New Financiers and the Environment
Ten Perspectives on How Financial Institutions Can Protect the Environment

May 2008
Acknowledgments

The beauty of natural rivers has motivated the publishers of this report to help protect the environment. The photographs in this report depict the middle and upper reaches of the Yangtze River in China. Photo credits: Colin Carpenter (p. 30), Li Hong (front cover, p. 9, p. 27, p. 35), Brian Ritchie (p. 5) and Zheng Yun Feng (p. 3, p. 12, p. 37, back cover).

This publication has been supported by the Blue Moon Fund and Oxfam America. The views in the report are those of the contributors and not necessarily those of International Rivers or our funders.


About International Rivers

International Rivers’ mission is to protect rivers and defend the rights of communities that depend on them. Through research, education and advocacy, International Rivers works to halt destructive river infrastructure projects, address the legacies of existing projects, improve development policies and practices, and promote water and energy solutions for a just and sustainable world.
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<td>ADB</td>
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<td>Association of Development Financing Institutions in Asia &amp; the Pacific</td>
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<td>BOT</td>
<td>Build-Operate-Transfer</td>
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<td>CBRC</td>
<td>China Banking Regulatory Commission</td>
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<td>CEA</td>
<td>Central Electricity Authority [of India]</td>
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<td>SECSD</td>
<td>Sivaguru Energy Consultants &amp; Software Development Pvt Ltd.</td>
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<td>CGGC</td>
<td>China Gezhouba Group Company</td>
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<td>CIDA</td>
<td>Canadian International Development Agency</td>
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<td>CSPC</td>
<td>Collaborating Center on Sustainable Consumption and Production</td>
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<td>China Southern Power Grid Company</td>
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<td>Corporate Social Responsibility</td>
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<td>ECA</td>
<td>Export Credit Agency</td>
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<td>EdL</td>
<td>Electricité du Laos</td>
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<td>EGAT</td>
<td>Electric Generating Authority of Thailand</td>
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<td>EHS</td>
<td>Environmental, Health and Safety</td>
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<td>Environmental Impact Assessment</td>
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<td>EMS</td>
<td>Environmental Management System</td>
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<td>EPFIs</td>
<td>Equator Principle Financial Institutions</td>
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<td>ERD</td>
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<td>Electricity of Vietnam</td>
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<td>GDP</td>
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<td>ICBIC</td>
<td>Industrial and Commercial Bank of China</td>
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<td>IFC</td>
<td>International Finance Corporation</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
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<td>JBIC</td>
<td>Japan Bank for International Cooperation</td>
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<td>KNU</td>
<td>Karen National Union</td>
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<td>LNG</td>
<td>Liquefied Natural Gas</td>
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<td>MDB</td>
<td>Multilateral Development Bank</td>
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<td>MIGA</td>
<td>Multilateral Investment Guarantee Agency</td>
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<td>MoU</td>
<td>Memorandum of Understanding</td>
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<td>NEPAD</td>
<td>New Partnership for African Development</td>
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<td>NGO</td>
<td>Non-governmental organization</td>
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<td>NHPC</td>
<td>National Hydroelectric Power Corporation [of India]</td>
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<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>PBOC</td>
<td>People’s Bank of China</td>
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<td>PS</td>
<td>Performance Standard</td>
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<td>SEPA</td>
<td>State Environmental Protection Administration</td>
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<td>SRI</td>
<td>Socially Responsible Investment</td>
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<td>SSE</td>
<td>Shenzhen Stock Exchange</td>
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<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
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<td>UNEP</td>
<td>United Nations Environment Programme</td>
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<td>WAPCOS</td>
<td>Water and Power Consultancy Services (India) Ltd.</td>
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<td>WCD</td>
<td>World Commission on Dams</td>
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<td>YMEC</td>
<td>Yunnan Machinery and Equipment Import and Export Company</td>
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We have entered a new era of South-South cooperation in the 21st century. Trade and investment flows between Asian, African and Latin American countries have grown rapidly in recent years. Companies from China, Korea, Thailand, Brazil and South Africa have taken a lead role in building textile plants, cell phone networks, car factories, roads and power plants in the developing world.

The UN’s 2006 World Investment Report found that investment flows from developing countries increased from US $4 billion to US $61 billion between 1985 and 2004. The bulk of these transfers – US $60 billion – consisted of flows between developing countries. In 2002-2005, investments from developing countries accounted for 33 percent of all foreign investment in East Asia, 29 percent in Africa, and 20 percent in South, East and Southeast Asia. The figures will likely have risen further since then.

Trade in consumer and investment goods, oil and iron ore, agricultural goods and timber, movies and tourism has grown just as fast as investment flows between developing countries. Commerce between China and Africa has expanded tenfold between 1999 and 2006. The export credit agencies of Brazil, China, Thailand and other emerging economies are playing a key role in financing infrastructure and extractive projects in the developing world. With loan approvals of US $36 billion, China Exim Bank became the world’s largest export credit agency in 2007 and has even outgrown the World Bank.

The growing economic South-South cooperation has many positive aspects. Developing countries are in great need of infrastructure investment. Southern companies offer consumer goods such as cell phones and pharmaceuticals which are often more affordable and better suited to the needs of poor societies than the products of their Northern competitors. Loans and grants from Southern governments have also reined in the power of the World Bank and the International Monetary Fund to impose strict and often ill-suited economic policy conditions on their borrowers.

Decades of experience with Northern actors demonstrate that trade and investment flows can create serious problems if they are not part of a sound economic, social and environmental development strategy. Projects which are motivated by short-term political prestige rather than long-term development can create unsustainable debt burdens. Investments that concentrate revenues in a few hands are likely to exacerbate corruption, social tension and conflict through the so-called recourse curse. Projects which are motivated by short-term profit interests can violate the rights of workers and consumers. Investments which do not respect the interests of local communities and the environment can turn into social, environmental and economic disasters.

The World Commission on Environment and Development (or Brundtland Commission), the World Commission on Dams, the high-level Millennium Ecosystem Assessment, the UN

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1 See UNCTAD World Investment Report 2006, pp. 120f. The figures do not include flows to offshore financial centers such as the Bermudas.

Millennium Project and many other UN conferences and task forces have agreed that all actors – the state, the private sector, and civil society – need to integrate social, economic and environmental concerns in their activities. In 1987, the Brundtland Commission defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Since then, all relevant international actors have endorsed this very general principle of sustainable development.

This report discusses the environmental responsibility of overseas financiers and investors. It brings together experiences and perspectives of civil society, financial institutions, and academics from developing and industrialized countries.

Countries such as Brazil, China, South Africa and Thailand have signed on to important international environmental agreements, and have strengthened their domestic environmental regulations for projects such as large dams in recent years. As Eisuke Suzuki argues in this report, export credit agencies – the most important financiers of overseas infrastructure projects – “cannot behave differently from the rest of governments, which are incorporated into the global decision process of sustainable development”.

More than 25 international organizations and governments from more than 100 countries have committed to harmonizing the standards and processes of foreign aid in the Paris Declaration on Aid Effectiveness of March 2005. The signatories include China, India, Korea, South Africa and Thailand. In this declaration, “[d]onors and partner countries jointly commit to strengthen the application of [environmental impact assessments] and deepen common procedures for projects, including consultations with stakeholders”.

Some progress towards this goal has been made in recent years. At least eight financial institutions from developing countries have signed on to the Equator Principles, the environmental principles of the world’s leading banks. China Exim Bank has adopted environmental guidelines, and China’s State Environment Protection Administration has endorsed the Equator Principles in its green credit policy. The Korea Export Insurance Corporation is bound by the Common Approaches to the Environment of the OECD’s Export Credit Group. The Association of Development Financing Institutions in Asia & the Pacific also has a program for greening development financing institutions, which the Association’s secretariat introduces in this report.

On the ground, serious problems persist. The papers contributed by Lucy Corkin, Carl Middleton, Himanshu Thakkar and the Burma Rivers Network present evidence from real-life projects which demonstrate the need for stricter social and environmental standards of the new financiers. In Burma, the state is developing dam projects without any regard to social and environmental impacts, and investors from China, India and Thailand have so far failed to make up for this lack with their own standards. In Gabon, local NGOs are pressing for stronger environmental measures and contract transparency in a Chinese iron ore and hydropower project. In the Mekong region, the Himalayas and other parts of the world, projects that neglect environmental impacts threaten to undermine the basis of the economic livelihood of millions of people.

A variety of standards and guidelines exist to address the environmental impacts of international projects. This report presents the following perspectives:

Osamu Odawara introduces the Equator Principles, which have become the globally accepted benchmark for project finance, and summarizes Mizuho Corporate Bank’s experience with them. He concludes that the Equator Principles have strengthened his bank’s approach to sustainable development, and contributed to its success in the project finance business.

Based on the policies of financial institutions around the world, Aaron Goldzimer summarizes the strengths and weaknesses of current best practice for environmental policies from a civil society perspective. He argues that new financiers could leapfrog some of the less effective current policies and move toward new, more effective institutional structures. Carl Middleton comments that because large projects are often funded by several financiers from different countries, it makes sense for financiers to adopt the same internationally acknowledged environmental policies.

Deborah Moore and Thayer Scudder, two members of the former World Commission on Dams, summarize the findings of the largest review of the development effectiveness of dams ever undertaken, and present the innovative framework which the WCD proposed for future water and energy projects.

Financial institutions can use a variety of processes to promote social and environmental sustainability. Guo Peiyuan’s paper introduces the early measures which Chinese banks have so far taken to promote the concept of socially responsible investment.

While most policies and guidelines espouse similar principles, they differ in the specifics, and put forward a variety of different mechanisms to implement the basic principles. Indeed, every country needs to pursue the principles of sustainable development which it has committed to in international agreements through mechanisms which reflect its own political and regulatory culture. This report offers concrete evidence, experiences and practical ideas to enrich the dialogue about the environmental responsibility of financial institutions. We hope it will meet the needs of interested government officials, financial institutions, parliamentarians, journalists, civil society groups and academics in the countries which have so forcefully emerged as international investors and financiers in recent years.
Africa is the continent most vulnerable to environmental degradation through lax regulatory frameworks and weak enforcement capacity. The article seeks to show that the recent construction boom which was spurred on by high commodity prices underlines the growing importance of environmental regulations for infrastructure projects in Africa. Furthermore, the onus to enforce such frameworks should be on the financiers of such projects, as the actors most likely to have success in such an endeavor.

Africa currently captures only a small percentage of global foreign direct investment. Yet following the commodities boom of recent years, the continent has taken on increasing global strategic significance. Africa remains rich in natural resources, previously unexploited due to the prohibitive cost of the infrastructure requirements for extraction. Rising commodity prices, fueled in part by the increasing demand of China and India’s burgeoning economies, have rendered investment in Africa’s natural resources sector more viable. Indeed foreign direct investment in Africa has between 2004 and 2006 doubled, according to a report by UNCTAD, and remains concentrated in the extractive industries. Integral to natural resource exploitation is the development of mining, transport and communications infrastructure required to support operations. This article examines the importance of addressing environmental concerns as regards infrastructure projects in Africa, and the responsibility of the financiers of such projects in this process.

While infrastructure development is sorely needed to boost economic growth and facilitate investor confidence in African markets, without proper management, it extracts a high toll on the already fragile environment. This is not only throughout the construction process, which often involves the clearing of land and the resettlement of communities, but also during the use of the infrastructure itself, through emissions from factories and facilities or vehicles on newly built roads. As developed countries attempt to reduce their own environmental degradations, it is likely that their heavily-polluting industries may move offshore, to regions such as Africa where environmental regulations are not so rigorous or adequately enforced.

Africa is in need of value-adding processes for its exports and may welcome such developments, prioritizing economic development over environmental concerns. Short-term economic gain will potentially be sacrificed for long-term economic sustainability. In Africa’s case, this is particularly concerning as the continent is likely to bear the brunt of the effects of global warming, according to WWF. Furthermore, environmental scarcities are proven catalysts for violent conflict. Water and arable land are essential aspects of survival on a continent that has largely yet to be industrialized. Particularly in the light of Africa’s worsening water scarcity due to population increases, environmental considerations are of increasing importance as infrastructure development accelerates.

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CHINA AS A FINANCIER FOR AFRICAN INFRASTRUCTURAL DEVELOPMENT

African states’ attempts to define the “developmental state” have been strongly influenced by East Asia’s – and more particularly China’s – economic growth success. China’s growth trajectory is unprecedented and many African leaders view it as one to emulate. This is despite the fact that the Chinese leadership does not advocate the wholesale application of China’s growth model to another context, instead encouraging developing countries to formulate their own solutions specific to their situations.

Aside from the different contexts, Africa’s economies can ill afford the downside of such rapid growth. Unchecked economic growth is directly linked to high levels of water pollution, water scarcity and desertification in China, which has in turn begun to affect economic growth. Despite this, economic development outcomes in Africa are often prioritized over environmental concerns. As with many other projects, Chinese interests are among the principal financiers. Indeed, China has become an important development partner in terms of Africa’s infrastructure.

China’s Africa Policy Paper, released in January 2006, emphasized infrastructure as one of ten key sectors for economic collaboration stating:

“The Chinese Government will step up China-Africa cooperation in transportation, communication, water conservancy, electricity and other infrastructures. It will vigorously encourage Chinese enterprises to participate in the building of infrastructure in African countries, scale up their contracts, and gradually establish multilateral and bilateral mechanisms on contractual projects. Efforts will be made to strengthen technology and management cooperation, focusing on the capacity-building of African nations.”

At the Beijing Summit of the Forum on China-Africa Co-operation, held in November 2006, China made further pledges to develop the African continent. The multibillion-dollar development package includes the following promises: US $3 billion in preferential loans and US $2 billion in preferential buyer’s credits over the next three years; the doubling of its 2006 aid assistance by 2009; and initiating a China-Africa development fund that will reach US $5 billion to encourage Chinese companies to invest in Africa. Furthermore, the Beijing Action Plan (2007-2009) makes specific reference to cooperation in the construction and infrastructure sectors. Indeed, many Chinese enterprises have recently invested heavily in the continent’s road and railway rehabilitation, as well as in several other large infrastructure projects. These projects are usually undertaken by Chinese state-owned enterprises, in line with the “go out” strategy.

This also dovetails with the Chinese government’s foreign aid programmes to African countries. Hence, these infrastructure projects are often financed by soft loans from the Chinese government.

It is no coincidence that some of the most extensive planned infrastructure operations are in the most resource-endowed African countries, such as Angola, the Democratic Republic of Congo and Gabon. Indeed, critics have commented that China’s newfound attitude toward Africa is mercantilist, in the global race for energy security and the procurement of raw materials to fuel China’s burgeoning economy. Nevertheless, it is worth noting Africa’s eternal irony: it is often the most resource-rich states that are in dire need of infrastructure development and support.

