

WORLD RIVERS

REVIEW

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New Report Urges Ten-Year Dam-Building Freeze on Mekong

by Ame Trandem

The Mekong region is at a crossroads. A groundbreaking new report urging a 10-year dam-building freeze on the Mekong River mainstream has raised the profile of the risks of a dam-boom on the highly productive and valuable river, while also putting a spotlight on the decision-makers who will determine its fate. The debate is noticeably shifting away from strict belief that dams are the best way to serve regional energy needs, and toward increased recognition of the value of a healthy river that supports millions with its natural abundance.

While the report hasn't convinced all key stakeholders – some dam proponents are proposing business as usual – new and unconventional critics, like the US government and World Bank, have entered the fray by expressing support for the report's main findings on the value of a healthy Mekong.

The report, *Strategic Environment Assessment of Hydropower on the Mekong Mainstream (SEA)*, cautions that the 11 large dams planned on the Lower Mekong River's mainstream would “fundamentally affect the integrity and the productivity of the Mekong aquatic system.” This in turn would disrupt the world's largest inland fisheries and result in economic losses of nearly US\$500 million per year. In a region where the



The site of the Xaburi Dam, the first of eleven planned Mekong mainstream dams. Photo: Pianporn Deetes

majority of its population is rural and dependent on natural resources, the dams would condemn millions of people to severe food shortages and increased poverty.

The SEA was commissioned by the Mekong River Commission (MRC), and is based on current state-of-the-art scientific knowledge of the river system combined with intensive consultation with regional governments, development partners and NGOs.

Due to the extent of the risk and scientific uncertainty, the report recommends that

decisions on mainstream dams be deferred for a decade. “The state of knowledge about the Mekong is not adequate for making informed and responsible decisions about mainstream dams at this time,” the authors state.

While the Mekong dams have long been considered by many of the region's donors as a regional issue, the issue has now become global due to the scale of the dams' negative impacts.

The World Bank was first to publicly welcome the re-

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Commentary



FAREWELL!

Over the past 17 years I've written many commentaries for World Rivers Review. I'm sorry to say that this will be my last. I'm leaving International Rivers at the end of January to help foment the clean energy revolution in the US as Executive Director of Black Rock Solar (www.blackrocksolar.org).

While I'm excited about my new position, I'm very sad to be leaving my wonderful colleagues and friends inside International Rivers and in the broader global dam-fighting and river-saving movement beyond.

In my five years as Executive Director, and 12 before that as Campaigns Director, I've helped build International Rivers into the world's premier organization devoted to protecting rivers and promoting sustainable alternatives to dams. Over the past five years we've opened offices in Bangkok, Mumbai and Cameroon to be closer to our allies and the rivers we are fighting to protect. We've added a vitally important program to respond to China replacing the World Bank as the world's worst builder of destructive dams. We've documented better alternatives to dams, and created training materials for our partners. We've greatly improved and expanded our online resources and our coverage in the "traditional" media. Our credibility has always been high, but our visibility has never been higher.

But the moments I'll remember most will be those times I got away from my computer and into the river valleys. Sleeping on the floor of adivasi huts in the Narmada Valley. Eating barbecue with dam-displaced farmers on a resettlement site in the Uruguay Valley in Brazil. Hearing first-hand the community transformations brought about by rainwater harvesters in Rajasthan. The intense pace of the international meetings of dam-affected peoples and their allies that International Rivers helped organize, and the unique encounters with indigenous people, activists and scientists, sharing their experiences, cultures, songs, and dances (and Tequila, cachaca or other local firewater) – and their commitments to protect nature and society from corporate greed and political ambition.

I'm very proud of the success that I've been a part of, not just stalling and stopping bad dams, but also the establishment of the groundbreaking World Commission on Dams, my work in forcing the Kyoto Protocol's Clean Development Mechanism to (partly) clean up its act, and the analyses I've done showing the poor performance of dams and the superiority of alternatives.

International Rivers has helped catalyze and support strong dam-fighting networks and coalitions around the world that turn almost every proposed big dam into a struggle for human rights, river protection and sound water and energy policies. Whether in Africa, the Amazon, the Himalayas or the Lower Mekong, the agents of the hydro-industrial complex know that wherever they want to turn rivers into profit they will face a fight.

Sometimes river defenders have clear wins – one great recent example is the cancellation of a dam on Australia's Mary River – but we also have clear defeats. The completion of Three Gorges Dam, and the near-completion of several dams on India's Narmada River, are two notable examples from the past two decades. In both cases our predictions of exaggerated benefits and underestimated costs – human, environmental and financial – have come true. But saying "told you so" is small comfort when so much has been lost and so much damage and suffering caused.

Every time we put up a fight, we put the dam-builders on notice that they are losing public support and legitimacy and that while they may win some battles, in the long term we will win the war and bring the era of river destruction to an end.

I'm happy to say that our Campaigns Director, Aviva Imhof, will take over as Interim Executive Director on February 1. Aviva is a terrific manager, fundraiser and campaigner, so the organization will be in highly capable hands. Our board co-chairs Deborah Moore and Marcia McNally will lead an effort to find a new Executive Director (send ideas and suggestions for candidates to edsearch@internationalrivers.org).

I'm very grateful for the support that you've given us over the years. We couldn't have achieved all that we have without your help.

Patrick McCully

MAKING WAVES



Students enact the breaching of Condit Dam. Photo: Daniel Dancer/
www.artforthesky.com

Imagining a Free River

After a 10-year struggle by tribes, fishers and river activists, Washington state environmental regulators have granted a key permit necessary for the removal of Condit Dam on the White Salmon River. The project will restore 14 miles of chinook salmon and 33 miles of steelhead spawning habitat. This “aerial artwork” shows students and teachers from Sunridge Middle School in Pendleton, OR enacting the dam removal.

There was more good news for US rivers this fall. In Maryland, the removal of Simkins Dam from the Patapsco River got underway. It is the state’s largest dam removal to date.

In Massachusetts, work is well underway to remove the Briggsville Dam on the Hoosic River. Several species of native fish are expected to benefit.

And in Oregon, the Gold Ray Dam was removed from the Rogue River, which is popular with rafters. The dam’s removal now allows free passage of fish for over 333 miles.

In the News

“Engineering companies generally tend to have a vested interest to support the projects they are asked to assess,” said Peter Bosshard of International Rivers. “If they recommend that a project go forward, they will often get follow-up contracts such as carrying out feasibility studies, environmental impact assessments, etc. If they take a critical stance on a project, they will not get follow-up contracts...”

“New controversy may hit Subansiri project,”
The Assam Tribune, November 5, 2010

International Rivers testifies Before US Congress

In September, Aviva Imhof, International Rivers’ campaigns director, testified at a US Senate Foreign Relations Committee hearing on challenges to water and security in Southeast Asia, focusing on the plans to build a series of dams on the Mekong mainstream. Imhof described to the committee the extensive harm the dams would bring to the river and livelihoods, and urged the Senators to do everything in their power to ensure that main-stream dams do not proceed until the findings of the Mekong River Commission’s Strategic Environmental Assessment are considered and adopted by regional governments (see cover story).

