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THE FOCUS OF THIS ISSUE: BIG HYDROELECTRIC DAMS

In the month of the International Day of Action against Dams and for Rivers, Water and Life and World Water Day the issue of large dams comes to the fore. The ever increasing need of energy for ever increasing industries is playing havoc on the Earth's health and on the present and future lives of thousands of peoples.

Construction of huge dams for hydropower is at a high cost: living rivers are turned into artificial lakes, extensive areas of peoples' homelands and livelihoods are flooded, and ecosystems are destroyed and fragmented.

The energy thus generated does not benefit the vast majority of people; it feeds an energy intensive pattern of production and commerce that sustains the high consumption of minority sectors in the world.

This bulletin is a collective effort to denounce and highlight the destructive impacts of huge dams with the hope of contributing to the creation of a new path of energy consumption and production.

OUR VIEWPOINT

• The devastating effects of tsunamis, big hydroelectric dams and other "clean" energies

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OUR VIEWPOINT

- The devastating effects of tsunamis, big hydroelectric dams and other "clean" energies

Over the last decade, as the effects of climate change have become increasingly visible, there has been a lot of talk from big companies, banks and governments about promoting "clean" energy projects – meaning energy that is not produced from fossil fuels.

As a result, a number of countries have, for example, been developing or expanding nuclear power production.

Obviously, the first thing this brings to mind today is the tragedy suffered by the Japanese people, with whose plight we deeply sympathize. The recent earthquake and tsunami that triggered the current nuclear disaster in Japan clearly illustrate that the reality faced by the Japanese people in connection with the Fukushima nuclear power plant is a far cry from what could genuinely be viewed as clean energy.

At the same time, investments in another supposedly "clean" energy source have also been stepped up significantly over the last 10 years: the construction of dams to produce hydroelectric power.

This is the theme of this month's bulletin, in light of the fact that March 14 is the International Day of Action against Dams and for Rivers, Water and Life, while March 22 is World Water Day. Numerous articles in this issue demonstrate that the new wave of supposedly "clean" hydroelectric power production is nothing more than talk. In practice, it has been clearly shown that the serious negative impacts continue in the new dam projects planned and those already in operation.

A number of key points are especially worth considering. First, there is a continued emphasis on large-scale hydroelectric dams, which obviously cause large-scale impacts. One example is the destruction of significant areas of native forests. As such, these large dams remain one of the direct causes of deforestation.

Second, hydroelectric dams continue destroying the livelihoods of families who live near the rivers while producing energy that doesn't benefit them in any way. Instead these dams serve to supply electricity to distant urban centres and, above all, to high energy-consuming industries. For example, in the Mekong delta in Southeast Asia, the construction of large-scale dams threatens the food security of local communities, which depends on the fish they are able to catch freely from the river today. What's more, riverside communities are often forced to migrate to cities, towards an uncertain future. Governments claim that they are raising these people out of a situation of "poverty" and offering them a new future of "progress". But the reality tends to be very different: hydroelectric dams generate greater poverty and have significant negative impacts both on the human population, especially women, and on the environment.

Third, hydroelectric power is in no way "clean" if we consider the problem of global warming and climate change. Greenhouse gas emissions produced by dam projects stem from several different sources. The trees cut down to make way for hydropower projects as well as those that die when the area is flooded release carbon dioxide into the atmosphere. In addition, the submerged trees and other vegetation decompose and produce another greenhouse gas, methane, which is mainly released through the dam's turbines and spillways. According to studies, methane

could have 25 to 34 times more of an impact on the climate than carbon dioxide. It should be stressed that this particular impact is generally not considered in environmental impact assessments (EIAs) of dam projects, such as the EIA conducted for the Belo Monte dam in Brazil.(1) So it is clearly absurd to permit the sale of carbon credits from hydroelectric power plant projects through the "Clean" Development Mechanism (CDM) of the Kyoto Protocol.

And if all of this were not enough, there are other studies, from China for example, which show that large-scale dams could even contribute to seismic stress, thus increasing the risk of earthquakes and tsunamis.

Another highly trumpeted category of "clean" energy is energy produced with socalled "biofuels" or agrofuels. This usually involves the establishment of large-scale monoculture plantations of different crops such as soybeans, oil palm and sugar cane. The devastating social, economic and environmental impacts of plantations like these have already been widely studied and demonstrated.

Ultimately, the tragedy in Japan will have even more tragic consequences if investments in nuclear energy are shifted towards investments in supposedly "cleaner" sources of energy, such as large-scale monoculture plantations for agrofuel production or the construction of more hydroelectric dams.

In conclusion, so-called "clean" energies are not clean when they are produced on a large scale and have devastating effects of various kinds. They end up resembling earthquakes and tsunamis when they destroy people's lives. And in the meantime, they continue to increase corporate profits. It should be stressed that big hydroelectric dams, like large-scale agrofuel production and nuclear power plants, continue to be major sources of profits for the companies involved.

The logic behind the discourse of the defenders of these supposedly "clean" energies is based on the principle that we need them to maintain the present model of production, trade and consumption. It has become clear that this model is socially and environmentally unjust – in other words, it is a failed model. By promoting the use of erroneously labelled "clean" energy without questioning the current model, our governments continue working for the enrichment of corporations while provoking suffering for millions of people from current and future generations, given the deep and long-lasting environmental impacts.

