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Brazil's Day of Action Mobilizes Thousands to Protest Destructive River Schemes

by Glenn Switkes

Thousands of dam-affected people and their supporters took action to protect living rivers in Brazil on March 14, the fifth Day of Action Against Dams and for Rivers, Water, and Life. Two of the Brazil's numerous events were marred by official repression, which left at least seven people wounded.

The International Day of Action was born at the 1997 conference of dam-affected people in Curitiba, Brazil, where the annual anti-dam mobilization by Brazil's Movement of Dam-Affected People (known by its Portuguese acronym MAB) was adopted by the international attendees to become an annual international event. (See p. 8 for a roundup of events around the world.) This year, MAB launched a national mobilization of unprecedented scope that targeted problematic dam projects, regulatory agencies, private companies, and Brazil's Mines and Energy Ministry, responsible for the nation's energy policy, which relies heavily on hydropower.

According to MAB, the government's current electricity plan proposes building 494 new dams, which would displace 800,000 people from their homes and land.

Confrontations took place at Barra Grande Dam, a project under construction on the Uruguay River in Southern Brazil, where 800 farmers affected by the project were the target of rubber bullets fired by a police shock troop. Four marchers, including two Catholic priests, were hospitalized. This dam is being constructed by a consortium of aluminum and construction companies, including U.S.-based Alcoa, to provide "cheap" power to energy-intensive aluminum smelters. MAB followed the Barra Grande protest with a demonstration in the capital of Rio Grande do Sul state, where three more MAB activists were hospitalized

after being beaten by police. The wounded protesters have now recovered.

Public outrage at the extent of the police violence helped create an atmosphere for negotiations on Barra Grande, but a week later MAB continued to block the work site, saying that the project consortium had not yet sent officials with decision-making power to the negotiations. Selmar Jaguszewski of MAB said, "This is a sign of total disrespect on the part of the company. Our patience has its limits. We will only leave once an agreement is reached."

In Mato Grosso state, 600 people affected by Manso Dam began a vigil in front of the governor's palace in Cuiabá. They are demanding the relocation of 300 families who were resettled in areas of very poor soils, and compensation for an additional 600 families and 2,000 fishermen that the state power company Furnas considered ineligible for indemnification. At this writing, the activists are awaiting official action.

MAB also organized a protest in Fortaleza, which focused on the role of the Inter-American Development Bank (IDB) in dam building. MAB also occupied the headquarters of the national agency responsible for carrying out irrigation projects in the region (known as DNOCS). MAB left DNOCS headquarters after the agency promised to review its resettlement procedures.

Marches and Meetings

In Brasília, the Ministry of Mines and Energy invited officials of the state electric companies Furnas, Eletronorte, and Chesf, and the national electrical energy regulatory agency ANEEL to meet with MAB. The outcome of this meeting was that MAB will submit a list of ongoing social problems caused by dam projects in Brazil, and the ministry will convene public meetings to assess these situa-



Photo: MDTX Altamira

Luiz Xipaya, chief of the Xipaya tribe - one of the tribes that would be affected by the Xingu Dam — at a Day of Action event in Altamira.

tions and draw up plans for solving them. MAB also met with the Agrarian Reform ministry to call for more agricultural support for dam-affected communities.

In Bahia, 450 dam-affected people and 2,000 supporters marched to the state capital where they held a rally to call attention to the lack of adequate resettlement provisions in dams being planned. They then met with officials and reached an agreement that new dams will not receive construction licenses until an accord is reached with the dam-threatened populations.

In Tocantins state, where some 14 new dam projects are planned for the eastern Amazon to fuel aluminum smelters, 400 farmers and brick makers and numerous Karajá and Apinajé indigenous people rallied in the capital of Palmas. In Minas Gerais state, 300 members of MAB staged a sit-in at the State Environment Foundation where,

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Shortly after the news broke in 1999 that many of the companies involved in building Africa's largest dam scheme in Lesotho had bribed the project's chief executive, the World Bank – an important funder of the project – began an internal investigation to determine whether or not it should debar any of the accused companies from further contracts with the Bank. Recently, a source inside the Bank revealed that its investigation of three companies involved in the Lesotho Highlands Water Project (LHWP) is now complete, and that none of the firms will be debarred. From what little is known about this secret investigation, it appears to set a very low bar for fighting corruption on World Bank projects, and may even undermine the trial now underway in Lesotho against some of the accused companies.

Project authorities contracted the companies to work on the Katse Dam, the first of five huge dams planned under the LHWP. Katse is now complete and a second dam, Mohale, is nearing completion. Many of the companies accused of corruption on Katse still went on to get contracts on Mohale. These firms include some of the world's biggest dam-building companies.

The Lesotho High Court is investigating the charges and the trial against the former chief executive of the Lesotho Highlands Development Authority is scheduled to be concluded very soon. A second trial, against the Canadian firm of dam engineers Acres International, is also underway. Trials against other contractors, individuals and consortia are still pending. The corruption allegations are reportedly backed by strong evidence that the accused companies transferred US\$2 million to Swiss bank accounts of the project CEO over a period of 10 years. "We would not show up in court if we did not feel we had an ace up our sleeve," one prosecution source told the *Financial Times* in June 2000.

While the Lesotho court continues its work, the World Bank in January quietly concluded its own internal corruption investigation of three of the 19 companies and individuals which allegedly paid bribes. According to internal sources, the World Bank's investigation concluded that there was insufficient evidence to disbar the three (unnamed) companies. However, the World Bank does not dispute that the companies channeled funds through a middleman named Max Cohen. This middleman and his mostly Panama-based enterprises were disbarred because they were found to have paid bribes to Lesotho officials. The World Bank did not announce the findings of the investigation or this sole disbarment publicly.

How can the dam building companies claim that they just paid "commercial fees" to a middleman and not be held responsible for how these "fees" were used? Since the middleman acted on behalf of the companies, the companies clearly bear responsibility. Apparently, the companies were able to pressure the World Bank to conclude its investigation while the Lesotho court proceedings are still ongoing. This will allow the companies to claim in Lesotho court that the World Bank found them to be innocent of the charges brought against them.

Another questionable element of this investigation is its limited scope. The World Bank's funding and financial coordination of the project was a pre-condition for launching the multi-billion-dollar project in 1986, when Lesotho was under military rule and South Africa was hindered by apartheid-era sanctions. But despite its key role in getting the project off the ground, the Bank claims it can only investigate those firms that took money directly from the Bank.

Immediately after the corruption scandal was revealed, NGOs pressed the World Bank to investigate all the accused companies on the project, not just those who had a direct contract with the Bank. But the World Bank chose instead to interpret its procurement guidelines very narrowly, neatly avoiding having to apply them to some of the biggest dam building companies in the world – companies with which the Bank does substantial business.

The facts of this case are scandalous: that the World Bank would disbar the middleman but let the companies go free; the timing of the conclusion of the investigation, which clearly seeks to influence the Lesotho court proceedings; the small pool of companies being investigated out of the total believed to have bribed on this project, and the fact that the Bank chose not to release any information about its findings. One can only conclude that the Bank is not serious about rooting out corruption on its projects.

With such a weak response to large-scale corruption on one of its projects, it could be argued that it is time for an independent investigation into the performance of the World Bank in its oversight responsibilities.

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Making the Connection

Indian Activists in US Come Together to Support Peoples' Movements Back Home

by Malavika Vartak

More than 50 people gathered in San Francisco in March with the aim of forging stronger links between people of Indian origin living in the US and progressive people's movements in India. Water and dam issues were the main focus of the workshop, but broader issues of corporate globalization were also discussed.

The workshop, organized by International Rivers Network, Friends of the River Narmada and the California Institute of Integral Studies, brought two of India's leading water activists to discuss the successes and lessons of India's "blue revolution" – the movement to supplant destructive water mega-projects with community-based water management systems such as rainwater harvesting, water conservation and other decentralized systems.

Shripad Dharmadhikary, a key activist from India who spent 13 years with the Save

the Narmada Movement (Narmada Bachao Andolan, or NBA), noted that "It's not just about finding equivalent benefits to replace these large-scale projects, but in finding alternative decision-making structures."

Dharmadhikary also brought participants up to date on the struggle to save the Narmada Valley from a massive project involving hundreds of large dams and huge networks of canals. "India has 4,600 large dams, 900 of which are under construction," he said. "We are a dam-obsessed country." He also described India's "glorious and rich water management history, developed over centuries," which had almost been forgotten in the 20th century, when large-scale water schemes began to be favored by politicians and engineers. Discussing India's inspiring people's movement against dams, Dharmadhikary noted that "a very simple but very powerful statement – 'We will not move' – is at the heart of this movement. It is based on internal strength, and it is key to the Indian anti-dams movement."

Dharmadhikary said that in the wake of the Indian Supreme Court verdict conditionally allowing the raising of the height of the Sardar Sarovar Dam on the Narmada River, it is even more important than before to build support and awareness of human rights and environmental concerns raised by the NBA and other popular movements working to protect peoples' rights over natural resources.

Another key speaker at the event, Rajendra Singh of Rajasthan's Tarun Bharat Sangh ("Young India Association"), explained the success of community-based rainwater-harvesting schemes. Singh believes that these are cheaper, more sustainable and more effective than large centralized water projects. Working with people in over 800 villages, his organization has built 4,500 small embankments, or johads, to trap rainwater and recharge groundwater. Singh's group helped revive five rivers in the desert state of Rajasthan, and restored degraded land to a healthier state.



