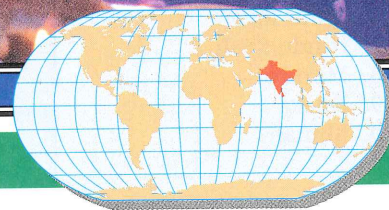
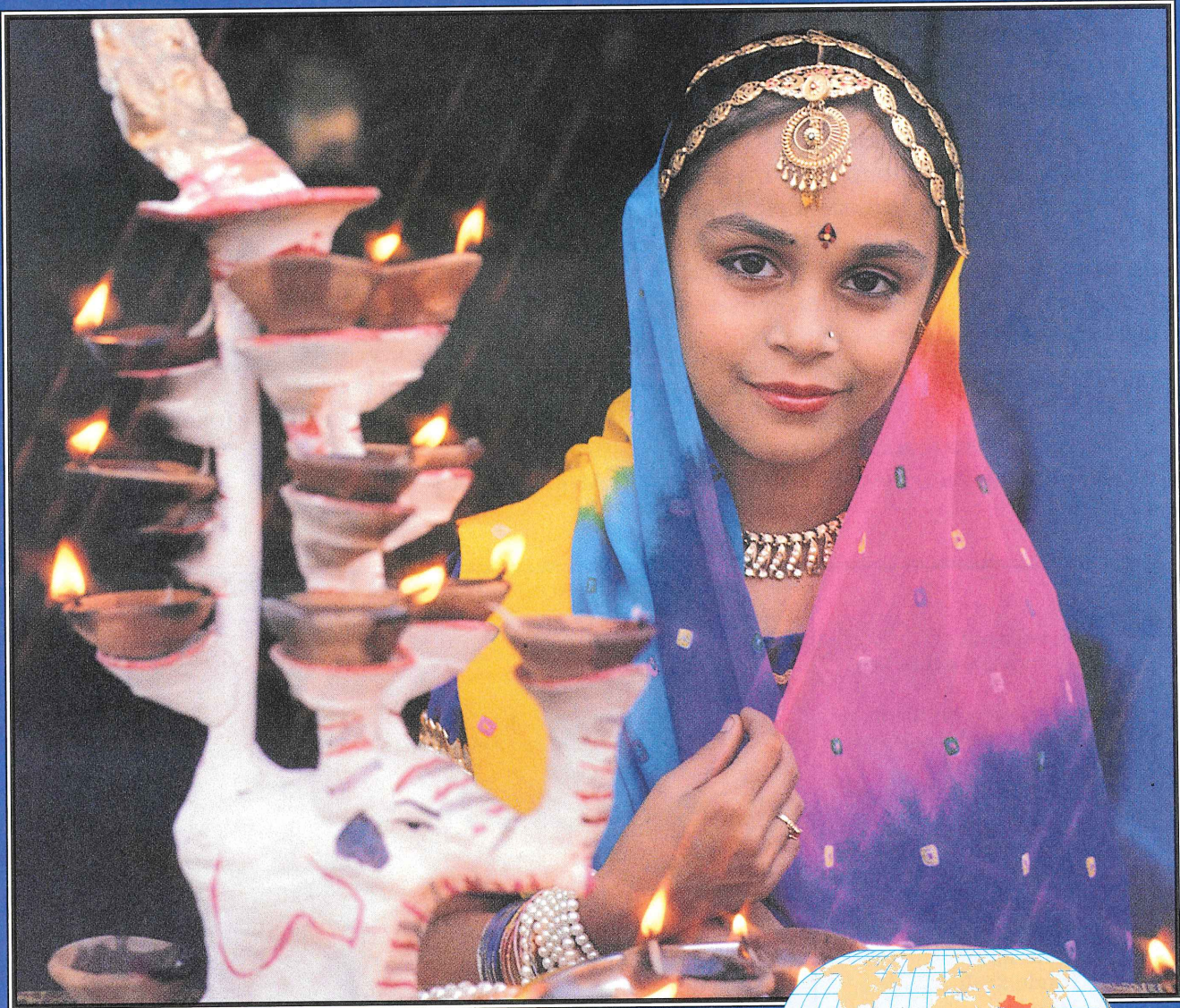


South Asia Today



CHAPTER FOCUS

Geographic Setting

The people who live in South Asia have adapted to a rich and varied geographic setting, which includes everything from isolated mountain valleys to a long coastline that is a crossroads for international trade.



Geographic Themes

Section 1 Living in South Asia

REGION In most nations of South Asia, a large majority of the people still make their living in agriculture.

▲ **Photograph:** Indian girl celebrating the Festival of Lights

Section 2 People and Their Environment

HUMAN/ENVIRONMENT INTERACTION The rapidly expanding population of South Asia is placing an ever-increasing burden on the environment.

1 SECTION

Living in South Asia

SETTING THE SCENE

Read to Discover . . .

- the major crops of South Asia.
- the industries that are developing in South Asia.
- mining and fishing resources of South Asia.

Key Terms

- subsistence farming
- jute
- cash crop
- green revolution

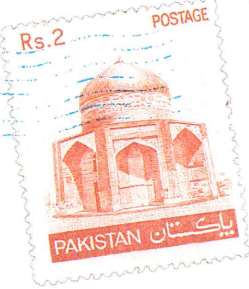
Identify and Locate

Malabar Coast, Kathmandu Valley, Chittagong

Rawalpindi, Pakistan

My family lives in Rawalpindi, a city in northern Pakistan. About 65 percent of Pakistanis live on farms, but the country is rapidly setting up new industries. Communication by means of mail, telephone, and fax are reliable, and even the remotest areas are getting equipped with telephones and post offices.

Zia Raja



Zia Raja describes the growth of industry in his homeland of Pakistan. In recent years the governments of India, Bangladesh, and the other nations in South Asia have also made tremendous progress toward modernizing their economies. India especially has increased agricultural output, slowed population growth, and established a broad and impressive industrial base. As a result, India ranks among the world's top 12 producers of goods and services. Yet India continues to have one of the world's lowest per capita incomes—about \$380 a year. Furthermore, its output per person is quite low. In India—as throughout the region—traditional, labor-intensive methods are used in most occupations. As a result, the average individual produces and earns little.

HUMAN/ENVIRONMENT INTERACTION

Agriculture

Most people in South Asia make their living by farming. In India 75 percent of the population is engaged in farming; in Bangladesh the figure jumps to 85 percent. Most people practice **subsistence farming**—managing to produce just what they need to survive. These subsistence farmers use simple tools; a peasant plowing with a wooden harrow pulled by an ox is still a common sight throughout much of the region. Gradually, however, agriculture is changing as modern methods are introduced in the hopes of producing larger harvests. Some farmers now use tractors and irrigate their fields with water pumped from electric-powered wells.



Agricultural Conditions

South Asian farms vary in size from large plantations in Sri Lanka to small plots of land in India.

The Sri Lankan plantations were originally established by the British and the Dutch. Today on these plantations, skilled workers use advanced technology to produce tea, rubber, coconut, and other products for export.

Contrasting with the vast tea and rubber plantations are the region's small farms. In India more than one-third of the farms are less than one acre in area. Their small size is a result of traditional inheritance practices. It is the custom to divide a family's land equally among all the family's sons. As generations pass and the plots are divided and then further subdivided, plots grow smaller. A family may own several such plots, scattered around the village where the family lives. This makes farming difficult. In an attempt to solve this

problem, some states in India have passed laws establishing a minimum size for farms.

