INTRODUCTION

Thinking About Tomorrow: Cuba's "Alternative Model" for Sustainable Development

Oliver Houck*

The credo of the Western World is that, if the environment is the problem, the economy is the answer. First things first. A rising economy not only lifts all boats, it raises environmental consciousness and provides the fuel for pollution controls and sound resource management.[1]

This credo, however, has a corollary, found at all levels of government in this hemisphere and reiterated like a mantra by the media: when economic times are hard, environmental policies take a back seat, if they even stay in the vehicle. First things first. If that means increasing air emissions[2] or opening up a wilderness to oil and gas development,[3] well, as a former governor of Louisiana once quipped when presented with the

---

* Professor of Law, Tulane Law School. Professor Houck's study of Cuban environmental law and policy can be found at Oliver A. Houck, *Environmental Law in Cuba*, 16 J. LAND USE & ENVTL. L. 1 (2000).

1. *See* Steve Chapman, *Does Free Trade Breed Poverty*? CHI. TRIB., Mar. 24, 2002, at 9 (citing a study in the *American Economic Review* finding that free trade decreases poverty rates and improves the environment); *see also* WORLD TRADE ORG., 10 BENEFITS OF THE WTO TRADING SYSTEM (2002), *available at* www.wto.org/english/thewto_e/whatis_e/10ben_e/10b00_e.htm. *But see* Mary Jordan & Kevin Sullivan, *Free Trade Has Heavy Price for Have-Nots in Mexico*, TIMES-PICAYUNE (New Orleans), Mar. 23, 2003, at A15 ("Despite the assurances of four presidents that Mexico was moving up from its Third World status and a landmark free trade agreement with the United States that was to have enriched the country, the number of people living in poverty has soared over the past two decades."). The economy is also the answer, apparently, to terrorism. *See* Ted C. Fishman, *Making a Killing: The Myth of Capital's Intentions*, HARPER'S, Aug. 2002, at 3 ("Every night, it seemed, another American official exhorted another audience in another world capital to eliminate tariffs, privatize industries, and court international investors . . . their message was as forceful and consistent as a PowerPoint slide: Terrorism must be defeated. Global trade will defeat it.").

2. *See* Natural Resources Defense Council, *The Bush Administration's Air Pollution Plan: Hurts Public Health, Helps Big Polluters, Worsens Global Warming*, *at* http://www.nrdc.org/air/pollution/fclearsk.asp (last modified Feb. 26, 2003) (discussing Administration's retreat from Clean Air Act Requirements).

3. *See* Defender of Wildlife, *Artic National Wildlife Refuge*, *at* http://www.defenders.org/wildlife/arctic/overview.html (last visited Mar. 11, 2003) (discussing Administration proposal to open the Arctic National Wildlife Range to oil and gas development).

fact that a local worker had died while dumping toxic wastes out in the bayou, "you can't make an omelet without cracking eggs."[4]

Then, there is Cuba. It might be fair to say that no country in recent history has suffered a greater economic shock from anything short of war. When the Soviet Union crashed, Cuba lost nearly ninety percent of its foreign exchange and more than half of its gross domestic product.[5] With the crash came a tightening of the U.S. economic embargo, from which Cuba has since lost an estimated $70 billion.[6] No one would wade into such a scenario on willing feet, and few would want to live with the economic difficulties that have followed. If ever there were a time to shelve environmental problems and go for the money, the 1990s were the time, and Cuba was the place.

The opposite happened. In the face of a housing crisis, a transportation crisis, a mammoth and antiquated agricultural base, virtually no domestic energy sources, a peso worth pennies, and the constant lure of the Vida Loca, dripping with luxury, only ninety miles away to the north, Cuba decided to make a priority out of environmental protection.

It will take better historians and political scientists than this author to identify the reasons why. One could make a guess that they include an unusual respect for nature, a high level of education (indeed, the highest in the Americas), a strong scientific community, and, perhaps, a sense on the part of Cuban leaders that environmental protection, which tends to challenge market capitalism and prioritize grassroots citizen groups, was

---

4. Telephone Interview with Robert Anderson, Reporter, Baton Rouge Morning Advocate (Oct. 22, 2002) (quoting former Louisiana Governor Edwin Edwards shortly after the death of a truck operator at Bayou Sorrell, La.).