Meeting participants sang songs of solidarity between sessions, from left to right: Malavika Vartak, Rajendra Singh, Smitu Kothari and Shripad Dharmadhikary.

Photo: Patrick McCully

He also spoke of the growing pressure by the World Bank on the Indian government to privatize water supply, and the nationwide resistance to it. Singh is heading a national coalition which is resisting the privatization and commodification of water and supports efforts to protect water as a common property resource. (For more on India's rainwater harvesting movement, see *WRR*, February 2002).

Other speakers at the workshop included Angana Chatterji of the California Institute of Integral Studies, Smitu Kothari of the NGO Lokayan, Sunil Deshmukh from the Maharashtra Foundation, Amit Srivastava of the US group CorpWatch, and Subramanya Shastry of Friends of the River Narmada. Presentations and discussions covered the role of Indians living in the US in financing power projects in India, the relevance of the World Commission on Dams to wider sustainable development issues, the campaign for justice for the survivors of the Bhopal gas disaster, and how overseas Indians can respond to the recent riots in Gujarat.

After an inspiring and energy-packed two days, participants committed to organizing locally within the Indian community in the US in support for peoples' struggles in India. An umbrella group was formed to exchange information and encourage the formation and strengthening of local groups in a number of US cities. ■

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Author Jailed for Narmada Activities

Arundhati Roy was jailed for a day in March for her activities opposing the damming of the Narmada River in India. She was arrested last year while protesting outside India's Supreme Court against its ruling on the Sardar Sarovar project, and was later charged with contempt of court, along with leading NBA activist Medha Patkar and the NBA's lawyer. Only Roy served jail time, however, because of comments she made in an affidavit on the case.

The plaintiffs alleged that demonstrators, including Roy, had shouted "filthy slogans" and physically assaulted them. The original case was dismissed, but Roy was later found guilty of committing contempt of court by "scandalizing it and lowering its dignity through her statements." Roy said the court's verdict "creates a disturbing impression that there is an inclination on the part of the court to silence criticism and muzzle dissent."

Roy is the author of *The God of Small Things*. Her 1999 essay about Sardar Sarovar ("The Greater Common Good") brought renewed attention to the long struggle.

Financing Dams Through the Back Door

by Peter Bosshard

NGO networks and social movements have successfully encouraged many international financial institutions to stop investing in large dams. Increasingly, domestic funders are trying to fill the gap left by more cautious international creditors. The following is an excerpt from a new report on the emerging trends of hydropower finance, based on the experience in India.

In ancient Greece, a nine-headed snake called Hydra lived in the marshes of Lerna. Again and again, she ravaged the fields and devoured the cattle of the local farmers. At last, King Eurystheus called on the Greek hero Herakles to bring the serpent's reign of terror to an end. A horrible battle unfolded in the marshes of Lerna. Every time Herakles cut off one of Hydra's heads, two new ones grew from her body.

The farmers and peasants of India's Narmada valley are confronted with a similar real-life situation. Since the mid-1980s, they have fought a massive dam-building program which threatens to evict millions of people from their homes. Numerous financial institutions – including the World Bank, export credit agencies from Japan and Germany, and commercial banks – have withdrawn from the program. Companies such as Bechtel and Siemens have also dropped out. Yet whenever a funder or contractor withdrew from the picture, other actors stepped in to fill the gap. A prominent role is played by Indian institutions which manage to raise resources abroad, and invest them in dams as financial intermediaries.

World Bank in Retreat

The experience of the Narmada valley farmers reflects a larger trend in international hydropower finance. The World Bank has given up funding large dams almost completely. Since it was forced to abandon the Sardar Sarovar (Narmada) project in 1993, it has not funded a single power plant in India. The Bank did not get involved in China's huge Three Gorges project either. Since 1995, it has reduced its lending for the energy sector by 65%.

Other development finance institutions – such as Canada's or Sweden's international development agencies, CIDA and SIDA – have also cut down or stopped their involvement in large dams. "Energy projects were part of the '80s," André Gingras of CIDA said in 1992. "India needed the power and we had the experience but now I would have to say in terms of development, it's not very good." And Preben Nielsen of the Asian

Development Bank said in 2001, "Multilateral development banks, including ourselves, are almost 'gun-shy' of dams now. The risks are great, the visibility is high, and the vulnerability is a constant concern."

Even export credit agencies, which extend official credits or guarantees to back up export contracts, have begun to reconsider their involvement in large dams. After a strong NGO campaign, the German and Portuguese governments decided not to approve export credits for the Maheshwar project in the Narmada valley in 2000. Various export credit agencies have decided to steer clear of Turkey's Ilisu Dam and Uganda's Bujagali Dam. (See Newsbriefs, p. 12 for updates on these dams.)

Stealth Financing

The increasing prudence of international financial institutions has not brought the era of uneconomic and destructive dams to an end. Governments and financial institutions have so far not demonstrated a strong interest in promoting more sustainable energy and water development alternatives. They have instead looked for mechanisms to fund large dams through the back door.

In 1994, China's government created the China Development Bank in order to mobilize foreign capital for controversial infrastructure projects in its pipeline – including the Three Gorges Dam and a series of nuclear power plants. Several international banks agreed to facilitate large bonds for the inconspicuous development bank. They included banks which for reputational reasons "would not touch Three Gorges with a barge pole," as one banker put it.

India's government has also created several institutions to fund power plants and other infrastructure schemes. The Power Finance Corporation (PFC), for example, approved Rs. 52 billion (more than US\$1 billion) for hydropower projects between 1986 and 2001. Foreign currency loans made up about one-quarter of this amount. India needs foreign capital to pay for imported equipment such as turbines and generators. PFC raises such funds from multilateral and bilateral development institu-

tions, export credit agencies, and commercial banks.

Various other domestic institutions have also begun to fund hydropower projects, and to raise foreign currency funds for them, in India. They include state-controlled development finance institutions, commercial banks, and even the state-controlled Life Insurance Corporation of India.

Funding Contradictions

Even more than the Ministry of Finance, financial institutions such as the Power Finance Corporation are subject to the pressures of vested interests and corruption. "The developers of power projects have long hands into politics," says one PFC official. Unlike the China Development Bank, PFC was not created with the explicit purpose of covering up controversial projects in order to make them fundable. PFC's operations still reflect the contradictions which arise when hydropower projects are funded through financial intermediaries. For example:

- The Asian Development Bank maintains that it has never funded a large dam in India. ADB is however one of the most important sources of foreign currency funding of PFC. Although the Bank admits that PFC's portfolio is "a matter of concern," at press time it was planning to approve a new loan of \$250 million for the Corporation in March 2002. Formally, ADB's loans are destined for PFC projects in power transmission and distribution (T&D). By taking care of T&D projects, ADB allows the Corporation to invest other available resources into more controversial generation projects, including large dams.
- In December 2001, the World Bank closed its loan for the ongoing Nathpa Jhakri hydropower project, the last dam project it funded in India, in frustration. Nathpa Jhakri is beset by massive design problems, corruption, and time and cost overruns. The developers of the project swiftly announced that the gap left by the Bank would be filled by PFC – which in the past had also received funds from the World Bank.
- PFC is the largest funder of the Maheshwar dam on the Narmada River. The German government refused to approve official export guarantees for this project – yet it funds PFC through its bilateral development agency KfW.

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Since the late 1980s, many international financial institutions have adopted comprehensive environmental and social safeguard policies. Will these policies also apply if financial institutions fund projects through intermediaries? Whom can affected people and NGOs hold accountable for these projects?

The World Bank and the Asian Development Bank claim that their policies must be complied with even when projects are funded through intermediaries. Their record of enforcing this rule is mixed, however. The International Finance Corporation (IFC), the private-sector funding arm of the World Bank, also requires its operational policies to be fulfilled in so-called financial intermediary projects. Yet unlike other funders, IFC does not make information available about which projects it funds through intermediaries. Aggrieved people have no way of getting redress if they have no right to know who funds the projects which affect them. IFC's example demonstrates that public control and accountability suffer when straight-forward project lending is substituted by indirect financial flows.

Follow the Money

"As far as mega-hydroelectric projects are concerned, words like 'tomorrow' are just not applicable," India's *Tribune* editorialized after the World Bank withdrew from the Nathpa Jhakri project. "One has to think in terms of eternity." Because of numerous financial, social and technical problems, many large dam projects in India do not move ahead, or only with big delays, and create permanent troubles even for their sponsors and funders.

"Temples of modern India"

"Dams are the temples of modern India," proclaimed Prime Minister Nehru in 1954. Today, India has more than 4,000 large dams. According to a country study for the World Commission on Dams, these structures have displaced an estimated 56 million people. To add insult to injury, water and power are consumed very inefficiently in India — a lot of it is simply wasted. An estimated one quarter of all electricity produced is simply stolen. "India's power sector is a leaking bucket; the holes deliberately crafted and the leaks carefully collected as economic rents by various stakeholders that control the system," says Deepak Parekh, the chair of India's Infrastructure Development Finance Corporation. "Most initiatives in the power sector are nothing but ways of pouring more water into the bucket so that the consistency and quantity of leaks are assured."

