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THE UNITED STATES, CHINA AND THE THREE GORGES DAM: TOWARD A SOUNDER FOREIGN ENVIRONMENTAL POLICY

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The Three Gorges Dam project on China's Yangzi River is the world's largest hydroelectric undertaking. While Chinese leaders say the dam will improve river navigation, prevent periodic flooding, and provide the needed electricity for China's growing economy, many doubt that the dam will be able to meet the proponents' claims and instead point to evidence of environmental catastrophe if it is built. Under pressure from NGOs, the Clinton Administration has opposed the provision of competitive export financing for the dam. This decision sparked criticism from U.S. executives who argue that by not participating the United States is losing jobs and the opportunity to mitigate the negative aspects of the dam. This paper argues that the U.S. position was justified. As part of a consistent and credible environmental policy to promote sustainable development, the United States should integrate environmental guidelines into its commercial diplomacy. U.S. policy towards China should provide support for prudent environmental policies as well as environmental technology transfers, both to foster environmentalism and advance U.S. commercial interests.

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INTRODUCTION

Construction of the Three Gorges Dam on China's Yangzi River began in earnest in late November 1997, perhaps marking the end of almost 15 years of debate on the project among American policymakers. However, the case highlights a key dilemma in U.S. foreign policy-making that is likely to remain for years to come: how to balance U.S. commercial interests with environmental concerns. Though lauded by environmentalists, the Export-Import (Ex-Im) Bank's decision not to provide financing for U.S. equipment suppliers vying for dam-related contracts has been criticized roundly by American corporations. They claim the policy hampers their efforts to break into the lucrative Chinese market. The prospect of similar potentially destructive megadams being proposed in other emerging economies means that U.S. policy on the Three Gorges Dam sets a precedent that will either aid or hamper American efforts to promote sounder environmental policies abroad.

This paper will examine the Ex-Im Bank's decision and its implications for U.S. foreign environmental policy. To this end, it will first outline the rationales behind support for and opposition to the project, including an evaluation of the net environmental impact of the dam. The following section will consider several issues raised by the case in order to assess the merits of the U.S. government's stance. The paper concludes with some recommendations for a more credible and consistent U.S. foreign environmental policy.

BACKGROUND

The concept of the Three Gorges Dam is over 75 years old, dating back to when it was first proposed by the nationalist leader Sun Yat-Sen, in 1919. The dam was a dream of communist leader Mao Zedong, who felt it would be a potent symbol of China's self-sufficiency and ability to develop without western aid. In 1992, Chinese leaders officially announced plans to harness the river's power by constructing the world's largest hydroelectric dam only after communist leaders managed to silence opposition and pushed the plan through the National People's Congress. The Three Gorges refers to a 120-mile stretch of limestone cliffs along the upper reaches of the Yangzi River where the water drops precipitously through the Qutang, Wu, and Xiling gorges. The region is linked to folklore and important historical events, and its beauty has inspired Chinese painters and classical poets such as Li Bai for centuries.

Since the dam's approval, however, the project has met with significant opposition, both domestic and international, as human rights groups,

environmentalists, and historians decry the extraordinary costs the dam will incur. The dam, which will be 1.3 miles long and 610 feet high, is expected to be completed by 2009. It will create a 385 mile-long reservoir stretching back up the river that will totally engulf the Three Gorges, as well as 115,000 acres of rich farmland, thirteen cities, hundreds of villages, and countless historic temples and archeological sites. Between 1.4 and 1.9 million people will need to be resettled.

The project poses significant ecological dangers, technical challenges, and human rights issues and has raised questions about the rights of other industrialized nations to intervene in Chinese internal affairs. It is the largest, most expensive, and perhaps most hazardous hydroelectric project ever attempted. Both its technical and social dimensions are staggering. In China, the project has fueled a heated debate over its feasibility and scientists as well as concerned citizens fear an economic and ecological catastrophe. According to some, the economic, social, and ecological costs of completing the dam are not warranted (International Rivers Network 1997). Experts from around the world believe the dam cannot control the river nor meet China's electricity demand (Kahn 1994, Burton 1994, Pearce 1995, Sullivan 1995). After conducting a four-year study of the project's feasibility, the World Bank concluded that the project design is not "an economically viable proposition," and refused financing.

In November 1997, however, the Three Gorges Dam project entered a crucial phase. The Yangzi River was diverted and construction commenced. The Chinese government has invited foreign companies to take part in the project with the prospect of lucrative exports and entry into the biggest emerging market in the world. The Japanese, German, French and Canadian governments have stepped forward to help their companies garner a piece of the project. However, under pressure from environmental non-governmental organizations (NGOs), the Clinton administration has opposed the provision of competitive export financing through the Ex-Im Bank, citing concerns about the adverse environmental effects, human rights violations, and economic consequences. American companies have thus been left out of the game.

