



STUDY GUIDE

Chapter 19, Section 1

For use with textbook pages 463–468.

Living in North Africa, Southwest Asia, and Central Asia

Terms to Know

arable Suitable for farming (page 464)

commodity An economic product (page 465)

petrochemical Product made from petroleum or natural gas (page 465)

gross domestic product (GDP) The value of goods and services produced in a country in a year (page 465)

hajj A yearly pilgrimage (page 466)

embargo A restriction on trade (page 468)

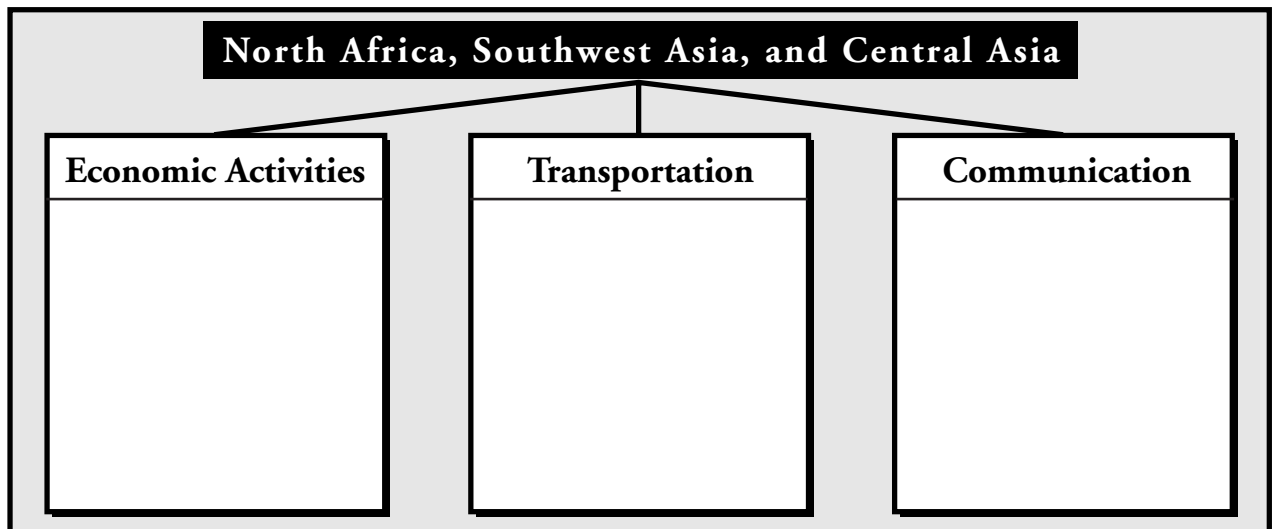
DRAWING FROM EXPERIENCE

Would you say that your lifestyle depends on the use of oil and oil products? Why or why not? Most of the world's oil is found in North Africa, Southwest Asia, and Central Asia.

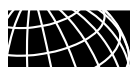
This section focuses on the economic activities, transportation, communications, and interdependence of North Africa, Southwest Asia, and Central Asia.

ORGANIZING YOUR THOUGHTS

Use the diagram below to help you take notes as you read the summaries that follow. Think about how people live in North Africa, Southwest Asia, and Central Asia.



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**STUDY GUIDE****Chapter 19, Section 1****READ TO LEARN** **Introduction** (page 463)

North Africa, Southwest Asia, and Central Asia hold great oil reserves. The oil industry is important in the region's economy. The region's improved transportation and communications link it with the world.

1. What industry is important in the region?

 **Meeting Food Needs** (page 463)

Producing food for a rapidly growing population is a challenge in many parts of the region. Poor soil and unreliable rainfall produce small amounts of food. Oil-producing countries such as Saudi Arabia can import food using oil profits. Less developed countries, like Afghanistan, grow their own food. Some countries use irrigation to grow food.

Only a small part of the region's land is suitable for farming, but a large part of the population works in agriculture. Citrus fruits, grapes, and olives are major crops in Mediterranean climates of the region. Grains, cotton, and livestock grow on farms in Central Asia. Fish are an important food source in coastal areas of the region.

2. How do countries in this region meet their food needs?

 **Industrial Growth** (page 465)

The region has about 67 percent of the world's oil supply and 33 percent of the world's natural gas reserves. Petroleum and oil products are the main export **commodities**, or economic goods in the region. Other industries use **petrochemicals**—products made from petroleum or natural gas—to make fertilizers, medicines, plastics, and paints. Copper and coal are mined in Central Asia. In North Africa, Morocco is the world's largest exporter of phosphate used in agricultural fertilizers.

