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THE U.S. AND MEXICO *SIN FRONTERAS*—WITHOUT BORDERS: SUSTAINABLE DEVELOPMENT FROM A LOCAL PERSPECTIVE

PAULETTE L. STENZEL*

I. INTRODUCTION—SUSTAINABLE DEVELOPMENT IN THE AFTERMATH OF JOHANNESBURG

The largest United Nations (“UN”)-sponsored event in history, the World Summit for Sustainable Development (“Johannesburg Summit”), ended in Johannesburg, South Africa on September 4, 2002.¹ It culminated with the ratification of a seventy-page action plan that sets goals related to water, sanitation, climate change, development, poverty, energy, health, and ecosystems.² The Johannesburg Summit was a follow-up to the 1992 United Nations Conference on the Environment and Development (“UNCED”) (also known as the “Rio de Janeiro Earth Summit Conference” or “Rio Summit”).³ The Rio Summit produced Agenda 21, which is a statement of principles for implementing sustainable development in industrialized and developing countries around the world.⁴ Thus, comparison of the two summits is inevitable and necessary. Some Johannesburg participants and observers are praising the results of that summit.⁵ On the other hand, critics say that Johannesburg actually took a step backward from the Rio Summit, and that the new action plan is far too limited.⁶

The Rio Summit provided a necessary forum for the articulation of ideals. Optimism ran high; it was a time for visions. Governments promised

* Copyright © 2003, by Paulette L. Stenzel, Professor of International Business Law, Eli Broad College of Business, Michigan State University. I am grateful to my undergraduate assistants, Kelly Averbek, Misty Kooienga Barger, Cliff Bracey, Tracy Gawecki, and Todd Westenbroek, for help with research and proof-reading.

¹ See Jon Jeter, *Summit Delegates Consult The South African Example; Country is Emblem of Success, Failure in Globalization Debate*, WASH. POST, Aug. 29, 2002, at A22 [hereinafter Jeter, *The South African Example*].

² Plan of Implementation of the World Summit on Sustainable Development: Report of the World Summit on Sustainable Development, Annex, ch. 1, resolution 2, U.N. Doc. A/CONF. 199/20, U.N. Sales No. E. 03. II.A.1 (2002), http://www.johannesburgsummit.org/html/documents/summit_docs/131302_wssd_report_reissued.pdf [hereinafter Plan of Implementation].

³ See James Dao, *Protesters Interrupt Powell Speech as U.N. Talks End*, N.Y. TIMES, Sept. 5, 2002, at A10.

⁴ See generally AGENDA 21: EARTH'S ACTION PLAN, ANNOTATED, at xxxvii (Nicholas A. Robinson ed., 1993) (setting forth Agenda 21).

⁵ Dao, *supra* note 3, at A10.

⁶ *Id.*

to pursue lofty goals. Leaders at Rio took a global view of environmental problems, and the pursuit of "sustainable development" became a rallying cry. During the Rio meeting and in its aftermath, businesses, governments, trade organizations, and environmentalists adopted sustainable development as a goal. It was a shining ideal.

In spite of the idealism that followed the Rio Summit, ten years later things have not changed a great deal. The economic gap between prosperous northern nations and impoverished southern nations has widened since 1992, and the number of people living on the equivalent of less than \$1 U.S. per day has not changed.⁷ Our air and water are still polluted, and, in many areas, they are even more polluted than they were ten years ago. Environmental treaties await ratification or, if ratified, await implementation.⁸ We have made limited progress, at best. UN Secretary-General Kofi Annan stated, "the record in the decade since the Earth Summit is largely one of painfully slow progress and a deepening global environmental crisis."⁹ The purpose of the Johannesburg Summit was to turn ideals of sustainable development into reality. Participants focused on practical ramifications of sustainable development.

All agree that the Johannesburg Summit was very different from the Rio Summit. As Kofi Annan said, "[o]bviously, this is not Rio."¹⁰ The tone of discussion at Johannesburg was not visionary, as it was in Rio. Instead, it provided a context in which leaders chose timetables, formed partnerships, and made pledges to take specific action. Many participants emphasized that action must be local. Malloch Brown, Administrator of the United Nations Development Program ("UNDP"), stated, "[w]hen you approach sustainable development from an environmental view, the problems are global, . . . [b]ut from a developmental view, the front line is local, local, local."¹¹ The major insight gained in recent years is that "small projects initiated largely at the community level may be more important than the big, glamorous cases."¹²

⁷ Jon Jeter, *Rich, Poor Further Apart as Earth Summit Nears; Economic Gap Has Widened Since Rio Meeting*, WASH. POST, Aug. 25, 2002, at A16.

⁸ *Id.* Prince Sadruddin Aga Khan, special consultant to UN Secretary-General Kofi Annan says, "[r]ight now there are about 250 international environmental treaties or conventions, and they suffer from neglect. They're run by toothless and underfunded secretariats. They're helpless and hopeless. We've got to change attitudes." *The Last Word: Sadruddin Aga Khan*, NEWSWEEK, Sept. 2, 2002, at 66.

⁹ Kofi Annan, *Beyond the Horizon: Will the Future Be Barren or Bountiful? The UN Secretary-General Offers Two Visions of Where Humanity is Headed*, TIME, Aug. 26, 2002, at A18-19.

¹⁰ Dao, *supra* note 3, at A10.

¹¹ Jeffrey Kluger & Andrea Dorfman, *The Challenges We Face*, TIME, Aug. 26, 2002, at A4, A12.

¹² Fred Guterl & Michael Hastings, *Put Out the Dung Fires*, NEWSWEEK, Sept. 2, 2002, at

In the months and years following the Johannesburg Summit, we must look carefully, and literally, from below the ground and into the sky to identify local needs and to take action. Therefore, in the spirit of Johannesburg and in view of the need for a local front line, this Article focuses on Mexico. This focus is further defined by looking at the environmental consequences of trade linkages between the United States and Mexico.

To begin, it is important to acknowledge two realities that underlie discussion of sustainable development. First, we live in a world that is increasingly *sin fronteras*—without borders. The United States and Mexico provide an especially apt set of examples. They share a common geographical border, yet interactions are increasingly conducted without regard to that border. Second, trade and environmental effects of trade between the United States and Mexico are inextricably linked. These linkages have accelerated since the North American Free Trade Agreement (“NAFTA”)¹³ went into effect on January 1, 1994. Sustainable development is tied to trade, and, therefore, the pursuit of sustainable development is articulated as a primary goal in the preamble to the Environmental Side Agreement to NAFTA.¹⁴ This Article illustrates both realities: (1) the borderless nature of Mexico-United States interactions, and (2) the inextricable links between trade and environment.

Because Mexico and the United States have become increasingly borderless, a look at trade in Mexico requires a look at United States and Mexican business. This Article explores responses to the question, “What should United States businesses and the United States government do in their interactions with Mexican people, their government, and their businesses?” Through this country-specific look at sustainable development, the concerns expressed at Johannesburg can be explored.

Part II of this Article examines the concept of sustainable development. It identifies parties who use the term and the contexts in which they use it. Those using the term include governments in trade negotiations and agreements as well as domestic legislation and programs, non-governmental organizations (“NGOs”), and businesses, both individually and through their organizations. Part III examines our progress toward sustainable development in the context of Mexico, focusing on links between the United States and Mexico. In other words, it responds to the questions, “What has

39.

¹³ North American Free Trade Agreement, Dec. 8-17, 1992, U.S.-Can.-Mex., 32 I.L.M. 289 [hereinafter NAFTA].

¹⁴ North American Agreement on Environmental Cooperation, Sept. 8-14, 1993, U.S.-Can.-Mex., pmbl., 32 I.L.M. 1480 [hereinafter Environmental Side Agreement].

happened?" and "What is happening as we enter the twenty-first century?" Recommendations for making meaningful strides in the pursuit of sustainable development are in Part IV. United States and Mexican citizens contribute to Mexico's problems directly and indirectly. Therefore, we must work together to pursue solutions. My recommendations speak to the United States and Mexican governments, businesses, and individual citizens.

II. BACKGROUND

This section discusses the term "sustainable development" and its context. It also looks at the parties who use the term in the context of trade between the United States and Mexico.

A. *Defining "Sustainable Development"*

The term "sustainable development" is widely used; there is no one definition of it.¹⁵ A survey of legal and business literature produces a myriad of definitions, yet neither the *American Heritage Dictionary* nor *Webster's Dictionary*¹⁶ includes the term. There is a danger that it may become a "buzz word." "In the 1980s, sustainable development became a catch-all term widely used to frame environmental issues."¹⁷ Ramesh Diwan, Professor of Economics, Rensselaer Polytechnic Institute, said, "[g]lobalization has become a buzz word."¹⁸ He continues, "[l]ike other similar buzz words, such as sustainable development, it is rarely defined but used to promote arguments favoring business interests."¹⁹ Yet, it is important to try to define sustainable development.²⁰ Sustainable development "mean[s] different

¹⁵ See LESTER R. BROWN ET AL., *SAVING THE PLANET: HOW TO SHAPE AN ENVIRONMENTALLY SUSTAINABLE GLOBAL ECONOMY* 12 (1991).

¹⁶ WEBSTER'S DICTIONARY 724 (4th ed. 2001).

¹⁷ Elizabeth Dore, *Capitalism and Ecological Crisis: Legacy of the 1980s*, in GREEN GUERRILLAS: ENVIRONMENTAL CONFLICTS AND INITIATIVES IN LATIN AMERICA AND THE CARIBBEAN 9 (Helen Collinson ed., 1996) [hereinafter GREEN GUERRILLAS].

¹⁸ Ramesh Diwan, *Globalization: Myth vs. Reality*, at <http://www.bjp.org/major/myth-global.html> (last visited Apr. 17, 2003).

¹⁹ *Id.*

²⁰ Economist Joseph E. Stiglitz said:

Fundamentally, it is closer integration of the countries and peoples of the world which has been brought about by the enormous reduction of costs of transportation and communication, and the breaking down of artificial barriers to the flows of goods, services, capital, knowledge, and (to a lesser extent) people across borders.

JOSEPH E. STIGLITZ, *GLOBALIZATION AND ITS DISCONTENTS* 9 (2002). Economic aspects of globalization have been at the center of most media discussion and are its most controversial

things to different people.”²¹ Therefore, it is important to seek a definition for purposes of this article. One practical way to explain the concept is that, “[i]t’s a guiding principle: what the Earth needs is for people to find new ways of making their living without running the environment into the ground.”²² A commonly used definition comes from the World Commission on Environment and Development (“WCED”), a UN-sponsored body. The WCED issued the *Brundtland Report* and *Our Common Future*.²³ The *Brundtland Report* defines sustainable development as development that “meets the needs of the present without compromising the ability of future generations to meet their own needs.”²⁴ It identifies four facets of sustainable development:

1. Meeting both present and future needs. This focuses on sustainability.
2. Meeting needs. This focuses on development.
3. Maintaining consistency between population size and ecosystem productive capacity. This recognizes limits must be imposed and balance must be attained and maintained.
4. Implementing a process of change. This acknowledges that the definition of needs and requirements for attaining a sustainable balance will change over time as societal needs and conditions change.²⁵

Since the *Brundtland Report* was issued, sustainable development has been widely discussed throughout the world, and it has been adopted as a goal by governments, businesses, and NGOs.²⁶ For example, sustainable development is the centerpiece for the World Business Council for Sustainable Development (“WBCSD”).²⁷ The WBCSD is a coalition of one

aspects. *Id.* at 10. See also WALTER TRUETT ANDERSON, ALL CONNECTED NOW: LIFE IN THE FIRST GLOBAL CIVILIZATION 2-6 (2001) (responding to the question, “What is globalization?”).

²¹ Guterl & Hastings, *supra* note 12, at 39.

²² *Id.*

²³ WORLD COMM’N ON ENV’T & DEV., OUR COMMON FUTURE (1997) [hereinafter OUR COMMON FUTURE].

²⁴ *Id.* at i.

²⁵ *Id.*

²⁶ For additional discussion of sustainable development, see generally Paulette L. Stenzel, *Sustainable Development*, in 2 ENCYCLOPEDIA OF BUSINESS 1700 (Jane Malonis ed., 2002).

²⁷ *Id.*

hundred and sixty international companies, drawn from over thirty different countries and twenty different major industrial sectors.²⁸

In the ten years between the Rio Summit and the Johannesburg Summit, many businesses and business-oriented NGOs became active participants in the discussion and pursuit of sustainable development. Therefore, it is not surprising that the business perspectives were prominent in discussions in Johannesburg. For example, a business coalition pledged greater investment in and support for the world's fifty poorest countries.²⁹ The coalition says that it has developed two hundred and thirty partnerships to promote development and environmental protection.³⁰ The partnerships include corporations and foundations working with poor countries to provide citizens with food, clean water, sanitation, and electricity.³¹

The business focus, however, created significant dissent before and during the Johannesburg Summit. During the summit, two alternative conferences were held.³² One was the Global People's Forum in Soweto, an all-black township twenty miles from the UN-sponsored summit. The Global People's Forum, also called the "Anti-Summit," was organized by relief agencies, trade unionists, and anti-globalization activists.³³ A second alternative conference in Johannesburg was sponsored by the Anti-Privatization Forum.³⁴ Nearly seven thousand demonstrators from the two alternative summits marched in Johannesburg on August 31, 2002 to protest the corporate agenda of the UN-sponsored summit.³⁵ Protesters were, and are, concerned because the United States and other developed nations are promoting privatization—the sale of government-owned business to private investors in developing countries. This enables private companies to gain control over basic services such as health care, water, and electricity.³⁶ Critics believe that privatization results in high prices for poor service and huge profits for private companies.³⁷

²⁸ *Id.* For discussion of the WBCSD's activities, see *infra* text accompanying notes 222-23.

²⁹ James Lamont & Alan Beattie, *Don't Rely on Business, UN Warns Johannesburg Conference Nations Urged to Give Strong Frameworks for Development Initiatives*, FIN. TIMES, Sept. 4, 2002, at 9.

³⁰ *See id.*

³¹ *See* Jon Jeter, *At Earth Summit, U.S. Backs Private Sector; Officials Call for Partnerships to Aid Poor*, WASH. POST, Aug. 30, 2002, at A12 [hereinafter Jeter, *At Earth Summit*].

³² Jon Jeter, *Anti-Summit Decries U.N. Trade Agenda; Some South Africans See Land as Greater Issue*, WASH. POST, Aug. 31, 2002, at A18.

³³ *Id.*

³⁴ Jon Jeter, *Protests Challenge S. Africa Summit*, WASH. POST, Sept. 1, 2002, at A18.

³⁵ *See id.*

³⁶ Jeter, *At Earth Summit*, *supra* note 31, at A12.

³⁷ *Id.*

Environmental NGOs objected to the business focus at Johannesburg, as well. Friends of the Earth asserted that the World Trade Organization ("WTO") exerted unprecedented dominance" over negotiations. Representatives of Oxfam, a relief organization, said the summit resulted in "a triumph for greed and self-interest, a tragedy for poor people and the environment."³⁸

B. *Problems Related to Sustainable Development*

Presidents, prime ministers, business leaders, environmentalists, and leaders of NGOs convened in Rio to discuss how to protect and heal our world. They took a global view of our world's environmental problems, and they responded with promises and lofty goals. In Johannesburg, leaders looked at sustainable development from the front line—what is going on locally. The goal of this article is to begin to identify what is needed to pursue sustainable development in one country, Mexico. Due to the inextricable trade, environmental, and geographical links between Mexico and the United States today, this article examines the actions of the United States, its businesses, and its citizens as they relate to Mexico.

Sustainable development is necessary because earth's resources are finite. "The amount of crops, animals and other biomatter we extract from the earth each year exceeds what the planet can replace by an estimated 20%, meaning it takes 14.4 months to replenish what we use in 12—deficit spending of the worst kind."³⁹

Topics planned for discussion in Johannesburg included, but were not limited to: (1) health; (2) water, including groundwater and oceans; (3) food, including genetically modified ("GM") foods; (4) agricultural subsidies; (5) biodiversity; (6) energy; and (7) climate.⁴⁰

Health is directly correlated to the quality of drinking water. Contaminated drinking water is the second deadliest malady.⁴¹ "At the present, 1.1 billion people lack access to clean drinking water and more than 2.4 billion lack adequate sanitation."⁴² This will not be an easy problem to

³⁸ John Vidal & Paul Brown, *Earth Summit 2002: Meeting Was a Sellout, Charities Say*, GUARDIAN (London), Sept. 4, 2002, at 2.

³⁹ Kluger & Dorfman, *supra* note 11, at A8.

⁴⁰ Population control was one major topic that, before the conference, was viewed by many as integral to all other discussion. Yet, it was not a major subject of discussion in Johannesburg.

⁴¹ Guterl & Hastings, *supra* note 12, at 39.

⁴² Kluger & Dorfman, *supra* note 11, at A10.

remedy, because only 2.5% of water on earth is fresh,⁴³ only part of that is accessible, and a great deal of that which is accessible has been rendered impotable due to pollution. Moreover, as drinking water supplies are further depleted each year, unequal access to remaining supplies may lead to conflicts among nations.⁴⁴

Nearly one-third of the world's people are at risk of starving; they include 800 million chronically malnourished people, 300 million of whom are children.⁴⁵ Due to this, agricultural policies are a serious concern around the world. A few key crops, including rice, wheat, and corn, furnish ninety percent of the world's food.⁴⁶ Planting and replanting those same crops removes nutrients from fields and increases the susceptibility of crops to insects and blight. Overreliance on pesticides creates additional problems including contamination of food, exposure of workers to toxic substances, and soil degradation. Soil degradation is exacerbated by multiple causes including agricultural mismanagement, overgrazing, deforestation, consumption of wood for fuel, expansion of industry, and urbanization.⁴⁷

Agricultural subsidies are a major concern. At the Johannesburg Summit, environmental NGOs, trade unionists, and others pushed the United States and Europe to reduce farm subsidies, because subsidies make it difficult for poor countries to export agricultural products.⁴⁸ Since 1948, the General Agreement on Tariffs and Trade (the "GATT"—now administered by the WTO) has cut industrial tariffs to an average of less than five percent, but tariffs on agricultural products as of late 2001 still averaged fifty percent.⁴⁹ Subsidies and protective tariffs are used extensively by many industrialized countries. For example, in 2002, President George W. Bush signed a ten-year, \$182 billion U.S. farm bill.⁵⁰ This alarmed Mexico's President Vicente Fox, because duties on most foods were scheduled to be eliminated on January 1, 2003 pursuant to NAFTA.⁵¹ Mexico is threatening retaliatory tariffs to keep out subsidized imports including, but not limited to, apples from the United States.⁵² The United States also subsidizes sugar and

⁴³ See *id.*

⁴⁴ Laura Bradford & Andrea Dorfman, *The State of the Planet*, TIME, Aug. 26, 2002, at A15.

⁴⁵ Kluger & Dorfman, *supra* note 11, at A9.

⁴⁶ *Id.* at A10.

⁴⁷ Bradford & Dorfman, *supra* note 44, at A15.

⁴⁸ Jeter, *The South African Example*, *supra* note 1, at A22.

⁴⁹ Adam Piore et al., *From Seattle to Doha*, NEWSWEEK, Nov. 12, 2001, at 28.

⁵⁰ Paul Magnusson, *Farm Subsidies, A Blight on the Economy*, BUS. WK., Sept. 9, 2002, at 50.

⁵¹ NAFTA, *supra* note 13.

