China's Three Gorges: The Impact of Dam Construction on Emerging Human Rights

by Sarah C. Aird*

Introduction

As the world population has exploded over the last century from 1.65 billion to over 6 billion people, demands on water and energy have increased exponentially. To meet these increased needs, governments have dammed more than half of the world's rivers, constructing large dams for hydroelectric purposes, irrigation, flood control, water storage, and a variety of other uses. Only recently, however, have policy makers begun to systematically consider some of the devastating social and environmental consequences of such infrastructure giants.

In an effort to better understand both the long-term benefits as well as costs of large dam projects, the World Bank and the World Conservation Union sponsored a World Commission on Dams (Commission) study of the issue. In November 2000, after two-and-a-half years of investigation, the Commission issued its final report entitled "Dams and Development: A New Framework for Decision-Making." It is the first comprehensive global and independent review of the performance and associated impact of large dams. According to the Commission, large dams implicate a number of human rights issues, some of which until recently have received little attention from the international community. Among the budding human rights concerns at issue are the right to be free from coercive or forced internal displacement; intergenerational equity, which encompasses the right of future generations to inherit a sustainable planet; and the right to have protected sites of great cultural and natural heritage importance. These issues all reflect emerging human rights in the sense that international human rights instruments recognize and protect them only partially, if at all, despite their growing prominence on the international stage. Examining the negative social costs of dams in general reveals the need for strengthening and expanding international law to ensure that large infrastructure projects respect these emerging rights. The Three Gorges Dam project, the largest dam project in history, provides the most compelling case study of how dams implicate the aforementioned rights.

Internal Displacement

The Three Gorges Dam, under construction in the southwestern province of Sichuan, China, will halt the flow of the great Yangtze River, the third largest river in the world. Once completed in 2009, the mammoth Three

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Gorges Dam will provide flood control, generate electricity, and further develop China's interior. It will be the largest dam ever built, creating a reservoir covering over 632 square kilometers, flooding 13 major cities, 140 towns, and 1,352 villages, as well as over 1,600 factories and abandoned mines. Critics estimate that the Three Gorges Dam will displace more than 1.4 million people in the largest peacetime evacuation in history, amounting to



Yangtze River, Sichuan province, China

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Displacement is a widespread and all too common side-effect of dams. The Commission estimates that dams have displaced at least 40–80 million worldwide. This estimate does not include the millions of economically displaced people who have lost their livelihoods due to the changed environmental conditions caused by dams, many of whom have had to relocate in search of income.

Despite the widespread effects of displacement, the issue has only come to the forefront of the international human rights debate in recent years. Even today, international human rights law, unlike international humanitarian law, does not expressly prohibit arbitrary displacement. Rather, a prohibition on displacement is only implicit in certain provisions, such as those found in the Universal Declaration of Human Rights (UDHR), the International Covenant on Civil and Political Rights (ICCPR), and the International Covenant on Economic, Social and Cultural Rights (ICESCR), that pertain to freedom of movement and choice of residence (Article 13 of UDHR, Article 12 of ICCPR), freedom from arbitrary interference in one's home (Article 12 of UDHR, Article 17 of ICCPR), the right to adequate housing (Article 25 of UDHR, Article 11 of ICESCR), and the right not to be arbitrarily deprived of one's property (Article 17 of UDHR). In order to establish a comprehensive normative framework regarding internal displacement, Francis M. Deng, Representative of the UN Secretary-General, developed and submitted the Guiding Principles on Internal Displacement (Guiding Principles) at the behest of the UN Commission on Human Rights and the General Assembly in February, 1998. Although the Guiding Principles are not legally binding, they serve as an international standard to guide governments and non-governmental bodies in providing assistance and protection to internally displaced persons. They reflect current as well as developing law on the issue of displacement.

Weighing Feasibility and Risk

Prohibited displacement, according to Principle 6(2)(c) of the Guiding Principles, includes arbitrary displacement "[i]n

cases of large-scale development projects, which are not justified by compelling and overriding public interests." This provision reflects a common legal concept found in the UDHR, the ICCPR, and the ICESCR, which states that restrictions on certain rights such as freedom of movement and residence are acceptable only insofar as they are provided by law and necessary to protect public interests such as national security, public order, or public health. The rationales for construction of large dams, such as enhancing irrigation, flood control, or hydropower generation, seemingly justify "compelling and overriding public interests."

