Global Environmental Accountability: The Missing Link in the Pursuit of Sustainable Development?

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Sustainable development has become one of the guiding principles of global environmental policy during its remarkable recent ascent. Yet the more widely the concept has been embraced, the more elusive its meaning seems to be. Despite broad agreement that we should leave future generations at least as well off as our own, sharp disputes persist over the proper path toward achieving this goal. Efforts to define sustainability or to apply the concept in policy debates evoke memories of the late Justice Potter Stewart's famous comment about obscenity. Rather than "trying to define what may be indefinable," he applied a simple test: "I know it when I see it."[1]

This case study argues that sustainable development, regardless of how it is defined, can be advanced by designing policies that increase the accountability of individuals, governments, and corporations for the environmental consequences of their actions. In this context, accountability means not only internalizing external costs, but also assigning burdens of proof and the risks of loss in a manner that encourages the development of better information about, and more realistic forecasts of, environmental consequences. It means ensuring that laws and regulatory standards are implemented and enforced and that risks controlled in one jurisdiction cannot easily be transferred to another.

This case study begins by reviewing the concept of sustainable development and why it is so popular yet difficult to apply in practice. It then discusses the challenges posed to sustainable development by the new global economy, where vast private capital flows can rapidly alter the economic fortunes of entire nations. The study then explores the accountability theme, reviewing institutional mechanisms for holding actors accountable for the environmental consequences of their actions. It concludes by exploring some examples of how

law is extending its global reach to promote greater environmental accountability in the pursuit of sustainable development.

The Concept of Sustainable Development

The roots of the concept of sustainable development can be traced to the 1972 Stockholm Conference on the Human Environment (see Hodas 1998, 1, 8), but it became a prominent theme of global environmental policy following publication of the 1987 report *Our Common Future by* the World Commission on Environment and Development (WCED, the Brundtland Commission). This report articulated the goal of sustainable development as "meet[ing] the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987, 43). Five years later, when representatives of 178 nations gathered at the U.N. Conference on Environment and Development, known as the Rio Earth Summit, they adopted sustainable development as the centerpiece of the Rio Declaration's statement of global environmental principles.[2]

Sustainable development is now widely embraced as the central goal of global environmental policy, even though it remains highly vague and difficult to apply to resolve specific environmental controversies. As economist Herman Daly has observed, "Sustainable development is a term that everyone likes, but nobody is sure of what it means" (1996, 1). Professor David Hodas observes that "when one attempts to implement the concept, one quickly discovers that, except in its most obvious applications, sustainable development is, if not meaningless, an oxymoron" (1998, 2–3). Indeed, the popularity of the concept may stem from its very malleability, as it combines elements that appeal to both environmental and business interests.

Efforts to implement sustainable development have been monitored by the U.N. Commission on Sustainable Development, created as part of Agenda 21 adopted at the Rio Earth Summit. Agenda 21 recommended that each country establish a national council for sustainable development, as the United States did in June 1993 by creating the President's Council on Sustainable Development (PCSD; Lash 1997). This Commission, which included government officials, CEOs of major corporations, and leaders of environmental, labor, and civil rights groups, issued its report in March 1996. The report outlined the Commission's principles for promoting sustainable development (PCSD 1996). These included the statements that "economic growth, environmental protection and social equity should be interdependent, mutually reinforcing goals" and that decision makers "should consider the well-being of future generations, and preserve for them the widest possible range of choices." The report concluded,

"Sustainable development requires fundamental changes in the conduct of government, private institutions and individuals." It was short on specifics concerning what these changes should be, but it emphasized the importance of market strategies, the precautionary principle, citizen participation in the policy process, and public access to information. Despite confusion over the meaning of sustainable development, it is not difficult to determine that certain trends reflect the consequences of unsustainable policies.