5. Ramon Pichs Madruga, Briefing at the Colloquium on Environmental Law and Sustainable Development in Twenty-first Century Cuba (Aug. 12, 2002); *see also* Oliver Houck, *Environmental Law in Cuba*, 16 J. LAND USE & ENVTL L. 1, 60 (2000). Cuba's reliance on the former Soviet Union cannot be understated:

> In 1989, the former Soviet Union and its socialist allies purchased roughly eighty-five percent of Cuba's exports, and provided a like share of imports on heavily subsidized, economically favorable terms. The subsidies alone amounted to an estimated $500 per Cuban citizen per year. . . . With the fall of the Soviet block, Cuba lost the major markets for its sugar and agricultural products and up to eighty percent of its imports. All categories of imports were decimated, among them oil (by seventy six percent), transportation equipment (86 percent), consumer goods (82 percent), chemicals (72 percent), machinery, spare parts and food. The gross domestic per capita fell by more than forty-eight percent (citations omitted).

Houck, *supra*, at 60.

6. *See* Madruga, *supra* note 5.

revolutionary as well.[7] It most certainly included an element of economic self-interest; tourism would require nice beaches.

For whatever reason, it is somewhat phenomenal that, notwithstanding economic hardships that would blow away environmental policies in many countries—after all, far less severe economic blips serve as excuses to deflect environmental policies in the richest country in the world[8]—Cuba decided that it would do better by not going for the fast buck but, rather, for the sustainable one.

Part of the evidence is found in Cuba's new environmental law. A previous article by this author describes the journey Cuba has taken in the development of its environmental programs.[9] It began with the enactment of an environmental strategy and framework law in the mid 1990s, a time when the Cuban economy was hitting rock bottom; if a local store had one item left on the shelf, it was your lucky day.[10] Law No. 81, almost constitutional in its sweep, is one of the most ambitious environ-mental laws yet enacted, anywhere.[11] Its mandates are still reverberating throughout the Cuban juridical world, leading to even newer decree laws and regulations on forestry, protected areas, coastal zone management, biological diversity, biosafety, marine sanctuaries, cultural and historic protection, pollution control standards, environmental impact analysis, licensing, permitting, and sanctions.[12] It has opened up a new field of environmental law enforcement.[13] It has knocked on and is breaking down the doors of inflexible civil, administrative, and criminal codes to provide for environmental crimes, for civil remedies such as injunctions, and for administrative remedies such as citizen suit standing.[14]

---

7. Affixed to a bulletin board in the author's office is a bumper sticker from Casper, Wyoming, which reads: "MAD, MARXIST ECOLOGISTS, Working For Russia." Alongside is another, reading, "Keep Montana Beautiful: Shoot a Land Developer." These views are essentially two sides of the same coin.

8. *See supra* notes 3-4; *see also* John Heilprin, *White House Wants to Speed Environmental Reviews of Transportation Projects*, ASSOCIATED PRESS, Sept. 19, 2002, at 1 ("President Bush directed federal agencies on Wednesday to accelerate environmental reviews of high priority transportation projects that he says are vital to the economy.").

9. *See generally* Houck, *supra* note 5.

10. *See id.* at 15-18.

11. *See id.* at 23-25.

12. Ley del Medio Ambiente, LEY NO. 81 [Environmental Law, LAW NO. 81] (1997) (Cuba).

13. *See* Houck, *supra* note 5, at 74-79 (discussing the administrative, and judicial review of CITMA decision making).

14. *See id.*; Carlos Alvarez, Briefing at the Colloquium on Environmental Law and Sustainable Development in Twenty-First Century Cuba (Aug. 12, 2002).

Laws are of course easier to write than to implement. Other articles in this Special Issue relate the investigations of other law professors and practitioners from the United States, Mexico, Chile, and Cuba that describe parts of the action and conclude that, whatever their drawbacks, they are not a facade. The week of workshops in Havana and the provinces that underlay these investigations were studded with examples of these laws working, pinching the shoes of questionable projects, and forcing change. A huge, concrete box-like tower in Central Havana, seven years in the planning and privately funded, has been canceled because of the visual effects it would have on its surroundings.[15] A large, Chinese hotel on the famous Malecon, an historic corridor lined with buildings from the early 1900s and badly in need of repair, was recently rejected for its incompatibility with what, in New Orleans, is called with some affection, the "tout ensemble."[16] In the second half of 2001, Cuban environmental agencies sanctioned nearly 550 individuals and corporations for law violations, imposed 178 fines and 308 cleanup or compliance orders, and closed a number of noncomplying facilities either temporarily or permanently.[17] They also created a system of rewards for environmental compliance featuring favorable publicity, increased salaries for workers, and vacation and other benefits for supervisors.[18] These actions are featured in *Granma*, the official newspaper of the Cuban government; i.e., they are front and center as public policy.[19]