Yet to meet the spirit of Principle 6(2)(c) requirements, policy makers should consider the feasibility of a project in addition to a project's rationale. In other words, even if a project's goals are "justified by compelling and overriding public interests," if the project itself is inherently incapable of accomplishing those goals it should be reconsidered. In the case of the Three Gorges Dam, as with many other multipurpose dams, the uses to which officials intend to put the dam are functionally contradictory. To effectively control flooding, the water level in the reservoir must remain low. For productive generation of electricity, however, it must be high. Because only electricity-generation will lead to profits, Chinese officials will likely maintain reservoirs at high water levels, potentially exacerbating rather than minimizing flooding.

In addition to the rationale and feasibility of a project, in order for officials to fully determine compelling and overriding public interests, they also should take into account the risks associated with the project. As noted by the Commission, officials typically downplay the risks associated with dams. Chinese authorities, for example, are building the Three Gorges Dam in an earthquake-prone region, further decreasing the likelihood that the dam will meet its long-term goals. Scientific evidence indicates, moreover, that the weight of water collected in large reservoirs may magnify seismic activity significantly. Many engineers fear the dam will collapse, forewarning that several million people will die when the dam breaks. If the dam should suddenly rupture, whether due to flood conditions or an earthquake, the world would witness what conceivably could be the largest man-made disaster to occur during peacetime.

Clearly, in order for a development project to meet the "compelling and overriding public interests" threshold, policy makers must consider feasibility and risks as well as the rationale behind a project.

Protection from Discrimination

To fairly assess what are compelling and overriding public interests, authorities also must take into

account all segments of society. As the Commission elucidates in its report, too often policy makers do not consider issues of equity in their decision-making. In the process of carrying out projects they claim advance development goals, policy makers regularly ignore the needs of the most marginalized in society—minorities, indigenous and tribal peoples, peasants, and women—often worsening their situations. Development in this context betters the situation for a select few, while worsening the situation for many others.

Indigenous populations and tribal peoples whose interests policy makers do not take into consideration endure particularly egregious suffering. Dams often destroy not only their lands but also their sacred sites, and may even threaten the survival of certain indigenous groups. By disregarding indigenous and



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tribal peoples' concerns, policy makers violate Principle 9 of the Guiding Principles, according to which States have a special obligation to protect against the displacement of indigenous peoples, minorities, and groups with special ties to the land. This principle embodies the enhanced protections that indigenous and tribal peoples enjoy with regard to their lands under international instruments, such as the 1991 International Labor Organization Convention Concerning Indigenous and Tribal Peoples in Independent Countries (Convention 169), to which China is not a signatory. The Commission's report indicates that in spite of these international instruments, officials follow dam policies that typically have a disproportionately negative effect on these populations. Authorities seldom respect the right of indigenous peoples to participate in dam or other development policies affecting their lands as required by Article 7 of Convention 169. Article 7 stipulates that indigenous and tribal peoples shall participate in the formulation, implementation, and evaluation of national and regional development plans that affect them directly. Yet, officials often select indigenous lands for dam construction without seeking the input of the pop-

ulations involved. This can have a tremendous impact on indigenous groups. In the Philippines, for example, officials have built or proposed building nearly all of the country's large dams on lands belonging to the country's 6–7 million indigenous peoples. Tribal peoples suffer similar discrimination. In India, 40–50 percent of those displaced by development projects were tribal

people, even though they account for only 8 percent of the total population.