Financial institutions go through a certain cycle of hope and disillusionment regarding hydropower projects in India. Like international creditors, Indian financial institutions had to realize that large dams may be profitable for contractors and privileged groups of consumers, but create big problems for funders and society at large. Since 2000, several financial institutions have decided to reduce their exposure to the

power sector. In December 2001, a group of creditors decided to review 19 power projects for which they had already approved funding, including Maheshwar and other hydropower schemes.

During the 1990s, NGO networks learned how to dance with financial institutions. Internationally, they have started to follow the money trail, to argue with financial analysts and fund managers, to lobby provident funds and banks. India's Save the Narmada Movement (Narmada Bachao Andolan or NBA) is also expanding its work from the grassroots level, the courtroom and the political arena into the financial districts. The NBA has picketed banks and discussed cost-benefit analyses with the management of financial institutions. It has also threatened to call for a boycott of the life insurance company which is investing in the Maheshwar project.

"We cannot allow the hard-earned savings of Indian people to flow into projects which contradict the interests of affected communities and society at large," argues Chitaroopa Palit of the NBA. Activists like Palit may be inspired by the story of the Greek hero Herakles. In the marshes of Lerna his courage eventually prevailed over the nine-headed Hydra. ■

This article is based on a report on new financing trends in India's hydropower sector. The report, Power Finance: Financial Institutions in India's Hydropower Sector, has just been published by the South Asia Network on Dams, Rivers and People, Urgewald, and International Rivers Network, and is available from IRN. (124 pp., \$35 plus shipping, \$10 for NGOs)

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after negotiations, they signed an agreement whereby the agency will investigate irregularities in licensing procedures for dam projects.

A public rally was also held in the city of São Paulo by *quilombolas* (members of communities of descendents of escaped African slaves) in front of the headquarters of the Votorantim industrial group, which plans a series of dams on the Ribeira do Iguape, the last living river in São Paulo state, and an important area for protection of the Atlantic Coast rainforest. MAB told company directors that it will not permit the construction of the dams network. In meetings with the state Justice Secretariat, officials promised to facilitate granting of land titles for the *quilombo* communities.

In Altamira, more than 1,000 people took part in a two-day meeting organized by the Movement for the Development of the Trans-Amazon and Xingu in opposition to

plans to construct the world's third largest dam, Belo Monte, on the Xingu River in the Amazon. At the meeting, a representative of the Federal Public Attorney's office told the gathering that a new court order has once again suspended the environmental studies for the dam, based on the fact that the contract was awarded without public bidding.

In Rio de Janeiro on March 13, MAB held an act of civil disobedience at the headquarters of Brazil's National Bank for Social Development (BNDES), which plans to lend billions of dollars for new dam projects. At a meeting with directors of the bank, MAB presented its proposals for changes in the national energy policy. The following day, 300 people affected by the Itaocara Dam, being built by the Light company which is owned by Electricité de France, occupied the company's offices until they were granted a meeting with the company president.

According to Marco Antonio Trierweiler of MAB's national office, "All the regions confronted enormous difficulties, but our initial evaluation is that the results of actions on March 14 appear to be extremely positive." Much depends on follow-up by MAB's regional representations, and on the willingness of state, federal, and company officials to take appropriate measures to improve the situation of dam-affected communities. But with hundreds of new hydro projects planned for Brazil for the next decade, improving the picture of social impacts of existing and proposed dams will mean the nation must embark on a more just energy path which acknowledges the huge social and environmental impacts of large dams, and involves a serious effort to shift Brazil's energy future toward alternative sources of energy, and especially toward greater efforts in efficiency and conservation. ■

Dam Threatens One of Last Wild Rivers in Portugal

by José Alves Teixeira

The Sabor River is born in Spain's Parada mountains, and flows through the Montesinho mountains into northeastern Portugal, ending its 120-kilometer course at the Douro River. Today, it is threatened by a large hydropower dam. The 125-meter-high Baixo Sabor Dam would do irreparable harm to unique ecological communities in the valley, while producing a small amount of power.

The absence of dams along its course and the low degree of human disturbance in its valley classifies the Sabor as one of the last wild rivers of Portugal and Europe. The diversity of habitats and plant and animal species in the valley is notable. The lower Sabor alone has 17 different types of officially recognized natural habitats (as listed in the European Union's habitats directive), of which four are considered priorities for conservation. Even the dam project's Environmental Impact Study acknowledges the importance of the lower Sabor, stating: "The zone being studied is an area of special and unique characteristics on the national level."

This river basin is unique in its physical geography. The region of Trás-os-Montes (which translates "behind the mountains") is basically made up of an extensive plateau rising about 600 meters above sea-level. It is part of the larger Iberian plateau, which is cut only by the Douro and Sabor rivers and their tributaries. These valleys, which are about 300 meters lower than the plateau, have the warmest temperatures in the region and served as a refuge for many plant and animal species during successive glacial eras. One of the peculiarities of this valley is its floodplain vegetation, which includes a unique combination of plants. This vegetation was eradicated in the Douro River valley as a result of the construction of a series of dams, but because the Sabor is still undammed, it contains a large number of plant species which are living relics and are endemic to the region. The lower Sabor has a high percentage of these species in terms of their national distribution, including for example the only known specimens in Portugal of the *Arabis alpina* and 70-75% of the *Buxus sempervirens* and *Piptatherum paradoxum* found in the country.

The Sabor valley is also home to the most extensive and well-preserved holm oak and cork oak woodlands of the Trás-os-Montes, relics of the Mediterranean forests that once prevailed in the region. The great impor-

tance of the lower Sabor in conservation of species and genetic diversity is also exemplified by the presence of important populations of wild grapes and olives, which present a potentially valuable genetic stock for improving agricultural varieties and fighting its plagues. The wild grapes in the lower Sabor

proved resistant to the pest *phylloxera* which ravaged non-wild grapevines throughout the country at the end of the past century (and which caused an outward migration by part of the population of Trás-os-Montes).

The fauna in the Sabor valley is also very rich and many species are protected by international conventions and national laws. Several endangered cliff-nesting birds, such as the Bonelli's eagle, the golden eagle, the Egyptian vulture, the black stork and the black wheatear, inhabit the scarps of this valley. The many mammals which have gained refuge in this region include the wolf, the water mole, the river otter, wildcat and roe deer. The creation of a 50-kilometer-long reservoir would flood an important natural sanctuary for the fauna and separate the genetic stock on the two sides of the river, threatening especially those species with a low effective population size. An example of this are two groups of wolves that live on opposite sides of the river valley whose contact would be restricted by the reservoir. The lower Sabor is also an important site for egg-laying and growth of indigenous fish species over a vast area.

Due to the high biological value of the area, it is classified as both a Natura 2000 and a Special Protection Area – categories that include the most important natural areas of the EU – and as an Important Bird Area by Birdlife International. Two years ago, 200 leading Portuguese scientists who study the region's fauna and flora signed a manifesto saying the Sabor River has unique values and that should be protected from dams.



Enjoying the Sabor River

Photo: José Alves Teixeira

Long Human History

As Paleolithic cave pictures in the lower Sabor demonstrate, man has taken advantage of the conditions of this valley since the earliest times. The village of Cilhades shows signs of occupation which date from the Iron Age, as well as Roman and medieval ruins. In the 16th and 17th centuries, two impressive granite bridges were built to overcome the river's torrential floods. In all, the reservoir area boasts about 200 sites of historical, archaeological and ethnic value, including some which continue to have strong significance for local people, such as the sanctuary of S. Antão da Barca.

Currently, on the banks of the Sabor, there are vast fields of olive trees and other crops (about 840 hectares along the lower Sabor alone). The Felgar valley – one of the most fertile areas of all Trás-os-Montes – produces 60,000 liters of high-quality olive oil, an important source of income for the region. The project EIA estimates that more than one-third of the families of the village (about 100 families) will lose their principal source of income if the dam is built.

Government assistance to support the production of these quality agricultural products, together with growing demand and valuation of the region's natural, cultural, and ecological heritage, could guarantee the Sabor valley a realistic chance at sustainable development. Its location near the Douro International Natural Park and the Côa Archaeological Park gives it further value. National initiatives to promote the development of such regions could provide

resources that would play a fundamental role in permitting local populations to remain in the region and to prosper.

But instead of looking for ways to protect the region's natural and human resources, local authorities defend the dam as a way to promote future tourism, even though restrictions on the use of the reservoir for motorboat activities and high variations in the reservoir depth will impede its recreational use, and despite the obvious fact that wild rivers – not reservoirs – are rare and beautiful attractions to tourists. Local authorities have proposed the creation of a Sabor Natural Park based upon construction of the dam, even though the dam will eradicate most of its natural values. The dam is being defended with the argument that it will provide water for irrigation, yet it is being touted exclusively for energy, and there are already plans for two smaller irrigation dams in the nearby Vilarica valley. Despite these facts, many local officials say that the dam will bring development, but the sad irony is that the region has the highest number of dams in Portugal, yet it has not gotten a correspondent gain from these projects: it was one of the last to receive electricity in Portugal, it remains one of the poorest regions of the EU, and it continues to lose people from the rural communities at an alarming rate.