Committee chair Senator Jim Webb of Virginia followed up on the event with a press statement that reflected growing concern about the Mekong. “Construction of hydropower dams is advancing recklessly in the absence of agreed-upon environmental standards and in a manner which could in fairly short order destroy the ecological and cultural environment of the region,” said Webb. Senator Webb also introduced legislation to curtail funding for hydropower projects funded by the Asian Development Bank and the World Bank if they do not meet accepted environmental standards.



Zach (second from left) with Parintintin tribal leaders from the Upper Madeira river basin in Brazil.

Welcome, Zach!

International Rivers is pleased to welcome Zachary Hurwitz, the newest member of our policy team. Zach has recently been a consultant to our Belo Monte campaign, and proved himself a man of many skills at the Rivers for Life meeting in Mexico (see p. 8). Zach has previously worked for Global Exchange, Amazon Watch and Rainforest Action Network. He recently completed his Masters in Geography and the Environment at the University of Texas in Austin.

Brazil's Dam-Building Industry: Crony Capitalism Goes Global

by Brent Millikan

“We’re going to build all the dams we possibly can in the Amazon, given the current legislation, and then we’re going to revisit the other potential sites that involve impacts on indigenous lands and protected areas, and see how we may exploit that hydroelectric potential as well. Brazil’s energy future is in the Amazon.”

This statement by the head of energy planning at the federal Ministry of Mines and Energy makes it clear that the dam-building business in Brazil is booming. Two huge hydroelectric dams on the Madeira River, the largest tributary of the Amazon, are already under construction, while another highly controversial project, Belo Monte on the Xingu River (which would be the world's third largest dam) may receive an installation license at any moment. The Brazilian government's energy plans place top priority on mega-hydro-projects in the Amazon, calling for construction of up to 40 dams throughout the region over the next 20 years. On the Tapajos River and its main tributaries alone, a total of 13 large dams are planned for construction by 2019. The unprecedented surge of dam building threatens to cause irrevocable damage to the Amazon's biological integrity and to local populations whose livelihoods depend upon healthy riverine ecosystems.

One of the striking characteristics of today's dam-building industry in Brazil is the “triple alliance” of public-private actors driving it. The scene is dominated by the parastatal energy company Eletrobras and its subsidiaries (Eletronorte, Furnas, Eletronorte, CHESF and others), private Brazilian multinational construction companies (such as Odebrecht, Camargo Correa and Andrade Gutierrez) and the Brazilian National Bank for Economic and Social Development (BNDES). This well-funded alliance is increasingly extending its scope beyond Brazil's borders. Currently, they are deeply involved in the design, financing and construction of large dams in other countries of the Amazon basin and elsewhere in Latin American (Bolivia, Peru, Ecuador, Nicaragua, etc.) and in African nations such as Mozambique, Ghana and Angola. Sadly, Brazilian-led dam-building in other countries tends to repeat the same destructive pattern.

In Brazil, the current dam-building frenzy in the Amazon has typically been accompanied by a steamrolling of environmental and human rights legislation. Nevertheless, dam proponents portray large hydro-projects in the Amazon as “clean energy,” ignoring their contributions to climate change through emissions of methane and other greenhouse gases, their immense social and ecological “footprints” – not to mention the fact that dammed rivers and the communities that depend on them are less able to withstand impacts of climate change than healthy rivers.

Politics as usual

What are the forces behind these alarming trends in the increasingly globalized Brazilian dam industry? A partial answer would be that the planning elite within Brazil's Ministry of Mines and Energy is dominated by technicians trained as large dam-builders, with little or no knowledge in areas such as energy efficiency or alternative sources of generation such as wind and solar, despite

their enormous potential. However, the pronounced bias of Brazil's energy bureaucracy towards large destructive dams is much more political than technical.

The huge construction companies that dominate Brazil's hydro industry have grown and prospered by maintaining close relationships with powerful politicians and their political appointees within the energy sector. Such relationships have been cultivated through practices such as “grafting” from contracts that originate from rigged public bidding, under-the-table campaign financing and other (often creative) uses of corruption.

The profitability of mega-dam projects has been enhanced by increasingly generous policies of subsidized credit, government-backed loan guarantees, and tax breaks, as well as the externalization of social and environmental impacts, often associated with violation of environmental and human rights legislation. Such factors at the same time reflect and harbor promiscuous relationships between dam-builders and the public sector. In the case of the Eletrobras group, the conflation of public and private roles has created a situation where a parastatal company occupies a privileged position to lobby for the its own corporate interests and those of its private sector partners.

Corruption continues

Luiz Inácio Lula da Silva was elected President of Brazil in 2002 on a platform of promises to reduce poverty, while fighting corruption and reinstating “ethics in politics.” Once in office, Lula proceeded to form political alliances with many of Brazil's most backward regional oligarchs, including enemies from his previous days as a union leader, supposedly to guarantee a majority of votes in Congress. Following tradition, alliances in the Lula administration were based on allocating control over key public institutions among political allies that serve the private interests of political parties which can be best described as patronage groups. The domination of the Sarney clan over the Ministry of Mines and Energy is just one example of such practices. After an initial Sarney appointee was dismissed amid corruption charges, a new minister, Edison Lobão, known as violent land-grabber in the northeast state of Maranhão, continued his predecessor's obsession with large dams. Lobão became famous for his public statement that “demonic forces” were impeding the construction of dams in the Amazon, referring to opposition from indigenous peoples and NGOs.

The opportunities for corruption arising from multi-billion-dollar dam contracts, involving political patronage networks that extend to the local level, cannot be matched in alternative investments. This goes a long way in explaining the enormous support that mega-dam projects typically enjoy among politicians, as well as the interest among political parties to secure control of the Ministry of Mines and Energy and its affiliates.

President Lula has portrayed indigenous people, human rights activists and environmentalists as either woefully naïve or as members of an international conspiracy set out to impede Brazil's emergence as an economic superpower and violate its sovereign rights over the Amazon. It's difficult to gauge the extent to which such positions arise from true convictions, an outdated developmentalist mentality, expansionist ambitions, or the expediency of a skilled politician with a high tolerance for corruption – or perhaps all of the above. ●

What is Driving Dams in Africa?

by Terri Hathaway

More than a billion people spread across 54 countries inhabit Africa, the world's second largest continent. International Rivers is tracking nearly 150 proposed large dams across those 54 countries. People from Kenya to Ghana, from Sudan to Zambia, from Uganda to Lesotho are under threat from dam building.

Yet the immediate threat facing African rivers – including its biggest, such as the Congo, Nile, Niger and Zambezi – is relatively small compared to other basins, such as the Mekong. The limited number of dams is due to the same factors that threaten Africa's development overall: intense concentrations of poverty, corruption, violent conflict, and political illegitimacy. Once these investment risks are lessened, Africa's rivers could face a far greater assault by dam builders.

Large hydro is the core of Africa's dam building and power planning today. Sub-Saharan Africa's power infrastructure has been described as the "least developed, least accessible, least reliable, most costly to operate, and, on average, highest priced of any region in the world." A 2010 World Bank report, *African Infrastructure: A Time for Transformation*, calculated that Africa's power sector requires an annual investment of US\$41 billion, far more than it currently receives.