The two major service industries in the region are financial services and tourism. Banking, real estate, and insurance account for most of Bahrain's **gross domestic product (GDP)**. GDP is the value of goods and

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services produced in a country in a year. Tourism is popular in North Africa and Southwest Asia because of their historical importance. Millions of visitors tour religious sites each year. Christians and Jews tour Israel, Jordan, and other countries in the region. Muslims make a **hajj**, or yearly pilgrimage, to Makkah.

3. Why are the oil industry and the tourism industry important to the region?

Transportation and Communications (page 466)

Mountains and deserts make transportation and communications difficult in some countries. There are five main methods of transportation in the region:

- A. **Road** systems in Iran, Turkey, and Egypt connect major cities with oil fields and seaports.
- B. **Railroads** connect cities with rural areas. Mass transit systems have been built in urban areas to ease traffic jams.
- C. **Airlines** connect countries within the region and with the rest of the world.
- D. **Waterways** and ports on the Mediterranean and Black Seas allow ships to load and unload cargo. Channels such as the Strait of Hormuz are used by oil tankers to transport oil from the region.
- E. **Pipelines** transport oil and natural gas overland to ports on the Mediterranean and Red Seas and the Persian Gulf.

There are five main methods of communication in the region:

- A. **Television and radio broadcasting** is expanding throughout the region. Most information media are controlled by governments.
- B. **Satellite technology** helps improve communication in the region.
- C. **Telephone** services are being improved through wireless services, solar-powered radiophones, and cellular phones.
- D. **Computer and Internet** services are becoming more available.
- E. A telecommunications cable was laid along the ancient Silk Road. This cable provides 20 countries with communication services.

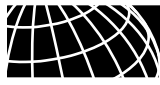
4. Why are transportation and communication difficult in the region?

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**STUDY GUIDE****Chapter 19, Section 1**** Interdependence** *(page 468)*

Interdependence within North Africa, Southwest Africa, and Central Asia has increased as more developed countries of the region give foreign aid, trade deals, and loans to less developed countries. Eight of the region's countries—Algeria, Libya, Iran, Iraq, Kuwait, Saudi Arabia, and United Arab Emirates—are part of the 11-member Organization of Petroleum Exporting Countries (OPEC). Because other countries depend heavily on the region's oil, OPEC countries have considerable influence in the world. Sometimes OPEC places an **embargo**, or restriction, on oil shipped to industrialized countries, causing oil prices to rise. In 1999 OPEC forced oil prices to rise by decreasing oil production.

5. Why does OPEC have influence with industrialized countries of the world?



STUDY GUIDE

Chapter 19, Section 2

For use with textbook pages 469–473.

People and Their Environment

Terms to Know

aquifer Underground layers of porous rock, gravel, or sand that contain water (page 470)

desalination A process to remove salt from seawater (page 470)