A Flawed Process

Taking into account the many environmental impacts of the dam in a Natura 2000 and Special Protection Area, the Environment Ministry followed the EU legal directives and announced the need to study alternatives before taking a final decision on Baixo Sabor Dam. Amazingly, the choice was made to study just one energy alternative – a series of dams in the middle/upper Cõa river valley which, together, could store about 580 cubic hectometers of water (more than the Sabor dam would hold). Although this dam scheme seems to cause slightly less environmental impacts, it would also affect a "Natura 2000" area and would cost more than the Sabor Dam. This approach to evaluating alternatives is clearly insufficient.

The EIA admits that the energy which the lower Sabor dam would generate is "insignificant at the national level" (in the year 2010 it would represent less than 0.6% of Portugal's projected electricity use). Currently, energy consumption in Portugal is increasing by 6% annually, while the GNP is growing by close to 3%. This disproportional energy use – one of the worst in the European Community – demonstrates the lack of strategies to combat energy waste in Portugal.

While some countries, such as the USA and France, opted not to build any more big dams and have begun to remove old and useless structures, Portugal recently built one of the biggest dams in Europe – the Alqueva Dam (see box) – which will flood about 25,000 hectares of well preserved Mediterranean habitats. The World Commission on Dams report made it clear that the environmental impacts of big dams are excessively high, and that these structures should be avoided at all costs. Strategies to increase energy efficiency and to stimulate the production of more environmental friendly energies are urgent and should be seen as valuable and priority alternatives to big dams.

What's at risk in the Sabor valley is the preservation of the natural heritage of Portugal and, to some degree, of our planet. The Sabor valley holds unique remains of the memory of the evolution of life on the Iber-

ian Peninsula and plays an important role in the maintenance of biodiversity. It is our responsibility now to comprehend the natural lessons that this valley teaches, and to join forces to preserve it dam-free, to support it, disseminate information about it, and use it wisely in the perspective of the integrated and sustainable development of the region. ■

The author is a biologist at the University of Porto. This article was excerpted from a longer piece; see <http://www.naturalink.pt/> for the full version in Portuguese. Thanks to Korinna Horta and Glenn Switkes for assistance on this article.

For more information on the Sabor River and the fight to preserve it, contact these Portuguese groups: Quercus (quercus@esoterica.pt) LPN (lpn.natureza@mail.telepac.pt) and GEOTA (geota@mail.telepac.pt). The author can be reached at jteixeira@mail.icav.up.pt

Gates Close on Alqueva, Europe's Largest Dam

In February, the gates of the 96-meter-high Alqueva Dam on the Guadiana River in southern Portugal were closed, amid protests from environmentalists and local workers whose factory is being flooded. Some 50 environmental activists dressed in black brought a wooden white elephant to the gate-closing ceremony on February 8.

The dam's 250 square-kilometer reservoir will drown a Mediterranean woodland that includes more than a million oak trees and much of Portugal's last remaining habitat of the endangered Lynx and other species, thousands of acres of agricultural land, hundreds of important archeological sites (including hundreds of Stone Age rock-art sites and the ruins of a Roman fortress from the first century BC), and the white-washed village of Luz.

Critics say the benefits of the US\$1.7 billion project (which received funding from the European Commission) have been dramatically overstated. The Portuguese group Geota states that Alqueva's model of intensive irrigation of a large semi-arid region "is not sustainable and has an incredibly low rate of return." The project is intended to irrigate 1,100sq km, but many factors make that figure unachievable. NGOs warn that the river's polluted water will not only be too poor for irrigation, but that the region's thin soils are prone to salinization.

"All told, maybe 20-30% of the area is suitable for irrigated agriculture with relatively low impacts and risks," says Joanaz de Melo of the environment department of the University of Lisbon. "More sensitive areas in the proposed irrigation area might also be irrigated, but with stricter environmental restrictions, higher impacts, and at very high cost. The project is well oversized." He notes that the project can only work with subsidies to farmers from Portuguese and European taxes, which contradicts the EU policy on agriculture requiring full cost recovery.

A recently released preliminary EIA for the huge irrigation project foresees major impacts on water quality and on land and river ecosystems. No evaluation was made regarding the environmental flow of the Guadiana and the impacts on the estuary, so these are still unknown. NGOs note that the Guadiana's flow has already been cut in half by previous diversions, and Alqueva will cut that flow in half again.

Portuguese NGOs are now demanding that the reservoir not be fully filled – rather than allowing flooding to the 152-meter line, they are urging officials to keep the reservoir to the 139-meter level, a move that would preserve more than half a million trees and important protected habitats from immediate destruction, as well as protecting many of the archeological sites. They are also calling for a public debate at national and European level on the viability of the irrigation plans in the development of Alqueva.

For more information in English on NGOs' concerns about the Alqueva project, visit <http://despodata.pt/geotalingles/alqueva.htm>

Five years after its launch in Brazil, this year's International Day of Action Against Dams and for Rivers, Water and Life united river activists around the world who came together to celebrate healthy rivers and to urge for greater protections for them. The point of the day's events was perhaps best stated by Baigorri Basoue in Argentina, speaking at an event organized by the group Proteger: "This 14th of March, more people will understand the importance of our rivers for a truly sustainable human development ... the rivers have been and are our life source. Their destruction and contamination has the consequence of death in the long-term and, with certainty, poverty."

More than 60 actions in 28 countries marked the passage of the event, with activities ranging from the mobilization of some 400,000 in Spain to protest that country's dam-heavy National Hydrologic Plan, to nationwide protests in Brazil (see cover story), to local educational activities from Mozambique to Bosnia-Herzegovina. Groups organizing and participating this year brought forward a range of issues, including interbasin water transfers, ecological flow protections, resettlement, financing and privatization, indigenous rights, dam decommissioning, and other issues affecting the health of rivers and those who depend upon them.

Dams and Development

Many groups focused on the misguided development goals that are fueling the damming of the world's rivers, using protests and educational events to call for a better way to manage precious water resources.

The Spanish government's adoption of a controversial national water plan last year prompted significant action in that country this year. Several groups organized a march of some 400,000 to 500,000 in Barcelona on March 10 under the name "Per una Nova Cultura de l'Aigua" (For a New Water Culture). The controversial water plan includes some 118 dams and the use of interbasin water schemes to transfer from wetter to dryer parts of the country. Just one of the planned transfers – that from the Ebro River to Catalonia – will cost an estimated US\$3.7 billion. One group involved in the struggle, Ecologists in Action, described the water plan as "a great victory for the construction companies, and a 20th century solution to a 21st century problem."

In Pakistan, a rally against a giant canal project was met with police opposition. The Pakistan People's Party (PPP) in Sindh

Taking it to the Streets on the Day of Action

by Randy Flay

organized a rally to protest construction of Greater Thal Canal in Punjab, which they say would turn the province into a desert. As an alternative to the canal, groups are calling for watercourses to be lined, which they say would save 70% wastage of water and resolve problems of water logging and salinity.

In El Salvador, in coordination with the people of Carolina in San Miguel, a vigil took place to bring attention to the proposed damming of El Chaparral.

In Poland, Klub Gaja submitted a petition with 60,000 signatures to the Polish Prime Minister in opposition to the construction of dams on the Vistula River.

In Benin City, Nigeria, a public lecture on dams and development brought together a cross-section of Nigerian society to discuss the issues. The Society for Water and Public Health Protection (SWAPHEP) organized the event. Nigeria's growing problems with dam failures and increasing flood disasters on dammed rivers was a particular focus. Participants agreed that "All dam sponsors in Nigeria should withdraw their support to dam projects in the country and direct such financial aid to alternative power and water supply projects that are sustainable, environment- and people-friendly and meet the specific needs of the Nigerian people."

In South Africa, Earthlife Africa eThekweni (Durban) organized public displays of information to encourage the support of local communities working to protect their rivers and watersheds; to halt destructive river development projects; and to encourage equitable and sustainable methods of



Spanish citizens protested the national water plan.

meeting needs for water, energy, and flood management.

Financing and Privatization

The growing worldwide trend of private companies building dams and buying up water supplies was a hot topic as well. In South Africa, union activists from SAMWU along with other groups held a march to call attention to the growing trend of the privatization of basic services by multinational corporations. The groups note that basic community services are sometimes lost in the process, leading to issues such as health being ignored, potentially compounding health-related issues such as tuberculosis, HIV/AIDS, cholera and other water-borne diseases.

In Santiago, Chile, the financing by ENDESA (Spain) of hydro projects on the Biobío and elsewhere was the subject of a large demonstration.

Friends of the Earth Costa Rica held a meeting to discuss the implications of the new proposed law on hydrologic resources, which would open the way to a continued expansion of private hydroelectric plants.

In the Philippines, the Cordillera People's Alliance launched the second phase of their



Rallying against Tokuyama Dam in Japan.

petition campaign, targeting the Japan Bank for International Cooperation (JBIC) and Philippine President Gloria Macapagal Arroyo for their support of the San Roque Dam.

Indigenous Issues

Because indigenous people have suffered the most from large dams, their rights and concerns featured in a number of Day of Action events.

Near Bogotá, Colombia, several groups conducted three actions for March 14 to focus attention on the well being of indigenous groups affected by hydro projects and poor water management. The goal was to end acts of violence and aggression that contaminate local rivers and to promote the ideas of water as community property.