The decision has sparked considerable criticism from U.S. executives who argue that while the project is controversial, not only is the dam being built, but it is proceeding ahead of schedule. If bids by American firms were approved by the Chinese government, they say, $1 billion of exports to the project would generate over 19,000 American jobs and assure entry into the booming Chinese market for U.S. companies. In the meantime, these jobs are going to foreign competitors. By not participating, execu-

tives argue, the United States is not only losing thousands of American jobs, but also the opportunity to mitigate the negative aspects of the dam. Moreover, they complain that the Chinese market, already one of the world's most competitive, is made more so for American companies because the U.S. government does not always separate political from commercial considerations.

On the other hand, backers of the administration's decision argue that the United States has the moral obligation to stand up for the environment and human rights. They also argue that the withholding of economic benefits is the quickest, and sometimes only, way to get the attention of uncooperative foreign governments, even in cases where the outcome appears futile.

Questions Raised

Since this is the first attempt to build a dam of this magnitude, different opinions regarding the benefits, duration, and cost of the construction have been formulated. On the one hand, it is obvious that the construction of the dam will result in the flooding of a sizable area of land, including entire villages and historical sites. On the other hand, proponents of the dam claim that the introduction of such a large amount of clean hydroelectric power into China's rapidly expanding economy might mean a significant reduction in the emission of fossil fuel pollution. Experts warn that the success of the Three Gorges Dam is not guaranteed, and disagree as to the net environmental impact of the project. A critical question here is whether the environmental concerns of China can be considered a U.S. national interest. Should that be the case, do the developed nations have a right to dictate which environmental impact is more appropriate to China? Should environmental concerns be a part of U.S. commercial policy? Should the U.S. government continue to push the Ex-Im Bank? Should U.S. trade policy continue to try to change foreign government's behavior by unilaterally imposing trade sanctions?

In the following sections, we will examine the U.S. policy towards the Three Gorges Dam. First, we examine the project's net environmental impact and describe the position of the United States. Next, we will discuss the issues raised by the case as outlined above. The concluding section will outline some recommendations for future U.S. foreign environmental policy.

Environmental Benefits and Costs

Chinese leaders argue that the dam will overall have beneficial effects. First, it will generate 18,000 megawatts of electricity, which would

decrease by one tenth the country's reliance on coal power, and thus reduce the amount of pollution over China's cities—one of the most severe problems in China today. Second, it will prevent the periodic flooding of the Yangzi which has already claimed half a million lives this century. At present, 15 million lives are at stake as the river rises ever higher above the surrounding land because of sediment deposits on the river bed, while dikes can no longer be raised safely (Veltrop 1997). The dam is expected to cut incidence of serious floods from once in 10 years to once in 100 years (Xinhua News Agency 1997, China Says Three 1997, Veltrop 1997). Third, it will make the upper part of the Yangzi more navigable, "raising the river's navigable tonnage by a big margin" (China Says Three 1997). Improved navigability would allow ocean-going freighters to penetrate the depths of China's remote Southwest, bringing much needed economic development and prosperity to the region. The project is also expected to develop reservoir fisheries, stimulate tourism in and around the reservoir, improve water quality downstream, protect the lake areas downstream, and enable south-to-north water transfer sometime in the next century (Veltrop 1997).

Since market liberalization in 1979, China's vast economy has grown at a breakneck pace, regularly topping 10 percent annual growth. Accompanying this rapid industrialization has been a tremendous increase in demand for electrical power and coal burning power plants have introduced enormous amounts of pollution over most cities. Pulmonary disease has become the nation's leading cause of death. This heavy pollution has international repercussions as well. Japan, Korea and Taiwan already suffer under the acid rain created by Chinese sulfur emissions. China has now become the world's second leading producer of greenhouse gases. If current growth rates continue, China will need to develop an additional 17,000 megawatts of energy per year for the next decade—eventually reaching an amount equal to total United States generating capacity today (Burton 1994). If coal is used to produce the additional power, the environmental impacts could be extremely serious and certainly would not be limited to within China's boundaries.

However, environmentalists and experts from around the world, as well as eminent scientists and economists within China, do not see the dam as a viable solution to the problem. Whether or not the Three Gorges Dam is ever finished, however, experts say hydropower will account for no more than 20 percent of China's electricity generated by year 2010 (Burton 1994). That leaves no way around a heavy dependence on coal, used widely not only to fuel China's industrial boom, but also to heat homes for a population growing by 15 million people a year. Forecasts indicate that

China's emissions of carbon dioxide will increase from approximately 2.8 billion tons in 1993 to 5.5 billion tons in 2020 (China Looks At 1996). Experts say that the best China can hope for is to cut coal's portion of the energy mix from 75 to 60 percent by the year 2010 (Burton 1994). Even if China was able to improve its large electric power plants, it would not touch the needs of small industrial plants and millions of households for coal. China's most pressing need is therefore to find cleaner, more efficient ways to burn the fossil fuel, reducing emissions of carbon dioxide, sulfur compounds, and the incompletely combusted particles that form soot.

