Multilateral Development Banks, Environmental Diseconomies, and International Reform Pressures on the Lending Process: The Example of Third World Dam-Building Projects

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MULTILATERAL DEVELOPMENT BANKS, ENVIRONMENTAL DISECONOMIES, AND INTERNATIONAL REFORM PRESSURES ON THE LENDING PROCESS: THE EXAMPLE OF THIRD WORLD DAM-BUILDING PROJECTS

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* Professor of Law, Boston College Law School. This article is based upon a speech delivered at the Annual Meeting of the International Third World Legal Studies Association at the Convention of the Association of American Law Schools, in Miami, January 8, 1988, which was published in earlier form as part of a symposium based on that meeting, 17 Den. J. INT'L L. & POL'y 23 (1989). The author is one of those erstwhile Africanists of the 1960s generation who moved away from active involvement with Third World legal issues upon returning to the United States. My work since returning from Africa has been involved with questions of environmental law, including water resources law, and cases involving public works dams, with some limited involvement with international environmental issues in Japan, India, and South America. The present analysis is thus written primarily from the perspective of an arm's length observer rather than that of an active participant in international dam controversies. I gratefully acknowledge the capable research and editing assistance of Albert Bedecarré, Boston College Law School Class of 1990, and Robert McLaughlin, Boston College Law School Class of 1989, and the helpful comments of Dr. Brent Blackwelder, Joel Peterson, Esq., Bruce Rich, Esq., and Professor Peter Rogers. The mistakes that remain in spite of their efforts are my own.
I. INTRODUCTION

An “environmental” perspective on multilateral development bank (MDB) loans presents at least three points of analysis relevant to Third World development issues. First, it gives some very vivid and instructive examples of how the international development loan process can go askew. Second, it demonstrates practically why and how the lending process itself has required constructive reform. Third, in reviewing legal approaches to reform, including recent pressures on MDBs, it helps clarify a latent debate about the legitimacy of donor-nation pressure on international lending institutions.
This article focuses upon World Bank projects and processes, not only because they provide many useful examples of disastrous development loans, but also because in the past two years the World Bank, followed by other regional MDBs, has made a dramatic official shift in its willingness to recognize the seriousness of environmental problems caused by MDB projects. The new statements of policy and procedure are an attempt to reform the development loan process by making it more rational and less prone to environmental disaster, an initiative that so far seems to be winning mixed reviews.¹

The particular example of World Bank loans for the construction of large capital intensive dam projects is quite useful.² Dam construction offers one discrete sector of development assistance that can be viewed on its own terms. It is an area in which major problems have surfaced over the years in World Bank and other MDB projects. It is also an area in which the banks have encountered vociferous opposition from a very effective coalition of Western and Third World environmental non-governmental organizations (NGOs). Dam-building offers useful opportunities to examine how engineering and financing decisions can go astray, while also

¹ See the brief analysis of the evolution of environmental planning considerations in World Bank development loans, infra text accompanying note 51.
offering a limited opportunity to applaud the Bank’s recent development reform efforts.

This article is organized in three parts. The first part offers a brief introduction to the environmental perspective, and then sets out a spectrum of serious environmental diseconomies which have been caused by various international dam projects, an accounting that requires the analytical observer to go beyond the usual broad and imprecise rubric of “social costs” or “economic externalities.” The second section of the article focuses on MDB administrative process: why have problems occurred over the years in the implementation of international development projects, and how can decisions be improved? The final section analyzes a range of available legal approaches for modifying and improving the international development loan processes, focusing on the practical example of several recent cases of donor-nation pressure on the MDBs. From an observer’s perspective, the most noteworthy recent improvements in the development loan process are quite clearly attributable to external pressures applied to MDBs by major donor-countries—a development that may well worry some internationalists.

II. THE ENVIRONMENTAL PERSPECTIVE AND ENVIRONMENTAL DISECONOMIES IN INTERNATIONAL DAM PROJECTS

A. Environmentalism

Two very contrary images will help the reader understand the particular perspective of environmental analysts and activists in their role on the world stage. The first image is the broadly held caricature of environmentalists, particularly common amongst those in the development profession. Most environmentalists are, in the eyes of many such promoters, a small but noisy elite, inexpert, primitive, petulant, opinionated amateurs, unfounded and insubstantial in their analysis, but unfortunately all too clever at mobilizing the media in quixotic campaigns to protect some endangered flower, fish, or dicky bird. Environmentalists cannot see the forest for the trees; they are skewed in their vision and their values. In their criticism of MDB lending, they are just being “Bank-bashers.”

The other quite contrary perspective is environmentalists' view of themselves. On one hand, those who work in environmental initiatives know there is as much ecological diversity within the ranks of those who call themselves "environmentalists" as there is in a hectare of tropical rainforest, ranging from scattered cells of bright-eyed nihilists in eco-guerilla "direct actions," to polite associations of silk-stocking, East Coast Brahmin noblesse oblige conservationists; from lonely guardians of a particular bog or forest, to advocacy organizations based in New York or Washington with thousands of members, dealing with dozens of issues around the country and the world. There are environmental groups dedicated to calm, rigorous scientific research, others emphasizing legal interventions, economic analysis, sociological issues, or artistic, historical, or quasi-religious values; some are deeply involved in political lobbying, and others adamantly avoid political entanglement; some are characterized by establishment sobriety, others by the fervors of campmeeting populism.

The United States has developed the most substantial and diverse environmental community, but in recent years the U.S. example has been followed by a plethora of similarly diverse organizations in Western Europe, elsewhere in the developed world, and in a growing number of Third World nations and localities. The distinctions between different groups within the environmental spectrum may often be greater than between a particular environmental organization and its non-environmental adversaries. The environmental coalition that has recently been applying reform pressures on the MDBs for instance, as we will see, has generally been characterized by its groups' professionalism, careful fact-finding, rigorous economic and legal analysis, and subtle political savvy.4

On the other hand, there is a common thread that runs through virtually all the diversity of the environmental "movement," a concern with values and ecological interconnectedness that has practical as well as philosophical coherence. My environmental law students once were visited by David Brower, one of the more eminent environmental activists in the U.S. today, who enjoyed the title role in the book, Encounters With the Archdruid.5 Standing tall in front of the

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4 This coalition was led by several U.S. groups, notably the Environmental Defense Fund, Environmental Policy Center, Natural Resources Defense Council, National Wildlife Federation, Sierra Club, and Rainforest Action Network, joined by Probe International (Canada), Friends of the Earth and Survival International (Great Britain), Rainforest Information (W. Germany), and Third World organizations.

5 J. McPhee, Encounters With the Archdruid (1971).
students, white-haired and raw-boned with piercing blue eyes, Brower stretched out his arm, with thumb and forefinger held about two inches apart and said to them:

Imagine if you will our entire planet reduced to this, the size of an egg... A computer ecologist did some interesting computations for me: if the planet Earth were reduced to the size of an egg, what do you think its total mass of air, of atmosphere, would be? And what would be the total mass of the water that, along with air and sunlight, sustains life on this Earth?

Based on those computations the sum total of atmosphere veiled around this egg planet Earth would be equivalent to no more than the volume of a large pea wrapped around the globe! And the water? That would be no more than the mass of a large matchhead, a tiny volume spread thin, just enough to fill the oceans, rivers and lakes of the world.

Looking at the students, Brower asked, “Thinking of those limits, can you any longer not believe that our planet is a tremendously vulnerable little system, totally dependent on this fragile tissue of air and water, a thin fabric of life support made up of all the air and water the Earth will ever have?”

Brower’s egg illustrates environmentalists’ shared perspective on environmentalism — an ultimately utilitarian approach in planetary, if not project terms, based upon an attempt to make a rational accounting of all of the real long term residual costs of modern technology including consideration of economically intangible as well as tangible values, in a context of limited and fragile resources. It is an approach characterized by a consistent skepticism about projects that do not reflect overall economic and ecological accounting.6

Although development interests here and abroad often chafe at environmentalists’ "meddling," and seek to characterize it as a narrow, unrealistic, aesthetic initiative, the record reviewed here shows that the engineers, the people who fund them, and the nations that desperately need improvements in their conditions, often need the cold dose of reality represented by "environmental" queries in planning successful development. In some cases this will result in scrapping large-ticket capital-intensive projects. It is a thesis of this article that rational systems require that there be someone included in the process whose role will be to check whether the emperor really is wearing clothes. Absent such an effective component in the MDB process, this is often the self-appointed role of the environmental analyst.

Environmentalism thus is not viewed by its advocates as a rarified aesthetic concept or as a minor luxury, when weighed against pressing human needs for development. Most environmental issues fought over today are based on the activists’ insistence on an overall long term accounting of real benefits, costs, and alternatives, seeking to make administrative decisions truly rational in terms of human utility. In practice, this usually means that environmental groups try to include various ignored real costs (in terms of longer range consequences and "intangible" unaccounted values destroyed or foregone) into the development accounting in order to achieve overall rationality.
From both perspectives, in the view of the development profession and in their own eyes, environmentalists often appear to be like little limpets clinging to the coattails of the engineers and financiers who day in and day out decide what will be done. In the eyes of developers, environmentalists latch on to these issues in order to harass them. From the environmentalists' own perspective, it is to help. In either event, both perspectives recognize that environmentalists usually remain outsiders to the decision-making process.

Environmentalists nevertheless do pose important questions. Environmental accounting on large dam projects in the Third World is a case in point, illustrating the MDB process and its problems, and a functional role for environmentalism.

B. Environmental Diseconomies in International Dam Projects

There have been many problems with large dam development loans over the years, some well known and some not so well known. Even without adopting a North/South debt-enslavement conspiracy theory, it is possible to discern projects that have not necessarily improved the developing nations' overall economic positions, where the institutional structure and momentum of the MDB lending process not only failed to prevent but indeed created, fostered, and encouraged diseconomic programs and projects.

Most well-read individuals today have a vague notion that large dam projects have indeed produced some unanticipated problems over the years. The Aswan Dam is the most familiar, a development project that brought schistosomiasis outbreaks and severely-altered river flows, and destroyed one of the world's most productive agricultural zones, in the Nile Valley and its delta region.7

Environmental problems, however, occur in a remarkably large number of different categories of residual effects, which for our purposes should not merely be lumped into the minimizing rubric of "social costs" or "external costs" as economists often want to do. Those terms tend to insulate or depreciate the overall dimensions of direct costs imposed by various projects, and, even more imprecisely, imply that at least within the "internal" terms of the particular development project itself there is accurate accounting of potential costs. Rational analysis is better served by dividing the different

categories of environmental diseconomies into three different classes: Class I would include system effects like the loss of an endangered species, an effect not generally tangible in national or local economic terms, but affecting human and ecological values, aesthetics, or planetary health. Class I diseconomies thus are less likely to receive consideration based on developmental pragmatics; instead they require protective initiatives based on altruistic principles. Class II effects are like the Aswan Dam's spreading of schistosomiasis, offsite problems directly caused by a project, that are economically tangible in national or local terms although often not considered in MDB project accounting before or after the fact. Class III diseconomies are mistakes like building nuclear plants on earthquake faults, problems caused for the project by the project itself, which undercut the specific purpose and function of the project and thus should have been accountable in project planners' own terms of direct project self-interest. Class III effects demonstrate why it is wrong to regard environmental costs as "external" costs.