In Honduras, indigenous people marked the Day of Action with a cultural exchange between dam-affected communities. On March 14, members of indigenous Lenca communities of eastern Honduras who are being threatened by a dam project held a cultural and informational exchange with visiting members of the Maya Achi people of Guatemala, whose own community of Rio Negro was devastated by the Chixoy Dam built in their region during the 1980s.

In Panama, the Fundacion para la Promocion del Conocimiento Indigena (Foundation for the Promotion of Indigenous Knowledge) organized an event against repression, in particular on the situation of local communities in the face of the expansion of river basin canals.

In Malaysia, a meeting and workshop were held about the Bakun Dam on the Balui River in Sarawak. Leaders of the five affected communities of Batu Kalo, Sang Anau, Long Jawe, Long Ayak, and Long Lawen attended.

Decommissioning

Removing dams continues to grow as a focus for events around the world.

In Germany, bicyclists toured the banks of the Salzach River to visit a place where dams have been removed as an experiment to let the

river flow into the riparian forest, a frequent occurrence before the dam. The organizer, Bund Naturschutz Burghausen, is urging government agencies in Germany and Austria to restore the Salzach in order to protect the riparian forest with its rich variety of species.

In Pietermaritzburg, South Africa, the group GREEN hosted an event to link climate change, flooding, and dam decommissioning. Concerns have been raised over the operation of the Henley Dam, which locals regard as unnecessary and dangerous.

In Utah, hosted by the College of Eastern Utah/Moab Center, a public event featured the exchange of viewpoints by groups arguing for and against decommissioning Glen Canyon Dam. Also in Utah, the Glen Canyon Institute and the Natural History Association held a lecture, "Restoring Glen Canyon: A Paradise Lost."

In California, a group called Restore Hetch Hetchy held a public lecture on the value and potential of restoring the Hetch Hetchy Valley, which was dammed decades ago to supply water to San Francisco. John Muir called Yosemite National Park's Hetch Hetchy Valley, "a grand landscape garden, one of Nature's rarest and most precious mountain temples." The group discussed alternatives to supply water as well as technical decommissioning issues.

World Commission on Dams

In the US, Environmental Defense launched a petition asking the World Bank to adopt

the guidelines of the World Commission on Dams. The petition urges signers to "Call on the World Bank to implement the recommendations of the World Commission on Dams to prevent the use of your funds for the financing of environmentally and socially destructive dam projects" (the petition is linked to www.irn.org).

In Srisaket Province, Thailand, a public panel on the impact of dams on communities and livelihoods, a workshop on state policies on water management, and a seminar on the WCD were held. The Assembly of the Poor and SEARIN-Thailand organized these and several other activities.

In Maputo, Mozambique, NGOs participated in a seminar on upcoming dam projects; many of the participants then signed a declaration which stated, "We support the findings and guidelines of the World Commission on Dams. Planning of new dams in Mozambique should be placed on hold until the WCD guidelines have been adopted in Mozambique."

Watershed Protection

In Bosnia-Herzegovina, Fondoko Sarajevo organized a meeting to share information about pollution in local rivers.

In Mpumalanga, South Africa, South African Water Crisis Network and HEAL (Houtbosloop Environment Action Link) jointly hosted an event entitled "HEALing Rivers." Several teams floated down a section of the Houtbosloop, bagging rubbish found on the way. In the afternoon, there was a mini-workshop on river ecology and problems posed by dams.

In Mexico, a press conference was held in the state capital of Tabasco. The municipalities of Cardenas, Centla, and Centro are heavily affected by contaminated rivers and a nearby hydroelectric dam. Modifications in fresh water reserves and temperature regimes are affecting species and biodiversity in two biosphere preserves, "Montes Azules Chiapas" and "Pantanos de Centla Tabasco."

In the US, The Alliance to Save the Mataponi, Save Our River, and Sierra Club-Virginia Chapter organized the "Save Our Rivers! Save Our Shad!" rally for the Mataponi and Pamunkey Rivers" in Virginia. ■

Additional information about the International Day of Action Against Dams can be found at <http://www.irn.org/dayofaction/> or by writing to dayofaction@irn.org.

Growing Asian Coalition Renews Commitment to Protect Rivers

More than 80 dam-affected people and river activists gathered in Baguio City, Philippines in February for the second meeting of Rivers Watch East and Southeast Asia (RWESA). This regional network was created to stop destructive river development, promote alternatives and fight for reparations for people affected by existing dams.

The second meeting of the network was a great success, providing inspiration, fresh ideas and new connections for activists in the region. RWESA members developed strategies for using the World Commission on Dams report for education and lobbying; came up with ideas for strengthening the RWESA network; and brainstormed on different ways to support local struggles and campaigns. In addition, a coordinated action plan targeting the Japan Bank for International Cooperation – now the largest funder of dam projects in the region – was developed. On the final day participants agreed upon the Baguio Declaration, excerpted below.

WATER FOR LIFE!

We, the participants from 10 countries of East and Southeast Asia, namely Cambodia, China, Indonesia, Japan, Korea, Malaysia, Philippines, Taiwan, Thailand and Vietnam, representing the organizations of riverine communities and their allies, have gathered here to assert our rights, strengthen our unity in our struggle to stop the implementation of destructive river development projects and ensure that justice is served to all riverine communities.

The main river ecosystems of East and Southeast Asia are dying under the assault of multiple destructive developments and privatization of water resources.

We have discussed each country's experiences and reaffirmed that we are beset by common problems arising from dams and other river development projects. These projects bring about the destruction of the environment and the loss of people's lives, land, livelihoods, heritage and cultural identity. The people's rights are not respected. Harassment and military interventions are employed by governments, dam builders and funders.

We stand for the protection and restoration of our rivers. They are the source of our nourishment, our livelihood and culture. We believe that rivers are an essential resource for all, especially those whose lives directly depend on them – the peasants, the indigenous peoples and the fisher folk.

Historically, rivers have been a focal point of cooperation among users. However, over time, they have become a source of conflict among neighbors, communities and peoples for the sake of profit and monopoly control. We seek development of our societies which guarantees that benefits are shared equitably, respects our economic, social, political and customary rights, makes

full use of indigenous or local knowledge, promotes environmental sustainability, operates on the principle of responsibility and accountability and recognizes the integrity of each nation's patrimony.

There is an urgent need for cooperative action to promote sustainable river basin protection and development at all levels. Participatory mechanisms are needed at local, national and regional levels to address sustainable and integrated river basin development and to ensure the health of riverine ecosystems and the protection of people's rights.

Grounded in our daily experiences of the negative impacts of large dams and other river development projects on people, river basins and ecosystems; noting the report of the World Commission on Dams; realizing that corporate globalization is fuelling inequitable and unsustainable river development projects which benefit transnational developers and private companies at the expense of people, communities and the environment—

We, the members of RWESA, call on the international community to:

- Promote water for life spanning across generations;
- Recognize and uphold the rights of local communities and indigenous peoples, particularly women, as central to just and sustainable river development;
- Support measures for the restoration of rivers and demand proper compensation of victims of destructive river development projects.

We call on the national governments in East and Southeast Asia to:

- Organize multi-stakeholder workshops and dialogues to discuss the WCD Report

and national experiences of dams leading to adoption of WCD recommendations;

- Place a moratorium on the construction of large dams until all the problems created by the existing dams have been rectified and reparations made to affected communities;
- Establish river basin conservation programs;
- Decommission destructive dams and provide social and restoration programs;
- Terminate intimidation, harassment and intervention by the military and to take strict measures against military practices which violate human rights.

We call on the Asian Development Bank, Japan Bank For International Cooperation, World Bank, China Ex-Im Bank, private investment banks and other funders to:

- Review operational policies, procedures and the portfolio of river and water projects in relation to WCD recommendations with a view to their adoption and implementation;
- Address outstanding social and environmental issues on existing dams in East and Southeast Asia and take appropriate action;
- Place a moratorium on the building of additional dams, until WCD recommendations are adopted and implemented.

And on the Mekong River Commission to:

- Promote multi-stakeholder cooperation within the Mekong Basin to review the WCD Report with a view towards regional action and implementation;
- Facilitate information sharing and negotiation processes for river basin developments between all countries in the Mekong Basin.

The members of RWESA commit to strengthening and expanding our ranks and building an ever-vigilant and active river protection movement which will address dam and other river development-related projects being promoted by international financial institutions, transnational corporations, and other international business interests. ■

Many thanks to the Cordillera Peoples' Alliance for their long hours and hard work in organizing the meeting, and to Joan Carling from the CPA, who will be acting as network facilitator for the next two years. For more information, visit www.rwesa.org.

Na Hang Dam Threatens Forests, People and Wildlife

by Chris Lang

The Tonkin snub-nosed monkey is endemic to northern Vietnam and is one of the world's most endangered mammal species. Before a group was spotted in Na Hang district in 1992, it was considered extinct. Today, 260 of the monkeys are known to be living in northern Vietnam. Half of the population lives in the Na Hang Nature Reserve, which was created in 1994 specifically to protect this rare primate.