Domestic opposition to the dam has centered largely on the poor record of China's Ministry of Water Resources, which includes the collapse of 62 dams in the Henan province in 1975 because of poor engineering and design. The resulting torrents of water wiped out whole cities and took the lives of an estimated 150,000 people (Sullivan 1995). Over 10 million contracted diseases and suffered starvation before the area could be restored and, because the Chinese government never acknowledged the disaster, it was not raised in hearings on the Three Gorges project (Topping 1995).

Anti-dam lobbyists have been calling for an investigation of the Three Gorges construction plans and pushing for more government accountability with the hope of averting the resulting catastrophe if the 36 billion cubic yards of water to be dammed were ever to be released, either due to structural failure or an act of war. Scientists predict that collapse of the megadam would produce a flood 40 times larger than the one caused by the collapse of all 62 iron dams combined, engulfing dozens of towns, and imperiling 10 million Chinese (Topping 1995). The Ministry, however, has denied requests for public comment on the project and has often refused to consider independent opinions from China's private sector (Ibid.).

International environmental groups are concerned that the dam will destroy the natural habitats of many of China's indigenous wildlife species, including the Chinese alligator, the white crane, the river dolphin, and the prehistoric Chinese sturgeon, a fish unique to Yangzi waters (Burton 1994). In addition, contamination of the river by toxic chemicals may dramatically increase if the 1,600 factories in the area are not cleaned up and moved before the waters begin to rise (Sullivan 1995). Experts warn that, by forever changing the hydrology of the river for thousands of miles, the dam will destroy commercial fish stocks and deprive the complex floodplain agricultural systems of the water and silt they need, thereby threatening the livelihoods of 75 million people who live by

fishing or farming along the Yangzi's bank. They also point out that the soon to be flooded land of Waxian prefecture is far more fertile than the high ground to which everyone will soon be moved (Stopping the Yangzi's 1997).

Seismologists fear that the weight of the reservoir water will trigger a fault line which lies beneath the proposed area, causing a massive earthquake and perhaps rupturing the dam itself (Kahn 1994, Sullivan 1995). Experts in hydrology are concerned that the Yangzi's high levels of silt and sediment—about 500 billion cubic meter each year—will clog drainage outlets and create backlogs, possibly flooding upstream cities (Kahn 1994, Sullivan 1995, Topping 1995). The *Wall Street Journal* reported that the amount of silt is so large that it could turn the dam reservoir into a giant mud pie in a matter of months. The silt problem may also impede the passage of large vessels by creating shifting sandbars and channels.

At present, China does not have the technology to control the flow of river silt through the dam project. A detailed four-year evaluation of the Three Gorges Dam project, funded in the late 1980s by the Canadian government and the World Bank at a cost of $14 million, warned that as the silt is carried downriver and deposited in the reservoir the Yangzi will tend to alter its course, thus increasing the risk of disastrous flood. American engineers who visited the site also concluded that the project would not prevent flooding (Pearce 1995).

The dam may also obstruct, rather than improve, navigation by making shipping vulnerable to an untested lock system that will prohibit the passage of ships whenever serious technical problems arise (Three Gorges Dam 1997). Some critics say that the three goals of power generation, improved navigation, and flood control are incompatible (Stopping the Yangzi's 1997). The increased sedimentation and the need to substantially lower the reservoir water level in the summer for flood control would limit power generation and interfere with navigation. They point out that oceangoing vessels could not clear the bridges in Nanjing and Wuhan and enormous locks of unprecedented scale would have to be constructed (Topping 1995).

The Three Gorges Dam is expected to cost more than any other single construction project in history (Kahn 1994). Critics have warned that China's leaders are so determined to build this project, they may have neglected to determine whether it is economically viable. Since construction has begun, the price tag has continued to soar. As late as 1992 the official cost of the dam was $11 billion. Estimates now exceed $75 billion (Kahn 1994, Burton 1994, Pearce 1995). One critic contends that the real

cost could total $77 billion, a sum so great that it could slow China's recent economic boom (Kahn 1994). Some economists believe that the dam will never make economic sense. A 1994 review of design and financing plans suggested a benefit-cost ratio of 0.8, meaning that China could never recoup its investment through flood control or electricity benefits, much less make the project a commercial contributor (Ibid.).

Several opponents of the dam argue that for a lower price, numerous smaller dams could produce more power and greater flood control benefits (Burton 1994, Topping 1995). Such a plan would avert the need for massive population relocation and eliminate the risk of a giant flood. Although ten projects smaller than the Three Gorges are under construction on the upper reaches of the Yangzi and its tributaries, progress is stalling as resources are funneled into the megadam.

Given this evidence, we conclude that the economic and environmental cost of the dam outweigh its potential benefits. The Three Gorges Dam is not a viable solution to China's navigational or flood control needs, nor is it a prudent approach to China's energy and environmental problems.