But building large hydro dams falls far short of "lighting up Africa." Why? Two reasons. Electrification rates in Africa lag behind every other region in the world. Most stark is sub-Saharan Africa, where only 8% of the rural population – and 26% total – have access to electricity. First, most of those without electricity live too far away to be connected to grid-based supplies. Second, for those closer to the grid, Africa's distribution networks are disproportionately underfunded. In 2004, grid distribution needed a total of \$271 billion, nearly equal to the combined investment need of supply and transmission. But most African power sector lending is earmarked for supply projects like big hydro and high-voltage transmission lines, leaving distribution networks starved for investments. Without money for distribution, new connections don't happen.

Africa's dam proponents have a clear message: large hydropower in Africa is a no-brainer. They say hydropower is cheap, clean, renewable and an indigenous power source.

"This is the time for Africa to harness its huge hydroenergy potential," said African Development Bank President, Donald Kabureka, in 2007. "The main challenge is making the schemes socially and environmentally acceptable." Kabureka has argued that climate change, the quest for cleaner energy and Africa's need for constant power supply underscore the need for hydropower.

Many would argue the opposite: with a changing climate, and so many African nations dangerously dependent on hydropower for most of their electricity, hydropower is one of the riskiest investments in a warming world. (See the September 2010 *WRR* for a map of African hydrodependency.) Safer, cleaner renewable energies are making slow inroads, but for now, big hydro is getting the lion's share of the attention.

All Talk, No Action

In March 2006, the African Ministerial Conference on Hydropower and Sustainable Development was a potential watershed moment. Prompted by the International Hydropower Association, the South African government agreed to host the tightly controlled event. For months beforehand, civil society fought for the right to participate,

finally prevailing with more than 20 invitations for some of Africa's most earnest dam fighters. The conference would be the largest forum devoted to African dam issues since the World Commission on Dams, and an unprecedented opportunity to advance the dams debate in Africa. As the conference opened, dam builders stood poised to initiate a widespread assault on Africa's rivers; across the aisle, civil society participants stood poised to protect rivers, rights and livelihoods.

But the years following the conference witnessed only a sputtering of momentum from Africa's governments. The conference's action plan to jump-start hydro projects across the continent lacked coordinated African leadership.

This was not the first action plan to sputter out. Other dam-laden plans, such as the New Partnership for Africa's Development (NEPAD) blueprint for Africa in 2001 and the Commission for Africa's report in 2005, brought initial excitement, then failure of homegrown political will. NEPAD's medium to long-term term infrastructure plan and various regional energy plans have also failed to materialize, resulting in lists of "priority projects" rather than thoughtful assessment of needs and options.

International Architects

Large dams have been imbedded into Africa's regional infrastructure plans which are then used to legitimize continued donor lending. The World Bank remains the most influential player in Africa's energy development path, despite a limited (but growing) number of loans for dams in recent years. World Bank documents including its Africa Action Plan, Energy Sector Strategy, and Water Sector Strategy help justify widespread construction of large dams in Africa. The Bank continues to influence African state policies and lend money for dams as well as for associated infrastructure.

One of the World Bank's influential roles is implementing the African Infrastructure Country Diagnostic (AICD), a project designed to catalogue baseline data of Africa's existing physical infrastructure in order to monitor results of donors' future investments. The AICD steering committee includes the African Union, NEPAD, Africa's regional economic communities, the African Development Bank, and major infrastructure donors.

"Africa's energy future lies in hydropower," wrote the AICD in its 2008 flagship report *Underpowered*, despite noting that hydropower already accounts for 70% of sub-Saharan Africa's power supply (excluding South Africa).

The African Development Bank, which was poised several years ago to take on a regional leadership role in implementing NEPAD projects, has muddled through years of little action. The Bank's lead role in preparing Ethiopia's Gibe 3 Dam found the Bank lacking due diligence and good faith in following Bank policies. The Bank is also home to the Infrastructure Consortium for Africa (ICA) which coordinates multilateral and G8 support for regional infrastructure, including dams. As of 2008, ICA reported 10 hydro dams in its pipeline. "This is an encouraging trend for Africa," noted ICA.

In Europe, the EU Energy Initiative (EUEI) was created in 2002 to enable achievement of the Millennium Development Goals. In recent years, the EUEI devoted resources toward sub-regional plans for improving access to energy and to the three-year African Electrification Initiative. Unfortunately, these initiatives have largely failed to attract African political will at levels required to advance their implementation. The EUEI's newest initiative, the

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India's Dam Building Abroad: Ignoring Lessons from Home?

by Himanshu Thakkar

Indian companies and state-owned enterprises have rapidly expanded their domestic and overseas investments in recent years. Not least motivated by the example of Chinese investors, they are trying to gain access to foreign resources, win international contracts, and strengthen their relations with trading blocks such as the Association of Southeast Asian Nations (ASEAN). They have long had a presence in neighboring countries such as Nepal and Bhutan, and are now also spreading to more distant countries in Asia and Africa.

This article looks at the track record of Indian institutions that are engaged in building dams in India and abroad, and analyzes some of the problems their new projects have created.

The actors and the stage

A large number of Indian companies are involved in the current foray into domestic and foreign power projects. They include state-owned and private-sector power plant developers and equipment suppliers; wind power companies; transmission companies, and state-owned and private consultancies.

Indian companies are involved in power projects in Afghanistan, Bangladesh, Bhutan, Burma, Congo, Ethiopia, Ghana, Indonesia, Iraq, Malaysia, Nepal, Rwanda, Sri Lanka, Tajikistan, Uganda and Vietnam. The Indian government has also offered Nepal, Bhutan and Tajikistan outright grant assistance for the construction of some of the hydropower projects by Indian developers. The Export Import Bank of India has provided support for Indian power projects abroad through various instruments. They include direct loans and lines of credit.

On the domestic front a large number of new dam financiers have entered the foray, including some well-funded ventures with capital to burn. Just to name two of the biggest, Life Insurance Corporation of India has extended more than US\$2 billion line of credit to the national dam building agency, the NHPC. And Blackstone group recently announced that it would invest up to \$1 billion in India's power sector in the next five years. This is in addition to international financiers such as the World Bank, IFC, JBIC and ADB.

With finances available aplenty, new companies are making their first forays into dam development. A large number of new companies are starting with smaller dams with a capacity of less than 25 MW. It is expected that some of these companies will eventually move into construction on larger dam projects after gaining experience.

The impacts

No detailed studies on the impacts of India's foreign investments in hydropower projects exist. There is evidence that Indian dams abroad also have serious impacts on affected communities and the environment. Here are just a few examples:



A Day of Action protest against India's plans to dam Burma's rivers. Photo: KSDF

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

■ The West Seti Hydropower Project in Nepal will submerge 22 square kilometers of land, displace at least 1,500 families, and dry out a long stretch of the Seti River. The dam's power

will be exported to India.

■ The 1,020 MW Tala Hydropower Project in Bhutan has almost totally dried up 30 kilometers of the Wangchu River, and damaged the rich biodiversity of a much larger region. The project is located in a geologically fragile area, and suffered extensive damages from flooding in 2000.