⁵² Magnusson, *supra* note 50, at 50.

other commodities.⁵³ According to a Toronto-based environmental organization, "the federal and provincial governments contributed \$3.55 in subsidies for every \$1 earned by Canadian farmers."⁵⁴ The Europeans are the strongest opponents of lowered tariffs, especially the French, who fear their small farms will suffer from competition from United States agribusinesses.⁵⁵ Other countries providing substantial support for agriculture include Japan, Korea, Switzerland, Norway, and some developing countries.⁵⁶

Farmers are both producers of food and stewards of the land, the front-line protectors of our ecology. But government policies and subsidy incentives that reward intensive production encourage farmers to use processes that destroy land, deplete water resources and ultimately threaten rural communities. Ironically, then, farm subsidies have been dismantling the very systems they were designed to preserve.⁵⁷

Proponents of subsidies say that they protect small farmers, but that is not true in many cases. "In the United States, a third of government agriculture payments go to the wealthiest five percent of farms . . ."⁵⁸

The amounts of money involved in subsidies are overwhelming. A 1998 study from Oxford University calculated that annual worldwide government subsidies reached a total of over \$2 trillion U.S. including \$390 to \$520 billion for agriculture,⁵⁹ \$110 billion for fossil fuels and nuclear energy, and \$220 billion for water.

One major set of concerns relates to deforestation through logging. "Among the real causes of deforestation, as we have seen, are large-scale agriculture, cattle breeding, road construction, logging, oil drilling, mining, and dams . . ."⁶⁰ In the past thirty years, more than fifteen percent of the Amazon rainforests have been destroyed through timber harvesting and

⁵³ Hilary French, *Challenging the WTO*, WORLD WATCH, Nov.-Dec. 1999, at 22.

⁵⁴ Philip Lee, *Killing the Land with Farm Subsidies: Critics Say Canada's Farm Aid Destroys the Communities it is Designed to Save*, OTTAWA CITIZEN, Apr. 3, 2001, at A1.

⁵⁵ Piore et al., *supra* note 49.

⁵⁶ Dale E. McNeil, *Agricultural Trade Symposium, Furthering the Reforms of Agricultural Policies in the Millennium Round*, 9 MINN. J. GLOBAL TRADE 41, 85 (2000).

⁵⁷ Lee, *supra* note 54, at A1.

⁵⁸ *Id.*

⁵⁹ Another source estimates that wealthy countries spend more than \$311 billion U.S. per year in agricultural subsidies. Magnusson, *supra* note 50, at 50.

⁶⁰ Al Gedicks, *Native Peoples and Sustainable Development*, in GREEN GUERRILLAS, *supra* note 17, at 34, 35.

burning of forests to create cropland.⁶¹ Increased harvesting of forest products accelerates destruction of forests because most of the timber industry does not use sustainable practices.⁶²

Loss of biodiversity and the use of genetically modified organisms ("GMO"s) in trees, plants, and foods were additional concerns faced in Johannesburg. Environmentalists are alarmed because plant and animal species are destroyed in the process of deforestation.

Use of GM foods is promoted by many scientists and food producers. Others vehemently oppose the use of GM foods. For example, the European Union ("EU") requires special labeling for all food products containing at least one percent of a genetically altered ingredient.⁶³ The EU argues that countries should be allowed to ban a genetically modified product in an effort to protect citizens from the uncertainties attendant to its use.⁶⁴ "A fundamental concern of GMO opponents is the unknown as such—fears of wholly unanticipated effects, large and small, on humans, the environment, or human society."⁶⁵

Although it is not discussed extensively in the United States, indoor air pollution is the world's number one human health problem, accounting for about ten percent of deaths globally.⁶⁶ Indoor air pollution is directly related to energy policies, one of the areas of hot debate at Johannesburg. In developing countries, people burn various contaminate-loaded materials such as wood, animal dung, and food scraps for cooking and heat. This contributes to many deaths.⁶⁷ According to one expert, "the best long-term solution . . . would be to introduce windmills and solar panels, but there's little support for bringing clean energy to developing countries."⁶⁸ Energy expert John

⁶¹ Bradford & Dorfman, *supra* note 44, at A15.

⁶² French, *supra* note 53, at 26.

⁶³ *Id.*; Food and Drug Administration, *FDA to Strengthen Pre-Market Review of Bioengineered Foods* (May 3, 2000), at <http://www.fda.gov/bbs/topics/NEWS/NEW00726.html>.

⁶⁴ This approach is called the "precautionary principle." The Global Development Research Center, E.U. Communication on the Precautionary Principle (Feb. 2, 2000), at <http://www.gdrc.org/u-gov/precaution-4.html>. "The Communication makes it clear that the precautionary principle is neither a politicization [*sic*] of science or the acceptance of zero-risk but that it provides a basis for action when science is unable to give a clear answer." *Id.*

⁶⁵ John S. Applegate, *The Prometheus Principle: Using the Precautionary Principle to Harmonize the Regulation of Genetically Modified Organisms*, 9 IND. J. GLOBAL LEGAL STUD. 207, 215 (2001).

⁶⁶ Guterl & Hastings, *supra* note 12, at 39.

⁶⁷ *Id.*

⁶⁸ *Id.*

Holdren of Harvard University says the primary obstacle is the status quo of our current \$10 trillion U.S. investment in fossil fuels.⁶⁹

The Johannesburg Summit's seventy-page action plan includes plans to reduce the use of oil and switch to cleaner, more efficient fuels.⁷⁰ The final language speaks of acting "with a sense of urgency" but does not include target dates or schedules that were advocated by delegates from NGOs and poorer countries.⁷¹ The watered-down language was largely a result of lobbying by the United States delegation, which opposed inclusion of specific target dates.⁷²

C. *Context for Sustainable Development: A World Without Borders*

We are becoming a world without borders economically, environmentally, and in many other ways, and sustainable development must be discussed in that context. This section discusses economic and environmental interrelationships between the United States and Mexico.

1. Economic Links

NAFTA has accelerated economic linkages between the United States and Mexico. Their economies and markets are inextricably linked—exports from Mexico to the United States accounted for about twenty-five percent of Mexico's economy in 2001, up thirteen percent from 1993.⁷³ Furthermore, "\$85 billion in foreign investment has gone into the Mexican economy" since NAFTA took effect.⁷⁴

Additionally, investment comes to the United States from Mexico. For example, *Grupo Bimbo*, the third largest bread maker in the world, acquired the Western United States part of George Weston Ltd. for \$610 million U.S. in January 2002.⁷⁵ The purchase is viewed as a huge move forward for Mexican business. *Pan Bimbo* (Bimbo Bread) is sold throughout Mexico and in various United States cities such as Chicago. The purchase

⁶⁹ *Id.*

⁷⁰ Plan of Implementation, *supra* note 2, *passim*.

⁷¹ Jon Jeter, *Energy Plan Reached at Summit; U.N. Forum Delegates Endorse Shift to Cleaner Sources with 'Urgency'*, WASH. POST, Sept. 3, 2002, at A12.

⁷² *Id.*

⁷³ Charles J. Whalen et al., *NAFTA's Scorecard: So Far, So Good*, BUS. WK., July 9, 2001, at 54.

⁷⁴ *Id.*

⁷⁵ *Grupo Bimbo Acquires George Weston's Western U.S. Banking Business* (Jan. 22, 2002), at <http://www.bimbobakeriesusa.com/news.html> (last visited Apr. 16, 2003) [hereinafter *Grupo Bimbo Acquires*].

gives *Grupo Bimbo* the right to distribute popular United States brands such as Entenmann's pastries and Thomas's English Muffins.⁷⁶ Analysts believe the acquisition may double *Grupo Bimbo*'s United States revenues.

There are examples from other industries as well. In 2002, *CAMISA*, a Mexican auto parts manufacturer, acquired the light duty cylinder liner business of Dana Corp., a major United States auto parts maker.⁷⁷ *CAMISA* plans to downsize three of Dana's United States plants, and about three hundred workers will be laid off.⁷⁸ Another example is *Gigante*, a supermarket chain with about two hundred stores in Mexico. After a struggle with the city of Anaheim, California, it is opening a store to serve the Anaheim area's sixty percent Latino population.⁷⁹

Due to economic links between the United States and Mexico, the terrorism of September 11, 2001 has taken a huge toll on Mexico. The effects are direct, resulting in fewer jobs for Mexicans in Mexico and in the United States. They are also indirect. For example, with no employment or reduced employment, fewer Mexicans residing in the United States are able to send funds to family in Mexico.

There is an economic adage that says "if the United States sneezes, the rest of the world catches pneumonia." This is especially true in Mexico in the wake of September 11.⁸⁰ Mexico felt the effects of the terrorism almost immediately, and it suffered two consecutive quarters of contraction.⁸¹ The Mexican recession was declared "official" on Friday, February 15, 2002.⁸² For example, service industries have been hard hit by September 11. Mexican tourist resorts have lost tens of millions of United States dollars.⁸³

⁷⁶ *Id.*

⁷⁷ *Dana Corp. To Sell Light-Duty Cylinder Liner Business*, MOD. CASTING, Sept. 1, 2002, at 14.

⁷⁸ *Panorama, Mexico*, LATIN TRADE, Oct. 20, 2002, at 10, 14.

⁷⁹ Mary A. Demsey, *Trade Talk: "Gigante" Battle*, LATIN TRADE, Oct. 2002, at 16. It is interesting to note that Anaheim threatened to block the store's opening. In response, *Gigante* relied on arguments under Chapter 11 of NAFTA to persuade the city to drop its opposition, *see infra* text accompanying note 178 (discussing the victory of Metalclad, a United States company, in a lawsuit against a Mexican municipality that blocked construction of a waste handling facility).

⁸⁰ *See* Geri Smith, *Mexico's Wagon is Hitched to a Falling Star*, BUS. WEEK, Oct. 1, 2001, at 88 (discussing the immediate economic effects of September 11, 2001 on Mexico and potential economic damage to Mexican exports and tourism).

⁸¹ Jenalia Moreno, *Once Mexico's Economic Wonder, Monterrey's Manufacturing Sputters*, HOUSTON CHRON., Feb. 17, 2002, at Business 1.

⁸² *Id.*

⁸³ Ginger Thompson, *Threats and Responses: After 9/11, Fox Still Waits for U.S. Moves on Mexico*, N.Y. TIMES, Sept. 13, 2002, at A1 [hereinafter, Thompson, *Threats and Responses*].

Much of the contraction in Mexico's economy stems from decreased demand from the United States for Mexico's exports. In 2001, 253 Mexican factories shut down and about 250,000 Mexican workers lost their jobs.⁸⁴ Most jobs were at *maquiladoras*, factories to which materials are shipped from the United States.⁸⁵ Mexicans then assemble materials, and the final product is returned to the United States.⁸⁶ *Maquiladoras* that closed down include manufacturers of garments, toys, car parts, and electronics.⁸⁷ The January 2002 issue of *Latin Trade* reports that Volkswagen has halted production at its Puebla plant and Ford Motor Company has idled its plant in Hermosillo, Mexico in response to sluggish sales in the United States.⁸⁸ Other *maquiladoras* have cut their production and their work forces.

This is the first time in almost ten years that factory employment levels have fallen in Mexico. It is estimated that each *maquiladora* job indirectly supports 3.5 additional jobs at other companies in the supply chain. Shut-downs at *maquiladoras* lead to shut-downs of suppliers and, in turn, even greater unemployment.⁸⁹ Workers who retain their jobs are likely to work fewer hours. Mexico's *Instituto Nacional de Estadística, Geografía, e Información* ("INEGI," National Statistics Institute) reports that factory workers saw their hours cut by about twenty percent.⁹⁰ At the same time, the Mexican peso strengthened as compared to the United States dollar, further harming the exports sector. A strong peso means that Mexican goods are more expensive in the United States as compared to goods imported from other countries or domestic goods.⁹¹

The recession has affected many small businesses in Mexico as well. Carpet weaving is the second largest source of income for Santa Ana del

⁸⁴ Barbara Hagenbaugh, *Between 2 Economic Extremes*, USA TODAY, Aug. 15, 2002, at 3B; John Moody, *Firms Flee Rising Labour Costs in Mexico*, MONTREAL GAZETTE, Apr. 2, 2002, at C4.

⁸⁵ For history and discussion of the *maquiladora* program, see David W. Eaton, *Transformation of Maquiladora Industry: The Driving Force Behind the Creation of NAFTA Regional Economy*, 14 ARIZ. J. INT'L & COMP. L. 747 (1997); Jesus Silva & Richard K. Dunn, *A Free Trade Agreement Between the United States and Mexico: The Right Choice?*, SAN DIEGO L. REV. 937, 956-59 (1990).

⁸⁶ *Id.*

⁸⁷ Ginger Thompson, *Fallout of U.S. Recession Drifts South Into Mexico; Jobs Are Scarce and the Outlook Becomes Dismal*, NY TIMES, Dec. 26, 2001, at C1 [hereinafter Thompson, *Fallout*].

⁸⁸ Mary Dempsey, *Ford Motor*, LATIN TRADE, Jan. 2002, at 15.

⁸⁹ Sara Silver, *US Sneezes, Mexico Catches a Cold: Maquiladora Export-Processing Zones are Suffering*, FIN. TIMES (London), Feb. 11, 2002, at 3.

⁹⁰ *Id.*

⁹¹ Moreno, *supra* note 81, at Business 1.

Valle, Oaxaca, Mexico.⁹² The largest source is money sent to Santa Ana del Valle by its citizens who are working in the United States. Town leaders operate a carpet shop in which individuals volunteer their time in exchange for services from local businesses. Carpet sales in the shop decreased from about \$300 to \$400 U.S. per week in early 2001 to \$30 to \$40 U.S. per week after September 11.⁹³ Juan Aquino Cruz, a carpet maker, questioned this effect, "[a]s far away as we are from all that is happening, why is it affecting us so much?"⁹⁴

Some economic analysts predict that even if the United States' economy improves, Mexico may not be able to recover quickly from its recession. It is becoming more difficult for Mexico to attract foreign investment, and in the first half of 2002, as compared to the first half of 2001, foreign investment in Mexico was down eighteen percent.⁹⁵ There are several reasons for this. Wages have been rising at well over the pace of inflation, making Mexico less competitive than Central American and Asian countries in terms of cheap, unskilled labor.⁹⁶ Juan Pablo Fuentes, an economist at the consulting firm DRI-WEFA, says, "[e]ven after the U.S. economy improves, and the demand picks up, it will be cheaper for manufacturers to produce in other countries."⁹⁷ For example, some *maquiladoras* have moved from Mexico to China, Vietnam, and other Southeast Asian countries to capitalize on the lower wages for workers.⁹⁸ Miguel Pedraza, a transportation consultant, says that Mexican businesses are not prepared for global competition and are making a mistake by operating as if they were the dominant forces in the cheap labor market.⁹⁹ Mexico must begin to export more of its goods to countries other than the United States, but this will take a major effort in view of the fact that it currently sends nearly ninety percent of its exports to the United States.

Some industries are hoping for changes to make Mexico more competitive in the wake of September 11. Mexico's steel industry has sustained substantial numbers of job cuts.¹⁰⁰ Its representatives claim that this

⁹² James F. Smith & Ken Ellingwood, *Sept. 11 Leaves Carpet Loomers Idle In Oaxacan Town*, L.A. TIMES, Nov. 28, 2001, at A5.

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ Mike Zellner, *Playing the Rebound*, LATIN TRADE, Oct. 2002, at 38, 39.

⁹⁶ Moody, *supra* note 84, at C4.

⁹⁷ Thompson, *Fallout*, *supra* note 87, at C1.

⁹⁸ *See id.* (noting that factories are leaving Mexico for Asia because effective wages in Mexico average \$2 to \$3 U.S. per hour while wages in Indonesia average \$1.19 U.S. per hour and wages in China average 43 cents U.S. per hour).

⁹⁹ Moreno, *supra* note 81, at Business 1.

¹⁰⁰ *Id.*

is because *PEMEX*, the national oil company, charges more for oil than its competitors charge in other countries.¹⁰¹ Mexican steel producers are currently lobbying to persuade the Mexican government to allow private investment in natural gas.¹⁰² If United States companies are permitted to invest in that sector, Mexico's economy will be stimulated. Other industries are calling for government improvements to infrastructure and simplified regulations to make doing business in Mexico easier and cheaper.¹⁰³

Many Mexican migrants are among the low-paid workers in the United States who are losing their jobs. Thus, many do not have money to send home. This is a major blow to Mexico because the money sent home by migrants working in the United States is Mexico's third largest source of dollars after oil and tourism.¹⁰⁴ Approximately 4.5 million Mexican workers were sending an estimated \$8 billion U.S. per year back to Mexico as of September 2001.¹⁰⁵ Entire villages in Mexico depend on funding sent by Mexicans living in the United States. Many migrants do not sever their ties to Mexico. They live in cramped quarters in the United States, and they send money to build houses in their home villages. Every winter, they return to their villages and homes, and they look forward to retirement in Mexico.¹⁰⁶

Prior to September 11, Mexico's President Fox and the United States' President Bush were negotiating a plan that would result in a sweeping reform of United States immigration laws.¹⁰⁷ First, Mexicans living and working in the United States would be given a form of amnesty that would later be followed by a grant of green cards allowing them legal status to

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ Peter Katel & Cañon de la Marran, *Slamming the Door: Stiffer Border Security Has Put the Livelihoods of Many Mexicans at Risk*, *TIME*, Mar. 11, 2002, at 37. Another *Time* article puts these funds as Mexico's fourth largest source of income. Michael Duffy & Peter Koutel, *Out of the Shadows*, *TIME*, July 30, 2001, at 14, 16.

¹⁰⁵ Duffy & Koutel, *supra* note 104, at 16.

¹⁰⁶ See ANDRES OPPENHEIMER, *BORDERING ON CHAOS: GUERRILLAS, STOCKBROKERS, POLITICIANS, AND MEXICO'S ROAD TO PROSPERITY* 282-292 (1996) (describing the lives of citizens of Nuevo Chupácuaro, a village in the state of Guanajuato, Mexico). The yearly routine of the town is based on emigration to the United States. In December, emigrants return for celebrations and family events, returning to jobs in the United States each January. Hundreds work in Greenfield, a town in the California Central Valley. Emigrants pay for their own houses in Mexico, and they contribute to hospitals and schools as well as public infrastructure such as water systems, drainage systems, and paving of streets. The same patterns are true with respect to hundreds of villages in central Mexican states including Michoacán, Jalisco, Guanajuato, and others. *Id.*

¹⁰⁷ Duffy & Koutel, *supra* note 104, at 16.

continue working.¹⁰⁸ Second, the ceiling placed by the United States on the number of immigrants from Mexico and Canada would be removed.¹⁰⁹ This would be a significant step in view of the fact that in 2000, the United States granted over 100,000 work visas to foreigners, yet only about 4,480 went to Mexicans.¹¹⁰ Third, a "guest-worker" program would be established.¹¹¹ It would allow as many as 300,000 Mexicans to work in the United States and return home.¹¹² In short, the Fox-Bush plan would decriminalize migration from Mexico.¹¹³ September 11 caused the plan to be set aside.¹¹⁴ In response, President Fox and the people of Mexico are becoming increasingly impatient with President Bush. They believe he has broken his promises to work with Mexico on immigration reforms and other mutual concerns.¹¹⁵

September 11 has severely reduced legal Mexican emigration to the United States.¹¹⁶ Many Mexicans, who would normally go to the United States to find work each year, are staying in Mexico due to decreased opportunities to find work and increased security at the border.¹¹⁷ This hurts United States businesses that depend on Mexican workers in restaurants, construction, farming, and meat-packing.¹¹⁸

Illegal migration has been affected, too. There has been a sharp drop in the number of illegal immigrants detained along the Southwest border. In the first eight days of October 2001, 10,622 people were detained.¹¹⁹ That is fewer than half the 22,912 detained in the same period in 2000.¹²⁰ For October and the first week of November 2001, arrests were down fifty-four percent as compared to the previous year.¹²¹ Wayne Cornelius, director of the

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ Duffy & Koutel, *supra* note 104, at 16.