Chinese government loans to Africa are more generous than the West’s, have more favorable terms, and give the African government more say in their expenditure. Western aid is much more prescriptive and makes the fundamental error of bruising African leaders’ sense of sovereignty. In this way China has encroached on the international financial institutions’ traditional domain of influence and their potential control of domestic policy of debtor nations.

China has several government departments and finance bodies that manage loans. China’s principal financing vehicle, China Exim Bank, is currently one of the largest such institutions in the world. According to World Bank estimates, China Exim has disbursed over US $12.5 billion for large-scale infrastructural projects in Sub-Saharan African alone although China Exim Bank’s official reported figures are much less. More than 80 percent of these were to resource-rich African countries, such as Angola, Nigeria, Zimbabwe and Sudan.

THE ROLE OF FINANCIERS IN ENVIRONMENTAL PRESERVATION

Many business groups have accused Chinese companies of low labor and environmental standards in their protests against market entry of Chinese companies. These allegations are often dismissed by the African host government as “sour grapes”. Furthermore, numerous examples of substandard environmental practices by Western companies have seriously diminished the credibility of lobby groups for important issues of this nature.

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While some Chinese companies do not have a good track record in terms of environmental standards, they have recognized that they must change this in order to cultivate and retain a good international image, and have taken steps to address this issue. The China Exim Bank in April 2007 released a code of environmental conduct for the Chinese companies undertaking projects financed by the bank. While this may not necessarily guarantee adherence to the code, it provides a platform for local and international NGOs to engage China Exim Bank, as the financier of such projects on this issue.

Furthermore, the Chinese government committed, amongst other things, to step up cooperation in capacity building, prevention of water pollution and desertification, maintenance of biodiversity, and environmental protection in projects conducted in Africa. This reflects China's increasing awareness of the risks associated with the negative international image its companies are creating in some African countries, especially with regard to environmental malpractices.

Nevertheless, it is important to remember that the challenge of environmental standards is not restricted to Chinese actors. Many Western financial institutions have yet to release their own codes as regards environmental practices. Furthermore, since the opening up of China's financial sector in the late nineties, several Western banks have bought shares in Chinese banks. It is also the responsibility of these shareholders to hold their strategic business partners to account.

THE ROLE OF SOUTH AFRICA

In late 2007, Industrial and Commercial Bank of China (ICBC), one of China's four largest commercial banks and the largest lender in China, proposed a 20 percent acquisition of South African-based Standard Bank, worth US $5.5 billion. Standard Bank is the largest bank in Africa with offices in 18 African countries. Furthermore, ICBC has companies such as PetroChina and Baosteel among its 2.5 million corporate clients.

The South African bank is well positioned as a financial facilitator for Chinese corporate interested in investing in Africa, and will be the conduit or gateway for further Chinese companies to invest in African markets. This is made further evident as Standard Bank and ICBC have reportedly set up a US $1 billion global trust fund to “identify opportunities in the mining sector”. Given the pattern of Chinese companies' investment in Africa, and their increasing involvement in mining, telecommunications, transport and other infrastructure sectors, this is an opportunity to raise the bar on environmental standards imposed on their clients' projects, many of which will doubtless be in Africa's infrastructure sector.

The Chinese government, through the vice-chairman of the Standing Committee of the National People's Congress, Cheng Siwei, in 2007 publicly urged Chinese companies to be more responsive to environmental concerns involved in their operations. There are signs that ICBC could be well disposed towards improvements in environmental management. Encouragingly, Goldman Sachs, a strategic investor in ICBC with a director on the ICBC board, has adopted an environmental policy. Furthermore, Standard Bank may insist on ensuring that future transactions are held accountable to the environmental pledges espoused in the New Partnership for African Development (NEPAD). NEPAD is endorsed by the South African government, which holds a 13.9 percent stake in Standard Bank, the largest single share before the ICBC purchase.

CHINESE INVESTMENT IN BELINGA'S IRON ORE DEPOSITS: A CASE STUDY

The Belinga iron deposits, located in northeast Gabon, were discovered in 1955. Despite the richness of the deposits, they were not exploited due to the remoteness of the area and the prohibitive cost of infrastructure development required for extracting them. Interest in the deposits was recently spearheaded by a consortium of firms - two Chinese companies, one of which was CEMEC, the Brazilian mining giant Companhia Rio do Vale Doce and the French company Eramet.

After the consortium split, CEMEC was officially awarded the project in September 2006. Because CEMEC committed to the project without the normal feasibility studies, there have been a few difficulties and delays on account of the project's large and complex nature.

CEMEC's offer of infrastructural investment is extensive. CEMEC committed to constructing a special purpose deep-water port at Santa Clara, a railway track running 560 kilometers from Belinga to the coast and a hydroelectric power plant to generate the energy required for the operations. It is a long-term project, intended to endure for 15-20 years, and will involve not only the extraction of the iron ore, but the development of auxiliary products.

It has been announced that the project will get underway in early 2008 and reach completion in 2011. Reports have already emerged announcing operations will only commence in 2011. A joint-venture company between China and Gabon has been formed, called Comibel, to manage and oversee operations. CEMEC is the majority shareholder, with 85 percent of Comibel, while the Gabonese Government holds the remaining 15 percent.

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9 At the time of writing, the acquisition has yet to be finally approved by shareholders. This decision was due in March 2008.
11 China View, Companies lacking social responsibility criticized, 29 January 2007.
This project represents a substantial investment which will bring in about 30 percent of Gabon’s gross domestic product, at a value of US $3.5 billion, with an estimated initial capital requirement of US $590 million. The World Bank offered assistance to the Gabonese government, in the form of a cross-sectoral package of expertise, but this was turned down. The World Bank offered the same package to the Chinese company, a role as a middle-man and possibly even as an investor, but was also turned down. A senior NGO representative argues that the Chinese rejected World Bank assistance because even though the Bank had needed expertise, its involvement would increase costs, delay implementation, attract too much media attention and overemphasize environmental concerns.

There are continued concerns about the environmental viability of the project, particularly the proposed port at Santa Clara and the site of the hydroelectric dam that will power the project. An area near the Kongou waterfall has been earmarked for the dam, prompting fears that the Ivindo National Park, in which the falls are situated, might be declassified, leaving it open for further development. Environmental groups have proposed an alternative site, at Tsengué-Lélédi falls, but this has been rejected as it is further away from Belinga than Kongou, increasing initial project costs. Furthermore, Belinga itself is considered ecologically sensitive due to the wild chimpanzees and gorillas that inhabit the area.

After the international attention garnered by a coalition of environmental groups called Environnement Gabon demanding the publication of the contract between CEMEC and the Gabonese government in September 2007, President Omar Bongo reportedly invited two members of the NGO consortium to join the inter-ministry commission tasked with supervising the Belinga project. In January 2008, 20 environmental groups, including members of Environnement Gabon, were suspended after they issued a statement criticizing government spending policies. They were re-instated a week later.

The Belinga experience demonstrates that environmental concerns are increasingly at the forefront of African NGOs' agendas, and are no longer merely a ‘developed world’ concern. African governments’ restrictions on local NGOs and their international networks are not uncommon. While they perform an important function, as in this case, NGOs are sometimes prevented from achieving their mission due to the political environment or lacking freedom of speech. What is important here is that the NGOs are not in opposition to the project per se, but the conditions under which it is carried out. Their contribution to the dialogue is important in ensuring the sustainability of such an undertaking.

This is a typical case where the financiers of the project could play an important role in assuming responsibility for environmental protection. CEMEC is financed by two Chinese banks. Bank of China extended a US $1.1 billion to the company in 2002 and China Exim Bank extended a three-year line of credit worth US $1.1 billion in 2003. Particularly as the Belinga project is an overseas investment in the strategic sector of natural resources, involving infrastructure development, it is highly probable that it is the latter bank that is financing the development of Gabon’s iron ore reserves. China Exim Bank has substantial leverage to impose environmental regulations on the operations as the major financier of the majority shareholder. This becomes important when, as in the case of Gabon, the government is impervious to environmental lobby groups. China Exim Bank already has an environmental policy. Unfortunately, despite the policy’s stipulations requiring that all projects have environmental impact assessments conducted, this has still not occurred for the Belinga project.

CONCLUSION

Africa’s industrialization through infrastructure development is inevitable and necessary, particularly in the current climate of resource scrambling. Several African nations, such as Angola, Sierra Leone and others are in dire need of infrastructure rehabilitation which can be facilitated by the increased revenue from favorable prices in the global commodities market. Chinese state-directed banks, with favorable lending conditions and eagerness to finance infrastructure, have quickly become major financiers of African projects.

As far the environmental commitments go, China Exim Bank, as a major Chinese financier in Africa, has a published code of environmental regulations. ICBC is in the process of establishing a strategic partnership with one of South Africa’s major banks, seen as a ‘good house-keeping seal of approval’. Furthermore, one of ICBC’s current major shareholders has its own environmental code. On paper, this raises hopes for the environmental sustainability of Africa’s future infrastructure projects. In reality however, as demonstrated by the case study in Gabon, this is not necessarily the case.

The activities of state-owned banks such as China Exim are the direct responsibility of the respective government. The Chinese government is aware of the potential damage to its international reputation if its banks are seen to flout environmental standards. Furthermore, neglecting the environmental impact of a project puts its long-term viability at stake. Pledges have been made to ensure this does not happen. This is encouraging as long as they are indeed fulfilled. While commercial banks are accountable to shareholders, responsibility for their projects risks being diluted.

The financiers of Africa’s infrastructure projects have a responsibility to ensure the sustainability of the projects they finance; particularly as they are the gateway and often the facilitator of such infrastructure expansion. Failing to monitor the impact of the projects they finance render them as much to blame as the negligent contractors.
In sectors such as steel, automobiles, oil and gas, wind and hydro power, Indian companies and state-owned enterprises have rapidly expanded their overseas investments in recent years. Not least motivated by the example of Chinese investors, they are trying to gain access to foreign resources, win international contracts, and strengthen their relations with trading blocks such as the ASEAN countries. They have had a presence in neighboring countries such as Nepal and Bhutan for a long time, and are now also spreading to more distanced countries in Asia and Africa.

Leading corporate actors and government representatives have adopted the mindset of economic globalization. India’s Prime Minister Manmohan Singh said: “Brand India has begun to make its mark on the world stage. This is just a beginning and the best is yet to come.” And Montek Singh Ahluwalia, deputy chairman of India’s Planning Commission, added: “Indians have superior management skills. Acquisitions are essential to make a global impact.” The Indian government supports Indian foreign investments through its export credit agency and other tools. This paper presents the Indian institutions which are engaged in building dams and other power projects abroad, and provides an overview of the projects which they are involved in.

It summarizes the track record of Indian dam builders at home, and analyzes some of the problems which their new projects have created. The paper concludes with recommendations for future action.

**THE ACTORS**

A large number of Indian companies are involved in the current foray into foreign power projects. They include:

- state-owned hydro and thermal power developers and equipment suppliers (National Hydroelectric Power Corporation [NHPC], Sutlej Jal Vidyut Nigam Ltd. [SJVN], National Thermal Power Corporation [NTPC], Bharat Heavy Electric Limited [BHEL]);
- private power plant developers and equipment suppliers (GMR Energy, Reliance, Alstom India);
- wind power companies (Suzlon);
- transmission companies (e.g. Power Grid Corporation of India Ltd, Tata Power Ltd, Power Trading Corporation);
- and state owned and private consultancies (e.g. the Water and Power Consultancy Services [India] Ltd [WAPCOS], the Central Electricity Authority [CEA], the Central Water Commission [CWC], and Sivaguru Energy Consultants and Software Development Pvt. Ltd. [SECS]).

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1 Manmohan Singh and Montek Singh Ahluwalia quoted in *The Hindu Business Line*, November 24, 2006
The Export Import Bank of India has provided support for Indian power projects abroad through various instruments. They include direct loans (e.g. a US $45 million loan for the Nam Chien Project in Vietnam) and lines of credit (e.g. for projects in Burma, Nepal, Uganda and Rwanda). The Indian government has also offered Nepal and Tajikistan outright grant assistance for the construction of hydropower projects by Indian developers.

**OVERVIEW OF PROJECTS**

The following is a brief overview of foreign dam projects with Indian involvement. It shows that a lot of projects are already being implemented in Nepal and Bhutan, India’s neighbors to the north. A small number of projects are also going forward in other Asian countries, while projects in Africa are still in the exploratory phase.

- **Afghanistan:** WAPCOS and to a lesser extent NHPC have been involved in a number of projects in various capacities, including in the 118 MW Kakajak Hydropower Project, the 40 MW Salma Dam Project, and the 40 MW Khanabad Hydropower Project.
- **Bhutan:** India has been involved in most hydropower projects in this country, from planning to funding to construction and the purchase of power. These projects include the 336 MW Chukha Hydropower Project, the 1020 MW Tala Hydropower Project, and the 60 MW Kurichu Hydropower Project. More projects are in pipeline. Among other companies, WAPCOS, CWE, Tata Power and the Power Grid Corporation have been involved in these projects in various capacities.
- **Burma:** In October 2007, India provided a loan of US$ 60 million to Burma to help fund construction of the 113 MW Thahtay Chaung hydropower project. The funds were made available via a Line of Credit from the Export-Import Bank of India. CEA and WAPCOS carried out the design and engineering of the 25 MW Sedawyagi Hydroelectric Project. NHPC prepared a pre-feasibility report for the 1200 MW Tamanthi multipurpose storage project on the Chindwin River in the Irrawady Basin and seems to be involved in further stages of development.
- **Congo:** In November 2007, senior NHPC representatives met with officials from the Democratic Republic of Congo and Ethiopia to explore opportunities for Indian hydropower projects in these countries. At the 4th India-Africa business conclave in Delhi in March 2008, Congo’s energy minister also advertised his country’s potential for Indian hydropower companies. So far, no specific projects have been identified at least in the public domain.
- **Ethiopia:** WAPCOS commissioned a master plan for hydropower development in Ethiopia already in 1988/89. The head of Ethiopia’s electricity utility also encouraged Indian companies to invest in his country at the business meeting of March 2008, and NHPC has expressed an interest in taking up Ethiopian hydropower projects.
- **Ghana:** SECSD, an Indian consultancy company, carried out a series of studies to identify potential private power projects in Western Ghana, and to prepare pre-feasibility and feasibility studies for a series of projects on the Pra, Tano and Ankobra rivers. Various Indian institutions were also involved in small hydropower projects in Ghana, but none of the projects seem to have been completed.
- **Indonesia:** WAPCOS was involved in Batang Hari Hydropower Project.
- **Iraq:** WAPCOS had contracts in the Bakuman and Khalikan Dam projects.
- **Malaysia:** WAPCOS was involved in the 21 MW Sungai Piah Hydropower Project.
- **Nepal:** Indian institutions are involved in a series of hydropower projects in Nepal at different stages of development. India’s Power Trading Corporation will purchase all the power produced by the 750 MW West Seti Project, which is currently being developed by Australia’s Snowy Mountain Engineering Company. In February 2008, Nepal’s government awarded the 300 MW Upper Karnali Project to GMR Energy Ltd, a private Indian company, and the 402 MW Arun III Hydropower Project to the Sutej Jal Vidyut Nigam Ltd.

