# Case Study 10

# A World of Contrasts on One Island: Haiti and the Dominican Republic

The terrible earthquake that struck Haiti in January 2010 brought to public awareness an immediate crisis of horrific proportions—and also an ongoing slow-motion disaster of poverty and suffering in a nation of 10 million people, including an environmental crisis. News reports showed its neighbor, the Dominican Republic (DR), also with a population of just over 10 million in 2012, with higher incomes, less poverty, and much better environmental conditions.

Haiti's environmental disaster could have been substantially averted with better domestic policies. And so it is not the root cause of Haiti's problems. But why were better environmental (and other supporting) policies not in place? That is, what were the limits of Haiti's institutions in this respect? And are Haiti's environmental problems caused by the country's great poverty? Has environmental degradation itself now also become one of the causes of continued economic and human development stagnation? What could have been done with well-targeted aid, and what role can aid play now?

Travelers to Haiti who flew across the border from the DR saw an astonishing contrast: Haiti to the west is barren, while the DR to the east is lush forest—except where Haitians desperate for fuelwood for income from charcoal production have made forays across the border. In 2004, the United Nations Development Programme (UNDP) commented on this scene, noting "a cycle of poverty and environmental destruction has denuded hill-sides." In 2005, Jared Diamond wrote eloquently that "the border looks like a sharp line with bends, cut arbitrarily across the island by a knife, and abruptly dividing a darker and greener landscape east of the line (the Dominican side) from a paler and browner landscape west of the line (the Haitian

side)." He added, "On the ground, one can stand on the border at many places, face east, and look into pine forest, then turn around, face west, and see nothing except fields almost devoid of trees." Years after this helpful publicity, little to address the problems was being accomplished.

On the eastern (nearly) two-thirds of the island of Hispaniola that the two nations share, the DR finds itself with a medium human development ranking, at number 96 on the 2012 New HDI. On the western third of Hispaniola, Haiti has a low human development ranking, at number 161—using data that do not yet reflect the full impact of the earthquake.

The contrasts between the two nations sharing the island of Hispaniola were not always as stark as today. In 1960, real incomes in these two countries were not very far apart, about \$2,345 for the DR and \$1,877 for Haiti in the Penn World Table estimates—that is, approximately 25% higher in the DR. Haiti had about 12% of average U.S. income levels at the time, while the DR had 16% of average U.S. income. But by 2007, real GDP in the DR had risen to \$9,664; but it actually fell in Haiti to \$1,581. That is, income in the DR is now over six times that of Haiti. U.S. incomes grew in this period such that Haiti's average income by 2007 was less than 4% of U.S. levels. But the DR, which had grown somewhat faster than the United States, now reached an average income that was more than 22% of that in the United States. (While estimates differ across methods, the qualitative comparisons are similar; Angus Maddison's research indicates almost identical incomes for the two countries in 1950, but by 2008, the DR incomes were over seven times that of Haiti.) This fact suggests that important clues are to be found in events and policies since 1960. On the other hand, to understand opportunities and







constraints so that it becomes clearer why policies diverged, it is often helpful to start with the beginnings of colonial times.

Hispaniola was "discovered" in 1492 by Christopher Columbus, but a large majority of its hundreds of thousands of Arawak and Taino people soon died—of diseases brought by the Spaniards, overwork in enslavement, and genocide. Slaves were then forcibly brought in from Africa. Since that hideous period, the economic histories of Haiti and the DR have been a tale of contrasts.

Haiti soon became one of the highest-income countries in the world, albeit with one of the highest extremes of inequality in history, with a large, impoverished, and brutalized slave population supporting a small, wealthy elite. In contrast, the DR, with fewer slave plantations, was more the tortoise to Haiti's hare. The better performance of the DR seems to offer further confirmation of the analysis of Chapter 2 (and of the case study for Chapter 5) of how differences in earlier institutions can have a big effect on economic development outcomes. This experience also reveals how influences of deep, structural inequality and education (or its lack) can shape the evolution of institutions over time, as was also first introduced in Chapter 2 and explored in Chapters 5 and 8. And it is also suggestive as to how each of these three factors can, through the quality of policies, affect the extent of environmental decay and how that can, in turn, worsen human capabilities and development prospects. What can we learn from the long-term record?

