Chapter 9

Physical Geography of Latin America: From the Andes to the Amazon

From rain forests and mountain ranges, to deserts and savannas, Latin America is rich with varied beauty, resources, and plant and animal life.

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Section 1: Landforms and Resources Section 2: Climate and Vegetation

Section 3: Human-Environment Interaction

SLIDE 3

Section 1: Landforms and Resources

- Latin America's landforms include highlands, lowlands, mountains, and plains.
- The Andes Mountains and the Amazon River are the region's most remarkable physical features.

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Section 1: Landforms and Resources

Mountains and Highlands

An Enormous Span

- Latin America spans 7,000 miles
 - from U.S.-Mexico border to Tierra del Fuego
 - part of North America, all of Central and South America, Caribbean

The Andes Mountains

- Andes Mountains—South American range along western side of continent
 - part of chain that includes Rockies in U.S., Sierra Madre in Mexico
 - barrier to interior forced settlement along eastern, northern coasts
 - once home to Inca civilization in Peru; has many active volcanoes

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Continued Mountains and Highlands

Highlands

Highlands—mountainous or hilly areas of country

- Guiana Highlands are in northeast section of South America
- highlands cover parts of Venezuela, Guyana, Suriname, French Guiana
- Brazilian Highlands are located along east coast of Brazil

Plains for Grain and Livestock

Llanos of Colombia and Venezuela

- Llanos—grassy, treeless areas used for livestock grazing, farming
 similar to Great Plains of U.S. or pampas of Argentina
- Plains of Amazon River Basin
- Cerrado—flat savannas with moderate rainfall, good for farming
 - found in interior of Brazil, mostly undeveloped

Pampas of Argentina and Uruguay

- Pampas—areas of grassland, rich soil, used for cattle and wheat
 - home to gaucho culture centered on horsemen

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The Amazon and Other Rivers

Central American Rivers

- Central America, Caribbean: bordered by water, fewer river systems
 - North America's Rio Grande forms border between U.S. and Mexico
 - less dependent on rivers for transportation than South America

Orinoco River

- Orinoco River—1,500 miles through northern South America to Atlantic
 - flows partly along Venezuela-Colombia border, drains interior lands
 - home to continent's few remaining native peoples

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Continued The Amazon and Other Rivers

Amazon River

- Amazon River—flows 4,000 miles, from west to east, to Atlantic
 - branches start in Andes
 - fed by over 1,000 tributaries
 - carries more water than next seven largest rivers combined

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Continued The Amazon and Other Rivers

Paraná River

- Paraná River—3,000 miles, starts in Brazilian highlands
 - flows south and west through Paraguay, Argentina, turns eastward
 - between Argentina and Uruguay becomes estuary Rio de la Plata
- Estuary—wide lower course of river where its current is met by tides

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Major Islands of the Caribbean

Columbus and the West Indies

- West Indies: Bahamas, Greater Antilles, Lesser Antilles
 - site of Columbus' landing; later Spanish base for mainland conquest

Bahamas

- Hundreds of islands off southern Florida, north of Cuba
 - Nassau is largest city and capital

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Continued Major Islands of the Caribbean

The Greater Antilles

- Larger islands in Caribbean: Cuba, Jamaica, Hispaniola, Puerto Rico
 - Hispaniola divided between Haiti, Dominican Republic

The Lesser Antilles

- Smaller islands southeast of Puerto Rico
 - Windward Islands face winds that blow across them
 - Leeward Islands are sheltered from prevailing northeasterlies

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Resources of Latin America

A Treasure House

Region is rich with minerals, energy resources, agriculture, forests

Mineral Resources

- Gold, silver, iron, copper, bauxite (aluminum ore), lead, nickel
 - also precious gems, tin, titanium, tungsten
- South America is a world leader in mining, exporting raw materials
 - Example: Jamaica used to be plantation economy (bananas, sugar)
 - began bauxite mining to reduce dependency on agriculture, tourism

Continued Resources of Latin America

Energy Resources

- Oil, coal, natural gas, uranium, hydroelectric power are plentiful
 - Brazil rich in hydroelectric power (from rivers, waterfalls), oil, gas
 - Trinidad has natural gas; major exporter of methanol, ammonia
 - Venezuela, Mexico have major oil deposits, export oil to world

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Section 2: Climate and Vegetation

- Latin America has a variety of climates, from the cold peaks of the Andes to the Amazon rain forest.
- The vegetation of Latin America ranges from grasslands to the largest rainforest in the world.