In October 2006, the Indian government offered Nepal grant assistance for the construction of a hydropower project of up to 250 MW. The 240 MW Naumure Project on the West Rapti River is currently being considered for this purpose. In September 2007, the Export Import Bank of India also extended a Line of Credit of US $100 million to the government of Nepal in support of various projects, including hydropower projects.

Finally, India is in the process of planning and investigating the 5600 MW Pancheswar Dam under the Mahakali Indo-Nepal Treaty that came into force in June 1997 for a period of 75 years. The two countries are also in the process of planning the Saptakosi High Dam Multipurpose Project and Sun Kosi storage and diversion scheme. India’s gigantic River Linking plans crucially hinge on the construction of huge storage dams in Nepal (and Bhutan).

- **Rwanda:** In October 2007, the Export Import Bank of India approved the first tranche of US $20 million of a US $80 million line of credit for a hydropower project in Rwanda.
- **Sri Lanka:** WAPCOS is involved in the biggest hydropower project currently planned in this country, namely the 150 MW Upper Kotmale Project.

- **Tajikistan:** An Indian delegation, including NHPC engineers, visited this mountainous country in August 2007 to explore hydropower projects. According to the Tajik ambassador to India, NHPC and BHEL stand ready to reconstruct the Varsob I Hydropower Project. The Indian government has offered US $13 million in support of this project.

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2 The Ambassador of the Republic of Tajikistan, Message, see www.tajikembassy.in/message%20by%20the%20ambassador.html
■ **Uganda:** In February 2008, Alstom India got the contract to supply electro-mechanical equipment for the controversial 250 MW Bujagali Hydropower project in Uganda. In March 2008, India approved a US $350 million line of credit for the development of a 100 MW hydropower project by BHEL at Isimba Dalls in the Upper Nile basin.

■ **Vietnam:** In January 2008, the Export Import Bank of India approved a loan of US $45 million for the 200 MW Nam Chien Hydropower Project in Northern Vietnam. BHEL will provide equipment for this project.

THE IMPACTS

No detailed studies on the impacts of India’s foreign investments, including hydropower projects, exist. The paper by Deborah Moore and Thayer Scudder in this report summarizes some of the findings of the World Commission on Dams regarding the development effectiveness of dams. There is evidence that Indian dams abroad also have serious impacts on affected communities and the environment. Here are some examples:

- According to students’ groups from the affected region, the Tamanthi Hydropower Project in Burma will submerge about 68 square kilometers of land, and displace about 30,000 people from 35 villages. The affected communities belong to the indigenous Kuki people. Some of the affected people have already been displaced by the country’s military rulers without any compensation, and the students’ groups have protested against the project in India.

- The West Seti Hydropower Project in Nepal will submerge 22 square kilometers of land, displace at least 1500 families, and dry out a long stretch of the Seti River.

- The Tala Hydropower Project in Bhutan has almost totally dried up a 30 kilometer-long stretch of the Wangchu River, and adversely impacted the rich biodiversity of a much larger region. The project is located in a geologically fragile area, and suffered extensive damages from flooding in 2000.

CONCLUSION

Dams in India have a long and extremely conflictive history. Poor, marginalized and often tribal people bore the brunt of dams’ impacts, but received few if any of their benefits. Dams have triggered many large-scale social mobilizations, with huge demonstrations, the blockade of construction sites, hunger strikes, court cases and other forms of conflict. Indian dam builders and financiers have not developed credible policies to address the negative social and environmental impacts of their projects. In numerous cases, they have circumvented laws, government and court decisions. Already, dams with Indian involvement have also triggered protests and court cases in Nepal, Burma and Uganda.

In many host countries of Indian projects, there are no appropriate laws and policies which regulate the social and environmental impacts of dam projects. In countries such as Bhutan, Burma, Ethiopia and Vietnam, there is no political space for an independent civil society, judiciary, and media. In such countries, foreign investors and financiers have a particular responsibility to address the social and environmental impacts of their projects.

The paper by Deborah Moore and Thayer Scudder in this report introduces the recommendations of the World Commission on Dams. These recommendations were elaborated in an open and inclusive process in which stakeholders from all sides of the debate were involved. Two of the Commission’s twelve members were from India, one of the WCD’s ten in-depth case studies covered India’s experience with dams, and India’s Ministry of Water Resources was a member of the WCD Forum. The WCD framework is therefore highly relevant for Indian dam builders and financiers.

As they expand their foreign operations, Indian dam builders and financiers risk exporting their negative domestic track record and creating conflicts over their projects abroad. The Export Import Bank of India and companies such as NHPC, BHEL, SJVN, GMR, WAPCOS and others are well advised to adopt the WCD’s recommendations for good practice in water and energy sector development, to avoid getting embroiled in international conflicts over their projects.
The Mekong region is enjoying a period of stability and rapid economic growth not experienced for centuries. As a result, the region demands increasing quantities of electricity, and exploiting its hydropower potential is high on the agenda. In contrast to the recent past, it is project developers and financiers from Asia rather than the West that are spearheading this hydropower drive. Yet, in a region where millions of people depend on the natural resources that rivers provide, many proposed dams pose risks for the environment, communities, project developers, and host governments.

This chapter outlines the current trends and main actors in hydropower development throughout the Mekong Region. It identifies the need for better planning practices and internationally recognized standards of best practice in the power sector. This will minimize project investment risks, and make certain that development in the Mekong region is sustainable and equitable.

THE MEKONG REGION’S ELECTRICITY HUNGER

As economies in the region continue to expand, demand for electricity is growing, especially in Thailand and Vietnam, although the extent of this growth is contested. Thailand’s government estimates that electricity demand will approximately double by 2021. In Vietnam, the government predicts that demand will quadruple by 2015. Burma, Cambodia and Laos have more modest demand growth predictions, though all governments have committed to urgently develop electricity infrastructure to support economic growth.

Thailand, which has already developed much of its hydropower potential and faces stiff opposition to further projects at home, plans to import at least 14,000 MW of electricity from Burma, Laos and Yunnan Province over the coming 15 years. Vietnam plans to develop almost all of its viable hydropower over the next 20 years, and to import hydroelectricity from Cambodia, China, and Laos. Responding to this demand, the governments of Burma, Cambodia and Laos are keen to develop their hydropower potential for electricity export and domestic consumption.

Hydropower development in the Mekong region has been hotly contested - where political space permits - by affected communities, academics, and civil society organizations. Critics are concerned that plans for dam construction are moving forward without genuine consultation with local communities and other stakeholders, and without strong planning processes at the national and regional level. Civil society groups have questioned Thailand and Vietnam’s power development plans, which heavily promote the development of new large-scale electricity generation plants. They claim that future electricity demands are overestimated, and that the role energy efficiency measures, renewable energy, and decentralized energy options could play are downplayed. They argue that existing plans mostly serve the interests of the state-owned electricity utilities, energy...
companies, and the construction industry, rather than the needs of the region's electricity consumers, and are calling for reform of the power planning process.

THE REGION'S NEW HYDROPOWER PROONENTS

Over the past five decades, Western governments, backed by multilateral development banks, corporations, and the United Nations, have promoted and financed major hydropower schemes in the Mekong region. Yet, many of these hydropower projects, such as the Pak Mun Dam in Thailand and the Theun-Hinboun Dam in Laos, have left affected communities worse off. The Asian Development Bank and World Bank have never supported a hydropower project in Cambodia or in Burma, which is presently subject to a moratorium on multilateral development bank support.

Asia's economic revival after the 1997 financial crisis and China's reemergence on the global stage have ushered in a new generation of hydropower developers, mainly from Thailand, Vietnam, China, and Malaysia. In a complex interplay of political support, development aid, and entrepreneurial spirit, these new proponents have led the push for widespread hydropower exploitation, often backed by export credit agencies and commercial financiers from their own countries. The new developers are able to move quickly, and have picked up many projects that were abandoned by Western corporations during the Asian financial crisis.

The new hydro companies and their backers are fast displacing the Western corporations and multilateral development banks that previously dominated the region. The Mekong governments increasingly view the social and environmental policies associated with Western aid as burdensome, time-consuming and costly. They have warmly welcomed the new hydropower actors and their alternative sources of finance.

THAILAND PROJECTS ITS POWER

As Thailand's demand for power has grown and the Thai public's resistance to new large domestic power plants strengthened, the Electricity Generating Authority of Thailand (EGAT) has increasingly favored importing power from neighboring countries, where the hydropower potential is huge and community opposition is largely stifled.

In Laos, Thai investors have already joined Western corporations in two major projects; namely the 210 MW Theun-Hinboun and 150 MW Houay Ho hydropower schemes. Both of these projects, which export electricity to Thailand and have been operating for almost a decade, have had serious impacts on local communities which remain largely unresolved. Two Thai companies are also major shareholders in the US $1.45 billion Nam Theun 2 hydropower project, which is financed by shareholder equity and loans from Thai and Western banks, export credit agencies, and multilateral development banks.

The construction of the 615 MW Nam Ngum 2 hydropower project, which broke ground in 2006, marks an important transition in that it is being developed and financed largely by Thai actors. Its shareholders are primarily Thai companies, such as Ch. Karnchang and Ratchaburi. Thai commercial banks are the main financiers of the US $832 million project, and EdL obtained its equity through a bond issue worth 1.5 billion Thai baht that was guaranteed by Thailand’s Export-Import Bank.

Nam Ngum 2 has already violated Laos’ 2005 National Policy on the Environmental and Social Sustainability of the Hydropower Sector that was promoted by the World Bank. The objective of the policy is to ensure that all hydropower projects in Laos meet minimum environmental and social standards. But key project documents, including the Environmental Impact Assessment, have not been disclosed, despite the fact that construction is well underway. In January 2008, ADB consultants also identified serious shortcomings in Nam Ngum 2’s resettlement program.2

In Burma, Thai companies have actively sought joint-ventures with Chinese partners to develop controversial hydropower dams on the Salween River. EGAT has partnered with Sinohydro Corporation and MDX has partnered with Gezhouba Water and Power Group Co. Ltd to develop the proposed Hat Gyi and Tasang dams respectively. Thai companies benefit from partnering with Chinese companies, in part because of the Chinese government’s close ties with Burma’s military junta. A separate chapter in this report describes the concerns of Burmese and international civil society regarding these projects.

Thai energy companies are now conducting feasibility studies throughout the region, especially in Laos where they are evaluating more than 10 hydropower schemes, including two controversial projects on the Mekong River’s mainstream. Several Thai energy companies have recently identified investing in regional energy projects as a core part of their business strategies. Thailand’s construction industry is also increasingly looking towards foreign markets. Backing these companies, Thailand’s commercial banks and Export-Import Bank have indicated their willingness to support regional projects.

CHINA COMPETES FOR CONTRACTS IN LAOS

Major Chinese state-owned enterprises, such as China Southern Power Grid and Sinohydro Corporation, figure prominently amongst the Mekong region’s new wave of hydropower developers. Projects developed to date have often been backed by China Export-Import Bank.

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2 Final Workshop on Draft Report of the Cumulative Impact Assessment of the Nam Ngum 3 Hydropower Project in Lao PDR, 22nd January 2008, Vientiane, Lao PDR.
The first China Exim-backed project in Laos was the Nam Mang 3 Dam, commissioned in 2004 and constructed by China International Water and Electric Corporation. The project negatively affected an estimated 15,000 people, including 2,700 people that had to be resettled from the reservoir area. Nam Mang 3 became embroiled in controversy when, in 2002, the project was the scene of the first villager-led protest against a dam in Laos. Some 40 Hmong men armed with sticks and guns, infuriated that they might be evicted from their lands without information about where they would be relocated, halted dam construction for five days.3

Competing with other project developers from Thailand, Vietnam, Russia, Malaysia, Japan and Korea, amongst others, Chinese companies have managed to carve out a large slice of Laos’ hydropower pie. Chinese companies are presently involved in two hydropower projects that are under construction, the Xeset 2 and Nam Lik 1–2 dams, and have secured Memoranda of Understandings to conduct feasibility studies on at least ten more projects. Sinohydro Corporation has spearheaded this push, signing five MoUs, including for a 1,100 MW cascade on the Nam Ou River that could potentially impact 50,000 people and inundate part of Phou Dendin National Biodiversity Conservation Area, and the controversial Pak Lay Dam proposed on the Mekong River mainstream.

### CAMBODIA: Partnering with China

Cambodia is on the threshold of an extensive domestic hydropower development program, backed mainly by Chinese developers and financiers. In Cambodia, the cost of electricity is amongst the highest in the world and electricity infrastructure remains rudimentary, a result of decades of fighting and political turmoil.

Until recently, Cambodia has struggled to attract investment for major hydropower development. Western bilateral donors and the multilateral development banks have been reluctant to provide support, in part over concerns about environmental and social impacts. Over the past several years, however, China’s political and economic ties with Cambodia have strengthened and the Chinese government has indicated high-level support for Cambodia’s hydropower plans.

In April 2006, the Chinese government announced a US $600 million aid package to Cambodia, almost half of which covered the cost of Cambodia’s first large dam, the Kamchay Project. China Exim Bank provided a concessionary loan to Sinohydro Corporation for developing the project.

Now under construction, the dam is located in Bokor National Park and will flood 20 square kilometers of protected forest. The forest is the habitat of 31 mammal species of which 10, including Asian elephants, leopard cats, and tigers, are endangered. This area is also an important source of revenue from non-timber forest products for local residents.4 In March 2008, the Cambodia Daily reported that the river’s water quality had seriously deteriorated due to construction activities at the dam and the release of sewage from the workers’ camp. This decimated the local tourist industry at the rapids downstream and affected those that take drinking water from the river.

Chinese companies are currently conducting feasibility studies on three other large hydropower projects in Cambodia’s Cardamom mountain region, large swathes of which are designated as protected areas.5 The Stung Cheay Areng Dam, under study by China Southern Power Grid Company (CSG), has raised particular concern. Its reservoir would flood nine villages with a population of 1,500 mainly indigenous people and extend into the Central Cardamom Protected Forest, inundating the habitat of 31 endangered fauna species and the world’s most important breeding site for the endangered Siamese Crocodile.6

CSG is also currently studying the Sambor Dam on the Mekong Mainstream in Kratie Province. The environmental consequences of this dam on the river’s fisheries would be severe.

Civil society groups in Cambodia have questioned the approval process of these projects, which has been conducted behind closed doors and without meaningful participation of local communities and other concerned stakeholders.