A Variety of Crops

The major food crop grown in South Asia is rice. Rice is grown chiefly in the tropical rain forest climate of the Ganges Delta and along the Malabar Coast—the western coast of the peninsula. India is the world's second-largest producer of rice. Tiny Bangladesh (about the size of Iowa) ranks fourth.

Wheat is a major crop of the Indo-Gangetic Plain. It is also the chief crop of the Indus Valley of Pakistan. Peanuts grown along the western coast of the peninsula are another important crop of the region.

Although rice is the major food crop of Bangladesh, **jute**—a fiber used to make string and cloth—is the country's major cash crop. When harvested, the slender stalks shine a dull gold color. Jute is called the “golden crop” for another reason: sales of this product account for 75 percent of all the money Bangladesh earns from exports.

Cotton is another important fiber crop grown in South Asia; India and Pakistan are world leaders in its production. India is also one of the world's largest producers of bananas, while citrus fruits are grown in the steppe areas of India, Pakistan, and Bangladesh.

India and Sri Lanka are two of the world's largest producers of tea. Originally grown in China, tea was introduced to India by British planters who brought plants and seeds from China. When workers on the Indian tea plantations began demanding better working conditions, the British set up new plantations in Ceylon (now Sri Lanka). When Sri Lanka gained its independence in 1948, the British planters moved on once again, but the plantations remain. The sale of tea abroad brings much-needed cash into Sri Lanka. So does the sale of rubber, the nation's second-largest plantation crop. The island's dependence on **cash crops**, however, forces it to import great quantities of rice to meet its people's food needs. This conflict—between growing the food crops a nation's people need to survive



Geographic Themes

Place: Sri Lanka

About three-fourths of all Sri Lankans live in villages and work on farms or plantations. *What agricultural products are exported from Sri Lanka?*



physically and growing the cash crops the country needs in order to survive in the global economy—exists throughout South Asia, as in many developing regions.

Improved Agricultural Practices

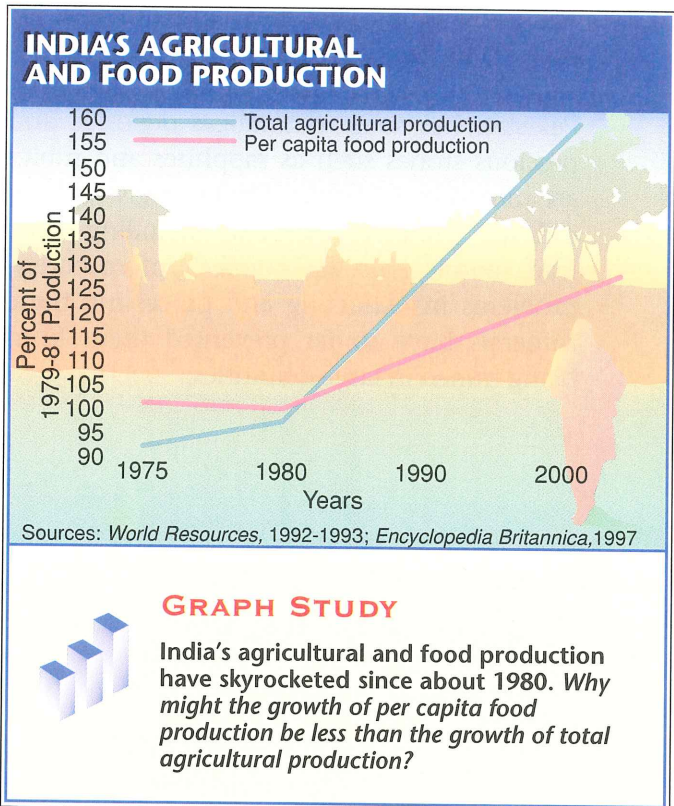
At the present growth rate, the population of South Asia will double in less than 40 years. Although government leaders—especially in India—have made efforts to slow the rate of population growth, they realize that agricultural production must rise dramatically if the region's people are to be adequately fed.

Government programs throughout South Asia are training farmers to use modern technology. These programs focus on how irrigation, insect control, and fertilization can raise productivity.

In some areas farmers are taught to plant two or more crops on the same piece of land in a single year. In Bangladesh, for example, farmers can harvest three crops of rice in most years. In the Kathmandu Valley of Nepal, farmers used to let their land lie fallow after harvesting their rice crops; now they plant a second crop of winter wheat. This method cannot work everywhere, however. In places where agriculture is dependent on the monsoon rains, growing more than one crop in a year is difficult. Also, farmers who have used traditional methods for centuries may be reluctant to experiment with new techniques; subsistence farmers have little room for error in their lives.

Education and government leadership are crucial—both to change attitudes and to teach specific new techniques. Agricultural research stations in Bhutan have led to the establishment of very successful fruit orchards. The government of Sri Lanka has encouraged rice production by paying high prices for rice and establishing new irrigation programs.

One of the most impressive achievements of recent years has been the **green revolution**. Worried by the rising threat of world hunger, plant breeders began in the 1960s to develop new and more productive varieties of rice, wheat, and maize. Asian rice growers planted



the new varieties, and rice production increased by more than 60 percent between 1965 and 1985. Wheat yields in India increased by 50 percent. These new varieties, however, are more susceptible to disease than the old strains were. They also require expensive fertilizers and much irrigation. Despite these problems, the green revolution has allowed countries such as India to store grain surpluses and even export grain. Researchers are currently working to develop strains that can better resist diseases and drought.

HUMAN/ENVIRONMENT INTERACTION

Mining and Fishing

South Asia consists of a peninsula and islands; naturally, fish are an important resource. Mining is also an important source of income.

Mining

Most of the mining in the region takes place on the Indo-Gangetic Plain and in east-



ern India. India produces large amounts of mica, coal, and iron ore and also has significant deposits of bauxite, silver, and copper. Pakistan has some natural-gas deposits, and precious stones such as sapphires and rubies are mined in Sri Lanka. Bhutan possesses significant mineral resources, including coal, lead, marble, zinc, and copper. Unfortunately, problems in extracting and processing these minerals have so far prevented them from being mined in large quantities.

Fishing

Fishing is an important industry in Sri Lanka and Pakistan. Fresh and dried fish, as well as lobsters and shrimp, are important exports of Pakistan. In Bangladesh, fish are a primary food source for many people. The majority of farmers in rural Bangladesh fish during the flood season, and the nation's commercial fisheries industry, though new, is very successful. Japan is a major purchaser of shrimp and frogs' legs from Bangladesh.