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Section 2: Climate and Vegetation

A Varied Climate and Vegetation

Reasons for the Variety

- Latin America's broad range of climate, vegetation due to 3 factors:
 - it spans great distances on either side of the equator
 - it has big changes in elevation due to the mountains
 - its climate's affected by both warm Atlantic, cold Pacific currents

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Tropical Climate Zones

Tropical Wet

- Rain forests—dense forests with different species of trees
 - hot and rainy all year
 - unique ecosystem—community of plants, animals living in balance
- Largest is Brazil's Amazon rain forest with 2 million square miles
 - 2,500 types of Amazon trees
 - animals include anaconda, jaguar, piranha

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Continued Tropical Climate Zones

Tropical Wet and Dry

- Savannas found in Brazil, Colombia, Argentina
 - hot with seasonal rain

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Dry Climate Zones

Semiarid

- Dry climate with some rain
 - home to vast, grass-covered plains or desert shrubs
 - found in Mexico, Brazil, Uruguay, Argentina

Desert

- Found in north Mexico, coast of Peru, north Chile's Atacama Desert
 - parts of Argentina's southern Patagonia are desert
- Vegetation is mostly shrubs growing in gravel or sand

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Mid-Latitude Climate Zones

Humid Subtropical

- Rainy winters and hot, humid summers; varied vegetation
 - parts of Paraguay, Uruguay, south Brazil and Bolivia, north Argentina

Mediterranean

- Hot, dry summers and cool, moist winters
 - vegetation is chaparral (drought-resistant trees)
 - -this is the climate of part of Chile along the west coast
 - -climate similar to that of California

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Continued Mid-Latitude Climate Zones

Marine West Coast

- Cool, rainy winters and mild, rainy summers; forest vegetation
 - occurs in southern Chile and Argentina
 - similar to the climate of Oregon or Washington

Highlands

- Varies from moderate to cold due to elevation, wind, sun, landscape
 - found in mountains of Mexico and South America

Section 3: Human-Environment Interaction

- 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.

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Section 3: Human-Environment Interaction

Agriculture Reshapes the Environment

Slash-and-Burn

- Slash-and-burn—cut trees, brush, grass; burn debris to clear fields
 - used by native peoples and today by poor farmers in Amazon basin
 - they move to new area when soil is exhausted
 - one reason for shrinking rain forests

Terraced Farming

- Terraced farming—step-like farm fields cut into mountains, hillsides
 - lets crops grow on steep land, cuts down on soil erosion
 - used by Incas in Peru, Aztecs in Mexico

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Urbanization: The Move to the Cities

From Country to City

- Highly urbanized countries: Argentina, Chile, Uruguay, Brazil
- Subsistence farming barely supports people and their families
 - they move to cities to improve their lives
- Push factors—factors that "push" people to leave rural areas
 - poor medical care, poor education, bad jobs, only rich few own land
- Pull factors—factors that "pull" people to cities
 - better jobs, schools, medical care

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Continued Urbanization: The Move to the Cities

Rapidly Growing Cities

- Six of Latin America's most populous cities are in South America
 - Sao Paulo and Rio de Janeiro, Brazil; Lima, Peru

- Buenos Aires, Argentina; Bogota, Colombia; Santiago, Chile
- Most populous city in Latin America is Mexico City
 - 18 to 20 million in city, 30 million in greater metropolitan area

Continued Urbanization: The Move to the Cities

Rapidly Growing Cities

- Similar problems affect cities throughout region
 - growing slums
 - increasing unemployment and crime
 - environmental problems include air pollution, drinking water shortages
- Governments can't afford facilities to support population increases
 - failing infrastructure—sewers, transportation, electricity, housing

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Tourism: Positive and Negative Impacts

Advantages of Tourism

- Tourists spend money on souvenirs, trips, restaurants
 - new hotels, businesses have been built in Mexico and the Caribbean
 - regional ports serve cruise ships
 - residents work in restaurants and resorts, guide tours and activities
- Helps reduce income gap between rich and poor

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Continued Tourism: Positive and Negative Impacts

Disadvantages of Tourism

- Resorts built in unspoiled settings create congestion, pollution
- Gap between rich tourists and poor residents creates resentment
- Local governments run up debt to build tourist facilities
 - airports, harbors, hotels, resorts, sewage systems, shopping malls
- Facility owners often live out of country, so profits leave the area
 - such owners make decisions that may not be in area's best interest