More concentrated environmental cleanup and restoration efforts are under way for specific pollution hotspots such as Havana Harbor and the Almendares River through Havana's large Metropolitan Park.[20] The Havana Harbor, contaminated to the point of anoxia in the 1980s, has seen some tough compliance measures for a range of point source industries and, concomitantly, dramatic improvements in water quality.[21] Chemical Oxygen Demand in the Harbor's water, hovering around 1.0 milligrams per liter (mg/l) twenty years ago, is now up to 3.9; at the same

---

15. Mario Coyula-Cowley, Briefing at the Colloquium on Environmental Law and Sustainable Development in Twenty-first Century Cuba (Aug. 13, 2002).

16. *Id.*

17. Orfilo Peláez, *Legislación Ambiental: Detener las conductas incorrectas y educar a los violadores* [Environmental Law: Stop Violations and Educate the Violators], GRANMA, Aug. 15, 2002, at 3.

18. *Id.*; Alvarez, *supra* note 14.

19. *See* Peláez *supra* note 17.

20. *See* Houck, *supra* note 5, at 5.

21. Amando Choy, Briefing at the Colloquium on Environmental Law and Sustainable Development in Twenty-first Century Cuba (Aug. 14, 2002). Perhaps some indication of the commitment of the Cuban government to this cleanup is that it is headed by General Choy of the Cuban Army.

time, the measurements for hydrocarbons (basically, oil) has dropped from 3.35 mg/l to 0.5.[22] For its part, the Metropolitan Park has managed to relocate more than a dozen industries away from the Almendares, and is now moving hundreds of squatters, living at risk from annual floods and disease, to new housing on higher ground.[23]

Some of this evidence is empirical; much of it is anecdotal and case-by-case. Other evidence shows gaps in policies and flat failures to catch a stupid idea in time. For example, the lack of recycling in a country so short in raw materials and so long in human resources and resourcefulness, is astonishing.[24] No country, however, is without these lapses. The bottom line is that environmental protection in Cuba is not a charade; it is happening.

Larger changes are of course happening as well, including changes in the way Cuba has chosen to restructure its economy and social planning. Initially, these changes were made necessary and promoted by the economic crash of the early 1990s.[25] At the macro level, they feature foreign investments and joint ventures, decentralization of government authority towards the smaller cities, towns, and provinces, and liberalization of small agriculture, small grocery markets, in-home restaurants, and private guest accommodations.[26] It is hard to walk a block in Havana without seeing a small, private enterprise and somebody wanting to lead you to it. In July 2002, Cuba announced a massive downsizing of its sugar industry,[27] an inefficient sector within Cuba for decades and a falling, glutted, government-supported market world-wide.[28] Tourism overtook agriculture as Cuba's primary source of revenue several years ago, and there will be no going back.[29]

---

22. *Id.*

23. Yochiel Marrero, Briefing at the Colloquium on Environmental Law and Sustainable Development in Twenty-first Century Cuba (Aug. 14, 2002); *see also* PARQUE METROPOLITANO DE LA HABANA, EL RETO DE TODOS: UNA ESTRATEGIA DE REVITALIZACION PARA EL PARQUE DE LA POBLACION HABANERA [METROPOLITAN PARK OF HAVANA, THE CHALLENGE FOR ALL OF US: A REVITALIZATION STRATEGY FOR THE PEOPLE'S PARK OF HAVANA].

24. *See* Rajendua Ramlogan, *Protection of the Environment in Cuba: Piercing the Caribbean Iron Curtain*, 29 U. MIAMI INTER-AM. L. REV. 37, 74 (1998) (noting Cuba's difficulties in establishing a recycling program).

25. *See* Houck, *supra* note 5, at 60-64.

26. *See id.* at 66-67.