### Vietnam: Racing to Meet Power Demand

Rapid economic growth in Vietnam has resulted in a massive increase in demand for power that the state-owned utility, Electricity of Vietnam (EVN), has struggled to meet. EVN estimates that it will have to invest US $45 billion over the next ten years in new electricity generation capacity alone. This has necessitated a radical reform of Vietnam’s electricity industry. Since 2004, EVN has undergone a process of partial privatization. The utility hopes to earn more than US $700 million by selling shares in many of its power plants.

Large hydropower plants in Vietnam have often caused serious social upheaval and high environmental costs. Examples include the Hoa Bin, Son La, and Yali Falls dams. Vietnam passed a Law on Environmental Protection in 2005, but it has been poorly implemented to date.

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5 Stung Tatay Dam, Koh Kong Province (China National Heavy Machinery Corporation); Lower Stung Russey Dam, Koh Kong Province, (Yunnan Corporation for International Techno-Economic Cooperation); Stung Cheay Areng Dam (Pursat Province).
6 Conservation International, A summary of the social and environmental impacts of the proposed Areng Valley hydroelectric dam, southwest Cambodia, 2008
The growth in Vietnam’s domestic financial markets and the increasing availability of private capital has enabled the government to steer Western donor support from its electricity sector towards less contentious sectors such as education and health. Vietnam has instead welcomed foreign assistance for its dam projects from donors whose aid does not come with rigorous social and environmental conditionalities. In January 2008, the Indian Export-Import Bank provided a concessional loan of US $45 million to Vietnam for the 200 MW Nam Chyen Hydropower Plant, complementing the US $156 million provided for the project mostly by Vietnamese banks.

To secure its electricity supply, Vietnam has also looked to its neighbors. The Viet Nam-Laos Joint Stock Electricity Investment and Development Company began construction of the 250 MW Xekaman 3 hydropower project in Southern Laos in 2006. Financing for the project, which will export electricity to Vietnam, was largely provided by Vietnamese financial institutions. As with the Thai-backed Nam Ngum 2 Dam, the project’s environmental documents have not been publicly disclosed in violation of Laos’ National Hydropower Policy. The company is presently studying four more hydropower projects in the Xekong and Xekamen basins. These projects threaten the livelihoods of tens of thousands of people in Laos as well as those downstream along the Srepok River in Cambodia.

A subsidiary of EVN is currently preparing a feasibility study for a dam in Cambodia on the Lower Sesan River, most likely to export power to Vietnam. The dam would further compound the impacts from dam construction upstream in Vietnam on communities living along the Sesan River. To date these impacts have neither been mitigated nor compensated for.

**INTERNATIONAL STANDARDS FOR INTERNATIONAL PROJECTS**

The Mekong region’s rush towards hydropower development remains fraught with pitfalls for project developers, financiers, host governments, and most of all, for affected communities. Serious questions have been raised about the commitment of new hydropower proponents to social and environment standards. Furthermore, there are concerns about these new actors’ lack of public accountability, despite the fact that many proposed projects threaten the health of the region’s river ecosystems and the well-being of communities that depend upon them.

While Western donors, financiers, and multilateral development banks claim to have strong environmental and social policies as well as commitments to public participation, in reality these measures have often proven inadequate to mitigate the risks of large dams. Yet, there is little evidence that the new wave of project financiers are striving to meet even these social and environmental standards.

None of the commercial banks in Vietnam and Thailand have adopted the Equator Principles. In China, the Equator Principles are only just beginning to gain momentum as the State Environmental Protection Administration has embraced them as part of its green credit policy. Amongst the new export credit agencies active in the Mekong region, only China Exim Bank is known to have an environmental policy, although it lacks detail and there is little evidence of its rigorous implementation on the ground.

Similarly, hydropower companies from Thailand, Vietnam, China, Russia and Malaysia, for example, have yet to commit to international best practice standards. Very few have developed and published Corporate Social Responsibility policies. Those companies that have, such as Thailand’s EGCO and Ratchaburi, have adopted a very narrow interpretation of CSR that provides only limited support for affected communities (and apparently, only for those in Thailand).

To genuinely mainstream environmental and social issues throughout the companies’ decision-making process, CSR frameworks must reflect international best practice standards - such as the recommendations of the World Commission on Dams and the UN Norms on the Responsibility of Transnational Corporations - and become embedded in the institutional culture of financiers and companies. Because large projects are often funded by several institutions from different countries, it makes sense for financiers to adopt the same internationally acknowledged environmental policies.

Where a comprehensive and participatory assessment of all options has concluded that a hydropower project is the best option to meet water and energy needs, all parties involved should commit to implementing international best practice standards. An atmosphere that encourages a race to the top, not the bottom, needs to be fostered. As actors from China, Thailand and Vietnam become increasingly influential in the Mekong region and step onto the global stage, they should accept their international responsibilities and adhere to international standards when developing and financing large infrastructure projects.
INTRODUCTION

In recent years, companies from China, Thailand and India have greatly increased their involvement in Burma’s hydropower development. Between 1997 and September 2007, at least 14 Chinese companies became involved in at least 40 hydropower projects in Burma. While affected communities receive few if any of the projects’ benefits, they suffer serious impacts, including displacement, environmental degradation, and the militarization of project areas. Burmese regulations are non-existent or not effective in addressing these impacts. Foreign investors, including from China, need to take extra precautions to avoid becoming complicit in the impoverishment of affected people.

Several dams in Burma are currently underway with major support from Chinese companies, including the 790 MW Yeywa Dam in central Burma and the 280 MW Paunglaung Dam. This paper will focus on plans for a few selected dams on the Salween, Irrawaddy, and Shweli Rivers. Plans for dams on these three rivers with a combined capacity of over 30,000 MW are all currently moving forward with financial and construction support from Chinese companies.

In Burma, many major development projects, including large dams, take place in ethnic minority areas along the country’s borders with India, Bangladesh, China, and Thailand. Burmese laws allow for no public participation in decision-making, require no environmental, social, or human rights impact assessment, and effectively offer no access to justice. Such provisions are especially crucial in Burma, where development projects often result in environmental devastation and loss of land and livelihood for communities that depend on natural resources. Increased militarization around project areas also often results in the use of forced labor and forced portering, forced relocation, and other abuses. Large dams in Burma financially and materially benefit the investing countries while continuing to support Burma’s military junta financially and politically.

International environmental standards and China’s own domestic environmental laws provide a benchmark for companies engaged in hydropower development in Burma. Environmental impact assessment, access to information, public participation, and the guarantee that projects will not harm or forcibly displace villagers should be the minimum foundation for hydropower development in Burma and elsewhere.

SALWEEN RIVER DAMS IN KAREN, KARENNI, AND SHAN STATES

Five dams are planned for the Salween River, Southeast Asia’s longest free-flowing river, in eastern Burma and along the Thai-Burma border. The Salween River forms the downstream part of the Nu Jiang, which is home to one of the world’s richest biodiversity hotspots. The banks of the Salween along the Thai-Burma border are covered with teak forest. In recent years the forest along the Salween has been depleted by logging. In this unique area, plant and animal species similar to those found in the Himalayas and northern India, as well as those found in Indochina, can be found.

The five planned dams on the Salween are the 1,200 MW Hut Gyi Dam in Karen State, the 7,100 MW Tasang Dam in Shan State, the 2,400 MW Upper Thanlwin Dam in Shan State, the 4,540 MW Weigyi Dam in Karenni State, and the 500-900 MW Dagwin Dam in Karen State.

2 For more information, please visit www.salweenwatch.org.
The Weigyi and Dagwin dams directly threaten 30,000 people from Karenni State. The homelands of the Yintalai tribe, a subgroup of the Karenni that now number just 1,000, will be completely inundated, jeopardizing the existence of an entire people. Over 35,000 people from Karen State, 50 Thai-Karen communities along the Salween in Thailand, and 17 communities on the Pai River in Thailand will also be directly affected. Further, the Salween Dams will disrupt the ecology of the downstream river ecosystem, negatively impacting over half a million people in the Mon communities that live along the river estuary. The following section focuses on the three Salween River Dams with confirmed support from Chinese companies.

Four of the five Chinese companies currently or potentially involved in the Salween Dams – Sinohydro, China Gezhouba Group Company (CGGC), Yunnan Power Grid Corporation, and Farsighted Group – lack publicly announced environmental policies, though Farsighted Group is a signatory to the UN Global Compact. Three of these four are state-controlled; Farsighted is the only private corporation. No information has been found about the fifth company, Gold Water Resources Group Company.

The first dam scheduled for construction is the Hut Gyi Dam in Karen State. Sinohydro, the Electric Generating Authority of Thailand (EGAT) and Burma’s military junta have joined to finance the $1 billion dam. The Hut Gyi Dam is located in an unstable area that is often in the midst of active fighting. The Democratic Karen Buddhist Army, a Karen group that currently has a ceasefire agreement with the military junta, controls the area. The Karen National Union (KNU), the major Karen opposition party in the area, has waged a war for independence against the Burmese military since 1949. The quickest and safest route to the area from Thailand is through KNU controlled territory to the north.

Between 2006 and 2007 two workers from EGAT were killed at the Hut Gyi site. The KNU, which in early 2007 was accused of blocking an EGAT-commissioned team from reaching the Hut Gyi site through its territory, was blamed for the attack and has faced much pressure from Thai authorities to support the dam plans. Representatives from the KNU denied involvement in the attack.

EGAT commissioned a team from Chulalongkorn University in Bangkok to travel to the dam site to study the environmental and geographic conditions in the area. Thus far the team has not been able to clearly determine the expected impacts from the Hut Gyi dam. Because of the differences between the Hut Gyi site and dam sites in Thailand, the Chulalongkorn team has admitted that they are unfamiliar with some of the issues that they are studying.

According to surveys conducted by Karen Rivers Watch, 41 villages will be directly impacted by flooding from the Hut Gyi Dam. Dozens more villages will be indirectly impacted. In Burma, villagers in planned development areas are often forcibly relocated from the project area. Ongoing offensives by Burma’s army in Karen State have led to massive displacement, with estimates of over 43,000 newly displaced people from 2006–2007 alone. When the villages that will be impacted by the Hut Gyi Dam are relocated, Thailand can expect another surge of refugees fleeing across the border.

The largest dam planned for the Salween River is the Tasang Dam in Shan State. The Tasang Dam is part of the Greater Mekong Subregion Power Grid. Thailand’s MDX Group and the military junta have signed a series of agreements to finance the dam. However, amidst rumors of Burmese dissatisfaction with MDX in early 2007, China Gezhouba Group Company announced that it had won a contract for initial dam construction, and quickly began sending workers to the site. In March of 2007, military officials held a ground breaking ceremony at the Tasang Dam site, hosted by CGGC and MDX. Approximately 400 villagers were forced to attend the ceremony.

The military junta implemented a forced relocation program in Shan State in 1996, which continues to the present. The forced relocation program began at the same time that MDX began surveying the area. Between 1996 and 1998, 55,957 families, or approximately 300,000 people, in Shan State were forcibly relocated to military-controlled relocation sites. Of these, around 2,000 families were forcibly relocated from a tributary of the Salween River, an area that will be directly affected by the Tasang Dam. In June of 2007, the Burmese military confiscated lands in Wan Mai village of Mong Ton township, and gave the land to MDX to build an office.

Burma’s military presence in the area of the Tasang Dam site has increased dramatically since 2000. The number of Burmese army battalions around the site has tripled to 30 since that time. The increase in troops has led, as is often the case with major development projects in Burma, to forced labor, forced portering, rape, and murder in the area of the Tasang site. In 2002, the Shan Women’s Action Network and the Shan Human Rights Foundation reported that approximately 300 women were raped by Burmese military troops around the Tasang Dam site. The Shan Human Rights Foundation has also reported that at least 1,221 people have been killed by Burma’s military troops in Shan State since 1996. 319 people were killed in Kun Hing township in 1997, which is in the flood zone of the Tasang Dam. Three of those killed in Kun Hing were Buddhist abbots, one of whom was tied in a sack and drowned in the river.

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4 Warning Signs, Shan Sapawa Environmental Organization, 2007
5 See The Shan Human Rights Foundation & The Shan Women’s Action Network, License to Rape, 2002
The construction of a fifth dam on the Salween River, also financed by companies from China, was announced early last year. In April 2007, Farsighted Group and China Gold Water Resources Co. signed Memoranda of Understanding (MoUs) with the military junta for a 2,400 MW hydropower project on the upper Salween, dubbed the Upper Thanlwin Dam. Reports from 2006 suggest that Yunnan Power Grid Co. also surveyed the area.

**IRRAWADDY AND SHWELI RIVER DAMS IN KACHIN AND SHAN STATES**

In Kachin State, China Power Investment Corporation plans to build seven dams along the Irrawaddy, N’Mai Hka and Mali Hka Rivers according to 2006 and 2007 agreements between the company and the military junta. In May 2007, the project-launching ceremony was held for the Myitsone Dam. The 3,600 MW Myitsone Dam will be located on the Irrawaddy River, at the confluence of the N’Mai Hka and Mali Hka Rivers in Kachin State. Surveys of the dam site were conducted by the Yunnan Machinery and Equipment Import and Export Company (YMEC) and the Kunming Hydropower Institute of Design in 2005. Burma’s Asia World Company is also heavily involved in the project.

There are approximately 47 villages that will be directly affected by the Myitsone Dam. Flooding from the dam site will displace an estimated 10,000 people from these villages, leading to the loss of livelihood for communities which traditionally depend on the Irrawaddy. The area surrounding the Myitsone Dam is a hotspot of biodiversity, much of which will be destroyed by flooding from the dam. Finally, the impacts common to all large dams in Burma — increased militarization in the area, forced relocation, portering, and other abuses — are expected as the Myitsone Dam project goes forward.8

In January of 2008, reports from the dam site detailed abuses that have been committed as a result of the increased Burmese military presence in the area since construction began in late 2007. Approximately 300 construction workers from Asia World Company, Chinese and Burmese engineers have also moved into the area and constructed shelters in the areas by the dam site.

The 600 MW Shweli I Dam is currently being constructed on the Shweli River, a tributary of the Irrawaddy, in northern Shan State. The Shweli I is a Build-Operate-Transfer (BOT) project, which according to media reports was 51% complete as of May 2007. The project site is located in Man Tat village, home of 700 ethnic Palaung people. The Shweli River I Power Station Co. was created in December 2006 by Yunnan Joint Power Development Co. and Burma’s Ministry of Electric Power.

In late 2000, in preparation for the project, 300 soldiers set up a permanent base in Man Tat. The increase in checkpoints following the arrival of the soldiers has limited the freedom of the villagers. Members of the village who once made their livelihoods from trading at the Chinese border are now prohibited from doing so. Soldiers from the base have also forced villagers to build roads and confiscated and destroyed farmlands. To date villagers have not received compensation. Women in the village are at greater risk of sexual violence, and several young women have been forced to marry soldiers. The villagers were not given any information about the dam plans or the reason for the new base.9 The same is expected of the planned Shweli 2 and 3 dams downstream.