MOVEMENT

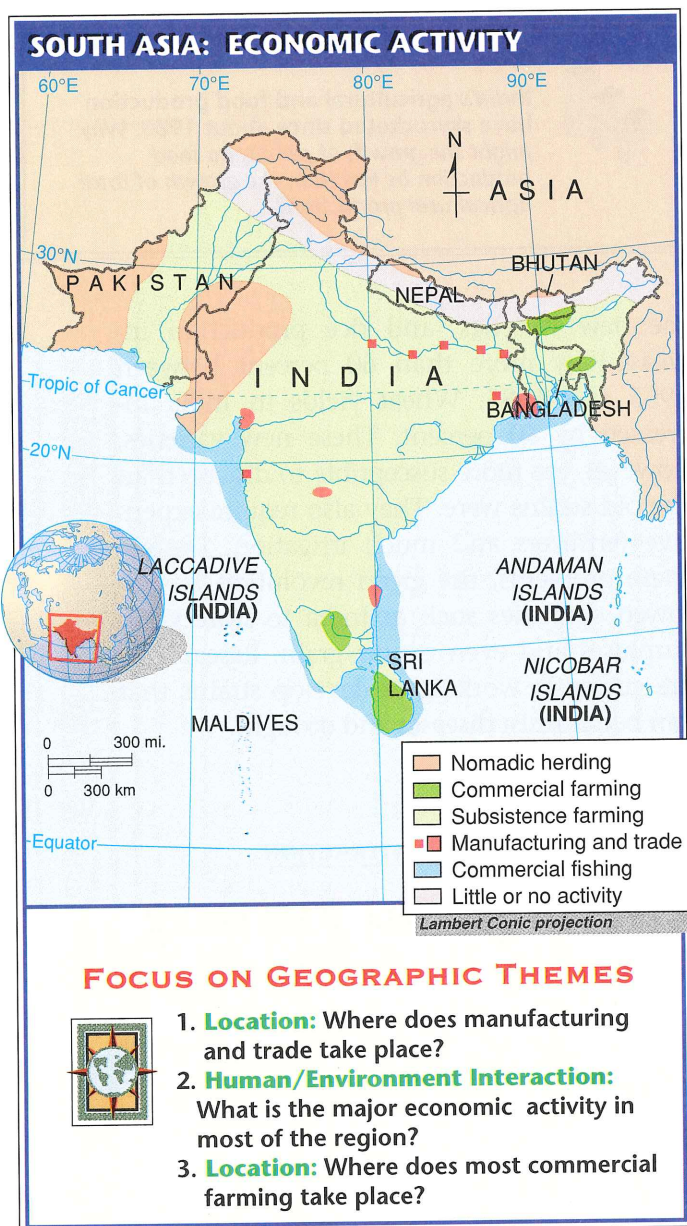
Industrial Growth

The pace of industrialization varies in South Asia. In India the process of industrialization was begun by the British. The nation's industries have traditionally been heavily regulated by the government. An easing of government regulations in the 1980s, however, led to a surge in development. At the other end of the spectrum is tiny Bhutan, which has remained isolated and undeveloped until recently. Government policy currently is to encourage development but to proceed very slowly, so that the nation's cultural heritage and natural resources are carefully preserved.

Light Industry

Light industry involves the production of consumer goods, such as bicycles, televisions, and textiles. Textile manufacturing is India's most important industry, and has been for hundreds of years. Roughly 24 million people are employed in India's textile industry, producing cotton, wool, and silk in an astonishing variety of colors and styles—embroidered, woven, painted, and tie-dyed. The garment industry is also thriving in Bangladesh. In 1979, the year Bangladesh first exported finished garments, the clothing industry earned \$9 million in profits. Within just 10 years, profits had soared to \$450 million.

Throughout South Asia many goods are manufactured by workers laboring in their own homes. Millions of these laborers weave



fabrics of cotton, rayon, and silk by hand. They also make shoes, jewelry, brassware, woodcarvings, furniture, bowls, and other goods. Because these home industries provide jobs for villagers, the government has always encouraged them. Today, many of the products made in these industries are sold in different parts of the world.

South Asia also has a number of privately owned small industries. These industries generally are plants that employ fewer than 100 workers and use simple machinery. They make such goods as bicycle parts, shoes, and carpets.

Heavy Industry

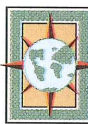
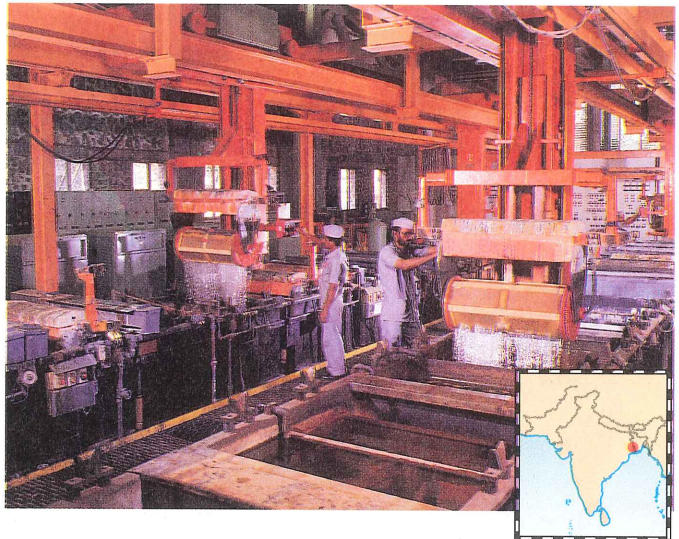
South Asia also has large-scale industries that specialize in heavy industrial production. These include or are related to mining, electric power, and iron and steel manufacturing. India manufactures steel, cement, and heavy machinery. Bangladesh produces cement, iron, and steel. Bangladesh also melts down and reuses steel from one of its most unusual industries—shipbreaking. Shipowners from all over the world send their old or crippled ships to the port of Chittagong, where workers scramble over the ships with sledgehammers and torches, ripping the structure apart. Manufacturing is not an important part of the economy of Sri Lanka, and in Bhutan there are only a few large industrial employers.

Until the early 1990s, when India moved to a free market economy, more than 200 of its large-scale industries were owned solely by the government. The rest were owned jointly by the government and private investors or were still in private hands.

Under the old economy, India did not welcome foreign investments. All foreign-brand products sold in India had to have Indianized names. Since 1992, however, foreign investment has been encouraged, and products may be sold under their own brand names.

Tourism

Tourism is important to the economies of several South Asian nations. Tourists are attracted to Nepal by the opportunities to hunt, photograph wildlife, and climb or trek in the



Geographic Themes

Place: India

India produces a variety of manufactured goods, including machines, tractors, cars, ships, and airplanes. *How many people are employed in India's textile industry?*

Himalayas. Tourists are also drawn to exotic Bhutan, but their activities are carefully controlled by the government. Sri Lanka has many beautiful beaches and lovely hotels to attract tourists. Unfortunately, continuing violence between the Sinhalese and the Tamils has drastically reduced tourism on the island.

SECTION 1 ASSESSMENT

Checking for Understanding

- 1. Define** subsistence farming, jute, cash crop, green revolution.
- 2. Locating Places** What areas in India and Pakistan are known for growing wheat?
- 3. Human/Environment Interaction** What are two problems with the new strains of wheat and rice being planted in South Asia?
- 4. Place** Why is there little mining in Bhutan?

Critical Thinking

- 5. Making Comparisons** Compare and contrast industrial development in India and Bhutan.





THE GANGES: PLAGUED BY POLLUTION

The Ganges is more than a river. It is a phenomenal force that holds 5,000 years of history, culture, and tradition.

The Ganges River flows across the northern corner of India, beginning as a pair of headstreams in the Himalayas. The streams flow south-southeast, joining at Kanpur, then continue across India and Bangladesh to empty into the Bay of Bengal. The Ganges River flows a total length of 1,557 miles (2,507 km), providing water to southern Tibet, northern India, and the entire countries of Nepal and Bangladesh.

THE ISSUE

The Ganges is the most sacred river of the Hindus, India's major religious group. Every year, millions of pilgrims journey to bathe in its waters. Those waters, however, are heavily polluted, carrying industrial and human waste, as well as agricultural runoff.