¹¹⁴ That "setting aside" has been scarcely noticed by the public in the United States, but it is of considerable consternation to Mexico, and it has cast a shadow on U.S.-Mexico relations. Christopher Marquis, *U.S. Hasn't Kept Promise to Latin America, Critics Say*, N.Y. TIMES, May 19, 2002, at A14.

¹¹⁵ See *id.*; Thompson, *Threats and Responses*, *supra* note 83, at A1.

¹¹⁶ See Thompson, *Threats and Responses*, *supra* note 83, at A1.

¹¹⁷ In the wake of September 11, the Mexican Consul General in Denver received anguished phone calls from Mexicans fearing mass deportations after Mexicans working as dishwashers and janitors were detained on September 19, 2001 and sent back to Mexico. Sam Dillon, *Mexican Immigrants Face New Set of Fears*, N.Y. TIMES, Oct. 15, 2001, at A14.

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ *Id.* at A14.

¹²¹ *Id.*

Center for Comparative Immigration Studies at the University of California San Diego, said, "[h]istory shows that Mexican migration patterns adjust very rapidly to perceptions of an adverse economic environment in the U.S."¹²²

In addition to the economic downturn, other factors are making it more difficult for Mexicans to enter the United States. New United States regulations make it more difficult to enter the United States at border checkpoints, and there is greater vigilance over people crossing into the United States.¹²³ As a consequence, it has become more expensive for illegal immigrants who seek assistance to cross the border.¹²⁴ Over a period of three years, the price for the services of a *coyote*, a person who smuggles migrants across the United States-Mexico border, went from \$1,000 U.S. to \$2,500 U.S. per person.¹²⁵ This new, higher price and increased chances of getting caught have caused many migrants to decide not to make the voyage at all.¹²⁶ One migrant, Severiano Antonio, said, "[a]fter the 11th, I am rethinking my plans. What happened there is punishing us here. We are waiting for things to calm down there."¹²⁷

Overall, United States-Mexico trade has been slowed by recession and the fallout from September 11 including tighter border security, unemployment, and reduced tourism. President Fox presents "an image of Mexico as an equal partner, not a poor neighbor, to the United States, but the United States is giving insufficient attention to that partnership. Mexico's foreign policy agenda, based on building a new relationship with the United States, has been blocked."¹²⁸

2. Environmental Links

Environmental problems shared by the United States and Mexico illustrate the fact that geographic borders mean little in terms of environmental protection. Most of the environmental problems faced by the United States and Mexico are the same as those identified and discussed at the Johannesburg Summit. Those problems relate to areas including, but not limited to (1) health, (2) contamination of water, air, and land, (3) food

¹²² Smith & Ellingwood, *supra* note 92, at A5.

¹²³ *Id.*

¹²⁴ *Id.*

¹²⁵ *Id.* Another source lists that average fee as \$2,000. Katel & de la Marran, *supra* note 104, at 37.

¹²⁶ Katel & de la Marran, *supra* note 104, at 37.

¹²⁷ Smith & Ellingwood, *supra* note 92, at A5.

¹²⁸ Thompson, *Threats and Responses*, *supra* note 83, at A1.

shortages, (4) destruction of habitat and biodiversity, and (5) energy and climate.

a) *Health*

Health problems along the United States-Mexico border are epidemic. Incidences of some diseases are two to three times higher along the border than elsewhere in Mexico. As compared to citizens in the United States, Mexicans suffer disproportionately from waterborne diseases, such as hepatitis, and respiratory diseases, such as asthma.¹²⁹ Cancer and birth defect rates are notoriously high along the United States-Mexico border. "According to the American Medical Association, environmental degradation related to industry location on the United States-Mexico border has turned the region into a 'virtual cesspool and breeding ground for infectious diseases.'"¹³⁰

b) *Contamination of Land, Air, and Water*

Environmental contamination does not stop at political boundaries; the United States and Mexico share troubled ecosystems. For example, we share the Gulf of Mexico and many rivers, including the New River, the Tijuana River, and the Rio Grande.¹³¹ Our cities share air basins. Examples include (1) Tijuana, Mexico and San Diego, California; and (2) Ciudad Juarez, Mexico and El Paso, Texas.¹³² "Vehicle emissions and severe traffic congestion at international bridges are major sources of air pollution in border cities. Emissions from industrial sources, residential combustion, and dust from unpaved roads are also significant contributors to poor air quality."¹³³

Industrialization in northern Mexico creates a spiral of environmental problems. El Mameyel, Mexico, a town of about four hundred people, provides an apt example. From about 1990 to 1998, about thirty-eight percent of a 215,000 acre forest surrounding the city was destroyed.¹³⁴ As a result,

¹²⁹ EPA, PROTECTING THE ENVIRONMENT OF THE U.S.-MEXICO BORDER AREA, A BRIEFING PAPER FOR THE INCOMING U.S. ADMINISTRATION 10 (2002), available at <http://www.scrp.org/transition.pdf> [hereinafter BRIEFING PAPER].

¹³⁰ Kori Westbrook, *The North American Free Trade Agreement's Effects on Mexico's Environment*, 10 CURRENTS: INT'L TRADE L.J. 86, 90 (2001).

¹³¹ Joel Simon, *Moment of Truth*, AMICUS J., June 22, 2000, at 12.

¹³² *Id.*

¹³³ EPA, SUMMARY OF SELECTED ENVIRONMENTAL INDICATORS FROM THE U.S.-MEXICO BORDER XXI PROGRAM: PROGRESS REPORT 1996-2000, EPA 909-R-00-002 (2000).

¹³⁴ Tim Weiner, *A Farmer Learns About Mexico's Lack of the Rule of Law*, N.Y. TIMES, Oct. 27, 2000, at A3.

arable land is washing away, and the springs that are citizens' only source of drinking water are choked by silt and debris.¹³⁵ Mexicans who move to cities seeking employment in industrial facilities live in squalor.¹³⁶ They lack basic services such as potable water and electricity.¹³⁷ Money is needed for basic services including electricity, drinking water, and sewage treatment.¹³⁸ Pollution does not recognize political boundaries. Environmental contamination along the United States-Mexico border includes raw household sewage. Such problems are especially grave in the San Diego, California-Tijuana, Mexico region.¹³⁹ Air contamination is also severe in the border area. The United States Environmental Protection Agency ("EPA") identified nine United States border communities exceeding one or more United States National Ambient Air Quality Standards for pollutants including carbon monoxide and ozone precursors.¹⁴⁰

Contamination is not limited to border areas. Wastewater from cities and return flows from agriculture find their way into the aquifers and rivers and pollute the water supply. Mexico's national water commissioner says seventy-three percent of Mexico's water supply is contaminated. This includes above ground and underground sources.¹⁴¹ A lack of drinking water is a serious problem in cities and rural areas across Mexico.¹⁴² People who can afford to do so drink bottled water.¹⁴³ About one out of eight Mexicans has no easy access to clean drinking water.¹⁴⁴ Citizens have to drink what they find, and, as a result, people get sick.¹⁴⁵ According to the Organization for Economic Cooperation and Development, fifty-four of every one hundred thousand people in the state of Chiapas die from bad water each year.¹⁴⁶

In addition to water quality problems, Mexicans must deal with water shortages. In the border area, "[t]he aquifers are being drawn upon well

¹³⁵ *Id.*

¹³⁶ For a description of the horrors of life for *maquiladora* employees who live in the neighborhoods of Matamoros, Mexico, see Bruce Selcraig, *Border Patrol*, SIERRA, May/June 1994, at 58.

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ For a discussion, see Paulette L. Stenzel, *Can NAFTA's Environmental Provisions Promote Sustainable Development?*, 59 ALB. L. REV. 423, 446-47 (1995).

¹⁴⁰ *Id.* at 446.

¹⁴¹ Tim Weiner, *Mexico Grows Parched, With Pollution and Politics*, N.Y. TIMES, Apr. 14, 2001, at A3.

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ *Id.*

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

beyond the rate at which they are being refilled and demands on the river are increasing. So, the problem is not just quality of water; there is also a problem with quantity of water."¹⁴⁷ The *maquiladoras* in northern Mexico are built in a desert. About 1.4 million people lived in the area in 1940, and nearly 12 million lived in the area as of late 2002.¹⁴⁸ A ten-year drought in northern Mexico has caused \$1 billion U.S. in economic losses.¹⁴⁹ Over-draining of the aquifer in the Mexico City Valley is causing Mexico City to sink faster than Venice, Italy.¹⁵⁰ Mexico's Environmental Secretary, Victor Lichtinger, acknowledges that Mexico faces a major water crisis. President Fox calls water a "national security issue."¹⁵¹

Mexico City is known for its severe air pollution. It is located at a high altitude of 2,300 meters above sea level in a valley between mountain ranges. The area is prone to thermal inversions.¹⁵² Due to serious air contamination problems, Mexico City instituted a "Day Without a Car" program. Using a system based on license plate numbers, drivers must leave their cars at home on one day each week.¹⁵³ Yet, exhaust from motor vehicles is only one of many sources of Mexico City's air contamination problems.

Additionally, Mexico faces serious problems with contamination of its lands. For example, the operations of *maquiladoras* have produced massive amounts of hazardous materials which, in turn, have led to extensive environmental contamination in northern Mexico. Mexican law requires that United States companies operating *maquiladoras* return their wastes to the United States for disposal. Studies reveal, however, that few United States companies do so.¹⁵⁴ Metalclad Corporation estimates that less than ten percent of hazardous waste generated in Mexico is treated according to law. As of 1999, there was only one licensed hazardous waste disposal facility in all of Mexico. The site, located in Nuevo León, is located approximately nine to twelve hours by truck north of Mexico City. Moreover, companies have

¹⁴⁷ BRIEFING PAPER, *supra* note 129, at 3.

¹⁴⁸ Jack Epstein, *Resource Wars*, 10 LATIN TRADE 22 (2002).

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ Weiner, *supra* note 141, at A3.

¹⁵² Dore, *supra* note 17, at 8.

¹⁵³ RON MADER, MEXICO: ADVENTURES IN NATURE 70 (1998).

¹⁵⁴ For discussion, see generally Stenzel, *supra* note 26; see also Joel Simon, *Dirty Work*, CAL. LAW., Feb. 1993, at 40, 43. On the other hand, American EPA inspectors and Mexican officials did increase their cooperation and enforcement efforts as NAFTA took effect. Under a tracking system called HAZTRAKS, United States and Mexican officials have access to an inventory of chemical wastes and movement of those wastes across the border. *U.S. Mexico Computer System Helps Track Illegal Shipments of Hazardous Waste*, St. Envtl. Daily (BNA) (Feb. 9, 1994), WL 2/9/94 SED d6.

spent millions of dollars trying to obtain licenses for seven major waste treatment facilities at various locations in Mexico. All have been cancelled or delayed indefinitely.

c) *Food*

Mexico faces a variety of issues related to food. Issues relate to agricultural subsidies, GMOs, and use of pesticides and other toxic substances.

Many citizens in the United States and Mexico oppose GMOs in foods.¹⁵⁵ The United States does not ban GMOs. Mexico allows them in most foods, but not in corn. This is because Mexico is the birthplace of corn, and it is home to the greatest number of varieties of corn in the world.¹⁵⁶ Therefore, in 1998, the Mexican government placed a moratorium on GM corn.¹⁵⁷ In spite of the moratorium, however, researchers and environmentalists have been alarmed by the discovery that some of Mexico's native corn varieties have been contaminated by genetically engineered deoxyribonucleic acid ("DNA").¹⁵⁸

Additionally, there is concern regarding pesticides used on foods in Mexico when they are imported to the United States. These same pesticides, of course, are a threat to Mexican consumers. Nevertheless, only a small percentage of the produce entering the United States is inspected as it is imported.¹⁵⁹ Thus, many questions about pesticide contamination remain unanswered.

d) *Destruction of Habitat and Biodiversity*

Mexico's rate of deforestation is second only to that of Brazil. Thus, its effects cause serious concerns for Mexico. More than 30,000 species of plants found in Mexico are found nowhere else on earth.¹⁶⁰ Mexico is also

¹⁵⁵ Mike Toner, *Designer Crops Already Abundant on Grocery Shelves*, ATLANTA J. & CONSTITUTION, May 19, 2001, at A1.

¹⁵⁶ Susan Ferriss, *Battle Lines Drawn in Mexico: Native Corn Too Sacred to "Infect"?*, ATLANTA J. & CONSTITUTION, Feb. 28, 2001, at 7A.

¹⁵⁷ *Id.*

¹⁵⁸ Carol Kaesuk Yoon, *Genetic Modification Taints Corn in Mexico*, N.Y. TIMES, Oct. 2, 2001, at F7; Jeff Nesmith, *Genetically Modified Food: As Biotechnology Spreads, Questions Grow, Too*, ATLANTA J. & CONSTITUTION, Feb. 28, 2002, at 7A; Michael Pollan, *Genetic Pollution*, N.Y. TIMES, Dec. 9, 2001, at 75.

¹⁵⁹ For discussion, see ERIC A. DAVIDSON, *YOU CAN'T EAT GNP: ECONOMICS AS IF ECOLOGY MATTERED* 51-54 (2002).

¹⁶⁰ Simon, *supra* note 154, at 12.

home to 449 species of mammals, 694 kinds of reptiles, and more than 1,000 kinds of birds.¹⁶¹ The United States and Mexico share a variety of endangered or threatened species including, but not limited to, gray whales and monarch butterflies.¹⁶²

Each year, monarch butterflies migrate from the United States and Canada to approximately one dozen mountain tops in the state of Michoacán, Mexico.¹⁶³ In recent years, the monarchs have been threatened by deforestation.¹⁶⁴ Illegal logging for commercial lumber has been destroying their habitats.¹⁶⁵ Making things worse, during the winter of 2001-2002, a severe freeze killed about eighty percent of the butterflies in the El Rosario sanctuary and about seventy-four percent of them in the Sierra Chincua sanctuary. President Fox has started a program to reduce logging in the sanctuaries—it includes funding for sixty inspectors to monitor the areas twenty-four hours per day. Additionally, the government is working with the World Wildlife Fund-Mexico to implement the plan. But, the problem is huge and will not be remedied quickly.

Environmental damage has been particularly devastating in the state of Chiapas. Chiapas is Mexico's primary producer of coffee and bananas, and it has nearly one quarter of Mexico's water resources.¹⁶⁶ It is the site of three major dams that provide half of Mexico's hydroelectric power. In turn, that power is used to produce twenty percent of Mexico's electricity.¹⁶⁷

Chiapas is a land of rainforests that provide homes for a multitude of birds, animals, and plant species. The rainforests have been subjected to tremendous environmental damage. Since the 1950s and continuing today, ranchers have rented land from communal farmers ("*ejidatarios*"). Ranchers clear trees and use the lands for grazing. When these lands are exhausted, they move on to other lands, leaving a wasteland behind.¹⁶⁸ Thus, when we eat hamburger and other Mexican beef products in the United States, we contribute to the destruction of the trees and the species that live among those trees in Mexico.

¹⁶¹ *Id.*

¹⁶² *Id.*

¹⁶³ For discussion of the monarchs and El Rosario sanctuary, see MADER, *supra* note 153, at 83-88.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ *Id.* at 248.

¹⁶⁷ *Id.* at 250.

¹⁶⁸ *Id.* at 251.

e) *Energy and Climate*

Energy is a problem in Mexico, too. Again, the state of Chiapas provides illustrations. Although Chiapas provides fifty percent of Mexico's hydroelectric power, little of that power goes to the *Chiapenecos*.¹⁶⁹ Only one third of the homes in Chiapas have access to electric power.¹⁷⁰ Due to the fact that citizens do not have access to electricity, they must gather firewood.¹⁷¹ This, in turn, contributes to deforestation.

f) *Conclusion*

In summary, the environmental problems of Mexico are numerous and complex. The pursuit of energy sources leads to deforestation; deforestation leads to loss of habitat and destruction of species. Moreover, the problems are not confined by geographical borders; the problems of Mexico are the problems of the United States. Industrialization in border areas leads to air, water, and land contamination in both countries.

C. *Use of the Term "Sustainable Development" in the Context of United States-Mexico Interactions*

Although sustainable development appeared to provide a fresh approach to environmental issues in 1987, "the cutting edge of this concept has been dulled as practically every major institution in the world economy from multinational mining and logging companies to the World Bank—has embraced the concept."¹⁷² Parties using the term include governments, businesses, and environmentalists. Governments use the term in trade negotiations and trade agreements, as well as domestic legislation and programs. Environmental NGOs use the term. Businesses use it in their operations and in the NGOs in which they participate. This discussion will examine how the various parties are using the term.

¹⁶⁹ MADER, *supra* note 153, at 250. Chiapas is rich in natural resources. As of 1994, Chiapas was supplying about sixty percent of Mexico's hydroelectric power, twenty-one percent of its oil, and forty-seven percent of its natural gas. OPPENHEIMER, *supra* note 106, at 20.

¹⁷⁰ MADER, *supra* note 153, at 250. Additionally, only about one-half of the citizens of Chiapas had access to potable water as of 1994. OPPENHEIMER, *supra* note 106, at 20.

¹⁷¹ MADER, *supra* note 153, at 250.

¹⁷² Gedicks, *supra* note 60, at 34.

1. Trade Negotiations and Agreements

NAFTA includes an environmental side agreement in which attainment of sustainable development is articulated as a goal.¹⁷³ Environmentalists lobbied members of the United States Congress heavily because they wanted environmental protection measures to be added to the draft of NAFTA. They were successful. Before NAFTA could be passed, President Bill Clinton of the United States was forced to negotiate an environmental side agreement.¹⁷⁴ When its provisions were finalized in 1993, NAFTA represented a turning point in international law because it explicitly recognized that trade and environmental policy are inextricably linked.

Sustainable development is mentioned three times in the preamble to the Environmental Side Agreement.¹⁷⁵ Yet, the agreement provisions provide, at best, a first step toward sustainable development. NAFTA does not create new environmental laws. It allows an Environmental Commission based in Montreal to take action against a NAFTA member-nation only if it shows a "persistent pattern" of failure to enforce its own environmental laws.¹⁷⁶

How much progress toward sustainable development has been made under NAFTA? The answer is "some," but many issues remain to be resolved and massive tasks remain to be completed.

The condition of the United States-Mexico border was a major concern when NAFTA was being considered for adoption. In 1992, the United States and Mexico agreed to a comprehensive plan to clean up environmental contamination along the 2,000 mile United States-Mexico border. They established two institutions that complement each other: the Border Environmental Cooperation Commission ("BECC") and the North American Development Bank ("NAD Bank"). The two institutions work together to improve the environmental infrastructure of the United States-Mexico border area. The BECC works with states, local governments, and NGOs to provide technical and financial planning. The NAD Bank provides financing for environmental infrastructure in the border area. As of September 2001, the Commission had approved \$21.2 million U.S. to 101 communities for assistance in the development of 155 infrastructure projects or "concepts." As of the summer of 2000, the BECC had only \$209 million

¹⁷³ NAFTA, *supra* note 13, 32 I.L.M. at 298; Environmental Side Agreement, *supra* note 14.