For instance, inadequate sewage treatment and industrial pollution have precluded a large portion of the world's inhabitants from having reliable access to safe drinking water, posing an enormous threat to human health. Water-borne diseases account for 80 percent of human health problems in developing countries, causing the death of 4 million children per year (U.N. 1996, 259). In 1980 the United Nations established as a global goal that clean water and adequate sanitation be provided for all the world's population by the year 1990 (U.N. General Assembly Resolution 35-18, 10 November 1980). But more than a billion people remained without access to safe water supplies in developing countries years after the 1990s had commenced. Even with improvements in sanitation and water supply services, it was projected that more than 750 million people would not have access to safe drinking water in the year 2000 and the number without access to sanitation would be more than three billion people (U.N. 1996, 260).

To transform sustainable development into a more useful policy goal, the United Nations Commission on Sustainable Development is trying to develop indicators for monitoring progress toward sustainable development. The goal of the Commission is to have an agreed set of indicators available for use by all countries in the year 2001 (U.N., n.d). Although these indicators are not sufficiently developed to provide a comprehensive picture of progress, when the United Nations met in June 1997 to review progress toward implementing Agenda 21, its assessment was largely negative: "(1) an increase of 450 million more people on the planet; (2) an increase of 4% in global carbon emissions; (3) the loss of another 3.5% of global tropical forests; and (4) a decline in development aid to 0.27% of donor GNP," its lowest level in fifty years and far below the U.N.'s target of 0.7 percent (A. Miller 1998, 287, 290).

The New Global Capitalism

With the collapse of communism, the explosive growth of world trade, and the shrinking of capital controls, the majority of the world's population has been thrust rapidly from state-controlled economies into a new world economic order. Shortly after the U.N. declared its glum assessment of progress since Rio,

the economies of developing countries in East Asia were devastated by a financial panic following the devaluation of the Thai currency. International investment banks that had made enormous investments in these emerging markets suffered heavy losses as the panic spread from country to country. The rapid capital flight away from Asia rocked the world economy, prompting the observation that global capital flows had become "the new neutron bomb" that can devastate a nation's economy virtually overnight. Although the world's financial markets weathered this "Asian flu," it demonstrated a new economic reality: that private capital flows now dominate international investment in developing countries. This was not true at the time of the Rio Earth Summit, where developing countries insisted on increased development assistance as a condition for accepting new international environmental commitments. Yet, as Alan Miller notes, "in the five years since Rio, all forms of public sector aid have been declining, while private sector flows have increased dramatically." As a result, in 1997, "private investment flows to developing countries totaled approximately $260 billion, more than five times greater than the $50 billion in multilateral aid" (1998, 291). This has important implications, both positive and negative, for sustainable development policy as private multinational corporations increasingly influence environmental and economic conditions in developing countries.

This is not an entirely new phenomenon, to be sure. In 1842, the United States suffered the wrath of some of the world's richest investors when Louisiana, Maryland, Mississippi, and Pennsylvania defaulted on bonds they had sold to London bankers (Kristof 1998, A18). But what is unprecedented here is the scale of the private capital flows, which are now so vast that they are capable of devastating the economies of entire nations.

Describing this as the new "global capitalism," Professor Jeffrey Sachs argues that it poses new challenges to legal systems to foster "the strong yet law-bound state" combined with a new international regime of law "fit for our global capitalist society." As Sachs notes, the former remains a problem in many developing countries where governments are either too weak or too corrupt to meet basic infrastructure needs, and the latter is complicated by the absence of any overarching political authority (n.d., 8–10). These are daunting challenges, yet legal processes are responding to them and the contours of a new global legal order are beginning to emerge, as described below.

Mechanisms for Enhancing Environmental Accountability

Economists have long explained environmental problems as the product of market failures due to the absence of property rights in common goods. Their pre-

scription to protect the environment is for some form of collective action to internalize externalities by making actors bear the full social costs of their actions. This can be accomplished by holding parties who cause environmental damage liable for the cost of remediation or by creating property rights in goods formerly held in common. Both solutions involve the use of law to create mechanisms for holding humans accountable for the environmental consequences of their actions. Recent developments in U.S. environmental law also are stimulating regulatory innovations designed to increase the fairness and efficiency of the modern regulatory state, promoting the kinds of values served by long-standing principles of private law. These developments include increased emphasis on informational approaches to regulation that help harness market forces to prevent pollution, the creation of marketable emissions allowances that reduce compliance costs and combat strategic behavior, and experiments with new regulatory approaches such as environmental contracting and challenge regulation.

