5B SOUTH AMERICAN REGIONS

FIGURE 5B-1

REGIONS

The Caribbean North

The Andean West

The Southern Cone

Brazil

IN THIS CHAPTER

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- Resurgence of indigenous peoples
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On the basis of physiographic, cultural, and political criteria, South America can be divided into four rather clearly defined regions (Fig. 5B-1):

REGIONS OF THE REALM

1. ***The Caribbean North***, located almost entirely north of the equator, consists of five entities that display a combination of Caribbean and South American features: Colombia, Venezuela, and those that represent three historic colonial footholds by Britain (Guyana), the Netherlands (Suriname), and France (French Guiana).
2. ***The Andean West*** is formed by four republics that share a strong indigenous cultural heritage as well as powerful influences resulting from their Andean physiography: Ecuador, Peru, Bolivia, and, transitionally, Paraguay.
3. ***The Southern Cone***, for the most part located south of the Tropic of Capricorn (latitude 23½°S), includes three countries: Argentina, Chile, and Uruguay (all with strong European imprints and little remaining indigenous influence) plus aspects of Paraguay. The far northern part of this region that lies east of the Andes is occupied by the Gran Chaco, a sparsely populated, hot, semiarid, grassy lowland centered on western Paraguay.
4. ***Brazil*** occupies an enormous part of interior and eastern South America. In the Amazon Basin of the north, its own interior overlaps with the continent's "green heart"—often referred to the world's "lungs"—the largest tropical rainforest on Earth. As South America's giant, accounting for just about half the realm's territory as well as population, it is swiftly developing into the Western Hemisphere's second superpower. In Brazil the dominant Iberian influence is Portuguese, not Spanish, and here

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MAJOR CITIES OF THE REALM

City	Population* (in millions)
São Paulo, Brazil	26.4
Buenos Aires, Argentina	14.1
Rio de Janeiro, Brazil	12.3
Lima, Peru	9.6
Bogotá, Colombia	9.5
Santiago, Chile	6.3
Belo Horizonte, Brazil	5.8
Brasília, Brazil	4.1
Caracas, Venezuela	3.5
Guayaquil, Ecuador	2.4
Asunción, Paraguay	2.4
Manaus, Brazil	2.0
Santa Cruz, Bolivia	1.9
Quito, Ecuador	1.7
Montevideo, Uruguay	1.7

*Based on 2014 estimates.

Africans, not indigenous peoples, form a significant component of demography and culture. And Brazil is in some ways a bridge between the Americas and Africa, which is why we discuss it last in this chapter, just before turning to Subsaharan Africa in Chapter 6A.

Each of these four regions shares some important commonalities in terms of physical environment, ethnic origins, cultural milieu, and international outlook. But there also are important differences, especially involving economic performance, democratic functioning, and social stability.

THE CARIBBEAN NORTH

The countries of South America's northern tier have something in common besides their coastal location: each has a coastal tropical-plantation zone based on the Caribbean colonial model. Especially in the three Guianas, early European plantation development encompassed the forced immigration of African laborers and eventually the absorption of this element into the population matrix. Far fewer Africans were brought to South America's northern shores than to Brazil's Atlantic coasts, and tens of thousands of South Asians also arrived as contract laborers and stayed as settlers, so the overall situation here is not comparable to Brazil's. Moreover, it is also distinctly different from that of the rest of South America.

To this day, Guyana, Suriname, and French Guiana still display the coastal orientation and plantation dependency with which the colonial period endowed them, although the logging of their tropical forests is penetrating and ravaging the interior. In Colombia and Venezuela, however, farming, ranching, and mining drew the population inland, overtaking the coastal-plantation economy and creating diversified economies (Fig. 5B-2).

Colombia

Imagine a country more than twice the size of France but with only three-quarters of the French population, with an environmental geography so varied that it can produce crops ranging from the temperate to the tropical, and possessing world-class oil reserves as well as many other natural resources. This country is situated in the crucial northwestern corner of South America, with 3200 kilometers (2000 mi) of coastline on both Atlantic (Caribbean) and Pacific waters, closer than any of its neighbors to the markets of the north and sharing a border with giant Brazil to the southeast. Its nation uses a single language and adheres to one dominant religion. Wouldn't such a country thrive?

The answer, unfortunately, is no. Colombia has a history of strife and violence, its politics unstable, its economy damaged, and its overall future clouded. Colombia's cultural uniformity did not produce social cohesion. Its spectacular, scenic physical geography also divides its population of 48.6 million into clusters not sufficiently interconnected to foster integration; even today, this enormous country has less than 1600 kilometers (1000 mi) of four-lane highways. Its proximity to U.S. markets is a curse as well as a blessing: at the root of Colombia's latest surge of internal conflict lies its role as one of the world's leading producers of illicit drugs.

History of Conflict

Colombia's recent disorder is not its first. In the past, civil wars between conservatives and liberals (based on Roman Catholic religious issues) developed into conflicts pitting rich against poor, elites against workers. In Colombia today, people still refer to the last of these wars as *La Violencia*, a decade of strife beginning in 1948 during which as many as 200,000 people died. In the 1970s, disaster struck again. In remote parts of the country, groups opposed to the political power structure began a campaign of terrorism, damaging the developing infrastructure and destroying confidence in the future. Simultaneously, the U.S. market for narcotics expanded rapidly, and many Colombians got involved in the drug trade. Powerful and wealthy drug cartels formed in major cities such as Medellín and Cali, with networks that influenced all facets of Colombian life from the peasantry to the politicians. In all, over the past half-century, it is estimated that one million people died violently as the fabric of Colombian society unraveled.

People and Resources

As Figure 5B-2 reveals, Colombia's physiography is mountainous in its Andean west and north and comparatively flat in its interior. Colombia's scattered population (see Fig. 5A-3) tends to cluster in the west and north, where the resources and the agricultural opportunities (including the coffee for which Colombia is famous) lie.

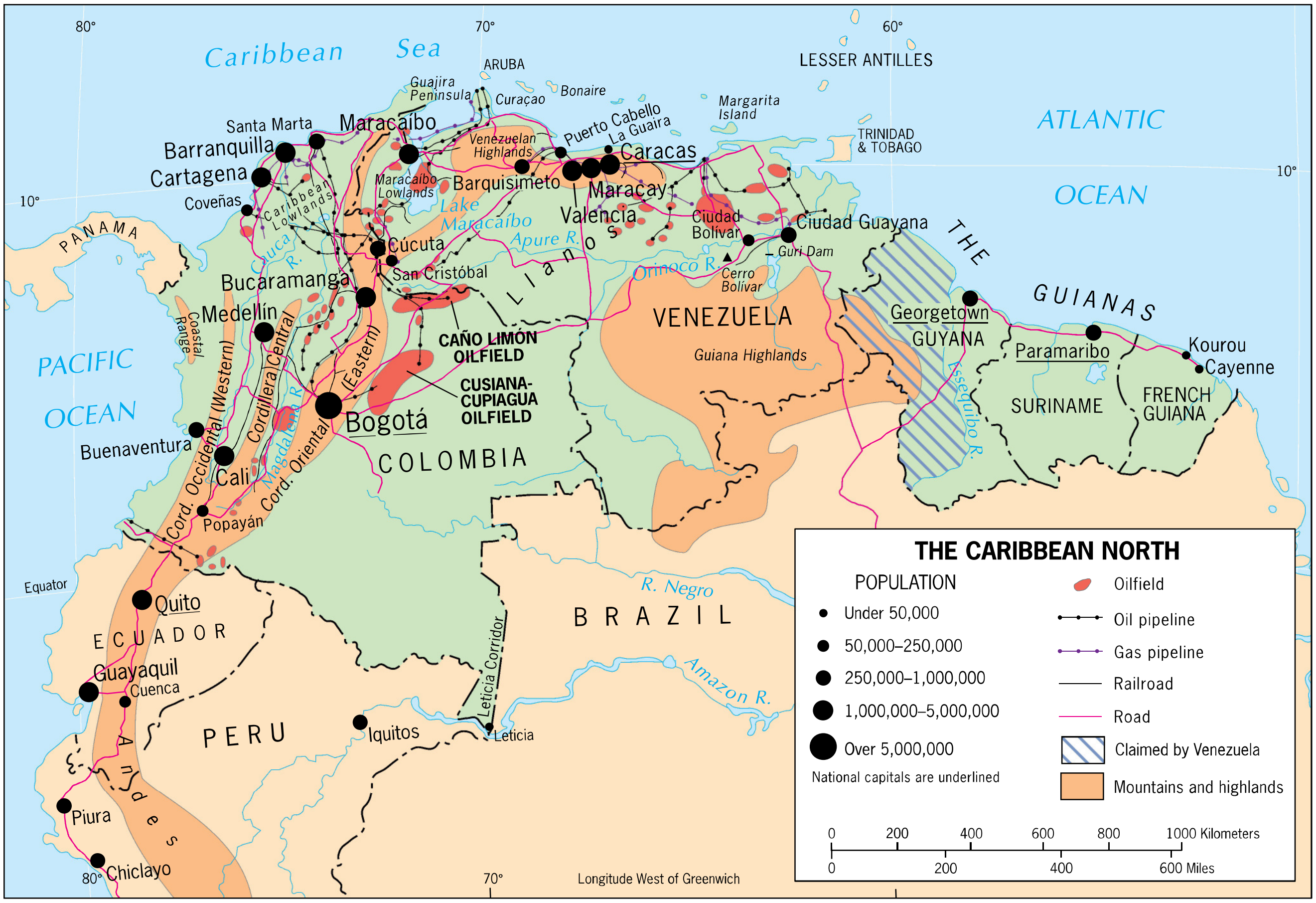

FIGURE 5B-2

Colombia's population clusters remain poorly interconnected. Several lie on the Caribbean coast, centered on Barranquilla, Cartagena, and Santa Marta, old colonial entry points. Others are anchored by major cities such as Medellín and Cali. What is especially interesting about Figure 5B-2 in this context is how little development has taken place on the country's lengthy Pacific coast, where the port city of Buenaventura, across the mountains from Cali, is the only place of any size. The map suggests that Colombia's Pacific Rim era, already in full force in Chile, Peru, and Ecuador, has yet to arrive.

The map also shows that Colombia and neighboring Venezuela share the oil and gas reserves in and around the "Lake" Maracaibo area ("Lake" because this is really a gulf with a narrow opening to the sea), but Venezuela has the bigger portion. Recent discoveries, however, have boosted Colombia's production along the base of the easternmost Andean cordillera, and our map shows a growing system of pipelines from the interior to the coast. Meanwhile, the vast and remote southeastern interior proved fertile ground for that other big Colombian money-maker—drugs.

Cocaine's Curse

The rise of the narcotics industry, fueled by outside (especially U.S. but also Brazilian and European) demand and coupled with its legacy of violence, crippled the state for decades and threatened its very survival. Drug cartels based in the cities controlled vast networks of producers and exporters; they infiltrated the political system, corrupted the army and police, and waged wars with each other that cost tens of thousands of lives and destroyed much of Colombia's social order. The drug cartels also organized their own armed forces to combat attempts by the Colombian government to control the illegal narcotics economy. Meanwhile, the owners of large haciendas in the countryside hired private security guards to protect their properties, banding together to expand these units into what quickly became, in effect, private armies. Colombia was in chaos as narco-terrorists committed appalling acts of violence in the cities, rebel forces and drug-financed armies of the political "left" fought against paramilitaries of the political "right" in the countryside, and Colombia's legitimate economy, from coffee-growing to tourism, suffered grievously. To further weaken the national government, the rebels even took to bombing oil pipelines.

Threats of the Insurgent State

What happened in Colombia beginning in the 1970s and then escalating during the subsequent four decades was not unique in the world—states have succumbed to chaos in the past—but this was an especially clear-cut case of a process long studied and modeled by political geographers.

FIGURE 5B-3

By the turn of this century, certain parts of Colombia were beyond the control of its government and armed forces. There, insurgents of various stripes created their own domains, successfully resisting interference and demanding to be left alone to pursue their goals, illegitimate though they might be. Leaders of some of these insurgent domains even sent emissaries to Bogotá, the capital, to negotiate their terms for "independence."

We use the concept of an **insurgent state [1]** to indicate the effective control of part of the state's territory by rebels, complete with boundaries, a core area as well as a capital, a local government, and schools and other social services that substitute for those the formal state may have previously provided. Colombia during the 1990s and early 2000s contained several entities that were taking on the properties of insurgent states, and one of these, the red-striped zone shown in Figure 5B-3, even acquired a name—"Farclandia"—after the initials of the Revolutionary Armed Forces of Colombia (FARC), one of the most brutal and by far the most powerful among Colombia's insurgent groups. At the end of 1999, FARC had the Colombian government on the ropes, forcing it to demilitarize its area south of Bogotá (about the size of Switzerland) and announcing plans for a second insurgent state centered on the remote southeastern town of Mitú. It appeared to be just a matter of time before the national government in Bogotá would lose control, the status quo would turn into disintegration, and Colombia would devolve into a **failed state [2]** (a country whose institutions have collapsed and in which anarchy prevails).

