



Human–Environment Interaction

A HUMAN PERSPECTIVE High in the Andes Mountains, in what is present-day Peru, the ancient Inca needed fields in which to grow crops. By the 1200s, in the highlands around their capital of Cuzco and elsewhere, the Inca carved terraces out of the steep sides of the Andes Mountains. They built irrigation channels to bring water to the terraces. Because of their activity, they were able to grow crops for thousands of people on the slopes of previously barren hillsides. In this way, the Inca altered their environment to meet their needs.

Agriculture Reshapes the Environment

Native peoples were the first in the Western Hemisphere to change their environment to grow food. They burned the forest to clear land for planting and diverted streams to irrigate crops. They built raised fields in swampy areas and carved terraces out of hillsides.

SLASH-AND-BURN To clear fields, native peoples used the **slash-and-burn** technique—they cut trees, brush, and grasses and burned the debris to clear the field. This method was particularly effective in humid and tropical areas.

Today, farmers practice the same method as they move into the Amazon River basin in Brazil and clear land for farming in the rain forest. But the non-landowning poor who are clearing and then settling the

Main Ideas

- The people of Latin America have altered the land through agriculture and urbanization.
- Tourism is having a growing impact on the environment of Latin America.

Places & Terms

slash-and-burn

terraced farming

push factors

pull factors

infrastructure

CONNECT TO THE ISSUES

INCOME GAP The income gap can be seen in the landless poor, the cities, and the tourist industry.

Slash-and-Burn Farming



1 Farmers cut trees, brush, and grasses to clear a field.



2 They then burn the debris and use the ashes to fertilize the soil.



3 Farmers plant crops for a year or two, which exhausts the soil.

CONNECT TO THE ISSUES

RESOURCES

A What is the impact of slash-and-burn on the rain forest?

land sometimes use destructive farming practices. After a few years, they find that the soil is exhausted—all the nutrients have been drained from the land. Then they move on and clear a new patch to farm. This is one of the reasons for the steady shrinking of the rain forests. (For more about the rain forest, see Chapter 11, Section 1, page 245.) **A**

TERRACED FARMING **Terraced farming** is an ancient technique for growing crops on hillsides or mountain slopes. It is an especially important technique in the mountainous areas of the region. Farmers and workers cut step-like horizontal fields into hillsides and slopes, which allow steep land to be cultivated for crops. The technique reduces soil erosion. As you read earlier, the Inca practiced terraced farming hundreds of years ago in Peru. The Aztecs of Mexico also used terraced farming.

Urbanization: The Move to the Cities

Throughout Latin America, people are moving from rural areas into the cities. They leave farms and villages in search of jobs and a better life. Cities have grown at such a rapid pace in Latin America that today the region is as urban as Europe or North America.

FROM COUNTRY TO CITY Argentina, Chile, and Uruguay are the most highly urbanized countries in South America. In these countries, more than 85 percent of the people live in cities. In Brazil, too, most people live in cities and towns.

People move to the cities in the hope of improving their lives. Many people in rural areas struggle to make a living and feed their families by subsistence farming. With a great deal of effort, they grow barely enough food to keep themselves and their families alive.

Both push and pull factors are at work in moving peasants and farmers off the land and drawing them to the cities. **Push factors** are factors that “push” people to leave rural areas. They include poor medical care, poor education, low-paying jobs, and ownership of the land by a few rich people. **Pull factors** are factors that “pull” people toward cities. They include higher-paying jobs, better schools, and better medical care. **B**

CONNECT TO THE ISSUES

INCOME GAP

B How might push and pull factors affect the gap between rich and poor?

RAPIDLY GROWING CITIES Six cities in South America rank among the region’s largest in population. These include São Paulo and Rio de Janeiro in Brazil, Buenos Aires in Argentina, Lima in Peru, Bogotá in Colombia, and Santiago in Chile. But the most populous city in all of Latin America is Mexico City. Estimates of its population vary from approximately 18 to 20 million people for the city alone to about 30 million for the entire greater metropolitan area.

Similar problems afflict cities throughout the region. Slums spread over larger and larger urban areas. Often unemployment and crime increase. In addition to social problems, there are many environmental problems. These include high levels of air