Liability

Prior to the emergence of the modern regulatory state, common law liability was the principal vehicle for holding actors accountable for environmental damage. But liability is no longer the primary legal tool for promoting environmental protection. In the past three decades regulatory legislation has largely eclipsed the common law because the difficulty of proving causal injury and tracing it back to individual agents made common law liability an inadequate tool for protecting the environment. As a result, environmental law has come to be largely dominated by statutes that authorize administrative agencies to set regulatory standards limiting emissions or that require agencies to consider prospective environmental effects as a condition for approving projects likely to have significant environmental consequences.

Recognizing the obstacles to common law recovery, Congress extended liability for environmental contamination beyond the common law model with the enactment of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) in 1980. This law, commonly known as the Superfund legislation, broadened liability by extending strict joint and several liability for the costs of remediating environmental contamination to much broader classes of parties, including current owners of contaminated property and generators of hazardous substances who arranged for its disposal. The law creates powerful incentives for businesses to prevent releases of hazardous substances to avoid future liability.

Regulation

In the regulatory context, environmental accountability requires mechanisms to ensure that government agencies implement and enforce statutory directives. To enhance the accountability of government agencies, most U.S. environmental laws authorize citizen suits against agencies and officials who fail to perform nondiscretionary duties. These provisions have been widely used to force agencies to implement regulatory programs, particularly those for which Congress has specified deadlines for agency action. Citizen participation in the regulatory process is another important mechanism for increasing the accountability of government agencies. U.S. laws give private citizens the right to participate in rule-making proceedings and guarantee citizen access to information held by government agencies.

Some provisions of regulatory legislation enhance accountability by generating better information about potential environmental risks that can be used to inform government policymakers and private citizens. In a few cases the laws require demonstrations of safety before certain substances—pesticides and therapeutic drugs—can be marketed. Pesticides can be marketed only if they are licensed following a demonstration by the manufacturer that they will not cause unreasonable harm. Therapeutic drugs can be approved only following a demonstration that they are safe and effective for their intended uses. These requirements have generated far more extensive test data than are available for most other chemical substances for which the environmental laws generally place the burden on regulators to act.[3]

Informational Approaches to Regulation

U.S. environmental policy is placing increasing emphasis on informational regulation. Informational approaches seek to enlist the marketplace in controlling environmental problems by providing information that will affect consumer choices in environmentally positive ways. They are particularly attractive to those concerned about the high costs of command and control regulation. The Emergency Planning and Community Right-to-Know Act (42 U.S.C. 11001–11050), enacted in 1986, requires industries to report annually the volume of their releases of hundreds of toxic substances. The Act creates a national inventory of toxic releases that is made accessible to the public, using information as a tool for mobilizing public pressure to reduce toxic emissions. This approach has been so successful that EPA has dramatically expanded the list of chemicals and industries subject to reporting.

One of the most innovative developments in U.S. environmental law has been California's Proposition 65. This law, which was adopted by voter initiative, combines a duty-to-warn approach with a shifting of the burden of demonstrating the safety of emissions of carcinogens and reproductive toxins. The law prohibits companies from exposing anyone without warning to any substance known to be a carcinogen or reproductive toxin unless the person responsible for the exposure can show that it poses no significant risk to human health. This legislation is founded on the simple, ethically irresistible notion that no one should intentionally expose another to a significant risk of harm without warning. Proposition 65 avoids most of the problems of defining regulatory targets by specifying that it will be applicable to those releasing any substances that have been identified as carcinogens or reproductive toxins. Avoiding one of the most serious pitfalls of conventional regulatory programs, Proposition 65 makes it unnecessary for regulators to decide how stringently to control the great variety of discharges by simply leaving it up to the source. If the discharger thinks it is too expensive to stop exposing others to chemicals on the list, it can continue its discharges, but only if it provides a clear and reasonable warning to the exposed population.