Moving in a completely different direction from the defenders of this energy model, different small-scale local and regional energy production initiatives tend to offer a more promising future. These include initiatives controlled by organizations and social movements which satisfy their basic needs without causing damages that compromise the future of these populations and the environment. However, these initiatives receive little or no financial support compared with the vast sums of money that corporations and governments receive and spend on genuinely dirty energies.

What is needed is a structural change in our energy model towards a popular energy model, in which energy and water are considered basic rights. As the Brazilian Movement of Dam-Affected People (MAB) rightly declares, Water and Energy are Not Commodities!

(1) Fearnside, Philip. "Hidrelétricas Amazônicas como Emissoras de Gases de Efeito Estufa". In: Revista Proposta, Year 35 – No. 122.

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- Greenwashing Hydropower

On a hot May day, a peasant farmer named Bounsouk looks out across the vast expanse of water before him, the 450-square-kilometer reservoir behind the new Nam Theun 2 dam in Laos. At the bottom of the reservoir is the land where he once lived, grew rice, grazed buffalo, and collected forest fruits, berries, and medicinal plants and spices. Now there is just water, water everywhere.

"Before the flood I could grow enough rice to feed my family and I had 10 buffalo," he says. "I like our new houses and I like having electricity in the new village, but we do not have enough land and the soil quality is very poor. Now I can't grow enough rice to feed my family, and three of my buffalo died because they didn't have enough food."

Bounsouk is one of 6,200 indigenous people whose lands were flooded to make way for the Nam Theun 2 Hydropower Project in this small Southeast Asian country. His story is one that is heard over and over again in the project resettlement area. Though in certain places some people may be happy with their new houses, electricity, and proximity to the road, they are concerned about how they will feed their families in the long term. The poor quality of land and lack of viable incomegenerating options in this remote area make their prospects bleak.

Big dams have frequently imposed high social and environmental costs and longterm economic trade-offs, such as lost fisheries and tourism potential and flooded agricultural and forest land. According to the independent World Commission on Dams, most projects have failed to compensate affected people for their losses and adequately mitigate environmental impacts. Local people have rarely had a meaningful say in whether or how a dam is implemented, or received their fair share of project benefits.

The permanent inundation of forests, wetlands and wildlife is perhaps the most obvious ecological effect of a dam. Reservoirs have flooded vast areas —more than 400,000 square kilometres have been lost worldwide. Yet it is not only the amount of land lost which is important, but also its quality: river and floodplain habitats are some of the world's most diverse ecosystems. Plants and animals which are closely adapted to valley bottom habitats can often not survive along the edge of a reservoir. Dams also tend to be built in remote areas which are the last refuge for species which have been displaced by development in other regions. No one has any idea how many species of plants and animals are now extinct because their last habitat was flooded by a dam but the number is likely far from negligible. As well as destroying habitat, reservoirs can also cut off migratory routes across the valley and along the river. Because it isolates populations, this ecosystem fragmentation also leads to the risks of inbreeding from a smaller genetic pool.

Hydro Boom

The dam building industry is greenwashing hydropower with a public relations offensive designed to convince the world that the next generation of dams will provide additional sources of clean energy and help to ease the effects of climate change. In some of the world's last great free-flowing-river basins, such as the Amazon, the Mekong, the Congo, and the rivers of Patagonia, governments and industry are pushing forward with cascades of massive dams, all under the guise of clean energy.

Following a decade-long lull, a major resurgence in dam construction worldwide is now under way, driven by infusions of new capital from China, Brazil, Thailand, India, and other middle-income countries. In particular, Chinese financial institutions have replaced the World Bank as the largest funder of dam projects globally. Chinese banks and companies are involved in constructing some 216 large dams ("large" means at least 15 meters high, or between 5 and 15 meters and with a reservoir capacity of at least 3 million cubic meters) in 49 different countries, particularly in Africa and Southeast Asia, many with poor human rights records. A look at the heavy dam-building activity in China, the Amazon basin, and Africa illustrates the risks involved.

China. Half the world's large dams are within its borders, for which China has paid a huge price. Chinese dams have displaced an estimated 23 million people, and dam breaks have killed approximately 300,000 people. Dams have also taken a huge toll on China's biodiversity, causing fisheries to plummet, threatening the endangered giant Chinese sturgeon, and driving species such as the baiji, or Yangtze River Dolphin, to extinction.

Achieving the new plan's target would require building cascades of dams on several rivers in China's Southwest and on the Tibetan Plateau – regions that are inhabited by ethnic minorities, ecologically fragile, rich in biodiversity, and seismically active. If the new plan goes forward, it will irreversibly destroy China's great rivers and biodiversity hotspots of global importance.

Under its new Five-Year Plan, the Chinese government proposes to build 130-140 gigawatts of new hydropower plants. This equals more than one new Three Gorges Dam every year for the next five years, and is more than any other country has built in its entire history.

As a harbinger of the new trend, the Chinese government announced in February 2011 that it would allow a dam cascade on the Nu River (or Salween) – a pristine river which lies at the heart of a World Heritage Site – to be built. China's premier had stopped these projects in 2004 as a major victory for environmental groups. The government has also agreed to shrink the most important fisheries reserve on the Yangtze River so that a new hydropower scheme, the Xiaonanhai Dam, can go forward. This project may sound the death knell for the endangered giant Chinese sturgeon.