Large dams cause diseconomies in all three classes of project effects.

1. Project Benefits

Usually, though not always, the engineers and planners who design dam-oriented development projects are quite accurate in their most obvious and direct project calculations. The annual volume and flow of a river can be determined quite precisely, as can the exact dimensions, the height from the bedrock base of the dam to the top of the spillway, creating a power head that will usually produce, at least in the short term, the projected capacity of electrical generation, or the projected volume of diverted irrigation flows. In brief, whatever direct benefits the structure will mechanically produce are likely to be more or less accurately estimated in the project designing and funding process.  

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8 Project planning accuracy, however, is not always achieved. See infra, text following note 25. It is not the purpose of this article to present detailed benefit-cost studies of projects. Increasingly, this job is being undertaken in the resource economics profession outside the MDBs. See, e.g., Rogers, Planning Without Facts: A Framework for Economic Evaluation of the Three Gorges Project (November 1986) (unpublished manuscript on file with author) presented at Symposium of the Education and Science Society (Dec. 6, 1986). The fundamental point is, however, that some past projects have not only experienced environmental diseconomies, but indeed have been so devoid of benefits that the entire projects can be seen as mistakes. Like the Balbina dam in Brazil completed with World Bank financing, which even official observers now admit to be "a disaster," the millions of dollars
2. Project Costs

But the estimated costs of a project are rationally as important as the benefits, and a project’s costs typically are not fully accounted for in the MDB’s price tag for it,9 even including the chronic overruns that seem to be inevitable in such projects once underway. The following catalog of environmental costs is not likely to be represented in full in any one dam project, but all of the listed diseconomies have occurred in past projects, including World Bank financed projects. It is far more likely that many of these costs will be found cumulated in any Third World dam project than that none will be found. The sad fact is that virtually all Third World international development dam projects to date have suffered from a dysfunctioally constrained scope of review that fails to consider serious direct and indirect environmental diseconomies.

With recent efforts by the World Bank and other regional MDBs to effect radical improvements in their decision-making processes, the following list may, one hopes, become a checklist of past disasters to be avoided for the future, rather than an historical prologue for continuing failures of project planning.

C. Class I Environmental Costs

Even a casual glance at a topographic map depicting a dam and reservoir project profile imposed on a previously existing river valley, makes clear that when a dam is built some major preexisting features of the riverine environment will be lost. These often include some costs which fit in the category least capable of attracting the serious attention of economists:

1. Displacement of Indigenous Peoples

As Professor Paul has recently noted,10 dams in tropical areas often displace extremely vulnerable indigenous cultures and human settlements. The actual numbers of persons forced from their ancestral homes may be relatively small, which coupled with the fact

spent on such projects may leave the borrowing country in a worse economic position than before, saddled with a ponderous burden of debt.


that they are often primitive or minority tribes further diminishes the attention they receive from national and international development officials. For some cultures and some peoples, however, the dislocation means death. The Bayano Dam in Panama, for instance, eliminated eighty percent of the settled villages of the Cuna Indians.\textsuperscript{11} As with the Tucurui Dam in Brazil (chronicled in the semi-fictional movie “The Emerald Forest”), some dam area dislocates have been pushed into the territory of enemy peoples, leading to the decimations of tribal warfare. Even where communal clashes and warfare are not their fate, the dislocated indigenous peoples, who may never have received notice from national authorities prior to the rise of impounded waters in their homelands, often lose their religious culture as well, since many such peoples are deistic and intimately tied to the physical features of their environment.

In the forced migrations of both primitive and modernized dislocates, there is always serious disruption of social and economic life, the straining or splitting of family ties, often producing disassociated personality traits, accompanied by alcoholism or other antisocial effects, the migration of destitute individuals to cities, and so on. The numbers of dispossessed may in some cases be quite large. The Xingu Dams currently being urged upon the World Bank by some of its staff and by the government of Brazil, would flood more than 4,000 square kilometers.\textsuperscript{12} The Narmada Dams project in India would ultimately displace more than 1.5 million people,\textsuperscript{13} in a process that has already begun with its first dam, the Sardar

\textsuperscript{11} Hanlon, supra note 7, at 20, (citing Wali, Hydroelectricity, Past and Present: Problems of Social Impact Assessment, 1 GLOBAL REPORTER 4 (1983). The Bayano Dam is a complex constructed between 1972 and 1976 in the Bayano River Basin of Eastern Panama. The project resulted in the flooding of approximately 250 square kilometers of the Bayano River Basin, displacing the majority of Cuna Indians, yet the Indians have not yet received any electricity generated by the complex. Hanlon, supra note 7, at 19–20.

\textsuperscript{12} Castanheira, supra note 2. The Kayapo Indians inhabit the Xingu river basin, and oppose the building of the Babaquara and Kasasaô dams on the river. The dams are expected to flood 7,200 square kilometers of rain forests and force displacement of the Kayapo and thousands of other Indians and Brazilians. In February the Kayapo erected a village on the proposed site of the project to prevent the beginning of construction. However, the Brazilian government is getting tough with the Kayapo. In February 1988, the government charged the two Kayapo chiefs, Kubei and Paiakan (and their American translator, anthropologist Darrel Posey) with violation of a federal law forbidding foreigners (!) from conspiring against the national interest. The hearings have been delayed by the chiefs’ attendance in native tribal dress, which the court considers disrespectful. If found guilty, they face up to three years in prison. On the Move Against Xingu Dams, Vol. 4, No. 1, World Rivers Review January/February 1989.

\textsuperscript{13} ECOLOGICAL DESTRUCTION, supra note 2, at 13.
MDB Loans and Environmental Costs

Sarovar Dam which is now in the process of dispossessing 70,000.\(^\text{14}\) Boghdat (Indira Sarovar) Dam, also in India would displace tens of thousands more.\(^\text{15}\) Even these large numbers, however, are often treated as relatively insignificant by the national and MDB development officials who plan the projects. After all, the Indian subcontinent now has 783 million people and will be well over a billion by the year 2000. The "oustees" as they are officially termed represent little political consequence; they are small tribal and ethnic minorities in the vast Indian state.

2. Rare and Endangered Wildlife

In addition to the loss of habitat for wildlife generally,\(^\text{16}\) the elimination of river valleys often destroys the last refuge of endangered species that contribute to the diversity of natural life forms on the planet. In the case of the Indira Sarovar Dam for instance, (which would have a capacity of only 106 megawatts) the dam would eliminate a major part of some of India's most endangered species, including the Bengal tiger, the mouse deer, the sloth bear, a particular species of buffalo, and a giant squirrel species. The Nam Choan Dam on the River Kwai Yai in Thailand will eliminate the six rarest animal species in that nation.\(^\text{17}\) Rare plant species too are typically lost in the flooding of a river.

These costs are of little moment to development planners and financiers, however, because they seem to represent only aesthetic values of a rather recherché élite. In fact there is a utilitarian argu-

\(^{14}\) The Indian oustees who had legal title were promised title to land elsewhere, but the program has worked poorly to date. They have been left in many cases with uncultivable land that is not irrigated, a further irony since irrigation is a posited benefit of the dam. For more information on the Indian dam projects, see Tuchow, Tribal Land Protection: Lessons from the Sardar Sarovar Conflict (1987) (unpublished manuscript on file with author).

\(^{15}\) Recently it was reported that the Indian government has formally asked the World Bank to cancel the Indira Sarovar Dam project based upon reevaluations determining that the national interest was better served without it. 3 EARTH ISLAND J. 13 (1988).

\(^{16}\) Oman, How Dams Disrupt the Elephant Habitat, 3 EARTH ISLAND J. 33 (1988). For example, the habitat of elephants in southern India is being flooded, and their migratory routes blocked, by the reservoirs and canals associated with various dam projects in Kerala state, near the Anamalai-Parambikulam wildlife sanctuaries. Elephants, as well as other animals, have been swept away and drowned in the swift currents of the canals as they try to take water or cross them. The six or more new dam projects being planned for Kerala will wipe out much of the area's remaining forest habitat.

\(^{17}\) Hanlon, supra note 7, at 19. Hanlon notes that twenty-five of the forty-one mammal species (including the six rarest species) would be adversely affected by the scheme. While the World Bank's environmental assessment team apparently realized these catastrophic effects, it refused to take action to safeguard the species' habitats. Id.
ment to be made for the preservation of endangered species — that from them may come, if we save them, knowledge about important medicines and chemical processes, the structure of which we will never discover if we throw away the natural models, “like burning a book before we've learned to read it” — but such arguments do not present immediate fiscal payoffs, so the preservation of rare and endangered wildlife is typically resigned to the status of a philosophic ideal, honored in the breach.

3. Archaeological Losses

Over aeons past, human settlements have usually been located along rivers, hence major human archaeological sites are likely to be lost when a river is dammed. In the proposed Usamacinta Dam project area along the Mexican-Guatemalan border, for instance, there appear to be many unexplored Mayan sites that will never be seen and understood before they are forever swallowed up under the waters and mud of another reservoir. As environmentalists in the U.S. have learned, archaeological sites do not possess direct economic value in terms relevant to the development planners who undertake reservoir projects, so their loss is not considered to present much of a utilitarian argument for negative accounting.

D. Class II Environmental Costs

This is the area of project-caused diseconomies which is most often covered by revisionist resource economists, and includes by far the longest checklist of problems:

1. Deforestation

Tropical forests usually represent a major national asset in sustainable timber resource supply, as well as constituting a major source of oxygen recharge and ecosystem maintenance. The world’s tropical forests, however, are being eliminated at a rate of one to two percent a year under the onslaught of slash-and-burn agriculture and national transmigration campaigns often funded by MDBs.\(^\text{18}\) Dams accelerate the process, removing major segments of tropical forests, often with little relation to the scope of benefits provided. The Balbina Dam in Brazil, which was recently completed with funds from a World Bank energy sector loan at the cost of

\(^{18}\) ECOLOGICAL DESTRUCTION, supra note 2, at 4.
$800 million, has been officially described as "a disaster." Currently not functioning, the dam has destroyed 2430 square kilometers to provide only 125 megawatts of power capacity.\textsuperscript{19}

2. Water Quality Effects

Beyond the acidification of impounded waters referred to below, water quality behind dams typically suffers serious degradation. Even if the muddiness and suspended solids precipitate out in the sedimentation process, impounded water is typically loaded with nutrients. When its flows are further warmed by sunlight, it often blossoms into a thick algal soup, with substantial deoxygenation and proliferation of waterweed. Though fish populations often increase dramatically in the first few years of an impoundment's life, the disturbed balance of the riverine ecosystem typically makes fish populations crash five to ten years after project completion, and waterweed and algae then take over the impoundment.\textsuperscript{20} Chemical herbicides can be used to attempt to control the waterweed problem, but these of course cost money and create major potential local health hazards as a further spin-off effect.

