Volume 13, Number 2 / April 1998

IN THIS ISSUE

- **Cover Story:** "Lao Dam Harms Fishing Communities"
- **Commentary:** Dam-affected people are uniting in their struggles.
- **China:** The Three Gorges Dam project's resettlement program is in crisis.
- **Latin America:** A massive channelization project for the Paraguay-ParanáRiver loses some critical government support.
- **Latin America:** As protesters were beaten by police at YacyretáDam, the World Bank was helping project officials whitewash the project's many problems.
- **Canada:** Innu people demonstrate against the massive Churchill Falls hydroelectric project.
- **Canada:** British Columbia gives quick approval to a controversial mine project.
- **The World:** Thousands of people take action to protect and celebrate rivers.
- **India:** Mass arrest of protestors at Maheshwar Dam site.
- **Namibia:** Bad economics and good alternatives could doom the Epupa Dam.
- **News Briefs:** Watching the world's rivers.
- **Australia:** NGOs gear up to fight an irrigation dam on the Fitzroy River.
- **In Print:** New resources of note.
- **Dam Watch:** The World Commission on Dams is finally launched.
Thousands of villagers living around the recently opened Theun-Hinboun dam in Laos are already experiencing severe impacts to their livelihoods, according to an independent researcher who visited the area. The US$260 million dam was opened by the Asian Development Bank (ADB) and the dam's Scandinavian and Thai shareholders at a gala dam-site ceremony on April 4.

Bruce Shoemaker, who lived in Lao PDR for seven years and is a fluent Lao speaker, interviewed 60 people in 10 villages during a visit to the project area in March. Interviewees included women and men, fish-stall owners, shop owners, fishermen, village headmen, boat pilots and others.

"What was particularly striking about the interviews with the villagers was that they all reported various harmful effects from the project," writes Shoemaker in his field report. "In all three areas visited, villagers reported substantial declines in fish catches. These declines ranged from 30 to 90 percent." Local people are heavily dependent on fish as a source of food and income.

The ADB, which gave a $60 million loan to the Lao government for the dam, has recently described Theun-Hinboun as a "winner" with "little for the environment lobby to criticize." The ADB claims that with Theun-Hinboun there is "no flooding, virtually no reservoir, and no need to resettle anyone." Interviews with villagers living around the reservoir, however, reveal that riverbank gardens which provide both essential food and income have been flooded and eroded. An entire village of over 100 households living below the dam has been informed that they will have to move because of the increased threat of flooding.

A group of six fisherman living around the reservoir area told Shoemaker, "The project has many bad effects! Now we can only get about half as many fish as before the dam closed. We have to buy expensive new nets to try to fish deeper in the river... Also, the vegetable gardens along the riverbank have all been flooded. They were each worth more than 100,000 kip [$41] but now are gone and much erosion has occurred ... We have not been told about receiving any help or compensation for these problems."
Only $50,000 has been allocated for all resettlement and compensation costs of the project, despite the fact that thousands of people are estimated to be adversely affected by the dam. According to official documents, two-thirds of the total mitigation budget of $2.59 million went toward structural modifications of the dam, costs that should have been incorporated as part of the project's basic infrastructure from the start.

In October 1996, the Lao government, acting with legal advice from the ADB, signed an agreement with the Theun-Hinboun Power Company (THPC) which absolved the company from any further obligation to assist with mitigation or compensation measures for the life of the project. Thus any additional compensation costs would have to be borne by the Lao government.

The report recommends that "a first step in addressing the concerns mentioned … might be for the project's public financiers - NORAD and the ADB - to sponsor an extensive and comprehensive independent examination of the points that have been raised in this field report. Such an examination could be the first step in providing redress to those Lao citizens currently being harmed by the project."

The Theun-Hinboun Dam is a joint venture between the Lao electricity utility, Electricite du Laos, a Thai company, GMS-Thailand, and two Scandinavian state-owned utilities, Vattenfall of Sweden, and Statkraft of Norway. The Norwegian aid agency NORAD gave a grant of $7 million for the project. Although the ADB claims that the project is "the first privately financed infrastructure in Lao PDR," well under half of the total investment comes from purely private sources.

For more information:

- Read "Trouble on the Theun-Hinboun: A Field Report on the Socio-Economic and Environmental Effects of the Nam Theun-Hinboun Hydropower Project in Laos" a report by Bruce Shoemaker, April, 1998. The Theun Hinboun Photo Gallery accompanies the report.
- Visit the Mekong Campaign Page.

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Chinese authorities "will have to rely on the military or a man-made flood to force people out of their homes" when the 450-mile-long reservoir behind the Three Gorges Dam begins to fill in five years, according to a Chinese dam-resettlement official. A Chinese sociologist's assessment appears in a new study on the project's resettlement program, released March 12 by IRN.

The investigation into the dam's resettlement record was carried out by Wu Ming (a pseudonym), a Chinese sociologist with extensive experience in evaluating resettlement programs. The study reveals widespread mismanagement; corruption and falsification of resettlement figures; inadequate relocation plans, including insufficient compensation, farmland and jobs; and systematic discrimination against rural residents in awarding financial and material compensation. Wu interviewed people in five of the 22 counties to be partly inundated by the dam's reservoir, from which a total of 420,000 people are scheduled to be relocated. Interviewees included workers, farmers, small-business owners and local officials.

Because of these problems, only some 50,000 people have been relocated in the program's first five years, Wu Ming estimates. The head of the Three Gorges Project Resettlement Bureau has been quoted in the Chinese press as saying 100,000 people have been resettled, but he did not specify whether these people had been properly resettled according to the government's own definition - meaning that they must have a replacement home, new livelihood and compensation for their losses. The report details a litany of problems in real-life resettlement communities.
For example, in Yunyang county, 8,737 people were said to be successfully resettled, mostly farmers. But officials anonymously admitted that up to 80 percent of the replacement farmland being used for resettlers was useless, and that they had lied about how many people had been given productive new jobs. They also admitted to covering up a situation in which farmers moved back to their old farms after having been resettled onto bad land. The farmers told the resettlement bureau that they had been cheated, but Wu notes they will not be eligible for further compensation.

Wu described how project authorities have created "model resettlers" (yimin dianxin), who receive preferential treatment and are showcased by local officials in an effort to persuade other farmers to relocate and impress senior inspectors. But he notes that creating such "model" households is expensive: each one costs about four times the amount available to relocate an average household.