Around 30% of China's rivers are severely polluted with sewage, agricultural and

mining runoff, and industrial chemicals, and the flows of some (such as the Yellow River) have been so dramatically altered that they no longer reach the sea. Free-flowing rivers with adequate oxygen and natural nutrient balances can remove or reduce the toxicity of river contaminants, but dams compound pollution problems by reducing rivers' ability to flush out pollutants and because the reservoirs accumulate upstream contaminants and submerge vegetation, which then rots. The water then released can be highly toxic and can have significant ecological and human-health effects downstream.

The Three Gorges Dam, perhaps the world's most notorious dam, generates electricity equivalent to that of about 25 coal-fired power stations. Yet the trade-offs involved are enormous. The project has been plagued by corruption, spiraling costs, environmental catastrophes, human rights violations, and resettlement difficulties. To date, more than 1.3 million people have been moved to make way for the dam. Hundreds of thousands of these people have received tiny, barren plots of land or have been sent to urban slums with limited cash compensation and housing. Those resettled in towns around the edge of the Three Gorges reservoir have seen the shore of the reservoir collapse in as many as 91 places, killing scores of people and forcing whole villages to relocate. Protests have been met with repression, including imprisonment and beatings.

The Three Gorges Dam is, unfortunately, the tip of the iceberg. In southwest China, at least 114 dams on eight rivers in the region are being proposed or are under development on major rivers, such as the Lancang (Upper Mekong), the Nu (Upper Salween), and the Jinsha (Upper Yangtze). Many of these projects are among the largest in the world, with correspondingly serious impacts on river ecology, displacement of hundreds of thousands of ethnic minority people, and concerns about the safety of downstream communities. Several of the projects are in or adjacent to the Three Parallel Rivers World Heritage Site, threatening the ecological integrity of one of the most spectacular and biologically rich areas of the world.

Of increasing concern is the potential for dams in Southwest China to trigger earthquakes. Recent evidence has emerged that the devastating 7.9-magnitude Sichuan earthquake of May 2008, which killed an estimated 90,000 people, may have been caused by the Zipingpu Dam. It is well established that large dams can trigger earthquakes through what is called reservoir-induced seismicity. Scientists believe that there are more than 100 instances of reservoirs causing earthquakes around the world. According to geophysical hazards researcher Christian Klose of Columbia University, "The several hundred million tons of water piled behind the Zipingpu Dam put just the wrong stresses on the adjacent Beichuan fault."

The Amazon. Under the guise of promoting cheap, clean energy, Brazil's dam builders are planning more than 100 dams in the Amazon. Already two big dams are under construction on the Amazon's principal tributary, the Madeira, with several others in the licensing process. Brazil's electricity-sector bureaucrats say these will be kinder, gentler dams with smaller reservoirs, designed to lessen social and environmental impacts. Legislation has been introduced that would fast-track the licensing of new dams in Amazonia and allow projects to circumvent Brazil's tough environmental laws, under the pretext that they are of "strategic importance" to Brazil's future.

By flooding large areas of rainforest, opening up new areas to logging, and changing the flow of water, the scores of dams being planned threaten to disturb the fragile water balance of the Amazon and increase the drying of the forest, a process that is already occurring due to climate change and extensive deforestation. New research confirms the critical role the Amazon plays in regulating the climate not only of South America, but also of parts of North America. The transformation of extensive areas of the Amazon into drier savannas would cause havoc with regional weather patterns. Lower precipitation, in turn, would render many of the dams obsolete.

Meanwhile, mocking one of the dams' justifications, the greenhouse gas emissions could be enormous. Amazonian dams are some of the dirtiest on the planet; the Balbina Dam alone emits 10 times more greenhouse gases (from rotting vegetation in the reservoir) than a coal-fired plant of the same capacity. What's more, the planned projects would expel more than 100,000 river-bank dwellers from their lands and seriously degrade extensive indigenous lands and protected areas.

The Santo Antonio and Jirau Dams on the Madeira River, currently under construction, have also raised the possibility that individual dams could affect a huge area of the Amazon Basin. Scientists have pointed out that several valuable migratory fish species could suffer near-extinction as a result of the Madeira dams, depleting fisheries and fauna thousands of kilometers up and downstream. The fertility of the Amazon floodplain, important for agriculture and fish reproduction, would also be impaired because a significant portion of the sediments and nutrients carried by the Madeira would be trapped in the reservoirs.

Another Amazon tributary under threat is the Xingu River. Brazil is moving forward with the construction of a huge dam on the Xingu, called Belo Monte. Belo Monte would be the third-largest hydroelectric project in the world and would require diverting nearly the entire flow of the Xingu through two artificial canals to the dam's powerhouse, leaving indigenous communities along a 100 km stretch of the Xingu's Big Bend without water, fish, or a means of river transport. The Belo Monte Dam would cause severe impacts to areas considered of extreme importance for conservation of biodiversity, as well as irreversible impacts to the Xingu's fish stocks.