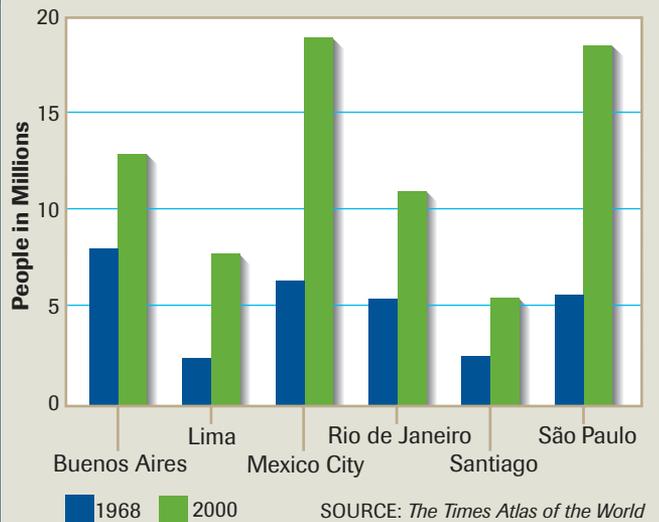


4 Fields often remain barren or are reclaimed by brush, grass, trees, and scrub.



PLACE Pedestrians crowd a street during a festival in Buenos Aires, Argentina.

Growth of Cities, 1968–2000



SKILLBUILDER: Interpreting Graphs

- 1 MAKING COMPARISONS** Which city had the largest population in 1968? In 2000?
- 2 MAKING COMPARISONS** Which two cities showed the biggest increase in population between 1968 and 2000?

pollution from cars and factories. Some cities have shortages of drinkable water as local supplies are used up and underwater supplies are drained.

To make matters worse, local governments cannot afford facilities to handle the population increase. This **infrastructure** includes such things as sewers, transportation, electricity, and housing.

Tourism: Positive and Negative Impacts

Tourism is a growth industry throughout Latin America. It is especially important in Mexico and the Caribbean. But despite the money it brings in to the economies of the region, tourism is a mixed blessing.

ADVANTAGES OF TOURISM Every year millions of tourists visit the resorts of Latin America, spending money and helping to create jobs. New hotels, restaurants, boutiques, and other businesses have sprung up on the islands of the Caribbean and in Mexico to serve the tourist trade. Luxurious cruise ships anchor in the ports of the region. They carry travelers who spend money on souvenirs and trips around the islands. Lavish restaurants serve expensive meals to these tourists. Staffing those ships, hotels, and restaurants are local people who profit from the visitors in their midst.

Resorts offer many activities that provide jobs for local residents. For example, local guides conduct tours of the natural wonders and beautiful scenery. Local companies may offer guided rafting trips down rivers. Sailing and snorkeling expeditions into the waters of the Caribbean and Pacific reveal exotic marine life. All of these activities bring money into the region and employ local people.

In this way, tourism can play a part in reducing the income gap between rich and poor. Jobs in hotels, restaurants, and resorts raise incomes and give the local people a stake in their society.

DISADVANTAGES OF TOURISM

Despite the income and jobs that tourism brings to various places in Latin America, it causes problems as well. As resorts are built in previously unspoiled settings, congestion occurs and pollution increases.

The tourism industry often puts a great strain on the local communities where it builds its resorts. Further, there is an obvious gap between rich tourists and less well-off local residents. This has produced resentment and hostility in places such as Jamaica in the Caribbean and Rio de Janeiro in Brazil.

More important, local governments can run up large public debts by borrowing money to build tourist facilities. Airports and harbors must be constructed. Hotels and resorts must be built. Sewage systems and shopping areas must be expanded.

Often the owners of these hotels and airlines do not live in the tourist country. Typically, they send their profits back home. Further, these absentee owners often make decisions that are not in the tourist country's best interest. The owners may be able to influence local elections and business decisions. 

In the next chapter, you will read about the human geography of Latin America, including its history, culture, economics, and daily life.



HUMAN-ENVIRONMENT INTERACTION

A luxury cruise ship is docked in the beautiful harbor of Charlotte Amalie, St. Thomas in the Virgin Islands.

What might be the impact of tourists on the local economy?

LATIN AMERICA

CONNECT TO THE ISSUES

DEMOCRACY

 How might absentee ownership of tourist facilities undermine democracy in a tourist country?

SECTION 3 Assessment

1 Places & Terms

Identify and explain the significance of each in the region.

- slash-and-burn
- terraced farming
- push factors
- pull factors
- infrastructure

2 Taking Notes

HUMAN-ENVIRONMENT INTERACTION Review the notes you took for this section.



- What are the steps in slash-and-burn farming?
- What are some of the problems of cities in the region?

3 Main Ideas

- How have humans changed the environment in Latin America to make it more suitable for agriculture?
- What factors have drawn people from the countryside into the cities of the region?
- What are some of the advantages of tourism to the Caribbean?

4 Geographic Thinking

Making Inferences How might the cities of Latin America deal with the increasing demands placed on them by their expanding populations? **Think about:**

- water, sewage, and electricity
- transportation and housing

 **See Skillbuilder Handbook, page R4.**



SEEING PATTERNS Pair with a partner and create a **travel poster** about a place in the region that you would like to visit. Show various activities and sports available at the place you choose.