No New Jobs
For the farmers who make up half of the project's resettlers, re-establishing livelihoods will be extremely difficult. There is virtually no adequate farmland available, which is why official plans call for moving resettled farmers into industrial jobs. But the reality is that China has been gripped by growing unemployment, and finding new jobs for the project's urban resettlers alone will be a very difficult task. By the end of 1997, 12 million people have been thrown out of work because of official revamping of the state sector. According to State Statistical Bureau spokesman Ye Zhen, only half have found new jobs. The nation's unemployment situation has worsened since Beijing announced at the end of 1997 its plan to accelerate the reform of state enterprises.

The report reveals that officials in resettlement areas are having great difficulty fulfilling the need for new jobs and housing. "A Fengjie County official said candidly that the vow of the Three Gorges Dam planners to make some of the rural resettlers into urban residents and industrial workers is now a meaningless slogan. 'What concerns us most at present is how to guarantee factory workers a minimum salary and how to provide emergency aid to urban residents who cannot make ends meet. There is no way to find industrial jobs for rural resettlers.'"

Official Response
When Chinese officials were asked by reporters in Beijing to comment on Wu's report, a Chongqing official in charge of resettlement in that city said that the report "had no basis in fact." The official had not actually seen the report when he made these comments. He did concede that "there had been some problems with fund mismanagement at the early stages of the project." Chongqing is the largest municipality to be affected by project resettlement.

Chongqing, China's largest municipality, will be particularly hard-hit by dam resettlement. According to China Daily, Chongqing will see some 20,000 hectares of cultivated land inundated and 1.03 million of its residents resettled for the reservoir. Local officials conceded that the resettlement effort has presented them with a number of tough challenges, made more difficult by rising local unemployment. The officials said that nearly 400,000 workers in Chongqing were laid off last year, and another 200,000 will lose their jobs this year. Chongqing "doesn't have enough room for [resettlers] in terms of arable land or
financial support," a local official told China Daily.

By 2003, if the Three Gorges Dam goes ahead, over half a million will be displaced, with an equal number to be moved by 2009. Thus the stage is being set for a repeat of China's past disastrous dam displacements, such as the Sanmenxia Dam relocation of 1958, which led to violent relocations to inappropriate sites where the 403,800 displaced ended up in extreme poverty. Regarding the Three Gorges Project, Wu notes, "resentment and foot-dragging opposition to resettlement is widespread, presaging a major crisis if the dam project continues as planned."

### Dam Safety Lags

The industry publication Hydropower and Dams estimated in January 1995 that for every 1,000 construction workers at dam sites, there is on average one fatality and numerous injuries each year. The Chinese paper Farmers' Daily reported on March 24 that seven people were killed on March 8 when a newly built dam in the central province of Hubei burst. Some 300,000 cubic meters of water spilled out of the dam and flooded the village of Haokou in the Tanjiangkou municipality, the paper said.

Then on March 13, news of a bridge collapse near the Three Gorges dam construction site surfaced. The accident apparently happened on February 20 when a 48-meter long bridge under construction fell 29 meters, according to the daily Nanguo Zaobao. Ten people were killed and 15 others injured. The newspaper did not specify if the victims were construction workers.

For more information:

- Visit the [Three Gorges Campaign Page](#).
- Read the report "[Major Problems Found in Three Gorges Dam Resettlement Program](#)"
Brazilian Rejection of Hidrovia Elicits Cautious Optimism

by Glenn Switkes

On March 20, Eduardo Martins, the president of the Brazilian government's Environmental Institute (IBAMA), announced that the country is abandoning its current plans to construct the Paraguay-Paraná industrial waterway, called the "hidrovia." Instead, according to Martins, the government will restrict its interventions in the Pantanal wetlands, considered to be the largest tropical wetlands in the world, to "minor works" which will not place the ecosystem at risk.

The Hidrovia project would channelize 3,400 km. of the Paraguay and Paraná Rivers to improve navigation for huge barge convoys. The project is a joint effort by the governments of Brazil, Bolivia, Paraguay, Argentina, and Uruguay. As currently designed, the project would lead to extensive dredging, channelization and rock removal in the Brazilian Pantanal. The project engineering plan was funded by the Inter-American Development Bank (IDB) and the United Nations Development Programme (UNDP).

Environmentalists expressed their concern that, despite Martins' statement, the project may still move ahead in some form that will cause significant environmental impacts. "It's too early to celebrate," said Alcides Faria, of the Brazilian NGO Ecologia e Ação (Ecology and Action), and executive secretary of the 300-member Rios Vivos coalition of NGOs, which has led the criticism of the project. "The Transportation and Foreign Relations Ministries, which have been promoting this project for a decade, still need to define which works they will carry out as part of the project, and officially inform the other countries on the Intergovernmental Committee on the Hidrovia (CIH). Brazil has for a long time said it won't harm the Pantanal, but meanwhile it is carrying out dredging without adequate environmental studies."

Rios Vivos has produced technical studies showing the project to be both environmentally unwise, economically unprofitable and technically unnecessary. Scientists and other technical experts have warned that the engineering works could alter the river system's hydrology, causing the Pantanal to dry out and adversely affect other critical ecosystems along the rivers' course. This would have disastrous effects on the region's biodiversity and local people's livelihoods, especially indigenous peoples, fisherfolk and small farmers. Downstream flooding on the Paraná River could also worsen, causing more disastrous social and economic impacts.
While Martins' announcement is widely interpreted as Brazil's rejection of the IDB/UNDP engineering design, it is doubtful that Brazil's Transport Ministry is fully in agreement with IBAMA's position. In fact, one week after Martins' announcement, José Alex Botelho Oliva of the Transport Ministry publicly stated, "We want the Hidrovia and we're going to get it."

In November 1997, the Brazilian Transport Ministry sent a letter of intent to the Environmental Ministry describing the ministry's work plans for the hidrovia, which included dredging - although not on the massive scale of the IDB/UNDP plan. The Ministry also indicated it has plans to construct a new port in the Pantanal at Morrinhos, and the expansion of another port. The Transport Ministry also said it planned to carry out a new set of studies to draw up a long-term plan for additional Hidrovia works.