¹⁷⁴ NAFTA, *supra* note 13, at 429. Major environmental groups were divided with respect to NAFTA. For example, the National Wildlife Fund supported it, and the Sierra Club vehemently opposed it. In addition to the Environmental Side Agreement, two other side agreements were added: a labor agreement and an agreement on income surges.

¹⁷⁵ NAFTA, *supra* note 13, pmbl.

¹⁷⁶ Environmental Side Agreement, *supra* note 14, art. 14.1, at 1488.

U.S. total for projects designed to clean up the border area, yet it estimates that it needs at least \$2 billion U.S.¹⁷⁷

Recently, environmentalists have become concerned that provisions in Chapter 11 of NAFTA pose a threat to efforts to promote sustainable development. "Chapter 11 permits individual companies to challenge their treatment before a panel of independent arbiters . . . who determine whether a government's actions violate its NAFTA investment commitments. The decision is binding, and the process is closed to the public." In a recent case based on Chapter 11, Metalclad Corporation won a judgment against the Mexican municipality of Guadalcázar for \$15.6 million U.S. after Metalclad was denied permission to open a waste disposal facility.¹⁷⁸ So far, there have not been enough decisions to reach clear conclusions about Chapter 11, but environmentalists fear that protections for investors may be gaining precedence over sustainable development. The United States business community adamantly supports investor rights, and those rights are protected under Chapter 11.¹⁷⁹ Environmentalists fear that environmental regulations that were previously considered to be purely domestic may be threatened by decisions under Chapter 11.¹⁸⁰

Needing to craft less controversial investment provisions for future free-trade agreements, the Clinton Administration in its waning days wrestled with possible changes to Chapter 11.¹⁸¹ There was no agreement, however, even within the United States government. The United States Justice Department, the Environmental Protection Agency, and the Department of the Interior wanted to limit the scope of investor provisions, but the United States Trade Representative and Commerce Department opposed that position.¹⁸²

Efforts to promote sustainable development under NAFTA carry important ramifications as the United States and thirty-three other countries of the Western Hemisphere continue negotiations for the Free Trade Area of the Americas ("FTAA"). Pursuit of sustainable development was articulated as one of four sets of goals in FTAA's Plan of Action resulting from the 1994

¹⁷⁷ Simon, *supra* note 154. For additional discussion of problems along the United States-Mexico border, see *supra*, text accompanying notes 129-136.

¹⁷⁸ *United Mexican States v. Metalclad Corp.*, [2001] B.C.S.C. 664, *amended by* [2001] B.C.S.C. 1529 (Sup. Ct. B.C., Can.); Demsey, *supra* note 79, at 16.

¹⁷⁹ For discussion of investment disputes under Chapter 11 and how interpretation of Chapter 11 seems to undermine governmental and judicial decisions, including those related to environmental protection, see Bruce Stokes, *Talk About Unintended Consequences!*, NAT'L J., May 26, 2002, at 1592.

¹⁸⁰ *Id.* at 1593.

¹⁸¹ *Id.*

¹⁸² *Id.*

Miami Summit. In 1996, a summit devoted to sustainable development goals for FTAA was held in Santa Cruz, Bolivia. Environmentalists, of course, want to see more environmental provisions built into FTAA than are in NAFTA. On the other hand, some governments and businesses oppose the inclusion of such provisions. Moreover, as they discuss FTAA, negotiators face questions about the relationship between investment provisions, such as NAFTA's Chapter 11, and environmental protection.¹⁸³

2. Governments and Their Agencies

Government officials talk about sustainable development. For example, after the Rio Summit, United States President Clinton appointed business, environmental, labor, and civil rights representatives to serve on the President's Council on Sustainable Development. After meetings around the United States, the Council delivered a report with ten national goals and fifty-nine policy recommendations designed to promote sustainable development.

Mexico's government talks about environmental protection and sustainable development, too. As compared to the United States, Mexico is in its infancy in terms of enactment and enforcement of environmental laws. Most United States environmental laws were first enacted in the 1960s and 1970s or earlier. Mexico's first environmental legislation came in 1971, when it enacted the Federal Act to Prevent and Control Environmental Pollution Protection, but little action was taken until the late 1980s.¹⁸⁴ The General Ecology Law, Mexico's first major set of environmental laws, was enacted in 1988. Today, Mexico's environmental protection laws include three components: the General Ecology Law (the General Law on Ecological Equilibrium and Environmental Protection or *Código Ecológico*);¹⁸⁵

¹⁸³ The on-going path to the FTAA is not smooth. In 1994, it was announced that Chile would join NAFTA soon. David E. Sanger, *Chile Is Admitted as North American Free Trade Partner*, N.Y. TIMES, Dec. 12, 1994, at A8. Yet, as of 2002, an agreement with Chile is not near. In the wake of September 11, the United States has placed negotiations for the FTAA to the side as it deals with terrorism, Afghanistan, and the Middle East. Latin American countries, which have reworked their export programs to prepare for the FTAA, are upset with the situation. The United States must pay attention to Mexico and the rest of Latin America. Heraldo Muñoz, general secretary of Chile's government, said of the United States's failure to respond to Latin American countries' efforts: "That's a bad signal for the region. If you have your house in order, then there should be some benefit coming out of it. That hasn't been the case." Marquis, *supra* note 114, at A14.

¹⁸⁴ Daniel Basurto & Sergio B. Bustamante, *Environmental Impact and the Handling of Industrial Waste in Mexico*, in 3 MEXICAN LAW: A TREATISE FOR PRACTITIONERS AND INTERNATIONAL INVESTORS 545 (Jorge A. Vargas ed., 2001).

¹⁸⁵ Paulette L. Stenzel, *Mexican Law*, in 2 ENCYCLOPEDIA OF BUSINESS 1256 (Jane Malonis

regulations promulgated under the General Ecology Law; and Official Mexican Standards (*Normas Oficiales Mexicanas* or "*NOMS*").¹⁸⁶

The General Ecology Law is a comprehensive statute addressing water, air, and ground pollution; resource conservation; and environmental enforcement. Its provisions closely parallel those of United States statutes including the Clean Air Act,¹⁸⁷ the Clean Water Act,¹⁸⁸ and the Resource Conservation and Recovery Act.¹⁸⁹

From 1994 to 2000, it was administered by *SEMARNAP*—the Mexican Environmental Secretariat (*Secretaría del Medio Ambiente, Recursos Naturales, y Pesca*, Secretary of the Environment, Natural Resources, and Fisheries). When President Fox took office in 2002, he changed the agency's name to *SEMARNAT* (*Secretaría del Medio Ambiente, y Recursos Naturales*, Secretary for Environment and Natural Resources). He deleted fisheries from the title and from the agency's duties. *SEMARNAT* is currently headed by Environmental Secretary Victor Lichtinger.¹⁹⁰

SEMARNAT oversees two other government offices. The National Institute for Ecology (*Instituto Nacional de Ecología* or "*INE*"), also called the Ecology Institute in English, formulates environmental policy and promulgates regulations implementing the General Ecology Law. It issues the *NOMS*. Under the auspices of *SEMARNAT*, the *PROFEPA*¹⁹¹ (*Procuraduría Federal de Protección al Ambiente*), the Federal Attorney General for Environmental Protection, enforces the code and *NOMS*.¹⁹²

As is the case in many countries, at least on paper, Mexico's environmental officials have embraced the pursuit of sustainable development. *SEMARNAT* has a program called "*PRODERS*" *Programas de Desarrollo Regional Sustentable*, which means "programs for regional sustainable development." It is based on regional development and decentralization to balance three sets of needs: socioeconomic, political, and environmental.

These programs are a step in the right direction, but Mexico needs to find ways to follow through on its environmental promises. This will not be

ed., 2d ed. 2000).

¹⁸⁶ Paulette L. Wolfson et al., *Mexican Environmental Regulations: How They Affect Your Business Decisions*, 10 NAT. RESOURCES & ENV'T. 48 (1996).

¹⁸⁷ 42 U.S.C. §§ 7401-7642 (1988 & Supp. 1995).

¹⁸⁸ 33 U.S.C. §§ 9601-9675 (1993 & Supp. 1991).

¹⁸⁹ 42 U.S.C. §§ 6901-6992 (1988).

¹⁹⁰ For information about *SEMARNAT* in Spanish, see <http://www.semarnat.gob.mx/> (last visited Apr. 17, 2003).

¹⁹¹ For information about *PROFEPA* in Spanish, see http://www.profepa.gob.mx/default.asp?com_id=0 (last visited Apr. 17, 2003).

¹⁹² Some writers use the acronym "*PFPA*" instead of "*PROFEPA*."

an easy task. In Mexico, as is true in many Latin American countries, the legal system suffers from a lack of legitimacy. Democratic and judicial institutions are weak. Additionally, environmental regulation in Mexico has been hampered by inefficient and cumbersome procedures for issuing environmental permits.¹⁹³

Mexico's environmental officials face many challenges. Their laws are new. Officials lack experience as compared to their counterparts in the United States. They have little funding, and Mexico desperately needs environmentally-related infrastructure and technology.

3. Non-Governmental Organizations

Sustainable development is articulated as a goal by various NGOs. Many are environmental groups. Some NGOs are supported by businesses, governments, and international organizations. One example is the World Economic Center ("WEC"). Others are coalitions formed by businesses. They include, for example, the Coalition for Environmentally Responsible Economies ("CERES"), the International Organization for Standardization ("ISO"), and the World Business Council for Sustainable Development ("WBCSD").

Many environmental NGOs are active in Mexico. Some are international while others are groups founded and run by Mexicans.¹⁹⁴ Environmental groups operating in Mexico include the *Centro Mexicano de Derecho Ambiental* (Mexican Center for Environmental Law),¹⁹⁵ the *Grupo de los Cien Internacional, A.C.* ("Grupo of 100")¹⁹⁶ *Pronatura*,¹⁹⁷ and

¹⁹³ See *infra* text accompanying note 376 (discussing the new Single Environmental License—SEL—part of a program to integrate inspection and regulatory activities).

¹⁹⁴ See *Fondo Mexicano para la Conservación de la Naturaleza, A.C.*, at <http://www.fmcn.org> (last visited Mar. 24, 2003); *CEMDA*, at <http://www.cemda.org.mx> (last visited Apr. 15, 2003).

¹⁹⁵ This group has prepared reports on a variety of topics and issues related to Mexican environmental law. *CEMDA*, *supra* note 194.

¹⁹⁶ This group has worked to protect monarch butterflies, gray whales, sea turtles, and other threatened or endangered species. *Grupos de Los Cien, Internacional, A.C.*, Sierra Juitepec 155-B, Col. Lomas Arrilaco, 11010 Mexico, D.F., Mexico, e-mail: grupo100@laneta.apc.org.

¹⁹⁷ *Pronatura* is one of Mexico's most active environmental groups. It is a private NGO with offices in several Mexican cities and sixteen other countries. *Pronatura*, Aspergulas No. 22, Col. San Clemente, 01740, Mexico, D.F. e-mail contact Hans Hermann at 74052.2137@CompuServ.com. One of its most active regionals is *Pro-Natura Peninsula de Yucatán A.C.* For information, contact Pro-Natura USA, c/o: The Together Foundation, 55 East 75th Street, New York, New York, 10021.

others.¹⁹⁸ There is also the Mexican Green Party, a political party with environmental objectives.¹⁹⁹

The WEC is "an international, not-for-profit, non-advocacy organization founded in 1974 with seed funding from the United Nations Environment Program ("UNEP")."²⁰⁰ It seeks to advance sustainable development, social responsibility, and environmental leadership throughout the world. The WEC acts as a bridge, sharing information and expertise between and among industry, governments, NGOs, scientists, and civilians. It is funded through the private sector, foundations, banks, and funding agencies such as the United States Agency for International Development ("USAID").²⁰¹

The WEC's four principal programs are the International Environment Forum ("IEF"), the International Technical Assistance Program, the International Corporate Social Responsibility ("ICSR") Initiative, and the WEC Gold Medal for International Corporate Achievement in Sustainable Development.²⁰² The IEF's members are multinational companies from a variety of industries.²⁰³ They meet several times each year to discuss sustainable development, environment, health, safety, resource management, and corporate social responsibility.²⁰⁴ Through the International Technical Assistance Program pro-bono and reduced-fee assistance is provided to eligible countries by the WEC's engineering experts.²⁰⁵ The engineers provide help with energy efficiency, pollution prevention, waste minimization, and eco-efficiency training.²⁰⁶ Industries, governments, NGOs, and academia also provide technical support and materials for this program.²⁰⁷ The ICSR Initiative helps corporate environmental and sustainability managers as they explore corporate, social, and environmental responsibility through an interdisciplinary approach.²⁰⁸ The program, which started in 2000, involves "experts from the automotive, energy, financial services,

¹⁹⁸ For a partial list with addresses and e-mail addresses, see MADER, *supra* note 153, at 295-301.

¹⁹⁹ For information, see *Mexico-Partido Verde Ecologista de México*, at <http://www.crwflags.com/fotw/flags/mx%7Dpve.html> (last visited Apr. 17, 2003).

²⁰⁰ World Environment Center, *Frequently Asked Questions*, at <http://www.wec.org/faq.htm> (last visited Apr. 16, 2003) [hereinafter WEC, *FAQ's*].

²⁰¹ *Id.*

²⁰² *Id.*

²⁰³ *Id.*

²⁰⁴ *Id.*

²⁰⁵ *Id.*

²⁰⁶ WEC, *FAQ's supra* note 200.

²⁰⁷ *Id.*

²⁰⁸ *Id.*

manufacturing and pharmaceutical sectors, industry associations, academia, and NGOs.”²⁰⁹

Companies operating internationally must deal with Environmental Management Systems (“EMSs”) of various countries and trade areas. For example, the United States EPA has several EMS programs including the XL²¹⁰ and Star Track Programs and the Environmental Leadership Program (“ELP”).²¹¹ State-level counterparts to the United States EPA have their own programs.²¹² Individual industries have established EMS programs such as the Chemical Manufacturers’ Association’s (“CMA”) Responsible Care® (known as “CARE®”) program.²¹³ In 1995, the EU established its Eco-Management and Audit System (“EMAS”) program. EMAS is a voluntary program that provides standards for environmental auditing, management, and reporting.²¹⁴

Because of the number of EMS programs being developed, businesses want to harmonize their requirements. Harmonization of standards would allow them to use their resources more effectively. One attempt to provide an international, harmonized system comes from the ISO. The ISO is a private standards organization that began operations in 1947. It is now a worldwide federation that is involved in standardization of industrial practices in a variety of areas.²¹⁵ In 1996, it issued its ISO 14000 series standards for environmental management.²¹⁶ Since then, the environmental standards have been adopted by tens of thousands of companies around the world.²¹⁷ The

²⁰⁹ *Id.*

²¹⁰ Project XL “supports regulated parties that demonstrate excellence and leadership (XL) in protecting the environment and . . . under take new initiatives . . .” Wis. Dept. of Natural Resources, *ISO 14000 Related Sites*, at http://www.dnr.state.wi.us/org/caer/cea/Iso/related_sites.htm (last visited Mar. 24, 2003).

²¹¹ Stephen L. Kass, *The Lawyer’s Role in Implementing ISO 14000*, NAT. RESOURCES & ENV’T, Spring 1997, at 3, 4.

²¹² For extensive discussion and a list of states involved, see Paulette L. Stenzel, *Can the ISO 14000 Series Environmental Management Standards Provide a Viable Alternative to Government Regulation?*, 37 AM. BUS. L.J. 237, 267-68 (2000) [hereinafter Stenzel, *ISO 14000*].

²¹³ CHEM. MFGS. ASS’N, RESPONSIBLE CARE®: A PUBLIC COMMITMENT (1993).

²¹⁴ Eric W. Orts, *Reflexive Environmental Law*, 89 NW. U. L. REV. 1228, 1233 (1995).

²¹⁵ See The International Organization for Standardization, at <http://www.iso.ch/iso/en/aboutiso/introduction/index.html> (last visited Apr. 17, 2003).

²¹⁶ *Id.*

²¹⁷ For discussion of the standards, see Paula Murray, *Inching Toward Regulatory Reform—ISO 14000: Much Ado About Nothing or a Reinvention Tool?*, 37 AM. BUS. L.J. 35 (1991); Stenzel, *ISO 14000*, *supra* note 212, at 240-43. See also The Int’l Org. for Standardization, *The ISO 14000 Series Environmental Management Standards*, at <http://www.iso.ch/iso/en/prods-services/otherpubs/iso14000/family.pdf> (last visited Apr. 17,

major goal of the standards is sustainable development. The standards provide a mechanism for a company to obtain certification for its EMS.

As it promotes sustainable development overall, the ISO 14000 series is designed to promote at least three additional goals.²¹⁸ They are: (1) harmonization of standards; (2) self-regulation in lieu of government regulation; and (3) a new paradigm leading to proactive environmental protection instead of "command and control" regulation.²¹⁹

A company can be certified to one standard in the series: "ISO 14001." To be certified, a company must:

1. Create an EMS;
2. Demonstrate that it is in compliance with the environmental statutes and regulations of countries in which it does business; and
3. Demonstrate its commitment to continuous improvement in environmental protection and pollution prevention.²²⁰

Implementation of an EMS under ISO 14001 encourages managers and employees to go beyond the dictates of law and consider environmental issues throughout a company's operations. The ISO 14000 series standards are receiving significant amounts of attention from business managers, lawyers, and economic advisors. In fact, it is said that the standards may be a "watershed . . . in the annals of environmental regulation."²²¹ Thousands of companies from developed and developing countries, including Mexico, have adopted them or are adopting them.²²²

Another important NGO run by businesses is the WBCSD. The WBCSD includes about 160 major businesses. The coalition was formed when the Business Council for Sustainable Development ("BCSD") in Geneva and the World Industry Council for the Environment ("WICE") in Paris merged in January 1995.²²³ Business groups, such as the WBCSD,

2003).

²¹⁸ See David J. Freeman, *ISO 14000 Standards Make Official Debut: May be a Watershed in Environmental Regulation*, N.Y. L.J. October 15, 1996, at S3 Col. 1.

²¹⁹ *Id.*

²²⁰ AMY ZUCKERMAN, INTERNATIONAL STANDARDS DESK REFERENCE 275 (1997).

²²¹ Freeman, *supra* note 218, at S3.

²²² Jeff Henriksen, *Light the Candles*, BUS. STANDARDS, May/June 1999, at 1. For discussion of the standards, see Murray, *supra* note 217; Stenzel, *supra* note 212. The ISO 14000 SERIES ENVIRONMENTAL MANAGEMENT STANDARDS are available from the American National Standards Institute (ANSI), 11 West 42nd St., N.Y., N.Y. 10035; phone 212-642-4900; <http://www.ansi.org>.

²²³ Henriksen, *supra* note 222, at 1.

emphasize three facets of sustainable development: economic growth, ecological balance, and social progress. The mission of the WBCSD is "to provide business leadership as a catalyst for change toward sustainable development, and to promote the role of eco-efficiency, innovation and corporate social responsibility." The organization has identified four objectives:

1. To be the leading business advocate on environmental or sustainable development issues;
2. To assist in policy development that allows businesses to contribute effectively to sustainable development;
3. To demonstrate progress in these fields and to share leading-edge practices among members; and
4. To contribute to sustainable futures in developing nations and nations in transition.²²⁴

Within the WBCSD's global framework, there are eight BCSDs. They are located in Croatia, the Czech Republic, Indonesia, Malaysia, Nigeria, Poland, Taiwan, and Thailand.²²⁵ There are also two regional BCSDs, one for the Gulf of Mexico and the other for Latin America.²²⁶

The WBCSD is led by a Council composed of the Chief Executive Officers ("CEOs") of its member companies.²²⁷ The annual meetings of the Council provide a forum for business leaders to discuss issues related to sustainable development.