**LACKING ENVIRONMENTAL LAWS AND SAFEGUARDS**

Though Burma does have some environmental legislation and is a party to several international environmental treaties, the country lacks the environmental standards, safeguards, and enforcement necessary to protect the environment. Even if Burma’s environmental laws were more comprehensive, the rule of law in the country has been obliterated, with final say in the hands of the military junta. A foreign company operating in Burma cannot expect that abiding by Burmese standards alone will ensure environmental or social protection.

Contrary to customary international law, Burma’s laws do not provide for environmental impact assessment. Burma’s environmental laws also do not appear to require public participation, from affected communities or from anyone else. Development decision are often shrouded in secrecy, with those most affected knowing little or nothing about a planned project. Despite being a party to the Convention on Biological Diversity, Burma’s environmental laws do not provide for public participation for indigenous people living in planned development zones.10 Finally, Burma’s environmental laws do not, as a whole, regulate pollution, though the Water Law implemented in 2006 contains some vague provisions covering pollution.11

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8 See Kachin Development Networking Group, Damming the Irrawaddy, October 2007
9 See Palaung Youth Network Group, Under the Boot, December 2007
10 Article 8(j) of the Convention directs parties to involve indigenous peoples in activities affecting biological diversity
NEW FINANCIERS AND THE ENVIRONMENT

RECOMMENDATIONS

There are many international standards applicable to the construction, operation and financing of hydroelectric projects. The World Commission on Dams’ guidelines are the most comprehensive, requiring environmental impact assessment as well as public participation and disclosure. Environmental impact assessment for major development projects is stipulated by several international environmental agreements. The rights of indigenous peoples to public participation in development projects have also been codified in international environmental documents, such as the Convention on Biological Diversity and the recent UN Declaration on the Rights of Indigenous Peoples. The international community has increasingly recognized the need for corporate responsibility, as laid out in the draft UN Norms on the Responsibility of Transnational Corporations, the UN Global Compact, and the OECD Guidelines for Multinational Enterprises.

In recent years, China has included environmental assessment, public participation, resettlement benefits, and pollution provisions in its own laws and policies. Since 2003, the Environmental Impact Assessment Law has required assessments for all major development projects; the process also includes public participation and the release of the assessments. These standards were further clarified in the 2006 Provisional Measures of the State Environmental Protection Administration on Public Participation in Environmental Impact Assessment. Also in 2006 the State Council adopted the Regulations on Land Requisition Compensation and Residents Resettlement in Construction of Large and Medium-sized Water Conservancy and Hydroelectric Projects. While it is understood that these laws and regulations govern Chinese businesses within China, they present an opportunity for China to extend the same commendable standards to its projects in other countries.

The Chinese government should consider the repercussions of Chinese overseas development projects, review the procedures and laws regulating such investments, and release information regarding the dam plans to affected communities. The Chinese government should monitor and regulate Chinese corporations operating and financing hydropower development and other natural resource extraction projects abroad. Businesses should be made to comply with Chinese and international standards to ensure accountability and people's informed participation in decision-making.
ABSTRACT
This short paper examines discrepancies between free wheeling export credit agencies (ECAs) and their sibling bi-lateral aid agencies, which are subject to the global decision process for sustainable development. Each ECA is an arm of the government. The Export–Import Bank of China is no exception. Ironically, any government that finances its ECA has supported social and environmental safeguards policies, to which multilateral development banks (MDBs) are subject. China is no longer an ordinary borrower in MDBs; it is an important donor. As a responsible financier in development, the China Exim Bank needs to develop its operational policies and procedures.
The social, environmental and economic impacts of large dams have often created public controversy, conflict, delays, and even termination. The independent World Commission on Dams was set up in an effort to create a new consensus, and in 2000 proposed an innovative approach that can help overcome dam-related conflicts.

With major support from the World Bank and IUCN, the independent World Commission on Dams (WCD) was created in May 1998. Its mandate was to review the development effectiveness of dams in terms of delivering water and energy solutions, and to develop internationally accepted standards, guidelines and criteria for decision-making in the planning and construction of dams. The Commission consisted of twelve members with high-level experience in government, industry, academia, and civil society. Its chair and vice-chair were Kader Asmal, then South Africa’s minister for water resources, and Lakshmi Jain, a senior public servant from India.

During its two-year mandate, the WCD carried out the most comprehensive evaluation of large dams done to date. It commissioned thematic reviews on 17 issues, with 130 contributing papers, studied seven dams and three dam-building countries in great detail (including a country study on China’s experiences with dams), reviewed another 125 dams in a cross-check survey, carried out four consultations in different parts of the world with 1,400 participants, and accepted 950 submissions from experts and the interested public. The Commission regularly consulted the WCD Forum, a multi-stakeholder body with 68 members from 36 countries, including representatives from China’s and India’s Ministries of Water Resources. Altogether, the WCD reviewed experiences from 1,000 dams in 79 countries.

**Key WCD Findings: Some Surprises and Disappointments**

Our main finding was that while dams have made an important and significant contribution to human development, and the benefits derived from them have been considerable, in too many cases an unacceptable and often unnecessary price has been paid to secure those benefits, especially in economic, social and environmental terms, by people displaced, by communities downstream, by taxpayers and by the natural environment.

Hydropower dams generated 19 percent of the world’s electricity. In 63 countries, their share was higher than 50 percent. Dams supported 30-40 percent of the world’s irrigated area, and 12-16 percent of global food production. In 75 countries, dams had been built to control floods, and 12 percent of all dams had a water supply function.

The WCD compared dams’ projected benefits with actual outcomes. While dams are providing substantial benefits, many have fallen below their targets. Only 50 percent of the dams in the cross-check survey were completed on schedule, and 75 percent had cost overruns (which on average amounted to 56 percent). Almost half of the irrigation dams underperformed, e.g. by falling short on irrigated area, yields, and productivity. Hydropower dams met expectations on average, but more than half fell short of their targets for electricity generation.

In many cases, dams have led to a significant and irreversible loss of species and ecosystems. This includes the loss of forests and wildlife habitat, aquatic biodiversity, upstream and downstream fisheries, and the services of downstream floodplains, wetlands, and riverine, estuarine and adjacent marine ecosystems — i.e.,
services like flood control, maintenance of water quality, flood recession agriculture, and fisheries. Efforts to date to counter or mitigate the ecosystems impacts of large dams have met with limited success.

In terms of economic and social impacts, we found that the negative impacts were frequently neither adequately assessed nor accounted for; indeed the lack of post-project evaluations for such major projects remains a major deficiency. The range of these impacts is substantial. Some 40-80 million people had been physically displaced by dams worldwide. Hundreds of millions of people living downstream of dams have also suffered harm to their livelihoods. Those who were resettled rarely had their livelihoods restored, as resettlement programs have focused on physical relocation rather than the economic and social development of the displaced. The poor, other vulnerable groups and future generations are likely to bear a disproportionate share of the social and environmental cost of large dam projects without gaining a commensurate share of the economic benefits.

These results are surprising and disappointing in many ways. Given the scale and magnitude of public investments in large-scale dams, and the magnitude of their social and environmental impacts, we wanted to ensure that dams will, in fact, produce their promised economic benefits and that their impacts can be avoided and mitigated. It is not acceptable to repeat the mistakes of the past.

A NEW APPROACH FOR THE FUTURE

To improve development outcomes of water and energy projects, the Commission presented a new framework for decision-making based on recognizing the rights and assessing the risks of all interested parties. The WCD framework builds on the recognition that no party’s rights should extinguish another’s, and that where rights compete, negotiated agreements are needed. This approach builds on internationally accepted norms such as the UN Declaration of Human Rights, the Declaration on the Right to Development, and the Rio Principles.

The goal of the new framework is to ensure that rights are respected and risks are reduced, whether financial, economic, social or environmental. By following the new framework, we believed that investments in infrastructure development would result in projects that will perform better economically, have fewer financial risks, create greater development benefits for affected communities and broader society, and avoid destructive environmental impacts.

To improve the development effectiveness of future decisions around dams, the WCD adopted five core values that form the basis for the more detailed framework and guidelines. These five values – equity, efficiency, participatory decision-making, sustainability, and accountability – provide the essential tests that must be applied to decisions relating to water and energy development. Based on these values, the WCD framework puts forward 26 recommendations, which are grouped under the following seven strategic priorities:

- Gaining Public Acceptance: Public acceptance of key decisions is essential for sustainable water and energy resources development. Acceptance emerges from recognizing rights, addressing risks and responsibilities, and safeguarding the entitlements of all groups of affected people, particularly indigenous and tribal peoples, women and other vulnerable groups. Decision-making processes are used that enable informed participation by all groups of people, and result in the demonstrable acceptance of key decisions. Where projects affect indigenous and tribal peoples, such processes are guided by their free, prior and informed consent.

- Comprehensive Options Assessment: Alternatives to dams often exist. To explore these alternatives, needs for water, food and energy are assessed and objectives clearly defined. The appropriate development response is identified from a range of possible options. The selection is based on a comprehensive and participatory assessment of the full range of policy, institutional and technical options. In the assessment process, social and environmental aspects have the same significance as economic and financial factors.

- Addressing Existing Dams: Opportunities exist to optimize benefits from many existing dams, address outstanding social issues and strengthen environmental mitigation and restoration measures. Dams and their contexts are not static over time. Benefits and impacts may be transformed by changes in water use priorities, physical and land use changes in the river basin, technological developments, and changes in public policy. Management and operation practices must adapt continuously to changing circumstances over the project’s life and must address outstanding social issues.

- Sustaining Rivers and Livelihoods: Rivers, watersheds and aquatic ecosystems are the biological engines of the planet. Dams transform landscapes and create risks of irreversible impacts. Understanding, protecting and restoring ecosystems at river basin level is essential to foster equitable human development and the welfare of all species. Options assessment and decision-making around river development prioritizes the avoidance of impacts, followed by the minimization and mitigation of harm to the river system. Avoiding impacts through good site selection and project design is a priority. Releasing tailor-made environmental flows can help maintain (though seldom restore) downstream ecosystems and the communities that depend on them.

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2 Ibid., part II.
Recognizing Entitlements and Sharing Benefits: Negotiations with adversely affected people result in mutually agreed and legally enforceable mitigation and development provisions. These provisions recognize entitlements that improve livelihoods and quality of life, and affected people are beneficiaries of the project. Successful mitigation, resettlement and development are fundamental commitments and responsibilities of the state and the developer. Accountability of responsible parties to agreed mitigation, resettlement and development provisions is ensured through legal means, and through accessible legal recourse at national and international levels.

Ensuring Compliance: Ensuring public trust requires that governments, developers, regulators and operators meet all commitments made for the planning, implementation and operation of dams. Compliance with applicable regulations and guidelines and with project-specific negotiated agreements is secured at all stages of the project. A set of mutually reinforcing incentives and mechanisms is required for economic, social, environmental and technical measures. These should involve an appropriate mix of regulatory and non-regulatory measures, incorporating incentives and sanctions.

Sharing Rivers for Peace, Development and Security: Storage and diversion of water on transboundary rivers has been a source of considerable tension between and within countries. Dams require constructive co-operation. Consequently, the use and management of resources increasingly becomes the subject of agreement between states to promote mutual self-interest for peaceful collaboration. This leads to a shift from the narrow approach of allocating a finite resource to the sharing of rivers and their associated benefits. External financing agencies support the principles of good faith negotiations between riparian states.

A USEFUL TOOL FOR EXPORT CREDIT AGENCIES

Export credit agencies have a different role in financing projects than other investors, and often enter the planning and decision-making process at a later stage. Still, within their roles and responsibilities the World Commission on Dams’ recommendations are highly relevant and useful in ensuring that export credit agencies reduce the risks associated with projects they finance and avoid harm.

Many of the WCD’s recommendations are aimed specifically at improving the economic and financial performance of large dam projects, and were designed to address the weaknesses and failures in existing safeguard policies of the World Bank, other international agencies, national governments, and project developers, among other parties. Many of our recommendations are concrete and practical. They include tested measures such as stakeholder fora, independent dispute resolution mechanisms, performance bonds, and integrity pacts to tackle corruption in the procurement process.

While most official export credits are guaranteed by governments, it is still prudent for export credit agencies to invest their funds in the best projects possible, or at a minimum in economically and financially viable projects that will not adversely affect longer-term sustainable human development in the host countries. Even at later stages of project planning when export credit agencies are asked to invest, the WCD’s recommendations will help to ensure the economic benefits and viability of the projects by improving compliance, reducing risks, reducing delays and cost overruns due to opposition, and improving benefit streams and performance.

By integrating the WCD approach into their policies, export credit agencies can expect to finance higher quality projects, avoid conflict, controversy and delays from public rejection of projects, and contribute to sustainable economic development.

A PRACTICAL WAY FORWARD

Two concerns have frequently been brought forward regarding the WCD framework. First it is sometimes argued that through the principle of free, prior informed consent, the framework disregards the eminent domain of states and advocates a “veto power” for indigenous people. This is not correct. The WCD report does advocate that decisions on projects affecting indigenous and tribal peoples should be guided by their free, prior and informed consent, and defines this as part of a good faith, negotiated decision-making process. Yet where a settlement does not emerge, the state will act as the final arbitrator, subject to judicial review.

Secondly, debate remains about whether the recommendations in the WCD report are feasible to implement, i.e., whether they can be “operationalized” or “instrumentalized”. In fact, many institutions have endorsed the WCD framework or parts of it, and are benefiting from it in their daily practice. The World Bank and the International Hydropower Association, while critical of specific recommendations, have endorsed the WCD’s seven strategic priorities. In a statement on export credits and hydropower projects, the member states of the OECD export credit arrangement in November 2005 also recognized the value of the WCD’s strategic priorities.

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3 Ibid., p. 219
Several countries – including Germany, Nepal, South Africa, Sweden and Vietnam – have organized processes to integrate WCD recommendations into national policy. The member states of the EU require hydropower projects to comply with the WCD recommendations if they are to supply carbon credits to the European market. HSBC, one of the world’s leading commercial banks, requires all its water sector projects to comply with the WCD framework. Other banks as well as other private sector companies have adopted the framework for parts of their business activities.

The Maguga Dam in Swaziland is a project which incorporates some lessons and recommendations of the WCD report. The Swazi and South African project developers designed the reservoir so that displacement was minimized. Affected communities were involved in building their own resettlement homes. They also received water, electricity and assistance in setting up cooperatives, and thus became project beneficiaries. Remaining conflicts were addressed by an independent dispute resolution process.