The government of Paraguay is also reportedly wavering in its plans to dynamite rock passes along the Paraguay River, apparently due to a study about the project's impacts by the US Army Corps of Engineers. The Corp's Waterway Experiment Station told Paraguayan President Wasmosy, "the report [by the IDB/UNDP-funded consortium] does not provide adequate information and analyses to support the conclusions of the consultants and is not sufficient upon which to base sound development decisions... At worst, [it] is a technically inadequate proposal unlikely to achieve its stated objectives but [which] will cause significant and irreversible impacts." The Corps report recommended that Paraguay "limit activities to the implementation of navigation aids."

Talk of the hidrovia's demise is still premature. In fact, the project appears to be slowly moving ahead down river. According to Silvia Ribeiro of Redes - Friends of the Earth Uruguay, "The other countries of the region are still determined to carry out extensive engineering works along the course of the Paraguay and Paraná Rivers. They, along with the economic interests behind this project, will try to pressure Brazil to reconsider its decision."

- Visit Hidrovia Campaign Page for more information.

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People affected by Yacyretá Dam, particularly those living on the Paraguayan banks of the dam's huge reservoir, have stepped up their protests and repression, which have been ongoing since February. The protests are intended to press project authorities to involve affected people in addressing the project's widespread environmental and social impacts. In February, 2,000 affected people blocked the main highway into Encarnación, Paraguay, and were beaten by riot police; 23 protesters were injured. Another group of dam-affected people staged a hunger strike in front of Yacyretá Binational Entity (EBY) headquarters. The protests resulted in the groups getting a meeting with the Paraguayan Director of EBY, Joaquín Rodríguez, who promised to "have another look" at some critical issues.

Meanwhile, the World Bank, a major funder of Yacyretá, has been caught in an apparent attempt to minimize the results of a recent investigation by its independent Inspection Panel into the project. The Inspection Panel had been asked by affected people to investigate problems at the dam. Its report was delivered to the Bank's Board of Executive Directors in November. One month later, the Board voted to postpone any of the Panel's recommendations for six months in favor of an "Action Plan" designed by EBY under supervision of the World Bank and the Inter-American Development Bank (each of these funders provided nearly $1 billion each in loans for the project).

The World Bank recently leaked a letter which stated, "The Bank is satisfied with the conclusions of the [Panel] report which affirm that its policies on resettlement, environment, community participation, and others were fully respected and applied in the case of Yacyretá." EBY published the letter as a paid advertisement in two major Paraguayan national newspapers for four days running. The letter was written by the Bank's Acting Vice President for Latin America, Isabel Guerrero, and addressed to Pedro Pablo Arzamendia of the Comisión Interbarrial de Afectados por Yacyretá (Inter-neighborhood Commission of People Affected by Yacyretá).

In fact, the Panel's report contains at least 14 references to serious violations of Bank policies. The Panel concluded that "the Bank has failed to bring the project into compliance with relevant Bank policies and procedures." In its report, the Panel also cited "...a long history of delays and non-compliance tolerated
by the Bank," and said that "in spite of extensive supervision efforts … and the fact that Yacyretá environmental actions have been cited as a 'model' by the Bank's Environment Department, the Panel has found that the Bank has not been able to bring the project into compliance with the ODs [Operational Directives] and is not likely to do so until after the year 2000." The Panel also stated that "Bank environmental and resettlement procedures call for continued participation of potentially affected people from the outset. The Panel has found that the process has been neglected and now is all but discontinued."

Secrecy Prevails
The NGO Sobrevivencia - Amigos de la Tierra Paraguay, which brought the case to the World Bank Inspection Panel on behalf of the affected people and itself, has repeatedly petitioned the Banks and EBY for a copy of the Action Plan. Although the plan supposedly requires public participation, the banks have refused to provide the group with a copy on the grounds that it is EBY's "property." EBY has not responded to Sobrevivencia's requests for a copy.

Raquel Rodriguez of Sobrevivencia said, "The Bank's willingness to withhold the results of the investigation from the public is a further sign that Bank management is determined to marginalize the Inspection Panel, which has played an important role in providing a channel for complaints by victims of Bank-funded projects."

In early April, Sobrevivencia wrote World Bank President James Wolfensohn to respond to the Bank's claim that its policies have been met on Yacyretá. The letter demands that the Bank pay for an advertisement in the Paraguayan press which retracts the allegations in the Bank letter; provide people affected by Yacyreta a copy of the Inspection Panel report translated into Spanish, and a copy of the World Bank/EBY Action Plans in Spanish, and meet with local organizations of affected people to plan how they will be integrated immediately into the process for designing and implementing viable and participatory action plans to remedy the critical situation they are facing.

Sobrevivencia's Rodriguez said, "The Bank is acting as a kind of public relations agency for EBY, instead of taking serious measures to solve the public health and environmental emergencies caused by the dam. The fact that they delivered their disgraceful letter to EBY, and that it was published in the press a full week before it was delivered to the affected people to whom it was addressed, is further evidence that the Bank wanted to avoid having us respond to their lies."

Perhaps the most galling section of the controversial letter was its response to an invitation by dam-affected people to World Bank President James Wolfensohn to visit the dam and take a first-hand look at ongoing problems. The Bank letter says, "In the name of President Wolfensohn, we express our thanks for your invitation to visit the Yacyretá project … The most propitious time for this visit would be when the resettlement and environmental management programs agreed to between the partners are being completed so that we may appreciate the results of their implementation." This may delay his visit somewhat.
Visit the International Finance Page for more information.
Damned Again: Innu People Protest Proposed Hydro Project

by Lori Pottinger

Newfoundland Premier Brian Tobin and Quebec Premier Lucien Bouchard announced March 9 that they will cooperate on one of the largest hydroelectric development projects in Canadian history. The project will flood a vast area of pristine hunting and trapping territory that is home to the indigenous Innu people. After nearly three decades since the first dam began production, 15,000 Innu are still seeking compensation for loss of land and burial sites.

The C$10 scheme calls for the expansion of the existing Upper Churchill Falls Dam by 1,000 megawatts, and the construction of the 2,264 MW Gull Island dam on the Churchill River, about 120 miles downstream from the existing dam. It would divert two rivers from Quebec into the Churchill Falls reservoir system.

NGOs following the project say that there has been no sign from the government or project authorities that the Innu will be meaningfully consulted about the new dam or fairly compensated for their losses. In fact, Premier Tobin told reporters that the Innu "have a right to a share" in the benefits from the new project, but will not have the right to "veto the project."