Numerous members of the WBCSD have changed their operations as they pursue environmental protection and sustainable development. General Motors established a water conservation program in its Ramos Arizpe Automotive Complex located in Coahuila, Mexico.²²⁸ Statoil Venezuela, a division of the Norwegian company Statoil, helped to "create a better judicial system of increasing judges' abilities to handle human rights cases."²²⁹

²²⁴ *World Business Council for Sustainable Development*, at <http://www.sustainable.doe.gov/database/794.html> (last visited Apr. 17, 2003).

²²⁵ *Id.*

²²⁶ *Id.*

²²⁷ *Id.*

²²⁸ *Case Study: GM de Mexico*, at <http://www.wbcds.org/templates/TemplateWBCSD4/layout.asp?MenuID=1> (last visited Apr. 17, 2003).

²²⁹ *Case Study: Statoil: Educating Judges*, at <http://www.wbcds.org/templates/TemplateWBCSD4/layout.asp?MenuID=1> (last visited Apr. 17, 2003).

DuPont developed a program in partnership with various Colombian organizations to give Colombian farmers financial assistance.²³⁰

In April 2001, the WBCSD issued a report entitled "Sustainability Through the Market: Seven Keys to Success." The WBCSD's President said, "In our report we examine how open, transparent markets are the best engines for driving sustainability and how pursuing sustainable development can benefit business in two basic ways by generating top line growth through innovation and new markets, and by driving cost efficiencies."²³¹ The report includes numerous case studies from companies with programs designed to promote sustainable development.

4. Individual Companies

Many individual companies pursue sustainable development through their daily operations. Some companies have joined the WBCSD, and many others participate in the ISO's 14001 certification program. These companies set excellent examples for others. For example, *CEMEX*, a Mexican cement manufacturer, provides examples of responsible environmental behavior for companies in Mexico and throughout the world.²³²

III. NAFTA'S GOAL OF SUSTAINABLE DEVELOPMENT IS NOT BEING MET

Substantial amounts of discussion have been devoted to sustainable development by the United States and Mexican governments as well as businesses and NGOs operating in the two countries. Now it is time to examine actions and results.

A. *Is the Goal of Sustainable Development More than Words?*

Sustainable development has become almost a "buzz word." An author in the *Economist* states, "[n]o one in their right mind is against sustainable development."²³³ This is a major change from ten years ago.²³⁴

²³⁰ *Case Study: Dupont Colombia: Helping Farmers Succeed*, at <http://www.wbcds.org/templates/TemplateWBCSD4/layout.asp?MenuID=1> (last visited Apr. 17, 2003).

²³¹ See *World Business Council for Sustainable Development*, *supra* note 224.

²³² See *infra* text accompanying notes 237-240 (discussing the 2002 World Environment Center Gold Medal for International Corporate Achievement bestowed on *CEMEX*).

²³³ Andrew Rawnsley, *Inside Politics: Cynicism Will End Up Costing the Earth*, *OBSERVER*,

[W]hen the first Earth Summit assembled in Rio de Janeiro, the idea of sustainable development was still widely regarded as a cranky and, in many minds, dangerously revolutionary concept which would deny Western consumers all the goodies they take for granted. One of the more remarkable sights in Johannesburg has been the representatives of big oil firms, nuclear processing companies, chemical conglomerates and car giants making alliance with their historic foes in Greenpeace to issue a joint plea for governments to meet the Kyoto targets for reducing greenhouse gases. It was, until recently, utterly unthinkable that the eco-warriors and the multinationals would find common cause.²³⁵

The question now is, how can we go beyond mere use of the words "sustainable development" and develop and implement mechanisms to pursue the goal in a meaningful way? Mechanisms and action depend on action by businesses and individuals on the local level.

B. *Mixed Reviews of Actions by Industries and Individual Businesses*

Some operating in Mexico are being praised for their efforts to promote sustainable development; this section begins with a success story. Yet, other businesses merely talk about sustainable development or they ignore it altogether. A great deal of work must be done, and it cannot wait.

1. *CEMEX—A Success Story*

One "shining star" for Mexico is *CEMEX*, a Mexico City-based international cement manufacturer. *CEMEX* is the largest cement maker in Latin America and the third largest in the world. It does business in North America, South America, Europe, Africa, and Asia.²³⁶ In May of 2002, the WEC awarded its 2002 Gold Medal for International Corporate Environmental Awareness to *CEMEX*.²³⁷

The WEC's award was established in 1985 as a way to recognize industry leadership in environmental protection and achievements in

Sept. 1, 2002, at 25.

²³⁴ *Id.*

²³⁵ *Id.*

²³⁶ *CEMEX, Environmental, Health and Safety 2001 Progress Report*, available at <http://www.cemex.com/pdf/cc/eniro01.pdf> (last visited Feb. 10, 2003).

²³⁷ WEC, *FAQ's*, *supra* note 200.

worldwide environmental quality.²³⁸ There are three basic criteria for the award:

1. Establishment of an exemplary, comprehensive, publicly-announced corporate sustainability policy;
2. Uniform, global, and innovative application of the corporate sustainability policy; and
3. International leadership in the sustainable development arena.²³⁹

Award applications are submitted to the WEC by qualified companies. The applications are then reviewed by a Gold Medal Jury, which is independent of the WEC and includes international environmental leaders from academia, government, and NGOs.²⁴⁰ The jury looks for clearly articulated values, proven accomplishment, a global outlook, and a continuing commitment to sustainable development.²⁴¹

The jury selected *CEMEX* because of its comprehensive strategy for environmental protection and sustainable growth.²⁴² *CEMEX* combines its local knowledge with its international network to provide high-quality products and service to its customers worldwide.²⁴³ *CEMEX* is also known for its leadership in environmental quality and sustainability.²⁴⁴ The company created a philosophy called "*En Armonía con la Naturaleza*" (In Harmony with Nature) that it applies to its operations worldwide.²⁴⁵ *CEMEX* used this philosophy to create an eco-efficiency program, international environmental

²³⁸ *Id.*

²³⁹ *Id.*

²⁴⁰ World Economic Center, *Programs*, at <http://www.wec.org/programs.htm#wec.html> (last visited Feb. 10, 2003); WEC, *FAQ's*, *supra* note 200.

²⁴¹ The jury announces its selection in January and the award is presented in a ceremony in May. Previous recipients of the award include the Royal Dutch/Shell Group of Companies (2001), International Paper (2000), Eastman Kodak (1999), Philips Electronics N.V. (1998), Compaq Computer Corporation (1997), Alcoa (1996), Ciba-Geigy Limited (1995), S.C. Johnson & Son, Inc. (1994), Xerox Corporation (1993), Procter & Gamble Corporation (1992), Rohm & Haas Company (1991), IBM Corporation (1990), Dow Chemical Company (1989), The BP Group (1988), E.I. du Pont de Nemours & Company (1987), Exxon Corporation (1986), and 3M (1985). WEC, *FAQ's*, *supra* note 200; Press Release, World Environment Center, *World Environment Center Honors CEMEX at the WEC Gold Medal Presentation Ceremony* (May 17, 2002), at <http://www.wec.org/press1.htm> [hereinafter *CEMEX Press Release*].

²⁴² *CEMEX Press Release*, *supra* note 241.

²⁴³ *Id.*

²⁴⁴ *Id.*

²⁴⁵ *Id.*

education initiatives, and environmental outreach programs.²⁴⁶ Chief Executive Officer Lorenzo H. Zambrano states, "[a]s a global company, we are fully committed to the protection of the environment, and we will continue to join forces with governments, renowned NGO's [sic] and communities to safeguard nature and promote a deeper ecological culture around the world."²⁴⁷

In 1993, *CEMEX* developed guidelines used by employees, suppliers, customers, and owners.²⁴⁸ The EMS was updated in 1997, and in 2000, it was adopted throughout *CEMEX*'s worldwide operations.²⁴⁹ This EMS was the basis for *CEMEX*'s ISO 14001 certification.²⁵⁰ As of December 2001, all of *CEMEX*'s fifteen facilities in Mexico, eight in Spain, and two in the Philippines were ISO 14001 certified.²⁵¹ *CEMEX* was the first cement company to receive this certification at facilities in the United States and Spain.²⁵² *CEMEX* was the first multinational cement company to publish an Environmental, Health, and Safety ("EHS") report.²⁵³

CEMEX has a good working relationship with Mexico's environmental regulators at *SEMARNAT*. It was the first industrial group in Mexico to gain Clean Industry Certification from *SEMARNAT* for all of its plants and it has increased its use of alternative fuels by twenty-one percent.²⁵⁴

CEMEX has created other programs to protect the environment and workers' health and safety. In 1997, the company created an EHS Steering Committee to help ensure health and safety as well as environmental protection at all of *CEMEX*'s facilities.²⁵⁵ Accommodating the fact that the company actively acquires new businesses, it created a Post-Merger Integration ("PMI") plan to quickly bring new facilities up to EHS standards.²⁵⁶ It also created a global database used to monitor conditions at

²⁴⁶ See World Environment Center, *WEC Gold Medal: 2002 Jury Citation*, available at <http://www.wec.org/cita2k2.htm> (last updated Dec. 20, 2001) [hereinafter *2002 Jury Citation*].

²⁴⁷ *CEMEX* Press Release, *supra* note 241.

²⁴⁸ *Id.*

²⁴⁹ *Id.*

²⁵⁰ *Id.*

²⁵¹ *2002 Jury Citation*, *supra* note 246.

²⁵² *CEMEX, Taking the Initiative*, at http://www.cemex.com.eg/cc/cc_cc1.asp (last visited Apr. 17, 2003).

²⁵³ *2002 Jury Citation*, *supra* note 246.

²⁵⁴ *CEMEX* Press Release, *supra* note 241.

²⁵⁵ *2002 Jury Citation*, *supra* note 246.

²⁵⁶ *Id.*

all of its plants.²⁵⁷ In 1994, *CEMEX* introduced the Eco-efficiency Program ("EEP") to help the company use its resources more effectively. This program has led to carbon dioxide reductions, new technology, recycling and reuse of supplies, the use of alternative fuels, and \$3.62 million U.S. savings in energy during 2001.²⁵⁸

CEMEX pursues its worldwide environmental objectives through specific projects in individual communities. It works with universities, conservation organizations, and other institutions to create outreach, conservation, and environmental stewardship programs.²⁵⁹ The company has made significant progress in wildlife conservation, and it has helped to establish about forty biodiversity projects in ten countries.²⁶⁰ One of them is the 136,000 acre *El Carmen* Project in Northern Mexico.²⁶¹ In 2001, twenty-eight endangered desert bighorn sheep were introduced to a special breeding facility created at the site.²⁶²

While *CEMEX* has earned praise, many other companies operating in Mexico are criticized because they cause major environmental problems. Those companies represent a wide variety of industries including, but not limited to, petroleum, tourism, logging, agriculture, fishing, and even soft drinks.

²⁵⁷ *Id.*

²⁵⁸ *CEMEX* Press Release, *supra* note 241.

²⁵⁹ 2002 Jury Citation, *supra* note 246.

²⁶⁰ *Id.*

²⁶¹ Harrison Ford, Remarks at the WEC Gold Medal Dinner (May 17, 2002), at <http://www.wec.org/wecford.htm>.

²⁶² *CEMEX, Environmental, Health and Safety 2001 Progress Report*, *supra* note 236, at 5. 2002 Jury Citation, *supra* note 246. Other projects in which *CEMEX* has played a significant role including the following:

- *CEMEX* was involved with the *Nature's Best* magazine nature photography contest. *CEMEX, Environmental, Health and Safety 2001 Progress Report*, *supra* note 236, at 4.
- The Knoxville, Tennessee *CEMEX* plant uses used tires as a supplemental fuel, turned a parking lot into a park, and helped with regulatory issues regarding the restoration of a nearby stream. *Id.* at 7.
- *CEMEX* Spain signed a voluntary agreement with the National Environment Ministry that calls for them to control its emissions by 2005. *Id.* at 8.
- APO Cement (a *CEMEX* company) in the Phillippines received the Presidential Mineral Industry Environmental Award. This is the highest honor for mining companies and recognizes achievement in the environmental arena and social responsibility. *Id.* at 9.
- *CEMEX* created forest conservation areas in Colombia and Venezuela. *Id.* at 10.

2. Petroleum

Petroleum is Mexico's biggest source of income. It is dominated by *PEMEX* (*Petróleos Mexicanos*), a state-owned company. Pursuant to the Mexican Constitution, the government controls all oil and gas exploration and production.²⁶³ The government expropriated oil interests from companies in 1938. Therefore, *PEMEX* has had complete control of the oil industry for nearly sixty-five years. (NAFTA began to allow severely limited competition in the energy sector in 1994.)²⁶⁴ "*PEMEX* is responsible for scores of industrial explosions, the collapse of the fishing industry along the Gulf Coast, and acid rain so toxic that it has destroyed agriculture in the oil zone."²⁶⁵

PEMEX has been able to continue to its harmful practices because of corruption in Mexico's government. President Fox faces major problems as he tries to change directions for a country in which the *PRI* (*Partido Revolucionario Institucional*, Institutional Revolutionary Party) ruled for seventy-one years (1929-2000), keeping itself in power through corruption and "looking the other way" with respect to law enforcement.²⁶⁶ In fact, *PEMEX* has been involved in political corruption. In an inquiry that is referred to as "*PEMEX*-gate," the Mexican government has been investigating charges that Rogelio Montemayor, the former chief of *PEMEX*, and Carlos Romero, the current head of *PEMEX*'s union, helped divert at least \$150 million U.S. to the *PRI* during the 2000 Mexican presidential elections.²⁶⁷

PEMEX has little or no competition, and, thus, it has little incentive to do a better job. In tiny increments, the Mexican government is beginning to allow some competition. For example, President Fox is trying to help outside firms enter the energy business in Mexico.²⁶⁸ He has proposed the creation of "Multiple Service Contracts" (*Contratos de Servicios Múltiples* or "*CSMs*"), which would not grant investing firms a share in production, but would allow them to profit by "meeting output goals" set by *PEMEX*.²⁶⁹

²⁶³ *Where Energy is Sacred*, *ECONOMIST*, July 13, 2002, at 48.

²⁶⁴ See *infra* text accompanying note 270-74 (discussing participation by Shell Oil of Mexico in the Mexican energy market).

²⁶⁵ Simon, *supra* note 154, at 12.

²⁶⁶ See *infra*, text accompanying notes 309-13 (discussing lack of transparency and corruption in Mexico's government).

²⁶⁷ David Luhnnow & Peter Fritsch, *Aggressive Audits: Mexico's Crusade to End Corruption Stalls Government*, *WALL ST. J.*, Sept. 25, 2002, at A1, A7.

²⁶⁸ *Id.*

²⁶⁹ *Where Energy is Sacred*, *supra* note 263, at 48.

Taking advantage of this shift in the Mexican government's laws and policies, Shell Oil of Mexico (a part of the Royal Dutch/Shell Group of Companies) has recently entered the Mexican energy market. Until now, Shell Oil of Mexico has had to focus on products other than oil or gas, such as lubricants.²⁷⁰ Shell has also created partnerships in the retail area.²⁷¹ Shell hopes to use the CSMs to enter the natural gas industry in Mexico.²⁷²

Shell is cognizant of environmental problems, and it is working to do a better job environmentally than PEMEX.²⁷³ Shell has several programs in Mexico designed to promote sustainable development. First, the Shell Chemical division is promoting a cross-industry effort to recycle plastic bottles made from polyethylene terephthalate ("PET"). Shell produces a key component of PET.²⁷⁴ PET is a plastic resin that is used extensively for soft drink bottles, containers for a variety of foods (including salad dressing, fruit juices, peanut butter, and milk), film, and other common products.²⁷⁵ Shell's project is administered through a partnership including chemical companies, resin suppliers, bottlers, recyclers, and the government. The partnership is working to find ways to recycle PET and reuse it in building materials.²⁷⁶ It wants to create an infrastructure to collect the used bottles, convert them into new materials, and find an outlet for those materials. Shell recently created a technology called "PET-fix" that transforms the waste into a durable material that can be used in construction and other capacities. Shell is hoping to expand the project if the pilot program in Mexico proves successful.

²⁷⁰ E-mail from Melissa Boisson, External Affairs and Communications for Shell Mexico, dated Sept. 18, 2002 (on file with author).

²⁷¹ *Id.*

²⁷² *Id.*

²⁷³ The Royal Dutch/Shell Group of Companies participates in five key activity areas: exploration and production, gas and power, oil products, chemicals, and renewables ("green" electricity and renewable energy sources). Shell International, *People, Planet and Profits: The Shell Report 2001*, available at <http://www.shell.com/shellreport> or by request from the Shell Oil Company, 630 Fifth Avenue, Suite 1970, New York, NY 10111 [hereinafter *The Shell Report*]. Its stated objectives are "to engage efficiently, responsibly and profitably in the oil, gas, power, chemicals, renewables and other selected businesses and participate in the research and development of other sources of energy." *Id.*

²⁷⁴ Shell Co., *There is No Alternative*, available at http://www.shell.com/home/media-en/downloads/publications/there_is_no_alternative_12072002.pdf or by request from Shell International Limited, PXXC (Publications), Shell Centre, London SE1 7NA, UK, at 14.

²⁷⁵ For information about PET, its uses, methods for recycling and reuse, and other statistics, see Chaz Miller, *Profiles in Garbage: Polyethylene Terephthalate*, WASTE AGE, May 1, 2001, available at <http://wastag.../magazinearticle.asp?magazineearthicleid=101916&magazineid=121&mode=prin>.

²⁷⁶ *Id.*

In February of 2000, the Shell Foundation's Sustainable Energy Program ("SEP") approved its first program of Social Investment in Mexico. The program aids Mayan communities in the protected natural reserves (*reservas naturales protegidas*) of the Yucatán and Chiapas. Poor citizens in those states are forced to use the resources in the forests to make a living, thus causing deforestation and harming the natural environment. To combat this, Shell worked with The Nature Conservancy of Mexico and other environmental NGOs to finance a \$200,000 U.S. project to develop alternative sources of income. For example, energy panels are being installed to decrease the use of wood as an energy source.²⁷⁷ The opening of Mexico's economy can be good news for environmental protection efforts if companies entering Mexico's markets bring environmental expertise and programs.²⁷⁸

²⁷⁷ *Id.*

²⁷⁸ Shell is heavily involved in sustainable development around the world. Shell's Chairman of the Committee of Managing Directors, Philip Watts, is also the chairman of the World Business Council for Sustainable Development ("WBCSD"). *The Shell Report*, *supra* note 273, at 44. He discusses the future of the company and its commitment to sustainable development in *The Shell Report* by stating: "Our commitment to sustainable development is today being integrated into the way Shell makes decisions. For example, I do not approve new investments unless they address the key sustainable development aspects of the project." *Id.* at 2. Shell seems dedicated to the environment and social development, and discusses these issues in depth in its *Shell Report*. In addition to identifying its goals and successes, Shell also discloses various failures, including an eleven percent increase in flaring (burning unused gases) and a significant increase in oil spill volumes. *Id.* at 26, 30.