Following the WCD framework will require increased efforts to identify the most suitable options, optimize the benefits, reduce and avoid the impacts, address problems and achieve public acceptance early in the project cycle. Some interests criticize the WCD framework out of concern that it will make the financing and building of dams more difficult than it already is. The WCD believed, however, that under-performing projects with detrimental impacts create ever worse difficulties. Using the WCD framework will reduce cost, save time and avoid conflicts over the longer term while achieving more equitable outcomes. It will also create new business opportunities through the improvement and re-operationalization of existing dams and development of other innovative alternatives to meet water and energy needs.

Our recommended guidelines and strategic priorities are solution oriented, make practical sense and are already being taken up in a wide variety of situations. The WCD approach is an appropriate way forward for future sustainable water and energy management. As the Chinese say: those who say it can’t be done should not interrupt those already doing it.
Mizuho Corporate Bank, Ltd. is part of Mizuho Financial Group, which is one of the largest financial institutions in the world. Mizuho Corporate Bank focuses on corporate finance and international business, serving as a core bank for approximately 70 percent of listed companies in Japan.

At Mizuho Corporate Bank, we are aware that it is our social responsibility to take into account environmental issues as we try to maintain a balance between economic development and environmental preservation. We believe that a responsible environmental policy makes sound business sense, and consider environmental issues as part of our business decision. This commitment is expressed in the Mizuho Code of Conduct of October 2000.

The Equator Principles are the common baseline and framework of leading financial institutions active in project finance for the implementation of their own social and environmental policies. Mizuho Corporate Bank adopted the Principles in 2003, and currently serves as the secretariat for the Equator Principle Financial Institutions. This paper introduces the Principles and how they are implemented.

THE EQUATOR PRINCIPLES – A FRAMEWORK FOR MANAGING SOCIAL AND ENVIRONMENTAL RISK IN PROJECT FINANCE

By Osamu Odawara

Since early 2000, commercial banks have increasingly come under close public scrutiny on environmental and social issues. Some environmental NGOs have asked commercial banks to implement their own policies to check the impacts of projects. To respond to these requests, ten commercial banks launched the Equator Principles in June 2003.

The Equator Principles are a framework for managing social and environmental risk in project finance. Project finance is a method of funding in which the lender looks primarily to the revenues generated by a single project, both as the source of repayment and as security for the exposure. This type of financing is applied to large, complex and expensive projects that include oil and gas development, mines, power plants and chemical processing plants. The Equator Principles apply to project finance transactions of US $10 million or more.

THE EQUATOR PRINCIPLES INCLUDE TEN PRINCIPLES:

- Review and Categorization
- Social and Environmental Assessment
- Applicable Social and Environmental Standards
- Action Plan and Management System
- Consultation and Disclosure
- Grievance Mechanism
- Independent Review
- Covenants
- Independent Monitoring and Reporting
- Reporting

Some of these Principles are elaborated below.

The ten Equator Principles cannot directly bind actions of borrowers. Instead, the Principles assist financial institutions to confirm actions of borrowers and to comply with themselves. Individual banks need to establish internal procedures and create a manual based on this framework.
The Equator Principles require financial institutions to check projects based on:

- host country laws, regulations and permits;
- the Performance Standards of the International Finance Corporation (IFC);
- IFC’s Environmental, Health and Safety (EHS) Guidelines.

IFC, the private sector arm of the World Bank Group, has eight Performance Standards. They cover issues such as social and environmental assessment and management system (PS1), labor and working conditions (PS2), pollution prevention and abatement (PS3), and land acquisition and involuntary resettlement (PS5).

IFC has Environmental, Health and Safety Guidelines for 63 sectors in the areas of forestry, agriculture and food production, general manufacturing, oil and gas, infrastructure, chemicals, mining, and electric power.

What do the Equator Principles mean in practice? The first Principle requires financial institutions to categorize projects as A, B or C based on the significance of their environmental impacts. Each project category places different requirements upon financial institutions. In the case of category A projects, borrowers need to carry out social and environmental assessments, and based on them, prepare action plans and social and environmental management systems to implement the action plans. Borrowers need to consult with affected communities, disclose the social and environmental assessment report and action plan, and develop a grievance mechanism. The assessment report, action plan and consultation process need to be reviewed by independent experts.

Most projects are not categorized as A, but as B. Their requirements are somewhat lighter.

The Equator Principles include requirements for climate change issues based on IFC’s Performance Standard 3. For projects releasing more than 100,000 tons of CO2, banks should ask the borrower to seek opportunities to reduce project-related greenhouse gas emissions, and to monitor and report greenhouse gas emissions annually.

The eighth Equator Principle deals with covenants. It requires that project finance loan agreements should have covenants which ask the borrower to comply with all relevant host country laws, to comply with the project’s action plan, and to provide annual reports that document compliance with relevant host country laws and with the action plan.

The Equator Principles have strengthened cooperation among the Equator Principle Financial Institutions (or EPFIs). Let’s look at the life cycle of a project finance syndication. At the due diligence stage, the lead arranger will screen and categorize the project, and retain an environmental consultant for category A and B projects. At the structuring stage, the lead arranger will prepare a lenders consultant Equator report, draft action plans, and draft covenants for the loan agreement. At the syndication stage, the lead arranger will share the lenders consultant Equator report with potential lenders. It will answer questions from potential lenders, and will facilitate the negotiation about action plans and covenants between potential lenders and the project sponsor. After the closing of the deal, lenders will keep monitoring the project’s compliance with the action plans.

By the end of January 2008, the Equator Principles had been adopted by 58 financial institutions. The EPFIs include commercial banks and export credit agencies in Africa, Asia, Europe, Oceania, North and South America. In the first half of 2007, 86 percent of the project finance transactions in developing countries were arranged by EPFIs. Because most project finance transactions require the involvement of several financial institutions, following the Equator Principles has, de facto, become a precondition for such transactions.

**HOW MIZUHO CORPORATE BANK IMPLEMENTS THE EQUATOR PRINCIPLES**

In October 2003, Mizuho Corporate Bank became the 18th financial institution to sign the Equator Principles. It took us twelve months to prepare the implementation of the Principles. During this period, we translated IFC policies and guidelines into Japanese and prepared checklists for 38 industry sectors (with the IFC’s pollution control limits and other IFC requirements). We created a manual and provided internal training, informed about our commitment on the Bank’s website and in our corporate social responsibility report, and established a dialogue with NGOs.

All issues relating to the Equator Principles are centralized within Mizuho Corporate Bank’s Sustainable Development Department, which was created in March 2006. This Department has six team members from four countries, including China. It works with 150 professionals in the Bank’s project finance staff, located in our Tokyo headquarters and in five other countries. Based on information from the Business Promotion Division, we prepare an Equator screening report on individual transactions. This report is judged by the Credit Division as part of the credit approval process.

From April 2006 until March 2007, we screened 39 projects under the Equator Principles. Of these projects, one – a mining project – was considered a category A project, 37 were considered category B projects, and one, a category C project.

The Sustainable Development Department also entertains a dialogue with interested stakeholders. Since 2006, for example, it has given presentations at workshops and conferences organized by Chinese environmental NGOs, the China Enterprise Confederation, and the Chinese Banking Society.

In November 2006, Mizuho Corporate Bank became the secretariat bank for the EPFIs. As the secretariat bank, Mizuho is responsible for operating the official website of the Equator Principles and supports new EPFIs in their adopting process.
When Mizuho adopted the Equator Principles in 2003, we were ranked 18th among global banks in the project finance business, with transactions of about US $1.1 billion. Since adopting the Principles, our ranking has steadily improved. In 2006, we were ranked 3rd, as the lead arranger of 54 deals with a total volume of more than US $7.7 billion. The Equator Principles appear to have been a contributor to our increased success in the project finance business.

**A CASE STUDY**

Tangguh LNG project is a prominent example of how the Equator Principles are being implemented in practice. Taking its name from the Indonesian word for “resilient”, Tangguh is centered on the Bintuni Bay area of Papua - 3,200 kilometers from Jakarta. It involves two offshore platforms located in Bintuni Bay sub-sea pipelines, and a Liquefied Natural Gas (LNG) processing facility and tanker terminal on the south shore, scheduled to begin commercial operations in 2009. It costs US $7 billion dollars and the loans to this project were provided in July 2006.

Mizuho has categorized the Tangguh LNG project as A, because it has significant impacts on Biodiversity, Natural Habitat, and Local Communities including Indigenous People and Involuntary Resettlement. All of the IFC Performance Standards and IFC EHS Guidelines for three industrial sectors were applied to this project.

The LNG facilities are designed to meet the requirements of Indonesian Environmental Law and the IFC EHS Guidelines. The Project’s Biodiversity programs provided valuable baseline information on the Bintuni Bay environment such as the fishery study and mangrove management study. Based on the study, the project has chosen the horizontal directional drilling method for pipeline construction at the offshore pipelines landfall to minimize impacts on mangroves. This method meets the requirements of the IFC Performance Standard for Biodiversity Conservation.

Equator banks also have to check the social impacts of the project. The Bintuni Bay area is sparsely populated by indigenous communities, living in numerous small villages. The local people have long been practicing agriculture, sago cultivation and fishing. Of these villages, the project identified eight villages as Directly Affected Villages including two Resettlement Affected Villages on the south shore, which are a resettlement village and a host village.

Villagers on the north shore of the bay were jealous of new houses provided for the resettlement affected villages. They believe the gas field in the bay also belongs to them under their own customs. The project created a system of Indigenous Peoples and the Integrated Social Programs and a Land Acquisition and Resettlement Action Plan for these villages. The project has been making efforts to ease tensions among the villages by these plans. Equator banks have been monitoring the implementation of these action plans.

The project is facing another challenge in the resettlement village. This project is going to hand over land titles for households and community assets. Community assets include the structures and land for village office, educational facilities, mosques and power and water utilities. The challenge is avoiding the risk of dependency, and keeping to a timetable for hand-over. Village people are becoming dependent on the project due to long running subsidies for assets and utilities, and do not like to assume the obligation for their operation, maintenance and repair.

**CONCLUSION**

Today, the Equator Principles have become the passport to successful participation in project finance transactions. For commercial banks in this business, the Equator Principles have brought two big changes. The Equator Principles promoted cooperation and competition among commercial banks in green credit. The Equator Principles have also become the framework for discussions between commercial banks and environmental NGOs. Environmental NGOs are watching the EPFIs’ implementation of the Equator Principles, and EPFIs have regular meetings with these NGOs at least once a year.

Mizuho Corporate Bank adopted the Equator Principles to ensure that the projects we finance through project financing are developed in a socially responsible manner reflecting sound environmental management practice. By doing so, we make sure that negative impacts on project-affected ecosystems and communities are avoided where possible, and if such impacts are unavoidable, they are reduced, mitigated or compensated for appropriately.

For Mizuho Corporate Bank, the adoption of the Equator Principles resulted in organizational change internally and renewed stakeholder interaction externally to strengthen our approach to sustainable development. We believe that the adoption of and adherence to the Equator Principles offers significant benefits to ourselves, our borrowers, and local stakeholders, through our borrowers’ engagement with affected local communities.
INTRODUCTION

Civil society groups internationally agree that proposed development activities with the potential to significantly affect the environment should conform to accepted international good practice norms for addressing environmental impacts. Such tools can help emerging financiers strengthen their environmental regulations and policies.

At the same time, we must acknowledge the limitations of these tools and the negative impacts around the world from projects financed by institutions claiming to practice them. Acknowledgement of the contradiction, at times, between standards, practices and outcomes can provide opportunities for new financiers to emerge as a progressive force and move toward new, more effective institutional guidelines.

This dialogue begins with a discussion of current good practice mechanisms.¹

Environmental and social assessment for private sector finance, and for public support of private sector activities, has now been established worldwide for a third of a century, in industrialized nations as well as in developing countries. The defining Goals and Principles of Environmental Impact Assessment, issued by UNEP on January 16, 1987, were codified in the 1992 Rio Declaration on Environment and Development and ensuing conventions.

The extensive literature on environmental assessment and decades of practical experience support a clear international consensus on basic good practice principles for private sector, public sector, and mixed private-public undertakings. These good practice principles, laid out below, cover all stages of project development.

¹ Certain ideas in this paper come from an internal report/strategy paper, China Foreign Aid and Investment Strategic Options Analysis #1: Possibilities for progressively influencing China’s Foreign Investment and Financial Flows and limiting negative social and environmental impacts, Fall/Winter 2007.
SCREENING

Screening is the evaluation conducted by the financing agency to determine whether or not a proposal should be subject to environmental assessment and, if so, at what level of detail. For instance, many financial agencies:

1. require Categorization of Projects according to the severity of their prospective impacts (A, B, C, etc.);
2. have Illustrative Lists of Sensitive Sectors to help determine that severity; and
3. set Specific Requirements for Environmental Assessment and Review commensurate with the severity of impacts.

Accordingly, a Category A project would require a full Environmental Assessment. A lower-impact Category B project would require a less comprehensive Environmental Review. And, shown to present no significant adverse environmental impact, a Category C project would not require an environmental assessment or review.

The environmental policies of many export credit agencies offer detailed guidance on how to screen a project for potential social and environmental impacts. The Case Impact Analysis Process of the United Kingdom’s ECGD, for example, includes a questionnaire with 12 pertinent questions. Exporters need to indicate whether the goods and services being exported comply with British standards; whether the project in question is in one of 20 potentially damaging business sectors; whether it is located close to a protected site; and which core human rights treaties and fundamental conventions of the International Labour Organization the host country has ratified. A detailed list defines which projects classify as high potential impact (Category A) or medium or low potential impact (Categories B and C, respectively). The list indicates 15 issues and activities that mark Category A projects: major pollution of air, soil or water; impact on habitat important to endangered/protected species; work that directly affects public safety; involuntary resettlement; substantial job losses; effects on vulnerable groups; uncontrolled use of armed security forces; etc.

In spite of this effective prognostic mechanism, ECGD stresses that the Case Impact Analysis Process “is not a statement of what will be done in every case”, and that even a breach of international standards will not prohibit it from providing support to a project. Such discretion significantly weakens the policy’s value.

An instructive example of a Southern export credit agency with more basic environmental guidelines is Turk Eximbank, which requires information that “should contain the positive and negative environmental impacts of the project, the parties involved and their roles, the identification of the project, including size, sector and aim, also the location of the project and whether it is close to sensitive areas.” The guidelines include an illustrative list of 26 sensitive sectors and areas that classify projects as Category A projects.

Another critical element of screening concerns the financial threshold which triggers the screening process. A US$10 million threshold is the increasingly accepted international standard, now widespread, adopted by the more than 50 international private banks adhering to the Equator Principles for project finance.

It is interesting to note that growing numbers of ambitious developing country banks – Banco Itau, for example, in Brazil – are not only adhering to the Equator Principles requirements, but go beyond them, in extending screening to all projects valued at 5 million Reales (about US $3 million) or more.