THE BACKGROUND

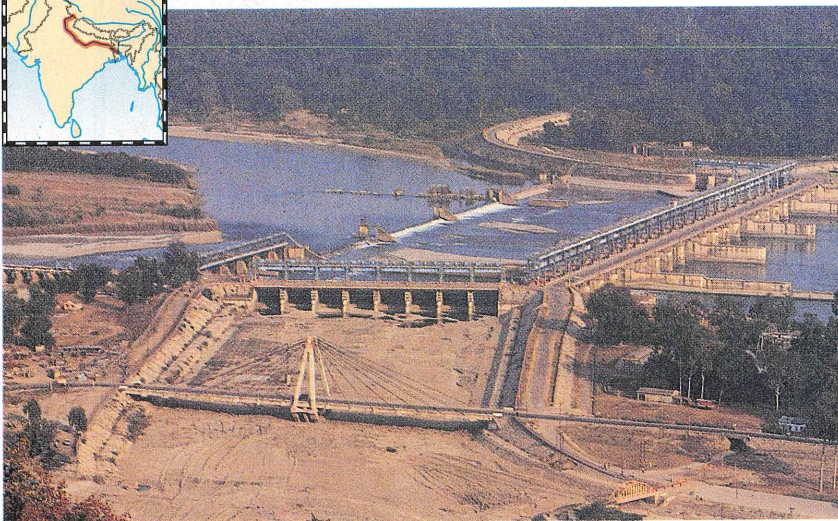
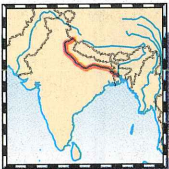
According to the Hindu religion, the Ganges is the Hindu goddess Ganga, come to earth

in the form of a river to redeem the souls of worthy men and women. To bathe in the waters of "Mother Ganges" is to be cleansed of all sins.

For years waste materials from distilleries, chemical manufacturers, fertilizer complexes, and the sewage from a steadily growing population have poured into the Ganges.

Millions of Hindus trek across India every year to bathe in the Ganges. Various points along the river provide flights of stairs, called *ghats*, down which pilgrims travel to reach the river. Many believers come, or are brought, especially to die in the Ganges. A believer so fortunate as to die while immersed in its waters is assured of a place in paradise.

"Mother Ganges" provides physical support as well as spiritual. The river and its tributaries drain a region of almost 400,000 square miles (1,040,000 sq. km). These lands have been fertilized continu-



Dams on South Asia's great river systems, especially the Ganges, supply electricity to the region's villages and factories.

ously for centuries by nutrients from the river.

The Ganges and its tributaries support roughly 300 million people, more than the entire population of the United States. Most are rural farmers, living in villages of about 1,000 or fewer people that dot the fertile plain. Drinking water for the villages is provided by a few wells dug deeply enough to tap into groundwater. Washing and bathing are usually done in the river.

Although the Ganges runs through a primarily agricultural area, several major cities are located along its banks: the commercial center Allahabad, heavily industrialized Kanpur, and Patna, a rice-producing center. Delhi, one of the world's fastest-growing cities, spreads along a northwestern tributary. Most of these cities have 1 million or more inhabitants. Kanpur has more than 2 million people; Delhi has 10 million residents.

In the last 40 years, factories and chemical plants have developed in these cities, as well as along the river's banks. Since the 1980s, it is estimated that more than 230 million gallons (872 million L) of untreated sewage have been emptied into the river every day.

THE POINTS OF VIEW

Observers point out that it is virtually impossible for many Hindus to comprehend pollu-

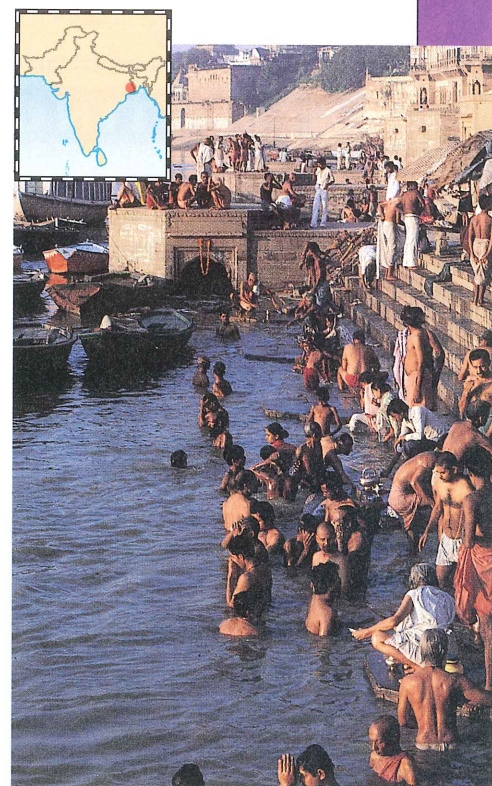
tion in the river's sacred waters. "A Hindu pilgrim has no knowledge of the fact that an average drop of water contains traces of cyanide, arsenic, lead, zinc, chromium, selenium and mercury," maintains photojournalist Raghbir Singh. Experts point out the continuing—and steadily increasing—pollution problems posed by India's expanding population and the advance of modern industrialization. The rapid population increase results from better preventive medical care and intensive public health measures. These, in turn, have produced a significant drop in infant deaths.

THE ISSUE TODAY

The Indian government has instituted ongoing efforts to reverse pollution in the Ganges. In 1986 a \$250 million clean-up project was begun.

In addition, the government started an ambitious program of population control. Many claim it is the most ambitious in history. Radio and TV ads promote family planning programs. The government also makes generous payments to families who agree to have no more than 2 children.

Although population growth has decreased, the average couple still has 3 to 4 children. About 65,000 babies are born every day. The continued population growth, coupled with the extent of the pollution



Some of India's largest cities, such as Calcutta and Varanasi, stand on the banks of the Ganges River. Pilgrims gather along the Ganges to perform ritual bathings.

from which the Ganges is already suffering, cause many to think that the river is long past the point of ecological recovery.

Reviewing the Case

1. What place does the Ganges River hold in the Hindu religion?

2. **Human/Environment**



Interaction What factors contributed to the pollution of the Ganges?



SETTING THE SCENE

Read to Discover . . .

- how people have affected South Asia's wildlife.
- how both deforestation and reforestation are occurring.
- how water use is changing.
- how activities such as tourism affect the environment.

Key Terms

- deforestation
- trekker
- mangrove tree
- Chipko

Identify and Locate

Sundarbans, Uttar Pradesh,
Narmada River basin

As in all parts of the world, the environment of South Asia is affected in many ways by the human beings who inhabit the region. Because much of South Asia is so densely populated, the interaction between humans and the environment is especially intense.

HUMAN/ENVIRONMENT INTERACTION

Forests of South Asia

Centuries ago much of South Asia was covered with forests. Over time, much forestland has been converted into farmland or pastureland. Trees have been cut for firewood and shelter. Still, many forests survive—from the rain forests of Sri Lanka and the west coast of India to the deciduous forests of drier and cooler areas. Many experts doubt that these forests can be preserved if South Asia's population continues to expand at its present rate. They point out the severe effects of **deforestation**, or the loss of forests, and urge governments and individuals to conserve woodlands.

Deforestation

One expert estimates that half of the trees of northern India have been cut down in the past 30 years. Many trees have been cut by

commercial timbering enterprises or to make way for other businesses, such as quarrying. Others have been slowly killed by impoverished villagers who use the leaves as fodder for their animals.

During the same period, almost one-third of Nepal's forests have been cut down. Nepalese farmers, pushed out of traditional farmlands because of the rising population, have been forced higher into the mountains. There they have cleared trees for farmland and grazing.