Domestic dam plans

India's hydropower potential is more than 150,000 MW, according to the Indian government's Central Electricity Authority. About a third of the potential has been developed so far and about 9% is being developed. It is small wonder that new players are entering the market rapidly and forcefully. Additionally, the Indian government is escalating dam plans in northeast India for "strategic reasons," including as part of a strategy to establish "first user rights" on the region's water, which are also claimed by China. The Indian Government has plans to build 135 large dams in Arunachal Pradesh state alone. (See back page.) Adding fuel to the fire, China claims that Arunachal Pradesh is part of China. Building hundreds of large dams in the biodiversity-rich, seismically active, erosion-prone and mountainous northeast at a time when climate change is impacting river flows is a recipe for disaster.

India's National Water Mission (part of its National Action Plan on Climate Change) has as one of its goals the "promotion of basin level integrated water resources management," which appears to translate into exhausting the nation's potential to build dams. Credible and comprehensive basin-wide carrying capacity studies or cumulative impact studies have not been undertaken in any basin. That said, the Federal Ministry of Environment and Forests continues to grant sanctions for hydroelectric projects even for rivers where river basin studies are just beginning, and mostly to agencies with questionable track records and where issues of conflict of interest linger.

Discussions on the new National Water Policy, to be finalized by March 2013, have already begun, but the water sector establishment has shown no interest in consulting the people and organiza-

Continued opposite

China's Influence on World's Rivers Grows

by Grace Mang

Since *World Rivers Review* last took stock of Chinese dam builders in 2007, China has emerged as the world leader in the international hydropower industry. The number of overseas Chinese dam projects that we are aware of has increased from 46 to 266. Chinese overseas dam builders are now active in 65 countries. Developing countries have welcomed Chinese dam builders and the loans offered by Chinese banks.

While all these new dams don't bode well for the world's rivers, some potentially positive trends are emerging. Just a few years ago, Chinese companies appeared to be willing to take on highly destructive projects that had been shunned by western dam builders. In 2007, Chinese dam builders were involved in the Merowe Dam human rights disaster in Sudan. Following the completion of the Three Gorges Dam project in 2006, there was a concern that China's newfound expertise would lead to a proliferation of mega-dams around the world.

But in the past three years, the Chinese government has begun to realize that social and environmental sustainability is in its long-term interest. It has urged Chinese firms to follow stricter environmental and safety standards abroad. The Chinese ministries of Commerce and Environmental Protection are currently finalizing environmental policy guidelines for overseas Chinese investment.

Some Chinese companies have also recognized the need to meet their international responsibilities. Sinohydro, a Chinese state-owned enterprise and the world's biggest dam builder, is currently developing an environmental policy for its overseas operations. Through a policy dialogue with Sinohydro, International Rivers has made it clear that if Sinohydro wants to become a global leader in this industry, it must have an environmental policy that reflects the highest international standards. That message appears to be heard. Sinohydro has looked at international standards, such as those adopted by the World Bank, for guidance.

Other Chinese dam builders have also emerged as potentially big players in the international hydropower market. Dam builders such as China Gezhouba, China Southern Power Grid Corporation and Datang International are some of the new actors that are eager to obtain a larger share of the international construction market but currently lack demonstrable environmental or social safe-

guards. While we are hopeful that the positive steps being taken by the Chinese government and Sinohydro will influence these dam builders, International Rivers will push for stronger environmental and social safeguards as we expand our policy dialogue to include other Chinese dam builders.

Growing awareness

One critical development has been the growing awareness, both inside and outside of China, of the huge role China is now playing in building big dams abroad. In 2007, the political space for monitoring Chinese overseas dam builders, let alone engaging in a dialogue with them, was non-existent. Today, International Rivers works in partnership with a growing group of Chinese NGOs to monitor and engage with Chinese dam builders. Beyond China, environmental and human rights groups in host countries are more aware of the different strategies and advocacy avenues available to them when Chinese actors are involved in projects in their countries.

There have been some successes. In Gabon, Brainforest – a local environmental NGO – succeeded in getting China Exim Bank to suspend a loan because it violated Exim Bank's own environmental guidelines. The dam was to be built in a national park. And in another case, Sinohydro has agreed to work with the Global Environmental Institute, a Chinese NGO, in an effort to address the social and environmental impacts of the Nam Ngum 5 Dam in Laos.

There have also been failures. Despite committing to green finance principles, the Industrial and Commercial Bank of China recently granted an export credit for hydropower turbines for the hugely destructive Gibe 3 Dam in Ethiopia, a project that will have significant impacts on the ecosystems and people of the Lower Omo Valley and Lake Turkana region in Kenya.

The story of Chinese dam builders still has no clear ending. Policy changes at China's leading dam builder and financier are important first steps. Yet as we know from other institutions, there is often a big gap between an environmental policy and actual practice on the ground. However, three years on, the evidence suggests that Chinese dam builders and financiers are not becoming the rogue players we had all feared. Indeed, they might emerge as good corporate citizens with leading social and environmental standards. ●

India's Dam Building *continued from previous page*

tions working at the grassroots or those who have been critical of the government's water sector agenda.

Exporting conflict?

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

In many host countries where Indian projects are being built, there are no appropriate laws or policies to regulate the social and

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

As they expand their foreign operations, Indian dam builders and financiers risk exporting their negative domestic track record and creating conflicts over their projects abroad. The Export Import Bank of India and Indian companies now building dams abroad are well advised to adopt the recommendations of the World Commission on Dams for good practice in water and energy sector development, to avoid getting embroiled in international conflicts over their projects, and to avoid bringing disrepute to their name and that of the country of their origin. ●

The author heads up South Asia Network on Dams, Rivers & People (Delhi). Samir Mehta contributed to this article.



VIVA TEMACA! RIOS PA...

The tiny town of Temaca, Mexico became the center of the movement in early October when more than 320 international countries descended on the town for the third "Rivers for L solidarity, strategizing and friendship helped build strength We hope these photos hint at the magic of this remarkable



Building solidarity wasn't always hard work. In their free hours, participants relaxed in local hot springs, walked the town's quiet cobbled streets, and revealed their wilder sides in unforgettable cross-cultural parties. Here, the African delegates got everyone out of their chairs. Singers, dancers and musicians from dozens of other countries also brought the house down with soulful performances.



A Mapuche indigenous leader from Chile talks to other participants at the community fair. "We can never take back our rivers, our lost forests, our lands, our cultures," she said. "It is very important to not let the dams come. We must pray for living rivers."

A tile-painting booth allowed participants to paint a tile for Temaca; townspeople used them to create a wall of solidarity and friendship at the town's entrance.



RA VIDA!

the global river-protection
onal activists from 54
Life” meeting. A week of
for the struggles ahead.
e gathering.



Local people made a traditional sawdust tapestry to commemorate the event (seen here from high atop the town's cathedral)



Temaca is itself threatened by a dam that will supply water for polluting industries in a neighboring state. The project is proceeding without required approvals, while another reservoir nearby sits idle as a monument to corruption. Here, a field trip to the El Zapotillo dam site turned into a spontaneous protest. The next day, activists who protested from the tops of bulldozers were happy to learn that a federal congressional representative promised to push for enforcement of a court-ordered construction suspension.



Participants could choose from more than 30 workshops, which covered topics as challenging as the spreading global influence of Chinese and Brazilian dam builders, international human rights law, strategies to advance renewable energy technologies, and how dam removal can restore rivers.