Despite this statement, the Innu and their supporters have worked successfully to voice their opposition to the project and pressure the government to include them in the process. Protesters nearly shut down the March 9 public relations event, blocking the road from the airport to the tiny community of Churchill Falls. Innu men, women and children surrounded the van carrying Bouchard and Tobin, chanting slogans, banging on the doors and beating drums. A young aboriginal boy scrawled, "No Dam Way" in the dust covering the van. After nearly an hour, the two men got out of the van and said they would walk back to the airport several kilometers away. They were eventually escorted into another vehicle, driven to the airport and flown by helicopter to the ceremony site, where they were again met by Innu protesters.

"We've shown them that we're not fooling around any more," said Chief Paul Rich at the protest. "Any big project like this that wants to go ahead, it first has to deal with the compensation for the (original) Upper Churchill project."
Too Little, Too Late
Earlier in the year, Innu leaders tried to get a seat at the table to discuss the project with the
governments, but were rebuffed. "We are extremely frustrated with the refusal of the Tobin and
Bouchard to include the Innu in their so-called preliminary discussions about the Lower Churchill
project. Premier Tobin has even denied that negotiations are taking place," stated Innu Nation Vice-
President Daniel Ashini. "We are tired of being lied to, tired of being misled, and tired of having our
rights ignored. The Innu will take whatever actions are necessary to prevent Newfoundland and Quebec
from entering into any contracts regarding the Lower Churchill or other hydro developments in our
territory without our consent."

Prior to the official ceremony, officials offered to brief Innu leaders, but most refused because it was so
late in the negotiation process. "That deal is almost finalized," said Rich. "That's the only time they'll ask
us to come and deal."
Survival International, an international nongovernmental organization (NGO) for tribal peoples, said that
the Premiers of Newfoundland and Quebec "are behaving like 19th-century colonialists," and that the
project would lead to "the worst human rights abuse concerning indigenous people on the North
American continent."

Twenty NGOs in the US issued a public statement expressing solidarity with the Innu people. It said in
part, "We will oppose the import and distribution of power from the Lower Churchill, and refuse the
purchase of electricity from this and other environmentally and socially irresponsible developments. We,
the intended customers for the power generated from the Lower Churchill development, shall oppose all
bond issues and purchase contracts needed to finance this destructive project."

Power Play
The project is being developed in large part to satisfy Hydro-Quebec's thirst for exporting electricity to
the US - at least 2,000 megawatts will be available to sell to the newly deregulating US markets. Hydro-
Quebec president André Caillé said the Churchill Falls power can be produced for said the Churchill
Falls power can be produced for 1.75 cents (US) a kilowatt-hour, and transmitted to US markets for
under 1.5 cents a kilowatt-hour, making it competitive with the cost of other new power sources.
However, according to Philip Raphals, Associate Director of the Helios Centre for Sustainable Energy
Strategies in Quebec, current market prices in the US are below this level, reflecting the fact that
existing plants can generate electricity more cheaply than new plants. He adds that real transmission
costs will probably be substantially higher, since Hydro-Québec is counting on "rolling in" the new lines
so their cost is shared by all Québec ratepayers.

Because the dam is not conceived to meet a power-supply need but rather make a profit, it is difficult to
discuss alternatives to it. Says Raphals, "Due to the competitive restructuring of the American electricity
industry, it is increasingly difficult to make rational energy choices." He adds that, while there are
significant efforts underway to limit increases in greenhouse gas emissions due to restructuring, little is
being done to ensure that it does not increase other types of environmental harm, such as that caused by
hydro projects.
Indeed, Québec and Newfoundland are trumpeting the new projects as a way to Canada's cut greenhouse gas emissions. They estimate that it will account for up to 15 percent of Canada's commitment under the Kyoto agreement. (The combined total of 3,200 MW of the two projects is equivalent to the annual electricity consumption of 550,000 households.) But NGOs see flaws in this reasoning, noting that displaced thermal generation will not be in Canada, but rather in the US where most of the power will be sold. Depending on how the trading system is designed, that could lead to the credits going to the US, not Canada. Also, recent research indicates that reservoirs in northern Canada themselves emit substantial amounts of greenhouse gases.

FOR MORE INFORMATION

Information about the Innu Nation's position is available on the internet: www.innu.ca. Or write the Innu Nation, PO Box 119, Sheshatshiu, Labrador, Canada A0P 1M0. Tel: 709.497.8398; E-mail: innuenv@web.net. Or contact the Quebec Innu organization, Mamit Innuat, 700, boul. Laure, bur. 208 Sept-Iles, Quebec G4R 1Y1; Tel: 418-968-4890; Fax:418-968-2370 E-mail: innuqc@quebecltel.com. Survival International is producing a report on the dam and its effect on the Innu. For more information, contact Survival: Tel: 0171.242.1441, Fax: 0171.242.1771; Email: survival@gn.apc.org; Web: http://www.survival.org.uk/
British Columbia Approves Mine in Remote Taku Watershed

Although a proposed Canadian mine 10 miles from the Alaskan border would have had a tough time getting approval in the United States, it won quick acceptance by British Columbia ministers recently. In late March, provincial ministers approved the Tulsequah Chief mine in the pristine Taku River watershed, despite major outstanding concerns by environmental groups and the native people in the area to be affected by the project. Although the company, Redfern Resources Ltd. of Vancouver, has cleared a high hurdle, it must still get permits to reopen the abandoned mine.

The mine - which would produce copper, lead, zinc, gold and silver - is being widely criticized on both sides of the border for inadequate evaluation of the many environmental and social impacts it would cause. The proposed "tailings" dam to prevent pollution from mine waste is particularly controversial, as it would be located in a floodplain and subject to earthquakes, floods and avalanches. In addition, the project's 100-mile-long access road could bring in logging and other industrial uses to the undisturbed watershed. Environmentalists charge that these problems were not seriously addressed in project documents, and could have serious impacts on the Taku River - one of the top salmon producers in the region. Concerns voiced by the indigenous Tlingit people, who oppose building the access road into their remote region, were also given little weight in the hasty approval.

The BC government's approval put the Taku River on the 1998 list of America's 20 most endangered rivers, released by the Washington, DC group American Rivers on April 6. "The risk of destroying this outstanding waterway is not justified by a small mining company's desire to extract gold at a time when the gold market is weak and gold companies are closing mines and going bankrupt," said Tom Cassidy of American Rivers.