The U.S. Position

The United States was one of the first countries to express interest in participating in the dam project. In the mid-1980s, government and business collaborated on a Three Gorges working group that conducted a feasibility study of the dam with the aim of winning contracts for American companies. Among the major corporate players recruited by the U.S. Bureau of Reclamation for the study were Bechtel and Merrill Lynch (Tomlinson 1997). In 1985, the working group proposed to the Chinese that the dam be built as a joint venture with selected members of the group. The Bureau of Reclamation was actually hired in the waning days of the Bush Administration by the Chinese to do technical consulting work on the dam. But in 1993, when the Clinton Administration took office, Interior Secretary Bruce Babbitt canceled the project under pressure from environmental NGOs.

In 1992, because of the increasing influence of more environmentally-attuned officials appointed by President Clinton, the Congress added a requirement to the Ex-Im Bank's mandate that environmental reviews be conducted for foreign projects that sought its backing, and the project became the first serious test of the new guidelines. The Ex-Im Bank asked the National Security Council (NSC) to convene a panel to evaluate the costs and benefits of American participation.

In 1993, the U.S. Bureau of Reclamation stated officially that it was no longer convinced that megadams were economically feasible or environ-

mentally sound. It also stated that it will not fund any such dams anywhere in the world.

In September 1995, the interagency NSC panel recommended to the Ex-Im Bank that it should not help finance American companies in bids to assist in the construction of the dam. Deputy National Security Adviser Samuel R. Berger cited three broad reasons why the Bank should not support the project:

> First, we think it would be unwise for the United States Government to align itself with a project that raises environmental and human rights concerns on the scale of the Three Gorges. Second, any decision to provide assistance would present legal difficulties as environmental and human rights group are threatening to sue the Bank if it became involved. Third, the White House has expressed concern about the project's financial viability as private bankers and the World Bank have raised serious questions about the Chinese government's estimates of its cost and economic benefits (Dunne 1995).

The memo also added a clause that counseled the government to "refrain from publicly condemning the Three Gorges project," and to "emphasize the U.S. government's commitment to strengthening commercial relations with China and to helping China meet its basic energy needs" so as to avoid afflicting already strained United States-China relations (Companies Turn Up 1996).

Eight months later, the Ex-Im Bank recanted its former proposition that large hydroelectric projects are environmentally beneficial, and voted unanimously not to issue a letter of interest for the project. According to Martin Kamarck, Ex-Im Bank chairman at the time of the ruling, China had failed to "establish the project's consistency with the Bank's environmental guidelines" (Tomlinson 1997). This marked the first time the Ex-Im Bank refused financing on purely environmental grounds (Ex-Im Bank Rejects 1996).

The Ex-Im Bank, however, stated that if the Yangzi Three Gorges Project Development Corporation, the project's sponsor, provided additional information on plans to mitigate environmental degradation, it would reconsider its position. It also stressed that its decision would not in any way limit or impede American companies from doing business related to the project on private terms or with financing from other sources.

However, because China demands export credit guarantees (essentially insurance to cover contracts) and supporting loans from contractors on all major Three Gorges deals, the Ex-Im Bank's ruling hindered most U.S.-based applicants' chances. As construction proceeds, the Japanese, Ger-

mans, French, and Canadians have stepped forward to help their companies garner a piece of the project, while American firms look on and suffer losses that they say could amount to over $1 billion in exports and 19,000 jobs.

Using private financing over the past few years, for example, Rotec Industries, an Elmhurst, Illinois engineering firm has sold cranes and conveyor belts worth around $50 million to the dam developers and executives reckon a further $100 million of similar equipment will be needed (Tomlinson 1997). But without export credit guarantees the company has lost some potential business to a consortium led by Mitsubishi, which is backed by Japanese export credit guarantees. Caterpillar estimates it lost out on $200 million in sales as a result of the Ex-Im Bank decision. The decision "gave an enormous advantage to our European and Japanese competitors," said William Lane, chief lobbyist for the company in Washington, in a recent interview (Ibid.).

Some U.S. companies were forced to use overseas subsidiaries to stay in the running for the project: Westinghouse and GE—both of which lack hydropower expertise in the United States—routed their bids for Three Gorges work through Canadian subsidiaries (only the GE bid was successful). And Voith's American subsidiary was forced to withdraw from the tender in favor of its German parent, which won $85 million in contracts (Ibid.).

According to the U.S. business lobby, more is at stake than even the hundreds of millions of dollars of contracts. American executives argue that the Three Gorges project is a key way to establish a foothold in China, the world's fastest growing market (Contest Heats Up 1997). Caterpillar, for instance, sees participation in a showpiece project like the dam as a way of developing good relations with local officials and companies. Since doing business in China is all about establishing relationships, companies are gambling that profits will materialize in the future as the market continues to grow and opens further to foreign investment. These companies see acquiring a stake in the dam project as a way of gaining a "first-mover's" advantage.