#### **Geography and Original Environments**

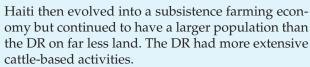
Hispaniola is a subtropical island of about 76,482 square kilometers—smaller than Cuba but larger than Jamaica or Puerto Rico. Sharing the same island, both Haiti and the DR seem to have started with similar geographies and environments, with some modest differences. The DR occupies about 64% of the land area; with the remaining 36%, Haiti is about the size of the Hawaiian Islands. Rainfall is slightly higher in the DR because the rain typically comes from the east; Haiti is more mountainous, and its mountains block the rain. The rivers flow mostly eastward from these mountains, providing water for the DR. These modest initial environmental differences may have put Haiti at some disadvantage, but Haiti has done

well economically in comparison to the DR in some periods. Both countries were once largely covered with forests. But environmental damage was already under way under colonial rule, with deforestation due to extensive logging and overuse of the soil. Adverse human influence has had a bigger impact in Haiti.

### **Institutions: Historical Legacy**

Clearly, neither country started with favorable institutions. The abundance of resources and the island's suitability for sugar production led the Spanish to create institutions designed for extraction. The Spanish New World repartimiento system, in which Spanish-born peninsulares received land tracts and the right to use native labor, was first implemented in Hispaniola. When importing slaves became too expensive for the Spanish, the French gained control of Haiti in 1697. The colony became a major slaveholding plantation economy and the wealthiest European colony in the New World. But a large majority of the population were slaves. A slave revolt led Haiti to independence in 1804. Both Haiti and the DR suffered subsequent attempts to reinstate slavery and fought wars against each other, including an 1821-1843 attempt at reunification (known as the Haitian occupation in the DR, whose Independence Day celebrates freedom from Haiti).

The period of revolt in Haiti led to much death and to the destruction of wealth as sugar plantations burned. And while the brutality of slavery ended, extreme inequality persisted in Haiti under a new mulatto and black privileged class for whom the French elite were the cultural reference point. But the French invaded and received a huge ransom, allegedly for lost wealth from expropriation. Fear of invasion and alienation from white slaveholding countries and colonies kept the country inward looking; this was reinforced by a policy of isolation imposed by slaveholding countries, including the United States. The mutual distrust between Haiti and its potential trading partners is one cause of the resulting autarkic development, including reluctance to allow foreign ownership. The people of Haiti also spoke Creole, an obstacle for potential trading partners; Spanish was spoken in the DR. Europeans tended to view the DR as Spanish but Haiti as African and hence "inferior."



The DR became fully independent only after 1843. It was undermined by war and intrigue, such as restoration of Spanish authority briefly in the 1860s and occupation by the United States from 1916 to 1924. During the occupation, significant infrastructure was built, including schools, roads, and ports—projects continued and extended to hydropower under the subsequent brutal Trujillo dictatorship; this helped facilitate a relatively higher growth rate, though inequality was reinforced while freedoms were repressed.

The United States occupied Haiti from 1915 to 1934. Basic security and order were restored, and road construction, expanded public health, education services, and other infrastructure improved. However, after U.S. occupation, the dictator François "Papa Doc" Duvalier—a brutal ruler like Trujillo in the DR—did not focus on modernizing Haiti, in some contrast to Trujillo. As Laura Jaramillo and Cemile Sancak concluded, Duvalier was only interested in short-term rent-seeking opportunities instead of maintaining the country's infrastructure. The DR has emerged as a much more democratic nation since the 1978 elections, while at least until very recently Haiti has made far less progress.

#### **Human Capital**

Haiti has the highest illiteracy rate in the western hemisphere, estimated at more than half the population. The school system is badly underfunded and disorganized. Health conditions are equally bad and include high under-5 mortality, hunger, and a large HIV/AIDS problem. The 2010 cholera outbreak was a symptom of a broken health system. The DR, although not without serious education problems, has done a far better job than Haiti at providing its people with the human capital they need to compete in a globalizing economy.