3. Other Fish Losses

The downstream effects of dams also cause major changes in the fish life of a river system. As in the case of the Three Gorges Dam in China, for example, there may be not only a threat of loss of nutrients and historical temperature conditions downriver, but also the saturated nitrogen level problems caused by high dams may give downstream fish "the bends," engorging their organs with nitrogen bubbles that kill them.\textsuperscript{21}

4. Other Downriver Effects

As the Aswan Dam illustrated most familiarly, the impoundment of a river eliminates ancient flooding cycles which typically have been built into the ecological and human balance of river valley

\textsuperscript{19} See generally Castanheira, \textit{supra} note 2.

\textsuperscript{20} The boom-to-bust progression is well known in the fisheries literature, and has led to attempts to manage water levels at cross-purposes with energy and irrigation functions. See G.E. Hall, Reservoir Fisheries, (\textit{Am. Fisheries Soc.} 1976); Keith, \textit{Management by Water Level Manipulation}, in \textit{Black Bass Biology and Management} 489 (H. Clepper, Ed. 1975).

use downstream. The lack of seasonal floods can eliminate the referertilizing effect of sediment deposition; without the recharge from upstream erosion, land adjacent to the downstream sediment flow is cut away and disappears, particularly in the estuaries where entire deltas can slowly dissipate.22

5. Seismic Effects and Mudslides

The collection of a large mass of water accumulates immense weight on the area of the damsite and impoundment, weight so unnatural that it may actually throw off the subterranean geological balance of a region, triggering earthquake and other seismic effects. Mud slides may also reduce the effect of the impoundment, triggered by wave erosion undercutting adjacent riparian slopes or by destabilization caused by human deforestation efforts attracted by the reservoir development itself.

6. Human Dislocation Effects

As noted earlier in the case of indigenous peoples, the dislocation of human settlements can pose serious problems to the inhabitants involved. There are also tangible indirect economic costs that may be felt in national and regional terms, as people are shifted from more fertile to less fertile lands, and packed into higher densities than prior to the impoundment which eliminated the land of the oustees.23

7. Disease

The spread of the snail-borne schistosomiasis bilharzia parasite in the Aswan system is well known. In addition to schistosomiasis, dams cause diseases in a broad range of cases including the spread of onocheriasis or river blindness, and increased exposure to malaria. At the Tehri Dam, for instance, the project has recently been blamed for the exposure of more than eight million people to malaria parasites, in a residual effect that had been known to health scientists at least since Ghana’s Volta Dam project which was com-

22 Like Aswan, the Three Gorges Dam will cause coastal erosion and saltwater intrusion problems. ECOLOGICAL DESTRUCTION, supra note 2, at 12–13.

23 Tuchow, supra note 14, at 9 (citing Colchester, The World Bank Ignores Human Suffering and is in Breach of International Law, THE ECOLOGIST 286 (1985), and Kalpavriksh, The Narmada Valley Projects: Development or Destruction?, in THE SOCIAL AND ENVIRONMENTAL EFFECT OF LARGE DAMS 224 (Goldsmith and Hildyard, eds. (1986)).
pleted more than two decades earlier in 1959. The health effects caused by dams are often accentuated by the fact that they occur in regions far removed from cities and other locations with established health care supply. Nevertheless they do not seem to attract the prior attention of project planners.

8. Irrigation Problems

Schistosomiasis and other waterborne diseases are carried by the irrigation systems of dam projects, but there are other serious diseconomies that can occur in irrigation programs. Lands which are irrigated, especially in hot climates, tend to concentrate whatever mineral salts exist in the river water, thereby producing an increasingly salinized soil system through the process of evaporation. India's Punjab has large sections of once-arable land now salted by intense irrigation. In other cases, as in the Kiambere Dam and Bura irrigation projects on Kenya's Tana River, the lands irrigated may turn out to be unsuitable for the intensive levels of irrigated agriculture posited by the engineers as the basis for irrigation benefits. In the latter project, for instance, the World Bank sponsored project has turned out to have less than half the irrigable hectares than it planned to develop, seriously diminishing the benefits promised to the dislocated populations, and raising the cost of those benefits to an average of more than $20,000 per household.

9. Sabotage Potential

Another major potentially catastrophic diseconomy which typically is not discussed by project planners is that the focus of so much capital, technology, and pent-up hydrologic pressure at one location increases the nation's and the downstream local region's vulnerability to sabotage. A high dam more than 200 meters tall, backing up millions of tons of water, may be less than 10 meters thick in poured concrete at its base. One car bomb driven over the dam anywhere along its upriver side could wipe out the investment

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24 Hanlon, supra note 7, at 15. The economic burden of caring for these Indian malaria victims was not included in the World Bank's sector report or financial development package in preparing the estimated costs of the Dam. Id. (citing Ecoforum, December 1982, and Environmental Impact of Multilateral Development Bank-Funded Projects: Hearing Before the Subcommittee on International Development Institutions and Finance of the House Committee on Banking, Finance and Urban Affairs, 98th Cong., 1st Sess. 37, 41 (1983) (statements of Dr. Brent Blackwelder and Bruce Rich, Esq.).

25 See Threatened Peoples, supra note 2.
as well as the downstream population, cities, and economy.\textsuperscript{26} Even without active sabotage, moreover, dams may contribute seriously to civil unrest. Frustration and anger against the Chico Dam plans in Ferdinand Marcos' Philippines were apparently the instrumental reason why many local peasants and tribals whose political affiliation previously had been toward the Presbyterian missionary church, turned toward the communist New Peoples Army.

10. Class Dislocation

Other politico-economic effects of big dams disequilibrated human social ecology as well as natural ecology. Poor people most often suffer the losses of large dam projects, while the more modernized and wealthier sectors of the population typically are those which are able to reap the benefits of dam construction; the tensions thereby produced can have substantial effects.

11. Dysfunctional Settlement Patterns

When a dam goes into an area, it typically attracts hordes of unskilled laborers who flock to the area in an ad hoc inflow migration from other areas of the country. As in the Brazilian projects, the immigrants often exacerbate problems by killing or exploiting the indigenous residents of the region, throwing up shanty towns, establishing settlements lacking in government services, and practicing a form of agriculture that may accelerate the deterioration of land quality. Increased inappropriate agricultural practices, such as slash-and-burn agriculture and slope farming, may also drastically increase sediment loads pouring into the impoundments.

12. Loss of Foregone Development Assets

Implicit in a number of the foregoing categories is the fact that dams not only eliminate the particular assets and resources located in their impoundment areas, but eliminate as well whatever potential there was for appropriate economic development based upon those assets. The loss of fertile soils is a classic example. The most fertile soils of any region typically are those lying in the river valleys. These are the soils which will be completely eliminated as a useful

\textsuperscript{26} The only recorded instance of this type of sabotage happened during the Second World War, but it has been rumored that the United States government has recently given plans of several dams, built in Nicaragua with U.S. aid, to the leadership of the contra guerilla forces, for whatever use they make of them.
national resource by the effects of an impoundment (The fertility of the soils, instead of raising crops, then contributes to dysfunctional biological oxygen demand and algal pollution effects of the impoundment). In this regard, it is politically understandable why engineering and feasibility studies for large dams never include agricultural maps classifying the quality of soils that will be lost under the impoundments. In the same way, they rarely include maps showing archaeological losses, or losses of mineral deposits which will be placed under water, etc. The project planning maps typically take account only of topographic dimensions, and of the discrete towns and commercial centers existing within the projected reservoir areas, entities which clearly will require removal operations. To register the existence of valuable assets to be lost in the project area would directly undercut the project’s cost-benefit ratios, and hence is counterintuitive to development planners.

13. Cumulative Effects

The practical reality of a large dam project is that many of the foregoing costs have cumulative synergistic effects. The biological, human, social, and economic effects of a series of dam projects in a region can cause qualitatively greater compounded problems, as populations grow more densely settled, on less fertile ground, with more susceptibility to disease, and less food available.

14. Alternative Technologies Avoided

Finally, a further logical loss caused by major capital focus on dam projects is that they foreclose a nation’s ability to undertake alternative technologies for development. The $500 million Nam Choan Dam in Thailand, for instance, will cause a host of environmental problems, and the cost of its construction and its electrical power supply system will prevent Thailand from investing in cogeneration technology. (Cogeneration could have produced more gigawatt hours than the dam for only one-fourth the dam project’s cost, by providing appropriate generation facilities in conjunction with the boilers of already-existing sugar processing plants throughout the country.)\(^\text{27}\) In 1986 it was predicted that electricity consumption by major power users in Brazil could be cut thirty percent by the year 2000 through energy conservation and efficiency mea-

sures. Such programs would cost $10 billion compared to the $44 billion that building the dysfunctional structures generating 22,000 megawatts of unnecessary power would cost. The institutional initiative and bureaucratic mass represented by dam projects, in other words, foreclose the implementation of potentially more beneficial national development strategies, and that cost can be large and cumulative.

Further, dam projects may produce benefits that are not particularly needed by a nation, and promote inappropriate low-multiplier exploitative industries. The Bakun Dam in Sarawak, besides eliminating five thousand tribal people and contributing to serious deforestation problems, is being built as a location for the Reynolds Aluminum Co. Pollution laws in the Federal Republic of Germany prevented Reynolds Aluminum from expanding its operations along the Elbe River and hence it will move its operations and its pollution to the Third World.28

E. Class III Environmental Costs

It is extraordinary to discover that a major environmental category of project defects that are quite serious, quite foreseeable, and not at all “external” to project accounting, has nevertheless regularly escaped the prior attention, and subsequently haunted the project efforts, of international dam builders:

1. Sedimentation

Rivers carry suspended solids eroded from upstream in their watersheds. When the flow of a river is slowed behind a dam, the soils and sand carried by the water precipitate downward, and can fill up a reservoir impoundment area with remarkable speed. One large Soviet project on the Yellow River in China so miscalculated the sedimentation rate that the dam was filled up with mud deposits before it was even finished. It now stands as an embarrassing albatross, the river flowing straight over its spillway with no effective water storage impoundment effect.29 The Tehri Dam in India was

28 International discussions have been occurring in the past two years about the negotiation of a multilateral convention prohibiting “pollution flight” to the Third World. This would be a salutary initiative that nevertheless raises mixed feelings in developing nations that hope for new cash flows at the same time that they worry about exploitation as the dumping ground for the detritus of Western industry. See infra note 36.

29 See Williams, supra note 2, at 11, briefly describing the plight of the Laoying Reservoir in China.
planned to produce benefits over a serviceable life of at least 100 years. Because of sedimentation, it currently is likely to be filled up in thirty to forty years.\textsuperscript{30} The Tarbela Dam in Pakistan completed in the 1970's will have mud levels reaching its hydroelectric intakes by 1992, requiring multi-million dollar retrofitting to attempt to rectify the situation. The $20 billion Three Gorges Dam project in China risks massive sedimentation from its impoundment effect on the muddy Yangtze River, sedimentation which is unlikely to be prevented by recently designed diversion tunnels near the dam site.\textsuperscript{31}

Sedimentation, moreover, turns out to be a problem that is not restricted to areas near the dam. Waters slow their rate of flow far upstream, where they enter the impoundment, in some cases beginning to deposit their sediment loads a hundred miles from the dam structure itself, causing obstructions and water elevations unforeseen by the engineers.\textsuperscript{32} As noted above, sedimentation also causes a large number of indirect Class II diseconomies that are typically ignored by feasibility studies.\textsuperscript{33}

Because sedimentation so seriously eliminates water storage capacity, cutting down on hydroelectric and irrigation potential, it is simply extraordinary that engineering feasibility studies can repeatedly ignore or underestimate its effects.