The mine's approval was also not well received across the border. On March 30, Alaska's Governor Tony Knowles requested that US Secretary of State Madeline Albright to have the mine approval reviewed by the International Joint Commission (IJC), which was created to resolve water issues between Canada and America. "It is an extraordinary and, to my knowledge, unprecedented request to place a mine development in the floodplain of a major salmon-producing river," Knowles said in his letter to Albright. Knowles said the state had two days to review the lengthy final proposal for the project before it was quickly approved earlier this month.
The US State Department and the US Environmental Protection Agency (EPA) also voiced concerns about the project. The EPA is especially concerned about the project's tailings dam, which would be built in the floodplain. Mine tailings can leach dangerous acid pollutants into ground water. "It's like a loaded gun sitting above Flannigan Slough, which is a valuable spawning area," said Bill Riley, mining coordinator for the EPA's office of water in Seattle. The slough is near the confluence of the Tulsequah and Taku rivers. While the EPA has been told it will be part of a committee to review the mine permitting process, the agency is still trying to find out how involved it can be in the permits, Riley said.

A number of NGOs in both Alaska and Canada will continue to oppose the project.

"The hasty decision by the BC government which gave reviewers only 48 hours to read the 100-page draft report and without allowing them to convene to deliberate on the final recommendations has made a mockery of the BC Environmental Assessment Act. This is a dangerous precedent, as this is the first mining project to be assessed under the new Act," said David Boyd, executive director of the Sierra Legal Defense Fund (SCLDF). SCLDF is questioning the legal validity of the government's decision, in accordance to provincial and federal law, as well as international treaties. Boyd said, "While I welcome Alaskan concern over the Tulsequah Chief mining project, politicians on both sides of the border must stop playing Russian roulette with BC's wild salmon. Alaska needs to stop over-fishing BC salmon and BC needs to protect salmon habitat, rather than rubber-stamping poorly conceived industrial projects, especially one which is to last only nine years."

The company intends to start construction in 1999 and open the mine in 2000, a Redfern spokesman said.

For More Information:

- Bill Wareham, Sierra Club of BC: 250.386.5255
- Alan Young, BC Environmental Mining Council: 250.384.2686; web: www.miningwatch.org/emcbc/
- Allan McDonell, BC Wild: 604.669.4802
- David Boyd, Sierra Legal Defense Fund: 604.685.5618
Thousands Rally for Rivers on Day of Action

by Aleta Brown

On March 14th, tens of thousands of people from around the world took to the streets or gathered at rivers to mark the first annual International Day of Action Against Dams and for Rivers, Water and Life. More than fifty major actions took place in twenty-four countries, including, to name just a few, demonstrations in Poland and the Philippines, clean-ups in Russia and the United States, and celebrations in Australia and Japan.

The decision to establish an international day of action came from participants at an international meeting for dam-affected people held last year in Curitiba, Brazil. Because March 14th has been the Brazilian Day of Struggle Against Dams for nearly a decade, Brazil was the site of many inspiring actions, several of which were noteworthy for their size, duration and fortitude. The only difference was that this year the Brazilian activists were joined by thousands of people on nearly every continent.

In Bahia, Brazil, 3,000 rural workers set up camp at the regional utility company's headquarters - which built the contested Itaparica Dam - and vowed to stay until their demands were met. Ten years after construction began, 65 percent of those resettled by the Itaparica Dam are still without irrigation promised by project authorities, which is required to farm the arid resettlement lands. Five days after the camp-in began, the protestors learned that the Brazilian government would release the long-promised $112 million for the irrigation project, so, they broke camp and went out to dance forro, a popular Brazilian music featuring accordions.

In Florianópolis, Brazil, 1,600 dam-affected people broke through a police blockade and occupied the offices of utility Electrosul for five hours. They were seeking just compensation for environmental damages, relocation and loss of livelihood for dams currently under construction in the Uruguay River basin. Electrosul refused to negotiate and called in a police riot squad.

Sandra Inez Paulino of the Brazilian Movement of Dam-Affected People (MAB) could have been speaking for people from India, Namibia or Hungary in explaining what inspires affected people to engage in such risky actions as these. Paulino said, "In every part of Brazil, dam-affected people have
been abandoned and forgotten. We have been excluded from the decision-making process about these projects. We will stop the construction of new projects until the social and environmental problems these projects cause are solved."

**Bring the Rivers Back**

The day's themes are to celebrate the life of rivers, protest their destruction, help educate the public, and promote the sustainable and equitable management of rivers. Participating groups were encouraged to hold actions that addressed the problems or challenges facing their local rivers.

In Budapest, Hungary, more than 2,000 environmentalists gathered in a cold rain to form a mile-long human chain along the Danube River. It was the second demonstration in two weeks against a dam project at Pilismarot, which was approved in early March by the Hungarian and Slovakian governments. The first demonstration, held the day after the governments approved the project, drew 10,000 protesters. Janos Vargha of group Danube Circle said, "Taking part in this International Day of Action helped to offset the argument used by dam-builders that the Danube movement is only a small, isolated group of fanatics."

Activists and friends of Slovakia's WOLF Forest Protection Movement demonstrated at the Starina Dam under a banner that said: "It's better to have water up to our knees than dams up to our necks." Catastrophic floods have increased in Slovakia because of heavy clear-cutting of forests, which reduces the land's ability to absorb rainfall. Instead of providing fundamental changes in forest management, the Ministry of Land Management is proposing 91 "flood control" dams - at $100-160 million each. "We could solve the housing problem in Slovakia with the money it takes to build just one of those dams," says a representative of WOLF.

Australia was host to five actions. Environs Kimberley held a family picnic on the threatened Fitzroy River (see page 14 for a story on the struggle to stop a dam proposed for this river). Mackay Conservation Group hosted a day of celebration with food, music, and stalls to teach people about the downstream effects of dams. And Snowy River Alliance arranged for the star of *The Man from Snowy River* movies to lead a group on horseback along the banks of the famous river. Currently, the Snowy River receives only one percent of its original flow due to the Snowy Mountains Hydroelectric Scheme. The group's message to the government was, "Bring the river back or stand accused of its demise."

In Japan, where eight different groups marked the day with a variety of activities, Citizens for Saving the Kawabe decided to celebrate. The group met at the undammed Kawabe River for a spring festival where they enjoyed the edible wild plants from the river ecosystem, cooked fish from the river, beat Japanese drums, and thanked the Kawabe for the many pleasures that it brings.