Photos: Archivo de Proyectos and International Rivers.

ON THE WEB For background information, blogs, and links about the Rivers for Life meeting, visit www.internationalrivers.org/node/5087. More photos: www.flickr.com/photos/internationalrivers/

Solidarity Camp Brings Supporters to Ancient Turkish Town

The historic town of Hasankeyf, under threat from the Ilisu Dam now under construction on the Tigris River in Turkey, was the site of a unique “solidarity camp” in October.

Organizers say the intent of the camp was to raise public awareness in Turkey and worldwide about the problems with the dam, and to foster an intense resistance “against” this destructive dam, and a public drive to preserve Hasankeyf and the Tigris Valley.

The 12,000-year-old town once served as an important commercial center along the Silk Road; Marco Polo is rumored to have crossed the Tigris here. As many as 20 cultures may have called the place home over the centuries. Today, more than 85,000 people in Hasankeyf and nearby villages would be affected by the dam, and downstream communities and ecosystems would be harmed by changes to the river’s flow.

The week-long camp included demonstrations, concerts, cultural events, workshops, panel discussions and field trips. At any one time, some 80 people were camping along the Tigris River. Directly affected people were active participants in the camp. A peaceful protest to the construction site of the resettlement town of New Hasankeyf, a drab place a few kilometers north of Hasankeyf, managed to avoid disruption despite threats from police to arrest people.



Local dancers perform at the solidarity camp.

The dam site is in the highly militarized Kurdish region.

Construction on the dam started in spring 2010. “The companies work 24 hours a day,” says Ercan Ayboga, one of the leading activists behind the camp. “We have a very serious situation here. The affected people of Hasankeyf and Tigris Valley are very angry because dam construction is continuing and the historical part of Hasankeyf has been closed to visitors since July, which has resulted in a significant decrease in tourism – the only income of Hasankeyf. “Millions of visi-

tors have toured the town and surrounding region in recent years. Hasankeyf contains an ancient bazaar and castle, cave dwellings, and 1,000-year-old churches and mosques.

The campaign to stop the dam has had many successes over the years. Turkish authorities initially sought – and obtained – finance for the dam from a number of international banks, but most of the funders have since pulled out of the controversial project. Three Turkish banks have agreed to fund the dam. Four Turkish companies and Austria’s Andritz remain in the project.

Ilisu Dam is one of 22 dams being constructed as part of the Southeastern Anatolia Project, or GAP, Turkey’s largest regional development project. The dam will be the country’s fourth largest, after the Atatürk Dam. ●

African Dams *continued from page 5*

Africa-EU Energy Partnership, intends to support the development of 10,000 MW of hydropower.

The New Dam Builders in Africa

Today, Africa’s new dams are most popularly backed by Chinese funders and dam builders. Between 2001 and 2007, China committed more than \$3 billion to African hydropower projects. Since then, China has dramatically expanded its interest, now funding of all new African infrastructure, dams included. The Forum on China-Africa Cooperation (FOCAC) has marked the terms of China’s official relationship with Africa for the past decade. At the 2009 FOCAC Summit, China pledged a further \$10 billion in concessional lending by 2013. This Sino-African collaboration is far from selfless for the Chinese, who benefit in two key ways. First, it helps Chinese companies access Africa’s natural resources which support China’s own industries. Second, China’s domestic market is flooded with too many engineering and construction companies looking for work; Africa provides a vast market for this expertise.

India Exim Bank has made a slow but noticeable entrance on the continent, including support for the Tendaho Dam in Ethiopia, \$50 million for Itzhi-Tezhi Dam in Zambia, and \$60 million for Nyabarongo Dam in Rwanda.

Major dam deals by Brazilian companies Odebrecht and Camargo Corrêa Group have been made in Angola and Mozambique. In Ghana, Brazilian company Andrade was awarded a contract to build a 90 MW dam on the Oti River.

Change is Needed

The official development message that hydropower dams are critical for powering Africa ignores key realities about climate change, and could widen the continent’s energy divide, not alleviate it. Power sector investments that unlock Africa’s natural resources for exploitation are not the best path to create decent jobs, food security, or self-determination. The result is the perpetuation of its infamous resource curse, increased corruption, and a further concentration of political and economic power to those who profit from this model.

Saving Africa’s rivers for future generations will require strengthening governance and public accountability over Africa’s natural resources. We must also reshape the dams debate in Africa to recognize that large dams are harmful to Africa beyond their direct social and environmental impacts. We must talk about corruption, job creation, climate change resilience and access to energy and water. ●

Envisioning Solar Cities in Argentina

by Martin Orecchia

The energy issue is one of the greatest challenges facing humanity today. The intensive use of fossil fuels that made the industrial revolution possible has had many unintended consequences. In Argentina, more than 90% of primary energy is from oil and gas. Yet not only are we running out of fossil fuels in Argentina, but we are already beginning to see the impacts from climate change.

At Taller Ecologista, we believe it essential to more quickly adopt renewable energy in Argentina not only to reduce energy consumption from non-renewable sources, but also to contribute to improving the quality of life for all sectors of our society.

My organization is currently working on the formation of a Solar Cities Network. The program's goals include the widespread adoption of solar energy, new regulations to encourage the use of renewable energies, capacity building, technology transfer and the creation of internal markets so that solar manufacturing jobs are created here.

We are now into the second year of our pilot program, called Rosario Solar. In order to promote and publicize the potential of using solar energy and resources, we conducted "Rosario Solar 2010," where companies and organizations set up 20 information booths demonstrating solar equipment (water heaters, stoves, ovens, solar panels, solar lamps, etc.).



The solar fair.



Cooking with a solar stove.

"More than 5,000 people passed through the exhibition, learning about the benefits of using these products, pricing, operations, and so on. During the exhibition visitors could taste foods made in different ovens and solar cookers," said Paul Bertinat, Energy Coordinator of Taller Ecologista.

Thanks to the great success of the event, we were able to hold similar events in other cities. Equally important is the fact that in each of these cities we are working to create new regulations that may provide a regulatory framework to promote the use of such energy sources.

We are also sponsoring a project designed by the Centre for Energy and Sustainability of the National Technological University, Facultad Regional Rosario, to develop a mobile solar water heater. It is now being used for demonstrations in the field for teaching and training.

"We're working to make our region into a model of power generation in the country with an abundant, safe, renewable, easy and proven technology," concluded Bertinat. ●

The author is with Taller Ecologista, an Argentinian NGO that works on energy issues and promotes the democratic use of water resources. More info: www.tallerecologista.org.ar

In Print

Blue Harvest: Inland Fisheries as an Ecosystem Service, by UNEP and WorldFish Center, 2010. 63 pages. Download from www.unep.org/pdf/Blue_Harvest.pdf

Although it borders on being too little, too late, the world is finally starting to pay attention to declining ocean fisheries. But river and lake fisheries are being virtually ignored – a situation that Achim Steiner, the executive director UNEP, calls "an oversight of potentially profound implications."