SPECIFYING ELEMENTS OF THE ENVIRONMENTAL ASSESSMENT OR ENVIRONMENTAL REVIEW

Good practice mandates a clear identification of an Environmental Assessment’s minimal requirements. Beyond a description of the project and the potentially affected environment, the Environmental Assessment generally includes the likely or potential environmental impacts of the proposed activity, including the direct, indirect, cumulative, short-term and long-term effects; a description of practical alternatives and an assessment of their impacts; and a description of measures to mitigate adverse environmental impacts of the proposed activity.

The French export credit agency COFACE has issued detailed environmental review requirements for three major environmentally sensitive sectors: thermal power plants, large dams, and oil and gas projects. The Oil and Gas guidelines, in turn, are divided into specific environmental requirements for extraction, transportation (pipelines), refineries, petrochemicals, and storage. The guidelines also identify a more rigorous “target” level of environmental compliance, and a still higher “best practice” standard which COFACE seeks to encourage.

The Swiss SERV likewise provides definitions of environmental impacts and issues to be addressed, such as biodiversity, World Heritage or other protected areas, indigenous peoples, etc. For certain Category A projects, SERV requires a Resettlement Action Plan, a separate evaluation of the Environmental Assessment by a consultant or an international financial institution, and comments from interested stakeholders.

In the case of hydroelectric power projects SERV gives special priority to associated environmental issues. It expects that the Environmental Assessment show “the extent to which the recommendations of the World Commission on Dams are fulfilled,” and suggests that this be done by an independent panel of experts or an independent consultant.

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1 Letter from John Snowden, ECGD, to John Napier, WWF-UK, 19 December 2006
The international private bank HSBC applies the Environmental Assessment requirements of the Equator Principles to a broader range of investments and transactions than the Principles require. In addition, HSBC’s five separate sector guidelines and policies provide comprehensive, detailed environmental review requirements for Forest Land and Forest Products, Freshwater Infrastructure, the Chemicals Industry, the Energy Sector, and the Mining and Metals Sector. These underscore HSBC’s commitment not to finance activities in environmentally sensitive no-go areas, not to finance “dams that do not conform to the World Commission on Dams Framework,” and to comply with IFC Performance Standards and Environmental, Health and Safety Guidelines where local standards are unsatisfactory.

PUBLIC CONSULTATION AND PUBLIC DISCLOSURE OF ENVIRONMENTAL INFORMATION

Public disclosure of information is quintessential good practice. UNEP’s defining Goals and Principles of Environmental Impact Assessment state: “Before a decision is made on an activity, government agencies, members of the public, experts in relevant disciplines and interested groups should be allowed appropriate opportunity to comment on the EIA.”

In China, new Regulations on Government Disclosure of Information, which took effect on May 1, 2008, aim to “ensure that citizens, legal persons and other organizations can obtain government information by lawful means, and increase government transparency.” The environment is listed as one of the sectors where transparency is required, allowing disclosure of Environmental Impact Assessments and similar environmental documents.

The Japan Bank for International Cooperation’s environmental policy includes detailed provisions on the disclosure of information. As a principle, “JBIC welcomes information provided by concerned organizations and stakeholders.” Once a project has been screened, “JBIC discloses, as soon as possible, the project name, country, location, an outline and sector of the project, and its category classification, as well as the reasons for that classification.” For Category A and B projects, “JBIC publishes the status of major documents on environmental and social considerations by the borrowers and related parties, such as EIA reports and environmental permit certificates, etc. issued by the host government on the JBIC website, and promptly makes available the EIA reports etc.”

Many export credit agencies, including COFACE of France, EFIC of Australia, and Finland’s Finnvera, require that an Environmental Impact Assessment be disclosed at least 30 days before decisions are made on project financing.

CLEAR REFERENCE TO STANDARDS TO BE APPLIED

Good practice in environmental assessment requires clarity with regards to which standards are to be applied to various issues such as emissions, effluents, chemicals and pesticides, as well as which policies dealing with social consequences, such as impacts on indigenous peoples or resettlement. Some financial institutions apply whichever are more stringent – the host country’s or international standards. The latter often means World Bank/International Finance Corporation standards (contained in the World Bank Pollution Prevention and Abatement Handbook, and IFC Performance Standards) or, where appropriate, standards of regional multilateral development banks.

Most major export credit agencies commit to World Bank standards; some commit to still more comprehensive standards. Australia’s EFIC, for example, incorporates both World Bank standards and any higher standards it is required to adhere to under international conventions ratified by the Australian government. French COFACE projects within the three especially sensitive environmental sectors of oil, dams, and thermal power are benchmarked explicitly against the sectoral standards of the World Bank Group, the World Health Organization, the World Conservation Union and the European Union.

More than 50 private international banks – including a growing number of developing country banks – also commit, under the Equator Principles, to apply World Bank/IFC sectoral environmental and health guidelines for project finance transactions of US $10 million and above. A growing number of international private banks such as HSBC, Citigroup and JPMorgan Chase extend these requirements beyond project finance to most transactions greater than US $10 million where the proceeds of the transaction are known to support the project in question.

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

A key outcome of the environmental assessment process is the development of an Environmental Management Plan (Action Plan) to address the mitigation issues identified in the Assessment and relevant sector-specific policies (e.g., resettlement, etc.).

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5 Japan Bank for International Cooperation, Guidelines for Confirmation of Environmental and Social Considerations, April 2002, Section 5, Article 1f.
The more than 50 Equator banks are committed to ensuring that borrowers prepare a binding Action Plan for both Category A and B projects and a Social and Environmental Management System to implement the Action Plan during the construction and operation of the project. Like a number of developing country private banks, the Banco Cuscatlan Group, a regional Central American bank headquartered in El Salvador, though not a signatory to the Equator Principles, requires the preparation of an environmental action plan for sensitive projects.

Some leading international private banks such as HSBC, which operate in developing countries, are more explicit. The OECD export credit agencies also commit, through the OECD Common Approaches, to the preparation of an Environmental Management Plan for Category A projects.

**SPECIFYING CONDITIONS UNDER WHICH SUPPORT FOR A PROJECT MAY BE DECLINED OR HALTED**

True good practice depends on an effective mechanism which ensures that support for a project will be halted or refused if environmental conditions are not met.

Equator Principle banks are committed to denying loans “to projects where the borrower will not or is unable to comply with our respective social and environmental policies, procedures, and standards that implement the Equator Principles.” Likewise, the Cuscatlan Group will reject financing if the proposed project or activity is found on its exclusion list (which corresponds to the IFC exclusion list) or if the environmental risk is high and there are no known solutions to mitigate the negative impacts.

HSBC goes beyond the Equator Principles in its screening thresholds and in other ways. Category A and higher risk Category B projects require prior consultation, including disclosure of the Environmental Assessment “in local language and in a culturally appropriate manner.” The bank will default a loan if an Environmental Management Plan “is breached, much the same if any other agreed loan term was not respected by the borrower.”

A number of major export credit agencies, such as Australia’s EFIC, have clear rejection policies for exports/projects that do not meet their explicit environmental standards. China Exim explicitly states that “projects that are harmful to the environment or do not gain endorsement or approval from environmental administration will not be funded.”

Finally, some public and private international banks and financial institutions explicitly report on projects they refuse to support because they do not meet environmental requirements. The U.S. Overseas Private Investment Corporation has done so since 2004. One project was rejected in 2004 and four in 2005, in Peru, Morocco, Ecuador and Ghana. Citigroup’s 2006 Citizenship Report mentions its rejection of support for a Category A hydroelectric project in Latin America.

**MONITORING**

Requiring or establishing a monitoring system to ensure implementation of mitigation measures or of the Environmental Management (Action) Plan is an important element of good practice.

JBIC’s Environmental Policy includes strong provisions on monitoring. The policy makes clear that information about project implementation must be provided by the borrowers; that JBIC will conduct its own investigations if necessary; that JBIC welcomes information about project implementation from third parties, including civil society groups; and that JBIC encourages project sponsors to take appropriate action if necessary. If their response is not appropriate, JBIC will take action according to the loan agreement, “including the suspension of disbursement.”

**ADDITIONAL GOOD PRACTICE ELEMENTS**

A growing number of private banks and export credit agencies have committed to additional elements of good practice in environmental and social assessment, including:

1. Requiring some form of Independent Review of at least Category A Assessments;
2. Requiring that measures to be undertaken in Environmental and Social Management (Action) Plans be included as binding conditions of loan covenants;
3. Establishing Categorical Exclusion Lists of certain kinds of exceptionally harmful activities and projects they will not support; and
4. Special programs to give more favorable financing terms for renewable energy, greenhouse gas mitigation measures, and other environmentally friendly technologies.

The Ethics Policy of Belgium’s Ducroire/Delcredere encourages exporters “to abide by the social norms mentioned in the OECD’s ‘Guidelines for Multinational Enterprises.’” But following the Guidelines is not mandatory; applicants only have to certify that they know about them. The Netherlands’ Atradius also requires applicants to confirm that they have taken note of the OECD Guidelines and that they “will make every effort to incorporate these guidelines” into their operations.

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8 HSBC, Equator Principles, 2005 progress update
8 JBIC, Guidelines for Confirmation of Environmental and Social Considerations, April 2002, Section 4, Article 4.
Several export credit agencies have excluded certain products from coverage by their services. The US Exim Bank excludes 54 pesticides and 30 industrial or consumer chemicals that have been banned or severely restricted by the US Environmental Protection Agency from coverage by export credits. Austria’s OeKB, Germany’s Hermes, and Switzerland’s SERV exclude the export of arms and/or nuclear technology from coverage. By law, SERV also has to take the principles of Swiss development policy “into consideration” for exports to poorer developing countries.

ACCOUNTABILITY AND GRIEVANCE MECHANISMS

Environmental policies are only as good as their implementation. The policies of many financial institutions, including some of the good practice language presented in this document, suffer from a lack of assured compliance.

Several financial institutions, including at least one export credit agency, have created Accountability and Grievance Mechanisms to strengthen compliance with their environmental policies and to handle complaints by affected parties. The Japan Bank for International Cooperation, like the World Bank and other multilateral development banks, has created an accountability mechanism in the form of an Office of Examiners, which aims to promote compliance with the Bank’s environmental policy.

TOWARD A NEW ENVIRONMENTAL POLICY AND PRACTICE: LEAPFROG THE INTERNATIONAL STATUS QUO

Emerging financiers should not simply adopt the established rules. They are developing their own standards and policies at a time when the weaknesses and gaps of the existing rules have clearly come out. They should use this chance to learn from the experiences of other institutions, and leap-frog existing institutional guidelines to create new mechanisms. Doing so would allow them to claim a leading role for Southern nations in overcoming historical problems associated with international lending and investment practices. ■
For many years, financial institutions played a quiet role in development decisions. What prompted them to start thinking green? For one, numerous environmental organizations around the globe began to put pressure on institutions that bankroll destructive projects. But in recent years, banks have started to recognize the real costs of the consequences of ignoring environmentalists’ warnings.

“We are now being confronted with global climate change issues,” observed Ambassador Jesus P. Tambunting, Chairman of ADFIAP and Planters Development Bank of the Philippines. “Some financial institutions that previously found nothing wrong with underwriting millions of dollars for certain sectors like mining, illegal logging and other commercial operations that rapidly deplete the ozone layer, denude forests, deplete water resources, or pollute the rivers, have now started paying attention. Along with governments, civil society and business organizations, banks and financial institutions realized that protecting the environment should also be their business.”

Apart from lending, financial institutions have also started looking within their organizations to manage the environmental impact of their operations. Financial institutions have started tracking their resource use efficiency. They monitor water, paper, and energy consumption as well as carbon dioxide emissions.

GREEN IS GOOD BUSINESS
Financial institutions have discovered that it makes good business sense to embrace the concept of “green banking,” and to take into account the environmental impact of their operations. For example, on December 2004, HSBC, one of the world’s biggest banks, became the first major bank in the world to publicly commit to going “carbon neutral.” It achieved this goal one year later, through a combination of reducing its direct emissions, buying green electricity, and offsetting its remaining emissions through the purchase of carbon offset credits. These credits have been purchased from wind and biogas energy production sites in India, Australia, Germany, and New Zealand. According to the 2004 HSBC CSR Report, while the British bank’s direct contribution to climate change is relatively small, they believe it is important to start making a difference close to home.

HSBC’s greening effort makes economic sense for the bank, too. In its Hong Kong office alone, HSBC expects to save US $140,000 annually through energy saving initiatives. It introduced a technology that cut its energy demand by 1,07 million kilowatt hours and carbon dioxide emissions by 1,050 tons every year. It has also been able to reduce by a third its water and energy consumption in its operations in China and India.

DEVELOPMENT BANKS IN ASIA GET INTO THE ACT
In the early 1990s, The United Nations Environment Program started a Finance Initiative to catalyze the banking industry’s awareness of environmental issues. This global partnership between UNEP and the financial sector has grown to include over 160 institutions, including banks, insurers and fund managers. Companies work with UNEP to understand the impacts of environmental and social considerations on financial performance. In 2003, western financial institutions got together independently to introduce the Equator Principles. These voluntary guidelines were developed to address the environmental and social issues that arise in financing projects. They direct banks to deny loans for projects if the borrower is unable or unwilling to comply with the Principles, or the bank’s own internal environmental and social policies, whichever are stronger. Through efforts such as these, the greening of many banks, particularly in the west, has slowly but steadily gained ground.
For financial institutions in the Asia-Pacific region, the concept of green banking is still new. The Development Bank of the Philippines (DBP), an ADFIAP member, is an early leader in green banking in Asia, having started implementing an environmental management system in 1997. In 2004, DBP attained ISO 14001 certification after a thorough audit of its operational controls, policies, programs, monitoring and measurement systems, and corrective and preventive actions in areas such as waste management and building maintenance. By reducing use of water, electricity, and paper, DBP has also seen significant financial savings.

In addition, DBP has a green lending program which supports companies developing and implementing cleaner technologies. And it conducts environmental due diligence to evaluate the environmental impacts and benefits of all loan applicants. DBP requires its clients to conduct environmental impact assessments, and considers risks such as community concerns over the impacts of a project. Through these efforts, DBP has improved its ability to avoid unnecessary risks.

But are other banks in Asia following suit? In 2005, ADFIAP conducted a survey of its members to determine the state of sustainability in the finance practices of development financing institutions in the Asia-Pacific region. Survey results show that ADFIAP members agree sustainability in the finance sector will grow in the next five years. About 69 percent of the members still look at sustainability issues as a business risk, while about 63 percent regard its relevance as a business opportunity. As a follow-through to this initiative, ADFIAP commissioned two research studies – one on internal environmental management systems by Germany’s UNEP/Wuppertal Institute Collaborating Center on Sustainable Consumption and Production (CSCP) and another on environmental risk scanning by UK’s University of Leeds and University of St. Andrews.