For the past decade, Colombia has mounted a twin campaign to defeat the rebels militarily and to persuade them through legal means to give up their arms. The government did succeed in transforming Colombia from a nearly failed state to a more stable, safer, and prosperous country. Securing assistance from the United States, it was able to increase the pressure on armed rebels as well as coca growers, invaded "Farclandia," and scored a number of noteworthy successes in killing and arresting leaders as well as freeing hostages held by the rebels. Colombia's nascent insurgent states weakened, but rebel troops still control important areas and, as along the Venezuelan border, they have in places been able to expand their presence.

If rebel groups like FARC initially pursued a purely political or ideological agenda, their widespread guerrilla activities soon brought them into contact with the cocaine cartels, which had their own reasons for wanting to exercise territorial control. In effect, this led to close, if murky, ties between the cartels and the rebel armies: the insurgents had found themselves a source of funding while the cartels linked up with a convenient source of military support against government forces in times of need.

The Colombia-Venezuela border zone has since 2010 emerged as a key transit stronghold for cocaine shipments to the United States (Fig. 5B-3). As the Colombian government stepped up the war on the cartels with U.S. help and made it harder to smuggle cocaine out of Colombia, the Venezuelan route became an increasingly useful option. First, the Colombian government has minimal control in the border provinces, especially pivotal Arauca. Second, Venezuela's Chávez regime had refused to permit U.S. troops to expand the drug war onto that country's soil. And third, the flat savanna of western Venezuela enables easy takeoffs and landings for the small aircraft that ferry the cocaine northwestward towards Mexico (see Chapter 5A).

A New Economic Future?

The government matched its domestic counteroffensive against the rebels with an international campaign to help revive the economy, promoting market-oriented, business-friendly policies. Under the political circumstances, it is remarkable that economic growth before the global recession began in 2008 was as high as 8 percent annually, led by the revenues from energy, metals, and agricultural products; the comparative lull in violence boosted the exporting of coffee and cut flowers (Colombia remains the leading U.S. importer) as well as a rise in tourism.

But Colombia remains a troubled nation and not all of the problems are of its own making. At least 70 percent of the exported cocaine winds up in the United States; almost all of the remainder goes to Brazil and/or Europe. Colombians maintain that the cocaine keeps flowing mainly because Americans continue to buy so much of it—and thereby indirectly contribute to Colombia's ongoing domestic troubles.

And cocaine is not alone among the very difficult challenges Colombia continues to face. Economic development is hampered by extreme inequality that has only worsened over time, particularly in the countryside. In 1954, 3 percent of landowners controlled 55 percent of the land; in 2005, a half-century later, less than half of 1 percent of the landowners held a whopping 63 percent of all agricultural lands. If the government wants to restore belief in the political system among the rural poor (many of whom have turned to employment in the cocaine industry and/or have been engaged by the rebels), land reform is a vital necessity.

Venezuela

A long boundary separates Colombia from Venezuela, its neighbor to the northeast. Much of what is important in Venezuela is concentrated in the northern and western parts of the country, where the Venezuelan Highlands form the eastern spur of the northern end of the Andes system. Most of Venezuela's 30.7 million people are concentrated in these uplands, which include the capital of Caracas, its early rival Valencia, and the commercial/industrial centers of Barquisimeto and Maracay.

The Venezuelan Highlands are flanked by the Maracaibo Lowlands and "Lake" Maracaibo to the northwest and by an immense plainland of savanna country, known as the Llanos, in the Orinoco Basin to the south and east (Fig. 5B-2). The Maracaibo Lowlands, at one time a disease-infested, sparsely peopled coastland, today constitute one of the world's leading oil-producing areas; much of the oil is drawn from reserves that lie beneath the shallow waters of the lake itself. The country's third-largest city, Maracaibo, is the focus of the petroleum industry that transformed the Venezuelan economy in the 1970s; however, as we shall see, since then oil has been more of a curse than a blessing.

The Llanos on the southern side of the Venezuelan Highlands and the Guiana Highlands in the country's far southeast, like much of Brazil's interior, are in a nascent stage of development. The 300- to 650-kilometer- (180- to 400-mi) long Llanos slope gently from the base of the northernmost Andean spur to the Orinoco's floodplain. Their mixture of savanna grasses and scrub woodland gives rise to cattle grazing on higher ground, however widespread wet-season flooding of the more fertile lower-lying areas has thus far inhibited the plainland's commercial farming potential (much of the development of the Llanos to date has been limited to the exploitation of its substantial oil reserves). Crop-raising conditions are more favorable in the *tierra templada* areas at more moderate altitudes in the Guiana Highlands. Economic integration of this even more remote interior zone with the heartland of Venezuela has been spearheaded by the discovery of rich iron ores on the northern side of the Guiana Highlands southwest of Ciudad Guayana. Local railroads now connect with the Orinoco, and from there ores are shipped directly by sea to foreign markets.

Oil and Politics

Despite these opportunities, Venezuela since the late 1990s has been in upheaval as longstanding economic and social problems finally intensified to the point where the electorate decided to push the country into a new era of radical political change. For nearly two decades since the euphoric 1970s, oil had not bettered the lives of most Venezuelans. A primary reason was that the government unwisely acquired the habit of living off oil profits, forcing the country to suffer the consequences of the prolonged global oil depression that began in the early 1980s. Venezuela found itself heavily burdened by a huge foreign debt it had incurred through borrowing against future oil revenues that were not materializing fast enough. By the mid-1990s, the government was required to sharply devalue the currency, and a political crisis ensued that resulted in a severe recession and widespread social unrest.

With more and more Venezuelans enraged at the way their oil-rich country was approaching bankruptcy without making progress toward the more equitable distribution of the national wealth, voters resoundingly turned in an extreme direction in the 1998 presidential election. Expressing their disgust with Venezuela's ruling elite of both political parties, they elected Hugo Chávez, a former colonel who in 1992 had led a failed military coup. Reaffirming their decision in 2000, Venezuelans gave nearly 60 percent of their votes to Chávez, apparently providing him with a mandate to act as strongman on behalf of the urban poor and the increasingly penurious middle class.

Venezuela's Autocratic Turn

Chávez, clinging to power tenaciously, did indeed pursue such a course after entering office in 1999, sweeping aside Congress and the Supreme Court, supervising the rewriting of the Venezuelan constitution in his own image, and proclaiming himself the leader of a "peaceful leftist revolution" that would transform the country. Even though he professed that social equality ranked atop his agenda, Chávez stirred up racial divisions by actively promoting mestizos (about 70 percent of the population) over people of European background (18 percent).

In the international arena, Chávez sparked controversy at every turn: infuriating the government of neighboring Colombia by expressing his "neutrality" in its confrontation with cocaine-producing insurgent forces; interfering with another neighbor, Guyana, by aggressively reviving a century-old territorial claim to the western zone of that country (the striped area in Fig. 5B-2); embracing Cuba's communist regime; and proclaiming his solidarity with Iran's leadership. Chávez had positioned himself as the champion of Venezuela's (and South America's) poor, trumpeting his "Bolivarian Revolution" as a local alternative to what he described as the insidious encroachment of U.S. imperialism. And yet, while alienating many other South American governments, Venezuela did receive support from Brazil and Argentina to formally join Mercosur in 2012, which in some ways should bring Venezuela back into the realm's fold.

Hugo Chávez's second (and final) presidential term was scheduled to end in 2012, but in 2009 he organized and won a referendum that abolished term limits. Vilified by much of the Western world and most of Venezuela's entrepreneurial citizens (many of whom had fled the country), Chávez had a powerful message that continues to resonate among South America's impoverished masses—itself testimony to the persistent inequality that characterizes this realm. Although Chávez was reelected to a third term in late 2012, terminal illness prevented his swearing-in, and his death in March 2013 plunged the country into a period of political uncertainty. Clearly, what happens next in Venezuela matters far beyond its borders because of its enormous oil reserves—which according to a number of the latest estimates may be the largest of any country on Earth.

The "Three Guianas"

Three small entities form the eastern flank of the realm's northern region: Guyana, Suriname, and French Guiana. They are good reminders of why the name "Latin" America is inappropriate: the first is a legacy of British colonialism and employs English as its official language; the second is a remnant of Dutch influence where Dutch is still official among its polyglot of tongues; and the third is still a dependency—of France. None has a population exceeding 1 million, and all three exhibit social characteristics and cultural landscapes far more representative of the Caribbean Basin than South America. Here British, Dutch, and French colonial powers acquired possessions and established plantations, brought in African and Asian workers, and created economies similar to those that mark a number of the Caribbean islands.

Guyana, with 840,000 people, still has more inhabitants than Suriname and French Guiana combined. When Guyana became independent in 1966, its British rulers left behind an ethnically and culturally divided population in which people of South Asian (Indian) ancestry now make up about 44 percent and those of African background (including African-European ancestry) 30 percent. This makes for contentious politics, given the religious mix, which is approximately 57 percent Christian, 28 percent Hindu, and 7 percent Muslim. Guyana remains dominantly rural, and plantation crops continue to figure prominently among exports (gold from the interior is the most valuable single product).

Oil may become a factor in the economy, though, because a recently discovered reserve that lies offshore from Suriname extends westward beneath Guyana's waters. Still, Guyana is among the realm's poorest and least urbanized countries, and it is strongly affected by the region's narcotics industry. Its thinly populated interior, beyond the reach of antidrug campaigns, has become a staging area for drug distribution to Brazil, North America, and Europe. A recent official report suggests that drug money amounts to as much as one-fifth of Guyana's total economy.

Venezuela's territorial claim against Guyana may be in abeyance, but the United Nations in 2007 settled a dispute with Suriname over a potentially oil-rich maritime zone in Guyana's favor. Some geologists believe that this offshore basin might hold more oil than Europe's North Sea, which would—if properly managed—be able to transform Guyana's economy. Exploratory drilling began in 2009 and the search continues today.

Suriname actually progressed more rapidly than Guyana did after it was granted independence in 1975, but persistent political instability soon ensued. The Dutch colonists brought South Asians, Indonesians, Africans, and even some Chinese to their colony, making for a notably fractious nation. More than 100,000 residents—about one-quarter of the entire population—emigrated to the Netherlands, and were it not for support from its former colonial ruler, Suriname would have collapsed. Nonetheless, its rice farms give Suriname self-sufficiency, even allowing for some exporting, and plantation crops continue to rank among the exports. Suriname's leading income producer, however, is its bauxite (aluminum ore) mined in a zone across the middle of the country. Offshore oil finds (exploration began to accelerate in 2012) could provide important revenues in the years ahead.

Suriname, most of whose population of 550,000 resides along the northern coastal strip, is one of South America's poorest countries, and its opportunities continue to be limited. Along with Guyana, Suriname is involved in an environmental controversy centering on its luxuriant tropical rainforests. Timber companies based in Asia's Pacific Rim offer lucrative rewards for the right to cut down the magnificent hardwood trees, but conservationists are trying to slow this destruction by buying up concessions before they can be opened to logging.

Suriname's cultural geography is enlivened by its many languages. Dutch is the official tongue, but other than by officials and in schools it is not heard much. A mixture of Dutch and English, Sranan Tongo, serves as a kind of common language, but you can also hear indigenous, Hindi, Chinese, Indonesian, and even some French Creole in the streets.

French Guiana, the easternmost outpost of the Caribbean North region, is a dependency—mainland South America's only one. This territory is an anomaly in other ways as well. Consider this: it is almost as large as South Korea (population: just under 50 million) with a population of only 220,000. Its status is that of an Overseas Département of France, and its official language is French. Nearly half the population resides in the immediate vicinity of the coastal capital, Cayenne.

In 2013, there still was no prospect of independence for this decidedly underdeveloped relic of the former French Empire. Gold remains the most valuable export, and the small fishing industry sends some exports to France. But what really matters here in French Guiana is the European Space Agency's launch complex at Kourou on the coast, which accounts for more than half of the territory's entire economic activity. From plantation farming to spaceport . . . but with minimal involvement, or benefits, for most ordinary people.

THE ANDEAN WEST

The second regional grouping of South American states—the Andean West (Fig. 5B-4)—is dominated physiographically by the great Andes mountain chain and historically by indigenous peoples. This region encompasses Peru, Ecuador, Bolivia, and transitional Paraguay, the last with one foot in the West and the other in the South (Fig. 5B-1). Bolivia and Paraguay also constitute South America's only two landlocked countries. For several decades the three main countries of this region (Peru, Ecuador, and Bolivia) have been members of the Andean Community, a trading bloc that also includes Colombia.