"Why? Because an estimated 100 million people in Africa alone get important levels of daily protein from these inland sources alongside essential vitamins and minerals," Steiner notes. "Meanwhile, unofficial estimates put the global inland catch at close to 30 million tons, comparable to official marine catches, and employment at 60 million people – 13 million more than in equivalent marine fisheries."

This new report lays out just what is at stake, and what is causing the problem. Culprits include the usual insults to nature:

pollution, over-abstraction of water, urbanization and road building, and climate change. But the biggest factor in the decline of river fisheries is, no surprise, dams.

"Of the many direct drivers impacting inland fisheries, dams and their impact on the hydrological regimes of rivers are the most important," the report notes.

The authors urge countries to adopt an ecosystem approach to managing inland fisheries given the multiple impacts coming to bear on their health and productivity.

The global South has the most to lose. Close to 70% of the total inland catch is in Asia, and 25% in Africa. These also happen to be areas where many new large dams are proposed, including dams that we know will cause great harm to fisheries.

To paraphrase Bruce the shark in *Finding Nemo*, fish are friends, AND food. Clearly, the time has come to stop building dams that destroy vital fisheries. ●

News Briefs



Boaters take action. Photo: Ian Trafford/iantraffordphotos.com

Rafting to Save New Zealand River

In late October, New Zealand groups Forest & Bird and Whitewater NZ organized a huge flotilla of rafting and kayaking activists to highlight the plight of the wild and scenic Mokihinui River, which is threatened by a large dam. Some 140 people boated down the river gorge, unfurling a huge banner along the way. The action got the attention of the national media.

"This demonstrates the passion so many people have to ensure that the Mokihinui – one of New Zealand's few remaining wild rivers – should remain protected forever," said Debs Martin of Forest & Bird. "A dam on this river would have a disastrous effect on the natural environment and also destroy a wild place loved by kayakers, rafters, fishers and trampers."

In April, state-owned energy company Meridian Energy Ltd was given consent to build an 85-metre-high (279-foot) hydropower dam. The dam would flood 14 kilometres of wild river gorge, and drown 330 hectares of river and forests. The decision is under appeal by both groups and the Department of Conservation (DOC) with a hearing date of 2012.

Situated on the west coast of New Zealand's South Island, the Mokihinui is ranked seventh in the country for its natural values, and is one of only a few large rivers left that hasn't been dammed for hydro; deforested for logging, farming, or other development; or dewatered by irrigation.

It is home to 16 threatened animal species, and its many diverse forest and riparian ecosystems provide important habitat and food sources. The river has abundant native fish, including the longfin eel, which is in serious decline across the country. With an historic pack route through the gorge, and big whitewater, the Mokihinui also draws wilderness adventurers.

Green Party co-leader Russel Norman, who took part in the flotilla, said New Zealand doesn't need the dam's electricity, and that two smaller hydro projects slated to go ahead were enough to meet local needs. New Zealand also has great potential for energy efficiency.

Meridian still needs permission to build the dam from DOC, which manages the land on behalf of all New Zealanders. Draft reports by DOC indicate that it would decline the application. Meridian is now stepping up the pressure.

For more information: www.forestandbird.org.nz

Grass-green fuel

A team of Australian and Chinese scientists has pioneered a method to decontaminate polluted land and provide a renewable energy source in the process. Their secret ingredient is an African relative of the sugar-cane plant.

An experimental plantation of the miracle plant at China's Shaoguan University is already being used to generate electricity for 100 households. The research team is also hoping to develop pilot projects of the plant (called Giant Napier grass) for Nigeria, Egypt, and possibly Australia, which has an estimated 160,000 contaminated sites.

The project's managing director, Professor Ravi Naidu, says giant napier grass was chosen because it grows in extremely poor soils and is efficient at drawing heavy metals and other pollutants out of contaminated soil. The trials showed the grass was effective at removing metals like copper, nickel and cadmium, as well as high concentrations of zinc and lead.

"By continually planting and harvesting these crops, you can lower the level of toxicity in the soil and make the land fit for human uses again, including for housing," says Naidu. The process may not work well enough to make contaminated land suitable for growing crops, however.



Harvesting Giant Napier Grass

Welsh dam still stings

Nearly half a century after their lives were devastated, former residents of Capel Celyn, a village in Wales, are calling for removal of the dam that flooded their homes to create a reservoir for Liverpool, the UK *Independent* reports.

In 1965, according to the article, "Nearly 50 people and a way of life in the Tryweryn valley which had lasted centuries were replaced by nearly 70 billion litres of water ... to the families and Welsh patriots, the memories and resentment at what they saw as high-handed colonial treatment lingered, and lingers still."

In mid-October, the last remaining members of the affected families held a march and called for the removal of the dam.

One of the marchers is Elwyn Edwards, now 67, who saw his mother's family lose everything during the flooding. "I remember the water coming out in a huge gush. There was nothing left – not a tree, a hedge, no sheep, cattle, or birds singing. It was deathly quiet, like a funeral. My family couldn't bring themselves to watch it. They were rehoused, but were scattered all over the place. We lost our heritage; we lost everything."

In 2005, Liverpool officially apologized for the flooding of Capel Celyn and surrounding farmland, but they're still waiting for a memorial – a bronze sculpture of a phoenix rising from the ashes. "We've raised £15,000 over the past 10 years," Mr Edwards said. "We need £300,000. We need to make sure people never forget."

Canada dam shelved

Two private companies have shelved plans to build a large hydro dam on the Slave River in Alberta, Canada, after a local First Nations tribe refused to back the project.

Alberta-based ATCO and TransCanada were working on the proposal, but their efforts

to reach an agreement with the Smith's Landing First Nation on feasibility studies came to a halt in October.

A project spokesman said the proposed run-of-river facility would not have created a huge reservoir, but some reserve land belonging to the Smith Landing First Nation would have been flooded. Some of the tribe's people had to relocate before because of another dam project.

"There was a lot of heart-ache, a lot of negativity that happened when the government forced Smith's Landing to move from Fort [Fitzgerald] to Fort Smith, so people did not want to experience that move again," Smith's Landing Chief Cheyenne Paulette told CBC News.

Atco and TransCanada will not be advancing any further studies on the Slave River at this time, a spokesman for TransCanada reported.

Thai floods overwhelm dams

Nearly two weeks of heavy flooding in October left at least 57 people dead and entire villages and fields underwater in Thailand. According to government medical and disaster agencies, the flooding affected more than three million people in Thailand alone (earlier deadly floods also devastated

Vietnam). Many flood survivors were left stranded for days without government aid. Officials called this case the worst in half a century.

Ten of Thailand's 33 main reservoirs were over-capacity at the time, and forced to open their dam gates. One of the overwhelmed dams was the Pasak Jolasit Dam, situated 110 miles north of Bangkok. Reports the *New York Times*: "Engineers said that despite many pleas from cities and towns downstream to hold back the water, they instead opened the gates wider when the dam's reservoir reached 122 percent of its planned capacity. 'If we get any more water than this, we might have problems with the stability of the dam,' Sornmith Singkanong, the head of water management, said from the dam's control room. The water level was the highest recorded in the 11 years since the dam was completed."

Bujagali officials' big gamble

Six officials from the company building Bujagali Dam in Uganda were called before the Ugandan Parliament recently to explain why they had used government funds intended for project-affected communities to make short-term investments for a profit.