Tourists vastly increase the demand on firewood in Nepal and Bhutan. A single **trekker**, or mountain hiker, may use as much firewood as 10 Sherpas. Trekkers also leave litter and garbage behind on the once-pristine slopes of the Himalayas. To avoid these problems, the government of Bhutan closely supervises the tourists who enter the country.

Little of Sri Lanka's original vegetation remains untouched. Slash-and-burn methods of agriculture and illegal logging have caused rapid deforestation. In Bangladesh, using firewood as the main fuel has caused a severe loss of woodlands. The only forests left are in the Chittagong Hills—home to a small number of tribal people—and the Sundarbans, swamp-land full of **mangrove trees** along the Bay of Bengal.



Effects

The effects of deforestation can be devastating. Traditionally, dense mangroves in the Sundarbans have provided protection from cyclones and tidal waves that affect the coast of Bangladesh. As the mangroves are cut down, this defense is weakened. The forests in the Himalayas have acted like sponges—absorbing the heavy rains in the monsoon season and gradually releasing the moisture throughout the year. When these forests are cleared, heavy rains pour down the bare mountainsides. The water run-off causes serious monsoon flooding as far away as Bangladesh. Downpours wash topsoil off the mountains, sometimes causing dangerous landslides. Soil, carried along by streams and rivers, clogs dams with silt and alters the paths of the rivers.

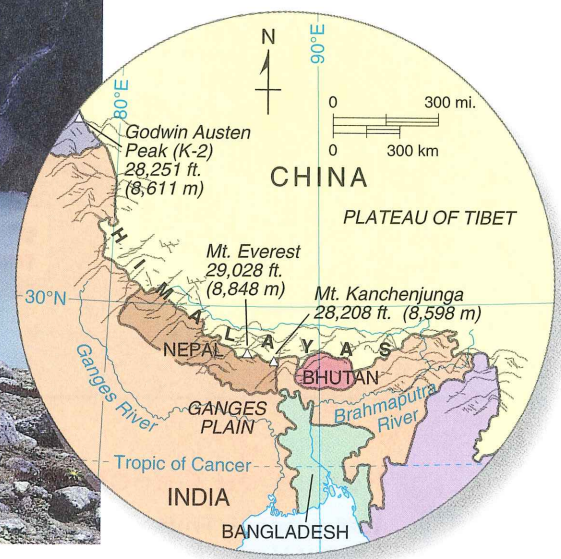
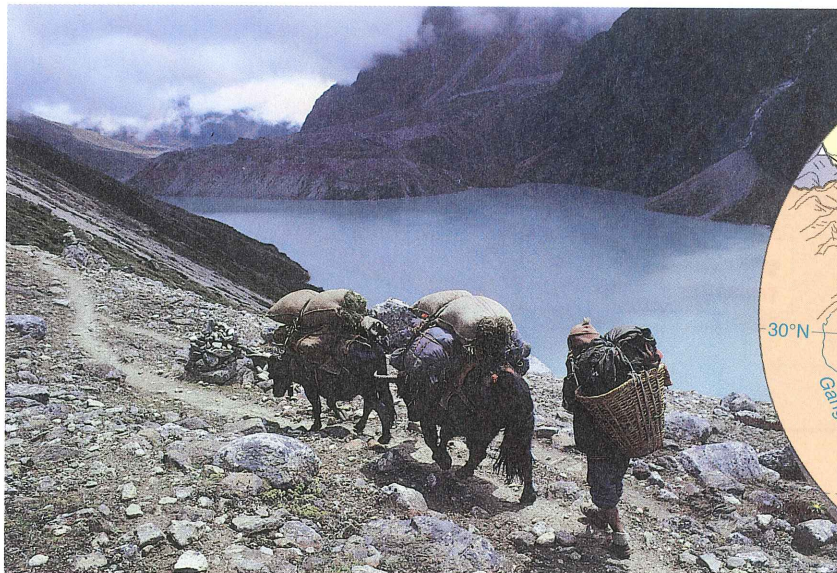
Deforestation affects wildlife as well. As forests are cut down, animals such as tigers and elephants are slowly forced into smaller habitats. In the foothills of the Himalayas, a traditional honey hunter reports, “My grandfather took 600 nests a year. Last year we took 80.” This is an example of the nature of human-environment relations. Human activi-

ty reduces the number of bee colonies, and then the people who depend on honey to make a living also suffer.

Deforestation of tropical rain forests is dangerous. These forests usually grow in poor soils. The trees’ elaborate root systems efficiently absorb available nutrients and also hold the topsoil in place. The trees absorb and gradually release rainfall, and help keep the climate cooler than it would otherwise be. If the rain forests disappear, soil erodes, and climate changes occur.

Conservation

The people of Bhutan have taken steps to protect the nation’s trees. The government supervises control of the forests, limiting commercial timbering and training citizens in forestry. Despite a high demand for Bhutan’s wood products, roughly 70 percent of the landscape is still wooded. Pine trees have been planted on Nepalese hillsides to stop erosion. In Sri Lanka a reforestation program began in 1970, and the export of timber has been banned since 1977.



Geographic Themes

Human/Environment Interaction: Nepal

A Sherpa carries goods across the foothills of the Himalayas. *How have Nepalese farmers affected the environment of the foothills area?*



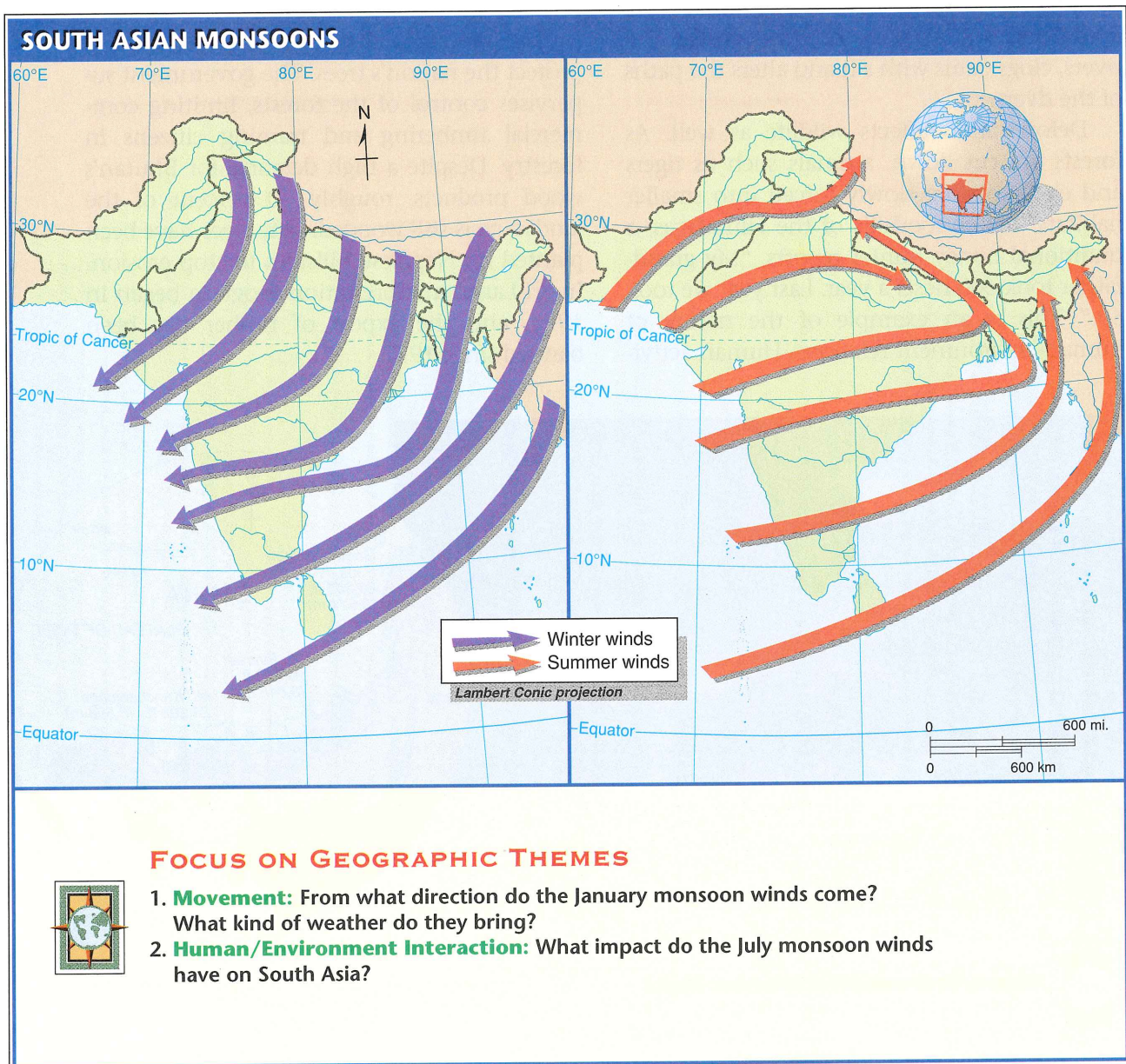
In India the **Chipko**—or tree-hugger—movement was started by environmental activist Sunderlal Bahaguna, a former follower of Gandhi. The tree-hugger movement is devoted to saving the remaining forests of northern India. Bahaguna tells villagers about the importance of trees and teaches them land management and reforestation techniques. In some villages Chipko has opened nurseries and provided seedlings. Bahaguna has had success in showing impoverished villagers that trees must be preserved if erosion and drought are to be avoided. He also convinced then Prime Minister Indira Gandhi to halt commer-