There is no doubt that meeting future energy needs of the Brazilian people is of crucial importance, but there are alternatives to more dams. Several studies, from WWF–World Wide Fund for Nature's to grass-root MAB's (Movement of those Affected by Dams in Brazil) - showed that Brazil could meet a major part of its future energy needs at lower social, environmental, and economic cost by investing in energy efficiency and renewable energy.

Africa. In Africa, dam construction is also on the rise. Africa is the least-electrified place in the world, with just a fraction of its citizens having access to electricity. Solving this huge problem is made more difficult by widespread poverty and poor governance, and because a large majority of the people live far from the grid, which greatly adds to the cost of bringing electricity to them.

The World Bank and many of the continent's energy planners are pinning their hopes for African electrification on something as ephemeral as the rain, by pushing for a slew of large dams across the continent. World Bank energy specialist Reynold Duncan told an energy conference earlier this year that Africa needs to greatly increase its investments in hydropower. "In Zambia, we have the potential of about 6,000 megawatts, in Angola we have 6,000 megawatts, and about 12,000 megawatts in Mozambique," he said. "We have a lot of megawatts down here before we even go up to the Congo."

Duncan said that governments and investors should not hesitate to look at riskier assets such as hydropower, adding that only 5 percent of the continent's hydro potential had been tapped. But "risky" is right. New African dams are being built with no examination of how climate change will affect them, even though many existing dams are already plagued by drought-caused power shortages.

Climate change is expected to dramatically alter the dynamics of many African rivers, worsening both droughts and floods. In this climate, the proposed frenzy of African dam building could be literally disastrous. Unprecedented flooding will cause more dams to collapse and hasten the rate at which their reservoirs fill with sediment. Meanwhile, worsening droughts will mean dams will fail to meet their power production targets.

Dams are not inexpensive investments: Just developing one of these dams, the Mphanda Nkuwa in Mozambique, is expected to cost at least \$2 billion (not including the necessary transmission lines). Yet these huge projects are doing little to bridge the electricity divide in Africa. With the majority of the continent's population living far from existing electricity grids, what is needed is a major decentralized-power rollout of renewables and small power plants to build local economies from the ground up, not the top down. But that's not where the money is right now.

Corruption

These examples from three areas of heavy dam-building activity hint at the spectrum of major problems they present. Big dams always promise progress and development, but what the reality on the ground shows are displaced and impoverished refugees, ecologically fragmented and damaged rivers, and downstream victims of destroyed fisheries and impounded sediments. Big dams also expand the habitat of waterborne disease vectors such as malaria, dengue fever, schistosomiasis, and liver fluke, and can trigger devastating earthquakes by increasing seismic stresses. Dams frequently fail to deliver their projected benefits and usually wind up costing more than predicted. And although hydropower is touted as a solution to climate change, many dams actually emit huge quantities of greenhouse gases. As Indian writer and activist Arundhati Roy has put it, "Big dams are to a nation's development what nuclear bombs are to its military arsenal. They're both weapons of mass destruction."

If dams continue to wreak havoc with people's lives and ecosystems, and are increasingly risky in a warming world, why do they continue to be built and promoted? And why are they now being hailed as a source of green, renewable energy? One of the main reasons is vested interests: There are substantial profits to be had, for the hydropower industry, their network of consultants, and host-country bureaucracies, from planning, building, and operating massive infrastructure projects. These attractions often trump the impacts on people and ecosystems and the need to develop sustainable economies in the midst of a growing water and food crisis.

Industry consultants and engineering companies that undertake feasibility studies and environmental impact assessments know that they need to portray a project in a favorable light if they want to get future contracts. In case after case, and without comprehensively assessing the alternatives, they consistently claim that the impacts can be mitigated and that the project in question represents the best option for meeting the country's needs.

Environmental impact assessments (EIAs) that should anticipate problems have served as a rubber-stamping device rather than a real planning tool. Jiang Gaoming of the Chinese Academy of Sciences reports that construction on many projects in southwest China is under way in violation of key aspects of Chinese law. Many projects lack an EIA and have not been approved by the government. According to Jiang, even basic safety checks have not been performed and government regulators are uninvolved. "EIAs have become a marginalized and decorative process, seen as just a part of the cost of doing business," says Jiang. "Both the builders and local government know that, to date, an EIA has never managed to halt a dam project."

Needless to say, corruption also plays a key role. A dam involves a huge upfront investment of resources, making it easy for government officials and politicians to skim some off the top. One of the most egregious examples of corruption involving a dam project is the Yacyretá Dam on the Paraná River, between Argentina and Paraguay. In the 1980s, the cost of this "monument to corruption" ballooned from an original estimate of \$1.6 billion to more than \$8 billion. In 2002 and 2003, several of the biggest dam-building companies in the world were convicted of bribing the former director of the Lesotho Highlands Development Authority to win contracts on Lesotho's Katse Dam. Masupha Sole accepted around \$2 million in bribes from major dam-building firms such as Acres International of Canada and Lahmeyer International of Germany. In China, corrupt local officials stole millions of dollars intended for people displaced by the Three Gorges Dam. At least 349 people have been found guilty of embezzling a total of about 12 percent of the project's resettlement budget.

The Way Forward

Needless to say, these are not easy problems to address. The most ambitious and systematic attempt to date has been undertaken by the World Commission on Dams (WCD), a multi-stakeholder independent body established by the World Bank and the World Conservation Union in 1998. After a comprehensive evaluation of the performance of large dams, the Commission issued its final report, Dams and Development: A New Framework for Decision-Making, in 2000.