Critics argue that the Clinton administration's decision illustrates the seeming futility of the increasingly frequent U.S. practice of trying to change a foreign government's behavior by unilaterally imposing economic sanctions. While the United States has led the international environmental opposition to the project by withholding low-cost government financing for the $30 billion project, the high-minded effort has had little discernible effect on the massive venture. The Three Gorges case,

they say, is one of the most visible examples of such American initiatives, but there are many (Iritani 1997).

The critics also contend that the ability of one nation, even a superpower, to cripple other governments by imposing economic penalties is increasingly ineffective in a global economy where foreign competitors will happily fill any void. They claim that the real victims of U.S. government sanctions are the American companies forced out of potentially lucrative markets and labeled as unreliable trading partners. And they call for a policy of "constructive engagement," which entails maintaining economic ties while pushing for change through normal diplomatic channels and multilateral organizations.

The Three Gorges Dam case is also an example of how efforts to promote trade come in conflict with political concerns. The issue is particularly relevant in considering U.S. foreign policy towards China.

In its relations with China, the United States has long been torn between engagement and disengagement. This division is currently at work in trade policy, with experts advocating the necessity of free trade and activists leading public opinion by highlighting its costs. The renewal of China's Most Favored Nation (MFN) trading status has been controversial ever since the Chinese government's 1989 assault on pro-democracy demonstrators in Tiananmen Square. However, consistent with his predecessors since the 1970s, President Clinton argues that maintaining normal trade relations is the best way to integrate China further into the family of nations, promote American interests and ideals, and increase U.S. government influence with the Chinese government. In addition, if the United States were to revoke China's normal trading status, it would jeopardize access to one of the world's most rapidly growing emerging markets, one that already supports 170,000 American jobs and doubtless will support more in the years ahead (Favoring China 1997).

In fact, the United States is China's largest export market. The U.S. trade deficit with China jumped 17 percent last year to $39.5 billion, a larger imbalance than with any other country except Japan (Ibid.). Experts agree that opening U.S. markets to China has indeed had a beneficial effect and that China is displaying a greater willingness to accept international rules (Favoring China 1997 and Friend or Foe 1997).

However, U.S. policy makers are often caught between the above needs and their obligation to act as leaders by sending a signal to the international community when necessary.

Environmental degradation in China poses a threat not only to the Chinese people, but also to the global population as a whole. The state of

China's environment is of concern, particularly as there seems to be little hope for a reversal of current trends. Such trends include the enormous population pressures the country faces, the political problems involved in laying off the thousands of laborers who work in polluting factories, and the fact that despite official recognition of the magnitude of the problem. Chinese environmental officials concede priority to economic development in the short to medium-term. The promotion of sustainable development in China must therefore be considered to be in the U.S. national interest.

Is China's Environment a U.S. National Interest?

This is an issue that is not specific to United States-China relations, but one that is relevant to international relations in general though it is most often debated in the context of North-South relations. Whether or not a specific problem should concern American policy makers depends on whether it has ramifications that transcend national borders.

The creation of the Three Gorges Dam reservoir will spell the extinction of several known and, possibly, numerous undiscovered species of flora and fauna. Ecologists such as Paul Ehrlich have posited that the loss of even "minor" species could upset the delicate balance of ecosystems, leading to major ecological disruptions and sometimes greater losses further up the food pyramid. Moreover, the loss of biodiversity also "deprives humanity of substances needed to produce new medicines, crop varieties and other products through biotechnology" (UN Chronicle 1997, 17).

The weight of these arguments depends on the likelihood and extent to which these developments will transpire. But even if the above claims are accepted at face value, the true cost in economic and more subjective terms is impossible to measure. It is this uncertainty that makes it problematic to characterize environmental degradation in foreign countries as a U.S. national interest. Put bluntly, the connection between the extinction of the river dolphin and U.S. national interests, broadly defined, is simply too tenuous to gain the support of policy makers and the public without spending a significant amount of political capital. Indeed, even within the United States it has been difficult to convince Americans that preserving the spotted owl was worth the loss of forestry jobs in Washington State.

However, when environmental conditions in foreign countries impact surrounding nations or the global environment, the case for U.S. intervention is easier to make for several reasons. First, the potential deleterious effects of environmental degradation on economic growth represent a threat to American export markets and the health of the nation's economy.

Acid rain caused by sulfur emissions from Chinese factories and households has caused billions of dollars of damage to Japan and South Korea's forests. In order to mitigate the effects, these major markets for U.S. exports are forced to divert economic resources which could otherwise be used to build stronger economies or buy more American products (Esty 1997).

Second, the damage that China is inflicting on itself gives rise to similar concerns. Given that China is expected to be an engine of growth for the Asia Pacific region as well as the rest of the world in the next century, the drag on China's economic growth that environmental degradation will bring has serious implications for the American economy.