cial timbering in the Himalayan forests of Uttar Pradesh.

Wildlife

South Asia is home to spectacular wildlife. For example, elephants, water buffalo, and monkeys are found in Sri Lanka. Crocodiles and the magnificent Bengal tiger roam Bangladesh. Unfortunately, many of these animals are endangered in a rapidly changing environment, especially in forested areas.

Some animals of the region have become rare through overhunting. Others have been endangered as a result of the loss of habitat.



Deforestation and development projects, such as the construction of dams, have taken a severe toll on animal species.

In recent decades, the countries of South Asia have taken steps to protect animals. Governments have created wildlife reserves with help from international organizations. They also have passed laws to control hunting and development.

HUMAN/ENVIRONMENT INTERACTION

Water

In South Asia, humans and the environment affect each other in relation to water. The people build dams, they irrigate, they pollute, and they change the courses of rivers and the effects of the monsoons.

Dams

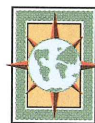
Dams play a crucial role in irrigating dry areas and regulating the flow of water. The Tarbela Dam of Pakistan is the world's largest earthen dam. Built in the 1970s, this dam controls floods and holds water in reserve for irrigating Pakistan's crops during the driest months. Dams also produce hydroelectric power. To build a dam, however, land must be flooded. Wildlife is displaced and plant life destroyed.

Dams trap silt that otherwise would flow downstream, and dam reservoirs can be a source of waterborne disease. In a country such as India, where many people consider the rivers holy, dams are seen as interfering with the spiritual force of the water.

Narmada River Project

Plans to build dams in India's Narmada River basin have met with both intense excitement and violent disapproval. Supporting the project are those who point out that the dams will generate large amounts of electricity and irrigate millions of acres of cropland. They will also control flooding during the monsoon months.

Opposing the dams are the thousands of tribal people who will be forced out of their



Geographic Themes

Human/Environment Interaction: Endangered Species

South Asian animals, such as this tiger, are facing extinction as humans have cleared forested areas for development. *What steps are being taken to protect South Asia's wildlife?*

villages when flooding begins, and environmental activists who point out that dams ruin soils and create health problems. This controversy is an example of the complex interdependence between the human residents of South Asia and their environment.

SECTION 2 ASSESSMENT

Checking for Understanding

- 1. Define** deforestation, trekker, mangrove tree, Chipko.
- 2. Locating Places** Where can the Bengal tiger still be found?
- 3. Human/Environment Interaction** How do tourists affect the Himalayas?
- 4. Region** How do forests prevent loss of topsoil?

Critical Thinking

- 5. Drawing Conclusions** Why is it important for South Asians to preserve their forests?



TECHNOLOGY SKILLS

Using a Spreadsheet

People use electronic spreadsheets to manage numbers quickly and easily. Formulas may be used to add, subtract, multiply, and divide the numbers in the spreadsheet. If you make a change to one number, the totals are recalculated automatically for you. The computer will even change your spreadsheet numbers into a graph.

REVIEWING THE SKILL

A spreadsheet is an electronic worksheet. All spreadsheets follow a basic design of rows and columns. Columns, arranged vertically, are assigned letters—A, B, C, AA, BB, CC, and so on. Rows, arranged horizontally, are assigned numbers—1, 2, 3, and so on. The point where a column and row intersect is called a *cell*. The cell's position on the spreadsheet is labeled according to its corresponding column and row—the cell at the intersection of Column A and Row 1 is labeled A1, for example.


To reach a specific cell, use the cursor keys or a mouse. The computer will indicate which cell you are in by placing a boldface border around it or by highlighting it. The contents of the cell will also appear on a line at the top or on the bottom of the screen, called a *status line* or *formula line*.

Spreadsheets use *standard formulas* to calculate numbers that are in various cells. You create a simple mathematical equation that uses these standard formulas. To create a formula, you begin by selecting the cell where you want to display the

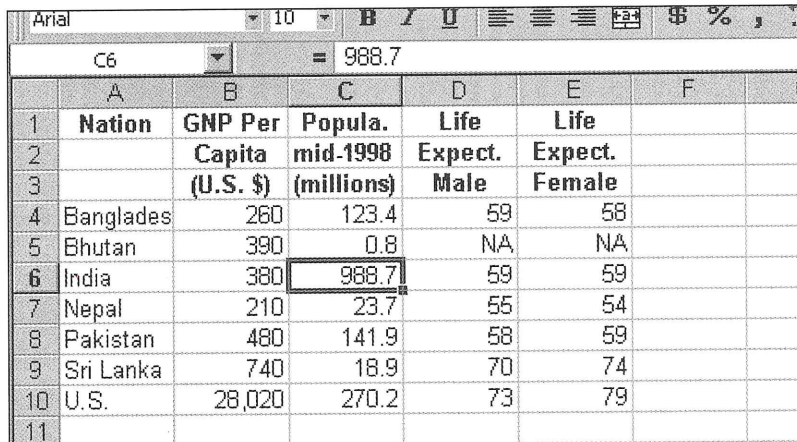
formula results. Type an equal sign (=) and then build the formula, step by step.

For example, the formula $=B2+B3$ adds the values in cells B2 and B3. The formula $=A5/C2$ divides the value in cell C2 into the value in cell A5. An asterisk (*) signifies multiplication: $=(B2*C3)+D1$ means you want to multiply the value in cell B2 times C3, then add the value in cell D1. Because adding is the most common function of spreadsheets, most have an *AutoSum* key (Σ) that you can click on to place a sum in a highlighted cell.