Shell is involved with various environmental and sustainable development projects worldwide. First, the company sets strict standards and goals for its own operations. Shell has committed to reducing greenhouse gas emissions by ten percent at the end of 2002 as compared to its 1990 levels. *Id.* at 26. It monitors its performance in other emissions (e.g., ozone-depleting substances, nitrogen oxides, and sulphur dioxide), effluents, spills, waste treatment, and the efficient use of energy and water. For more information, see *id.* at 26-33. Second, Shell is involved in environmental projects outside of its own operations. For example, it purchased the rights to explore the Sundarbans Natural Reserve in Bangladesh for oil and gas. Instead of exploiting the region, Shell teamed with the World Conservation Union to preserve the area and publish a book on the importance of biodiversity. *Id.* at 27. Third, Shell also participates in a number of social initiatives as a part of sustainable development. At Shell service stations in Africa, for example, there are posters and leaflets containing information about HIV/AIDs and how to prevent infection. *Id.* at 35. More information on sustainable development projects sponsored by Shell is available in its publication, *There is No Alternative*.

3. Tourism

Tourism, especially along the Pacific and Atlantic coasts of Mexico, provides Mexico's second largest source of income after oil.²⁷⁹ Over the past ten years, groups have tried to promote ecological and adventure tourism. Their goal is to promote tourism that is less destructive of the environment. In the early 1990s, the NGO *DANA* was created to promote ecotourism and organic farming in the Lacandón Rainforest of Mexico.²⁸⁰ In April of 2002, the Fox administration announced that ecotourism activities will be promoted in about 127 natural areas in Mexico.²⁸¹ Also, in April of 2002, Leticia Navarro, Mexico's Secretary of Tourism, and Victor Lichtinger, Secretary of *SEMARNAT*, signed the UN's International Ecotourism Agreement.²⁸²

Those who promote ecotourism have good intentions, but ecotourism, like any other tourism, can accelerate environmental degradation and hurt local residents.²⁸³ For example, when roads are built through the rainforest, people traveling on those roads bring garbage including plastic containers.²⁸⁴ In Mexico, this means that disposable plastic is brought into areas with no recycling program.²⁸⁵ In the Lacandón Rainforest, people traditionally burn garbage and bury the remains in their backyards.²⁸⁶ If more tourists come, and they generate more garbage, there is no mechanism for dealing with that garbage other than the traditional "burn and bury" approach. Thus, ecotourism may bring tourists who want to protect the environment, but the tourists will bring new threats to that environment.

4. Logging

Logging and clearing of lands in Chiapas and other states of Mexico have been discussed earlier in this article.²⁸⁷ Such activities lead to erosion, destruction of habitats, and extinction of species.

²⁷⁹ Jesus Lopez Jr., *Immigrants in Utah Use Special Services to Send Money Back Home*, STANDARD EXAMINER, Feb. 2, 2003.

²⁸⁰ Susana Guzman, *Mex Appeal*, EJ MAGAZINE, Summer 2002, at 21. EJ is the magazine of the Knight Center for Environmental Journalism at Michigan State University.

²⁸¹ *Id.* at 22.

²⁸² *Id.* at 23.

²⁸³ *Id.* at 22.

²⁸⁴ Jim Motavalli, *Transforming Travel: Eco-Tourism*, E, Apr. 1995, at 38.

²⁸⁵ *Id.* at 22.

²⁸⁶ *Id.*

²⁸⁷ See *supra* text accompanying notes 167-69.

5. Agriculture

Pesticide residues in foods are a major problem for companies seeking to export foods from Mexico to the United States.²⁸⁸ Mexican crops were detained by United States custom officials over 6,200 times in the 1980s and over 1,390 times in the 1990s.²⁸⁹ The principal problem was a highly toxic product called methanmidophos.²⁹⁰ Another problem related to pesticide use in Mexico is pest resistance: pests evolve through genetic selection to be able to resist pesticides.²⁹¹

6. Fishing and the Oceans

The Mexican government faces multiple challenges related to fishing and the oceans. In coastal areas, species are being depleted, and there are not enough fish for the fishermen who seek them. The Mexican government is trying to move fishermen to new occupations. For example, in Celestún, on the Western coast of the Yucatán peninsula, a cooperative has been formed to give fishermen jobs in the tourist industry.²⁹² They provide boat rides for tourists and naturalists who come to learn about the flamingos and other species in the Celestún bioreserve.²⁹³

Industrias Pecis ("Pecis") is a major company that raises and harvests shrimp for export to the United States and Europe. One of its two major facilities is located in Sisal, Yucatán, Mexico on the coast of the Gulf of Mexico. At Sisal, *Pecis* brings in water from the Gulf of Mexico, uses it in shrimp ponds, and discharges it to the ocean after use. This creates significant

²⁸⁸ Lori Ann Thrupp, *New Harvests, Old Problems: The Challenges Facing Latin America's Agro-Export Boom*, in GREEN GUERRILLAS, *supra* note 17, at 122, 126.

²⁸⁹ *Id.* at 127.

²⁹⁰ *Id.*

²⁹¹ *Id.*

²⁹² For information about the Celestún bioreserve, see <http://www.mexonline.com/celestun.htm> (last visited Oct. 29, 2002). See also, MADER, *supra* note 153, at 221-23.

²⁹³ SEMARNAP (now SEMARNAT) ordered the fishermen of Celestún to form a cooperative as their activities moved from subsistence fishing to commercial fishing. Up to five hundred fishermen worked in the area in the past. Now, there are about 180 members of the cooperative. MADER, *supra* note 153, at 221-23. However, as shrimp and certain species of fish began to be depleted, members of the cooperative moved into their new activity with the boats providing eco-tours. Interview with Biól. David A. Chay Hernández, *Supervisor de Proyectos* (Project Supervisor) for DUMAC (Ducks Unlimited of Mexico), in Celestún, Yucatán, Mexico on May 17, 2002. For additional information about DUMAC, in English see http://www.dumac.org/dumac/ingles/habitat/quienessomos/centro_celestun.htm (last visited Oct. 29, 2002), and in Spanish http://www.dumac.org/dumac/habitat/esp/quienessomos/centro_celestun.htm (last visited Apr. 17, 2003).

contamination from the organic wastes of the shrimp. Working with *PROFEPA*,²⁹⁴ *Pecis* planted mangroves next to new ponds it opened in 2002. Eventually, waters from the ponds will be sent through the mangroves to provide natural filtration before the waters are discharged into the ocean.²⁹⁵ The weakness in this step to protect the environment is that mangroves were planted and the ponds opened in 2002, yet it takes approximately thirty-five years for mangroves to mature. The baby plants cannot provide the filtration needed today.²⁹⁶

More protection for the Gulf of Mexico waters is needed, yet the Mexican government and Mexican companies are not well situated to provide a remedy. From the perspective of *Pecis*, it is difficult to make a profit under current conditions. In the wake of September 11, prices for shrimp are down drastically, and, even with its new ponds, profits for *Pecis* have drastically fallen. In May 2001, shrimp sold for fifty-four pesos per kilo, but prices had fallen to forty-seven pesos per kilo as of May 2002.²⁹⁷ Currently, the company's focus is on staying in business. Paying for cleaner procedures that put clean water back into the Gulf might destroy the company's remaining profits. What is the solution? It has to come from a source that will impose similar requirements on all shrimp producers so that they will have a "level playing field" for price competition. Thus, a solution has to come from somewhere beyond an individual company, such as *Pecis*, or an individual country, such as Mexico. All of us who consume shrimp around the world contribute to environmental problems caused by the shrimp industry. The predicament faced by *Pecis* is faced by many companies in Mexico and other developing countries. Although environmental problems are local, the solutions cannot be purely local.

Along the coast of Mexico's Yucatán Peninsula lies the Maya Reef, the second longest barrier reef in the world. For many years, environmentalists warned that cruise ships could do irreparable damage to the reef. Inevitably, it happened. In 1997, a ship from the Norway Cruise Line sailed over the Los Cuevones Reef off the coast of the island of Cozumel, destroying about eighty percent of it. Some say it will take five hundred years for the reef to repair itself, others say even longer.²⁹⁸ In addition, damage to

²⁹⁴ For discussion of *PROFEPA*, see *supra*, text accompanying notes 191-92.

²⁹⁵ Interview with *Pecis* engineer, Aedrián Ortíz Johnson, in Sisal, Yucatán, Mexico (May 22, 2002).

²⁹⁶ *Id.*

²⁹⁷ *Id.*

²⁹⁸ *MADER*, *supra* note 153, at 199.

the reef continues on a daily basis from tourists who snorkel and scuba dive.²⁹⁹

7. Soft Drinks

Mexico has the second highest per capita consumption rate of soft drinks in the world.³⁰⁰ As a result, soft drink containers make up a substantial portion of roadside waste in many cities in Mexico. In the recent past, many of the soft drink bottles used in Mexico were washed and refilled, but that has changed quickly. Now, as in the United States, most containers are plastic, not glass. Thus, the materials may be recyclable, but they are not reusable. For example, at the Coca-Cola bottling plant in Mérida, Yucatán, there were four production lines as of May 2001. Three were devoted to plastics, and one was devoted to reusable glass bottles. The plant's managers planned to convert that fourth line to plastic by 2002, thus eliminating the use of refillable bottles.³⁰¹ Similarly, the Pepsi-Cola bottling plant of Mérida, Yucatán relied completely on plastic bottles as of 2001 with no plans to use refillable glass.³⁰² Yet, there is no facility for processing used bottles in the Yucatán. Thus, the problem of garbage on roadsides is exacerbated.³⁰³

²⁹⁹ In 1993, I spent a wonderful day snorkeling at Chankanaab National Park on Cozumel. I saw thousands of beautiful tropical fish. Fewer than twelve months later, when I returned in 1994, that same section of the reef was essentially "dead," with only a few fish remaining. I was told by employees at the park and by citizens in town that damage from people snorkeling had killed those sections of the reef; the fish were gone. For a description of Cozumel National Park, see MADER, *supra* note 153, at 206-07.

³⁰⁰ *Coca-Cola Facts*, at <http://www.knet.co.za/cocacola/Facts.htm> (last visited Mar. 23, 2003). United States is highest consumer, see *At Twice the Sales Volume of Water, Soda Still Saturates*, WORLD PAPER, at <http://www.worldpaper.com/2002/oct02/water4.html> (last visited Apr. 17, 2003).

³⁰¹ Site visit and interview with Lic. Armando Cruz, Manager, and Lic. Antonio Lugo, Human Resources Director, May 23, 2001, Mérida, Yucatán, Mexico at Coca-Cola de Yucatán. For information about Coca-Cola's business operations see <http://www.cocacola.com> (last visited Apr. 17, 2003) and regarding Coca-Cola's international operations, see <http://coke.net/home/index.html> (last visited Apr. 17, 2003).

³⁰² Site visit and interview with Tec. Víctor Canto Gómez, *Supervisor de Producción* (Production Supervisor) and Srta. Alina Góngora Arjone, *Jefe de Capacitación* (Head Manager), May 24, 2001, Mérida, Yucatán, Mexico at Coca-Cola de Yucatán. For Pepsi-Cola's business operations and international operations, see <http://www.pepsi.com> (last visited Apr. 17, 2003).

³⁰³ Trash litters the roadsides outside of the city limits of Mérida and in villages throughout the Yucatán. Personal observations of the author of this article based on travel throughout the state of Yucatán in May of 2001 and May of 2002.

IV. RECOMMENDATIONS

Overall, environmental action in Mexico is a case of too little, too slowly. Industrialization is proceeding rapidly, and, just as rapidly, Mexico is experiencing rampant environmental degradation. Some businesses operating in Mexico are doing admirable work. They include Mexican-owned businesses as well as those owned or controlled by foreign investors, many of whom are from the United States. The majority are doing little, and some are doing nothing. What should be done? This section will address the following questions: (1) what should businesses operating in Mexico do?, and (2) what should United States citizens and their government do to assist Mexico?

A. *The Pursuit of Sustainable Development Must Include Action*

The message of Johannesburg is that individuals, businesses, and governments must act locally. Concurrently, local focus must be facilitated by access to information, education, and participation in democratic government. In Mexico, as in other countries, an effective local focus is contingent upon educating and informing citizens. Without knowledge and understanding, citizens cannot be expected to know how to alleviate problems. Education is at the heart of democracy. As Thomas Jefferson said, "if we think [the people are] not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them, but to inform their discretion."³⁰⁴ In a democracy, such as the United States, this philosophy is reflected in numerous statutes and regulations. For example, the need for information and education is at the heart of laws including Community Right to Know, Worker Right to Know, Right to Act, and other laws.³⁰⁵

The United States and Mexican governments and businesses must work together to promote democracy, transparency in government and business, and compliance with environmental laws. United States Right to Know and Freedom of Information laws can serve as models for Mexico. Businesses with experience in the United States have a working familiarity

³⁰⁴ Letter from Thomas Jefferson to William Charles Jarvis (Sept. 28, 1820) in WRITINGS OF THOMAS JEFFERSON 177, 179 (H. Washington ed., 1855), quoted in Natural Res. Def. Council v. United States Nuclear Regulatory Comm'n, 547 F.2d 633, 655 (D.C. Cir. 1976).

³⁰⁵ For discussion of laws designed to increase public access to environmentally related information, see generally Paulette L. Stenzel, *Right to Act: Advancing the Common Interests of Labor and Environmentalists*, 57 ALB. L. REV. 1 (1993).

with Right to Know laws. Therefore, they can and should apply that experience in operations in Mexico.

Mexico's democracy is in its infancy at best. From the 1920s until 2000, Mexico's federal government and most of its states were under the control of a single political party, the *PRI*.³⁰⁶ The *PRI* began to lose its ironclad hold on the Mexican government during the 1990s when several Mexican states elected governors from opposition parties. In November of 1999, the *PRI* held its first primary elections since 1929 to select its presidential candidate. This was the first time the candidate had not been designated by the current Mexican president. Prior to the 2000 elections, it was said, "Voting [the *PRI*] out of power would be a daring democratic act for a country where the seeds of democracy have only recently been sown."³⁰⁷ Finally, in elections held on July 1, 2000, Mexico elected Vicente Fox to be their president. Fox is a former Coca-Cola Corporation executive and leader of the National Action Party (*Partido de Acción Nacional* or "*PAN*"). He was sworn in as President on December 1, 2000, thus ending seventy-one years of rule by the *PRI*.³⁰⁸ This appears to be a major step for Mexico toward democracy.

In connection with Mexico's closed political system, Mexico's citizens have endured a tradition of secrecy. Activities of the Mexican government, as well as those of its businesses, have been kept secret. It is difficult or even impossible to get answers to questions that are answered for citizens here in the United States. Moreover, Mexican presidents have routinely destroyed records before leaving office.³⁰⁹ Mexico does not have Worker and Community Right to Know provisions found in federal and state laws in the United States.³¹⁰ Under President Fox, however, steps are being taken to improve matters. In 2002, Mexico's Congress passed a freedom of information law.³¹¹ The enactment of the new law represents a big step

³⁰⁶ The *PRI* provides citizens with free "gifts" such as pencils, soda pop, and the attention of a doctor for children in a community. There is also evidence of stolen ballot boxes, uncounted ballots, and other maneuvers by the *PRI* designed to control the outcome of elections. JUDITH ADLER HELLMAN, *MEXICAN LIVES* 73 (1994).

³⁰⁷ Sam Quiñones, *The People's Choice*, MB, Jan.-Feb. 2000, at 8, 9.

³⁰⁸ For in-depth discussion of the significance of the election of Vicente Fox, see Alma Guillermoprieto, *Letter From Mexico: Enter Harpo*, NEW YORKER, July 24, 2000, at 30. See also Andrew Phillips et al., *Saying Sí to the Fox*, MACLEAN'S, July 17, 2000, at 30.

³⁰⁹ *It's the Law*, LATIN TRADE, July 2002, at 16.

³¹⁰ For in-depth discussion of Community Right to Know and Worker Right to Know legislation in the United States, see Stenzel, *supra* note 305; and Paulette L. Stenzel, *Toxics Use Reduction Legislation: An Important "Next Step" After Right to Know*, 4 UTAH L. REV. 707, 723 (1991).

³¹¹ *It's the Law*, *supra* note 309; Ginger Thompson, *World Briefing Americas: Mexico:*

forward for Mexico. Implementation of the law will be an even bigger step. This is because public records have been purposely kept from the public view in Mexico. In many cases, official records were destroyed or taken home by officials when they left office.³¹² Mexico's government was "obsessed with secrecy during the seven decades of one-party rule by the Institutional Revolutionary Party, or *PRI*, that ended with Fox's election."³¹³

Democracy must be nurtured in Mexico. To nurture democracy, Mexico's government must become more transparent, the public must be educated, and the public must have access to information. The adoption and implementation of freedom of information laws is a step in the right direction; compliance with those laws must be the next step. Additionally, those laws will need to be amended to expand their coverage. For example, the new act does not require that government meetings be open to the public, nor does it open court records to the public.³¹⁴

Democratic processes, as facilitated by education and information, enable citizens to speak out on environmental issues. Yet, environmental protectors in Mexico believe they have "limited recourse to the law."³¹⁵ This is true, but conditions are changing. For example, an international coalition of environmental NGOs recently helped defeat proposals for a golf course outside of Mexico City and a nuclear waste facility near the Texas border.³¹⁶ Two examples of a new climate in Mexico will be given in more detail below.

A coalition of environmental groups from the United States and Mexico won a major victory in 1999 when the then President Ernesto Zedillo cancelled a major salt project in Baja California.³¹⁷ This is considered the first time a Mexican president has withdrawn support for a project in response to public political pressure.³¹⁸ Prior to 2000, Mexican presidents were nearly all-powerful. Therefore, cancellation of the salt project is signaled a shift toward democracy in Mexico.

The need for a new airport near Mexico City was first addressed in 1978.³¹⁹ The current international airport that services Mexico City, Benito

Freedom of Information, N.Y. TIMES, May 2, 2002, at A6.

³¹² *Id.*

³¹³ *Id.*

³¹⁴ *Id.*

³¹⁵ *Introduction to GREEN GORILLAS*, *supra* note 17, at 1.

³¹⁶ Simon, *supra* note 154.

³¹⁷ *Id.*

³¹⁸ *Id.*

³¹⁹ Tom Dieusaert, *Bumpy Landing: The Government's Decision to Build the New Airport in Texcoco has Met with Controversy*, BUS. MEX., Dec. 2001-Jan. 2002, at 27.

Juarez International, is operating close to its maximum capacity of 340,000 landings and takeoffs annually.³²⁰ Operators of the airport face major safety concerns, and one pilot describes the airport as "unpredictable and chaotic."³²¹

Due to these concerns, President Fox is being pressed to build a new airport. Recently, his government narrowed its search for a site to two locations: a dry lake bed in Texcoco and a site to the north in Tizayuca, Hidalgo.³²²

On October 22, 2001, the Mexican Communications and Transport Secretary (*Secretaría de Transporte y Comunicaciones—STC*) chose Texcoco as the site for the new airport.³²³ Politicians, environmentalists, and other Mexican citizens raised numerous concerns in response to the decision. Politicians from the *PRI* and the *PRD* (*Partido de la Revolución Democrática*—Party of the Democratic Revolution) claimed that the decision favored certain economic groups and was "arbitrary, obscure, and lacking in seriousness."³²⁴ Environmentalists objected for different reasons. First, the ground at the Texcoco site is extremely unstable, similar to the current airport, which requires new layers of concrete each year to strengthen and shore up the runway.³²⁵ Some parts of the lake bed sink up to twelve inches each year.³²⁶ Second, Mexico City's sewer system runs through Texcoco. This might cause infrastructure problems for the new airport and create a foul stench.³²⁷ Not only that, water is scarce in the area.³²⁸ An airport in the region

³²⁰ *Id.*

³²¹ Robert Campbell, *Safety First? Remember to Look Both Ways When Landing at Benito Juárez*, BUS. MEX., Dec. 2001-Jan. 2002, at 28.