Briefly, the WCD recommends conducting an open and participatory process to identify the real needs for water and energy services, followed by a careful

assessment of all options for meeting those needs, giving social and environmental aspects the same significance as technical, economic, and financial factors. If a new dam is truly needed, outstanding social and environmental issues from existing dams should be addressed, and the benefits from existing projects should be maximized. Public acceptance of all key decisions should be demonstrated and decisions affecting indigenous peoples should be guided by their free, prior, and informed consent. Legally binding agreements should be negotiated with affected people to ensure the implementation of mitigation, resettlement, and development entitlements. Impact assessments should follow European Union and other global EIA standards. By definition, an effective EIA "ensures that environmental consequences of projects are identified and assessed before authorization is given"— something that almost never occurs in today's world. Dam projects built on international rivers should also evaluate the potential transboundary impacts or cumulative impacts from multi-dam projects in regional watersheds.

The dam industry has rejected the WCD guidelines and in 2007 established its own process, hoping to develop a sustainability protocol that will replace the WCD framework as the most legitimate benchmark for dam projects. But the industry approach is clearly an attempt to circumnavigate the more robust requirements of the WCD while paying lipservice to sustainability.

In fact, the industry's attempt to repackage hydropower as a green, renewable technology is both misleading and unsupported by the facts, and alternatives are often preferable. In general, the cheapest, cleanest, and fastest solution is to invest in energy efficiency. Up to three-quarters of the electricity used in the United States, for instance, could be saved with efficiency measures that would cost less than the electricity itself. Southern countries, especially those like China, India and Brazil with huge industrial expansion projects within an export-oriented model will account for 80 percent of global energy demand growth up to 2020. These countries could cut that growth by more than half using existing efficiency technologies, according to McKinsey Global Institute. "Technology transfer" programs can be an effective way to help poorer nations avoid having to reinvent the wheel; for example, California's remarkable energy efficiency program has been sharing knowledge with Chinese energy agencies and government officials to jump-start strong efficiency programs there.

Even with investment in efficiency, however, it will be necessary to look for new generation sources. In several Southern countries, sources such as wind, solar, geothermal, and biomass energy, as well as low-impact, non-dam hydropower, are gaining ground. Such technologies can be much better suited to meeting the energy needs of the rural poor, if they are being developed where people need the power and do not require the construction of transmission lines. Examples include the installation, supported by Global Environment Facility incentives, of hundreds of thousands of solar home systems in Bangladesh, China, Sri Lanka, and Uganda.

True renewables can also be an attractive and affordable solution to many countries' energy problems. The cost of windpower in good locations is now comparable to or lower than that of conventional sources. Both solar photovoltaic and concentrating solar power are rapidly coming down in price. A 2008 report from a U.S. National

Academy of Engineering panel predicts that solar power will be cost-competitive with conventional energy sources in five years.

As for systemic corruption, it must be openly challenged by governments, funding agencies, and other proponents of dam projects. Regulations must be written to identify, define, and eliminate corruption at all levels of the planning process. And the regulations must be openly supported and enforced by the World Bank, the dam industry, the national and transnational hydropower companies, and the governments supporting dam construction, projects that often involve amounts of billions of US dollars. And the dam industry itself, together with its biggest government allies such as China, Brazil and India, must take steps toward internal reform. Adopting the WCD guidelines would be a good first step, together with instituting such practices as integrity pacts, anti-corruption legislation, and performance bonds that require developers to comply with commitments.

Healthy rivers, like all intact ecosystems, are priceless. Southern countries should do everything in their power to protect these irreplaceable lifelines. One important step is to not copy the problem-filled energy model developed by Northern industrialized countries decades ago. Southern countries have cost-effective alternatives at their disposal that would enable them to leapfrog to a sustainable, twenty-first-century energy regime – one that is more sustainable, efficient, socially just, and strengthens local and regional economies. The alternative is, quite simply, a persistent legacy of human and environmental destruction.

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- Brazil: Belo Monte dam would turn the Xingú River into a river of blood

A hydroelectric complex comprising two dams and the diversion of the Xingú River from its natural course on the stretch that flows through the state of Pará; a cost of more than 16 billion dollars; the flooding of 516 square kilometres of Amazon forest; impacts on a total of 1,522 square kilometres of forested lands; between 100 and 142 square kilometres of land left in permanent drought; changes in the river ecosystem, with the introduction of foreign fish species and the extinction of others; loss of biodiversity, which is the source of food and income for millions of people in the Amazon; direct or indirect impacts on 30 indigenous territories inhabited by more than 13,000 people from 24 indigenous ethnic groups; the forced displacement of between 20,000 and 40,000 people; 80,000 unemployed people; the possibility of other dams being built upstream. This is the scenario created by the Belo Monte dam on the Xingú River, a project originally conceived in the 1970s during the Brazilian military dictatorship.

The auction for construction of the hydroelectric dam project was won by the Norte Energia consortium, in which the largest shareholder is the mixed-capital state-controlled power company, Eletronorte.