PRACTICING THE SKILL

 To practice using a spreadsheet follow the steps below.

1. Open a new spreadsheet file.
2. Type the information in columns A through E as shown below.
3. Delete the information about the United States in row 10.
4. Type the following information in cell B10 to calculate total GNP per capita for the South Asian countries listed: $=B4+B5+B6+B7+B8+B9$. Check the formula in the status line before you press Enter.
5. In cell C10, use the *AutoSum* function (Σ) to calculate total population in millions for South Asia.
6. Print your results and share them with the class.



	A	B	C	D	E	F	G
1	Nation	GNP Per	Popula.	Life	Life		
2		Capita	mid-1998	Expect.	Expect.		
3		(U.S. \$)	(millions)	Male	Female		
4	Banglades	260	123.4	59	58		
5	Bhutan	390	0.8	NA	NA		
6	India	380	988.7	59	59		
7	Nepal	210	23.7	55	54		
8	Pakistan	480	141.9	58	59		
9	Sri Lanka	740	18.9	70	74		
10	U.S.	28,020	270.2	73	79		
11							

For additional practice in using a spreadsheet, see **Practicing Skills on page 524 of the Chapter 25 Assessment.**

1

SECTION

Living in South Asia

KEY TERMS

subsistence farming (p. 511)
jute (p. 512)
cash crop (p. 512)
green revolution (p. 513)

SUMMARY

- Agricultural advances are helping South Asia produce enough food for its expanding population.
- Main food crops include rice and wheat; main cash crops include jute and tea.
- Mining, fishing, and tourism are significant sources of income in the region.
- Industry—both light and heavy—is expanding in the region.



Tea plantation in Sri Lanka

2

SECTION

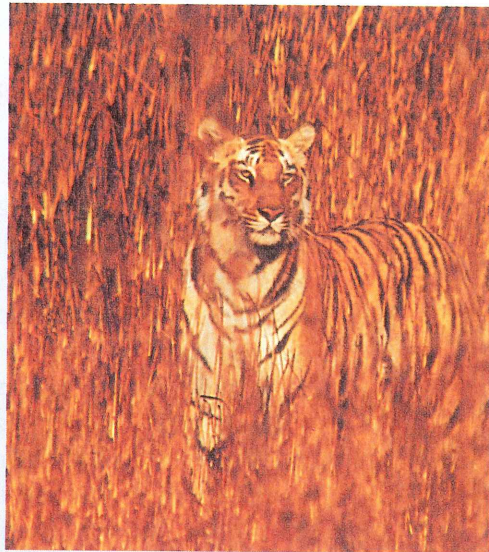
People and Their Environment

KEY TERMS

deforestation (p. 518)
trekker (p. 518)
mangrove tree (p. 518)
Chipko (p. 520)

SUMMARY

- Much of South Asia has been deforested by human beings seeking wood for fuel and shelter, and land for farming and grazing.
- Deforestation can lead to flooding, landslides, loss of valuable topsoil, loss of habitat for animals, and climate changes.
- Governments and individuals throughout South Asia are attempting to conserve and replant forests.
- Despite the loss of many animals due to overhunting and habitat loss, South Asians are working to maintain existing species in wildlife preserves and elsewhere.
- Water usage is controversial in South Asia for many reasons; dams are needed to control flooding and provide water for irrigation, but they also cause environmental problems.



Tiger reserve in India



Reviewing Key Terms

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

- jute (p. 512)
- cash crop (p. 512)
- green revolution (p. 513)
- deforestation (p. 518)
- trekker (p. 518)
- mangrove trees (p. 518)
- Chipko (p. 520)

SECTION 1

1. A fiber used to make rope and cloth is _____.
2. Something grown to make money rather than to use for one's own survival is known as a _____.
3. The development and use of new, high-yield grains is called the _____.

SECTION 2

4. A mountain hiker is known as a _____.
5. _____ grow in the swamplands of Bangladesh.
6. A movement to save the forests of northern India is called _____.
7. The loss of all the trees in an area is called _____.

Reviewing Facts

SECTION 1

8. How do the majority of people in South Asia make their living?
9. What is the major food crop of South Asia?
10. What is India's most important industry?

SECTION 2

11. Which South Asian country still has forests covering 70 percent of the land?
12. Why is the Bengal tiger endangered?
13. What religious reason do people in India have for opposing dam construction?

Critical Thinking

14. **Making Generalizations** What effect is modern technology having on the economy of South Asia?
15. **Expressing Problems** What are several ways in which expanding human populations are having negative effects on the environment of South Asia?



Geographic Themes

16. **Place** Where does most mining take place in India? What are the key minerals?
17. **Movement** How has Bhutan's isolation helped to preserve its environment?

Using the Unit Atlas

Refer to the physical geography section of the Unit Atlas on page 472–473.

18. What mineral is mined in India?
19. What is Pakistan's greatest natural resource?
20. What is South Asia's highest point?



Practicing Skills

Using a Spreadsheet

In addition to managing numbers quickly and easily, a spreadsheet allows you to compare many numbers at a glance. Use the spreadsheet on page 522 to answer the following questions.

21. Which country in South Asia has the highest GNP per capita?
22. Which cell is highlighted? What information is found in the cell?
23. What country's life expectancies for both males and females most closely matches the United States?

Projects

Individual Activity

Choose a nation in South Asia and research one economic activity, such as the garment industry of India or the tourist business in Nepal. Write a brief report on the subject.

Cooperative Learning Activity

Working in a small group, organize a debate on one of the environmental issues in South Asia. Each group should hold its debate in front of the rest of the class. Afterward, the class as a whole should evaluate the issue and form judgments.

Writing About Geography

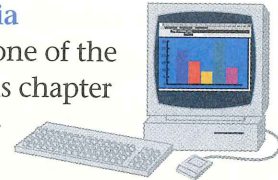
Cause and Effect Choose one aspect of human-environment interaction in South Asia.

Write an essay that shows how humans both cause changes in the environment and are also affected by those changes. You may use your journal and other sources to help you write your essay.

Technology Activity

Developing Multimedia

Presentations Select one of the animals discussed in this chapter and develop a multimedia presentation on the animal's habitat and endangerment. Try to incorporate photographs, drawings, music, and video into your presentation.