In India, men, women and children from more than 35 villages gathered on the banks of the Narmada River to celebrate Holi Week, the most important tribal festival of the year. This year's festival coincided with the Day of Action, and so the ancient celebration was expanded to not just celebrate the Narmada River and to recognize the threats facing this holiest of Indian rivers. People burned effigies made to
represent the dams, funding agencies, dam contractors and politicians whose river development schemes have further impoverished so many tribal people. New Delhi's Indian Social Institute estimates that more than 14 million people have been moved by reservoirs and associated irrigation projects in post-Independence India. "The people vowed to fight unjust, unwarranted and inhuman displacement despite the adversities they might face," said Sanjay Sangvai of the Save the Narmada Movement.

International Rivers Network, the information coordinator for the Day of Action, sponsored an event in San Francisco, which was co-sponsored by 15 local groups. The day began with a celebration at a restored local creek. A group of about 50 people then proceeded to San Francisco to protest the Ralco Dam on Chile's Biobío River. Joined by others, the group marched through San Francisco's Chinatown and demonstrated in front of Bank of America's Corporate Headquarters to call attention to foreign financing of China's Three Gorges Dam on the Yangtze River.

Dai Qing, a Beijing journalist and outspoken opponent of the project, came to California for the Day of Action because in her native China it is illegal to speak out against the dam. "If this project is as good as promoters say," says Dai Qing, "then why is the Chinese government using their weight to silence the criticism?"

The International Day of Action is one more tool to be utilized by those fighting for living rivers. Whether a group is fighting to stop a project a river or receive just compensation for those affected by development schemes; whether they are trying to maintain the health of a threatened river or are actively working - as are many groups in the US - to remove a dam and restore the river, the simple act of speaking out together, with one voice, offers strength to the people and to the world's rivers.

*If you wish to plan an action for next year's event, contact Aleta Brown at International Rivers Network (Tel: 510.848.1155; email: aleta@irn.org) or visit the [Day of Action Page](http://www.irn.org) for more information.*
Thousands of Protesters Brutally Arrested at Maheshwar Dam

by Patrick McCully

More than 2,000 protesters occupying the site of the Maheshwar Dam in India's Narmada Valley were arrested and beaten by police in late April. At press time, at least 25 had been hospitalized for injuries. The villagers, who were engaging in Satyagraha (non-violent resistance), were protesting the government’s violation of a recent agreement to stop all construction work on the controversial project until a thorough review is completed.

The struggle began April 22 when more than 4,000 people from 61 villages affected by the project captured the dam site and stalled ongoing work. Villagers took over the heavily-protected site despite the use of police force, riot control vans and barricades on all entry points to the site. After the arrests, work on the project was resumed under massive police protection.

The project has been the focus of a year-long struggle and a number of mass occupations at the dam site. Activists had agreed to stop their activities after an official work stoppage on the project was brokered, and a task force appointed to carry out a review of the project - a group that includes activists from the Save the Narmada Movement (NBA), independent experts and government officials. But in early March the state government called a meeting to discuss breaking the work stoppage to allow "safety" work on the dam to proceed. S. Kumars, the local company given the concession to build and operate the dam, described the "safety work" as building a 240-meter wall. The wall would require 2-3 months work, cause submergence in some villages and include blasting, which has damaged houses in villages near the dam site.

The NBA refused to agree to any work at the site, believing that the company used the safety argument as a ploy to restart work so that they could show foreign investors that the review of the project is only an empty political concession. The NBA believes that extensive international coverage of the protests and the work stoppage is scaring off potential foreign investors.

When workers began to arrive at the site in mid-March, angry villagers met them with protests. Then on March 28, some 1,000 police descended on Maheshwar and blocked all routes to the dam site as a
"safety" precaution for a large rally called for April 3. The demonstration was peaceful. As the NBA suspected, the police operation proved to be a ploy to provide protection for S. Kumars to move in laborers and machinery and start work on the wall. The day after the rally, local people set up a roadblock to prevent the contractors from reaching the site. At press time, the police had threatened protesters but had not yet arrested any.

Swiss-Swedish engineering giant ABB and German firm Siemens have signed contracts to supply equipment for the dam. Oregon-based energy utility PacifiCorp has helped with the finance package.

- Visit The Narmada Campaign Page for more information.
Good Energy Alternatives, Bad Economics May Kill Epupa Dam

by Steve Rothert

On a hot day in late January and with the sound of Epupa Falls in the background, Himba Chief Hikuminue Kapika rose to address the two dozen people gathered around a table overlooking the Kunene River. "Epupa Falls was created by God," he said. "When God made the falls, he left his footprint in the rock below. Now the government wants to build the dam and cover God's creation. Government should not try to go beyond God."

With its 380-square-kilometer reservoir, the proposed Epupa Dam would inundate this meeting place and a broad swath of the surrounding river basin. The dam would force the relocation of 1,000 people and affect more than 10,000 through the inundation of grave sites, 18,000 hectares of grazing land, and thousands of riparian palm trees which produce omarunga nuts, a critical food source for the Himba during times of drought. At 160 meters high and 570 meters across, the dam would be one of the largest in Africa (a second proposed site, called the Baynes Scheme, would result in a 200-meter-high dam - the largest in Africa). Despite its enormous size, however, its maximum potential capacity is only 360 megawatts (one megawatt can supply 1,000 average homes in the US).

The spiritual importance of the landscape is just one of many reasons the Himba oppose the Epupa Dam. At the January meeting, the community finalized its position on the proposed dam in preparation for a February 7 public hearing on the project.
"The traditional leaders think the dam is not in the best interests of Namibia nor of the communities they represent," the statement begins. "We question the need for the electricity, and ask if there are options that would not destroy the Himba economy, culture and grave sites." The statement further requested a meeting with the government to discuss development options for the region that would be less harmful to their culture and way of life.

Himba leaders have named some of the more important meetings about the dam. The gathering at which they were first informed of the dam's size, complexity and major impacts is known as "katu tjiwa," or "we did not know." The meeting to finalize the community's opposition to the project was named "katu tjitire," or "we will not die," to express their conviction that they will not forfeit their lands and livelihood.
Project Faults Detailed

The Himba are not alone in their critique of the Epupa scheme. The project's economic, environmental and technical drawbacks have been highlighted by a number of critics, both inside Namibia and internationally. A team of outside experts volunteered to review the project feasibility study for local environmental groups; the review was coordinated by IRN, and comments delivered to the government in January. The review team - which included a lawyer, hydrologist, economist, ecologists and other technical experts - found numerous problems with the project as described in the Feasibility Study, which was released in October 1997. In addition, critiques of the project's social, environmental and economic impacts were lodged by government officials, local NGOs and concerned citizens.