In Brazil, 25% of the electricity produced is consumed by nine mining and energy companies: Alcoa, ArcelorMittal, Camargo Corrêa Energiam CSN, Gerdau, Samarco, Vale do Rio Doce and Votorantim. A number of these companies have a strong interest in the construction of the Belo Monte dam – which would be the world's third largest – for the expansion of their extractive operations.

If the dam is built, between 20% and 30% of the inhabitants of Altamira will be permanently displaced, according to the environmental impact assessment (EIA) for the project.

From the moment plans for the project were announced, the resistance of social movements and indigenous communities in the region has continued to grow. A landmark in the resistance struggle was a gathering held in Altamira in February 1989, the First Encounter of Indigenous Peoples of the Xingú, where participants spoke out against the decisions adopted for the Amazon region without the participation of its indigenous peoples, and against the construction of the Xingú hydroelectric dam complex. More than 3,000 people took part in the encounter, including 650 indigenous people from various parts of Brazil and other countries, representatives of environmental and social movements, and the Brazilian and foreign media.

Over the following years, the project has been redesigned numerous times, new viability studies and EIAs have been conducted, and consultations and public hearings have been held, with a marked lack of transparency throughout the whole process.

Opponents to the dam have fought back, filing public civil suits for the suspension of environmental licences, preparing documents, organizing debates, and writing letters to the president's office calling for the suspension of the dam's construction.

But in 2007, the government of former President Luiz Inácio Lula da Silva included the Belo Monte project in its Programme for the Acceleration of Growth (PAC) as a key priority. This spurred the organization of the Xingú Alive Forever (Xingú Vivo para Sempre) Encounter, in 2008, which brought together representatives of indigenous and riverine communities, social movements, civil society organizations, researchers and specialists. In 2009, the Belo Monte case was presented in a public hearing at the OAS Inter-American Commission on Human Rights in Washington, D.C.

In December 2009, representatives of a number of different indigenous peoples (Arara, Guarani, Juruna, Kayapó, Xavante, Xipaia, Xicrin and Yanomami) issued a manifesto denouncing the Brazilian government's indifference. The declaration talked about the 20 years of struggle waged by indigenous peoples against the Belo Monte project and concluded by saying that the Xingú River could be turned into a "river of blood."

In February 2010, the Brazilian Ministry of the Environment, through the environmental agency IBAMA, granted a provisional environmental licence for the Belo Monte dam complex, with 40 conditions attached. This sparked an upsurge in opposition. The Xingú Alive Movement, which gathers together more than 100 organizations opposed to the project, joined with 40 other social organizations to submit a formal petition to the Inter-American Commission on Human Rights calling for precautionary measures

to halt the dam's construction. The petition stated that the provisional licence for the Belo Monte project had no legal basis and had been issued without the fulfilment of the requirements established by IBAMA.

One year later, in February 2011, IBAMA granted a partial installation licence for the initiation of construction work, the clearing of 238 hectares of forest, and the opening of access roads on the Bacajá and Xingú Rivers.

It should be stressed that the category of "partial installation licence" does not exist in Brazilian environmental legislation, as was pointed out by a panel of specialists monitoring debate on the project. And as federal prosecutor Felicio Pontes Junior observed in a recent blog article, from which an excerpt is presented below, this is only one of the numerous irregularities and illegalities that have characterized the history of this megaproject.

On February 8, 2011, a petition with more than half a million signatures opposing the project was submitted to a representative of the current Brazilian president, Dilma Rousseff. Paradoxically, the representative expressed the willingness to participate in a "dialogue" with indigenous and other resistance leaders in the region but while moving ahead with the project's execution at the same time.

What follows is an excerpt from an article posted by federal prosecutor Felicio Pontes Junior on his blog (<u>http://belomontedeviolencias.blogspot.com/</u>), in which he comments on the provisional environmental licence granted in 2010 and the recently issued partial installation licence:

Belo Monte's provisional licence (LP) was granted by IBAMA in February 2010 with 40 environmental conditions and 26 indigenous-related conditions attached. The LP does not allow for work on the project to begin. It is merely a preliminary planning licence. Through it, the agency issuing the licence states that the location and conception of the project are approved. Before work on the project itself can begin, another licence must be obtained: the installation licence (LI).

In order for the Norte Energia consortium – which was hastily put together on the eve of the hydroelectric dam auction – to initiate work, it must fulfil the conditions attached. Many of these conditions are, in fact, unresolved disputes. The government pressure for the issuing of the LP was so great that the conflicts were turned into conditions.

Among the 40 environmental conditions we could cite, as an example, No. 9, which stipulates: (i) the initiation of construction and repair of educational and health facilities in Altamira and Vitória do Xingu; (ii) the initiation of basic sanitation works in these localities; and (iii) the installation of basic sanitation services in Belo Monte before the construction of workers housing. The Federal Public Ministry was able to access documents from the local authorities of these localities which demonstrate that nothing had been done as of 2010.

Another condition, this time No. 5 of the conditions related to indigenous peoples, requires, among other measures: (i) the physical demarcation of the Arara de Volta Grande and (ii) Cachoeira Seca Indigenous Lands; (iii) an agrarian survey and the beginning of the end of intrusion (withdrawal of non-indigenous people) from the

Apyterewa Indigenous Land. None of this can be done overnight. The Federal Public Ministry itself has been trying for decades. And it is all extremely necessary.