**HOW TO BE GREEN IN AND OUT**

The CSCP and UK studies form part of ADFIAP’s Greening of DFIs Project, funded by the European Commission under its Asia Pro-Eco Program. The project’s ultimate goal is to support the greening of the banking and finance sector in Asia-Pacific through the development and implementation of environmental governance standards for ADFIAP members and other financial institutions.¹

The CSCP study focused on the idea that to be a truly green bank, development banks have to be green from within. It created a step-by-step program to integrate environmental practices within a bank’s operational and organizational structures. The program also created a tool to benchmark the development bank’s environmental management policies and practices against best-in-industry standards.²

The University of Leeds’ and University of St. Andrews’ study looked at bank lending decisions and came up with an environmental risk scanning tool that banks can use in loan appraisal. “Environmental Risk Scan: a tool for integrating environmental aspects in bank lending decisions” is a guidebook and CD-Rom also available from www.egs-asia.com. The guidebook familiarizes the reader with environmental risks in bank lending, what banks do about environmental risks and how they analyze these risks. It provides a six-step screening and analysis framework for evaluating environmental risk.

**SPREADING THE WORD**

ADFIAP has also been deeply involved in conducting hands-on workshops about EMS and green lending among its member institutions and others. Through regional and national seminar-workshops conducted in Beijing, Manila, Hanoi, Kuala Lumpur, Mumbai and Colombo, over 200 senior executives and middle managers of development banks and other participating financial institutions have gained deeper insight into their environmental management practices and other environmental issues of their lending operations. Sixteen development banks across the region have instituted and/or enhanced their environmental governance standards through ADFIAP’s work. As the risks and rewards of EMS and green lending become more recognized, more development finance institutions are expected to join the movement to become green.

¹ More information about this program and the services and tools it provides can be found at the web site www.egs-asia.com.
² This tool is available from the EGS-Asia web site www.egs-asia.com.
Along with the rapid development of Corporate Social Responsibility (CSR), Socially Responsible Investment (SRI) is emerging in China’s financial market. Some bankers and fund managers have become active on SRI issues. Regulators, stock exchange authorities and other stakeholders have also become involved. This article aims to provide an overview of SRI development in China in 2007.¹

BANKS ARE TAKING THE LEAD

Several interesting developments are relevant to SRI in China’s banking sector. First, more banks released CSR reports in 2007. China Construction Bank published a CSR report in May 2007, followed by Shanghai Pudong Development Bank (in June 2007) and China Merchant Bank (in September 2007). These reports cover various topics ranging from corporate governance to employee relations and philanthropic activities. Though these reports do not focus on how environmental, social and governance (ESG) issues impact the banking business, CSR reports are still a good starting point for Chinese banks to practice non-financial disclosure.

Secondly, some banks have begun to consider environmental factors in their business. On December 19, 2006, the People’s Bank of China (PBOC, China’s central bank) announced its collaboration with the State Environmental Protection Administration (SEPA) to integrate information on corporate pollution records into the database for corporate credit. PBOC then urged all commercial banks in China to conduct a strict environmental screening process when lending money to companies. This became widely known in China as the “green lending campaign” or “environmental storm in the banking sector”. Banks in China are forced to follow this policy. Industrial and Commercial Bank of China (ICBC), one of the biggest banks in China, declared that it had set up a system to classify sectors into three categories, and clients into five categories according to environmental criteria.² But it is still not easy for many banks to figure out an effective mechanism for green lending. The International Finance Corporation (IFC) grasped this opportunity and established cooperation with SEPA in early 2008. In January 2008, SEPA introduced the Equator Principles in China.

¹ There is a close relationship between CSR and SRI. SRI is typically more about investment. However, CSR activities conducted by a financial institution might also be considered as SRI-related as these activities will have potential impacts on future decision making processes of this financial institution regarding investment.
² The three sector categories are: Positive Sector, Normal Sector and Limited Sector. The five client categories are: Encouraged Client, Preconditioned Client, Neutral Client, Limited Client, Rejected Client.
Besides screening borrowers to prevent pollution, energy efficiency and emission control became two other hot issues in the banking sector because they are on the top of the Chinese government’s agenda. An official from the China Banking Regulatory Commission (CBRC) announced that CBRC was drafting a piece of guidance which aimed to link a company’s energy efficiency and emission performance to its credit standing. China’s Industrial Bank, a local bank in Fujian Province, achieved great success in this regard. Supported by IFC, this bank designed an energy efficiency program that offers tailor-made financing tools to support industrial, commercial and residential entities in implementing energy efficiency improvement projects and the use of cleaner fuels and renewable energy. The bank financed nine projects in six months and won the Financial Times Sustainable Banking Award in 2007.

**SRI-LIKE FUND SHOWS RISK RESISTANT CAPACITY**

Though SRI funds do not yet exist in China’s financial market, an SRI-like fund has been created. According to its prospectus, this fund, the Bank of China Sustainable Growth Equity Fund, manages its investment portfolio from two dimensions: profitability and sustainability. Established in 2006, the fund was not very attractive while the whole market was booming as its investment style was rather conservative. When the market slumped, however, the fund showed its strength, i.e. its capacity to resist risk. According to Morning Star, the leading rating agent, the fund was ranked top in the first quarter of 2007. From October 16, 2007 to January 4, 2008, the Shanghai Stock Index dropped by 12.7 percent while the Sustainable Growth Equity Fund still managed to grow by 7.6 percent. It provides a good case to educate investors who care about long term values to enhance their risk resistant capacity by using the SRI strategy.

The Sustainable Growth Equity Fund is not alone. A statement by Li Keping, the Vice Secretary General of the National Council for Social Security Fund, indicated that this large-scale pension fund might consider SRI as its future investment style. Li said in September 2007 that the Social Security Fund will promote a long-term value investment style and consider corporate governance and socially responsible investment.

Compared to conservatively managed SRI mutual funds, SRI venture capital is more proactive. The China Environment Fund is a leading player in SRI venture capital. In the last few years, it invested in several projects, including two solar power companies, China Sunergy and LDK. Both companies successfully listed in the NASDAQ and New York stock exchange, respectively. The venture capital fund enjoyed great returns from these investments.

**STOCK EXCHANGE LAUNCHES ENVIRONMENTAL INDEX**

Shenzhen Stock Exchange (SSE), one of the two stock exchanges in mainland China, has shown its interest in CSR and SRI since 2006, when it first launched a CSR Guideline for Listed Companies. In this guideline, SSE encouraged its listed companies to be more socially responsible, and in particular to disclose non-financial information through CSR reports. This guideline motivated many listed companies to publish CSR reports in China, even though some were of low quality. In addition, in summer of 2007, SSE organized a CSR training for listed companies to advance the progress of corporate social responsibility.

In December 2007, SSE announced that it was cooperating with the TEDA Group in developing the TEDA Environment Index. This index consists of 40 listed companies. The companies on the index were selected from ten environment-relevant sectors according to their environmental and governance performance. Launched on January 2, 2008, TEDA Environment Index was said to be the first environmental index or even SRI index in Chinese history. It is a milestone for SRI development in China. The index set up a benchmark for SRI style investment, which might be able to indicate the long term values and risk resistant capacity which result from ESG concerns.

**SRI AS A POLICY INSTRUMENT FOR GOVERNMENT**

In China, government plays an important role in promoting SRI. Government agencies do not fully understand the concept of SRI, and do not use this term. But they understand that financial institutions matter a lot to policy implementation. Therefore, SRI has become a policy instrument in some areas. Obviously, pollution control and energy efficiency are among them. When SEPA realized the value of SRI, it turned to the banking regulators and asked for their support in order to strengthen its influence on business sectors. That was the origin of the “green lending campaign.”

Energy efficiency and emission-based credit screening is a similar story. When the central government set up an ambitious goal regarding energy efficiency and emission control, it urged all government agencies to make efforts in their own areas to help fulfill this goal. Consequently, CBRC decided to integrate these issues into the credit checking process.
As SRI is new to many government officials, bankers and business people, the Chinese government conducted several seminars and workshops in 2007. In late October, SEPA organized a training workshop on the green lending policy. In late November, China Industrial Bank, IFC, and the National Development and Reform Commission jointly held a conference entitled Green Financing. In early December, PBOC and IFC organized a seminar on CSR and the banking sector.

**DOMESTIC STAKEHOLDERS: LEARNING BY DOING**

Besides government, some other domestic stakeholders contribute to the development of SRI in China. These stakeholders include academic faculties, NGOs and the media. For instance, a professor from the environmental department of Tsinghua University organized a few small seminars on green banking at the university in 2007. The Institute of Public and Environmental Affairs launched a water/air pollution map in 2007, which potentially enhances corporate environmental disclosure. The Institute’s work might also have impacts for future SRI developments. As for the media sector, some environmental concerns, in particular water, air and mining issues, are a frequent topic for some business papers. Caijing, a semimonthly finance magazine, became a leading forum for such discussions. In 2007, Caijing magazine published many analytical articles on corporate CSR reporting, water pollution, etc.

Similar to the government, these stakeholders are still learning by doing. For some NGOs in China, SRI is somewhat outside the scope of their knowledge, and they need to learn more to understand the concept and apply it to their campaigns. Some NGOs have begun to pay attention to that concept. For example, Green Watershed, a local NGO in Yunnan Province, participated in SEPA’s green lending workshop in October 2007.

**GLOBAL STAKEHOLDERS: CHINA AS AN IMPORTANT PLAYER**

Global stakeholders keep a close eye on China’s SRI development. Some international organizations are interested in engaging Chinese financial investors in their programs. They made some progress in 2007, in particular the following:

- The UNEP Financial Initiatives successfully recruited two new signatories from mainland China: China Industrial Bank and China Merchant Bank. The Initiative also invited a team of Chinese representatives to join its annual roundtable.
- IFC signed a partnership agreement with SEPA, to introduce the Equator Principles to Chinese financial institutions.
- Mizuho Corporate Bank introduced its experiences with the Equator Principles at a conference organized by the China Enterprise Confederation.
- WestPac (China) introduced its experiences with CSR in a conference organized by a business magazine.
- International Rivers and Pacific Environment received China Exim Bank’s environmental policy for public release.
- The Carbon Disclosure Project successfully convinced China Investment Corporation to join as a signatory.

Some global stakeholders, particularly international NGOs, are highly concerned about the overseas operations of Chinese financial institutions. However, most instruments mentioned above, such as reporting, green lending and the SRI fund, have so far not paid sufficient attention to this aspect. For instance, few CSR reports by Chinese banks mention their overseas branches and international project financing. This might be because of the following reasons. First, China’s financial market used to be disconnected from the global market. Therefore, most banks and funds do not have a large exposure globally, and relevant financial instruments and policies are designed in a Chinese context. Secondly, SRI and even CSR are new to Chinese companies and it is hard for them to have a global SRI/CSR focus at such an early stage.

This is however changing as more Chinese banks and investors get involved in southern Asia and Africa. Some companies, as well as the Chinese government, have experienced pressures from international society and global stakeholders. They will be more careful about their overseas investments in terms of social and environmental impacts in the near future. This provides good opportunities for global stakeholders to engage Chinese companies.

**ENABLERS OF SRI**

Generally, SRI grows fast when the national economy develops to a level where environmental factors become scarce and social issues have a direct impact on business decisions. This is now the case in China. Nowadays, after 20 years of growth, China is facing a crossroad where we need to change our old development pattern and pay more attentions to environmental, social and governance issues. Otherwise, business cannot survive in the longer term. This is the fundamental background and underlying driver of SRI development in China.

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1 According to UNEP FI website, there are four institutions shown as signatories, three from mainland (Bank of Shanghai, China Industrial Bank, China Merchant Bank) and one from HK (Development Partner Fund).
In a well-developed market, ESG issues should be clearly defined and priced. As a result, all investors will act in a way that can realize mutual benefits regarding public welfare. However, China is still far from this stage, and many ESG issues are not reflected in market prices. In such a situation, government policy and regulation become the most important enablers. For example, to prevent negative environmental impacts, government requires all projects to undergo Environmental Impact Assessment as part of the approval process. As a result, investors or lenders have to be careful about the quality of the project’s EIA documents. Otherwise, they may be sanctioned by the government.

On the other hand, civil society, including NGOs, the public, the media etc, is also driving the development of SRI. Although they are not comparable with their peers in developed countries, NGOs, the public and the media have growing power in Chinese society. Sometimes they are able to change a company’s behavior or stop a project. Two examples may illustrate this. In 2006, two journalists disclosed the lack of compliance with labor regulations at FOXCONN, a factory producing electronic products for some leading brands such as iPOD. This embarrassed FOXCONN and motivated them to improve their labor compliance. In Xiamen City of Fujian Province, people in 2007 raised their voices and opposed plans by the municipal government to bring a chemical company to the town. Their protests were successful and the plans of the chemical company were finally suspended.

For some large financial institutions with global operations, globalization might be a potential enabler as well. These institutions have to operate on a global level and will meet demands to use a CSR or SRI approach to communicate with their business partners or outside stakeholders. These institutions will proactively need to learn more about SRI.

**OUTLOOK**

China is still in the baby stage of SRI development, but some progress had been made. In the coming one to three years, it seems to me that SRI will continue to grow in China, and more people will become aware of its importance. Strongly increasing the amount of SRI funds and the number of SRI tools will require collective efforts by all stakeholders.

SEPA, PBOC and CBRC have to work out a green credit system that can be commonly accepted, so that the greening lending campaign, energy efficiency and emission-based credit screening systems can become more effective. The main gap between these organizations is the collection and interpretation of information.

In a downside market, investors care more about risks than they do in a bull market. One of the strengths of the SRI approach is its risk resilience. Consequently, ESG issues may turn up on the investors’ agenda more frequently. This will stimulate professional ESG research and disclosure of non-financial information.

The interest and pressure of academics, NGOs and the media will support this trend. But NGOs and the media have to gain more knowledge before they can effectively use SRI as an instrument to realize their goals.
The Association of Development Financing Institutions in Asia & the Pacific is a not-for-profit, private international organization with 87 member institutions in 37 countries. ADFIAP was founded in 1976 under the auspices of the Asian Development Bank, and has its headquarters in Manila, Philippines.

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The Burma Rivers Network is comprised of representatives of different ethnic organizations from potentially dam affected communities in Burma. The Network’s mission is to protect the health of river ecosystems and sustain biodiversity, rights and livelihoods of communities in Burma.

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New Financiers and the Environment

Investors and financiers from China, India, Thailand, Brazil and other countries have rapidly emerged as major funders of infrastructure projects in developing countries. Such investment is urgently needed. Yet decades of experience have demonstrated that infrastructure projects can create serious problems if they are not part of a sound economic, social and environmental development strategy. This report discusses the environmental responsibility of overseas financiers and investors. It brings together the practical experiences and perspectives of experts from civil society, financial institutions, and academia from developing and industrialized countries.