Women also suffer disproportionately due to the construction of large dams. Government officials often design dam policies in gender-biased ways, resulting in the unequal treatment of women. For example, some governments still recognize only male heads of household as legitimate landowners, denying women compensation for submerged lands and exacerbating pre-existing gender inequalities. In tribal communities where women enjoy *user* rights over land but not *ownership* rights, governments do not provide these women with any compensation. In addition to suffering greater negative effects due to dams, women

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also generally do not enjoy the same benefits men do, such as enhanced employment opportunities. Such policies violate the customary law principle of non-discrimination as codified in numerous international instruments, including the Universal Declaration on Human Rights (Article 2), the ICCPR (Article 2), the ICESCR (Article 2), and the 1979 Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). CEDAW defines prohibited discrimination as any distinction, exclusion or restriction made on the basis of sex that has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, on a basis of equality with men, of human rights and fundamental freedoms. By failing to compensate women for their loss of user and ownership rights, States are arbitrarily impairing the ability of women to enjoy such rights on the same footing as men. In addition, employment policies associated with dam con-

struction, which are typically restricted to men, also violate the principle of non-discrimination in that they have the effect of restricting women's equal opportunity to employment.

Procedural Guarantees

Principle 7(3) of the Guiding Principles delineates certain procedural guarantees that States must meet when they undertake large-scale development projects.

First, the decision to displace people can only occur in accordance with the law. Officials then must take adequate measures to guarantee that those to be displaced have full information regarding the displacement; endeavor to involve those affected in the planning and management of their relocation; and seek the free and informed consent of those to be displaced. Moreover, authorities must provide, where applicable, compensation and relocation support, as well as the right to an effective remedy, including the review of such decisions by appropriate judicial authorities.

Unfortunately, officials intent on constructing dams often do not follow policies of full disclosure, informed consent, and public participation. In China, for example, officials have used repression and misinformation to quell dissent. In fact, Chinese authorities have arrested over 170 activists opposed to construction of the dam, disappearing them and silencing other critics. Public authorities elsewhere use similarly abusive tactics. As recounted in the Commission's report, officials in India, for example, dealt with potential opposition to the Bargi Dam by filling the reservoir without warning, submerging 162 villages. Similarly, according to the report, employees from the Papaloapan River Commission set fire to the homes of 21,000 Mazatec Indians in order to quell opposition to the Miguel Aleman Dam in Mexico.

In addition to utilizing heavy-handed tactics designed to discourage community input and limit public disclosure regarding dam policies, officials often implement inadequate resettlement strategies. Typically, public authorities select resettlement sites without reference to the availability of livelihood opportunities. In fact, rarely do resettlement policies restore the livelihoods of those resettled. According to the Commission, at least 46 percent of the 10 million Chinese resettled today live in conditions of extreme poverty as a direct result of displacement by dams. In India, 75 percent of those displaced by dams have not had their livelihoods restored and thus live in dire poverty, as well. People once self-sufficient become dependent on others or the State for survival, and lose not only their land and ability

to survive independently, but also their sense of community and self-esteem.

Intergenerational Equity

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In its groundbreaking report, the World Commission on Dams also identifies intergenerational equity as another budding human right threatened by dams. Integrating environmental concerns and relevant human rights doctrine, the concept of intergenerational equity denotes the right of future generations to inherit a planet capable of sustaining life. As a corollary to that right, present generations have a duty to refrain from irreparably destroying the environment. Dams like the Three Gorges contravene China's and other States Parties' commitment to ensure intergenerational equity as outlined, for example, in the 1992 Convention on Biological Diversity, according to which States Parties are "[d]etermined to conserve and sustainably use biological diversity for the benefit of present and future generations."

Closely linked to the notion of sustainable development, intergenerational equity is gaining worldwide acceptance. A handful of countries explicitly provide for the rights of future generations in their national constitutions. Many international instruments also utilize the concept, including the 1972 Stockholm Declaration of the United Nations Conference on the Human Environment, the 1992 Rio Declaration of the United Nations Conference on the Human Environment, the 1992 Rio Declaration of the United Nations Conference on the Human Environment, the 1992 Rio Declaration of the United Nations Conference on the Human Environment, the 1992 Rio Declaration of the United Nations Conference on the Human Environment, the 1992 Rio Declaration of the United Nations Conference on the Human Environment, the 1992 Rio Declaration of the United Nations Conference on the Human Environment, the 1992 Rio Declaration of the United Nations Conference on the Human Environment, the 1992 Rio Declaration of the United Nations Conference on the Human Environment, the 1992 Rio Declaration of the United Nations Conference on the Human Environment, the 1992 Rio Declaration of the United Nations Conference on the Human Environment, the 1992 Rio Declaration of the United Nations Conference on the Human Environment of the United Nations Conference on the Human Environment of the United Nations Conference on the Human Environment of the United Nations Conference on the United Nations Confere