2. Scour and Other Structural Effects

Large dams produce downstream discharges of tremendous force, which can cause major local environmental effects and in some cases cause unforeseen destructive effects to the dam structures themselves. The Tarbela Dam, for example, had a concrete

\textsuperscript{30} Hanlon, \textit{supra} note 7, at 16 (citing 1987 \textit{Hearings, supra} note 2, at 42 (statement of Dr. Brent Blackwelder)).

\textsuperscript{31} See generally \textit{ECOLOGICAL DESTRUCTION, supra} note 2, at 12.

\textsuperscript{32} When rivers deposit their suspended solids at the upstream end of a reservoir they form large sand bars or mud bars that rise toward the level of the reservoir itself. Because the suspended grains of sand and soil interlock upon deposition, they are not readily dislodged by the slightly increased water flows that occur over their upper surface. Accordingly the "hump" of deposited sediments grows and forces the waters to go higher to pass over its mass, in turn causing further upriver sediment deposits. As this process of upstream hump deposition continues, the upstream elevation of the reservoir may be as much as a meter higher than the elevation of the reservoir at the dam structure itself, thereby flooding many more kilometers of terrain than the engineers had foreseen, totally changing the hydrologic characteristics of the planned impoundment. I am indebted to Dr. Philip Williams for information on this and other details of hydrologic problems affecting dams.

\textsuperscript{33} See \textit{supra} text accompanying notes 19–25.
spillway that produced such strong flows that they began to cut the spillway itself away on the downstream side, requiring construction of a massive deflector system rushed into place to control the destructive process.

3. Destructive Water Quality

Large dams typically cause major offsite Class II water quality consequences. In a number of tropical dams, particularly those like Brazil’s Tucurui or Balbina dams, where large amounts of trees and vegetation were inundated without being removed from the reservoir area prior to impoundment, there is a marked increase in the acidity of the rivers’ waters. This not only has ecological effects, but also causes extensive corrosion of hydroelectric turbines so that they can be used for only a fraction of their normal working lives. Drifting vegetation and logs, moreover, clog turbines and spillways in a long continuing process in which the organic materials of the impoundment area break down and slowly drift downstream.

4. Structural Failure

Approximately one percent of the world’s dams actually do fail, sometimes because their bedrock geology was not sufficiently studied (as with the Teton Dam in the United States); in others seismic effects are generated by the dams themselves, by having such huge masses of water collected in fragile geological zones.

These obvious and direct Class III costs have often been used by environmentalists in trying to build cases for modification or abandonment of international dam projects. Though they represent serious concerns (and also, as we have seen, have spillover effects into more extended Class II diseconomies), the momentum of the development process still produces contemporary dam project designs that do not take sufficient account of even these most direct project problems, which is perplexing in the light of the promoters’ purported project orientation.

F. Summary: MDB Dam Projects Cause Significant Real Environmental Costs

In sum, the catalog of potential and existing problems caused by large dam projects is sobering, and would seem to require logical

34 See Castanheira, supra note 2, at 138.
35 See generally Williams, supra note 2, at 10.
consideration along with the glowing promises of development that typically accompany such proposals. Serious environmental problems do occur. Many development projects have only narrowly positive benefit-cost ratios, even when using optimistic official benefit projections and restrictive cost estimates. Given such marginality, it would seem evident that many of these projects, if account were taken of their real costs, would produce net disbenefits to their struggling nations' economies. The World Bank has been a major part of the problem, spending $30 billion for large dams in the Third World. Despite recent improvements in World Bank policy at least 400,000 persons have been involuntarily displaced from reservoir impoundment areas since 1979, with another 1.5 million impending in India's Narmada project. Indeed, the momentum of the World Bank lending process over past decades not only failed to prevent but appears to have created, fostered and encouraged diseconomic projects in a number of Third World nations.

III. Administration Process: Problems and Reforms

A. The Causes of the Problems

Faced with the preceding catalogue of diseconomies and their serious cumulative effects, the question must be asked, how is it that they can have occurred? At one level the answer is that apparently, in many cases in the past at least, the potential occurrence of these environmental harms (even those disruptive effects which directly undercut the project itself, our Class III effects), were to a major degree simply ignored in large dam development projects. The engineers and financial development planners who hypothesized and created projects did not take account of a wide array of negative economically tangible and intangible effects. At another level, however, the question must be asked why the process did so ignore predictable and measurably substantial diseconomies.

To surmise how the international lending process may go askew, it is not irrelevant to view the process from an environmentalist observer's perspective. To an environmentalist, the problem comes down to the fact that the MDB development loan process is a closed system which quite naturally resists consideration of the negative consequences of its own development mission.

A large dam project can be given birth in a number of different ways, by the request of a borrowing nation government, by the suggestion of international engineering and construction companies
(which often lobby Third World governments to urge them to request dams), and the like. If one goes back through project histories, however, the primary project initiators in many cases are the multilateral development bank’s staffers themselves. Bank staff constantly review conditions in developing regions and, as in the case of the World Bank, prepare “sector analyses” which hypothesize a variety of different development projects which may be attractive opportunities for World Bank loans.

Already environmentalist observers would assert that there is a problem. Within the World Bank, staffers have “lending targets,” levels of monetary lending that the Bank wishes to achieve in a given year; these lending targets are typically increased annually by the Bank’s management. This form of incentive loads the dice in favor of large capital-intensive projects and against lower-budget alternatives that ultimately might prove to be more fitting development initiatives for the conditions of target nations. Appropriate lower-tech alternatives may exist, but it may take as much time and effort to prepare plans for them — for agricultural cooperative systems, decentralized low-technology production facilities, public education, low mechanization modern agriculture, and other decentralized infrastructure projects — as it would for a large dam project. To some MDB staff, it surely must be more enticing to use their time to produce a multi-million dollar dam rather than a lower-budget, lower-tech appropriate development project.

The borrower country makes a formal request for MDB consideration of the dam project. Most developing nations, it should be noted, do not have a heightened sensitivity to the kinds of environmental costs noted herein, and share the common impression that environmentalism is Western aesthetic luxury, and a contradiction to the growth of national economic revenues. If developed nations want to talk about environmental restraints on the Third World, having amassed wealth and momentum by despoiling their own resources, they should pay the developing nations for the privilege. The “North-South” equity debate reflects the fact that

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36 This North-South debate, fueled by belated scientific recognition of the immense importance of rain forests and savannahs to global oxygen cycles and climatic equilibrium, understandably strikes some developing nations as post-colonial condescension and exploitation. In the late 1960s President Jomo Kenyatta of Kenya argued often, in his so-called “Arusha principle,” that developed Western nations should pay for the privilege of pushing their environmental scruples upon the Third World. It is a concept that has recently resurfaced in promising “debt-for-nature” swaps, whereby developing nations agree to set aside vulnerable regions and resources in return for a measure of debt forgiveness.
humankind has long assumed that states generally develop wealth by pillaging natural resources. A sign of the realities of project planning, moreover, is that in some cases the borrowing country government may not even be actively involved with the preparation of its own request, and may get to see it as prepared by the MDB staff only shortly before the time the formal request is actually made.

Within the MDB as well as the borrowing nation, the invention of the dam's name gives the project a concrete identity from that point on. It becomes "the Dunkoro Dam Project," and the referent is clear: a particular place, a particular kind of project, a known development commodity, a particularly highly-focused form of capital investment, and a particular set of stirring development images — mighty piers of concrete, thundering spillways, clouds of white spume with electrical transmission towers in the background.

After having been hypothesized and requested, the proposed dam project goes into the feasibility study stages. This is very much a closed process, typically carried out by MDB staff and/or working groups from engineering firms involved in the development profession. There is typically no input whatsoever from those who will be most directly affected by the dam proposal, and often very little input from the borrowing country government. Feasibility studies tend to be construction analyses done by the potential construction interests. The feasibility study for the Three Gorges Dam in China, for instance, was prepared by a consortium of Canadian corporations who are likely to be prime candidates for the construction of the dam itself. Multinational contractors are an intimate part of the development profession, and typically play an active role within the MDB planning process. The graphics prepared in the feasibility studies incorporate the shortcomings noted in the environmental overview above: they tend to focus on the dam structure itself and its reservoir impoundment, on projected power demand curves and repayment schedules. The studies do not include maps of the natural assets that will be eliminated by the project, soil maps showing the fertile soils that will be inundated, and make little or no attempt to assess intangible costs and potential development assets foregone. Feasibility studies generally tend to prove the feasibility of the project as hypothesized.

38 Ecological Destruction, supra note 2, at 12.
After the identification and preparation stages in the project cycle, the dam proposal passes to the project appraisal report stage. At this point the staff takes the initial feasibility studies and prepares an overall presentation of the project for the Board, typically including an overall benefit-cost assessment. Prior to 1987, this appraisal stage was the only occasion where the small environmental staff of the World Bank was required to have any formal involvement in the project analysis process. Unfortunately, project appraisal reports replicate much of the same mission momentum discernible in prior stages of the process. The benefit projections typically (at least from the perspective of outside observers, environmental analysts, and resource economists) tend to inflate estimated potential benefits, and constrain the range and magnitude of estimated project costs, direct and indirect. The environmental inputs and commentary on projects at this stage tend to be rather flaccid and forlorn. In the case of the Nam Choan Dam on the River Kwai Yai, for instance, noting the presence of six endangered species, the environmental staff was merely able to insert the comment that these rarest species “will be forced to move elsewhere.” The tone of the environmental staff was resigned to the inevitability of project completion, positing a biological relocation which in scientific terms was highly unlikely to be successful.

In some cases projected benefits do not aggregate sufficient amounts to justify projected costs. World Bank project appraisal reports have occasionally based their subsequent affirmative judgments that a project should move forward on the assertion that the dam would create substantial amounts of “unquantified benefits.” This rationale is paralleled by American porkbarrel construction agencies which claim intangible multiplier effects on the plus side of the ledger while typically avoiding consideration of unquantified negatives.

In some cases, as with the Narmada project, the ministries within the borrowing country government which had been promoting the development loan bypass normal domestic review by those ministries that might raise questions regarding indigenous peoples, population resettlement problems, and environmental impacts. In the Narmada case the government of India had not issued its environmental clearance, as required under Indian law, prior to

39 See generally The Project Cycle, supra note 37.
40 Hanlon, supra note 7, at 19 (citing 1987 Hearings, supra note 2, at 40 (statement of Dr. Brent Blackwelder)).
prior approval. The necessary studies had not been made, yet the environment ministry was finally pressured into making a "preliminary approval" without factual record so as to permit execution of the loan.