Spanish conquerors overpowered the indigenous nations, but they did not reduce them to small minorities as happened to so many indigenous peoples in other parts of the world. Today, roughly 45 percent of the residents of Peru, the region's most populous country, are indigenous; in Bolivia, they are in the majority at 55 percent. About 15 percent of Ecuador's population identifies itself as indigenous, and in Paraguay the ethnic mix, not regionally clustered as in the other three countries, is overwhelmingly weighted toward indigenous ancestry.

As the Data Table in Appendix B reports, this is South America's poorest region economically, with lower incomes, higher numbers of subsistence farmers, and fewer opportunities for job-seekers. For a very long time, the urbane lives of the land-owning elite have been worlds apart from the hard-scrabble existence of the landless peonage (the word *peon* is an old Spanish term for an indebted day laborer).

But today, this region, like the realm as a whole, is stirring, and oil and natural gas are part of the story. In Bolivia, the first elected president of indigenous ancestry is trying to gain control over an energy industry not used to his aggressive tactics. In Ecuador, a populist leftist became president in 2007 and was twice reelected on promises to divert more of the country's oil revenues toward domestic needs and improving the lot of the poor. In Peru, where an energy era is dawning as new reserves are discovered, the government is under pressure to protect Amazonian peoples and environments, limit foreign involvement, and put domestic needs and rights first.

Peru

Peru straddles the Andean spine for more than 1600 kilometers (1000 mi) and is the largest of the region's four republics in both territory and population (31.0 million). Physiographically and culturally, Peru divides into three parts (Fig. 5B-4). Lima and its port, Callao, lie at the center of the ***desert coast*** subregion, and it is symptomatic of the cultural division prevailing in Peru that for nearly 500 years the capital city has been positioned on the periphery, not in a central location in a basin of the Andes. From an economic point of view, however, the Spaniards' choice of a headquarters on the Pacific coast proved to be sound, for the coastal strip has become commercially the most productive part of the country. A thriving fishing industry contributes significantly to the export trade; so do the products of irrigated agriculture in some 40 oases dispersed across the arid coastal plain, which include fruits such as citrus and olives, and vegetables such as asparagus (a big moneymaker) and lettuce.

The Andean or ***Sierra*** subregion occupies just about one-third of the country and is the ancestral home of the largest component in the total population, the speakers of Quechua, the *lingua franca* that emerged during the Inca Empire. Their physical survival during the harsh Spanish colonial regime was made possible by their adaptation to the high-altitude environments they inhabited, but their social fabric was ripped apart by communalization, forced cropping, religious persecution, and involuntary migration to towns and haciendas where many became serfs. Although indigenous peoples constitute almost half of the population

FIGURE 5B-4

of Peru, their political influence remains slight. Nor is the Andean subregion a major factor in Peru's commercial economy—except, of course, for its enormous mineral storehouse, which yields copper, zinc, and lead from mining centers, the largest of which is Cerro de Pasco. Peru is also the world's sixth-largest producer of gold, the price of which has been soaring in recent years, contributing to this country's steadily growing economy. The goldmines are located in the Andes north of Lima.

In the high valleys and intermontane basins, the indigenous population is concentrated either in isolated villages, around which people practice a precarious subsistence agriculture, or in the more favorably located and fertile areas where they are tenants, peons on white- or mestizo-owned haciendas. It was a very different story during the time of the Incas, when the indigenous social structure was still unharmed and the Andean Sierra provided bountiful harvests. These days, there is a painful contrast between the

Machu Picchu, South America's best-known pre-Columbian site. This fifteenth-century "City of the Incas" is located on an Andean ridge (elevation: 2400 meters/7900 ft) about 80 kilometers (50 mi) northwest of Cuzco, the long-time capital of the Inca civilization and still a major city today. Machu Picchu is believed to have been built (ca. 1450) as an estate for the emperor Pachacuti, but was abandoned less than a hundred years later at the time of the Spanish Conquest. It first became known to the outside world in 1911, and restoration (now nearing the halfway point) has been ongoing ever since. Archeologists have long been fascinated as well, and their intensive on-site fieldwork and research efforts continue. Improved overland access now allows about a million tourists to visit each year, a one-third increase since the late 2000s.

prosperous coast, its booming capital of Lima, and the thriving north on the one hand, and this poverty-plagued southern Andean zone on the other. That division could be a threat to Peru's longstanding stability.

Of Peru's three subregions, the East or ***Oriente***—the inland-facing slopes of the Andean ranges that lead down to the Amazon-drained, rainforest-covered *montaña*—is the most isolated. The focus of the eastern subregion, in fact, is Iquitos, a city that looks east rather than west and can be reached by oceangoing vessels sailing 3700 kilometers (2300 mi) up the Amazon River across northern Brazil. Iquitos grew rapidly during the Amazon's wild-rubber boom of just over a century ago, and then declined; now it is finally growing again and reflects Peruvian plans to open up the eastern interior.

Today, the Oriente subregion, and perhaps Peru as a whole, appears on the threshold of a new era due to major new discoveries of oil and gas reserves in the Oriente. Indeed, while still one of the poorer countries in this realm, Peru has experienced higher economic growth rates than any other between 2005 and 2013. Already, pipelines transport natural gas from the Camisea reserve (north of Cuzco) to a conversion plant on the Paracas Peninsula south of Lima. From there, an underwater pipeline sends it to an offshore loading platform for tankers taking it to the U.S. market (Fig. 5B-4). Other reserves now being tapped and are expected to come on line in the near future.

But this development is not occurring without adversity. Environmentalists and supporters of indigenous rights are raising issues in the interior even as political activists argue against the terms of trade that Peru has accepted with the big oil companies. Their complaint is that the proceeds will only further benefit the already-favored coastal, northern, and urban residents of Peru, and leave the disadvantaged residents of the interior even further behind.

Peru has never had an indigenous president, and that will be the case through at least 2016. Elected in 2011, the country's current leader, populist Ollanta Humala, like the others before him, is supported by the traditional Hispanic (and mestizo) establishment. Indigenous protests have continued during his presidency and a number of people were killed in the months following the election. Indigenous peoples form a near-majority, they are restive, and they now have models of empowerment not previously seen in this region. The main question is what course Peru will take, but with its presently burgeoning economy this may well be the time to bring the country closer together.

Ecuador

On the map, Ecuador, smallest of the three Andean West republics, appears to be just a northern corner of Peru. But that would be a misrepresentation because Ecuador possesses a complete range of regional variations (Fig. 5B-4). It has a coastal belt; an Andean zone that may be narrow (less than 250 kilometers [150 mi]) but by no means of lower elevation than elsewhere in the region; and an Oriente—an eastern subregion that is as sparsely settled and as economically marginalized as that of Peru. As with Peru, just about half of Ecuador's population (which totals 15.4 million) is concentrated in the Andean intermontane basins and valleys, and the most productive subregion is the coastal strip. Here, however, the similarities end.

Ecuador's Pacific coastal zone consists of a belt of hills interrupted by lowlands, of which the most important lies in the south between the hills and the Andes, drained by the Guayas River. Guayaquil—the country's largest city, main port, and leading commercial center—forms the focus of this subregion. Unlike Peru's coastal

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"I can't remember being hotter anyplace on Earth, not in Kinshasa, not in Singapore . . . not only are you near the equator here in steamy Guayaquil, but the city lies in a swampy, riverine lowland too far from the Pacific to benefit from any cooling breezes and too far from the Andes foothills to enjoy the benefits of suburban elevation. But Guayaquil is not the disease-ridden backwater it used to be. Its port is modern, its city-center waterfront on the Guayas River has been renovated, its international airport is the hub of a commercial center, and it has grown into a metropolis of 2.4 million. Ecuador's oil revenues have made much of this possible, but from the White Hill (a hill that serves as a cemetery, with the most elaborate vaults near its base and the poorest at the feet of the giant statue of Jesus that tops it) you can see that globalization has not quite arrived here. High-rise development remains limited; international banks, hotels, and other businesses remain comparatively few; and the "middle zone" encircling the city shows little evidence of prosperity (top). Beating the heat and glare is an everyday priority: whole streets have been covered by makeshift tarpaulins and more permanent awnings to protect shoppers (bottom). Talk to the locals, though, and you find that there is another daily concern: the people 'up there in the mountains who rule this country always put us in second place.' Take the 45-minute flight from Guayaquil to cool and comfortable Quito, the capital, and you're in another world, and you quickly forget Guayaquil's problems. That's just what the locals here say the politicians do."

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strip, Ecuador's is not a desert: it consists of fertile tropical plains not afflicted by excessive rainfall. Seafood (especially shrimp) is a leading product, and these lowlands support a thriving commercial agricultural economy built around bananas, cacao, cattle raising, and coffee on the hillsides. Moreover, Ecuador's western subregion is also far less Europeanized because its white component of the national population is only about one-third the size of Peru's.

A greater proportion of whites is engaged in administration and hacienda ownership in the central Andean zone, where most of the Ecuadorians who are indigenous also reside—and, not surprisingly, where land-tenure reform is an explosive issue. The differing interests of the Guayaquil-dominated coastal lowland and the Andean-highland subregion focused on the capital (Quito) have long fostered a deep regional cleavage between the two. This schism has intensified in recent years, and autonomy and other devolutionary remedies are now being openly discussed in the coastlands (see *From the Field Notes*).

In the rainforests of the Oriente subregion, oil production is expanding as a result of the discovery of additional reserves. Some analysts are predicting that interior Ecuador as well as Peru will prove to contain energy resources comparable to those of Colombia and Bolivia, and that an "oil era" will soon transform their economies. As it is, oil already tops Ecuador's export list, and the industry's infrastructure is being modernized. This is essential because considerable ecological damage has already taken place: the trans-Andean pipeline to the seaport of Esmeraldas, constructed in 1972, was the source of numerous oil spills, and toxic waste was dumped along its route in a series of dreadful environmental disasters. A second, more modern pipeline went into operation in 2003; but like Peru, Ecuador faced growing opposition from environmentalists and activists who, in 2005, shut it down for a week. With revenues from oil and gas exports exceeding 50 percent of all exports, Ecuador's leaders are hearing an increasingly familiar refrain from its people: demand more from the oil companies and give these funds to those who need them most. But it is not as simple as that: oil and gas exploration and exploitation require huge investments, and foreign companies can afford to spend what the government's own state company, Petro Ecuador, cannot. That leads to difficult choices because the state needs income to cover its obligations. Clearly, energy riches are a double-edged sword.

Bolivia

Nowhere are the problems typical of the Andean West more acute than in landlocked, volatile Bolivia. Before reading further, take a careful look at Bolivia's regional geography in both Figures 5B-4 and 5B-5. Bolivia is bounded by remote peripheries of both Brazil and Argentina, mountainous Andean highlands as well as intermontane ***altiplanos* [3]** (high-elevation basins and valleys) of Peru, and coveted coastal zones of northern Chile. As the maps show, the Andes in this zone broaden into a vast mountainous complex some 700 kilometers (450 mi) wide.

On the boundary between Peru and Bolivia, freshwater Lake Titicaca lies at 3700 meters (12,500 ft) above sea level and helps make the adjacent *Altiplano* (see map) liveable by ameliorating the coldness in its vicinity, where the snow line lies just above the plateau surface. On the lake's surrounding cultivable land, potatoes and grains have been raised for centuries dating back to pre-Inca times, and the Titicaca Basin still supports a major cluster of indigenous (Aymara) subsistence farmers. This portion of the *Altiplano* is the heart of modern Bolivia and also contains the capital city, La Paz.

The European/Indigenous Divide

The Bolivian state is the product of the Hispanic impact, and the country's indigenous peoples (who still make up about 55 percent of the national population of 11.2 million) no more escaped the loss of their land than did their Peruvian or Ecuadorian counterparts. What made the richest Europeans in Bolivia wealthy, however, was not land but minerals. The town of Potosí in the eastern cordillera became a legend for the immense deposits of silver in its vicinity; tin, zinc, copper, lead, and several ferroalloys were also discovered there. Indigenous workers were forced to work in the mines under the most appalling conditions.