One particularly alarming impact for the arid region is that the reservoir would evaporate up to 630 million cubic meters of water each year - more than the total potable water supply in Namibia. Yet he cost-benefit analysis in the project Feasibility Study gave absolutely no value to this huge volume of water - even in the shadow of Namibia's worst water supply crisis, and as the government plans a US $600 million project to extract water from the Okavango River. "The external costs of evaporative losses must be set at nil due to a lack of alternative uses for this water," the study states.

The Feasibility Study was widely criticized over this issue. Scientist Hans Eggers wrote in a review of the study, "The Kunene represents a priceless water reserve. The huge evaporation loss and the desperate need for water in Namibia alone should conclusively eliminate any proposal to build a dam which does nothing but waste this reserve."

Economic Consequences

The Epupa hydropower scheme not only wastes valuable resources like water and land, but involves considerable risks - many of which would impact the project's bottom line.

One of the biggest risks for Epupa is already plaguing the Ruacana Dam upstream: too little water in drought years to fully power the turbines. The industry publication International Journal on Hydropower & Dams reported late last year that Ruacana is currently operating at just 13 percent of its installed capacity due to "falling water levels in the Kunene River." Since Epupa's economic viability also depends on the reliability and predictability of the Kunene River hydrology, at least several decades of stream flow records are needed to make reliable predictions about its long-term profitability. However, since no hydrological record exists at either of the proposed dam sites, the Feasibility Study uses a "synthesized" a data base to predict future flows and assess the project's viability, based on a 12-year hydrological record from a site 200 kilometers upstream at Ruacana and a longer record from the Okavango River.

There are several serious problems with using such a synthesized data base. The two systems could be different in significant ways that are not readily apparent. Also, recent evidence suggests that flows in the Kunene basin are decreasing. Finally, the Kunene River's great variability in flows, including consecutive years of low flows, could delay the project's start of power production due to drought-
induced delays in filling the reservoir.

Delays in the project's start-up date would affect its economic viability. Based on the worldwide record, a project the scale of the Epupa (which would be among the largest dams in the world) could typically experience at least a one year delay and, conservatively, a 10 percent cost overrun. The feasibility study states that such a delay and overrun would drop the project's return below 10 percent, and thereby fail the study's own test of the project's economic viability.

Project economics also depend on the financing package negotiated. At N$2.5 billion, the cost of the project is equivalent to one-fifth of Namibia's 1996 Gross Domestic Product. Undertaking this project would increase the government's annual expenditure on capital investment by more than four times. Windhoek-based independent economist Robin Sherbourne says, "This is a very large project in relation to Namibia's population and economy, the risks of which would be borne by the Namibian government and people if financed with public funds. Even if privately financed, the Namibian people would not escape the project's risks because the government has committed to underwriting the financing package."

Steve Rivkin, the economist on the NGO review team, concluded, "I do not believe that it passes the narrow test of economic viability using only the quantifiable costs and benefits, much less so when all costs and benefits are considered."

Because of the risks inherent to large hydro projects, Epupa has a high probability of low economic returns. Any potential investor, public or private, closely examine the region's power market to ensure sufficient demand exists to justify the project. With South Africa currently exporting power at less than half the estimated cost of Epupa electricity, and with the Kudu gas power station promising to produce twice as much electricity as Epupa at a lower cost, finding a buyer for the dam's electricity might prove difficult.

Exploring Alternatives
Much has been learned about the Kudu gas field since the Epupa study got underway. According to the Epupa study, the 750-MW natural-gas-fired power plant would be able to supply electricity at a lower cost than the Epupa scheme, and would satisfy Namibia's capacity needs until 2020. In addition, the risk of the gas project would be borne by the private sector, not the Namibian people. The first phase of the gas feasibility study should be completed by June.

The Namibian government is currently studying the feasibility of large-scale wind and solar power production. Namibia has the highest solar energy potential in the world, and considerable wind resources along its lengthy coast. Preliminary results of wind-velocity monitoring at two coastal sites suggest wind power could play a significant role in meeting Namibia's power needs. Wind gauges in Walvis Bay have clocked an average velocity of 6.5 m/s, and at least 7.5 m/s at Luderitz, both of which exceed the 6.0 m/s velocity considered to be the threshold velocity for developing a wind farm. A wind power feasibility study should also be completed by June.

The Windhoek-based Wildlife Society of Namibia has asked the government to reassess recent progress
on alternative energy sources and incorporate that information into the Epupa feasibility study. The group also wants the revised study to be submitted for an independent international scientific review. A review of the original Feasibility Study by IUCN's regional office in Zimbabwe is nearing completion, but will not include the new information on gas or wind power options.

The Namibian and Angolan governments have already postponed making a final decision on the dam by several months - a delay welcomed by project critics, because it allows the new studies on alternative energy sources to inform the decision-making process. In addition, the Namibian government will soon finalize a new energy policy that establishes several laudable policy standards under a "sustainable energy development" goal. If the Epupa scheme is reviewed under the new policy, it could spell the end for this controversial and costly project.

Namibia's Promising New Energy Policy

Namibia's new draft Energy Policy calls for developing energy resources in a sustainable manner. Some of its most promising provisions include:

- Government must base decisions regarding new energy projects on "internationally recognized principles and procedures for environmental and socio-economic impact assessment, mitigation and compensation";
- Cost-benefit analyses of proposed projects must be based on "full environmental and socio-economic costs of projects," and new energy projects must have positive net socio-economic benefits.
- The draft policy concedes that renewable energy technologies are currently prevented from competing on equal footing with conventional energy forms. Government will "level the playing" such that conventional energy sources do not enjoy institutional or financial preferences over renewable sources;
- Government will promote the use of solar and wind power to complement grid power in rural electrification, water supply, urban water heating and other appropriate areas.