Third, Thomas Homer-Dixon has written extensively on how resource scarcities can lead to regional instability by spurring transnational migrations or enticing nations to attempt to expand their territories (Homer-Dixon 1994, 5–40). In April 1996, U.S. Secretary of State Warren Christopher's allusion to China's "enormous environmental pressures" underscored fears in the region that resource scarcity within China translates into threat of war and conquest beyond its borders (A Greener China 1996). If such a conflict were to occur, American military and economic leadership would likely be required to bring about a peaceful resolution.

What is ironic about the Three Gorges Dam debate is that the project is aimed partly at reducing China's reliance on coal as an energy source. Therefore, at first glance the position taken by the Clinton administration seems to contradict its interest in promoting Chinese efforts to clean up the environment. However, it is important to clarify that the basis of the administration's policy decision rests on concerns about the questionable benefits and likely costs of the megaproject, rather than disagreement over the need for cleaner sources of energy. If the United States has credible grounds to doubt the prudence of a project, it is within its rights and in its interests to make those doubts known and push for alternatives that it believes are more appropriate.

In sum, China's environment, and those of other countries, should only be of concern to the United States when its improvement or degradation can be linked convincingly to American economic or security interests.

Environmental Policy: Domestic Affair or a Global Issue?

A frequent source of friction in North-South relations is disagreement over environmental policy-making. Some argue that prioritizing environmental impacts is a nation's prerogative. This position stems from the belief that economic growth would be stunted if developing countries were

forced to adopt stricter environmental standards or rely on expensive, more environmentally-friendly technologies. They would also argue that since environmental policies should be a domestic matter, attempts by developed nations to dictate an environmental agenda impinges on the rights of developing countries as sovereign nations and is an example of hypocritical "environmental colonialism."

An illustration of this hypocrisy is a recent World Resources Institute study that scapegoats countries such as China and India for producing between 10 and 30 percent of the world's atmospheric pollution. This study concluded that the key to solving this problem is getting developing countries, in general, to curb their output of air pollutants. However, it could be argued that since China and India account for about 40 percent of the world's population, they should be entitled to emit an equal portion of the world's air pollution. Calculated in terms of share of the world's population, countries such as Canada and Australia far exceed their fair allotment of pollution (Agarwal and Narain, 1995).

Proponents of this view argue that the developed world ignores the environmental damage it caused during the early stages of its own development, and the disproportionate share of pollution and resource consumption accounted for by its citizens. The above claim that environmental restrictions would impede economic growth is true to a certain extent, but it is almost certain that if the pursuit of economic growth in developing countries continues at the expense of environmental protection, the long-term negative effects on development and living standards will be enormous.

Given the higher quality of scientific knowledge and research in developed countries, and because environmental threats are a global matter, the industrialized world has both the responsibility, and the right to pressure less developed countries to follow more environmentally-sound policies. This is even more imperative when poor environmental policies and conditions in one country have an impact on the environment of another.

The claim to this right, however, is legitimate only if developed countries recognize the disproportionate burden that they impose on the environment and the Earth's resources, and acknowledge that they are better able to afford to finance environmental protection than developing countries. This implies that they must be willing to help developing countries to minimize the impact of their development on the environment, and compensate them for the economic benefits they forego by respecting stricter environmental standards.

Should Environmental Concerns be a Part of U.S. Foreign Policy?

The Three Gorges debate highlights one of the major foreign policy dilemmas for policy makers—how to promote responsible environmental standards without conflicting with the commercial interests of U.S. corporations. The environmental lobby pressured the government not to allow Ex-Im Bank support for the Three Gorges project, claiming that American taxpayers' money should not be used to fund environmentally destructive projects. On the other hand, U.S. multinationals argued that environmental regulations would seriously decrease their ability to compete for Three Gorges-related contracts.

This fear of losing business in China is overstated. Many firms who are competing to win Three Gorges contracts privately concede that they do not expect to make any money from the project (Tomlinson 1997). In addition, claims by corporations that they would lose vast amounts of business rest on the assumption that they would win most, if not all, of the available contracts. Loss of U.S. jobs is likewise uncertain, given that American companies such as Caterpillar assemble their machines mostly in Indonesia using parts made in Japan. It is also true that construction projects typically involve much local labor. Therefore, a significant amount of the economic loss to the United States would be restricted to foregone sales and service of machinery that is not truly American-made anyway.

It is worth reiterating that the lack of access to export credits acts as an impediment to, but not a legal ban on, U.S. corporate involvement in the project. Some American firms chose to compete for contracts through their foreign subsidiaries. Those who have not, such as Caterpillar and Rotec, have sold up to $100 million in equipment and services without Ex-Im Bank support (Iritani 1997). Furthermore, despite the lack of export credits, it has been estimated that of the $2 to $3 billion worth of equipment that will be imported to construct the dam, 70 percent will come from the United States (China to Import 1997). Thus, when the difference between the amount of business that ultimately goes to U.S. companies and the amount of business that would have gone to U.S. companies directly is calculated, the figure may not be so significant.