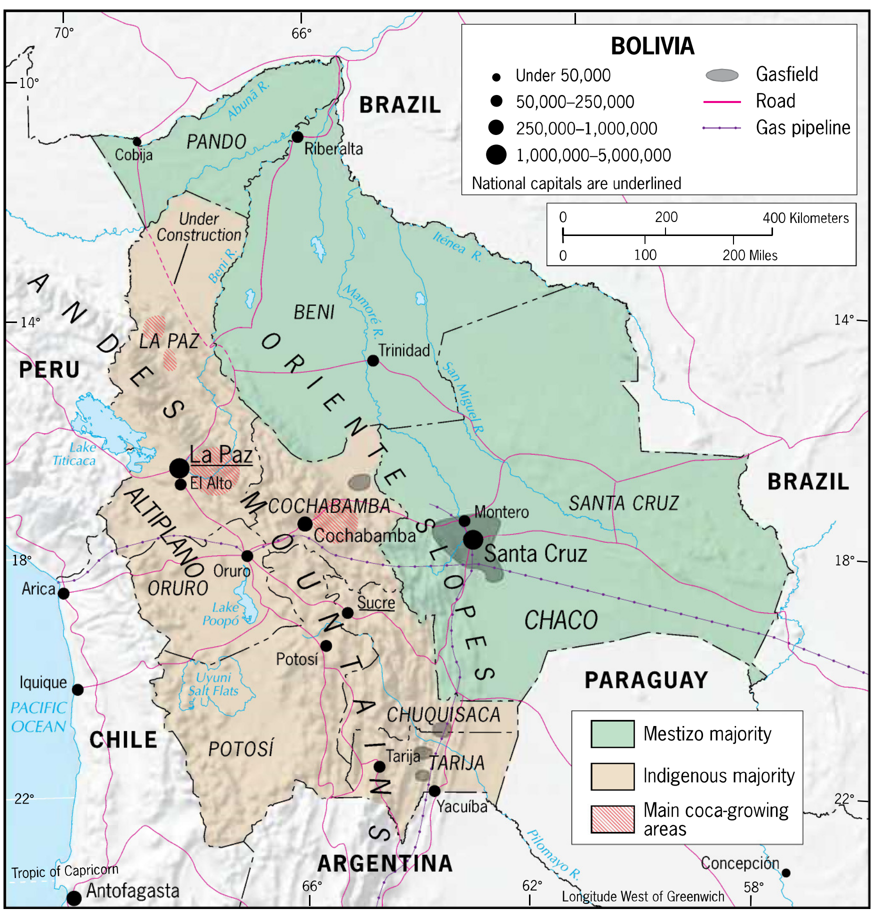

FIGURE 5B-5

Aizar Raldes/AFP/Getty Images, Inc.

Rodrigo Buendia/AFP/Getty Images, Inc.

Bolivia's political geography is as divided as its physical geography, the power base of the indigenous population lying in the altiplanos and mountains, and that of the mestizo minority centered in the interior lowlands. These photos, taken a day apart in Santa Cruz, where mestizo strength is concentrated, show the crucial difference of opinion: a majority of mestizos want autonomy for their eastern provinces (left); virtually all indigenous people protest the prospect of such autonomy, seen as a prelude to secession and independence, as fatally fracturing their country.

Today, natural gas and oil, exported to Argentina and Brazil, are leading sources of foreign revenues, and zinc has replaced tin as the leading export metal. But Bolivia's economic prospects will always be impeded by the loss of its outlet to the Pacific Ocean during its war with Chile in the 1880s, despite its transit rights and dedicated port facilities at Antofagasta.

More critical than its economic limitations or its landlocked situation is Bolivia's social predicament. The government's history of mistreatment of indigenous peoples and harsh exploitation of its labor force hangs heavily over a society where about two-thirds of the people, most of them indigenous, live in dire poverty. In recent years, however, this underrepresented majority has been making a growing impact on national affairs. In 2003, violent opposition to a government plan to export natural gas to the United States via a new pipeline to the Chilean coast led to chaos and the government's resignation. In 2005, Bolivian voters elected their first president of indigenous (Aymara) ancestry, Evo Morales, whose agenda included the nationalization of the country's natural gas resources.

Departments and Capitals

Landlocked, physiographically bisected, culturally bifurcated, and economically divided, Bolivia is a severely challenged state. Moreover, the country's prospects are worsened by its political geography: look again at Figure 5B-5 and you can see that Bolivia's nine provinces are regionally divided between indigenous-majority *departments* (as subnational units are called here) in the west and those with mestizo majorities in the east. The capital city, La Paz, lies on the indigenous-majority Andean *Altiplano*, but many mestizo Bolivians do not recognize it as such: historically, the functions of central government have been divided between La Paz (the administrative headquarters) and Sucre (which lost most of its government branches in 1899 during a civil war but retained the Supreme Court, thereafter calling itself the "constitutional capital"). And extremist mestizo Bolivians even suggest that the southeastern city of Santa Cruz (now Bolivia's biggest) should become the "compromise capital" of their country.

The Santa Cruz *Department*, like the others in the Oriente, stands in sharp contrast to those of the Andes in the west. Here the hacienda system (see Chapter 4A) persists almost unchanged from colonial times, its profitable agriculture supporting a wealthy aristocracy. Now this eastern zone of Bolivia has proved to contain abundant energy resources as well, adding to its economic advantage. So there is talk—abetted by frequent public demonstrations—in support of autonomy, even secession here (see the photo pair), but neither the haciendas nor the energy industry could operate without the indigenous labor force.

When Evo Morales was elected and began trying to gain control of the energy industry while making moves to alter the division of national wealth, the struggle between east and west took a new turn. When energy prices were high, there was sufficient money to spend on the social programs President Morales had promised to expand. But when, in 2008, the price of natural gas declined (and remained at a relatively low level through early 2013), the specter of state failure rose again. The combination of rising expectations among indigenous citizens and devolutionary hopes among the minority mestizos continues to cast an ominous cloud over Bolivia's future.

Paraguay

Paraguay, Bolivia's landlocked neighbor to the southeast, is one of those transitional countries lying in between regions, exhibiting properties of each (see Fig. 5B-1). Certainly, Paraguay (population: 7.0 million) is not an "Andean" country: it has no highlands of consequence. Its well-watered eastern

Martin Bernetti/AFP/Getty Images, Inc.

These buckets of salt brine sitting in the moonscape of southwestern Bolivia's Uyuni Salt Flats represent one of the country's most promising new development opportunities. Once the liquid evaporates, the residue consists mainly of lithium. This lightest of all metals is used to manufacture the lithium-ion batteries that power the portable electronic devices that dominate our daily lives, especially smartphones, tablet computers, and laptops. Larger versions of these batteries are also used to power hybrid motor vehicles, and Bolivia contains as much as half of the world's lithium reserves—enough to support close to 5 billion electric cars. The facility under construction here in this remote part of the *Altiplano* is a pilot lithium extraction plant that opened in 2011. The Bolivian government is the major player in this effort and is determined to keep lithium production a domestic enterprise—despite considerable pressure by foreign companies and investors to become involved. Another fascinating angle is that much of the land of the Salt Flats is the property of indigenous groups, who are seeking a share in the income to be earned from mineral exploitation. Their claims are consistent with the country's 2010 constitution, which enables indigenous communities to have control over resources in their territory—and potentially shape the future course of development.

plains give way to the dry scrub of the Gran Chaco in the northwest. Nor does it have clear, spatially entrenched ethnic divisions between indigenous, mestizo, and other peoples as do Bolivia and Peru. But aboriginal ancestry dominates the ethnic complexion of Paraguay, and continuing protests by landless peasants are similar to those taking place elsewhere in the Andean West. Moreover, the native language, Guaraní, is so widely spoken that this is one of the world's most thoroughly bilingual societies.

The poet Augusto Roa Bastor has described his country as "an island surrounded by land." This relative isolation has surely contributed to the unusual dominance of Guaraní, which is spoken by about 90 percent of the Paraguayans even though only 1.5 percent of the population is indigenous. Because the Spanish colonial rulers never reached far into the interior of the country, Christian missionaries were required to learn this language to connect with the locals. Today, Guaraní is officially on an equal footing with Spanish and is taught in every school—a remarkable exception to the worldwide trend of disappearing indigenous languages.

In every other sphere, however, Paraguay's longstanding isolation is eroding. Nowhere is this more evident than in the decreasingly remote Gran Chaco, which is now rapidly opening up as a burgeoning new cattle-ranching frontier. Deforestation is occurring at a prodigious rate, with satellite land-cover analyses confirming the razing of a woodland area nearly equal in size to the State of Delaware during 2010–2011 alone. This is a particular nightmare for indigenous peoples like the Ayoreo, whose traditional livelihoods are threatened with imminent destruction (the word for bulldozer in their language means "attacker of the world"). The disappearance of the Chaco has also raised alarms among biologists and conservationists, because so much of it remains unexplored and is certain to contain myriad unknown plant and animal species.

Looking south, there is little in Paraguay's economic geography to compare to Argentina, Uruguay, or Chile, as Appendix B confirms. In a sense, Paraguay is a bridge between the Andean West and the Southern Cone—but not yet a heavily traveled one.

And Paraguay is transitional in yet another way: more than 300,000 Brazilians have crossed the border to settle in eastern Paraguay, where they have created a thriving commercial agricultural economy that produces soybeans, livestock, and other farm products exported to or through Brazil. Brazil, of course, is the giant in the Mercosur/l free-trade zone, but Paraguay is in a geographically difficult position, often complaining that Brazil is not interested in living up to its regional-trade obligations and creates unacceptable difficulties for Paraguayan exporters. Meanwhile, politicians raise fears that Brazilian immigration is creating a steadily expanding foreign enclave within Paraguay, where people speak Portuguese (including in the local schools), the Brazilian rather than the Paraguayan flag flies over public buildings, and a Brazilian cultural landscape is beginning to evolve. Like Bolivia, Paraguay pays a heavy price for its landlocked weakness.

Paraguay's low GNI resembles that of countries of the Andean West, not the more advantaged Southern Cone region. This is also one of South America's least urbanized states, and poverty dominates the countryside as well as the slums encircling the capital, Asunción, and other towns (Fig. 5B-4). In 2011, about 35 percent of the population lived at or below the official poverty level. Moreover, research suggests that 1 percent of the population owns about 77 percent of the land, which may be a record for inequality in the South American realm.

Another, and quintessentially geographical, problem stemming from Paraguay's long-term weakness and misrule lies in the southeast, where the borders of Brazil, Argentina, and Paraguay converge in a chaotic scene of smuggling, money-laundering, political intrigue, and even terrorist activity, centered on the town of Ciudad del Este. Locals call this the **Triple Frontier [4]** (Fig. 5B-4). This area is home to a large Middle Eastern community, identified by the U.S. government as a source of funding for Islamic militant groups—an allegation that was rejected by the governments of Argentina, Brazil, and Paraguay. Nevertheless, Paraguay's state system decidedly needs strengthening, and not just for domestic reasons.

In 2008, Paraguay ended its history of ruthless dictatorial rule with the election of a radical, pro-Guaraní priest, Fernando Lugo, who during his days as a missionary supported hacienda invasions by landless peasants and promised land reform and other remedies for the poor. Even though money for such remedies is always hard to come by, Lugo did score a major success in 2009 when he negotiated better terms with Brazil for the sale of Paraguay's share of the electricity generated by Itaipu Dam located on the Paraná River between the two countries. Furthermore, Brazil aided Paraguay in building a state-of-the-art transmission line from Itaipu to Asunción, which in 2012 led to the start of a crucial expansion of Paraguay's electrical-power grid. Nevertheless, his political opponents engineered Lugo's swift impeachment on dubious grounds in mid-2012. Outraged neighbors viewed his ouster as a *coup d'état* and, led by Brazil and Argentina, quickly responded by suspending Paraguay from Mercosur/l (whose economic ties it urgently needs); in mid-2013, the country remained in supranational limbo.

THE SOUTHERN CONE

This region of South America, consisting of Argentina, Chile, and Uruguay, acquired its name from its tapered, ice-cream-cone shape (Fig. 5B-6). Since 1995, the countries of the Southern Cone have been drawing closer together in an economic union named ***Mercosur*** (the Spanish acronym for *Mercado Común del Sur*), the hemisphere's second-largest trading bloc after NAFTA. Despite setbacks and disputes, this organization has expanded and today encompasses Argentina, Brazil, Uruguay, Venezuela, and Bolivia (full accession in 2014)—as well as currently suspended Paraguay. Chile, Peru, Ecuador, and Colombia participate as associate members. (Note that in Portuguese-speaking Brazil, this bloc is known as ***Mercosul*** [*Mercado Comum do Sul*]—which is why we use the appellation *Mercosur/l* throughout this chapter).