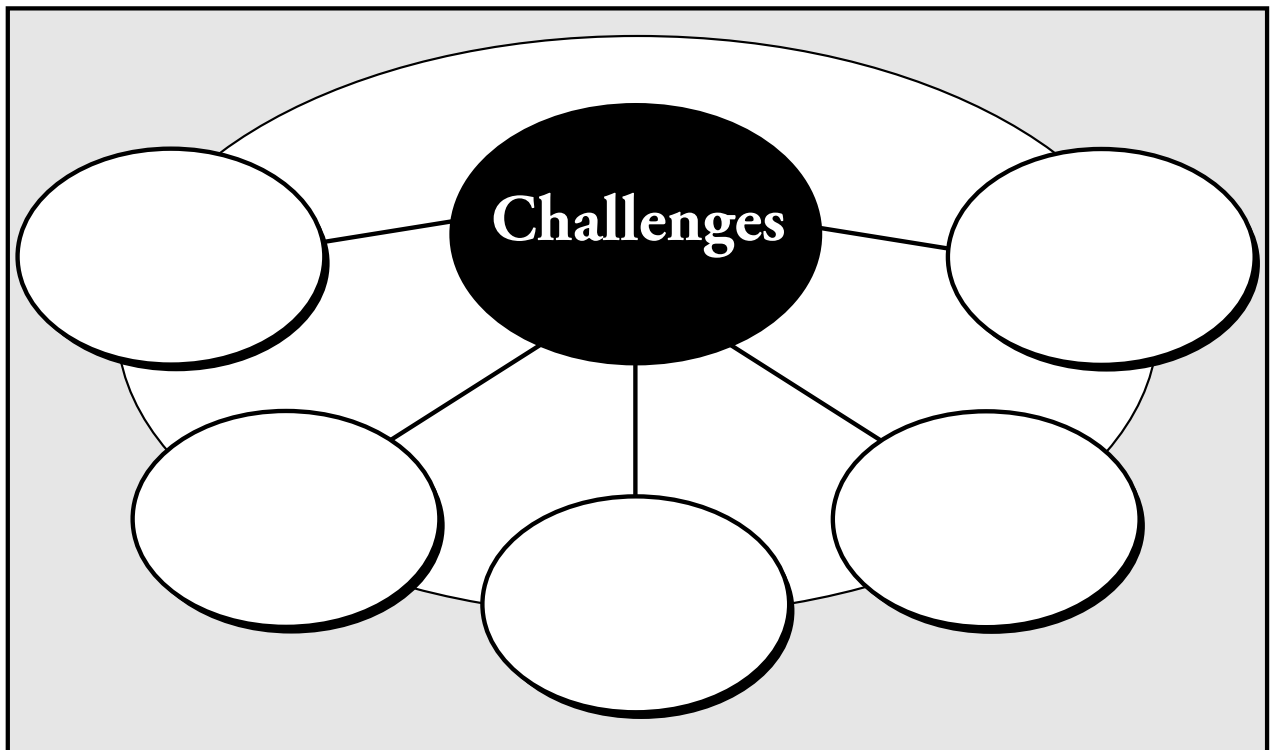
DRAWING FROM EXPERIENCE

Is freshwater in your area scarce? Why or why not?

In the last section, you read about economic activity in North Africa, Southwest Asia, and Central Asia. This section focuses on the environmental challenges facing the region.

ORGANIZING YOUR THOUGHTS

Use the web below to help you take notes as you read the summaries that follow. Think about the challenges facing North Africa, Southwest Asia, and Central Asia.



**STUDY GUIDE****Chapter 19, Section 2****READ TO LEARN** **Introduction** (page 469)

Human actions in North Africa, Southwest Asia, and Central Asia threaten the environment. These actions include oil spills, urbanization, and over-use of water supplies.

1. What human actions threaten the environment of the region?

 The Need for Water (page 469)

Freshwater is scarce in the region. About 97 percent of the world's water is saltwater. About 2 percent of the world's water is frozen. That leaves about 1 percent of the world's water available for drinking and other human uses. Much of the freshwater in North Africa, Southwest Asia, and Central Asia comes from rivers, oases, and **aquifers**. These are underground layers of porous rock, gravel, or sand that contain water. The region has few freshwater rivers.

Scientists have developed a way to remove salt water from seawater in a process called **desalination**. Many countries in the region, especially those near the Persian Gulf, depend on desalination for their freshwater supplies.

Libya built a "great man-made river" using pipelines to bring water from aquifers beneath the Sahara desert to farms near the Mediterranean coast. Some scientists fear that these pipelines will drain aquifers in Libya and neighboring countries. They are also concerned that pumping from aquifers near the Mediterranean coast could draw in salt water from the sea and ruin the freshwater.

2. What are two solutions to the freshwater scarcity in the region?

 Environmental Concerns (page 472)

Environmental concerns have grown in the region in recent decades because of new technologies and destructive wars.

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- A.** In 1970 the Aswan High Dam was completed. It controls the Nile River's floods, irrigates 3 million acres of land, and supplies almost 50 percent of Egypt's electrical power. The dam has also created an artificial lake to help the fishing industry. However, because of the dam, the Nile River no longer deposits fertile soil along the riverbanks. Instead, the dam traps the soil. To grow crops, farmers must now use expensive fertilizers. Parasite-related diseases have increased near the dam.
- B.** The 1990 Persian Gulf War had disastrous effects on the environment. Iraqi troops set fire to oil wells, causing smoke to pollute the area. The effects of the oil fires threatened millions of birds. They also dumped millions of gallons of oil into the Persian Gulf. This killed fish and other marine life.
- C.** The countries of Central Asia have inherited some environmental problems from the Soviet era. The Soviet Union tested nuclear, chemical, and biological weapons in Kazakhstan. This weapons testing caused radiation leaks. Heavy industry in Kazakhstan and Kyrgyzstan polluted the air with toxic chemicals. This industrial pollution has increased the rate of infant deaths.
- D.** The Caspian Sea, the Dead Sea, and the Aral Sea face severe environmental problems. Pollution and overfishing in the Caspian Sea are killing off sturgeon, an important export of the region. The water level of the Dead and Aral Seas has dropped dramatically because water has been diverted from the rivers that feed them. The diverted water is being used to irrigate farmland and to fuel hydroelectric plants. This has destroyed the sea's fishing industries. People are working to stop the environmental problems of these seas.
- 3.** What environmental problems does the region face?