In fact, even the environmental impact assessment carried out by Eletrobras and contractors predicts that some 100,000 workers will migrate to the area in search of employment on the project. Considering that the current population of Altamira is 94,000, and that, at most, the project will create approximately 19,000 jobs – and only in the third year, because in other years a smaller number of jobs will be available – one can easily conclude that, in addition to the demographic explosion, Altamira will also have at least 80,000 unemployed people.

Norte Energia attempted a manoeuvre to evade complying with these conditions. It requested a partial installation licence to break ground for the project. This does not exist in Brazilian legislation. Breaking ground is in itself work on the project. Or does anyone think that breaking ground alone will not attract migration?

In October 2010, the IBAMA technical team said "no" to this manoeuvre precisely because of non-compliance with the conditions established.

And it cannot be claimed that the localities affected will be compensated through the release of more public funds. Would these funds be sufficient for the construction and maintenance of hospitals, schools and judicial and security agencies in a region where the population will double in one year? Will these funds also double Altamira's annual budget? Obviously not.

What is taking shape is nothing other than a déjà vu. We will be left with the social chaos and the environmental damages. The multinationals will get the energy.

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- Mekong dams heat up the region

The problems associated with large-scale hydropower dams are not a new issue to the Mekong basin. Originating in the Tibetan Himalayas, the Mekong River weaves through Yunnan province in southern China before passing through a small part of Burma, then into Laos, where for a long stretch it forms the Lao-Thai border in north and northeastern Thailand, and then flows south through Cambodia and down to the Mekong delta in Vietnam. Over the past decades, many parts of this river-rich region have been seriously impacted by large-scale hydropower dams. Current proposals to build hundreds of dams on the Mekong River's most important tributaries together with 12 dams on the Mekong mainstream are raising serious concerns and heating up tension and conflicts among region's countries more than ever.

At the moment when this article began to be written, around 2,000 people from local communities, members of the People's Movement for a Just Society (PMove) - Assembly of the Poor, were returning home after a 25-day-long gathering under the blistering sun in Bangkok. The had gone there to pressure the Thai cabinet's decisions on cases of injustice, including large-scale projects that take away people's natural resources and livelihoods. The people's movement has been

driven by a wide range of chronic problems including inadequate land reform, unwanted mining projects, and the emergence of power plant proposals in rural communities. Among all these issues is the case of the Pak Mun Dam.

Over the last two decades, the people affected by the Pak Mun Dam in Ubon Rachathani province in northeastern Thailand have become the forefront of the Assembly of the Poor, the strongest people's movement ever witnessed in Thailand. In 1991, with direct support from the World Bank, the military-appointed government decided to dam the Mun River, the biggest tributary of the Mekong River, for electricity generation at a capacity of 135 MW. Only one kilometre away from where the Mun and the Mekong Rivers meet, the Pak Mun Dam has plagued both rivers, as it has almost completely blocked the natural fish migration route. As a result, the dam has directly affected around 6,000 families from fishing communities along the oncefertile river, and many more in other northeastern parts of the country. Since entering into operation, the dam has failed to generate the intended amount of electricity. Recently, this first "run-of-river dam" in Southeast Asia was recorded as producing just a little over 20 MW of electricity. Even at its full capacity, the dam could barely meet the electricity needs of the largest mall in Thailand, located in Bangkok, and its remaining supply would not meet even half the needs of the second largest mall.

Despite the dam's failure in efficiency and its continuing impacts, the Thai cabinet continues to refuse to take action on the recommendations of the government-appointed committee to study the dam, which states that all the Pak Mun Dam's sluice gates should be opened permanently. The explanation for this refusal given by the Thai government and the Electricity Generating Authority of Thailand (EGAT) to the public is that if the gates are opened, the Mun's flow would rapidly drain as a result of the severe drought that has afflicted the Mekong River, and thus its advantages would be simply wasted.

The Thai cabinet's claim conflicts with another widely shared theory: that the real reason why the Pak Mun Dam can never be opened permanently is not because of the need for the 20 MW of electricity it produces nor the concern for water use, but rather because permanently opening the dam gates is equivalent to an acknowledgement of the total failure of the dam. This would be advantageous for those who oppose dams, while leaving authorities who advocate dam building in both Thailand and the rest of the region in a disadvantageous position.

The Thai and other Mekong region governments never inform the public about the hydrological changes caused by the four dams built upstream in China. Meanwhile, the case of the Pak Mun Dam clearly demonstrates how governments hold on tight to their own existing dams and plans to build dams on the Mekong's tributaries, while also striving to build dams along the lower Mekong mainstream as well.

The series of large-scale dams on the upper Mekong mainstream in China started with the construction of the Manwan Dam, which was completed in 1992 without any proper consultation with the lower Mekong countries, especially with the people who directly rely on the river for their everyday life. The scale of the Chinese dams is in no way comparable with Pak Mun: they all have more than 1,000 MW of installed capacity and hold millions of cubic metres of Mekong water. Apart from the early outcry of the people in northern Thailand, the impacts of China's dams seemed to be

very slowly felt by the downstream Mekong countries throughout the 1990s. For instance, until the mid-2000s, nobody seemed to have any idea about the impacts of the Chinese dams on Vietnam's Mekong delta.