Argentina

The largest Southern Cone country by far is Argentina, whose territorial size ranks second only to Brazil in this geographic realm; its population of 41.7 million ranks third overall after Brazil and Colombia. Although Argentina exhibits a great deal of physical-environmental variety within its boundaries, the overriding majority of the Argentines are concentrated in the physiographic subregion known as the ***Pampa*** (a word meaning "plain"). Figure 5A-3 underscores the degree of clustering of Argentina's inhabitants on the land and in the cities of the Pampa. It also shows the relative emptiness of the other six subregions (shown in Fig. 5B-6): the scrub-forested ***Chaco*** in the northwest; the mountainous ***Andes*** in the west, along whose crestline lies the boundary with Chile; the arid plateaus of ***Patagonia*** south of the Rio Colorado; and the undulating transitional terrain of intermediate ***Cuyo, Entre Rios*** (also known as "Mesopotamia" because it lies between the Paraná and Uruguay rivers), and the ***North***.

From the Field Notes . . .

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"At the heart of Buenos Aires lies the *Plaza de San Martín*, flanked by impressive buildings but, unusual for such squares in Iberian America, carpeted with extensive lawns shaded by century-old trees. Getting a perspective of the plaza was difficult until I realized that you could get to the top of the 'English Tower' across the avenue you see in the foreground. From there, one can observe the prominent location occupied by the monument to the approximately 700 Argentinian military casualties of the Falklands War of 1982 (center), where an eternal flame behind a brass map of the islands symbolizes Argentina's undiminished determination to wrest these islands from British control."

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FIGURE 5B-6

The Argentine Pampa is the product of the past 150 years. During the second half of the nineteenth century, when the great grasslands of the world were being opened up (including those of the interior United States [Great Plains], Russia, and Australia), the economy of the long-dormant Pampa began to emerge. The food needs of industrializing Europe grew by leaps and bounds, and the advances of the Industrial Revolution—railroads, more efficient ocean transport, refrigerated ships, and agricultural machinery—helped to make large-scale commercial meat and grain production in the Pampa not only feasible but also highly profitable. Large haciendas were laid out and farmed by tenant workers; railroads were built and radiated ever farther outward from the booming capital of Buenos Aires, soon bringing the entire Pampa into production.

A Culture Urban and Urbane

Argentina once was one of the richest countries in the world. Its historic affluence is still reflected in its architecturally splendid cities whose plazas and avenues are flanked by ornate public buildings and private mansions. This is true not only of the capital, Buenos Aires, at the head of the Rio de la Plata estuary—it also applies to interior cities such as Mendoza and Córdoba. The cultural imprint is dominantly Spanish, but the cultural landscape was diversified by a massive influx of Italians and smaller but influential numbers of British, French, German, and Lebanese immigrants.

Argentina has long been one of the realm's most urbanized countries: 91 percent of its population is concentrated in cities and towns, a higher percentage even than western Europe or the United States. Fully one-third of all Argentinians live in metropolitan Buenos Aires, by far the leading industrial complex where processing Pampa products dominates. Córdoba has taken its place as the next-largest city and industrial center, and has been selected by foreign automobile manufacturers as the auto-assembly center for the growing Mercosur/l market. But what concentrates the urban populations is the processing of products from the sprawling, sparsely peopled interior: Tucumán (sugar), Mendoza (wines), Santa Fe (forest products), and Salta (livestock). Argentina's product range is enormous. There is even a petroleum reserve near Comodoro Rivadávia on the central coast of Patagonia.

Economic Volatility

Despite all these riches, Argentina's economic history is one of boom and bust. Possessing a vast territory with diverse natural resources, adequate infrastructure, and above-average international linkages, Argentina should still be one of the world's wealthiest countries, as it once was. But political infighting and economic mismanagement have combined to shackle a vibrant and varied economy.

AMONG THE REALM'S GREAT CITIES . . .

BUENOS AIRES

ITS NAME MEANS "fair winds," which first attracted European mariners to the site of Buenos Aires alongside the broad estuary of the muddy Rio de la Plata. The shipping function has remained paramount, and to this day the city's residents are known throughout Argentina as the *porteños* (the "port dwellers"). Modern Buenos Aires was built on the back of the nearby Pampa's grain and beef industry. It is often likened to Chicago and the Corn Belt in the United States because both cities have thrived as interfaces between their immensely productive agricultural hinterlands and the rest of the world.

Buenos Aires (14.1 million) is yet another classic South American primate metropolis, housing over one-third of all Argentines, serving as the capital since 1880, and functioning as the country's economic core. Moreover, Buenos Aires is a cultural center of global standing, a monument-studded city that contains the world's widest street (*Avenida 9 de Julio*).

During the half-century between 1890 and 1940, the city was known as the "Paris of the South" for its architecture, fashion leadership, book publishing, and performing arts activities (it still has the world's biggest opera house, the newly-renovated *Teatro Colón*). With the recent restoration of democracy, Buenos Aires is now trying to recapture its golden years. Besides reviving these cultural functions, the city has added a new one: the leading base of the hemisphere's motion picture and television industry for Spanish-speaking audiences.

During the past few years, the city has been showing signs of distress as inflation ran at nearly 25 percent annually and the cost of living skyrocketed. Economic growth was slowed to about 2 percent, unemployment rose, and the homeless became a common sight along the city's elegant boulevards. There really was no good economic reason for this downturn, and most residents point to the leadership, the politicians, as the culprits. But this is not the first economic crisis faced by the city in recent times, and resilient Buenos Aires is likely to return to its grander ways in due course.

FIGURE 5B-7

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Part of the problem, it appears, lies in the country's lopsided geography with an enormous gap between a few highly populated and urbanized provinces that have almost all the political power and a large number of provinces with very small populations (Fig. 5B-7). Buenos Aires Province has 15.7 million people (out of a total 42 million) while Tierra del Fuego has barely more than 125,000. A dozen other provinces contain less than 750,000 inhabitants, so that the larger ones in addition to dominant Buenos Aires are also disproportionately influential in domestic politics, especially Córdoba and Santa Fe.

Another seemingly never-ending problem for Argentina has been corrupt politics and associated mismanagement, going back at least as far as the mid-twentieth century. The darkest episode was the "Dirty War" of 1976–1983, in which a repressive military junta caused more than 10,000 (and perhaps as many as 30,000) Argentinians to disappear without a trace. Then in 1982, this ruthless military clique decided to launch an invasion of the British-held Falkland Islands (which the Argentines call the Malvinas) off the far southern Patagonian coast, resulting in a crushing defeat for Argentina (Fig. 5B-6). By the time civilian government replaced the discredited junta, inflation and national debt were soaring. Economic revival during the 1990s was followed by another severe downturn that exposed the flaws in Argentina's fiscal system, including scandalously inefficient tax collection and unconditional federal handouts to politically powerful provinces.

The current administration, led by the country's first (and now reelected) female president, Cristina Fernandez de Kirchner (whose late husband preceded her in this office), has thus far failed to make progress. Indeed, corruption and mismanagement reached so high a level in early 2012 that the authoritative international weekly, *The Economist*, decided it would no longer include statistics provided by the Argentine government; pointedly, the newsmagazine also announced that it did not want to be part of the government's "deliberate attempt to deceive voters and swindle investors"—a reflection of the country's sorry condition today.

Argentina was a net exporter of oil until 2003, but it must now rely on imports to serve its consumption needs. In response, the government in 2012 decided to nationalize the biggest oil company, YPF—widely considered to be a disastrous move that merely served populist political needs. In the longer term, it is feared that nationalization will only further erode the company's efficiency and competitiveness. And to add to these problems, the old Falklands dispute erupted once again on the conflict's 30th anniversary in 2012, just as the British began preparations for oil-drilling in the potentially rich seabed surrounding those far-off South Atlantic islands (Fig. 5B-6). Once again, Buenos Aires registered strong protests and aggressively restated its claims that the Malvinas must be returned to Argentina.

Chile

For over 4000 kilometers (2500 mi) between the crestline of the Andes and the coastline of the Pacific lies the narrow strip of land that is the Republic of Chile (Fig. 5B-8). On average just 150 kilometers (90 mi) wide (and only rarely over 250 kilometers or 150 miles in width), Chile is the world's quintessential example of what **elongation [5]** means to the functioning of a state. Accentuated by its north-south orientation, this severe territorial attenuation not only results in Chile extending across numerous environmental zones; it has also contributed to the country's external political, internal administrative, and general economic challenges.

FIGURE 5B-8 © H. J. de Blij, P. O. Muller, and John Wiley & Sons, Inc.

Nevertheless, throughout most of their modern history, the Chileans have made the best of this potentially disruptive centrifugal force: from the beginning, the sea has constituted an avenue of longitudinal communication; the Andes Mountains continue to form a barrier to prevent encroachment from the east; and when confrontations loomed at the far ends of the country, Chile proved to be quite capable of coping with its northern rivals, Bolivia and Peru, as well as Argentina in the far south.

Three Subregions

As Figures 5B-6 and 5B-8 indicate, Chile is a three-subregion country. About 90 percent of its 17.7 million people are concentrated in what is called Middle Chile, where Santiago, the capital and largest city, and Valparaíso, the chief port, are located. North of Middle Chile lies the Atacama Desert, wider, drier, and colder than the coastal desert of Peru. To the south of Middle Chile, the coast is punctuated by a plethora of fjords and islands, the topography is mountainous, and the climate—wet and cool near the Pacific—soon turns drier and much colder against the Andean interior. South of the latitude of Chiloé Island, there are few permanent overland routes and very few settlements.

Not surprisingly, the land in Middle Chile is the most fertile and valuable, with hardly any agriculture to be found either in the North or South (Fig. 5A-5). The three subregions are also apparent on the realm's cultural map, with Europeans dominating the Middle, mestizos prevailing in the North, and indigenous groups forming the majority in the South (Fig. 5A-4).

Still, prior to the 1990s, the arid Atacama region in the North accounted for more than half of Chile's foreign revenues. It contains the world's largest exploitable deposits of nitrates, which was the country's economic mainstay before the discovery of methods of synthetic nitrate production a century ago. Subsequently, copper became the dominant export (Chile again possesses the world's largest reserves, which in 2012 accounted for more than half of all export revenues). It is mined in several places, but the main concentration lies on the eastern margin of the Atacama near Chuquicamata (see photo), not far from the port of Antofagasta.

Political and Economic Success

Following the withdrawal of its vicious military dictatorship in 1990, Chile embarked on a highly successful program of free-market economic reform that brought stable growth, lowered inflation as well as unemployment, reduced poverty, and attracted massive foreign investment. The last is of particular significance because these new international connections enabled the export-led Chilean economy to diversify and develop in some badly needed new directions. Copper remains at the top of the export list, but many other mining ventures have been launched. In the agricultural sphere, fruit and vegetable production for export has soared because Chile's harvests coincide with the winter farming lull in the affluent countries of the Northern Hemisphere. Industrial

Peter McBride/Aurora Photos, Inc.

A view into the gaping maw of northern Chile's Chuquicamata copper mine, the world's largest and second-deepest open-pit mine. For most of the century since mining began here in 1910, 'Chuqui' was the single leading source of copper on Earth. But the increasingly negative environmental impact of its moonscape of slag heaps and toxic materials has now forced the relocation of the town of Chuquicamata and the 2013 closure of the surface mine. Nonetheless, huge quantities of copper will continue to be extracted from this still-rich deposit after a major new underground mine is built below this site: it will begin operating in 2018—with plans to keep enlarging it until at least 2060.

expansion is taking place as well, though at a more leisurely pace, and new manufactures have included an array of goods that range from basic chemicals to computer software.

Chile's increasingly globalized economy has also propelled the country into a prominent role on the international economic scene. The United States, long Chile's leading trade partner, now ranks behind the Asian Pacific Rim, where China consumes the bulk of Chile's exports followed by Japan and South Korea. (Argentina remains Chile's leading source of imports, mostly energy, a potential problem given Argentina's rising domestic needs.) Chile's regional commerce is growing as well, and it has affiliated with Mercosur/l as an associate member.

One of Chile's noteworthy initiatives in this decade is its 'Start-Up Chile' project, nicknamed *Chilecon Valley*. Since 2010, the government has granted startup funding of up to (U.S.) $40,000 for roughly 500 new cutting-edge information technology companies from around the world, and it has provided visas for their personnel to live and work in Chile. The aim is to stimulate and nurture entrepreneurship and innovation in Chile. At the same time, much has been done to increase access to higher education: in 2012, 1.1 million students were enrolled in the country's universities, up from about 200,000 only ten years earlier. Tellingly, 70 percent of today's students are the first in their families to go to college.

Chile's post-1990 governments, regardless of the party in power, seem to have discovered a winning formula: a pragmatic approach that circumvents ideological extremism, exhibits transparency in decision-making, and maintains a desirable balance between sustained economic growth and poverty alleviation. If things can stay on track, Chile's goal of becoming the first South American country to join the ranks of the world's most developed economies may well be rapidly approaching.