Tradeable Emissions Allowances

Title IV of the Clean Air Act Amendments of 1990 provided the first large-scale experiment with emissions trading approaches long advocated by economists as a more efficient means for reducing pollution. While mandating significant reductions in sulfur dioxide emissions, the law creates emissions allowances that may be bought and sold to ensure that the reductions are obtained in the cheapest manner possible. Experience with Title IV's emissions trading program produced some surprising results. The allowances have been selling at prices that look astonishingly low compared to estimates made when the 1990 Amendments were enacted. Emissions reductions also are occurring at a faster rate than EPA had anticipated as utilities switch to low-sulfur coal to reduce emissions at a time when the price of such coal has dropped substantially. In the first five years after enactment of Title IV, sulfur emissions were reduced by 1.7 million tons from 1990 levels at a dramatically lower cost than Congress had anticipated (U.S. EPA 1995a). The low prices for which emissions allowances have sold appears to confirm that industry estimates of the cost of complying with Title IV were greatly exaggerated. When the 1990 Amendments were debated, it was projected that allowances could sell for $1,000 to $1,500 per ton because of the high cost of installing pollution control equipment to achieve the

emissions reductions required by Title IV. However, emissions allowances have been selling at prices ranging from $100 to $200 per ton because the cost of reducing sulfur dioxide emissions has been much lower than expected. The price of low-sulfur coal has fallen due to improved mine productivity and reductions in the cost of transporting coal by rail. The costs of installing scrubbers also has fallen substantially ("Cyprus Amax" 1995, 1). In addition, many early cost estimates probably were deliberately inflated as a familiar form of strategic behavior by a regulatory target seeking to avoid regulation. Thus, one benefit of marketable allowances is that they make the true costs of compliance more transparent.

How Much Accountability? Improving the Fairness and Efficiency of Regulation

The first generation of U.S. regulatory programs made dramatic progress in reducing certain kinds of air and water pollution, particularly emissions from large industrial point sources, and created powerful incentives for more careful handling of hazardous substances. But they also came under considerable fire from regulated industries who argued that they were inefficient and inequitable mechanisms for improving environmental quality. These criticisms have intensified as environmental law's regulatory tentacles have been extended to embrace smaller and smaller entities and to affect development decisions by individual property owners.

Some of the apparent backlash against environmental regulation represents ordinary strategic behavior by the regulated community. But it also has some roots in tensions that the common law has long struggled to reconcile. These include the tension between the common law's insistence on individualized proof of causal injury and the inherently probabilistic and uncertain nature of environmental consequences. Regulatory legislation sought to overcome this problem by dispensing with the common law's causation requirements and endorsing preventative regulation by expert administrative agencies. But a major factor contributing to the apparent backlash against federal environmental regulation is the failure of national regulatory programs to deal with some of the very genuine concerns for fairness and efficiency that animated common law requirements. The difficulty of tailoring nationally uniform regulations to respond with flexibility to local circumstances and the perceived unfairness when changing regulatory standards benefit some groups and burden others help explain persistent complaints from the regulated community that the burdens of environmental regulation are distributed in an unfair or inefficient manner. An-

other major focus of fairness complaints has been CERCLA's extension of strict joint and several liability to broad classes of parties who may be far removed from the activities that result in releases of environmental contamination.