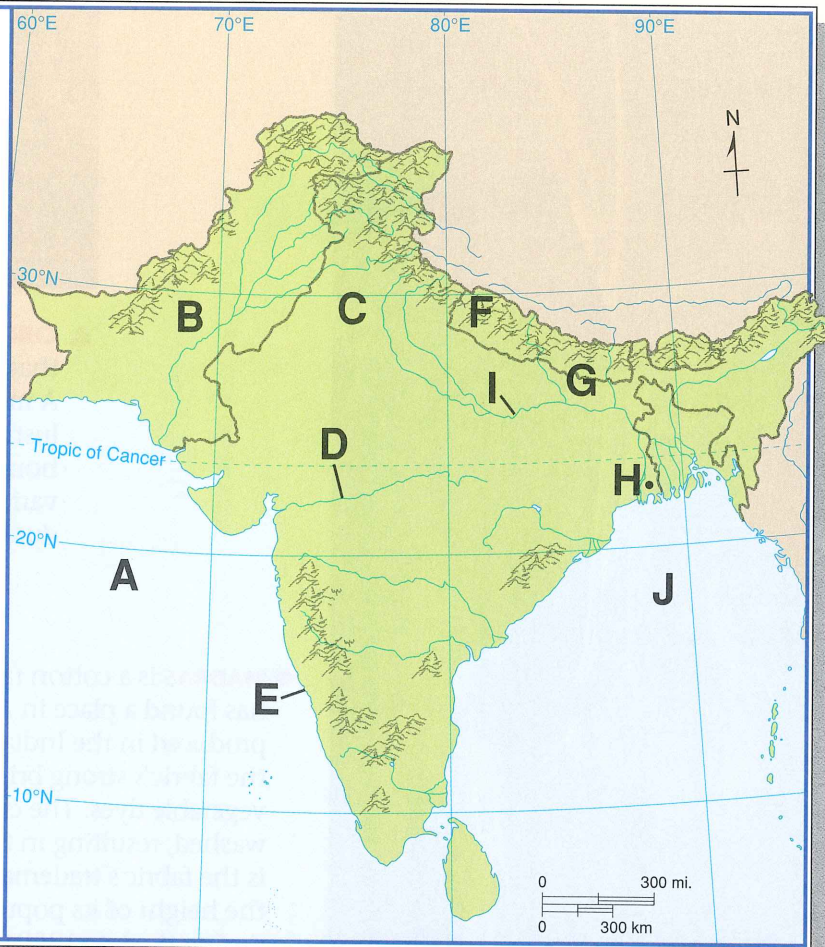


Locating Places

SOUTH ASIA: PHYSICAL GEOGRAPHY

Match the letters on the map with the places and physical features of South Asia. Write your answers on a separate sheet of paper.

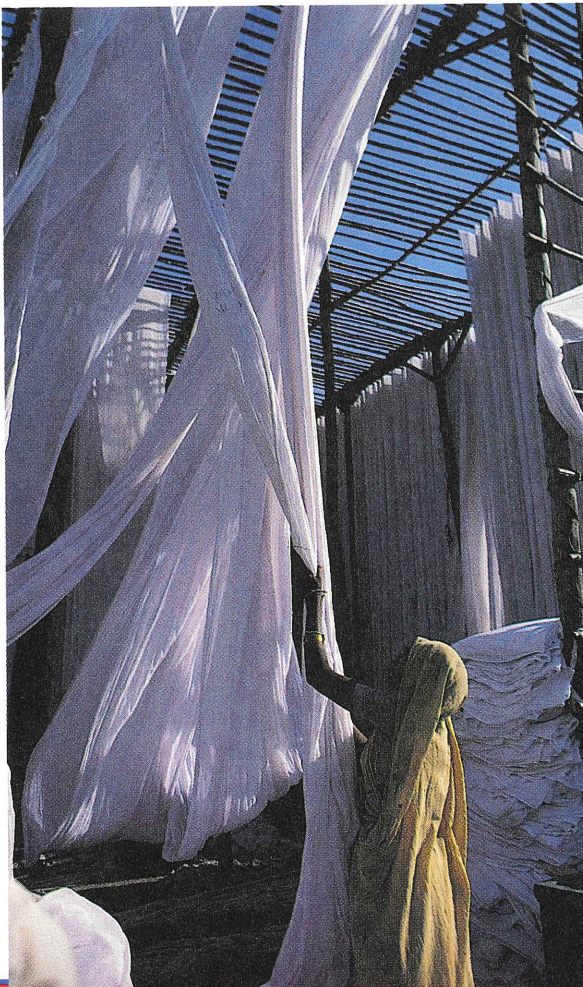
1. Calcutta
2. Arabian Sea
3. Kathmandu Valley
4. Narmada River
5. Indus Valley
6. Ganges River
7. Indo-Gangetic Plain
8. Malabar Coast
9. Bay of Bengal
10. Himalayas



South Asia and the United States

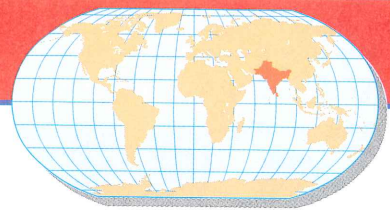
COTTONS, CASHMERE, AND TIE-DYE

South Asia's textile industry has an ancient past. Experts have dated some printed cottons of the region to 3000 B.C. The materials calico and chintz have been part of our heritage since colonial times. Cashmere, madras, and tie-dye appeared later in our fashion history, but have become popular and enduring favorites as well.



▲ **CHINTZ** is a cotton export from South Asia that quickly became an American favorite. A medium-weight cotton fabric with a soft, lustrous glaze, chintz has been used in home decorating since the 1700s. Its wide variety of colors and patterns, as well as its durability and easy care, keep it in demand.

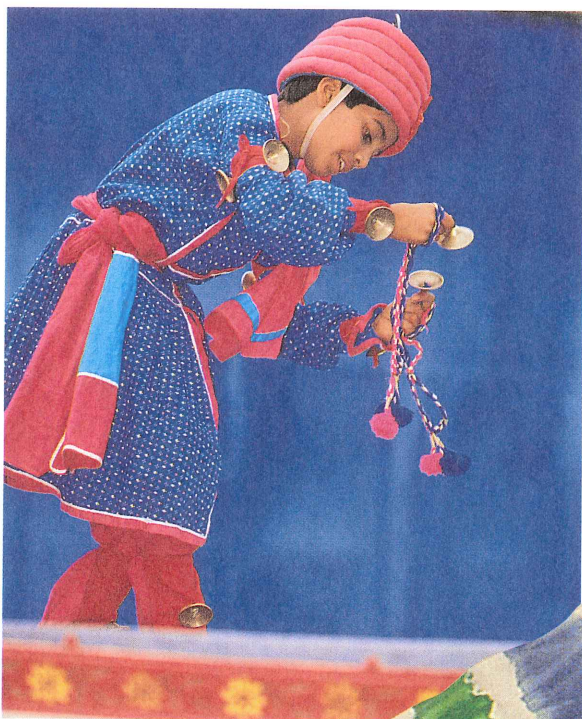
◀ **MADRAS** is a cotton fabric from South Asia that has found a place in American wardrobes. First produced in the Indian city of Chennai (Madras), the fabric's strong bright designs are colored with vegetable dyes. The colors "bleed," or run, when washed, resulting in the soft, subtle coloring that is the fabric's trademark. Madras fabric reached the height of its popularity in the United States during the late 1950s and early 1960s.



▼ **CALICO**, a lightweight cotton fabric, originated in and was named for the Indian city of Calcutta. It quickly became one of the most popular products imported to the United Kingdom by the British-owned East India Company. Hundreds of designs and colors were eventually available in Europe and North America as a result of the Industrial Revolution. Fragments of cotton calicos became the basic ingredient of an American art form developed by pioneer women—the patchwork quilt. Colorful calicos remain a contemporary textile for shirts, blouses, and casual summer clothing.



▲ **CASHMERE**, a lightweight luxury fabric, is made from the fine, soft hair fibers that grow as the undercoat on goats in the Vale of Kashmir in northern South Asia. An especially supple and elegant textile, cashmere tops the list of the best dressed for coats and sweaters.



TIE-DYE ►

refers to a special technique developed in central India to decorate fabrics. A length of fabric, usually cotton or silk, is twisted, and sections are tied with thread or rope before dyeing. Tie-dyeing most often produces spectacular circular or zigzag designs of brilliant hue. Fashion seekers prize tie-dye for its unique one-of-a-kind look.



Checking for Understanding

1. What South Asian textiles are part of American fashion?
2. **Movement** How did calico and chintz first get to the United States?