Uruguay

Uruguay, in comparison with Argentina or Chile, is compact, small, and rather densely populated. This **buffer state [6]** of the early independence era, lying between (then) potentially hostile Argentina and Brazil, has evolved into a fairly prosperous agricultural country—in effect a smaller-scale Pampa, though possessing less favorable soils and topography. Montevideo, the coastal capital, contains half of the country's population of 3.4 million; from here, railroads and roads radiate outward into the productive agricultural hinterland (Fig. 5B-6). In the immediate vicinity of Montevideo lies Uruguay's major farming zone, producing vegetables and fruits for the metropolis as well as wheat and fodder crops; most of the rest of the country is used for grazing cattle and sheep, with beef products, wool and textile manufactures, and hides dominating the export trade (Fig. 5B-6, inset map). Tourism is another major economic activity as Argentines, Brazilians, and other visitors flock to the Atlantic beaches at Punta del Este and other thriving resort towns.

About the size of Florida but with less than one-fifth the population, Uruguay offers significant agricultural promise. Nonetheless, its government seeks to diversify the economy, and one of its plans—the construction of two large cellulose (paper) factories on the Uruguayan side of the Uruguay River where it forms the border with Argentina—has caused a quarrel between the two Mercosur/l neighbors that has exposed some serious rifts. Montevideo is the administrative headquarters of Mercosur/l, but, like Paraguay, Uruguay has long felt neglected and even obstructed by its much larger neighbors. When Argentines across the river began demonstrating, barricaded a bridge, and stopped taking vacations on Uruguay's beaches, they severely impacted the Uruguayan economy.

The Argentines, who in any case dislike major foreign investments (the factories were going to be built by Finnish and Spanish companies), argued that the paper mills would accelerate deforestation, cause river pollution, create acid rain, and damage the farming, fishing, and tourist industries. When the presidents of the two countries met to negotiate a solution and Uruguay's leader agreed to halt construction for a "study period," Uruguayan public opinion showed strong opposition to the compromise. This issue reveals just how suddenly nationalist feelings can overwhelm the need for international cooperation. It also shows that Mercosur/l partners are far from united on economic matters and that the collaboration implied by membership in the organization is still a distant reality.

BRAZIL: GIANT OF SOUTH AMERICA

The next time you board an airplane, don't be surprised if the aircraft was built in Brazil. When you go to the supermarket to buy provisions, take a look at their sources. Chances are some of them will come from Brazil. When you listen to your car radio, some of the best music you hear may have originated in Brazil. The emergence of Brazil as the regional superpower of South America and an economic superpower in the world at large is going to be one of the main stories of the first quarter of the twenty-first century. Along with Russia, India, and China, Brazil is designated as one of the four biggest emerging markets in the world, the **BRICs [7]** (an acronym based on the first letter of this quartet of countries). In 2013, Brazil surpassed the UK to become the world's sixth-largest economy.

Why is Brazil so upward-bound today? First, after a long period of dictatorial rule by a minority elite that used the military to stay in power, Brazil embraced democratic government in 1989 and has not looked back since. The era of military coups and repeated crushing of civil liberties is over. Second, with its vast storehouse of natural resources, Brazil has benefited enormously from increased demands for commodities in the world market, mainly from China and India. In some ways, Brazil's political and economic turnaround runs parallel to that of Chile, but because of its sheer size Brazil matters far more to the rest of the realm and, indeed, the world.

By every measure, Brazil is South America's giant. It is so large that it has common boundaries with all the realm's other countries except Ecuador and Chile (Fig. 5B-1). Its tropical and subtropical environments range from the equatorial rainforest of the Amazon Basin to the humid temperate climate of the far south. Territorially as well as in terms of population, Brazil ranks fifth in the world, and on both counts it represents just about half of this entire realm. And by 2016, the Brazilian economy, with its ultramodern industrial base, will also be fifth in size, trailing only the U.S., China, Japan, and Germany.

Population and Culture

Brazil's population grew rapidly during the world's twentieth-century population explosion. But over the past three decades, the rate of natural increase has slowed from nearly 3.0 percent to 1.0 percent today, and the average number of children born to a Brazilian woman has been more than halved from 4.5 in 1975 to 1.9 in 2012. It is a demographic trend consistent with Brazil's overall modernization since 1980.

Brazil's population of 198.2 million is as diverse as that of the United States. In a pattern quite familiar in the Americas, the indigenous inhabitants of the country were decimated following the European invasion (approximately 800,000 now survive, about two-thirds of them deep within the Amazonian interior). Africans came in very large numbers as well, and they currently total more than 15 million.

Brazil's culture is infused with African themes, a quality that has marked it from the very beginning. Three centuries ago, the Afro-Brazilian sculptor and architect affectionately known as Aleijadinho was Brazil's most famous artist. The world-renowned composer Heitor Villa-Lobos used numerous Afro-Brazilian folk themes in his music. So many Africans were brought in bondage to the city and hinterland of Salvador in Bahia State (Fig. 5B-9) from what is today Benin (formerly named Dahomey) in West Africa that Bahia has become a veritable outpost of African culture. Indeed, Brazil can be said to have the second-largest black (African) population in the world, after Nigeria.

Significantly, however, there was also much racial mixing, and the 2010 census reported that 97 million Brazilians (50.7 percent of the total population) have combined European, African, and minor indigenous ancestries. White Brazilians of European origin—the descendants of immigrants from Portugal, Italy, Germany, and eastern Europe—are no longer in the majority: between 2000 and 2010 their share of the population dropped from 53.7 percent to 47.7 percent.

Yet another significant, although small, minority began arriving in Brazil in 1908: the Japanese, who today are concentrated in the States of São Paulo and Paraná. The more than 1 million Japanese-Brazilians form the largest ethnic Japanese community outside Japan, and in their multicultural environment they have risen to the top ranks of Brazilian society as business leaders, urban professionals, commercial farmers—and even as politicians in the city of São Paulo. Committed to their Brazilian homeland as they are, the Japanese community also retains its contacts with Japan, resulting in many a trade connection.

Brazilian society, to a much greater degree than is true elsewhere in the Americas, has made progress in dealing with its racial divisions. Yet blacks remain the least advantaged among the country's leading population groups, and community leaders continue to complain about discrimination. But ethnic mixing in Brazil is so pervasive that hardly any group is unaffected, and official census statistics concerning "blacks" and "Europeans" are rather pointless.

What the Brazilians do have is a true national culture, expressed in a traditional adherence to the Roman Catholic faith (its adherents now constitute only about 65 percent of the population [down from 90 percent as recently as the 1970s], a share that steadily continues to erode under Protestant-evangelical and secular pressures); in the universal use of a modified form of Portuguese as the common language

FIGURE 5B-9

("Brazilian"); and in a set of lifestyles in which soccer, "beach culture," distinctive music and dance, and an intensifying national consciousness and pride are fundamental ingredients.

Inequality and Poverty

For all its accomplishments in multiculturalism, Brazil remains a country of stark, appalling social inequalities (Fig. 5B-10). Although such inequality is hard to measure precisely, South America is frequently cited as the geographic realm exhibiting the world's sharpest division between affluence and poverty. And within South America, Brazil was traditionally reputed to have the widest gap of all.

But since 2002, the Brazilian government has been implementing a set of policies aimed at bringing relief to the poor while maintaining robust economic growth. It has enacted land reform and increased access to education for Brazil's masses. It has also started a subsidy program that has had

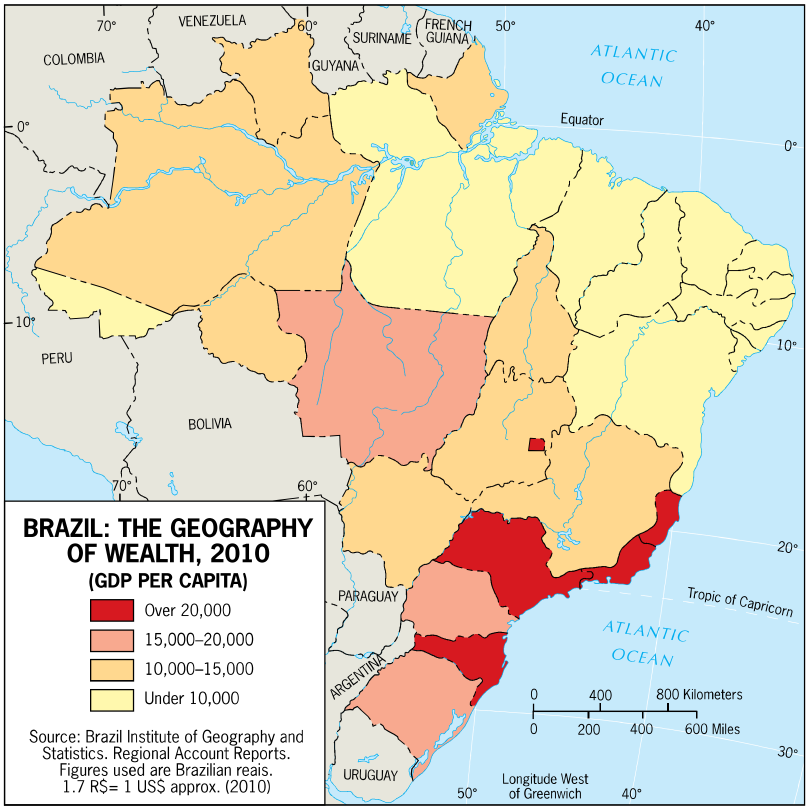


FIGURE 5B-10 © H. J. de Blij, P. O. Muller, J. Nijman, and John Wiley & Sons, Inc.

significant results in the poorest States. This *Bolsa Familia* (Family Fund) plan, instituted under former President Cardoso in the 1990s, provides families with small payments of cash to keep their children in school and ensure their vaccinations against diseases that especially afflict the poor. In just a few years this program has become so successful that it now serves as a model for antipoverty campaigns in many other parts of the world. At the same time, the percentage of people officially living in poverty in Brazil dropped from roughly 30 percent in 2000 to around 21 percent in 2012.

Regional inequalities are being targeted as well by government policies. Major new legislation was passed in 2012 that would allow revenues from oil to be shared by all of Brazil's States (previously this income was mainly channeled to the three oil-producing States of Rio de Janeiro, Espirito Santo, and São Paulo). In addition, overall federal spending is increasingly being steered to poorer States—particularly the Northeast—in order to accelerate economic growth.

Development Prospects

Brazil is richly endowed with mineral resources, including enormous iron and aluminum ore reserves, extensive tin and manganese deposits, and highly promising oil- and gasfields (Fig. 5B-9). Other significant energy developments involve massive new hydroelectric facilities and the successful integration of sugarcane-based anhydrous ethanol with gasoline to allow Brazil's motor vehicles to utilize this "gasohol" instead of costlier imported petroleum (all Brazilian cars today are configured to use this biofuel, whose ethanol content must be at least 18 percent). Besides these natural endowments, Brazil has more arable land than any other country in the world. Brazilian soils sustain a bountiful agricultural output that makes the country the world's leading exporter of coffee, orange juice, sugar, tobacco, ethanol, beef, and chicken. Its government has set the goal of Brazil becoming the number-one food exporter in the world as soon as 2015, displacing the United States. Commercial agriculture, in fact, is now the fastest growing economic sector, driven by mechanization and the opening of a booming new farming frontier in the fertile grasslands of southwestern Brazil (discussed later in conjunction with the Interior subregion).

Industrialization has driven Brazil's rise as a global economic power. Much of the momentum for this continuing development was unleashed in the early 1990s after the government opened the country's long-protected industries to international competition and foreign investment. These new policies proved to be highly effective because productivity has risen by at least one-third since 1990 as Brazilian manufacturers attained world-class quality. More than a decade ago, revenues from industrial exports surpassed those from agriculture. Heightened commerce with Argentina made that other key member of Mercosur/l one of Brazil's leading trade partners.

AMONG THE REALM'S GREAT CITIES . . .

RIO DE JANEIRO

SAY "SOUTH AMERICA" and the first image most people conjure up is Sugar Loaf Mountain, Rio de Janeiro's landmark sentinel that guards the entrance to beautiful Guanabara Bay (see photo on opening page of this chapter). Nicknamed the "magnificent city" because of its breathtaking natural setting, Rio replaced Salvador as Brazil's capital in 1763 and held that position for almost two centuries until the federal government shifted its headquarters to interior Brasília in 1960. Rio de Janeiro's primacy suffered yet another blow in the late 1950s: São Paulo, its urban rival 400 kilometers (250 mi) to the southwest, surpassed Rio to become Brazil's largest city—a gap that has been widening ever since. Although these events triggered economic decline, Rio (12.3 million) remains a major *entrepôt*, air-travel and tourist hub, and leading cultural center with its entertainment industries, universities, museums, and libraries.