Although not yet widely employed in the United States, there is considerable interest in more flexible regulatory tools. Proposals for greater regulatory flexibility reflect the belief that environmental objectives could be achieved at far less cost if industries are given the latitude to reduce emissions plantwide and without the constraint of medium-specific requirements (e.g., Rice 1994, 15). In one approach, called "challenge regulation," the government establishes a clear environmental performance target while allowing the regulated community to design and implement a program for achieving it. Unlike purely voluntary programs, the government specifies regulatory responses that will take effect if the target is not met. Another approach, called "environmental contracting," involves an agreement between a government agency and a particular source to waive certain regulatory requirements in return for an enforceable commitment to achieve superior performance. Under this approach, companies are offered the flexibility to design their own program for meeting regulatory goals in return for a commitment to achieve specified levels of environmental performance.[4]

Efforts to provide greater regulatory flexibility were endorsed by the PCSD in its March 1996 report. The Council concluded that basic regulatory standards contained in existing environmental laws have been successful and should not be relaxed. However, it found that the efficiency and effectiveness of the current environmental management system could be improved by developing new approaches to regulation that emphasize performance targets rather than prescribing the means for achieving them. The Council strongly endorsed the notion of giving companies "greater operating flexibility, enabling them to *reduce their costs* significantly in exchange for achieving superior environmental performance" (PCSD 1996, 27). But it also stressed the importance of maintaining accountability, a goal that may be in tension with flexibility given the greater monitoring difficulties that more flexible approaches may entail.

Expanding the Global Reach of Law

During the past three decades there has been a remarkable surge in the enactment of environmental laws throughout the world. This is the product in part of the very forces that have fueled the explosive growth of global economic activity. Trade liberalization and advances in communications and information technology have contributed to pressure to harmonize environmental stan-

dards, as have bilateral and multilateral environmental agreements (see Kimber 1995, 17). In addition to enacting environmental legislation, countries that recently have revised their constitutions are now incorporating environmental rights or duties into them.

Yet it is far easier to put laws on the books than to develop the capacity and political will to implement and enforce them. Most countries have established specialized environmental agencies, but in many developing countries these agencies lack the resources even to begin to implement national regulatory programs. As a result, in many countries environmental legislation exists largely in the law books with little implementation or enforcement.

Inadequate resources represent an important barrier to increasing environmental accountability in many developing countries. In former Soviet bloc countries, where the government has owned most production facilities, lack of funding has been a crucial obstacle to investment in pollution control technologies. As industries are privatized, many countries are requiring that pollution control issues be addressed as part of privatization agreements, which provide financial incentives for environmental improvements. Environmental improvements also can be accomplished through policies that promote more efficient management of natural resources, such as improved planning and pricing of public water supplies to ensure that they are used where they provide the greatest social benefits.

To hold agencies accountable it is important to mobilize citizens to participate actively in the process of implementing and enforcing regulatory standards. In June 1998 the Convention on Access to Information, Public Participation and Access to Justice in Environmental Matters was signed in Aarhus, Denmark. This treaty represents the first time that citizen participation has been the focus of an international environmental agreement. It requires signatory nations to change their national laws to give citizens access to environmental information, including the right to know about toxins in their communities and the ability to bring actions to enforce the environmental law. This treaty ensures that more countries will adopt the U.S. model of citizen involvement as a means for ensuring that regulatory legislation is implemented and for supplementing government enforcement.

Most countries have adopted some form of framework environmental legislation that requires environmental impact assessment. Indeed, an environmental impact assessment requirement has become the primary and most universal element of environmental law around the world, having been adopted by more than 130 countries. The United States was the first country to adopt such a requirement, but some countries have improved on the model of our National

Environmental Policy Act by requiring that forecasts of environmental impacts be embodied in enforceable commitments. In these countries the environmental impact assessment process serves as a framework for applying all environmental standards in a single licensing process with follow-up audits to ensure that predictions of environmental consequences prove accurate. By holding the proponents of development projects accountable for their projections of future environmental consequences, this approach creates incentives for more realistic forecasts, while relieving the public of some of the cost of remediation if forecasts prove too optimistic (Hodas 1998, 45–48).