#### **Policy Effects**

In the 1990s, growth rates accelerated in the DR due to improvements in education, trade policies, and infrastructure. Remittances and tourism grew to become nearly a quarter of the country's

GDP, and net manufacturing exports per capita doubled. Haiti, however, suffered from political instability during the same period. The army overthrew President Aristide in 1991 and began a violent regime that damaged the economy directly and also indirectly through subsequent UN and U.S. trade embargoes. Haiti also failed to diversify its economy; its continued focus on sugar has left Haiti not only contending with volatile sugar prices but also competing against sugar-subsidizing rich countries (most prominently the United States). The DR's diversification into tourism depended on a clean environment—both on its beaches and in its forests—for ecotourism. Policy in the DR actively sought out foreign investment for manufacturing that provided higher-wage employment. The DR has long had far more nature reserves and national parks; Trujillo's insistence on forest preservation had long-run positive effects on the environment and development. The DR has clearly had better policies, and apparently, a long legacy of institutions mattered for the policy differences between the DR and its neighbor.

Poverty can cause environmental damage, and the poor can, in turn, become its victims. Haiti's agricultural expansion has been poorly managed. Deforestation has, in turn, led to the massive loss of fertile soil, lowering productivity of farms. Currently, more than a quarter of the DR is forested, compared to only 1% forest cover in Haiti. A similar cover existed in Haiti as in the DR just a few decades ago. Other low-income countries have introduced and enforced helpful environmental regulations; had Haiti done the same, despite deep historical roots, the environmental disaster might at some level have been averted. The case of Haiti adds to the growing evidence that environmental destruction can retard the development process more generally and needs to be a bigger priority.

Both countries have faced serious environmental challenges, including hurricanes and earthquakes. It is critical to manage the risk of extreme events before they become full-blown humanitarian disasters; this is something the DR has done much more effectively than Haiti. The UNDP explained it this way in its 2007–2008 *Human Development Report*:

In 2004, the Dominican Republic and Haiti were simultaneously struck by Hurricane Jeanne. In the Dominican Republic, some 2 million people were affected and a









major town was almost destroyed, but there were just 23 deaths and recovery was relatively swift. In Haiti, over 2,000 people were killed in the town of Gonaives alone. And tens of thousands were left trapped in a downward spiral of poverty. The contrasting impacts were not the product of meteorology. In Haiti, a cycle of poverty and environmental destruction has denuded hillsides of trees and left millions of people in vulnerable slums. Governance problems, low levels of finance and a limited disaster response capacity left public agencies unable to initiate rescue and recovery operations on the scale required. In the Dominican Republic, national laws have limited deforestation and the civil defence force has a staff 10 times larger than its counterpart in Haiti to cater for a population of similar size.

Poverty cannot always be contained by national boundaries. There is a large-scale emigration of Haitians over the border to the DR, despite the harsh welcome they often receive there. Dominicans, in turn, are emigrating to the United States in significant numbers. The reported illegal logging by Haitians across the border in the DR, believed to be largely for charcoal production, is a challenge for the DR's emphasis on environmental preservation as a development strategy. Currently, the DR is investing in replanting trees along its border with Haiti.

It is clear that environmental deterioration results from bad economic and regulatory policies. Poverty, too, remains severe in significant measure due to poor policies. Severe poverty, in turn, leads to environmental deterioration, which perpetuates poverty directly and through reduced overall growth.

Most of the causality has run from poverty to environment (as well as from rapacious, unsustainable economic policies dating from the French colonial period). But today, addressing environment is a vital step in Haiti's start toward development. Improved environmental policies have greatly aided countries such as Costa Rica-and increasingly the DR—that have invested in the land. Unfortunately, as noted in this chapter, global warming will bring much more substantial climate change. The future is expected to see more and deadlier hurricanes and other challenges that will require adaptation and resilience. To the extent that adaptation capacity and resilience are synonymous with human development, this gives the edge for the DR to build on its already large lead going forward. There is a strong case for the international community to respond to Haiti's plight with well-implemented aid, with attention that does not dissipate as the earthquake disaster recedes in the world's memory.

#### **Sources**

Diamond, Jared. *Collapse: How Societies Choose to Fail or Succeed*. New York: Penguin Books, 2005.

Dupuy, Alex. *Haiti in the World Economy: Class, Race, and Underdevelopment since 1700.* Boulder, Colo.: Westview Press, 1989.