On the darker side, this city's reputation is increasingly tarnished by the widening abyss between Rio's affluent and poor populations—symbolizing inequities that rank among the world's most extreme (see the photo pair of contrasting urban landscapes in Chapter 5A). All great cities experience problems, and Rio de Janeiro has for years been bedeviled by the drug use and crime waves emanating from its most desperate hillside *favelas* (slums) that continue to grow explosively.

Rio's planners recently launched a wide-ranging project (known as "Rio-City") to improve urban life for all residents. This ambitious scheme, it is said, aims to reshape nearly two dozen of the aging city's neighborhoods, introduce an ultramodern crosstown expressway to relieve nightmarish traffic congestion, and—most importantly—bring electrical power, paved streets, and a sewage-disposal network to the beleaguered *favelas*.

Much of this was related to Rio's hosting of the Summer Olympics in 2016 and soccer's World Cup tournament in 2014, which motivated local and federal authorities to do all they could to showcase their city in the "happy-go-lucky" image of Brazilian soccer. But in the early summer of 2013, hundreds of thousands people took to the streets of Rio to vent their frustration with government plans to raise transit fares, protest runaway corruption, demand better schools and other public services, and even to protest what many considered wildly disproportionate investments in new soccer stadiums that would sit unused after the World Cup. Facing a race against time to prepare the country for the events of 2014, this unrest was the last thing Brazil's government needed.

On the global stage, Brazil has become a formidable presence in other ways. The country's enormous and easily accessible iron ore deposits, the relatively low wages of its workers, and the mechanized efficiency of its steelmakers enable Brazil to produce that commodity at half the cost of steel made in the United States (which caused American steel producers to demand protectionist measures). The biggest consumer of iron ore and steel, as well as many other raw materials, is China. In 2012, the Açu Superport, 400 kilometers (250 mi) northeast of Rio de Janeiro, opened for business as the largest bulk cargo port on Earth, accommodating the biggest ships that sail the oceans—those, too, are Chinese (see final photo in Chapter 5A).

A Highly Promising Oil Future

Compared to the other BRICs, Brazil stands out in terms of the diversity and accessibility of its natural resources. It has been paying for government programs with revenues mainly derived from commodities—iron ore, soybeans, coffee, orange juice, beef, sugar—that in recent years have commanded high prices on international markets.

Brazil can now add oil—lots of it—to its portfolio. In the past, a leading concern for Brazil was energy and its rising costs. Recessions were deepened by high oil and gas prices, and other than some modest domestic reserves and those in neighboring Bolivia there were few nearby sources to acquire what was needed. But in 2009 the state-owned (but publicly traded) petroleum company, Petrobras, confirmed the discovery of an enormous oil reserve, quite possibly among the world's largest, capable of yielding an estimated 2 billion barrels. It was proof, said then-President Lula with a broad smile on his face, that "God is Brazilian."

By 2010, the country was already self-sufficient in oil. Production is expected to double by 2020, and before then Brazil will become a major exporter, thereby adding significantly to its foreign revenues. Moreover, the newfound reserves lie off the coast in a cluster of oilfields—most fortuitously located near Rio de Janeiro and São Paulo (see Fig. 5B-9)—and are being explored further as you read this. Although these oil deposits are massive and reserve estimates are constantly being revised upward as new discoveries are made, they are buried quite far beneath the ocean floor. Thus exploitation will be costly and require substantial foreign investment in addition to leading-edge drilling methods, but is likely to take Brazil's technology sector to an ever more advanced level.

Brazil's Subregions

Brazil is a federal republic consisting of 26 States and the federal district of the capital, Brasília (Fig. 5B-9). As in the United States, the smallest States lie in the northeast and the larger ones farther west; their populations range from about 475,000 in the northernmost, peripheral Amazon State of Roraima to more than 42 million in burgeoning São Paulo State. Although Brazil is about as large as the 48 contiguous United States, it does not exhibit a clear physiographic regionalism. Even the Amazon Basin, which covers just about 60 percent of the country, is not entirely a plain: between the tributaries of the great river lie low but extensive tablelands. Given this physiographic ambiguity, the six Brazilian subregions discussed next exhibit no absolute or even generally accepted boundaries. In Figure 5B-9, those boundaries have been drawn to coincide with the borders of States, making identifications easier.

The **Northeast** was Brazil's source area, its culture hearth. The plantation economy took root here at an early date, attracting Portuguese planters, who soon began to import the country's largest contingent of African slaves to work in the sugar fields. But the ample rainfall occurring along the coast soon gives way to drier and more variable patterns in the interior, which is home to about half of the region's 50-plus million people. This drier inland backcountry—called the ***sertão***—is not only seriously overpopulated but also contains some of the worst poverty to be found anywhere in the Americas. The Northeast produces less than one-sixth of Brazil's gross domestic product, but its inhabitants constitute more than one-fourth of the national population. Given this staggering imbalance, it is not surprising that this subregion contains half of the country's poor, a literacy rate 20 percent below Brazil's mean, and an infant mortality rate twice the national average.

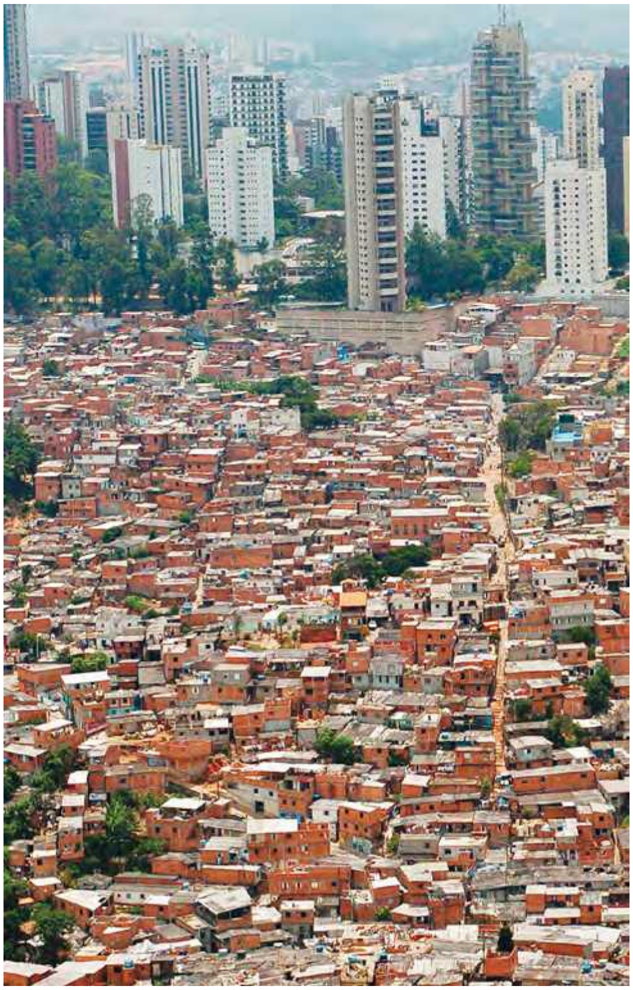
Much of the Northeast's misery is rooted in its unequal system of land tenure. Farms must be at least 100 hectares (250 acres) to be profitable in the hard-scrabble *sertão*, a size that only large landowners are able to afford. Moreover, the Northeast is tormented by a monumental environmental problem: the cyclical recurrence of devastating droughts at least partly attributable to ***El Niño*** **[8]** (periodic events of sea-surface warming off the continent's northwestern coast that skew regional weather patterns).

Brazil's great contradiction today, the Northeast is finally receiving greater attention from the central government, largely in the form of federally funded (think oil money) infrastructure projects and incentive-driven investment. In cities such as Recife and Salvador, hordes of peasants driven from the land constantly arrive to expand the surrounding shantytowns. As yet, few of the generalizations about emerging Brazil apply here, but there are some bright spots. A petrochemical complex has been built near Salvador, creating thousands of jobs and luring foreign investors. Irrigation projects have nurtured a number of productive new commercial agricultural ventures. Tourism is booming along the entire Northeast coast, whose thriving beachside resorts attract tens of thousands of vacationing Europeans (flying times are 8 hours or less). Recife has now spawned a budding software industry and a major medical complex. And Fortaleza is the center of new clothing and shoe industries that have already put the city on the global economic map.

The **Southeast** has been modern Brazil's ***core area***, with its major cities and leading population clusters. Gold first drew many thousands of settlers, and other mineral finds also contributed to the influx—with Rio de Janeiro itself serving as the terminus of the "Gold Trail" and then as the long-time capital of Brazil until 1960. "Rio" became the cultural capital as well, the country's most international center, *entrepôt*, and tourist hub. The third quarter of the twentieth century brought another mineral age to the Southeast, based on the iron ores around Lafaiete carried to the nearby steelmaking complex at Volta Redonda (Fig. 5B-9). The surrounding State of Minas Gerais (the name means "General Mines") formed the base from which industrial diversification in the Southeast has steadily mushroomed. The burgeoning metallurgical center of Belo Horizonte paved the way and is now the endpoint of a rapidly developing, ultramodern manufacturing corridor that stretches 500 kilometers (300 mi) southwest to metropolitan São Paulo (Fig. 5B-9, striped zone).

São Paulo State is both the leading industrial producer and the primary focus of ongoing Brazilian development. This economic-geographic powerhouse accounts for nearly half of the country's GDP, with a booming economy that today matches Argentina's in overall size. Not surprisingly, this subregion is growing phenomenally (it contains more than 20 percent of Brazil's population) as a magnet for migrants, especially from the Northeast.

The wealth of São Paulo State was built on its coffee plantations (known as ***fazendas***), and Brazil is still the world's leading producer. But coffee today has been eclipsed by other farm commodities. One of them is orange juice concentrate (here, too, Brazil leads the world). São Paulo



São Paulo may not have an imposing skyline to match New York or a skyscraper to challenge the Sears (now Willis) Tower of Chicago, but what this Brazilian megacity does have is mass. São Paulo is more than just another city—it is a vast conurbation of numerous cities and towns containing more than 26 million inhabitants who constitute the third-largest human agglomeration on Earth. This view shows part of the razor-sharp edge of the CBD, a concrete jungle with little architectural distinction but home to a vibrant urban culture. In the foreground, juxtaposed against the affluence of downtown, the teeming inner city reflects the opposite end of the social spectrum—a chaotic jumble of *favelas* that mainly house the rural-urban migrants, especially from Brazil's hard-pressed Northeast.

State now produces more than double the annual output of Florida, thanks to a climate all but devoid of winter freezes, ultramodern processing plants, and a fleet of specially equipped tankers that ship the concentrate to foreign markets. Another leading pursuit is soybeans, in which Brazil today ranks second among the world's producers.

Matching this agricultural prowess is the State's industrial strength. The revenues derived from the coffee plantations provided the necessary investment capital, ores from Minas Gerais supplied the vital raw materials, São Paulo City's outport of Santos facilitated access to the ocean, and immigration flows from Europe, Japan, and other parts of Brazil contributed the increasingly skilled labor force. As the capacity of the expanding domestic market grew, the advantages of central location and large-scale agglomeration nailed down São Paulo's primacy. This also resulted in metropolitan São Paulo becoming the country's—and South America's—leading industrial complex and megacity. But with this came massive problems of overcrowding, pollution, and congestion (see *Great Cities* box).

The **South** consists of three States, whose combined population exceeds 27 million: Paraná, Santa Catarina, and Rio Grande do Sul (Fig. 5B-9). Southernmost Brazil's exceptional agricultural potential has long attracted sizeable numbers of European immigrants. They introduced their advanced farming methods to several areas in this part of the country. Portuguese rice farmers clustered in the valleys of Rio Grande do Sul, where tobacco production has now propelled Brazil to become the world's number-one exporter. The Germans, specialists in raising grain and cattle, occupied the somewhat higher areas to the north and in Santa Catarina. The Italians selected the highest slopes, where they established thriving vineyards. All of these fertile lands proved highly productive, and with growing markets in the mushrooming urban areas to the north, this tri-State subregion became Brazil's most affluent corner.

With Brazil's South firmly rooted in the European/commercial agricultural sphere (Figs. 5A-4, 5A-5), European-style standards of living accompany the diverse Old World heritage that is reflected in the urban centers and countryside (where German and Italian are spoken alongside Portuguese). This has led to hostility against non-European Brazilians, and a number of communities actively discourage poor job-seeking migrants from the north by offering to pay return bus fares or even blocking their household-goods-laden vehicles. Moreover, extremist groups have proliferated and continue to openly espouse the secession of the South from the rest of Brazil.

Economic development within the South is not limited to the agricultural sector. Coal from Santa Catarina and Rio Grande do Sul is shipped north to the steel plants of Minas Gerais. Local manufacturing is growing as well, especially in Pôrto Alegre and Tubarão. During the 1990s, a major center of the computer software industry was established in Florianópolis, the island-city as well as State capital just off Santa Catarina's coast. Known as *Tecnópolis*, this budding technopole continues to grow by capitalizing on its seaside amenities, skilled labor force, superior air-travel and global communications linkages, and government and private-sector initiatives to support new companies.