Although few countries approach the United States in terms of tort liability, civil liability for damages caused by pollution is beginning to appear in the laws of several countries. Some of the more egregious forms of health and environmental damage are generating tort claims by foreigners against multinational corporations. In 1996 three thousand workers on banana plantations in the Phillippines settled a lawsuit against U.S. chemical companies who manufactured or used dibromochloropropane, a pesticide banned in the United States for causing reproductive harm. In October 1998, another group of more than twenty thousand banana workers filed a similar lawsuit ("Philippine Banana Workers" 1998). A $1.5 billion class action against Texaco on behalf of thirty thousand residents of an Ecuadoran rain forest ravaged by oil drilling was reinstated by an appellate court in October 1998 (*Jota v. Texaco, Inc.*, 157 F.3d 153 (2d Circ. 1998)). Some Central and South American nations have sought to facilitate lawsuits on behalf of their citizens in the U.S. courts by closing their own courts to such claims to reduce the possibility of a forum non conveniens dismissal (Newman 1999). When successful domestic tort claims are made against companies for marketing hazardous products that also are sold abroad, it is not surprising now when lawsuits by foreigners seek to follow. For example, in the wake of the $206 billion settlement by the tobacco industry of the class actions brought against it by states, the governments of Guatemala, Nicaragua, and Panama filed similar lawsuits against the industry (Torry 1999, A12).

As international megamergers increase the size and influence of multinational corporations, international cooperation will become increasingly necessary to hold such corporations accountable for their actions. Coordination of national regulatory strategies can be a useful means for avoiding a regulatory race to the bottom. For example, when one Caribbean island nation sought to impose a waste disposal tax on cruise ships that call at its port, a major cruise line threatened to drop the island from the itinerary of its ships. This was successful in scuttling the tax until the Association of Caribbean States adopted a coordinated policy in which several nations adopted the same tax simulta-

neously. Faced with the reality that it could not play off one island nation against another, the cruise line backed down and agreed to pay the fee.

Conclusion

Speaking to the World Economic Forum in February 1999, U.N. Secretary-General Kofi Annan invited multinational corporations to enter into a formal "compact" with the United Nations. The terms of the proposed bargain were that the companies would agree to promote sustainable development, human rights, and fair labor practices in whatever countries they do business in return for the U.N.'s political support for open global markets. The secretary-general explained the problem as follows: "Globalization is a fact of life. But I believe we have underestimated its fragility. The problem is this: The spread of markets far outpaces the ability of societies and their political systems to adjust to them, let alone guide the course they take. History teaches us that such an imbalance between the economic, social and political realms can never be sustained for very long." Annan warned, "We have to choose between a global market driven only by calculations of short-term profit and one which has a human face." Pledging to use the United Nations to "help make the case for and maintain an environment that favors trade *and open markets*," Annan argued that "unless those values are really seen to be taking hold, I fear we may find it increasingly difficult to make a persuasive case for the open global market" (quoted in Cowell 1999, A10).

The secretary-general's comments reflect a growing appreciation that additional institutional mechanisms for holding multinational businesses accountable will be required in an era of unprecedented global capital flows and trade liberalization. A variety of initiatives are underway to increase environmental accountability at every level of government and in the private sector. For instance, the International Standards Organization is involved in efforts to establish voluntary standards for corporate environmental management systems and environmental auditing that could have a significant influence on the environmental performance of businesses. Individual nations are adopting and upgrading national environmental laws, implementing environmental assessment requirements, and incorporating citizen participation and access to information provisions. Indigenous tribes and workers injured by toxic chemicals in foreign countries are taking their own actions to enforce environmental laws, filing tort actions against multinational corporations and linking human rights claims with environmental protection concerns (see Bearak 1998, A26).

Thus, although the newly globalized economy poses important challenges

for sustainable development, the legal system is not retreating from its underlying commitment to global environmental protection. No single approach to regulation is appropriate for every underlying legal framework (see Wiener 1999), yet we have sufficient experience with a variety of regulatory approaches to make wise choices in the selection of policy instruments for promoting environmental accountability and sustainable development.