Nevertheless, American firms view involvement in the Three Gorges Dam as a gateway to more infrastructure development contracts in China, a view that the Chinese government also seems to share. Since this project is so important to Chinese leaders—Premier Li Peng, a former hydroelectric engineer, has pushed for it personally—some companies fear that their

business with China may suffer if they do not take part. Infrastructure development spending is estimated to total around $300 billion by the year 2000. It is the prospect of losing such opportunities that compelled the vice president-international of the U.S. Chamber of Commerce, Willard Workman, to characterize the lobbying campaign as "an effort of some extremists in the environmental movement to export their concept of environmental policy" (Yerton 1996) . This statement reflects the view that the Ex-Im Bank should be in the business of promoting commercial interests, not necessarily studying environmental impacts or conveying American foreign policy concerns.

However, a commercial policy without environmental guidelines also exports a certain concept of environmental policy: one that signals that Americans are willing to do anything in the pursuit of profit. If the manner in which U.S. government agencies operate overseas are a reflection of American values, then the Ex-Im Bank is faced with the dilemma of choosing between two sets of values: that of corporations and that of environmentalists.

If neither extreme is an acceptable reflection of American values as a whole, then the solution must lie somewhere in between. The most workable compromise is to establish a minimum standard of environmental guidelines. Given U.S. market leadership in many environmental and infrastructure technologies, as well as the high demand for investment in China and other developing countries, such guidelines should not be too onerous a restraint on American firms wishing to conduct business overseas.

Sanctions: Forceful or Futile?

Within the United States there is a large divide between some policy makers who favor maintaining trade sanctions as a foreign policy tool, and private sector interests who insist that they are only effective in hurting U.S. businesses. The track record for unilateral actions taken by the United States is mixed, but tends to be discouragingly ineffective. A study of more than 100 instances when economic sanctions were applied for political purposes, economic sanctions worked to some extent about one-third of the time (Haass 1997).

This ineffectiveness is a serious concern in a global economy where foreign competitors will gladly fill the void left by American companies, and lends support to those who argue that sanctions or boycotts should only be employed for issues of global security, and then only when there is multilateral support. Holders of this view believe that foreign policy

concerns are more effectively conveyed through "constructive engagement"—continuing commercial ties that help developing countries progress economically (with the expectation of eventual political liberalization). Deeper economic ties, in turn also lend more weight to diplomatic pressure. In the case of the Three Gorges, American expertise could help ensure that the project is built safely and in a manner less damaging to the environment.

On the other hand, imposing sanctions or implementing a boycott are sometimes the most unambiguous signals of disapproval that the U.S. government can convey to protest another country's policies. Though it may be true that greater involvement by American firms may help mitigate some of the risks raised by the construction of the Three Gorges Dam, the more important issue is preventing similarly environmentally suspect projects in the future. This is a very real concern given plans for other megadams in the region such as Laos' Nam Theun 2 Dam on the Mekong River.

Weighing the economic costs of unilateral action against the implications of not registering the government's reservations about the project, taking a stand against the Three Gorges Dam was a justifiable policy action. The extension of export credits would have set a precedent of the U.S. government assisting domestic firms gain contracts in overseas projects despite its fears of possible environmental consequences. Such a policy would do little to discourage developing countries from accepting enormous environmental (and economic) risks. Imagining such risks as quantifiable entities, this policy would result in American firms rushing around the globe trying to "mitigate" environmental damage through incremental reductions in this stock of risk, rather than preventing risks from accumulating in the first place.

The Clinton administration opted to take a stand against what it deemed to be a questionable undertaking. Though the true motivation behind the decision may be open to question, this policy potentially can serve as a basis for the prevention of poorly conceived and environmentally destructive projects.

The critical factor is the contention that American leadership is needed to give an issue such as higher environmental standards the first push it needs to gain currency. Alternatively, American leadership is sometimes needed to prevent these issues from being excluded from the global dialogue. In other words, U.S. leadership is necessary both on the leading edge of the environmental movement and as a last line of defense against unbridled commercialism.

In sum, the above examination of these issues leads us to conclude that the environment should matter in U.S. foreign policy, especially when the effects of environmental degradation cross national boundaries. Moreover, it should matter enough for U.S. government agencies to adopt environmental guidelines. Most importantly, the U.S. government should take unilateral measures particularly in instances when the environment should matter more.

RECOMMENDATIONS

We support the Clinton administration's policy regarding the Three Gorges Dam despite the fact that the policy was largely a result of pressure from special interest groups, and as a trade-off for President Clinton's broken election promise to revoke MFN status for China. A genuine commitment to environmental protection seemed lacking in the decision making process, underscoring the absence of a core policy for the environment. Such a core policy is necessary, because a policy driven by environmental concerns and applied in international transactions helps promote sustainable development in both developing and developed countries, opens the way to multilateralism, and ultimately promotes higher environmental standards. Given the catastrophic state of China's environment, we recommend that the Chinese environmental crisis be given higher priority in the U.S. government's dealings with China. We therefore make the following recommendations toward a credible and consistent U.S. foreign environmental policy.