The Na Hang Nature Reserve is in an area of dramatic mountainous limestone scenery. The forest within the nature reserve is extraordinarily rich in biodiversity. As well as providing habitat for the snub-nosed monkey, it is home to the Francois' leaf monkey, lesser slow loris, stump tailed macaque, pig tailed macaque, dhole, Owston's palm civet, clouded leopard, Asiatic black bear, serow, a series of endangered birds and butterflies, an endangered tortoise and 13 species of threatened plants. Four endangered fish species live in the Gam River, which forms the western boundary of the nature reserve.

Consultants, Scott Wilson Asia Pacific is leading a consortium carrying out a Protected Area Resource Conservation (PARC) project in Na Hang with funding from the Global Environment Facility (GEF), a World Bank conservation program. In addition, the Zoological Society for the Conservation of Species and Populations and Allwetter Zoo (both of Germany) are running the Tonkin Snub-nosed Monkey Conservation Project.

Unfortunately, the same Vietnamese government that set up the Na Hang Nature Reserve now seems determined to go ahead with plans for a US\$420 million, 300 MW hydropower dam on the Gam River. The dam would flood part of the Na Hang Nature Reserve and have devastating, long-term impacts on the forests, people and wildlife in and adjacent to the reserve.

In 1997, Electricity of Vietnam (EVN), the state electricity utility, produced a pre-feasibility study for a dam on the Gam River. Two years later, EVN produced terms of reference for a feasibility study of the dam which was due to be completed at the end of last year. Scott Wilson Asia Pacific wrote, in the inception report for its conservation project in Na Hang, that it proposed to "assist the Government of Vietnam by carrying out a preliminary environmental assessment of the River Gam Dam." Scott Wilson's con-

sultants completed their preliminary environmental assessment in 2000. According to Vietnam's Electricity Master Plan Number Five, released in 2001, the Na Hang Dam is planned to be commissioned in 2006. So far, the Vietnamese government has not secured international funding for the dam.

If built, the Na Hang Dam would create a reservoir stretching 30 kilometers up the Gam River and flooding 57 square kilometers, including 220 hectares of the Na Hang Nature Reserve. Forty five villages would be flooded, and more than 11,000 people would be evicted to make way for the reservoir. Ethnic groups living in the area include Dao, Tay, Hoa and H'mong, as well as Kinh, the Vietnamese majority group. One woman, who would be evicted by the dam, told Scott Wilson's consultants, "We may be poor, but this is our home."

Although the area of the nature reserve which would be flooded is small, the habitat of the snub-nosed monkey is less than 1,000 hectares. The reservoir would be in an area adjacent to where the monkey is known to live. The snub-nosed monkey is very sensitive to disturbance and tends to stay at least one kilometer from roads, trails or villages.

Before the dam is built, the reservoir area

would be logged. At present there is no road access to the area. The project would involve building a new road, a major construction site, traffic, construction noise, dust, pollution, explosions, and up to 10,000 workers.

Construction workers will increase local demand for wildlife and other forest products. The bones, hands and feet of Tonkin snub-nosed monkeys are made into traditional medicines. With a stream of construction trucks driving in and out of the area, it would be almost impossible to stop illegal trading.

In May 1999, a group of environmental organizations, including IUCN, Allwetter Zoo and Primate Conservation Inc., wrote to Prime Minister Phan Van Khai and other Vietnamese officials. Their letters requested that a thorough environmental impact assessment of the proposed dam should be carried out, in accordance with Vietnam's Law on Environment Protection and the Convention on Biodiversity (to which Vietnam is a signatory). To date, no such study has been done. The Vietnamese government did not reply to the letters. ■

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Kids, Collect 'em All!

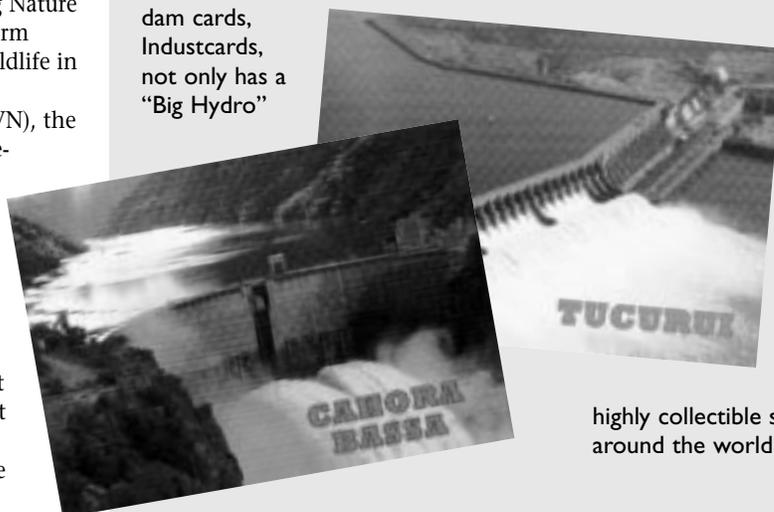
Imagine our surprise when we received a package of sample "trading cards" featuring some of the biggest, baddest dams around ... what's next, cards with prison guards on them, or "Rockin' Nuclear Reactors"? Well, not too far from wrong – the same company that does the dam cards, Industcards, not only has a "Big Hydro"

series of cards, but cards featuring soot-belching coal and oil plants and, yes, nuclear plants (though the web site refers to this set as being "temporarily offline"). A complete set of the 70 power-plant cards (including dams) is \$35.

Featured dams include Theun-Hinboun in Thailand, Gariep in South Africa, and the notorious Tucuruí in Brazil. While the card doesn't mention any of Tucuruí's infamous problems, it does note it "was the first large dam built in a tropical rain forest."

The Maryland-based company will also create custom card sets "for public relations, marketing, and educational applications." Perhaps a

highly collectible set of dam fighters from around the world?



SHORTS

In an effort to accelerate the process of licensing construction of the Belo Monte dam (11,000 MW installed capacity) on the Xingu River in the Brazilian Amazon, Brazil's National Council on Energy Policy (CNPE) has announced it will form a working group in order to "unlock" obstacles to the dam's construction. This is despite the fact that the government lost in its attempt to overturn a court order suspending the environmental studies for the dam. The studies were rejected on the grounds that the contract for the work was awarded without public bidding to an institution which has been implicated in fraud on prior studies it carried out for other large-scale river projects. Brazil's Mines and Energy Ministry says it hopes to be able to offer the concession to build the dam by the end of the year.

Ghana is experiencing low reservoir levels behind Akosombo Dam again this year due to poor rains. The recurring problem is not expected to lead to an energy crisis as it has in the past, because now Ghana has access to thermal supplies – but at higher cost to consumers than hydropower. A release by the agency that runs the dam said hydro is expected to provide about 58% of the nation's total demand, while thermal sources and import will provide the rest. This is a significant increase in thermal power generation compared to 2001, when the total hydro met 79% of national demand.

Iceland's government is planning to look out for new investors to help build an aluminum smelter in eastern Iceland – a project that includes a dam that would destroy fragile wetlands and wildlife habitat. Norwegian conglomerate Norsk Hydro in April announced it would postpone until the end of 2003 a decision on the smelter project. An Icelandic government spokesman said, "An investment of this size requires a large company, such as aluminium firms Alcoa in the United States, Canada's Alcan, France's Pechiney and Russia's RussAl."

News Briefs



CAMPAIGN UPDATES

UGANDA: The Bujagali Dam has been delayed because of the falling fortunes of the company behind the project, the US-based AES Corp. AES' shares have been declining steeply over the past year, but they were further battered by the Enron debacle combined with troubled economies in Latin America, where AES is heavily invested. The firm's stock crash has reduced its ability to raise money for new projects like Bujagali. The dam delay comes only two months after the company got approval for \$175 million in loans from the World Bank for the \$550 million project.

"We are all a bit embarrassed by these events so late in the day," AES executive Vice President Mark Fitzpatrick told Bloomberg news service in late February. "We're probably looking at a two- to four-month delay in construction start." Or perhaps much longer, if funding cannot be secured.

Earlier in the month, the Virginia-based company, whose stock has plunged 90% in the past year, announced that it will trim spending by 41% and sell up to \$1.5 billion in assets. The company also said it would cancel one of its three African energy projects, but did not specify which one.

The company was counting on foreign export-credit agencies (ECAs) to provide \$250 million in guarantees for the Uganda project. AES contacted agencies in Sweden, Finland, Norway and Switzerland to guarantee \$250 million in loans. At press time, only Switzerland's agency has gone along, but its guarantee is dependent on other ECAs supporting the project. The Swedish ECA, known as EKN, refused AES's application in late January.

"We were surprised when Sweden first told us (they) were not inclined to support that project," Fitzpatrick told Bloomberg in an e-mail.

Finland and Norway are still considering the project, but have reportedly postponed their decision for the time being.

TURKEY: In February, Switzerland's largest bank, UBS, announced that it was pulling out of its financial advisory role on the Ilisu project in Turkey because of fears about the scheme's social and environmental impacts. The Swiss bank has, since 1998, attempted to pull together a creditor consortium to fund the large hydroelectric scheme on the Tigris. If built, Ilisu would negatively impact more than 70,000 ethnic Kurds, and heighten the tensions between Turkey and the downstream countries, Syria and Iraq. The 313-square-kilometer reservoir will flood more than 90 villages and the ancient town of Hasankeyf. There is no acceptable resettlement plan, and conditions in the region make a just resettlement unattainable.