Bujagali Energy Limited and Uganda Electricity Transmission Company Limited reportedly diverted Sh10 billion (US\$4.3 million) in government funds to their account in a private bank in 2008, accumulating Sh460m in interest over two years. The money was invested without prior approval of the implementing agency. The interest was apparently never declared in the company's books.

The money, which was in a government escrow account for the project, was meant for the resettlement and compensation of over 2,600 people affected by the Bujagali transmission-line project. The Government is to spend over Sh30b on compensation.

The project director, Glenn Gaydar, explained that the money was invested due to delays in the project.

"This is a serious case of fraud. Did the Government instruct you to invest the money and make profits? Why did you request for money that you were not ready to spend?" committee chairperson Nandala Mafabi asked.

Africa poised for clean-energy gold rush

Sub-Saharan Africa is expected to become the new boom region for global renewable energy investment, according to a new international study.

Market research firm Frost and Sullivan has found that Kenya, Nigeria and South Africa are instituting renewable energy-friendly policies that will attract major investment in renewables.

The report states the Sub-Saharan African renewable-energy market is expected to triple in investment value between 2010 and 2015, driven by a significant need for energy diversification and energy security of supply.

Indeed, South Africa recently announced plans to build the world's largest solar

energy plant. The 5,000 MW "solar park" will house several solar thermal power stations. A recent conference on the park drew 400 potential investors.

The South African government hopes the park will have a capacity of 1,000 MW as early as 2012, and be at full capacity in about 10 years.

The project is part of the South African government's plan to create 300,000 "green jobs" in the country by 2020. The Solar Park is expected to create 12,300 construction jobs annually in South Africa and 3,010 operations and maintenance jobs by the time the last solar plant is constructed.

Celebrate World Toilet Day!

Where has the time gone – we almost missed the tenth anniversary of the World Toilet Summit! The annual conference has the worthy goal of finding sanitation solutions for the 2.5 billion people now without reasonable access to safe toilets. The event includes sessions about innovative toilet design, micro-financing to help bring good sanitation to the poor communities that need it, and green plumbing innovations. The topic is one of the major public health issues facing the world today; 1 out of 5 children die of diarrheal disease. That's 5,000 children a day, every day.

The meeting is organized by the World Toilet Organisation, a Singapore-based NGO, which also sponsors World Toilet Day on November 19 (put it in your calendar for next year). The day's message is serious, but the group brings a dash of humor to the event, known as The Big Squat. The premise is simple: "Simply squat for one minute in a highly visible location, and then have a plan to explain to anyone who notices why you're all squatting," the group's website states.

Get ideas for your own event from the group's "Big Squat Toolkit" at <http://tinyurl.com/256kerr>.



On Nov. 11, thousands of people in 16 countries joined in solidarity to call for the cancellation of Mexico's El Zapotillo Dam, which would flood the town where Rivers for Life 3 was held (see p. 8 for more on this historic meeting).

Uncovering the Mekong Region's New Dam Proponents

by Carl Middleton

In the Mekong region, ongoing economic growth despite the global economic crisis continues to drive a push for extensive dam-building. Since we last reported on the Mekong region's new dam builders from Thailand, Vietnam and China in 2007, these developers have proposed even more ambitious and controversial projects, including a cascade of 11 dams on the Mekong River's mainstream (see p. 1). Climate change is increasingly cited as a justification for dam building, as is a serious drought and then floods that have ravaged the region this year.

Importing Power, Exporting Costs

Plans for extensive hydropower development are nothing new to the Mekong region, yet the decades of regional conflict prevented many large dam projects from proceeding. As peace returned in the early 1990s, plans for extensive dam construction were revived. These plans are shaped by growing political cooperation between the Mekong countries, and aspirations for a regional transmission grid fueled largely by hydropower projects (a plan originally conceived by the Asian Development Bank).

The massive financial flows pouring into infrastructure and other investment projects throughout the Mekong region from Thailand, Vietnam and China is increasingly marginalizing the Asian Development Bank, the World Bank and Western donors that at one time were the region's principal hydropower proponents. Even without the development banks, hydropower remains high on the agenda of the region's governments.

Massive Hydropower Potential

Thailand's government estimates that electricity demand in Thailand will approximately double to 65,600 megawatts (MW) by 2030. Vietnam, one of the world's fastest growing economies, predicts its demand will triple to 69,500 MW by 2020. Burma, Cambodia and Laos have more modest domestic demand growth predictions, although all governments have committed to urgently develop electricity infrastructure. These government projections are challenged by civil society groups who argue that improved power planning and pursuing energy efficiency and renewable and decentralized energy projects is the best way forward, not the business-as-usual mega-projects proposed by the governments.

Thailand, which has already developed much of its domestic hydropower potential and faces stiff opposition to further projects at home, plans to import at least 14,000 MW of hydroelectricity from neighboring Burma, Laos and Yunnan Province over the coming 15 years. Vietnam plans to develop almost all of its viable hydropower over the next 20 years, totaling at least 17,000 MW, as well as importing electricity from Cambodia, China, and Laos. Responding to this demand, the governments of Burma, Cambodia and Laos are keen to develop their relatively unexploited hydropower potential for both electricity export, which would earn these governments foreign currency, and domestic demand.

The New Dam Proponents

As the new century dawned and new economic realities and political relationships emerged, private-sector hydropower developers from Thailand, Vietnam, China, Malaysia and Russia picked up the hydropower plans that were abandoned by Western companies during the 1997 Asian financial crisis. These developers are now proposing dozens of projects throughout the region, bringing with them the sup-

port of financiers from their own countries, and are often backed by influential political players and their governments' bureaucracies.

Project developers from Vietnam include the state-owned utility Electricity Vietnam (EVN), and Song Da Corporation, Vietnam's largest construction company. They are building tens of dams in Vietnam and several more in Laos that will export power to Vietnam. Dam developers from China include the world's largest dam builder, Sinohydro Corporation, and China Southern Power Grid (CSG). These and other Chinese dam builders have tens of projects under construction or under consideration in Burma, Laos and Cambodia for the domestic and regional power markets.

Thailand's electricity utility, EGAT, is a state-owned enterprise that dominates power planning and development in Thailand. It has increasingly favored importing power from neighboring countries. Several of Thailand's largest independent power companies, including the Electricity Generating Company of Thailand and Ratchaburi Electricity Generating Holding Company, have stated that investing in regional energy projects is core to their business strategies. Thailand's major commercial banks have proven to be willing backers of these regional dam projects. While most major Thai energy companies and Thai banks have committed to some form of corporate governance and corporate social responsibility on paper, in the case of the regional hydropower projects that they are involved in there is little evidence that they are seriously implementing these commitments in practice. These publicly

Continued opposite

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port's findings upon its release in October, calling it "an important new body of information on the Mekong and the potential impacts of these projects on the river's mainstream." The World Bank also confirmed that it would not finance or invest in the projects.

US Senator Jim Webb, Chairman of the Senate Committee on Foreign Relations Subcommittee on East Asian and Pacific Affairs, next warned that the US has "a strategic interest in averting regional conflict" and should consider withdrawing funding to the MRC if the dams proceed. This sentiment was echoed by US Secretary of State Hillary Clinton during recent travels to the region, as she called on the Vietnamese and Cambodian governments to "pause before major construction continues."