Prior to final loan commitment, the project must be finally approved by the Board of Directors. Sitting atop a process which has gone from "lending target," through increasing institutional investment in the production of the dam proposal, substantial momentum has by this time been generated within the MDB. It is little wonder that the executive directors, at least until recently, rarely if ever refused to approve such projects, absent extraordinary external pressures.41

B. An Environmental Perspective on the Process

Looking at this development process, environmental analysts would note the institutionalized mission orientation throughout the stages of project development that narrows the scope of planning considerations and makes the ultimate project a foregone conclusion. The process is dominated by the engineering perspective — what can be done physically, with existing technology — and by the multifaceted inducements of large capital-intensive projects. There are institutional benefits for all the varied interests in the development profession, for multinational construction corporations and their home governments (Italy and France, for example, have often taken a strong role in encouraging construction of such large projects by their own nationals), for promotional "insiders" within the borrowing country (development ministries and those interests which will profit most directly in fiscal and political terms from the project activity), and for the MDB itself. The active participants in the formation and development of the particular project become personally invested in its progress. The participating interests will profit either in fiscal terms or in mission terms with a sense of accomplishment of having built a specific large dam.

Environmentalists would analyze this problem as that of an immensely powerful decisional process run entirely by "insiders" whose direct motivations — profit, institutional momentum, political power accrued, etc. — are not directly tied to the overall best

41 Some environmental observers argue that the Boards of Directors, i.e. the Executive Directors representing donor nations, consistently defer to the staff on major loans and therefore exercise little direction or control over the day to day life of the MDBs.
rational development of the particular country or region. The domi­
nating motivation for some if not all of the participants in the 
process is hardly likely to be "what is best for Gabon." Gabon's 
particular national needs, the environmentalists would assert, may 
merely serve as an opportunity for the engine of the development 
apparatus to "do its thing": hence the focus on building the largest 
possible projects, and the aversion to low-tech low-budget projects,
to investment in education, to decentralized production, and the 
like.42

Such critics recognize, in other words, that rational accounting 
as a goal may actually miss the real motivations of some of the 
development establishment as it applies to a particular project. Ra­
tionality is not necessarily the dominating internal drive. The al­
truistic desire to transfer maximum benefits to a needy people is 
not always the dominating reward or motive for large capital-inten­
sive project promoters. The self-serving motivations of human na­
ture at large are what environmentalists see, and to some extent of 
course, there probably is truth in their observation that human 
organizations tend to seek to perpetuate themselves. There is an 
institutional need to sustain and expand activity in order to justify 
organizational existence, and there is ego gratification to the human 
mind in the image of something very large that has resulted from 
one's efforts. Profits for some of the actors in the development 
process are also certainly a motivation and in some cases perhaps it 
is even corruption that actually pushes along projects that involve 
billions of dollars of cash flow in less developed countries. There is 
also a sort of engineer's technological imperative — what can be 
built must be built. In the case of dams, moreover, there may even 
be a touch of atavistic magic. There is something visceral in the 
pleasure that comes from making nature do one's work: throwing 
up a fragile barrier before the forces of a river's hydraulic power, 
watching the river tamed from raging torrent to placid pond, rising 
up behind a man-made wall. And there is something of an engi­
neering competition: The largest power output dam in the world, 
Itaipu in Brazil, generates about 11,000 megawatts (MW). The en­
gineers who initially planned the Three Gorges Dam in China 

42 The same overall criticisms have recently been developing with regard to the mid­
1970s orgy of borrowing, fueled by Western commercial banks' eagerness to reinvest OPEC 
petro-dollars, that helped produce the developing nations' current excruciating debt burdens. 
The process of "churning" by which banks and borrowers spun each other into an acceler­
ating dervish dance of development lending, produced many uneconomic projects whose 
failures (and consequent unrepayable debts) cannot be laid solely at the debtors' door.
changed its original plans so as to increase the dam's elevation substantially, when it became clear that raising its height could make it the largest generator output dam in the world at 13,000 MW. Since then, the planners for the dam at Xingu in Brazil are meeting the Three Gorges challenge, apparently planning their dam so that it can be the biggest.43 One wonders if there would be the same competition going on if the development profession were staffed by women instead of men.

C. Reforms and Reformers

It may well be that the environmental perspective is unnecessarily jaundiced. The record of MDB development loans for large dam projects over the years, continuing in the present and projected into the immediate future, however, indicates that serious problems indeed do occur. Over-capitalized and under-planned development initiatives with serious diseconomies are born, nurtured, and pushed to fruition, not prevented, by the MDB development lending mechanism. It is thus altogether likely that some of these dam projects should not, if there were an overall rational accounting, be built, and others should be undertaken only with very severe modifications and mitigations built into the project proposals.

Rational accounting has not, until recently, been encouraged within the MDBs themselves. Pressures for reform were not generated within the MDB structures or within the development profession at large. Instead, the pressures have come from external reformers, almost exclusively non-governmental organizations in affected Third World regions and similar interest groups in the developed nations.

The coalition that mobilized reformist pressures upon MDB development lending was initially put together by representatives of several U.S. environmental groups. These groups had developed extensive legal and political expertise in the course of fifteen years of domestic environmental initiatives, many involving water projects. The coalition included the Environmental Defense Fund, the Environmental Policy Institute, the National Resources Defense Council, Sierra Club, National Wildlife Federation, and Rainforest

43 According to one source within the profession who would rather not be quoted by name, "the members of the dam building fraternity all carry around with them this little handbook listing the world's biggest dams; they're forever publishing papers trying to prove that theirs is the biggest, the tallest, the widest, the most massive, has the biggest earth-fill, the most water impounded, the highest generative capacity . . . ."
Action Network. Some of these groups had occasional international experience, but the MDB effort was innovative in the scale of its comprehensiveness, persistence, and international networking. The U.S. groups were joined by Canadian Probe International, the British branches of Friends of the Earth and Survival International, and the West German Regenwalder (Rainforest) Information. A critically-important ever-growing number of Third World NGOs also joined. These NGOs had formed to resist local development projects and joined the network, sometimes at the risk of their lives and safety.44

This coalition began to build an analytical factual record detailing the destructive consequences and diseconomies of the MDB's neoclassical economics approach to development lending. In the case of dams, they collected case examples of most of the kinds of project diseconomies chronicled hereinabove. The strategy was to focus pressure on the World Bank, assuming that the Bank would be potentially more responsive than the borrowing countries or the smaller regional MDBs. The World Bank was also politically vulnerable in the U.S. and many Western donor-nations because it did not have a significant political constituency within the U.S. Congress or the European parliaments. The strategy was accurate and effective.

In functional terms, the NGO coalition urged a series of changes in the way MDBs planned their development projects:

1. Early Overview Analysis

A meaningful, comprehensive, realistic look at an early stage of project analysis, incorporating a sufficient rational overview, could insure that projects which do not make overall sense can be filtered out of the process early on, before they gather institutional investment and momentum.

2. Active Open Consideration of Alternatives

One of the major problems that reformers see in the process is that once the MDB staff and development interests have focused on a particular high-technology, high-capitalization project idea, they systematically avoid considering alternatives that might preclude the construction of the proposed dam. Rational cost-benefit

analysis can only be accomplished by considering common sense alternatives to proposals.

Some kind of environmental impact statement process, reviewable within the agency and by external observers, is useful in this endeavor. The indirect, intangible, or long-term diffuse and cumulative diseconomies of a project need to be considered along with the direct projected benefits normally featured in feasibility studies.45

Open information is also a necessary part of a rational development loan process. MDBs have characteristically been extremely closed with their data while projects were brought to the point of construction. Nevertheless, the computer profession reminds us of the epigram "garbage-in-garbage-out": a decisional process can only be as good as the range and accuracy of the data supplied. If a process systematically excludes all data that is negative to completion of a project, then the decision will not be fully rational nor can it be expected that the project will develop as planned. "What the banks are in some need of, from the environmentalists' perspective, is glasnost."46

3. Participation of Non-Governmental Organizations (NGOs)

NGOs are an important source of real life evidence about the effects of a project on a locality, a region, a nation, and even the planet. NGO participation is important in more than political terms. It assures that a wide range of real costs, as well as benefits, will be considered in determining the feasibility of a project. Until very recently the World Bank, like other MDBs, asserted that it was inappropriate to communicate with NGOs because it "talked only with governments." There was, of course, a constant flow of communication between MDBs and numerous private entities, partic-

45 The United Nations' Environment Programme (UNEP) would be a fit vehicle for assisting in (or even taking full responsibility for) the preparation of MDB environmental impact statements. UNEP, formed shortly after the United Nations' Stockholm conference of 1972, and based in Nairobi, was established to strengthen international environmental protection efforts. See, e.g., Nanda & Ris, The Public Trust Doctrine: A Viable Approach to International Environmental Protection, 5 Ecol. L. Q. 291, 292 (1976) (citing the Report of the U.N. Conference on the Human Environment held at Stockholm, 5–16 June, 1972, U.N. Doc. A/C 48/14 at 9. UNEP possesses great expertise and potential, but to date has had little practical effect because it has no functional substantive powers. Giving UNEP responsibilities for studying and monitoring environmental impacts in MDB development projects, with required UNEP approvals prior to initial and supplemental funding, would strengthen UNEP and promote international environmental cooperation.

46 Nanda & Ris, supra note 45, at 318.
ularly multinational construction firms, development consultants, and representatives of regional development associations. The integration of informed NGO participants in the development planning process, however, is a way to open a conduit of relevant information that would be otherwise excluded from development loan considerations.

4. Subsequent Realistic Audits

Projects, as they are completed and put into operation, should be subjected to retrospective studies to determine the extent to which they actually created the benefits posited and the extent to which extraneous diseconomies and costs caused problems. Because the actual performance of dams has been so problematic, it appears that there has never been a comprehensive overview accounting of the true costs and benefits of an international dam project after it was completed. The World Bank does prepare some retrospective project reports, but these are quite limited in their scope of accounted costs and consequential effects. The lack of accounting demonstrates an aversion, environmentalists would say, to accumulating the retrospective hard facts which might demonstrate that other ongoing projects should not be built. Retrospective audits as a means of mid-course correction and process feedback are a logical requirement of an ongoing successful development program.

5. External Accountability

If it is difficult for a system to police itself, it would be useful to have mechanisms in which outside observers could have an authoritative analytical role in the process. Whether this be a form of judicial review, or some sort of overall economic and social review tribunal, external accountability is one way by which the mistakes of the past could realistically be improved upon.

The reformers who have been attempting to implement these functional improvements in the MDB development loan system have generally been skeptical of MDB reform from within. They rarely have found it practical to focus their efforts on intellectual persuasion. For their part, the MDBs have, at least until recently, been inhospitable to the reform message. Over the past decade, the most active efforts for implementation of environmental reforms in the lending process have come from outside the institutional structure. In Third World dam locations, for example, projects have been resisted through strikes, demonstrations, sabotage, and human
road blocks. These methods often garner publicity, sometimes encouraging political re-evaluation of positions, but they have rarely been successful in the longer term for they fail to present their positions in comprehensively articulated form. Some resistance to the current development process has been in the nature of civil insurgencies. In other cases, there are political backlashes against development initiatives. In the developed nations, some NGOs, not necessarily part of the MDB reform coalition, have staged media events. They have attempted to embarrass MDBs by staging sit-ins or placing large banners with embarrassing messages on the facades of MDB headquarters.