UBS states that the progress of the project has been generally "unsatisfactory in recent years." Dieter Tobler, who has been in charge of Ilisu at the bank, adds that UBS was frustrated about the "lack of consultation of the people affected by the project." Civil society groups will watch with interest whether adequate consultation will become a precondition for the bank's involvement in future dam projects.

The withdrawal of UBS is another blow for Ilisu after Balfour Beatty, the British company heading the civil works consortium, terminated its involvement after a strong NGO campaign. The Swiss advocacy group Berne Declaration has called on Sulzer Hydro, the leader of the suppliers' consortium, to quit the project as well. Sulzer Hydro says it is still committed to building the dam. This position might be motivated by a wish not to upset the Turkish government as much as by any realistic hope to get the project back on its feet.

Another controversial Turkish dam, the Yusufeli Dam on the Coruh River, suffered a setback in March as well. Just a day before the launch of a major campaign against the British company AMEC for its potential role in the project, the company announced its withdrawal. The company was seeking a US\$96 million export credit for the project from the UK Export Credits Guarantee Department (ECGD). Export credits are also

being sought from COFACE, France's export credit agency, by the French company Spie Batignoles.

Kerim Yildiz, Executive Director of the Kurdish Human Rights Project, said, "We are delighted that AMEC has withdrawn from this project. This a huge victory for minorities on the ground whose homes, livelihoods and ways of life are threatened by this project."

If built, the Yusufeli Dam would flood 18 towns and villages and precious archeological sites. Habitat that is home to endangered species will also be lost. The project would drown the homes of 15,000 people and displace another 15,000.

DECOMMISSIONING

US: The US Army Corps of Engineers announced that its four Snake River dams will be modified to improve salmon survival, but will not be breached. The technical and operational changes, when formally adopted, will cost about \$390 million over 10 years. The affected dams – Ice Harbor, Little Goose, Lower Granite, and Lower Monumental – provide electricity marketed by the Bonneville Power Administration, as well as irrigation water and Snake River navigation. The dams disrupt the migration of juvenile salmon and steelhead to the ocean, exposing the fish to predators, high water temperatures, and hydroelectric turbines. As a result, many runs have been placed on the endangered species list, which triggered studies on the best way to restore them. "[The decision] is disappointing but not surprising," said Melissa Pease, of the Save Our Wild Salmon coalition. Hundreds of millions of dollars have been spent over the past two decades to modify the dams to help salmon, she said, but "engineering and technology are not going to save these fish. They need more natural river conditions, and they need dam removal to achieve that."

For more information on the campaign to breach the four Lower Snake River dams, visit <http://www.removedams.org>.

US: Two congressmen working with environmental groups introduced a bill that would significantly change the hydroelectric industry by reforming the dam licensing process, charging utilities fees for use of public lands and instituting decommissioning requirements similar to those already used for nuclear power plants. Industry groups say that the bill places excessive demands on dam owners and will stymie further growth in the industry. One of the primary purposes of the Federal Investment in Sustainable

Hydropower Act would be to reform the delay-ridden relicensing process. The process typically takes five years, and dams are then certified for 30 to 50 years. If the certification process takes longer, however, the Federal Energy Regulatory Commission issues temporary, one-year licenses until the application is finished. These annual licenses may serve as a disincentive to completing the process. Under the FISH Act, dam owners installing fish-friendly turbines would be given priority consideration in the relicensing process as well as fee discounts. License duration would also be reduced to between 15 and 30 years, and interim conditions would be placed on annual licenses. "Dropping the relicense term to 15 years brings this process more in line with other environmental permits and licenses," said Charles Gauvin, president of Trout Unlimited. The bill would also create a decommissioning fund for dams that are no longer in operation and need to be removed. On March 13, the bill was referred to the House Subcommittee on Energy and Air Quality.

Read the Federal Investment in Sustainable Hydropower Act at: <http://thomas.loc.gov/cgi-bin/query/z?c107:H.R.3800>:

A BETTER WAY

WIND: The US wind power industry was granted a two-year extension of a key federal tax credit in March. The wind energy Production Tax Credit (PTC) – an important factor in financing new wind power projects – had expired at the end of last year; it will be extended retroactively from that date to Dec. 31, 2003. It provides a 1.5 cent-per-kilowatt-hour tax credit for electricity generated by wind turbines. The tax credit means about \$3 billion (or 3,000 megawatts) in wind energy investments that had been delayed after the tax expired are now back on track.

"It's great news because now we can begin to tap into the momentum that was running so strongly at the end of last year," said Randall Swisher, executive director of the Washington-based American Wind Energy Association (AWEA).

Last year, about 1,700 megawatts of new wind generation equipment worth about \$1.7 billion was installed in the US – more than double the previous record year of 1999 when 732 megawatts were added. That put the US in second place behind Germany in terms of new capacity installed in 2001.

Swisher also said that hundreds of idled wind industry employees can now go back to work building and installing new high-tech wind turbines. He said Denmark's Ves-

tas Wind Systems, the world's biggest wind-turbine maker, has put its workers back on full time. Many Vestas employees had been working reduced hours due to the US industry slowdown after Congress at first failed to extend the PTC.

AWEA continues to push for a five-year extension of the PTC included in the energy bill now being debated in the Senate. The trade group projects that wind will provide 6% of the nation's electricity by 2020 from less than 1/2% now.

WATER WOES

CHINA: Ecological concerns and high costs are delaying the start of China's contentious project to channel water from its south to the parched north, the new head of the country's top engineering body said in March.

Xu Kuangdi, appointed Communist Party Secretary to China's Academy of Engineering in December, claimed there were no big engineering problems in moving water from the Yangtze River to the dry northern region, but admitted that environmental issues and the cost of the project's water were serious impediments.

The north-south water project's estimated \$22 billion cost may price the water out of the reach of the intended northern users, Xu said. The project is costly in part because of pumping costs. Water expert Sandra Postel writes in her book *Last Oasis*, "Pumping 20 billion cubic meters of water from the Yangtze up to the higher-elevation Yellow River would require the electrical output of seven large power stations."

Pollution is another serious issue that is not easily addressed. The water would have to pass through the heavily industrialized provinces, possibly becoming contaminated along the way, Xu said.

Environmental experts, both Chinese and foreign, say the massive project will spark widespread corruption, human hardship and environmental damage, and could dry up the Yangtze in 30 years. They urge China to take simpler steps like raising water prices, curbing rampant well-digging, stopping leaks and improving water treatment.

The huge project, first conceived by Mao Zedong 50 years ago, was revived in 2000 after years of severe drought exacerbated China's man-made water crisis. Over-pumping and unchecked industrial development have dried up rivers, wells and lakes and sapped the water table, causing cities to sink.

China had planned to launch construction of the project this year. Xu did not say when work would begin, reports Reuters. ■

The New Economy of Water: The Risks and Benefits of Globalization and Privatization of Fresh Water

by Peter Gleick et al. Published by The Pacific Institute, Oakland, 2002. \$20 (hard copy) or free PDF from www.pacinst.org.

"There is little doubt that the headlong rush toward private markets has failed to address some of the most important issues and concerns about water. In particular, water has vital social, cultural and ecological roles to play that cannot be protected by purely market forces." So begins this very thorough, well written report on the perils and promise of the privatization of water supply – now a US\$300 billion industry (excluding bottled water) that, to many, represents the worst of globalization. The authors note that privatization's risks are many and serious: it can lead to the weakening of governments, the worsening of water-inequities, and the neglect of efficiency and conservation measures, and other problems.

The report states that while water provision should be a basic responsibility of governments, many have failed to provide water to the majority of their citizens – thus opening the way for development banks and aid agencies to press for private sector involvement. The authors argue that a better approach is to strengthen governments' ability to meet water needs. But they conclude that privatization is a force that cannot be stopped in the short term, and so offer standards to ensure that privatization agreements meet basic principles, including these: that unmet basic human water needs are met first, that ecosystem needs for water are guaranteed a basic allotment, that communities are included in privatization negotiations, that conservation measures are given priority over new supply, and that governments should retain public ownership or control of water sources. Such an approach, with binding contracts, could at least dull some of the sharp edges of privatization.



Water Privatisation in Southern Africa: The State of the Debate, by Patrick Bond, David McDonald, Greg Ruiters and Liane Greeff. Published by Environmental Monitoring Group, Cape Town, 2001. Free from EMG (Write liane@kingsley.co.za).

A useful booklet for Africans facing water privatization in their communities. It includes good basic explanations of different types of water privatization, common myths about privatization (e.g., "public utilities are inefficient and can't be reformed"), information about who is driving privatization in Africa (corporations, the WTO, World Bank and IMF), and a lengthy section on the arguments for and against privatization (including sections on efficiency, capital and expertise, accountability and innovation). The report ends with a call to slow down privatization in the region until more is known about its long-term impacts.

Dirty Water: The Environmental and Social Records of Four Multinational Water Companies, by Friends of the Earth, UK, 2001. Free in PDF form from www.foe.co.uk

The past decade's increase in the privatization of water supply has led to a massive rise in the fortunes and power of the multinational corporations who now control water supply. This report reveals how the powers that be are creating conditions for these companies to grow even bigger: the World Bank and International Monetary Fund often include private-sector participation in water services as a condition of debt re-scheduling; water services are now in line for further liberalization under the World Trade Organization, and water privatization is facing communities around the globe. This report focuses on the past record of four water companies: Vivendi, Suez-Lyonnaise (the two biggest water companies), Enron and Thames Water.