For more information:

- Visit Rivers in Peril - Epupa Falls.
- Read the January 21, 1998 IRN Press Release: "Epupa Dam Feasibility Study too Poor to Use, Experts Say".
The Fitzroy River drains a significant portion of the magnificent Kimberley region of northwestern Australia - an ancient, remote and spectacular landscape characterized by a sharp monsoon season and a nine-month dry season. It is one of the last great natural regions of Australia and home to a diversity of Aboriginal peoples who speak more than 30 different languages. Collectively, the natural and cultural values of the Fitzroy valley are priceless. Now this unique river system - the largest in Western Australia - is threatened by a major irrigation project.

In August 1997, the State Government of Western Australia announced that Western Agricultural Industries P/L (WAI) had won the right to undertake a feasibility study into a major irrigation project. The process is expected to take around two years. At press time, details of the proposal had not been made public. However, activists have been able to establish that the proposal would involve the construction of between one and three major dams on the Fitzroy River, which would flood 1,000 square kilometers or more; around 500 km of canal to transport water to pastoral lease holdings and vacant public land proposed for conversion to irrigated agriculture, and the clearance of perhaps half a million hectares of pastoral land for irrigated agriculture.

This proposal would have a devastating impact on the environment. In particular, it would flood the beautiful Dimond Gorge and other important ecosystems, destroying important habitat for rare and endangered species such as the Gouldian finch and the Purple crowned wren. The river's flows would become heavily regulated, causing another set of environmental problems downstream of the dams.

**Downstream Impacts**

Silt-bearing monsoon flows into the shallow estuary of King Sound would be substantially reduced, potentially impacting mud flats, mangrove and seagrass communities. This region provides important habitat for migratory wading birds from northern Asia, as well as supporting populations of the endangered dugong and several species of turtle. The monsoonal flows would be captured by the reservoirs for diversion into the proposed canal during the dry, irrigation season. Below the canal off-take, the river would suffer low flows almost all of the time. The changes to the river's flows would also
change the river banks and channel structure ("morphology"), reduce downstream habitat diversity, and lead to weed invasion on sand banks and beaches.

As with many large dam projects, this one could result in the total destruction of native fish communities over long distances downstream. These dams would be impassable to migratory fish. Without expensive variable dam off-take structures, water releases from deep in the reservoir would be cold and possibly anoxic (dangerously low in oxygen), thus further harming river life.

For the many Aboriginal communities in the Fitzroy valley, much is now at risk - including the loss of important sites in Dimond Gorge, the right to fish in the Fitzroy, and the right to own and occupy traditional lands. A highly controversial Federal amendment to the Native Title Act, now under consideration by Parliament, is crucial to the success of this development proposal. The amendment, called the Native Title Amendment Bill, would effectively kill many land ownership claims of Aboriginal communities, and allow the construction of dams and other irrigation infrastructure, without requiring negotiations with Aboriginal owners.

Few other developers in Australia would stand to gain as much from the Native Title Amendment Bill as WAI. However, even without the bill, the state government of western Australia may still be able to proceed with the development. The Western Australia state government has reportedly expressed interest in compulsory acquisitions of pastoral lease holdings, which it would then transfer to WAI for subdivision as irrigation holdings. Industry sources expect that the state government is prepared to grant ownership of water entitlements to WAI for resale to irrigators - water entitlements with a capital value of AU$600 million at the very least. Furthermore, the government is prepared to approve an initial ground water-based development in advance of any dam construction - the "thin edge of the wedge," as it were.

The battle for the Fitzroy is now on in earnest. A group of NGOs including the Australian Conservation Foundation, Environs Kimberley, the Kimberley Aboriginal Land Council and the Conservation Council of Western Australia have joined forces to campaign against the dam on the Fitzroy. The groups are actively raising awareness about this issue nationally.

Tim Fisher is the Natural Resources Campaign Coordinator of the Australian Conservation Foundation (ACF). A "Save the Fitzroy River" poster is available from ACF for AU$20 plus postage. For more information, E-mail the group at: TIMF@peg.apc.org

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Launch of Dam Commission Marked by Call for Moratorium

by Patrick McCully

After ten months of often heated negotiations between dam critics and proponents, the World Commission on Dams (WCD) was launched on February 16. NGOs involved in the process marked the launch by demanding that aid agencies and governments cease the building of large dams until the Commission's recommendations are fully implemented.

In response to the call for a moratorium, World Bank President James Wolfensohn indicated that the Bank would consider a moratorium only if the WCD recommended it. The Swedish aid agency SIDA stated that it would wait until the WCD's final report was issued (expected to be April 1999) before making any changes in its lending practices.

The WCD is sponsored by the World Bank and IUCN, but will be formally independent of both bodies. The initiative to review the worldwide record of large dams began at an international conference of dam-affected people held in Curitiba, Brazil in March 1997.

The Commission's mandate sets two overarching goals: "to review the development effectiveness of dams and assess alternatives for water resources and energy development," and "to develop internationally-accepted standards, guidelines and criteria for decision making in the planning, design, construction, monitoring, operation and decommissioning of dams."

The mandate also instructs the WCD to carry out case studies of individual dam projects and of complete river basins, and for its results to include "an understanding of the accuracy of predictions of costs and benefits used in the dam planning process" and of "the need for restoration and reparation where necessary". The commission will look at an estimated 50 case studies, with perhaps 3-5 per region.

There are 12 part-time commissioners, including the Chair, South African water minister Professor Kader Asmal, and Vice-Chair, Indian High Commissioner to South Africa, Shri Lakshmi Jain. The secretariat is expected to be based in South Africa.
The mandate and the list of commissioners were agreed to by a group of around 40 people from the dam industry, dam-affected people's groups, NGOs, governments and academia. The strongest dam critics in the group were representatives from India's Save the Narmada Movement (NBA), the Brazilian Movement of Dam-Affected People, IRN, Sobrevivencia-Friends of the Earth, Paraguay, Sungi Development Foundation from Pakistan and the Swiss group Berne Declaration.

The WCD launch was originally scheduled for November but was postponed because the representatives of dam critics' organizations did not accept the original list of commissioners. Dam critics charged that the proposed list had a strong pro-dam bias and did not include a single representative from a dam-affected people's organization. Eventually, the working group agreed to add Medha Patkar, a leading activist in the NBA, as a commissioner.

"The World Commission on Dams is a major landmark in the struggle of the dam-affected and other deprived and exploited people across the world," says Patkar. "It has entrusted us with the great responsibility of conducting an unbiased scientific inquiry into the social, environmental, economic and political issues related to water and energy, and into the alternative paradigms of natural resource management within the framework of sustainability and justice."

- Visit the World Commission on Dams Page for more information.