If there is value in considering the problems and potential reforms of the MDB development loan system, as in the case of international dams, there should be better ways in which the system can integrate the merits of these pluralistic points of view.

IV. Legal Avenues for Reform and the Question of Donor-Nation Pressure

Faced with a situation posing MDB development interests and their NGO critics at loggerheads, with important merits supporting different aspects of the position of each, it is altogether desirable that some institutionalized resolution of these issues be found within the legal system, rather than in protracted eco-guerilla actions in the media of the West and the backcountry locations of Third World projects.

A. Evolving International Law Norms

The law, of course, operates in different ways in different arenas. At the most general level, one approach to reforming the MDB lending process would involve legal initiatives to define principles of international law. Professor Paul has analyzed how the definition of human rights in developing countries could provide a basis for MDBs to reform the process by which they may disrupt and dispossess indigenous populations in development areas. The dramatic human costs occasioned by the World Bank's Narmada project, or the Balbina and Itaparica projects in Brazil, provide a setting where human rights appear to be threatened. At this level,

47 Paul, supra note 10.
however, the definition of international law principles is quite abstract, and does not now present practically applicable legal theories.

Some environmental activists have accordingly gone beyond the broad definition of human rights, to assert that in some cases MDB dam projects have implemented "genocide" in their effects upon indigenous peoples, a claim that, if it could be substantiated, could draw upon recognized positive international law norms and conventions. Such claims of genocide, however, represent an extremely drastic avenue for integrating human costs into development planning. A genocide argument is not likely to promote careful adjustment of interests, but rather invites inflexible polarization.

Other broad international principles might be found in international declarations, like the U.N. Declaration on the Human Environment issued at Stockholm in 1972. It could be argued that articles 13, 14, 15 and 25 of that Declaration in particular declare international law principles requiring overall review and sensitivity to social and natural resource diseconomies caused by development projects.\(^{48}\) The problem with the Stockholm Declaration and other such general declarations is, of course, that they have no direct practical enforceability and must await future specific implementation by U.N. action, by treaty, or by convention.

Customary law, too, can evolve to encompass environmental concerns. The past decade has brought increased international awareness of environmental issues, especially transboundary pollution issues, radioactive and otherwise. This awareness, coupled with relevant international declarations, can be expected to lead

\(^{48}\) The text of those articles states that:

13. In order to achieve a more rational management of resources and thus to improve the environment, States should adopt an integrated and coordinated approach to their development planning so as to ensure that development is compatible with the need to protect and improve the human environment for the benefit of their population.

14. Rational planning constitutes an essential tool for reconciling any conflict between the needs of development and the need to protect and improve the environment.

15. Planning must be applied to human settlements and urbanization with a view to avoiding adverse effects on the environment and obtaining maximum social, economic and environmental benefits for all. In this respect projects which are designed for colonialist and racist domination must be abandoned . . .

25. States shall ensure that international organizations play a coordinated, efficient and dynamic role for the protection and improvement of the environment.

United Nations Declaration on the Human Environment, issued at Stockholm, 1972. The Declaration was accompanied by "Recommendations," several of which would be applicable to the instant debate, but with the exception of the recommendation on weather modification, they have received little follow-through.
over time to the recognition of enhanced norms of environmental customary law. Because of the special sensitivities of the North-South debate, however, and the diffuse effects typically internal to developing nations in the MDB setting, it is far more likely that the development of an environmental customary law will focus at least in the near term more upon problems in the nature of localized transboundary torts or delicts.

1. International Conventions

Some existing conventions do offer potential applicability to the problems posed by poorly conceived dam development projects. A fascinating example occurred in the Narmada project. There, faced with massive dislocation of indigenous peoples and little planning for relocation and mitigation of the effects on villages and tribal cultures, threatened indigenous peoples formed a union under the auspices of the International Federation of Plantation and Agricultural Workers (IFPAW). In October, 1985, the IFPAW filed a complaint with the International Labor Organization (ILO) in Geneva alleging multiple violations of Convention Article 107 of the ILO. Under the terms of that convention, signatory nations, including India, are prohibited from taking development actions which lower the living standard of indigenous peoples or fail to supply them with equivalent cultivable land.

The ILO forwarded those allegations to India, with an initial official expression of concern that the convention was being violated. Faced with this ILO inquiry, both the government of India and the World Bank responded with indignation to the international second-guessing of their plans for Narmada. After several months of tense political negotiations, the ILO was persuaded to withdraw from its review of the effects of the Narmada project. Despite the fact that the ILO intervention was ultimately neutralized, however, this initiative showed the potential utility of review and pressure embodied in existing conventions (as well as the potent ability of the development structure to resist such intervention).49

49 As a further example, the Convention for the Protection of World Cultural and Natural Heritage, Multilateral, 27 U.S.T. 37, T.I.A.S. No. 8226, provides for each state to protect and conserve its cultural and natural heritage. Id. at Art. 5. After ratification by the requisite number of states it may also be construed as reflecting an evolving statement of international customary law. "Natural Heritage" includes "geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation." Id.
2. Internal MDB "Law"

Within the MDBs as well, there are several kinds of "law" which can have an effect in implementing a reform of the development process.\footnote{It may be helpful to compare briefly the internal structure of the International Bank for Reconstruction and Development (World Bank) and the International Monetary Fund. The Bank and the Fund are separate international organizations with distinct characters. Both the Bank and the Fund are currently involved with developing countries in Africa, Latin America and Asia. Both organizations, however, were formed at the Bretton Woods Conference of 1944 with an eye toward the reconstruction of Europe after World War II.}

The main purpose of the Bank today is financing investment for the development of its member nations.\footnote{The Relationship Between the International Monetary Fund and the World Bank, 15 Creighton L. Rev. 499, 504 (1982) [hereinafter The Fund and the Bank].} As a result, the Bank tends to involve itself in long-term financial activities focusing on particular projects designed to promote development of a country.\footnote{Id. at 515. These activities include analyzing the composition and appropriateness of development programs and project evaluation. Id. at 514.}

Briefly, the Bank funds its lending by requiring each member to subscribe shares of its capital stock. Some subscriptions are always subject to the call of the Bank. The majority of subscribers are subject to call only when they are required to meet obligations of the Bank to its bondholders.\footnote{Id. at 505. These obligations arise from Bank borrowing to make direct loans or from the Bank guaranteeing loans made by private investors. Id. The total amount of the Bank’s outstanding guarantees, participations in loans, and direct loans cannot exceed 100% of the unimpaired subscribed capital. Id.}

The Fund, in contrast, focuses on short to medium term financial problems. It is concerned with broader problems than those which the Bank addresses. The purposes of the Fund are set out in detail in Article 1 of the Fund charter. Briefly, the Fund is primarily responsible for adjusting temporary balance of payments disequilibria. The Fund is also responsible for evaluating and assisting its members in working out stabilization programs as a sound basis for economic advance.\footnote{Id. at 514. These functions are by nature broader than the Bank’s because they require international collaboration. To make collaboration effective the members agree to undertake certain obligations of conduct and to make the Fund the administrator of this conduct. Id. at 501.}

One of the most important features of membership in the Fund is "conditionality."\footnote{Gold, The Growing Role of IMF Standby Arrangements, 1984 J. Bus. L. 308, 312 (1984). Since their inception in 1944 the Fund and the Bank have grown closer in purpose. The Fund, for example, established an "extended facility" policy under its Second Amendment. This policy is designed "to assist countries with economies suffering from serious imbalances in international payments because of structural maladjustments in production and trade in countries with economies characterized by slow growth and an inherently weak balance of payments position that prevented pursuit of an active development policy." Gold, The Fund and the Bank, supra, at 515–16. The explicit relationship this policy has with development pushed the Fund closer to the Bank. In addition, the Fund now gives greater attention to savings investment and production in programs that it supports with its resources. Id. Similarly, the Bank has moved closer to the Fund by increasing lending for structural adjustment. Id. at 516–17. Under such programs the Bank can provide longer term finance}
laration of Environmental Policies and Procedures Relating to De-
velopment," a general statement of commitment to integrate envi-
ronmental concerns into the development planning process. Unfor-
tunately, although some MDBs including the World Bank
took some minor actions to implement the declaration, includ-
ing the hiring of one or more environmentalists on staff,51 in general
the actions of the MDBs amounted to little more than symbolic
gestures. In the World Bank, for example, a poll of the Bank's
regional directors three years later showed that a significant number
did not even know of the existence of the Bank's environmental
policy declaration.

Each MDB does have the potential to issue internal regulations
and guidelines that would assure implementation of analysis at
effective points in the decisional process. Until recently, however,
there was little evident interest in doing so. The concerns of envi-
ronmentalists and indigenous peoples' advocates were treated as
minor marginal considerations, instead of an indication of tangible
diseconomies that might undermine the success of projects as a
whole.

Furthermore, there is "law" in each development loan itself, a
sort of project-by-project "law of the case." When an MDB negoti-
ates a development loan with a borrowing country, it can build in
whatever requirements it wishes, and these requirements can apply
tremendous constraints upon most countries to assure that planned
projects will not create human or ecological destruction. Unfortu-
nately, this potential is only as good as the institutional motivation
that would put such requirements into effect and subsequently
enforce them, and over past years such incentive has been hard to
discern.

The World Bank, however, can be applauded for actions it has
taken in the past two years. On May 5, 1987, Chairman Barber
Conable made a formal address asserting that environmental con-
siderations were not only useful ideals to integrate within the plan-
ning process, but were also substantive functional necessities to

than the Fund or commercial banks. Id. The goal of the lending is to reduce deficits in the
balance of payments of developing countries and to ensure that the deficits do not jeopardize
current investment programs and activities that produce foreign exchange. Id. Thus, the
Bank attempts to stabilize a country's balance of payment disequilibrium in the short-run to
accomplish the long term goal of development.

51 In 1984 the Bank incorporated comprehensive policy declarations and procedures
into its Operations Manual, but as President Conable's address, supra note 2, implicitly
admitted, these appear to have been honored in the breach.
assure successful projects. "Good ecology," he stated, "is good economics . . . If indeed the World Bank has been part of the problem in the past, it can and will be a strong force in finding solutions in the future." 52 Conable's address was the first major sea change within the World Bank's internal government and appears to have led to practical results. The Bapai Dam in Nepal appears to have been halted subsequently under the review encouraged by the chairman's address. From around the world, NGOs and the environment ministers of borrowing countries have reported that World Bank staff and development interests within the particular countries have for the first time taken seriously the arguments, data, and environmental accounting procedures long urged upon them. The Inter-American Development Bank has hired an environmental staff. The African Development Bank similarly appears to have internalized the lesson that projects that create environmental problems will often have an economic backlash that renders major development loan initiatives nugatory. In the Itaparica Dam in Brazil, the World Bank insisted that the "law of the project" include not only promises on the part of the borrowing country government that indigenous people would be adequately relocated (assurances which in the past had often turned out to be merely rhetorical), but also that enforceable contracts be made with local NGOs so that if relocation efforts were non-existent or inadequate, the persons directly affected would have an immediately available legal remedy in the courts of the borrowing country itself. 53

In the last two years, in fact, the World Bank has implemented a major reorganization, dividing its operations into four global regions, with a central directorate in Washington, D.C. In 1980 the World Bank had one ecologist on its entire world-wide staff. In May, 1987, the World Bank had only three environmental reviewers trying to analyze 300 projects each year (in addition to various public relations duties!). 54 After the reorganization and President Conable's environmental policy declaration of May 5, 1987, the Bank created an Environmental Department in Washington, D.C. and environmental units in each region. Environmental guidelines and the Operations Manual have been updated, and a new sensitivity to environmental diseconomies appears evident.