³²² The two proposed sites are very different. Texcoco is close to Mexico City, about twenty minutes from the current airport, which would eliminate some of the ground transportation problems caused by the location of the Tizayuca site. Dieusaert, *supra* note 319, at 29. Tizayuca, however, is far enough away that the currently used Benito Juárez airport would not have to be shut down, but could continue operating as a supplemental airport. *See id.* at 29-30. Each site has environmental and other concerns as well, including strong concerns about groundwater contamination, air pollution, and soil erosion. *See id.* at 29-31; *Requerimientos Ambientales Básicos para la Localización del Nuevo Aeropuerto Internacional de la Ciudad de México*, SEMARNAT, available at <http://www.semarnat.gob.mx/programas-informes/aero/desplegado.shtml> (Aug. 3, 2001).

³²³ Dieusaert, *supra* note 319, at 27.

³²⁴ *Id.* at 28.

³²⁵ *Id.* at 29.

³²⁶ Homero Aridjis, *Stop Mexico's New Airport*, EARTH ISLAND J., Autumn 2001, at 37.

³²⁷ Dieusaert, *supra* note 319, at 29.

³²⁸ *Id.*

would increase urban sprawl and further diminish limited resources.³²⁹ Third, ash from the nearby Popocatepetl volcano would create visibility problems.³³⁰

Perhaps the greatest environmental concern associated with the proposed airport at Texcoco is the population of migratory birds that live in the area, one of the last habitats for these birds in the Valley of Mexico.³³¹ CONABIO (*Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*—The Mexican National Biodiversity Commission) has designated Lake Texcoco as a “critical bird conservation area.”³³² Between 100,000 and 300,000 birds representing 156 species fly to Lake Texcoco each year. A number of these species are considered threatened or in need of special protection. They include the Peregrine Falcon, Red-Tailed Hawk, Least Bittern, and Great Blue Heron.³³³ The large bird population would also be dangerous to the airplanes because birds can be sucked into the turbines and cause engine failures and crashes.³³⁴

Another problem created by the Texcoco site was the plan for reimbursement of the farmers who lived on the 11,000 acre site.³³⁵ Farmers were insulted by the government’s offer of 70 cents U.S. per square meter, or \$2,835 U.S. per acre. The farmers, who were primarily Indians, were convinced that the government’s decision to build the airport without asking for permission was a form of conquest.³³⁶ Farmers from San Salvador Atenco, a town in the Texcoco region, took fifteen hostages, seized control of the local government offices with machetes and bombs, and blocked roads going into the town.³³⁷ They told the government that they would not sell their land at any price.³³⁸ In the five-day standoff, at least thirty people were injured.³³⁹ Primarily in response to the protests of local farmers, President Fox cancelled the land expropriation necessary to build the new airport. Fox’s party, the PAN, claimed that the decision demonstrated a new kind of politics in Mexico. Pedro Carisola, Minister of Communications and Transport said, “This is a positive precedent . . . [t]he government is willing to take no for an

³²⁹ *Id.*

³³⁰ *Id.*

³³¹ *Id.* at 31.

³³² *Id.*

³³³ Dieusaert, *supra* note 319, at 31.

³³⁴ *See id.*

³³⁵ *Id.*

³³⁶ *Id.*

³³⁷ Ginger Thompson, *Cornfields or Runways? Zapata’s Ghost Watches*, N.Y. TIMES, July 18, 2002 at 4.

³³⁸ Ginger Thompson, *Mexico Drops Planned Airport After Protests from Peasants*, N.Y. TIMES, Aug. 3, 2002 at A4. [hereinafter Thompson, *Mexico Drops Planned Airport*].

³³⁹ *Id.*

answer, and that is a sign of change."³⁴⁰ Others, such as Jorge Espina, president of the business association *COPARMEX*,³⁴¹ said that the government's inability to stand up to the farmers was a negative sign to investors interested in Mexico. Still others claimed the decision was an example of Fox's inability to lead.³⁴²

Recent victories provide hope for environmentalists, but the environmental movement must be nurtured in Mexico. Mexican environmental groups are in their infancy as compared to their American counterparts. "Mexico does not have a culture of green awareness. . . ."³⁴³ Mexico has environmental groups, but they must be nurtured through membership and funding.³⁴⁴ In turn, Mexican environmental groups may be able to affect decisions about environmental laws and allocation of resources.³⁴⁵

B. *Assist Mexico in Efforts to Eliminate Corruption, Establish Transparency, and Facilitate Compliance with Environmental Laws*

Mexicans have ample reason to distrust their government and legal system. "The *PRI* has created a government world-famous for corruption, and with it a pathetic police corps . . ."³⁴⁶ The lack of the rule of law is "what worries Mexicans most," said Vicente Fox in October 2000.³⁴⁷ Corruption pervades Mexico in areas including, but not limited to, police forces, business organizations, political campaigns,³⁴⁸ and government.

There is major corruption within and among law enforcement agencies. In the 1990s, Governor Francisco Barrio of the State of Chihuahua (a state that borders Texas and New Mexico) put up billboards urging people

³⁴⁰ Richard Boudreaux, *Mexicans Ponder a Triumph*, L.A. TIMES, Aug. 3, 2002.

³⁴¹ *COPARMEX* is an association of businesses in Mexico that serves as a sort of "chamber of commerce." In addition, it serves as an active voice for business in state and national government in Mexico. For information in Spanish, see <http://www.coparmex.org.mx/index.htm> (last visited Apr. 17, 2003).

³⁴² Thompson, *Mexico Drops Planned Airport*, *supra* note 338; Panorama: Mexico, *supra* note 78, at 12.

³⁴³ Barbara Kateling, *A Solution to Pollution?*, US/MEX. BUS. 26, 28 (Sept. 1998).

³⁴⁴ For discussion of Environmental groups in Mexico, see *supra* text accompanying notes 194-99.

³⁴⁵ See *supra* text accompanying notes 306-08 (discussing Mexico's new President and Mexico's steps toward democracy).

³⁴⁶ Quiñones, *supra* note 307, at 9.

³⁴⁷ Weiner, *A Mexican Farmer*, *supra* note 134.

³⁴⁸ Political assassinations leading up to the 1994 presidential elections shook Mexico and were of great concern to United States business investors. OPPENHEIMER, *supra* note 106, at 188-95, 195, 200, 211.

to quit paying bribes to police officers.³⁴⁹ In November 2000, Mexican Federal Police stormed an infamous street market in an attempt to seize contraband goods, including counterfeit and stolen goods, weapons, and drugs. The majority of those arrested were federal police officers caught guarding the illegal goods. Yet, most were not prosecuted; all but three of them were released the next day.³⁵⁰ Between 1998 and 2002, at least 5,000 soldiers were ordered to take the place of civilian officers because the government concedes that law-enforcement agencies are corrupt.³⁵¹ Yet, these soldiers are immune from civil justice. Mexican police and army officials have been caught providing police protection to major drug dealers.³⁵² "Killing, torture, kidnappings, and false arrests by law-enforcement authorities were prominent features of the legal landscape, charted in recent reports by the United Nations, the [United States Department of State], the Organization of American States and human rights groups."³⁵³

Individual businesses in Mexico have been charged with corruption. For example, *Banco Bilbao Vizcaya Argentaria* ("BBVA") is embroiled in charges of money-laundering, secret political contributions, and questionable cash transfers. The Spanish bank is under investigation for allegations related to multibillion-dollar bank privatizations in Mexico and other countries.³⁵⁴ Mexican officials are investigating whether offshore funds were illegally used in BBVA's recent purchase of *Bancomer*, Mexico's largest bank. They are also investigating whether money laundering was involved in the takeover of the financial group *Mercantil Probur*.³⁵⁵

Overall, Mexico has a poor track record on transparency. The U.S.-based organization Transparency International issues an annual Corruptions Perceptions Index. In the Corruptions Perceptions Index 2002, 102 nations are ranked, with a rating of "1" representing the least corruption. Mexico ranks number 58.³⁵⁶

Some steps are being taken to reduce crime and corruption and increase transparency. Mexico City has hired former New York City Mayor Rudolph Giuliani to advise Mexico City's mayor on reducing crime. Giuliani has said, "the similarities between what Mexico City faces today and what

³⁴⁹ Luhnnow & Fritsch, *supra* note 267, at A7.

³⁵⁰ As quoted in Weiner, *A Mexican Farmer*, *supra* note 134, at A7.

³⁵¹ *Id.*

³⁵² OPPENHEIMER, *supra* note 106, at 165, 300-01, 303-05.

³⁵³ Weiner, *A Mexican Farmer*, *supra* note 134, at A7.

³⁵⁴ Mary A. Dempsey, *Transparency, Just Like Old Times*, *LATIN TRADE*, Oct. 2002, at 35.

³⁵⁵ *Id.* at 36.

³⁵⁶ *Id.* at 37. The United States ranked number 16. Chile, at number 17, was the only Latin American country in the top tier of least corrupt countries. *Id.*

New York City faced in the late '80s and early '90s are striking."³⁵⁷ Even in crime, the United States and Mexico share inextricable links. It is estimated that two thirds of crimes in Mexico City go unreported "because no one trusts the crooked cops."³⁵⁸ Only about seven percent of reported crimes lead to convictions, largely because Mexican police officers are poorly paid and badly trained.³⁵⁹ Unfortunately, there is irony in the fact that \$4.3 million U.S. will be paid to Giuliani and his team of associates.³⁶⁰ Meanwhile, the average Mexico City police officer is paid about \$6,500 U.S. or less per year. That is less than half the average wage of a middle class citizen in that city.³⁶¹ A lack of safety in the streets of Mexico City discourages potential investors. "The corporate executives paying [Giuliani's] fee out of pocket—chief among them Carlos Slim, the richest man in town—want to make the city a place to do business without having one's pocket picked."³⁶²

Mexico is working on reforming its laws to combat the crime problem. Since 2000, Mexico has revised its tax laws, and, in 2002 it passed a freedom of press law that opens court documents and other files that were previously closed to the public.³⁶³ Also, Mexico's desire to join the global economy is making it more anxious to adopt transparent procedures in business. For example, in 2001, the U.S.-based National Law Center for Inter-American Free Trade issued a study titled Transparency and Truth in Latin American Banking. The report listed recommendations for accounting standards in Mexico, as well as other Latin American countries.³⁶⁴

Even before President Fox was elected, Mexico's political leaders talked about rooting out corruption in government. In 1979, the Secretary of Control and Administrative Development (*Secretaría de Controlaria y Desarrollo Administrativo*—*SECODAM*) was created by decree in Mexico's Official Gazette.³⁶⁵ The *SECODAM* oversees public spending, finance, and

³⁵⁷ As quoted in *Mexico City Mayor Hires Giuliani*, available at <http://thepost.baker.ohiou.edu/archives3/oct02/101102/n18.html> (Apr. 6, 2003). Giuliani and his consulting firm will be paid \$4.3 million. The funds will be donated by wealthy Mexican citizens. Michele Orecklin, *Yankee, Come Here*, TIME, Oct. 28, 2002, at 73.

³⁵⁸ *Giuliani's Tough New Gig*, L.A. TIMES, Oct. 21, 2002, pt. 2, p. 10.

³⁵⁹ Tim Weiner, *A Town on the Wild Side Awaits Sheriff Giuliani*, N.Y. TIMES, Oct. 17, 2002, at A4.

³⁶⁰ *Id.*

³⁶¹ *Id.*

³⁶² *Id.*

³⁶³ Dempsey, *supra* note 354, at 37.

³⁶⁴ *Id.*

³⁶⁵ Jorge Antonio Zepeda, *Mexico's Port Development Law*, 3 MEXICAN LAW: A TREATISE FOR LEGAL PRACTITIONERS AND INTERNATIONAL INVESTORS 279 n.1 (Jorge Vargas ed., 2001).

national development planning. Even though one of its stated goals was to eliminate corruption, under the *PRI*, *SECODAM* monitored the flow of graft.³⁶⁶ President Fox has enlisted *SECODAM* in his drive to clean up Mexico's government. *SECODAM* now has one hundred and twenty internal auditors, and they work with about twelve thousand auditors at various Mexican government agencies.³⁶⁷ Unfortunately, so far *SECODAM*'s auditors seem to be more successful in causing extra paper work and penalizing government officials for technical errors than in rooting out corruption. *SECODAM*'s auditors may investigate public agencies and workers without judicial oversight.³⁶⁸ Yet, as a result of about 13,000 audits, only about seventy people have been charged with crimes. Meanwhile, officials within government and government-owned businesses are spending millions of dollars and tremendous amounts of time dealing with government auditors.³⁶⁹ "A revolution bogged down in bureaucracy is not what voters and investors expected of Mr. Fox's anticorruption drive."³⁷⁰ On the other hand, President Fox has brought about some change at agencies such as Mexico's Interior Ministry, an agency that was a center of *PRI* power and known for corruption. Instead of doling out money for political favors, the Ministry is now working to save money for Mexico.³⁷¹ But, on the whole, a great deal remains to be done.

In recent decades, Mexico was considered a "pollution haven" for companies wishing to avoid enforcement of more stringent United States federal and state environmental laws. The worst offenders appear to be the *maquiladora* factories located along the United States-Mexico border.

Today, United States companies contemplating doing business in Mexico should be aware that enforcement of Mexican environmental laws and regulations has become more vigorous since 1988, and that trend is expected to continue. From 1988 to 1993, Mexico's environmental enforcement budget increased from \$6.6 billion U.S. to \$77 billion U.S., and the number of Mexican environmental inspectors in the border area was increased from fifty to 200. During the six years preceding 1993, environmental compliance inspections resulted in orders temporarily closing about 2,000 facilities for noncompliance. Between June of 1992 and early

³⁶⁶ Luhnow & Fritsch, *supra* note 267, at A1.

³⁶⁷ *Id.*

³⁶⁸ *Id.*

³⁶⁹ It is estimated that government audits cost *PEMEX* several hundred million dollars per year. Now, new rules require *PEMEX* to hire outside experts to approve its projects, adding additional expenses. *Id.*

³⁷⁰ *Id.* at A7.

³⁷¹ *Id.*

1994, Mexican officials conducted over 16,000 inspections of industrial facilities throughout Mexico. Two thousand, four hundred of them are in the border area. Over 100 facilities have been closed permanently, including a large *PEMEX* plant near Mexico City.³⁷²

Mexico has a long way to go as it tries to live down its image as a pollution haven and strives to eliminate realities on which that image was based. For example, administrative procedures in Mexico are time-consuming and expensive.³⁷³ To facilitate compliance with environmental regulations, Mexico has taken a number of important steps in recent years. For example, Mexico implemented a 1995-2000 Environmental Protection Plan.³⁷⁴ As part of the plan, in 1997 Mexico adopted the Standardization Program 1997-2000 on Environmental Matters.³⁷⁵ As a result, *SEMARNAT*, through *INE*, now issues a Single Environmental License ("SEL" or *Licencia Ambiental Única*) that includes environmental authorizations for environmental impact assessment, air emissions, water discharges, and handling of hazardous waste.³⁷⁶ This SEL is part of a new program called the Integrated System for Direct Regulation and Environmental Action in Industry ("*SIRG*"—*Sistema Integrado de Regulación Directa y Gestión Ambiental de la Industria*).³⁷⁷ The *SIRG* includes three main elements: (1) the SEL; (2) the Certificate of Environmental Performance; and (3) the Voluntary Action Plan for Alignment of Standards with International Standards ("*VAP*").³⁷⁸

SIRG is not an industry-wide program, however, and it is only available to new industrial establishments. It is not applied retroactively, but a company can request relicensing under the program. Thus, it is a useful, even if limited, step toward better enforcement of environmental law because it facilitates good record keeping and makes it easier for some companies to comply with environmental laws.

³⁷² See *supra* text accompanying notes 267-69 (discussing *PEMEX*).

³⁷³ Basurto & Bustamante, *supra* note 184, at 558.

³⁷⁴ Daniel Basurto González, *Mexico: Recent Activities Concerning Environmental Matters in Mexico*, 29 U. MIAMI INTER-AM L. REV. 393 (1998).

³⁷⁵ *Id.* at 395.

³⁷⁶ *Id.* at 396.

³⁷⁷ *Sistema Integrado de Regulación Directa y Gestión Ambiental de la Industria*, available at <http://www.ine.gob.mx/ueajei/publicaciones/download/sirg.pdf> (April 1997) (provides complete text of *SIRG* in Spanish) [hereinafter *SIRG*].

³⁷⁸ *Id.*

C. *Corporate Social Responsibility*

Democratic and legal institutions in Mexico are weak, as is true in much of Latin America.³⁷⁹ Businesses must take responsibility for the social consequences of their actions even if they do not face legal sanctions. Precedent for such an approach comes from the Corporate Social Responsibility ("CSR") movement. CSR recognizes the power of corporations in the global economy, and it asks that corporations take responsibility for the effects of their activities in non-financial areas, such as environmental protection. As a part of this, corporations are asked to be more transparent in communicating information about their business practices.

Early writings on CSR were published in the 1950s and 1960s. Authors advocated the collapse of *laissez-faire* and described a movement toward a system in which businesses would recognize their obligation to do more than merely obey the law while producing goods and services at a profit.³⁸⁰ The CSR movement had many opponents, of course. The most well-known was Milton Friedman, who published a book³⁸¹ and a widely cited *New York Times* article³⁸² in defense of *laissez-faire*. By the 1970s and 1980s, nevertheless, many respected scholars supported CSR, and today CSR has been adopted as rule of operation by many corporations.³⁸³ Scholars say that CSR and action taken in its pursuit should be directly or indirectly related to the function of the corporation. For example, an automobile manufacturer should be responsible for the effects of air pollution and for the safety of those who ride in its automobiles. Public policy includes the "spirit" of the law as well as societal values and commitments that are a part of that "spirit."³⁸⁴ This concept of public policy and social responsibility means that CSR provides "a guide for managerial behavior more objective than

³⁷⁹ *Introduction to GREEN GUERRILLAS*, *supra* note 17, at 1.

³⁸⁰ See William C. Frederick, *The Growing Concern Over Business Responsibility*, 2 CAL. MGMT. REV. 54 (1964). See also, Archie B. Carroll, *Corporate Social Responsibility: Evolution of a Definitional Construct*, 38 BUS. & SOC'Y 268 (1999) (reviews attempts to define CSR).

³⁸¹ MILTON FRIEDMAN & ROSE D. FRIEDMAN, *CAPITALISM AND FREEDOM* (1962).

³⁸² Milton Friedman, *The Social Responsibility of Business is to Increase Its Profits*, N.Y. TIMES MAG., Sept. 13, 1970, at 32.

³⁸³ Scholars Lee Preston and James Post articulated two key criteria to be examined as a business tries to determine its responsibilities to society: (1) the scope of the social duties of the business, and (2) criteria for assessing a business' involvement with society. LEE E. PRESTON & JAMES E. POST, *PRIVATE MANAGEMENT AND PUBLIC POLICY: THE PRINCIPLE OF PUBLIC RESPONSIBILITY* (1975).

³⁸⁴ *Id.* at 100.

individual moral or ethical insights and more general than the literal texts of statutes and regulations."³⁸⁵

In light of Mexico's fledgling democracy, weak court systems, and corrupt system of law enforcement, it has been easy for companies operating in Mexico to ignore environmental protection and other laws. Therefore, it is crucial that companies behave according to the tenets of CSR in their operations in Mexico.