The **Interior** subregion—constituted by the States of Goiás, Mato Grosso, and Mato Grosso do Sul—is also known as the ***Central-West***. This is the subregion that Brazil's developers long sought to make a part of the country's productive heartland, and in 1960 the new capital of Brasília was deliberately situated on its margins (Fig. 5B-9).

By locating the new capital city in the wilderness 650 kilometers (400 mi) inland from its predecessor, Rio de Janeiro, the nation's leaders dramatically signaled the opening of Brazil's development thrust toward the west. Brasília is

AMONG THE REALM'S GREAT CITIES . . .

SÃO PAULO

SÃO PAULO, WHICH lies on a plateau 50 kilometers (30 mi) inland from its Atlantic outport of Santos, at first appears to possess no obvious locational advantages. Yet here on this site we find the third-largest metropolis on Earth, whose population has multiplied so uncontrollably that São Paulo has more than doubled in size (from 11 to just over 26 million) during the past three decades.

Founded in 1554 as a Jesuit mission, the initial choice of location was based on access to the relatively large native population groups of the interior that were targets of conversion to Catholicism—hence the naming after St. Paul. The mission was also situated on the Tietê River, a convenient means of transport that originates near the coast but flows inland toward the northwest interior. In the seventeenth century, São Paulo became the home base of the so-called *bandeirantes* (explorers, gold prospectors, and slave traders), an unruly lot for whom the relatively remote location, far from the rule of law, was an advantage. Important gold mines were soon discovered in neighboring Minas Gerais State, turning São Paulo into a busy gateway that was further enhanced as the fertile lands to the west attracted a growing number of settlers.

Modern São Paulo, however, was built on the nineteenth-century coffee boom. Ever since, it has grown steadily as both an agricultural processing center (soybeans, orange juice concentrate, and sugar besides coffee) and a manufacturing complex (today accounting for about half of all of Brazil's industrial jobs). Along the way, it also evolved into Brazil's primary focus of commercial and financial activity. Twenty-first-century São Paulo's bustling, high-rise CBD (see photo) is the very symbol of urban South America, and attracts the realm's largest flow of foreign investment as well as the trade-related activities that befit the city's emergence as the business capital of Mercosur/I.

Nonetheless, even for this metropolitan industrial giant of the Southern Hemisphere, the increasingly global tide of postindustrialism is rolling in and São Paulo is learning to adapt. To avoid becoming a Detroit-style Rustbelt, the aging automobile-dominated manufacturing zone on the central city's southern fringes is today attracting new industries. Internet companies have flocked here, as well as to the nearby city of Campinas, in such numbers that they now form the country's largest high-tech cluster—increasingly referred to as "Silicon Valley of Brazil."

Elsewhere in São Paulo's vast urban constellation—whose suburbs now sprawl outward up to 100 kilometers (60 mi) from the CBD—many additional opportunities are being exploited. In the outer northeastern sector, new research facilities as well as computer and telecommunications-equipment factories are springing up. And to the west of central São Paulo, lining the ring road that follows the

Pinheiros River, is South America's largest suburban office complex replete with a skyline of ultramodern high-rises.

These advances notwithstanding, the colossal recent growth of this megacity has come at a price. Whereas incomes are about 25 percent higher than in Rio, so is the cost of living. And there are massive problems of overcrowding, pollution, and congestion. Traffic jams here are among the world's worst, with more than twice as many gridlocked motor vehicles on any given day than in Manhattan. The recent expansion of the metro—the last of only four such transit lines—was not completed until 2010; it has somewhat eased commuting, but overcrowding is immense with a staggering 5.2 million passengers riding the trains every work day. The urban region has expanded in all directions and is now relatively well connected by major highways. One of the world's most spectacular expressways leads to Santos, with enormous bridges, tunnels, and crisscrossing north- and southbound lanes—mostly amidst breathtaking scenery.

But there is also another São Paulo, this one plagued by grinding poverty on a scale with Mexico City's (see foreground of photo). This is the most pressing urban crisis of all as the ever-expanding belt of shantytowns tightens its grip on much of the metropolis. With its rapid growth rate expected to persist through the foreseeable future, can anything prevent Greater São Paulo from surpassing the 30 million milestone less than 10 years from today?

noteworthy in another regard because it represents what political geographers call a **forward capital [9]**. A state will sometimes relocate its capital to a sensitive area, perhaps near a peripheral zone under dispute with an unfriendly neighbor, in part to confirm its determination to sustain its position in that contested zone. Brasília does not lie close to a contested area, but Brazil's interior was an internal frontier to be conquered by a growing nation. Spearheading that drive, the newly-built capital occupied a decidedly forward position.

Despite the subsequent growth of Brasília to 4.1 million inhabitants today (which includes a sizeable ring of peripheral squatter settlements), it was not until the 1990s that the Interior began its economic integration with the rest of Brazil. The catalyst was the exploitation of the vast ***cerrado* [10]**—the fertile savannas that blanket the Central-West and make it one of the world's most promising agricultural frontiers (at least two-thirds of its arable land still awaits development). As with the U.S. Great Plains, the flat terrain of the *cerrado* is one of its main advantages because it facilitates the large-scale mechanization of farming with a minimal labor force. Another benefit is rainfall, more prevalent here than in the Great Plains or Argentine Pampa.

The leading crop is soybeans, whose output per hectare (2.5 acres) here exceeds even that of the U.S. Corn Belt. Other grains and cotton are also expanding across the farmscape of the *cerrado*, but the current pace of regional development is inhibited by a serious accessibility problem—forcing the Interior's products to travel along poor roads and intermittent railroads to reach the markets and ports of the Atlantic seaboard. Today several projects are finally underway to alleviate these bottlenecks, including the privately financed Ferronorte railway that links Santos to the southeastern corner of Mato Grosso State, and the much-improved, so-called ***Soy Highway*** leading northward to the Amazon River port city of Santarém.

The **North** is Brazil's territorially largest and most rapidly developing subregion, which consists of the seven States of the Amazon Basin (Fig. 5B-9). This was the scene of the great rubber boom of a bit more than a century ago, when the wild rubber trees in the *selvas* (tropical rainforests) produced huge profits and the central Amazon city of Manaus enjoyed a brief period of wealth and splendor. But the rubber boom ended in 1910, and for most of the seven decades that followed, Amazonia was a stagnant hinterland lying remote from the centers of Brazilian settlement. All that changed quite dramatically during the 1980s as new development began to stir throughout this awakening subregion, which currently is the scene of the world's largest migration into virgin territory. More than 200,000 new settlers arrive each year. The North of Brazil is also well known for its high rates of ***deforestation*** (an issue discussed in Chapter 4A). Removing the rainforest results directly from logging operations, but more of it is now a matter of clearing space for land occupation by settlers as well as the expansion of large-scale agribusiness.

From 1995 to 2005, an area of 20,000 square kilometers (7700 sq mi) was cleared away every year. But the worst may be over (despite a surge in 2012–13). In 2008, the Brazilian government pledged to achieve an 80-percent reduction in deforestation by 2020, and to terminate the practice by 2030. At least part of its thinking is that Brazil has enormous potential as a "green economy" with its abundance of land, water, and sunshine. Today, about 40 percent of the country's energy is already obtained from renewable sources (versus less than 12 percent in the United States), and it is becoming easier to envision Brazil as a leading environmental power.

Development projects abound today in the Amazonian North. One of the most durable is the ***Grande Carajás***

VOICE FROM THE Region

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LIVING IN ONE OF BRAZIL'S FAR CORNERS

"I have lived all my life in the town of Boa Vista, capital of Roraima which is the northernmost State of Brazil. Roraima has dense, lowland tropical rainforest in the south and beautiful highland rainforest in the north. There are less than 500,000 people in the entire State and we are extremely isolated—almost 3000-kilometers (1850 mi) from São Paulo, separated by the Amazon Basin. Most of our border is with Guyana and Venezuela. To go anywhere in Brazil from here, you have to first drive to Manaus; there is one road that goes there, the BR-174. Before that road was built, we were much more isolated still. Manaus is on the Rio Negro and from there you can travel the Amazon by boat, or you can fly to the Southeast. I went to São Paulo once and it's a different world from Roraima. The drive to Manaus normally takes 12 hours but on the way back the bus broke down and I remember having to stand there for 6 hours in 97-degree heat, waiting for it to be repaired. Because of the distances, the products we buy are more expensive, from food to clothing. Lately, many people like me cross the border to nearby Venezuelan towns where things are cheaper. Despite the distances and some of the hardships, I love living here: I belong with the indigenous culture, the natural environment is beautiful, and my friends and family are here. In addition, the Brazilian government now invests a lot in remote border areas like Roraima and induces migrants from other parts of the country to settle here. Despite the small population, we have a good public university in Boa Vista where I study geography, an important subject in Brazil. I might move somewhere else for a career opportunity, the Southeast maybe, but I already know that I will miss Roraima."

NRSC/Science Source

This is what the Amazon's equatorial rainforest looks like from an orbiting satellite after the human onslaught in preparation for settlement. The colors on this Landsat image emphasize the destruction of the trees, with the dark green of the natural forest contrasted against the pale green and pinks of the leveled forest. The linear branching pattern of deforestation is the preferred approach here in Rondônia State's Highway BR-364 corridor. But farming is not likely to succeed for very long, and much of the cleared land is likely to be abandoned. Then the onslaught would resume to clear additional land—a cycle the Brazilian government has committed itself to end by 2030.

Project in central Pará State, a huge multifaceted scheme centered on the world's largest known deposit of iron ore in the hills around Carajás (Fig. 5B-9; aerial photo Chapter 5A). Besides a vast mining complex, other new construction here includes the Tucuruí Dam on the nearby Tocantins River and an 850-kilometer (535-mi) railroad to the Atlantic port of São Luis. This ambitious development project further emphasizes the exploitation of additional minerals, cattle raising, crop farming, and forestry. What is taking place here is a manifestation of the **growth-pole concept [11]**. A growth pole is a location where a set of activities, given a start, will expand and generate widening ripples of development in the surrounding area. According to this scenario, the stimulated hinterland could one day cover one-sixth of all Amazonia.

Understandably, tens of thousands of settlers have descended on this part of the Amazon Basin. Those seeking business opportunities have been in the vanguard, but they have been followed by masses of lower-income laborers and peasant farmers in search of jobs and land ownership. The initial stage of this colossal enterprise has boosted the fortunes of many urban centers, particularly Manaus northwest of Carajás. Here, a thriving industrial complex (specializing in the production of electronic goods) has emerged within the free-trade zone adjoining the city thanks to the outstanding air-freight facilities and operations at Manaus's ultramodern airport. But many problems have also arisen as the tide of pioneers rolled across central Amazonia. One of the most tragic involved the Yanomami people, whose homeland in Roraima State was overrun by thousands of claim-stakers (in search of newly discovered gold), who triggered violent confrontations that ravaged the fragile aboriginal way of life.

Another important, pathbreaking development scheme, known as the ***Polonoroeste Plan***, is located about 1600 kilometers (1000 mi) to the southwest of Grande Carajás concentrated in the 2400-kilometer (1500-mi)-long Highway BR-364 corridor that parallels the Bolivian border and interconnects the western Brazilian towns of Cuiabá, Pôrto Velho, and Rio Branco (Fig. 5B-9). Even though the government had planned for the penetration of western Amazonia to proceed via the east-west Trans-Amazon Highway, the migrants of the 1980s and 1990s preferred to follow BR-364 and settle within the Basin's southwestern rim zone, mostly in Rondônia State (see photo). Agriculture has been the dominant activity here, but in the quest for land, bitter conflicts continue to break out between peasants and landholders as the Brazilian government grapples with the volatile issue of land reform.

Brazil is the cornerstone of South America, the dominant economic force in Mercosur/l, the only dimensional counterweight to the United States in the Western Hemisphere, a maturing democracy, and an emerging global giant as an industrial and agricultural powerhouse. Its rapidly intensifying relationship with China, in particular, is a clear sign that South America no longer remains in the shadow of the United States. The future of the South American realm depends in large part upon Brazil's stability and social as well as economic progress.

POINTS TO PONDER

- Brazil is well on its way to displacing the United States as the world's biggest food exporter; it aims to do so by 2015.
- Much of South America's economic growth in the past ten years can be attributed to China's demand for raw materials.
- Rising cost of living becomes a focal point for social protest when a government seeks to attract world-class events such as the Olympic Games. As Brazil found out, with millions pouring into new infrastructure to accommodate what locals regard as the jet-set elite, bus fares and food prices rise, creating an atmosphere that can turn violent.