Water Wars by Vandana Shiva. South End Press, Cambridge, 2002. \$14

Water has always been a source of conflict – between nations, urban and rural users, the rich and the poor. Under the onslaught of privatization, water has also become the subject of conflict between social movements and institutions like the World Bank and the WTO. A new book by India's prolific writer Vandana Shiva contributes to the heated debate on the global water crisis.

Historical conflicts between the US and Mexico, Turkey and its Arab neighbors, Sudan and Egypt or Israel and Palestine bear witness that water has been a contested resource for a long time. With scarcity increasing, it is expected to fuel further conflict in the future. Vandana Shiva argues forcefully that the main causes of water scarcity are not population growth and natural disasters, but greed and wasteful consumption. Destructive hydropower and mining operations, eucalyptus and sugar plantations have deprived large regions of their traditional water supply – for the benefit of development models which cannot be sustained.

Technological quick fixes and privatization, as promoted by the World Bank and the World Trade Organization, do not provide solutions to water scarcity. Examples from around the world demonstrate that communities can collectively manage water by recognizing its quality as a common good, rather than by turning it into a commodity. As Shiva says, "ending the water crisis requires rejuvenating ecological democracy."

Watergy: Taking Advantage of Untapped Energy and Water Efficiency Opportunities in Municipal Water Systems, by Kevin James. Published by Alliance to Save Energy, Washington, DC, 2002. Available from <http://www.ase.org/programs/international/watergyfull.pdf>

This new report on the most energy-efficient and water-efficient ways to meet water needs details energy-efficiency measures that are applicable worldwide, from US cities to developing nations. It describes projects in Africa, Asia, Europe, Australia, and North and South America. "Watergy" is the group's term for the range of water efficiency and energy efficiency activities that help water utilities provide consumers with

continued opposite

Opposition to Biobío Dam Continues

by Glenn Switkes

Tensions are running high in Chile's Biobío region as the opposition to the Ralco Dam project continues. The dam, the second of six planned for the Biobío River, is being built by the Spanish conglomerate Endesa. In March, 100 Pehuenche indigenous people and supporters blockaded a road to prevent a 225-metric-ton transformer from reaching the construction site. According to news reports, they overpowered the drivers of three of the trucks in the convoy, and used the vehicles to block the highway leading to the community of Ralco Lepoy.

Carabineros police fought with demonstrators, clearing the blockade, but the trucks were still impeded by other blockades mounted farther up the road. Five people were injured, and 50 people – half of them Pehuenches and half their supporters – were arrested.

If completed, the 155-meter high Ralco Dam would flood 3,500 hectares of a unique ecosystem and the heart of the Pehuenche ancestral territory, displacing 700 people, including 400 Pehuenche, and threatening the survival of endangered fauna and flora.

In February, two Pehuenche anti-dam activists, Nicolasa and Berta Quintreman, had said they would use every means possible to keep the transformers from reaching the dam site. The Quintreman sisters have led a group of six families that oppose the Ralco project. They insist the dam will not only flood Pehuenche land, but will also cause serious damage to the group's culture. More than 90 Pehuenche families living in

the area have accepted relocation packages offered by the electric company. Six families, including the Quintremans, have not.

Also in March, anti-Ralco protesters disrupted a ceremony at Chile's presidential palace. A woman dressed in Indian garb grabbed the microphone from Minister for Women's Affairs Adriana Delpiano as she was making a speech to mark International Women's Day.

Witnesses said the protester shouted "No to Ralco" as President Ricardo Lagos looked on calmly just yards away. Presidential security officers carried the protester away as Indian women continued to shout slogans about the dam.

In January, the Chilean Supreme Court upheld a lower court decision permitting construction of Ralco. However, the Court ruled that, under the nation's indigenous law, all families affected by the dam will have to agree to relocation.

In February, the Quintremans said they had reached a preliminary agreement with Endesa for US\$15,000 each, and were promised an additional \$305,000, as well as a 200-hectare farm. This would have been far more than other affected families had received. The Quintremans then backed out of the deal, saying the \$15,000 was theirs as compensation for damages suffered, and that they were no longer interested in settling with Endesa.

Pehuenche people already relocated to the El Huachi and El Barco areas have complained about their livestock's poor condition in the colder climate, the lack of techni-

cal support, a shortage of firewood and lack of medical assistance. Anthropologists also point out that the relocation disrupts the Pehuenche seasonal migration between higher altitudes in the summer and the riverside's warmer climate in the winter.

Work on the \$500 million dam, which would have an installed generating capacity of 570 MW, is already half completed, and is expected to be concluded by December, 2003, according to the company.

Meanwhile, international NGO pressure on Endesa, Chile's principal electricity provider, and on the foreign companies building Ralco continues. Endesa has awarded contracts on the Ralco project to companies in France, Perú, Spain and Canada. Canada's Export Development Corp. (EDC) is providing US\$17 million in financing for the dam, according to Canadian NGO Probe International. EDC's support is apparently for ABB Alston Power's Canadian subsidiary to provide generating equipment for Ralco. The EDC has refused to disclose further details of its involvement in Ralco. Juan Pablo Orrego of the Biobío Action Group believes that EDC is the first international financing institution to get involved.

The World Bank's private-sector arm, the International Finance Corporation (IFC), which supported the first dam on the river, Pangué, refused to back Ralco. The IFC was bombarded with criticism over Endesa's violations of indigenous people's rights and environmental covenants of the IFC loan for Pangué. ■

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water services while saving energy. The report states, "Water utilities globally have the potential to cost-effectively save more energy than the entire country of Thailand uses annually. Unfortunately, relatively little attention has been given to reducing energy use in municipal water systems." It describes the real-life implementation of a range of simple, cost-effective strategies to reduce energy use while maintaining or even improving water service. Such strategies can cut current energy consumption used in supplying water by as much as 25%. In the developing world, where the cost of energy to supply water may easily consume half of a municipality's budget, those savings

could be used to expand water service to new or underserved customers or for other pressing needs.

Enron's Pawns: How Public Institutions Bankrolled Enron's Globalization Game, by The Institute for Policy Studies, Washington, DC, March 2002. Free from <http://www.seen.org/>

This report explores how the now-fallen energy giant's rise to global prominence depended upon close financial relationships with US agencies, the World Bank, and other government institutions. "Enron would not have scaled such grand global heights, nor fallen so dramatically, without its close finan-

cial relationships with government agencies," the authors note. The report details how, over the past decade, 21 agencies representing the US government, multilateral development banks, and other national governments helped leverage Enron's global reach with \$7.2 billion in public financing approved for 38 projects in 29 countries. The company also benefited from the global strategy to privatize the energy sectors in developing countries, which became a major priority of international financial institutions in the 1990s. The end results were not reliable energy at an affordable price, but rather price hikes, blackouts and shady deals cut by government officials. ■

Cash-Strapped Three Gorges Dam Turns to US Banks

by Doris Shen

The ever-expanding budget for the Three Gorges Dam has created huge funding obstacles for the massive project. Recently, project developers for the dam reported they plan to resolve funding problems by offering shares on the domestic and international stock markets. On March 12, 2002, the *Financial Times* reported that US investment banks Morgan Stanley, Merrill Lynch, and Goldman Sachs are supporting this effort. The project's projected costs have risen from US\$11 billion to \$27 billion in part because of inflation and interest-rate fluctuations.

The international capital-raising for Three Gorges met with criticism and protests by an international network of human rights and environmental organizations. In mid-March, IRN, Friends of the Earth (UK), and Free Tibet Campaign (UK) protested Morgan Stanley's financing of controversial projects such as Three Gorges at the company's annual general meeting, this year held in London.

The organizations drew attention to the company's financial support of a number of bad projects, including the Three Gorges

Dam, a variety of resource extraction projects in politically oppressed Tibet, and Asia Pulp & Paper, a logging company in Indonesia that has laid waste to 300,000 hectares of virgin rainforest.

Campaigners entered the Morgan Stanley meeting on proxy status granted by a US shareholder. In the meeting, they circulated "Rogue Traders," a report which details Morgan Stanley's financing of controversial projects in Asia (download it from www.irm.org). The report describes human rights violations and environmental degradation from projects the company has helped finance.

A key message from the campaigners is that Morgan Stanley appears to be carving a niche for itself in financing projects in Tibet and China that even the World Bank would not touch because of social and environmental safeguards. They raised the question of whether or not the company was prepared for a growing consumer backlash.

The campaigners contend that such financial involvement posed not only a reputational risk, but also called into question management's ability to effectively assess

What You Can Do

IRN encourages you to speak out against Morgan Stanley's financing decisions. Whether or not you are a current customer of Morgan Stanley (including their Discover credit card) the company values your potential business and will be interested to hear your concerns.

See www.boycottdiscover.org

risks in emerging markets, posing a serious threat to shareholder value.

IRN specifically requested the company refrain from underwriting the initial public offering for Three Gorges Dam until the economic and civil liberties of project-affected people had been secured.

Activists were given fifteen minutes to make statements at the annual general meeting. Afterward, Morgan Stanley CEO Phil Purcell failed to answer their questions directly and stated only that the company was planning to release an environmental policy. ■

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