52 B. Conable, Address to the World Resources Institute, supra note 2.
53 There are reports, however, that Electrosul, a state utility, has recently reneged on such a promise at the last minute. See World Bank Loan, supra note 2.
54 Rich, Funding Deforestation, supra note 2, at 3.
Environmental observers, skeptical as ever about internal reform efforts because of the inherent tensions within institutions between promotional momentum and protective principles, take a wait-and-see attitude. "We like what they're saying, but we are still seeing the same old stuff coming out at the end of the pipeline, especially in the energy sector," said one participant. They find hope in the Bank's public declarations, and in the fact that, after years of insistence that "the Bank will only talk to governments," the World Bank has entered into active dialogues with the NGOs, even setting up a formal "World Bank-NGO Committee" to institutionalize communication.

Noting the apparent dramatic shift in MDB environmental consciousness, the environmental observers nevertheless skeptically ask why it has occurred. While they may applaud the MDB initiatives they have seen within the last two years, there is a strong and not unreasonable suspicion in the minds of many NGO observers that the dominating reasons for these reforms lie outside the MDBs themselves.

In part, the MDBs' newfound recognition of the rational importance of environmental accounting may be attributed to the significant 1987 report of the World Commission on Environment and Development, which was available to President Conable in draft form when he made his May 5 speech. This "Brundtland Report," prepared by a blue ribbon international commission (Mrs. Brundtland was Prime Minister of Norway; the U.S. representative, among high-ranking national officials from 22 nations, was William

55 Telephone interview with Dr. Brent Blackwelder, 30 Nov. 1988.
56 See, e.g., the remarkably affirmative speech by Moeen A. Quereshi, Senior Vice President, Operations, the World Bank, before the Society for International Development, 22 April, 1988:
The doors of our headquarters and of our resident missions around the world are open. We hope new partners for development, new allies against poverty, will come to see us, even as Bank staff work to seek them out .... As late as ten years ago, what we knew about World Bank operations in many countries depended mainly on bureaucratic lines of information and supervision. Within developing country governments, implementing agencies reported on what they were doing, and country authorities tried to maintain quality control. The Bank supervised the projects it financed, but within the Bank, too, we depended on bureaucratic lines of management .... In today's global village, NGO networks can report a problem in rural Northeast Brazil to Sao Paolo, to Brasilia and throughout the world within a week. Where bureaucratic eyes are astigmatic, NGOs provide vivid images of what is really happening at the grassroots.
Ruckelshaus), issued a strong call for drastic changes in international environmental performance. The report targeted international economic pressures and lending programs as important causes of past problems and indispensable parts of necessary fundamental international environmental reforms.

A further critical motivation for the World Bank's policy shift, however, beyond the intellectual persuasions of the Brundtland commission findings, appears to have been a practical threat of direct statutory pressure on Bank appropriations, and a subsequent barrage of political pressures from donor-nations, orchestrated by the coalition of environmental NGOs.

3. Donor-Nation Pressure on MDB Policy

There is no accepted analysis of the status and legitimacy of donor-nation pressure seeking to force particular policy initiatives upon international lending organizations, but actions focused on environmentalism and indigenous peoples have recently created prime examples of this phenomenon. The initial and quite dramatic example of such socio-ecological pressure originated in a U.S. congressional initiative. Over the past ten years, the NGO coalition based in the United States has been increasingly successful in persuading powerful members of Congress that capital-intensive, multilateral development projects may cause more problems than they solve. Drawing upon the tactics of a successful initiative against commercial whaling which used U.S. statutes (threatening import cutoffs) to apply pressure on parties to the International Whaling Convention, the environmental coalition levied congressional financial pressures on the MDBs.

Senator Robert Kasten, Republican from Wisconsin and past chairman of the relevant Senate appropriations subcommittee, emerged as a particularly important congressional figure in this initiative, backed by current chairmen Daniel Inouye, in the Senate, and Representative David Obey, in the House. Over the last several fiscal years, Kasten and Obey have attached an elaborate statutory provision to the annual bill appropriating money for the World Bank. These appropriations riders declared that the executive directors of MDBs appointed by the U.S. must "vigorously promote the integration of environmental and cultural assessments and protections in the processing of multilateral loans" and attached further

practical requirements to enforce that goal. The statutory language is detailed, contains very specific mandates and prohibitions, and has been enforced by periodic accountings from the Treasury (which through its IDCA and NAC is directly responsible for briefing the U.S. executive directors to the World Bank and other multilateral development banks). The U.S. Congress has held twenty-one hearings on the environmental problems of Bank lending in the past five years. Because of the pressure applied through U.S. legislation upon the Treasury Department, the U.S. representatives have undertaken critical reviews of ongoing development loan proposals, and in several cases have voted against or abstained from loan approvals. Because the United States wields such a major block of votes within the MDBs (voting being proportionate to the financial sponsorship share of each nation), these actions have not created a merely symbolic stance, but rather have enforced upon the World Bank the need to pay functional attention to the environmental principles the American statutes represent.

The pressures brought to bear upon the MDBs did not stop with the U.S. initiatives. In the past two years there have been growing numbers of Western donor-nations which have weighed in with declarations of the practical importance of environmental analyses in MDB lending, and making direct requests that the MDB boards incorporate environmental reviews into a reformed development loan process. These pressures have come from West Germany, Great Britain, the Netherlands, and the countries of the Scandinavian bloc. At the Bank’s recent annual meetings in Berlin, Canada asked the Board of Directors to implement an environmental impact statement review procedure for all development construction loan projects.

The NGO coalition, in sum, has helped to marshal a wide range of external donor-nation pressures upon the MDB lending process, and can be credited with a fair measure of whatever successes flow from the ongoing MDB reforms.

4. The Propriety of Donor-Nation Pressure on MDBs

Even if one assumes that quite salutary environmental reforms have been instigated by donor-nation pressure, the use of direct

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59 By statute, moreover, the Agency for International Development in the United States Department of State is now required to publish a list every six months of MDB projects that confront environmental problems, an "early warning system." See Aufderheide & Rich, supra note 2, at 309–10.
pressure on an international compact entity raises worrisome concerns in some observers’ minds. No matter how altruistic, the fact remains that certain nations are able to have this effect upon the MDBs in part because they possess financial leverage on the Bank board. For constructive reforms on the international stage to rely upon altruistic bullying is a troubling concept indeed.

What then is the propriety of a donor-nation’s applying direct pressure to lending decisions of the Bank? The question is presented with particular clarity in the recent U.S. environmental initiative because there the U.S. Congress applied its pressure via direct statutory enactment (although the same issue is present in less formal interventions). For purposes of analysis, let us take two separable kinds of formal, unilateral donor-nation action. First, the Kasten-type appropriations situation where specific directions are given to a country’s Executive Director on the Bank board to cast votes or to refrain from voting on particular issues in particular ways. Second is the further troubling possibility of direct economic threats — the threat of withdrawal of funding for the World Bank — tied to conditions of Bank action or inaction on particular loans and particular issues. The second category of pressure, moreover, may be further separated into threats designed merely to withhold extensions or commitments for further funding for the Bank, or a more drastic form of statutory condition cutting off appropriations for previously agreed-upon funding commitments meeting existing Bank quota obligations.

There is a spectrum of arguments that may be applied to both these categories of unilateral donor pressure on an MDB. At one end of the spectrum is the opinion of those members of Congress who have attached or attempted to attach policy conditions to appropriations bills. As the office of Senator Kasten has indicated, it is always the right of a sovereign people to determine how their taxpayer dollars are going to be spent; so if the legislature attaches directive conditions to its funding bills, or threatens a cut-off of their taxpayers’ contributions based on particular policy positions, that is no more than one would expect and demand as a right of a democratic people. The office of Senator Steven Symms of Idaho strongly echoed the same position. If World Bank loans in the agricultural and mining sector create Third World competitors for Idaho farmers and mining corporations, it is perfectly appropriate

for a member of Congress to attempt to limit the effects of World Bank-financed competition through appropriations riders.62

Senator Symms has, as recently as the Foreign Aid Appropriations Act for fiscal 1989, prepared amendments that stopped short of a retroactive cut-off of committed funds.63 One provided that if a loan designed to produce debt service revenue were approved by the Bank over the dissent of the American representative, then the future U.S. commitments of funds to the Bank would be reduced proportionately. No such amendments, however, have passed the Congress. The Treasury Department, which instructs the U.S. MDB representatives, has announced that it views such amendments as violations of international legal commitments and hinted strongly that the agency would argue for a veto in such a case; for its part the World Bank has made it clear that it would not accept any grant of funds from a member state if such conditions were attached.64

At the other end of the spectrum is the quite skeptical position taken by Dr. Ibrahim Shihata, Vice-President and General Counsel of the World Bank. In his speech to the International Third World Legal Studies Association in Miami65 and in memoranda prepared within the Bank in other similar controversies, Dr. Shihata has eloquently argued that all such unilateral threats or suasions applied by donor-nations are improper and even contra legem under international agreements, unless the policy conditions are directly related to the economic integrity of the Bank and its loans to member states. His position is grounded upon an understandable aversion to any politicization of the Bank and other MDBs, that might draw them like any other international player into the hurly burly of world politics and factionalism. Going back to cases arising in the

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62 The terms of such conditions, of course, cannot appropriately be cast as specific domestic protection, but such more or less latent objectives may be the actual motivation of restrictions cast in other terms.


The Congressional offices, supra notes 60 and 61, make the further point that, since Bank loans are based on borrowing from commercial banks, not merely upon appropriations granted by member states represented on the board, the withdrawal of appropriated funds, even after a prior agreement to contribute has been made, does not directly undercut the Bank's lending program: "At the most it might cause the bond rating of the Bank to drop," requiring higher interest rates, but lending could continue.

64 Interview with policy-level Bank staffer, January 4, 1988.

early 1970's and earlier, Dr. Shihata argued that both Article IV, section 10 and Article V, section 5(c) of the Bank's charter prohibit direct interference in Bank affairs by member states. Article V provides that:

[T]he President, officers and staff of the Bank in the discharge of their offices, owe their duty to the Bank and to no other authority. Each member of the Bank shall respect the international character of this duty and shall refrain from all attempts to influence any [officers] in the discharge of their duties.