ration on Environment and Development, and the 1992 Convention on Biological Diversity. Certain international legal entities, including the World Commission on Environment and Development, even contend that protection of the environmental interests of future generations is a general principle of international law. Practitioners also increasingly invoke the concept of intergenerational equity in proceedings before countries' high courts. Even at the International Court of Justice, in the recent maritime case *Denmark v. Norway*, Justice Weeramantry discussed the legal traditions of intergenerational equity in his opinion.

Protecting biodiversity is one component essential to ensuring intergenerational equity. When human activities cause species extinction, lessening the biodiversity of a region, complex local ecosystems are thrown out of balance. These ecosystems become unable to carry out natural processes, such as pollution filtering by wetlands, which are essential for the health of the planet and therefore human survival, or the right to life (Article 3 of the UDHR and Article 6 of the ICCPR). Despite the importance of such ecosystem services, development planners often do not take into account the effect of development projects on these critical services.

According to the World Commission on Dams, large dams cause particularly adverse consequences to ecosystems and biodiversity, with serious implications for the health and well-being of future generations. The Three Gorges Dam, for example, will radically alter local habitat. Besides wreaking havoc on fish populations, the dam will destroy the habitat of the giant panda and the Siberian white crane, both of which are endangered species. Environmentalists predict the dam also will cause the extinction of the *baiji* (Yangtze River dolphin) and the Chinese alligator, as well as other animal and plant species. As studies have shown, the removal of just one species from an ecosystem can lead to the disappearance of many others, lessening biological diversity to a far greater extent than it might first appear.

The irreversible biological devastation that the Three Gorges Dam will cause at the local level contravenes principles enshrined in the 1992 Convention on Biological Diversity that emphasize the importance of preserving biodiversity. In its preamble, the Convention acknowledges the importance of biodiversity for evolution as well as its ecological, genetic, social, economic, scientific, educational, cultural, recreational, and aesthetic values. As biological diversity is lost, so too is the opportunity to learn more about the unique, complicated interconnections that exist among living creatures of the region as well as the opportunity to discover substances potentially useful to the field of medicine.

In addition to causing species extinction and habitat destruction, dams require people to resettle on lands unsuitable for agricultural purposes, quickly leading to resource-depleted and environmentally-degraded areas around reservoirs. When governments decide to submerge vast areas of productive land, driving many into landless poverty, they also decrease the amount of arable land available for future food production necessary to satisfy the needs of a growing human population. This problem is especially critical in China, since between 1987–1992, China lost 3.87 million hectares of arable land to soil erosion, urban expansion, and other factors, land that could have produced enough food to feed 4.5 million people. Loss of biodiversity and arable lands are only two of the severe consequences of large dams that will have a devastating impact on the ability of future generations to survive. For this reason, policy makers need to take such issues into consideration when evaluating the desirability of such mega projects.

Destruction of Cultural and Natural Heritage Sites

In addition to the displacement of millions of people and the destruction of unique species and habitat, the World Commission on Dams also identifies cultural heritage loss as another victim of dam construction. As noted at the 1998 Stockholm Intergovernmental Conference on Cultural Policies for Development, the notion of cultural rights, including the right to cultural heritage, looms increasingly large and yet the international community has only recognized some cultural issues as legally enforceable rights. Consequently, no effective recourse is available in the current framework of human rights protection to adequately address most cultural rights violations. The gravity of this weakness in international human rights law is evident when studying the Three Gorges Dam.

