Sahara.