27. *See, e.g.*, Mary Jordan, *Ending an Era, Cuba Closes Sugar Mills; Icons of Revolution Become Museums for Tourism, the New Moneymaker*, WASH. POST, July 29, 2002, at A1; *Cuba: Sugar Production to be Cut by Half; New Crops, Cattle, to be Introduced*, BBC MONITORING, July 2, 2002.

28. Houck, *supra* note 5, at 68.

29. *Id.* at 42 (citing a 1998 statement by Cuba's Vice-President of the Counsel of State:. "I would not say that tourism is one of the sectors most important, tourism is the *heart* of the economy") (emphasis in original).

Quite related to these larger changes are new practices that lead directly to what, in the jargon of the environmental world 2000, is called "sustainable development." The economic crash and the subsequent special economic period did more than impose hardship. Many countries have experienced economic hardship, done without, tightened their belts, and tried to move on; some countries have made it, but others have not. Large portions of most Latin American countries live in a near-permanent state of economic despair.[30] What is striking with Cuba is the degree to which it has taken advantage of its crash and of the terribly difficult limitations it then faced. It broke from huge, centralized, mechanized agriculture towards smaller, lower-impact operations.[31] It moved from chemical pesticides and fertilizers to natural and bio-technological ones, and, when they were not available, it invented them, applied them, and went on to market and sell them.[32] It promoted urban vegetable gardening, not as a feel-good way to use blighted patches of urban lots until the next building came along, but as a way to diversify the economy and move the growing of food closer to the people who consume it.[33] It moved to sustainable agriculture.

Cuba made similar decisions about urban planning. With a shortage of transportation and fuel, it decided to shrink the perimeters of its cities, starting with Havana, and move them away from the suburbs, back towards their centers.[34] The decisions were no doubt prompted by stress. But they were also adopted with full awareness of the mega-sprawls of other Latin American cities that, even without an economic crash and a tight blockade, have found themselves overwhelmed by seemingly insolvable problems in transportation, housing, crime, and poverty.[35] Havana has been rezoned in three concentric rings. The first ring, the old, core city, receives heavy investment in restoration and reconstruction, house by house, block by block. One can walk nearly any street in Old or Central Havana and see the scaffolds up and the renovations underway; when the renovations are done, the same people who were there before move back in. At the perimeter of the first ring,

---

30. *See, e.g.*, Charles Roth, *Venezuela Shaping as Next Argentina; Red Flags Appearing: Similarities in Meltdown of Latin American Economies*, NAT'L POST, Sept. 21, 2002, at FP10.

31. *See* Houck, *supra* note 5, at 63.

32. *See id.*

33. Juan Jose Leon, Briefing at the Colloquium on Environmental Law and Sustainable Development in Twenty-first Century Cuba (Aug. 14, 2002).

34. Carlos Rodriguez Otero, Briefing at the Colloquium on Environmental Law and Sustainable Development in Twenty-First Century Cuba (Aug. 12, 2002).

35. *See* Peter M. Ward, *Creating a Metropolitan Tier of Government in Federal Systems: Getting "There" from "Here" in Mexico City and in Other Latin American Megacities*, 40 S. TEX. L. REV. 603, 606 (1999).

away from the harbor and the sea, new business and tourism zones seek to spread the load and avoid the crush of everyone living downtown. In the second zone, a limited amount of supporting business and residences is allowed. In the third and largest zone, which contains the aquifer supporting the city and the province, there will be absolutely no new development. Nor will there be any new highways out there. The objective is to repopulate the core and to stop the sprawl. Faced with a transportation crisis and a central city housing nightmare, Cuba moved to sustainable cities.

The same could be noted about tourism for the same mix of economic and environmental reasons. Against the prospect of short-term bonanzas from Caribbean-style beach development and blight, Cuba opted to set its new resorts back from the beach, limit them in number, concentrate them in chosen places, and prohibit them entirely from mangroves, small keys, and other sensitive zones.[36] Its new waterside facilities are on stilts. Instead of building new roads to the keys, a celebrated controversy some years ago, Cuba is ferrying tourists out to lodgings and day excursions. Sustainable tourism.