Damn the torpedos

The million-dollar question now is whether the members of the MRC – Thailand, Laos, Cambodia and Vietnam – will heed the warnings foretold by the report. Just weeks before the SEA was publicly released, the MRC announced the start of regional decision-making procedures for the Xayaburi Dam, the first of the planned mainstream dams.

As signatories of the 1995 Mekong Agreement, regional governments have committed to the equal and sustainable use of the Mekong River and thus must notify, consult, and then reach agreement with their neighbors on proposed mainstream projects. The SEA was commissioned as a first step toward this, in order for regional governments to understand the implications of the mainstream dams and provide recommendations on whether or not the projects should be pursued. The move forward with decision-making without consideration of the SEA has placed the legitimacy of the MRC as an advisor to regional governments into question.

The Save the Mekong coalition, an international coalition of NGOs, academics and friends working to keep the Mekong free-flowing, has called on the MRC to halt the decision-making process and cancel the Xayaburi Dam. In a letter submitted to the MRC, the coalition states: "Abundant evidence produced by the MRC itself has already demonstrated the Xayaburi dam to be exceptionally destructive, and a project that should not go ahead." As the MRC has failed to take the most basic of measures in ensuring public participation, transparency and due consideration of the SEA report, the coalition states that the MRC is "racing irresponsibly ahead in support of the construction of the Xayaburi Dam." The MRC has yet to announce how it plans to give the report the due diligence it requires.

Despite the MRC's silence, the SEA is now stirring a debate within regional government agencies. Thai Senator Prasarn Marukpitak, Chair of the Senate sub-committee on Mekong Development

Mekong Dam Proponents *continued*

traded energy and construction companies and commercial banks are driven to maintain investor confidence and keep stock prices high, and therefore have a keen interest in promoting new large-scale power projects even where better energy options exist.

Many civil society groups have concluded that existing electricity plans mostly serve the interests of the electricity utilities, energy companies, and the construction industry, rather than the needs of electricity consumers. Yet, through community protests at individual project sites, NGO policy analysis of national energy plans, and regional civil society campaigns such as the "Save the Mekong" movement, these out-of-date and destructive dam plans continue to be doggedly challenged with the belief that a more sustainable and equitable energy future is possible. ●

helped lead a roundtable discussion on the issue among committee members. One clear message from this roundtable was the need for greater dialogue within Thailand. The Thai Senate is now planning to organize a forum on the SEA and Xayaburi Dam with the Thailand National Mekong Committee. Additionally, a seminar organized by Save the Mekong partners inside Vietnam was well attended by deputies of Vietnam's National Assembly, who voiced worry over the impacts the dams would cause to the Mekong Delta and the rise in regional tensions that could result.

As the warnings of a disaster on the Mekong continue to resonate in the region, International Rivers, along with the Save the Mekong coalition, will continue to press for a moratorium on mainstream dam building, while working to ensure that the voices and needs of riparian communities are a central aspect of regional decision making. Together, we will challenge the Mekong River Commission and its development partners to live up to international standards of accountability, transparency and public participation, and to work toward finding solutions for the region's energy needs that don't sacrifice this magnificent lifeline. With so much at stake, the need is both urgent and tremendous. ●

Download the SEA report here: www.mrcmekong.org/ish/SEA.htm

Learn more about Save the Mekong Coalition:

www.savethemekong.org/

Key Findings of the SEA

- The dams would turn more than half the Mekong into a series of reservoirs
- The dams would block important fish migration routes, resulting in US\$476 million per year in lost fisheries income.
- Fisheries are the main source of protein in the region, but Cambodia and Laos would be the hardest hit, as little to no alternatives exist. Livestock production would be unable to compensate for the loss.
- By inundating agricultural land and blocking vital sediment and nutrient flows, the dams would reduce agricultural productivity by more than \$25 million/year.
- As a biodiversity hotspot, the dams would lead to permanent losses of species of global importance. Some areas of the Mekong would see losses of up to half the recorded species, along with the extinction of flagship species such as the Giant Mekong Catfish and Irrawaddy dolphin.
- The dams would contribute to growing inequality in the region, as the region's poor would suffer the greatest impacts.
- Many of the risks associated with the dams cannot be mitigated and would represent losses of economic, social and environmental assets.
- Recommendations include a 10-year deferment in decision making, the full translation and systematic distribution of the SEA report, further studies to be undertaken, and that the mainstream never be used as a test case.



Intern of the Month

Kate Ross joined the Rivers for Life 3 (see p. 8) team in June and managed to dive right into the thick of things. Whether it was assisting international delegates with housing or making last minute travel arrangements, Kate handled it all with a broad smile and great competence. In her own words, "The meeting was an inspiring, exhilarating and exhausting experience. It was such an honor to meet everyone in person, to be inspired by their stories, their struggles and their expertise. *Ríos para la vida, no para la muerte!*"

Anti-Dam Protests Get Louder in Northeast India

by Raju Mimi

Over the past several months, protests against big dams in northeast India have been a regular feature in the headlines. What initially started as student's movement against big dams in the state of Arunachal Pradesh has now snowballed into becoming a major election issue for next year's election in the state of Assam.

Spearheading the anti-dam protest in Assam is the Krishak Mukti Sangram Samiti (KMSS), a peasant movement which has declared that political parties supporting the construction of mega-dams in Assam would be voted out. Giving a call of "final warning" to central government, KMSS sent a petition signed by more than 110,000 people to Prime Minister Manmohan Singh, demanding a complete moratorium on all government clearances to mega-dams in the Northeast.

In Arunachal Pradesh, the state government has signed 168 memoranda of understanding with private and public companies for big dams in the mountainous region. Alarms are being raised in the state of Assam over the dams' downstream impacts. A detailed study on the downstream impacts of 2000 MW Lower Subansiri Dam by an expert group of faculty from three Indian universities has recommended that no mega-dams should be built in tectonically unstable northeastern India.

The Arunachal government, however, chose to downplay these concerns, saying the downstream impacts are exaggerated. It

strongly lobbied for speedy clearances of all hydro projects in the state by writing to concerned ministries, ignoring suggestions by India's environment minister that the Prime Minister stop all dam construction work in the region until an assessment to survey the dams' impacts was completed. Several Arunachal parliamentarians have gone so far as to label people opposing the dams as "anti-nationals."

Agitated by this response, protesters in Assam burnt effigies of Arunachal state's Chief Minister. Two student groups have issued a call for joint resistance against the dams.

Aware of the growing public opinion against big dams, the Assam government has been taking a posture expressing concern over wanton building of dams in Arunachal Pradesh. The credibility of such statements remains to be time tested.

In one "U-turn" development, the environment minister has been accused of contradicting his own earlier statement calling for a halt on mega-dams in the region. In an October 14 letter to the Prime Minister on the Lower Siang project, he writes that it should go forward because of its strategic importance. The Lower Siang Project would be built on the Siang River, which flows from China into Arunachal Pradesh. The Adi Students Union, which has been fighting this project, says it is not demoralized by the sudden change of tone from the of Environment Minister, and vows to continue its fight. ●