D. *Sustainable Development Must be Pursued Through Day-to-Day Operations*

A major message of the Johannesburg Summit is that governments, businesses, and individuals must approach sustainable development from a day-to-day perspective and on a local level. Programs such as the ISO 14000 International Environmental Management Series can help companies meet environmental goals.³⁸⁶ Companies operating in Mexico can and should implement environmental management systems and become certified to ISO 14001 or similar standards.

Mexico's government has recognized that ISO 14001 certification can be a useful tool in the pursuit of environmental protection and sustainable development. The *SIRG* promotes environmental certification through the VAP. Environmental certification under the VAP must be conducted in such a way that the company meets the demands of an established international standard such as ISO 14001.³⁸⁷ In view of its lack of funding for enforcement, it is wise for Mexico to cross reference its standards to the ISO 14000 Series and other private programs that promote voluntary environmental protection.³⁸⁸ Companies in Mexico are following a world-wide trend toward ISO certification. As of December 1999, sixty-three business organizations in Mexico were certified to ISO 14001.³⁸⁹ By December 2000, there were 159, and by December 2001, there were 254.³⁹⁰ The EMS implemented by

³⁸⁵ *Id.*

³⁸⁶ See *supra* text accompanying notes 221-22 (discussing the ISO 14000 Series).

³⁸⁷ *SIRG*, *supra* note 377, at 27.

³⁸⁸ The *SIRG* set a goal of reducing industrial hazardous waste generation by ten percent by 2010 through ISO 14000 standards and other programs. González, *supra* note 374, at 404. Yet, businesses operating in Mexico can and should expect more of themselves.

³⁸⁹ For statistics and lists of some of those companies (in Spanish), see <http://www.geocities.com/eco14000/industria.html> (last visited Oct. 7, 2002).

³⁹⁰ For these statistics as well as statistics related to countries around the world, see The ISO Survey of ISO 9000 and ISO 14000 Certificates, Eleventh Cycle: Up To and Including 31 December 2001 at <http://www.iso.ch/iso/en/prods-services/otherpubs/pdf/survey11thcycle.pdf>.

each facility certified to ISO 14001 prompts the company to promote sustainable development in its operations.³⁹¹ The substantial number of companies becoming certified to ISO 14001 is a healthy sign for Mexico.

E. *Use the "Carat"—Reward Those Who Set a Good Example*

United States citizens and businesses can assist Mexico in its efforts to promote environmental protection by supporting programs that reward environmentally-responsible corporations. The 2002 Gold Medal for International Corporate Environmental Awareness awarded to *CEMEX* by the WEC is a good example of this kind of reward.³⁹² In a country that suffers from a lack of legitimacy in its legal system, it is even more important to provide such public recognition and awards than in a country such as the United States, where environmental laws are enforced more consistently.

F. *Provide Funding*

Businesses operating in Mexico must fund environmental protection as a part of the cost of doing business. Most cattle ranchers, mining firms, and agribusinesses in Mexico get their water free. Victor Lichtinger, the Environmental Minister, wants those businesses to start paying for their water.³⁹³ That is what would happen under a new tax law proposed by President Fox.³⁹⁴ In essence, the poor have been subsidizing the rich.³⁹⁵ Water subsidies make up over one percent of Mexico's federal budget.³⁹⁶

Funding is needed for wastewater treatment throughout Mexico. In Mérida, the capital of the state of Yucatán, the water supply is contaminated by industrial waste and household sewage. Only fourteen percent of municipal and industrial waste throughout Mexico is treated.³⁹⁷

Unusually high rates of cancer and birth defects in the United States-Mexico border area are blamed on air, water, and ground pollution from the *maquiladoras*. Funding is needed to clean up contamination and prevent future contamination. Mexican environmental law enforcement started to

³⁹¹ For discussion of the ISO 14000 Series standards, see *supra* text accompanying notes 221-22.

³⁹² For discussion of this award and why it was given to *CEMEX*, see *supra*, text accompanying notes 236-37.

³⁹³ Weiner, *Mexico Grows Parched*, *supra* note 141, at A3.

³⁹⁴ *Id.*

³⁹⁵ *Id.*

³⁹⁶ *Id.*

³⁹⁷ *Id.*

become more vigorous in the 1990s, especially in the United States-Mexico border area. But, environmental enforcement remains uneven due to a lack of funds. In reference to depletion of Mexico's wildlife population, Gustavo Alanis Ortega, President of the Mexican Center for Environmental Law, says, "the authorities need more money, more equipment, more technology and they need to actually apply the law. It needs to pass from law into practice. And the inspectors need to be paid more, too, to avoid corruption."³⁹⁸

Some funding is being provided on the United States-Mexico border through the BECC and the NAD Bank.³⁹⁹ The two organizations were started as a part of NAFTA and focus on "improvement of environment and health of communities located within 100 km of the United States-Mexico border."⁴⁰⁰ The BECC focuses specifically on providing technical assistance for projects and certifying projects for financing consideration.⁴⁰¹ The NAD Bank primarily facilitates funding for BECC-certified projects and provides managerial and financial guidance.⁴⁰²

As of December 31, 2002, the BECC had certified 196 infrastructure projects in 113 communities for projects totaling more than \$28.17 million U.S.⁴⁰³ Border communities may receive BECC assistance for environmental assessment studies; technical, economic and financial feasibility studies; preliminary and final design studies; evaluation of social and sustainability aspects of projects; public participation programs; operation and maintenance; and capacity building needs.⁴⁰⁴

The BECC operates six assistance programs. The Project Development Assistance Program ("PDAP") assists with water and wastewater treatment projects.⁴⁰⁵ Between April and June of 2002, ten new communities were approved for assistance under this program.⁴⁰⁶ From September to December 2002, five new communities' projects received

³⁹⁸ Rachel Salaman, *Pet Pirates*, US/MEX. BUS., Sept. 1998, at 71, 72.

³⁹⁹ BECC & NADB, JOINT STATUS REPORT 2 (Dec. 19, 2002), *available at* http://www.nadb.org/Reports/Joint_Report/english/status_eng.pdf or a copy of this report is also available by request from the Border Environment Cooperation Commission, P.O. Box 221648, El Paso, TX 79913 [hereinafter JOINT STATUS REPORT].

⁴⁰⁰ *Id.* at 3.

⁴⁰¹ *Id.*

⁴⁰² *Id.*

⁴⁰³ *Id.* at 5.

⁴⁰⁴ *Id.*

⁴⁰⁵ JOINT STATUS REPORT, *supra* note 399, at 6.

⁴⁰⁶ BECC & NADB, JOINT STATUS REPORT 5-6 (June 30, 2002), *available at* <http://www.gmunccd.org/FIELD/Multi/NADB/BECC.pdf> [hereinafter JOINT STATUS REPORT, June 2002].

approval. "Through [PDAP], the BECC has approved \$24.9 million [U.S.] to assist 104 communities with 128 projects."⁴⁰⁷

The Capacity Building Needs & Solid Waste Technical Assistance Program uses the BECC's own funds as well as funds from outside sources, such as Mexico's Ministry of Social Development ("*SEDESOL-Secretaría de Desarrollo Social*"). The BECC has assisted forty-two communities with forty-six solid waste projects for a total of \$2.3 million U.S. Two new projects were developed between April and June 2002.⁴⁰⁸

The Management Training Program teaches utility operators the basic technical elements needed to maintain and improve environmental infrastructure. The program focuses on the management of water and solid waste and uses a local and regional approach.⁴⁰⁹ The BECC has organized ten training courses, all in Mexico. The Public Participation Program provides funding to help inform communities about environmental infrastructure projects.

The Sustainable Development Program defines sustainability as "conservation-oriented social and economic development that emphasizes the protection and sustainable use of resources, while addressing both current and future needs and present and future impacts of human actions."⁴¹⁰ For a project to be certified, it must comply with this definition of sustainable development, as well as the definition developed by the Brundtland Commission, and meet a set of fourteen minimum performance indicators for better compliance with sustainable development goals.⁴¹¹ The State Inter-institutional Coordinating Committee Programs are committees formed pursuant to this program to coordinate the various BECC projects and oversee the effective use of funds.⁴¹²

As of June 2002, the BECC had certified sixty projects whose construction is estimated to cost \$1.24 billion U.S.⁴¹³ Thirty-six of these projects are in the United States and twenty-four are in Mexico.⁴¹⁴ As of 2002, sixteen were complete, twenty were under construction, and seventeen

⁴⁰⁷ *Id.* at 6. (Note: the source is unclear about the dates that these figures encompass.)

⁴⁰⁸ *Id.* at 6.

⁴⁰⁹ *Id.*

⁴¹⁰ JOINT STATUS REPORT, *supra* note 399, at 7.

⁴¹¹ *Id.* at 8.

⁴¹² *Id.*

⁴¹³ JOINT STATUS REPORT, June 2002, *supra* note 406, at 12.

⁴¹⁴ *Id.*

were expected to start construction.⁴¹⁵ The technical assistance provided by the BECC for forty-three of these projects totals \$9.9 million U.S.⁴¹⁶

Similarly, the NAD Bank has been working to deal with the massive problems in the border area. "As of June 30, 2002, the NAD Bank has authorized \$381 million U.S. in loans and/or grant resources to partially finance forty-five infrastructure projects estimated to cost a total of \$1.15 billion U.S."⁴¹⁷ There are currently fifty projects certified by the BECC that are seeking financial assistance from NAD Bank for an estimated total of \$425 million U.S.⁴¹⁸ Fifty-three percent of these funds would be used in the United States.⁴¹⁹ The NAD Bank's contribution to these projects represents thirty-three percent of their total funding.⁴²⁰ Forty-two percent of the money will go to Mexico, with the remainder going to the United States.⁴²¹ Forty-eight percent of the approved NAD Bank funding has been disbursed.⁴²² On September 27, 2002, NAD Bank announced it will provide grants for six communities along the border for water quality improvements and wastewater treatment, and solid waste disposal services.⁴²³ These grants, totaling \$57.8 million U.S., will aid an estimated 200,000 people. They reside in communities including La Joya, Texas; Tornillo, Texas; Santa Rosa, Texas; Ojinaga, Chihuahua; and Tecate, Baja California.⁴²⁴

Even with their extensive projects, the BECC and NAD Bank have only begun to tackle the massive environmental clean up and protection tasks on the U.S.-Mexico border. Additionally, clean up and protection are needed throughout Mexico. Mexico needs at least \$30 billion U.S. over the next ten years to stop water contamination and treat drinking water.⁴²⁵ It does not even

⁴¹⁵ *Id.*

⁴¹⁶ *Id.* at 6. For example, in June of 2002, three new projects were certified by the BECC. These include a wastewater collection system in San Pablo, New Mexico (cost: \$3 million U.S.); replacement of a portion of the wastewater collection system in Desert Shores, California (cost: \$1.06 million U.S.); and replacement of a water well in Nogales, Arizona (cost: \$958,452 U.S.). *Id.* at 12. See also *id.* at 14-16 for a breakdown of the status of each of the BECC projects.

⁴¹⁷ *Id.* at 2.

⁴¹⁸ *Id.*

⁴¹⁹ JOINT STATUS REPORT, June 2002, *supra* note 406, at 2.

⁴²⁰ *Id.* at 12.

⁴²¹ *Id.*

⁴²² *Id.*

⁴²³ Press Release, NAB Bank, The North American Development Bank will Provide More Than \$57.8 Million in Grant Assistance for Six New Projects in U.S.-Mexico Border Communities 1 (Sept. 27, 2002), available at http://www.nadbank.org/Reports/NADB_News/english/volume_6/45.pdf (last visited Mar. 24, 2003).

⁴²⁴ *Id.*

⁴²⁵ Weiner, *Mexico Grows Parched*, *supra* note 141, at A3.

have enough money at the present to run existing water-treatment facilities.⁴²⁶ In the state of Chiapas, there are thirteen treatment plants, but, due to a lack of funds, not one is working.⁴²⁷

In short, Mexico faces massive challenges in environmental protection. It lacks money for enforcement of environmental laws, technology to control pollutants within and outside of the factory walls, and disposal sites for hazardous wastes. The United States must assist with the money and technology needed because its citizens help to create and exacerbate the problems when they buy products produced at facilities located in Mexico.

V. CONCLUSION

Environmentalists and other leaders at the Johannesburg Summit were correct in their assertion that sustainable development must be viewed in the light of local problems. Yet, the effects of local action or inaction are not bounded by geographical borders. Borders between the United States and Mexico are increasingly irrelevant with respect to population, economics, and environment. This Article examined sustainable development *sin fronteras* in the context of business in Mexico and its inextricable links with the United States. This Article asks: "What has happened?" and "What should be done?"

In the context of business in Mexico, too little is being done. NAFTA promised the pursuit of sustainable development, and some steps are being taken. Some companies are setting excellent examples for others. Yet, in areas including petroleum, tourism, *maquiladoras*, agriculture, fishing, and a multitude of other businesses, a great deal more is needed.

This Article recommends steps for the pursuit of sustainable development. In Johannesburg, it was emphasized that a local focus is crucial. As United States companies and individuals interact with Mexicans, we must view Mexico's environmental problems as "our problems, too." Business and individual citizens in Mexico must be educated, they must make decisions, and they must take action. Mexico's government lacks financial resources. Therefore, United States businesses and individuals operating in Mexico should provide technology and funding to pursue sustainable development even if laws do not require them to do so.

The United States government, businesses, and citizens must work with Mexico in its efforts to become a more true democracy. First, we must assist Mexico as it seeks to eliminate corruption and to strengthen its

⁴²⁶ *Id.*

⁴²⁷ *Id.*

democracy through tools such as transparency, fair elections, and education for its citizens. Overall, the United States must assist Mexico in establishing legitimacy for its government and legal system.

Second, a company operating in Mexico must meet two challenges. First, it must comply with laws even if it does not face "getting caught." Additionally, it should adhere to tenets of CSR and pursue sustainable development even if that means taking actions that are not required by law.

Third, this Article examined the day-to-day context for pursuit of sustainable development. Programs including, but not limited to, the ISO 14000 series standards can provide tools for this pursuit. NGOs can provide rewards including public recognition for good actors. An example is the Gold Medal for International Corporate Environmental Awareness. It was presented by the WEC to a Mexican cement manufacturer, *CEMEX*, in 2002.⁴²⁸

This piece examines selections from a complex set of inter-relationships all of which affect the pursuit of sustainable development in Mexico. It is designed to open dialogue, and it suggests steps to be taken in the pursuit of sustainable development.

This examination shows that in business, as is true in all human activities and relationships, there are "good" actors and "bad" actors. Some companies operating in Mexico have taken significant steps toward sustainable development. Yet, on the whole, in the context of Mexico and its inextricable links with the United States, during the next ten years all parties must act far more quickly and do far more than has been done in the ten years since the Rio Summit. Before the Johannesburg Summit, Kofi Annan said, "As our attention has been focused on conflict, on globalization, or most recently on terrorism, we have often failed to see how these are connected to the issue of sustainability. That word has become a pious invocation, rather than the urgent call to concrete action that it should be."⁴²⁹ Now is the time to take concrete action.

⁴²⁸ For discussion of the 2002 award, see *supra* text accompanying notes 236-37.

⁴²⁹ Charlie Homans, *Bush Redefines Progress*, U. WIRE (Colum. U.), Sept. 7, 2002.

GLOSSARY

BBVA	<i>Banco Bilbao Vizcaya Argentaria</i>
BCSD	Business Council for Sustainable Development
BECC	Border Environmental Cooperation Commission
CARE®	Chemical Manufacturers' Association's Responsible Care® Program
CEO	Chief Executive Officer
CEMDA	<i>Centro Mexicano de Derecho Ambiental</i> Mexican Center for Environmental Law
CERES	Coalition for Environmentally Responsible Economies
CMA	Chemical Manufacturers' Association
CONABIO	<i>Comisión Nacional para el Conocimiento y Uso de la Biodiversidad</i> Mexican National Biodiversity Commission
CSMs	<i>Contratos de Servicios Múltiples</i> Multiple Service Contracts
CSR	Corporate Social Responsibility
EEP	Eco-Efficiency Program
EHS	Environmental, Health and Safety Report
ELP	Environmental Leadership Program
EMAS	Eco-Management and Audit System
EMS	Environmental Management System

EPA	U.S. Environmental Protection Agency
EU	European Union
<i>FMCN</i>	<i>Fondo Mexicano para la Conservación de la Naturaleza</i> Natural Resources Protection Committee
FTAA	Free Trade Area of the Americas
GATT	General Agreement on Tariffs and Trade
GM	Genetically modified
GMOs	Genetically modified organisms
ICSR Initiative	International Corporate Social Responsibility Initiative
IEF	International Environment Forum
<i>INE</i>	<i>Instituto Nacional de Ecología</i> National Ecology Institute
<i>INEGI</i>	<i>Instituto Nacional de Estadística, Geografía, e Información</i> National Statistics Institute
ISO	International Organization for Standardization
NAFTA	North American Free Trade Agreement
NAD Bank	North American Development Bank
NGO	Non-Governmental Organization
<i>NOMS</i>	<i>Normas Oficiales Mexicanas</i>

	Official Mexican Standards
<i>PAN</i>	<i>Partido de Acción Nacional</i> National Action Party
<i>PEMEX</i>	<i>Petróleos Mexicanos</i> Petroleum of Mexico
PET	Polyethylene terephthalate
<i>PROFEPA</i>	<i>Procuraduría Federal de Protección al Ambiente</i> Federal Attorney General for Environmental Protection
PMI	Post-Merger Integration
<i>PRD</i>	<i>Partido de la Revolución Democrática</i> Party of the Democratic Revolution
<i>PRI</i>	<i>Partido Revolucionario Institucional</i> Institutional Revolutionary Party
<i>PRODERS</i>	<i>Programas de Desarrollo Regional Sustentable</i> Programs for Regional Sustainable Development
Rio Conference	United Nations Conference on the Environment and Development
<i>SECODAM</i>	<i>Secretaría de Controlaría y Desarrollo Administrativo</i> Secretary of Control and Administrative Development
<i>SEDESOL</i>	<i>Secretaría de Desarrollo Social</i>

	Secretary for Social Development
SEL	<i>Licencia Ambiental Única</i> Single Environmental License
SEMARNAP	<i>Secretaría del Medio Ambiente, Recursos Naturales, y Pesca</i> Secretary of the Environment, Natural Resources, and Fisheries
SEMARNAT	<i>Secretaría del Medio Ambiente, y Recursos Naturales</i> Secretary of the Environment and Natural Resources
SCT	<i>Secretaría de Comunicaciones y Transportes</i> Secretary of Communications and Transport
SEP	Shell Foundation's Sustainable Energy Program
SIRG	<i>Sistema Integrado de Regulación Directa y Gestión Ambiental de la Industria</i> Integrated System for Direct Regulation and Environmental Action in Industry
UN	United Nations
UNCED	United Nations Conference on the Environment and Development
UNDP	United Nations Development Program
UNEP	United Nations Environment Program

USAID	United States Agency for International Development
VAP	Voluntary Action Plan for Alignment of Standards with International Standards
WBCSD	World Business Council for Sustainable Development
WCED	World Commission on Environment and Development
WEC	World Environment Center
WEC	World Economic Center
WICE	World Industry Council for the Environment
World Commission	World Commission on the Environment and Development
WSSD	World Summit for Sustainable Development
WTO	World Trade Organization