The Three Gorges Dam will inundate some of the world's most significant archaeological artifacts. In the Three Gorges area archeologists have found over 1,300 known sites of archeological value, some over 5,000 years old, yet they expect to save only ten percent from flooding. Recently, archaeologists in the Three Gorges area found a jawbone identified as belonging to a newly discovered subspecies of *homo erectus*. They have also discovered remains of cave persons dating back as far as 2 million years in the Three Gorges area, making the remains coterminous with the earliest human finds in Africa and raising new questions about the history of human origin. In addition, the dam will inundate hundreds of sacred ancient monuments, shrines, and temples of ancestral importance to the local Chinese people.

Although the extent of cultural and natural heritage that will be lost due to the Three Gorges Dam is unique in magnitude, many other dams have inundated sites of great importance. Typically, affected communities are most disturbed by the desecration of burial and other sacred sites by flooding. As the Commission notes, however, the loss of cultural heritage resources not directly linked to local people has been at least equally significant. River valleys often hosted the most ancient civilizations, so humanity loses some of its history through the construction of dams. The Commission has expressed concern

at the lack of attention paid by state officials to this social cost of development projects.

Two fairly limited mechanisms for the protection of certain cultural or natural heritage sites do exist. First, the right to have protected certain structures or sites of cultural value, such as religious buildings or burial sites, is at least partially implied in the right to participate freely in cultural life, a right recognized in the UDHR (Article 27), ICCPR (Article 27), and ICE-SCR (Article 15). Without preserving these specific sites, the ability for people to participate in cultural activities, such as worshipping together in a sacred place or visiting ancestors, is severely limited. It is therefore arguable that the destruction of such areas does violate the right of individuals to participate freely in cultural life. This right, however, does not address the destruction of sites of archeological or historical significance.

The second mechanism, the Convention Concerning the Protection of the World Cultural and Natural Heritage (Convention), adopted by the United Nations Economic, Social, and Cultural Organization (UNESCO) in 1972 and to which China is a State Party, offers some protection of key archeological and historical sites. The Convention obligates States Parties to cooperate in preserving and protecting cultural treasures and natural areas throughout the world, such as the Three Gorges region. Three types of protected sites exist under the convention: cultural, natural, and mixed. Cultural heritage sites include, in part, historic buildings, cave dwellings, and important archaeological sites of outstanding universal value from the historical, ethnological, or anthropological view. Natural heritage sites are identified as natural areas of outstanding universal aesthetic value, or areas that precisely delineate and constitute the habitat of threatened species of outstanding universal value from the point of view of science or conservation.

Unfortunately, Article 3 of the Convention provides that only host governments may designate such sites for protection, which leaves many of them vulnerable. For example, despite the Three Gorges region's renowned beauty, which has inspired artists and writers for centuries, and its unique biological diversity, China has not listed it as a World Cultural or Natural Heritage site. The purpose of the Convention is to protect such sites from deterioration or disappearance, which "constitutes a harmful impoverishment of the heritage of all the nations of the world." Yet neither this convention nor any other international instrument provides a mechanism by which individuals, groups, or outside entities may seek protection of such globally important sites when the State at issue chooses not to designate it as a World Cultural or Natural Heritage site.

Clearly, there is a need to expand the scope and recognition of cultural rights within the human rights framework. As part of this endeavor, the World Commission on Culture and Development has urged the International Law Commission first to draft an inventory of cultural rights not currently protected by existing international instruments, followed by an International Code of Conduct that would provide a basis for adjudicating egregious violations of cultural rights. Without these legal mechanisms, there appears to be only limited methods by which to protect cultural sites of such tremendous importance as those found within the Three Gorges region.

Conclusion

Emerging human rights, such as the right not to be displaced, the right of future generations to a healthy environment, and the right to have one's cultural heritage preserved, should be among the guidelines used to measure the desirability of projects like large dams that, due to their magnitude, can cause long-lasting permanent damage to the environment and to the