Article IV adds that, in the deliberation of the Bank and its officers:

[O]nly economic considerations shall be relevant to their decisions, and these considerations shall be weighed impartially in order to achieve the purposes stated in Article I [setting forth the productive development mandate of the World Bank].

These conclusions, Dr. Shihata said, "clearly indicate that, as a general principle, the Bank, including its Executive Directors, may not take into account political considerations." Based on the cited Articles, Dr. Shihata concluded in a formal memorandum to the Bank's Board that "member [states] of the Bank are under an obligation not to influence the Bank's President and staff in the discharge of their duties, and Executive Directors are under the duty not to act as the instrumentality of member [states] to exert such prohibited influence." Dr. Shihata also, however, "recognized that there was no legal sanction available to challenge a vote by an Executive Director which is motivated by political considerations."

A fundamental proposition of Dr. Shihata's argument is that constraints like environmental or human rights accounting are "political." He specifically recognized that in some circumstances "there are political situations which have effects on the country's economy or on the feasibility of project implementation or monitoring which should be taken into account." Insofar as there can be established a link, direct or indirect, between the environmental consequences of a loan and the ability of the nation to repay it, that kind of economic nexus would justify such "political" intervention. As a

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66 Id.
68 World Bank document, supra note 67, at 12-17 (emphasis added).
general proposition, however, Dr. Shihata's argument stakes out a strong presumptive position against the supposed propriety and legality of such "political" interference by any member state in the activities of the Board of Directors.  

Dr. Shihata's position is echoed by the foreign investment committee of the American Branch of the International Law Association, which recently released a report strongly condemning efforts by member states of international agreements, specifically the United States as a member of the Multilateral Investment Guarantee Agency (MIGA), attaching statutory conditions to participatory activities under the MIGA international convention.

The Committee believes that such a unilateral directive to a unilateral economic institution ... will be unacceptable to the other parties to the Convention. They will question the right of one nation to dictate to the Agency that the nation's [interests] must be protected ... at the expense of other signatory nations. If these conditions are required, U.S. participation in this multilateral Agency will be barred [sic] and [the Convention] would effectively be destroyed.  

Somewhere in the middle between the two polar positions is the opinion of several MDB legal counselors who informally expressed a fundamental pragmatism about such donor-nation pressures on international lending. A "whole host of appropriations riders" has been attached to recent U.S. funding statutes. According to one informal World Bank source, the Bank has implicitly taken the position that such pressure is appropriate since it involves guidance to a national representative by its member state. Critical to the middle position is a modification of the fundamental distinction made by Dr. Shihata. If indeed the Bank's Executive Directors are legally to be regarded not as representatives of their appointive or elective member states, but rather as individuals deriving their authority from and owing their paramount loyalty and duty to the

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69 This is apparently a position which the Brazilian government agrees with. Brazil, concerned with its ability to generate power as it becomes increasingly industrialized, has proposed building 136 new dams, among which 70 are in the Amazon Basin. This plan exists despite growing environmental concerns expressed from both within Brazil and outside on the detrimental effects such damming will have on the existence of the rainforests and the world's climate. Brazil believes that hydroelectric power is the cheapest and best way to provide energy, and the country's energy concerns outweigh any environmental concerns expressed by other nations. See Simons, The American Forest, Brazil Wants Its Dams, but At What Cost? N.Y. Times, The Week in Review, Sunday March 12, 1989 § 4.1.

70 Report by Committee on Foreign Investment, American Branch, International Law Association (October 15, 1987) (chaired by David G. Gill, Esq.).
Bank, as Dr. Shihata argues, then political pressure upon them is improper (and the scope of permissible "economic-linked" political pressure is concomitantly narrowed). The pressures of a particular national special interest undercut the required dominance of the collective international enterprise.

If, on the other hand, one regards and accepts the status of Executive Directors as delegates, representing the position of the state or states that put them on the Board, then many instances of donor-nation pressure upon MDBs become less troublesome, less destructive of the international agreement underlying the MDB process. Such a recognition de-escalates the latent tension represented by the alleged "violation" of international agreement, in effect thereby rationalizing reality.

Indeed, political reality indicates that some unilateral pressure on MDBs is completely inevitable and will take place regardless of whether or not it is formal or informal, direct or indirect, linked to economic concerns or not. The initial choice of an Executive Director of course is guided to some degree by the character and political predilections of the appointee, and to consider that political communication in this modern age would be limited only to discussions prior to appointment ignores modern international political reality. From this middle perspective, the application of pressure to the appointees of member states, or to the elected representatives of blocks of member states, is perhaps best regarded with a shrug. In any event, the compromise position would note, the directives are not an attempt to bind the MDB organization as such.

According to the middle position, then, the only case where donor-nation political interference with lending decisions becomes contra legem is the case where the prior commitment of a member state to contribute a specified amount of money is unilaterally rescinded in whole or in part according to various political conditions. In this case a prior binding international agreement is being unilaterally abrogated. In other situations, including conditional refusals to commit further supplementary contributions, a member state is merely exercising its right to contract or to decline to contract. An example of the latter phenomenon occurred when the U.S. Congress passed Public Law 98-181, in November 1983, with instructions to Executive Directors to refrain completely from voting unless the representatives had consulted with and received approval from appropriate Senate committees. Even this kind of stringent condition was arguably proper because it was attached to a resolu-
tion agreeing to increase the quota for contribution to the Bank, a financial undertaking that had not been previously agreed to.\textsuperscript{71}

Consent once given is binding, however, and unilateral withdrawals or rescissions are not appropriate after a commitment has been made. Short of that action, however, unilateral pressure is as pragmatically acceptable as it is inevitable.\textsuperscript{72} The whole world is political; the whole world is economic;\textsuperscript{73} therefore it is unrealistic to expect political pressure not to occur, and ultimately possible to argue that most political intervention can be found to be, at least indirectly, linked to concerns about the "economic" ability of the debtor nation to repay a development loan.

From this pragmatic middle perspective, the further forms of hortatory donor-nation environmental pressure that have been applied to MDBs by Canada, West Germany, the Scandinavian states and others, are not at all inappropriate. The World Bank is a major actor in the Third World, created and funded primarily by developed Western nations. What happens ecologically, economically, and socio-politically in the Third World inevitably affects the world order and the varied interests of the developed states. Once one concedes that the MDBs are not cocoon-like neutral technical entities, existing in a sector of economic activity somehow divorced from historical and political realities, then the arguments of donor-states attempting to persuade MDB boards on various policy issues can be seen as part of the stream of information and dialogue that constantly and properly flows between players in the international order. Bankers are instruments of international development policy, not a priesthood.

\textsuperscript{71} This is not to say that states' refusal to continue funding ongoing international programs does not raise important questions of collective support for doctrines of internationalism. An example is the debate that followed the U.S. withdrawal from funding for UNESCO. See The United States' Withdrawal From UNESCO, 24 INT'L LEGAL MATERIALS 489–530 (March 1985); Jordan, Boycott Diplomacy: the U.S., the U.N., and UNESCO, 44 PUBLIC ADMIN. REV. 283 (1984); Keltz, International Ethical Obligations: the Implications of the U.S. Withdrawal From UNESCO, 1 NOTRE DAME J. L. ETHICS & PUB. POLICY 365 (1985).


\textsuperscript{73} Even in the case of the Chilean loans, in which the United States government has required its representatives to dissent from development loans so long as the regime violated human rights norms, World Bank staffers generally stake a noncommittal position, refusing to condemn this stance as a violation of international law or internal Bank Articles. This may reflect an implicit interpretation of U.S. pressures as linked to "economic" matters, or a more straightforward recognition of the fact that major states' representatives will reflect national political considerations and there is nothing that the Bank can do about it.
Ultimately then, the most problematic legal controversy is presented not merely by the application of political pressure to Bank lending decisions, but by the drastic potential case of unilateral rescission of prior existing commitments to the Bank. Even in such cases, it is true, the Bank has no enforcement mechanism and it is questionable to what extent it would seek formal legal redress. As so often in international law, the resolution of such controversies would come down to a very basic question of internationalism. If the political actor deems domestic political and legal considerations to be dominant over international commitments, then there is no effective constraint except the burden of world opinion, both of member states and of the international legal profession. Most states, however, have clearly accepted the doctrines of internationalism in their concept of law. Absent radical domestic political changes, it would appear that doctrines of state sovereignty will not usually be applied casually to abrogate international development commitments.

V. Summary

From the foregoing discussion it can be asserted that the example of international development loans for construction of large dam projects, especially in tropical areas of the Third World, presents a wide range of troubling consequences that have often been systematically and disastrously excluded from prior planning efforts and MDB lending procedures. The failure of the international development loan process to review and understand the many serious diseconomies caused by such dam projects is attributable at least in part to completely understandable internal institutional dynamics. An institution that is geared towards large capital-intensive projects may find it dysfunctional and motivationally unattractive to consider reasons for such projects not to be built.

74 The dangers inherent in the actions of any nation that simultaneously urges collective adherence to international legal norms, and selectively asserts its own sovereign right to avoid such responsibilities, is disturbingly evident in the Nicaragua harbor mining case and its aftermath. See The United States Withdrawal From the General Compulsory Jurisdiction of the International Court of Justice, ICJ Rev. 39-46 (June 1986); Cole, The World Court Withdrawal: an Embarrassing Inconsistency?, 8 The National Law Journal, Nov. 18, 1985, p. 13, col. 1; Chayes, Nicaragua, the United States, and the World Court, 85 Colum. L. Rev. 1445 (1985) (Professor Chayes was counsel to Nicaragua in the ICJ proceedings); Pax, Nicaragua versus United States in the International Court of Justice: Compulsory Jurisdiction or Just Compulsion?, 8 B.C. Int'l & Comp. L. Rev. 471 (1985); Lieberman, Law and Power: Some Reflections on Nicaragua, the United States and the World Court, 10 Md. J. Int'l L. & Trade 295 (1986).
The environmental movement has applied much political pressure upon MDBs over the past decade, largely without success until the mid-1980’s, attempting to reform the lending process that has produced a series of disasters in international water development. In the last two years the World Bank and other MDBs have made major procedural reforms within their internal processes designed to address the problem of environmental diseconomies in their projects. To outward appearances, this major change of heart on the part of the MDBs can be attributed in at least significant part to the pressure applied by donor-nations, including direct unilateral mandates to directors requiring environmental reviews and standards in the MDB lending process, with the implicit potential for funding threats in the future.

The external pressure of donor-nations presents a tangible and persuasive catalyst to the internal reform of MDB institutions. Such pressure, however, raises some questions about the propriety and even legality of the phenomenon, irrespective of the arguably salutary changes it may work in the implementation of international lending. From the perspective of jurists sensitive to the development of international legal norms, it is at least troubling that such a phenomenon has no inherent limits. In the short run, environmental observers will say that important sets of environmental considerations are now being considered where before they might never have been. The health of the planet may thus continue to benefit from the efforts of the 1980’s. Debate about the proper relationship between MDBs and individual donor-states is likewise likely to continue into the future.