Similar and complementary developments could be noted in energy and water conservation.[37] With shortages came metering and rates that start low for consumers but climb precipitously with greater use.[38] The lights in new Havana hotels go on with the use of your room key/card; when you take your card with you, the lights go off. No building in the country leaves the lights on all night long.[39]

None of the above is to say that Cuba or Cubans are paragons of environmental virtue. It is to say, however, that they have managed to make good things happen in sustainable agriculture, urban development, tourism, and resource conservation that escape many countries in the region entirely, and that make only difficult and uncertain headway even in the United States. Cubans are not, at least as a matter of national policy, simply living with shortages and shooting for a better day. They are also shooting for a different day, a day that no country in the western world has yet achieved. They call it "an alternative model on sustainable development."[40] No one would wish the dire economic circumstances of

---

36. *See* Houck, *supra* note 5, at 38-47 (describing Cuban coastal zone conflicts and management).

37. *See* Madruga, *supra* note 5.

38. *See id.*

39. *See id.*

40. *See* Peláez, *supra* note 17 ("Pero, sobre todo, dependerá mucho de la comprensión que tenga cada ciudadano para unir esfuerzos y acciones en favor del sueno 'verde' de avanzar hacia un modelo alternativo de desarrollo sostenible." ["But, above all, [environmental

Cuba's last decade on his or her worst enemy. But these same circumstances have contributed to the actual implementation of sustainable development, a concept that the rest of the world pays more lip service to than serious attention.

This conclusion leads to the final question of this Introduction, and it is one on the mind of everyone who deals with Cuban environmental policy: are these policies doomed or can they last? Are we looking at the last gasp of an experiment in governance that will vanish soon and without a trace, or are we looking at something that will endure? There are potentially two triggers for radical change. One is the end of the U.S. embargo. In all likelihood, it will end soon, if for no reason other than the pressure of U.S. economic interests and their anxiety to get a foot in the door before Europe, Canada, and Asia lock up all the best concessions.[41] The other trigger is, of course, President Fidel Castro, whose death or renunciation is as near as that of any other, healthy seventy-five-year old, which is to say, not far away.

Taking these two triggers in the order in which they will most likely be pulled, the first question becomes the effect of ending the economic embargo. In the minds of Cuban policymakers, they are ready. They have planned for an influx of several million more tourists per year.[42] The hotels are under construction. The accommodations industry schools are pumping out as many English-speaking, front-desk trained service employees as possible.[43] After the weekly soaps, *Learning English* is the most popular program on Cuban television.[44] Cubans are facing, however, an invasion of spending and investment on a scale they cannot possibly imagine.[45] As a fellow law professor commented during the seminar, the U.S. Embassy in Mexico City has 1000 employees, eighty percent of whom are dedicated to advancing U.S. business interests.[46] With these interests come, inevitably, a full-court press on environmental

---

protection] will depend on the efforts of each citizen towards a 'green' vision of progress for an alternative model of sustainable development."]).

41. *See* John Lantigua, *Clamor Grows to Relax Cuba Embargo: House Vote on Policy Expected This Week*, BOSTON GLOBE, May 22, 2000, at A3.

42. Norman Medina, Briefing at the Colloquium on Environmental Law and Sustainable Development in Twenty-first Century Cuba (Aug. 12, 2002).

43. *Id.*

44. Personal observation, Havana, Cuba, January 2001. The texts for the English language programs ran out of their first and second printings within a week.

45. *See* Houck, *supra* note 5, at 42. ("Independent analysts project Cuba to receive $18.5 billion in economic impact from tourism by the year 2078; that number rises to $27.7 if free market capitalism has its way.") (citations omitted).

46. Professor Sanford Gaines, Briefing at the Colloquium on Environmental Law and Sustainable Development in Twenty-first Century Cuba (Aug. 16, 2002).

restraints and controls. Since the advent of environmental policy in the European Union, Brussels and other capitals are awash with U.S. law firms and lobbyists seeking the best for their clients. Today, Cuban environmental agencies hold their own, just barely, and not always, against their counterparts in agriculture and other sectors of the economy. When U.S. business interests join the fray, the tables will tilt. While the legal processes may remain the same or similar; the outcomes will be different, and from an environmental protection standpoint, worse.