Fielding, David, and Sebastian Torres. "Cows and conquistadores: A contribution to the colonial origins of comparative development." *Journal of Development Studies* 44 (2008): 1081–1099.

Gronewold, Nathanial. "Haiti: Environmental destruction, chaos bleeding across border." *Greenwire*, December 14, 2009. http://www.eenews.net/public/Greenwire/2009/12/14/5.

Hartlyn, Jonathan. *The Struggle for Democratic Politics in the Dominican Republic*. Chapel Hill: University of North Carolina Press, 1998.

Hausmann, Ricardo, Dani Rodrik, and Andrés Velasco. "Growth diagnostics," 2005. http://ksghome.harvard.edu/~drodrik/barcelonafinalmarch2005.pdf.

Howard, Philip. "Environmental scarcities and conflict in Haiti: Ecology and grievances in Haiti's troubled past and uncertain future." Paper prepared for the Canadian International Development Agency, June 1998.

Jaramillo, Laura, and Cemile Sancak. "Why has the grass been greener on one side of Hispaniola? A comparative growth analysis of the Dominican Republic and Haiti." *IMF Staff Papers* 56 (2009): 323–349.

Logan, Rayford W. *Haiti and the Dominican Republic*. New York: Oxford University Press, 1968.

Lundahl, Mats. "Poorest in the Caribbean: Haiti in the twentieth century." *Integration and Trade* 5 (2001): 177–200.

Maddison Project, http://www.ggdc.net/maddison/maddison-project/home.htm, accessed 16 February 2014.

Martínez, Samuel. "From hidden hand to heavy hand: Sugar, the state, and migrant labor in Haiti and the Dominican Republic." *Latin American Research Review* 34 (1999): 57–84.

Matibag, Euginio. *Haitian-Dominican Counterpoint:* Nation, State, Race on Hispaniola. New York: Palgrave Macmillan, 2003.

Penn World Table, http://pwt.econ.upenn.edu.

Roc, Nancy. "Haiti-environment: From the 'Pearl of the Antilles' to desolation." FRIDE, September 19, 2008.United Nations Development Programme. Human Development Report, 2007–2008. New York: Oxford University Press, 2007. Walter, Ingo, and Judith L. Ugelow. "Environmental policies in developing countries." *Ambio* 8 (1979): 102–109. World Resources Institute. *World Resources* 2005: *The Wealth of the Poor—Managing Ecosystems to Fight Poverty.* Washington, D.C.: World Resources Institute, 2005.

## **Concepts for Review**

Absorptive capacity
Biodiversity
Biomass fuels
Clean technologies
Climate change
Common property resource
Consumer surplus
Debt-for-nature swap
Deforestation
Desertification
Environmental accounting
Environmental capital

Environmental Kuznets curve
Externality
Free-rider problem
Global public good
Global warming
Greenhouse gases
Internalization
Marginal cost
Marginal net benefit
Pollution tax
Present value

Private costs

Producer surplus
Property rights
Public bad
Public good
Scarcity rent
Social cost
Soil erosion
Sustainable development
Sustainable net national income
(NNI\*)
Total net benefit

## **Questions for Discussion**

- 1. Is sustainable development a practical and feasible goal for nations? What might be some of the difficulties and possible trade-offs? Explain your answer.
- 2. In what ways does poverty lead to environmental degradation? In what way are the poor victims? Specifically, provide two examples of how the poor sometimes degrade the natural resources on which they depend. Why does this happen, and what might be done to escape this trap?
- 3. What types of environmental problems do the rural and urban poor share? What are some differences in the conditions they face?
- 4. How are population growth, poverty, and land pressures interrelated? Explain how these problems can create a vicious circle of events.

- 5. What steps might governments in less developed countries take to reduce overexploitation of natural resources? What impact do pricing policies have?
- 6. Why are national environmental concerns in developing countries likely to focus increasingly on urban problems in the future? How are urban conditions related to rural-to-urban migration?
- 7. Why are the objectives of economic development and sustainable growth mutually reinforcing?
- 8. In what ways does neoclassical theory provide a useful framework for analyzing environmental issues? What are some of its limitations?
- 9. What are some of the costs associated with environmental degradation? How might they detract from economic growth? What are the developmental implications?