The United States Should Articulate a Core Foreign Environmental Policy

We believe that there is a need for an overarching environmental policy that would add integrity to the U.S. stance on export and environmental standards. In the long run such a policy may foster sustainable development by encouraging more ecologically sound infrastructure projects in developing countries. There will be instances when even having such a policy in place will not be effective in preventing an environmentally damaging project from being implemented. In these cases, the policy is still valuable, because it sends a signal to the international community that the United States believes that there are minimum environmental standards that must be observed. Additionally, setting such a precedent provides an invitation for multilateral action on an issue of global magnitude. Such a signal may appear futile in the short run, but its impact

on future international negotiations could be critical. Finally, it is also our belief that the United States should consider trade sanctions, if environmental degradation in one country has cross-border environmental or political consequences.

The United States Should Promote Environmental Technology Transfers to China

China suffers not only from a lack of capacity and clean sources of energy, but also from high inefficiencies. To remedy this problem, the Chinese government is preparing to spend more heavily on the environment while continuing to seek foreign funds. The Ninth Five-Year Plan calls for boosting environmental investment from 0.8 percent to 1.5 percent of GDP by the year 2000, and a list of some 1,400 priority projects requiring $21.7 billion has been drawn up to complement the plan. However, these ambitious goals will not likely be met. Currently, there exist more than $1.3 billion worth of multilateral agency-funded environmental projects annually in China. Many of these projects call for pollution control equipment, normally procured with hard currency through international competitive bidding. American companies, considered one of the strongest leaders in environmental technology, have been quite successful when they have participated. Currently, environmental assistance from the United States to China totals less than $10 million, compared to Japan which will provide $183 million in soft loans over the 1994-2000 period (Esty 1997).

The best prospects for market growth in environmental technology includes clean coal and desulfurization technology, both critical in carbon dioxide mitigation. Other areas of potential growth in technology are environmental monitoring instruments, process controls, sanitary landfill liners, and inexpensive but effective wastewater treatment plants. Given such potential market growth in China, this represents a lucrative opportunity for American businesses as well as an effective avenue for promoting efficient energy use within China. In fact, in April 1996, "the United States and China embarked on a program of environmental cooperation to address problems such as rapid urbanization, pollution from energy consumption and the changing agricultural patterns" of an increasingly prosperous population (U.S. Strains, 1996).

The United States should increase such initiatives in order to maximize the competitive advantage of U.S. firms' environmental technology. According to experts, with self-interested help from the United States and

other wealthy nations, a program to install efficient equipment and processes throughout China's energy system could reduce its energy consumption by 50 percent (Hertsgaard 1997).

Exercise Swifter Diplomacy to Offset Possible Retaliation

A possible result of the Clinton administration's decision to block Ex-Im Bank financing for U.S. companies involved in the Three Gorges project is that an antagonized China may retaliate against American businesses by excluding them from large infrastructure projects in the future. Chinese resentment may stem from the perception that Ex-Im adopted environmental guidelines specifically in opposition to the Three Gorges project, soon after it had been approved by the Chinese government.

We believe the United States should have acted sooner through high-level diplomatic contacts in order to forestall any possible retaliatory actions. Although in 1996 Vice President Gore and Premier Li Peng agreed on a program of environmental cooperation, a similar effort should have taken place before or immediately after the Ex-Im decision was announced. To be more specific, it should have included an offer to China to participate in the United States-Asia Environmental Partnership (USAEP)—a program that links U.S. private and public sector environmental expertise with government programs in Asian countries. China is currently excluded from the program due to the events in Tiananmen Square. This policy, adopted under the Bush administration, is inconsistent and counterproductive, because it punishes China for its deplorable human rights record at the expense of its environment. By depoliticizing the USAEP, the Clinton administration would have signaled to the Chinese leadership that the Ex-Im Bank ruling was guided by a genuine interest in the sustainable development of China, rather than by domestic political considerations.

To date, China has not been offered participation in the USAEP, a situation that should be rectified immediately, so as to not undermine United States credibility in the international arena.

We recommend that in the future the U.S. government exercise swifter diplomatic action when it recognizes that new export rules may antagonize trading partners, particularly if strained U.S. relations with the concerned countries may undermine American security, commercial, or other interests.

Conclusion

In the case of the Three Gorges project special interest groups played a major role in influencing U.S. foreign policy. Despite the potential for

short-sighted responses to case-specific conditions, the decision was appropriate also in view of the fact that it led to a significant advance in domestic politics. Moreover, we believe the decision could be viewed as a starting point for establishing a core foreign policy regarding the environment. Having such a core policy will add consistency to U.S. foreign relations, prevent the government from becoming hypnotized by each individual issue, and ultimately enable the government to engage constructively in the sustainable development of China and other developing countries.

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