A second and marked change will come with the availability of monies for both development and for environmental controls. Potentially, there will be first-ever funding available for the massive sewage infrastructure needs of all cities and towns, including Havana, which today funnels half of its wastes untreated into the sea and does not even have the capacity to funnel, much less treat, the other half.[47] Similar monies may be available for other environmental controls such as higher-grade petroleum, unleaded gas, catalytic converters, and hazardous waste management systems. On the other hand, these monies are chronically short even in wealthy, U.S. states and cities, and are found only infrequently anywhere in Latin America. The thought that increased trade will bring significant new monies to environmental protection may be more of a dream than reality.

More significantly, the thought that these protections will be sufficient to offset the impacts of a sudden flood in, say, private automobiles, is pure illusion. The famed Malecon of Havana is already dangerously congested and foully auto-polluted many hours of the day; crossing it on foot is something of a local sporting event. The idea of several million Havana residents each living out their lifelong dream of owning a private car is, from an urban environmental standpoint, one's worst nightmare. It could be argued that the automobile has, in its contamination and impacts on growth and land use, done more to impair the life quality of the world's cities than any other single development, including armed conflict.[48] It is no surprise, indeed it is no longer even news, that the United States is the most advanced country in the world in

---

47. *See* Madruga, *supra* note 5; CITMA, CUBA, ENVIRONMENT AND SUSTAINABLE DEVELOPMENT 10 YEARS AFTER RIO DE JANEIRO SUMMIT "Rio + 10" 21, 30 (2002) (showing only 48% of urban water is pressured through sewers and sewage treatment).

48. DAVID BURWELL, THE END OF THE ROAD 21-31 (1977). The author describes the automobile's effect on urban air pollution, demolition of housing, loss of greenspace, flight to malls and sprawl, vehicular accidents and deaths, water pollution, energy waste, and the loss of affordable public transit. *Id.*

its pollution controls and the most uncontrolled and damaging in its demands on natural resources.[49] Wealthy does not mean environmental.

A third and related change will come with globalization, and the incorporation of the new, unblockaded Cuban economy into the global market. While many outcomes of this trend are unpredictable, one feature of globalization is its pressure on countries to specialize, to move away from independence and self-sufficiency, and towards the production of fewer goods sold to niche markets in the larger world.[50] The acid test for Cuba will be agriculture, historically a one-crop, plantation economy at the mercy of the ups and downs of world prices for sugar. Cuba has now moved towards diversity and self-sufficiency, but it may become obvious that greater foreign exchange can be gained by producing specialty crops, sold in competition with crops grown and maintained by chemical fertilizers and pesticides in other countries. The pressure to go centralized, chemicalized, specialized, and global-dependent will be extremely strong, perhaps even irresistible.

A fourth and utterly predictable change is cultural, and no one can say how far it will go. As one U.S. syndicated columnist recently wrote, "Mickey Mouse and McDonald's are among the most powerful weapons in America's arsenal. Let's send them in."[51] Whatever effect Mickey Mouse, McDonald's, and their thousands of cousins in the U.S. consumer economy will have on Cuban governance and democracy, they could have an hypnotic, Pied Piper effect on Cuban culture. To a certain extent, they already do. And whatever else one might say about the U.S. consumer culture, it is not one that shows much concern for the environment. Behind throw-away bottles, throw-away cans, trade-in wardrobes, disposable diapers, several plastic containers per fast food meal, motorized leaf blowers, electric toothbrushes, pesticide-maintained lawns, gas-powered golf carts, and miniscule-miles-per-gallon ATVs, SUVs, and HUMVs are a million acres of Louisiana marshland lost to oil

---

49. *See* Oliver Houck, *Environmental Law and the General Welfare*, 16 PACE ENVTL. L. REV., 1, 4-6 (1998); *see also* Neil Morgan, *A Missionary of Environment Joins Fox in Mexico City*, SAN DIEGO UNION-TRIB., Jan. 28, 2001, at A3 (citing Argentine ecologist Exequiel Ezcurra "[T]he world's entire energy reserves would be depleted in 10 years if the Chinese had the same level of consumption as the United States").