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Russia—charges Putin and the Russian government with genocide in violation of Russia's obligations under the 1948 Convention on the Prevention and Punishment of the Crime of Genocide. The Chechen suit makes the following allegation of genocide: "[t]he Russian Federation and the former Soviet Union have ruthlessly implemented a systematic and comprehensive military, political and economic campaign with the intent to destroy in substantial part the national, ethnical, racial and religious group known as the Chechen People." An American lawyer, Francis Boyle, filed the lawsuit on behalf of the Chechen government. Boyle previously won a case for the Republic of Bosnia and Hercegovina against Serbia and former Serb president Slobodan Milosevic. While the lawsuit currently is pending, at the very least the ICJ should grant Chechnya's request for provisional measures, which are detailed in its complaint. The Chechen government requested the following provisional measures: the Russian government should immediately take all measures to prevent commission of the crime of genocide, and ensure that any military, paramilitary, police or irregular armed units do not commit any acts of genocide. Article 41 of the ICJ Statute justifies provisional measures "where there is urgency in the sense that action prejudicial to the rights of either party is likely" before a final decision is rendered.

The European Court of Human Rights

Holding a permanent member of the UN Security Council accountable for human rights and humanitarian law violations within the UN system may be unattainable, thus requiring other legal mechanisms. The European Court of Human Rights (European Court) is another possible venue for pursuing accountability. As a signatory to the European Convention, Russia is subject to the European Court's jurisdiction. Chechens have begun filing complaints with the European Court alleging violations of their rights under the European Convention. The European Court has agreed to hear numerous cases, including a complaint involving the Staropromyslovski massacre. Through interviews with survivors, Human Rights Watch compiled details about the massacre, in which nearly 40 civilians were summarily executed. In another complaint, Sasita Khasuyeva, a Chechen nurse, has brought a claim against the Russian government for the murder of six patients and the forced disappearance of 61 other patients. According to Khasuyeva's claim, Russian troops attacked a hospital convoy clearly marked with white flags.

Additionally, the United States might encourage its European allies to bring an inter-state complaint before the European Court. The complaint would charge Russia with violating its international treaty obligations. The guarantors of the European Convention could display tremendous resolve by launching

an interstate complaint. The European Union has long been a proponent of humanitarian law. It supported the creation of the International Criminal Court (ICC) and the ICTY, and deployed monitors to document the atrocities in the former Yugoslavia. United opposition to Russia would be fitting as Europe celebrates the 50th anniversary of the European Convention.

The only remaining question is whether a human rights court can apply humanitarian law to determine whether there has been a human rights violation. While this is an issue of first impression for the European Court, the Inter-American Commission on Human Rights (IACHR) has dealt with this issue. In the 1997 La Tablada case, the petitioners invoked various rules of international humanitarian law to support their allegations that state agents used excessive force and illegal means to recapture the La Tablada military base. The IACHR determined it was "necessary at times to apply directly rules of international humanitarian law or to inform its interpretations of relevant provisions of the American Convention [on Human Rights] by reference to these rules." The IACHR further noted that the American Convention and humanitarian instruments share a "common nucleus of nonderogable rights and a common purpose of protecting human life and dignity." During situations of internal armed conflict, the Commission argued, these branches of international law converge and reinforce each other. The IACHR's findings certainly could instruct the European Court's determination of its competence to adjudicate humanitarian law.

The ICC provides another potential forum for addressing Chechen claims against Russia. Russia is a signatory, but has not ratified the Rome Statute. Should the Rome Statute acquire the requisite 60 ratifications, Chechen claims could be adjudicated before the ICC.

Conclusion

It remains to be seen what course of action the international community will choose to pursue accountability. Ensuring truth and justice is necessary to building long-term peace in the region. Whatever path it chooses, the international community must insist on a credible, impartial, and transparent accountability process.

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well-being of both present and future generations. The fact that lawmakers have not adequately addressed these issues through comprehensive and binding human rights instruments means that policy makers will continue to be able to carry out unsound super-infrastructure projects like the Three Gorges Dam in non-participatory, repressive ways that result in the displacement of millions, the endangerment of future generations through massive habitat and species destruction, and the loss of cultural heritage resources vital to understanding human history.

Although policy makers favoring large dam construction are responding to the genuine needs of their citizens, large dams clearly do not always offer the best available solution. International human rights law needs to provide better protection for these emerging human rights threatened by dams so that policy makers can conduct balanced assessments of what truly is in the public's interest.

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