50. Bruce Scott, *Creating Competitive Advantage*, *in* INTERNATIONAL ECONOMICS AND INTERNATIONAL ECONOMIC POLICY: A READER 78 (Philip King ed., 1990). "Comparative advantage, free trade, and competition among firms are central features of theory behind the trading system built since World War II. It is a system in which all countries gain if each specializes in its areas of competitive advantage and exchanges products with other countries in the free market system." *Id.*

51. Cynthia Tucker, *Mickey Mouse Will Bring Castro Down*, TIMES PICAYUNE (New Orleans), June 1, 2000, at B-7.

and gas canals, a string of open-pit mines down the Andean corridor and across the islands of the Pacific, and climate change that threatens to drown Micronesia, Panama City, and Bangladesh.[52] U.S. consumers walk heavily on the earth and leave large scars. How much the consumer mindset—less than ninety miles away from Havana and backed by the most powerful economic production machine in history—is changed by Cuba, and how much it in turn changes Cuba, is the big unknown.

Talking with Cubans about this shock to their culture, they place enormous faith in the independence and strength of their traditions: Cubanidad. They look at Puerto Rico, so dependant on U.S. consumerism, as risking its own identity. They say they are different. They say that through their educational systems and policies they are creating environmental awareness, a new environmental human being. But, of course, that is what the Soviet Union said about what it was creating, a new human being motivated by social well-being and beyond the reach of greed. The Soviet Union, of course, was wrong.

One last consideration, and a different trigger for change, is political: the death of Fidel Castro.[53] The question of Life After Castro is probably the most privately discussed and the least openly discussed issue in Cuba. No one can reasonably bet on a single, subsequent scenario. Any outcome along the spectrum of More of the Same, to Chinese-style Communism-cum-Capitalism, to European-style Socialism, to All-out Capitalism-and-Devil-take-the-Hindmost is certainly possible.

What these outcomes might mean for environmental policies is a total crapshoot. The challenges of environmental protection in a socialist system are quite different from those of a capitalist system, but neither system ensures sound environmental policies or sustainable development. In Cuba, as in all socialist societies, the question is how to motivate people to care about and protect resources that they do *not* own, from their living spaces right on up. The failure to meet this challenge in Eastern Europe is, by now, legend.[54] In the United States and other capitalist societies, the question is how to motivate people to care about and protect resources that they *do* own, and are intent on turning into a

---

52. *See generally* Mark A. Drumbl, *Poverty, Wealth, and Obligation in International Environmental Law*, 76 TUL. L. REV. 843, 873 (2002) (positing that third world nations in low-lying regions are the most likely to suffer if sea levels rise as expected from global climate changes).

53. While the death of Castro might end the embargo, ending the embargo does not necessarily presuppose the death of Castro, although of course it does for many in the Cuban exile community.

54. *See* Rett R. Ludwigowski, *Constitutional Culture of the New East-Central European Democracus*, 29 GA. J. INT'L & COMP. L. 1, 12 (2000).

quick and often highly destructive buck. The reckless development of much of the U.S. coastline is also, by now, legend.[55] Ditto the Front Range of the Colorado Rockies, to say nothing of Greater Atlanta.[56] When push comes to shove, free-market capitalism can at least conceptually come to grips with pollution, but it cannot begin to manage the land—not even close.

The ultimate question for Cuba is, then, the ultimate question for the United States and every other country of the world: is there a third way? Every time a socialist government gets into trouble it is either overthrown or, if it is smart, it adopts a few capitalist policies and saves itself. And every time a capitalist government gets in trouble, from the shame of child labor in the last century to the corporate scandals of this last year, it adopts a few socialist controls and saves itself. There must be something in the middle that we are all trending towards and have yet to find. That the United States has made earnest efforts to find it, at least at times, is indisputable. What is equally indisputable is that Cuba is making earnest efforts to find it too, from an opposite starting point. As noted earlier, they call it an alternative model for sustainable development. Whether this approach can survive the changes that are coming is of course a hugely important question for Cuba's future. It is also an important question for the rest of the world.

---

55. *See generally* Jeffrey W. Niemontz, *A Line in the Sand: Global Climate Change and the Future of Coastal Zone Management*, 8 DICK. J. ENVTL. L. & POL'Y 1 (1999) (discussing how development of the American coastline has left the country susceptible to much greater storm damage).

56. *See* James W. Spensley, *Using Intergovernmental Agreements to Manage Growth*, 15 NAT. RESOURCES & ENV'T 240 (2001). *See generally* James L. Bross, *Smart Growth in Georgia: Micro-Smart and Macro-Stupid*, 35 WAKE FOREST L. REV. 60 (2000) (discussing development disasters in and around Atlanta).