However, shortly before the completion of the Xiaowan Dam – the fourth dam in China, out of plans to build a total of eight or even 15 dams on the upper Mekong mainstream – the impacts on the Mekong River were already being overwhelmingly felt. In April 2010, a representative of the Chinese embassy in Thailand appeared before the Thai public for the first time, at a civil society-hosted forum in Bangkok, to deny any relation between China's dams and the negative changes in hydrology, biodiversity and livelihoods in the lower Mekong mainstream countries. It was a bit too late, though, as the Chinese government had already been bombarded with criticisms by local communities, civil society groups and news agencies. In Vietnam, for instance, the people, academics and even government agencies, in particular those from the Mekong delta, have pointed a finger at China as one of the root causes of the hydrological change and voiced their concern over the impact of the Mekong dams on the delta.

In addition to the mounting concern over the transboundary impacts of the Chinese dams, it was announced in early 2008 that the first Mekong mainstream dam proposal outside China – the Don Sahong Dam in southern Laos – was ready to proceed. The dam is one of the 12 dams proposed among the lower Mekong countries: eight dams in Laos, two on the Thai-Lao border, and the other two in Cambodia. Aside from the Don Sahong project, none of the proposed dams has less than 800 MW capacity, and the biggest dam is up to 3,000 MW in size. Among questions raised about the Don Sahong Dam, the major concern was the potential impact on fisheries in what is probably the most intensively fished area and largest fish spawning area in the lower Mekong. As a result, the Don Sahong case raised the question of how much importance the Mekong region governments give to Mekong fisheries, which provide livelihoods for a great number of people and contribute significantly to these countries' economies, especially in Cambodia, where fisheries account for 17% of the country's GDP.

Nevertheless, after more than two years of opposition by many civil society groups, the Lao government has not yet submitted the Don Sahong Dam proposal to the regional Procedures for Notification, Prior Consultation and Agreement (PNPCA) to inform other Mekong countries of its intention to build the dam. Instead, the Lao government submitted the proposal for the Xayaboury Dam in September 2010, initiating the PNPCA process, which was agreed under the framework of the 1995 Mekong Agreement among Laos, Thailand, Cambodia and Vietnam. According to the PNPCA, all four member countries agree to notify and listen to neighbouring countries when they propose to build a project on the Mekong mainstream, even within their own countries. However, the process can play no role in stopping the dam if the host country insists on building it. Therefore, the current process will represent a crucial milestone for the Mekong River's fate, as the PNPCA process for the case of the Xayaboury Dam in northern Laos becomes a test case for all.

The proposed Xayaboury Dam has sparked wide criticisms and expressions of disapproval, splitting the Mekong countries like never before. The Mekong River

Commission (MRC, formed in 1995 by an agreement between the governments of Cambodia, the Lao PDR, Thailand and Vietnam with the primary duty of protecting the river under the 1995 Mekong Agreement) has been accused by many civil society groups of failing to play an effective role in facilitating the use of its own knowledge as an effective tool for decision making on the dam. The Strategic Environmental Assessment (SEA) commissioned by the MRC states the severe impacts on fisheries, sediment load, wetlands and agricultural land, weighed against the limited benefits of electricity supply if the 12 projects are to proceed. According to the SEA, under the scenario for the year 2015, the series of 12 dams would only supply up to 11.6% of the electricity needed in Thailand, and only 4% for Vietnam. The SEA finally recommends the deferment of all lower Mekong mainstream dams for 10 years. Opposed to the recommendation, the government of Laos released a statement insisting that "Our view remains unchanged. We are confident that the Xayaburi Hydroelectric Power Project will not have any significant impact on the Mekong mainstream" - even before the completion of the consultations in the neighbouring countries under the PNPCA process. This proves the failure of the MRC in integrating its knowledge in shaping development based on comprehensive impact assessments, as seen in the case of the SEA.

The debate on the Xayaboury Dam will reach the final round when the MRC Joint Committee members from the four countries convene by the end of this month to voice their opinion about the project. The situation could be volatile and is unpredictable.

In the midst of a situation where the large-scale hydropower dam era has been revitalized, the Mekong region needs more mechanisms than it currently has to cope with the impacts and potential disasters. The decision on the Xayaboury Dam, which might be the final threat to the life of the Mekong River, cannot be subject to the judgement of the MRC's Joint Committee members, who hold even lower positions than ministers.

The urgent and critical task is to ensure and emphasise transparency and public participation in the process to meet the region's power needs. The promoters of dams in the Mekong region argue that there is an increasing need for electricity and income generation; however, it is crucial to be aware of whom and what the energy is for, as well as who benefits and how they achieve their objectives. It is quite clear that the benefits of large dams would ultimately be concentrated among private sector investors in the projects and big companies that need ever increasing amounts of energy for their huge industries.

It's about time that hydropower dams in the Mekong region go through a serious and inclusive regional dialogue, which conveys "the voice of the region" that truly represents the majority of the Mekong people, before a natural resources crisis becomes the only future awaiting us.

By Premrudee Daoroung, Towards Ecological Recovery and Regional Alliance (TERRA), e-mail: premrudee@terraper.org, www.terraper.org

- Brazil: Discrimination and violence against women in the construction of hydroelectric dams

Cause and effect of a dam The company staff came And said nothing would happen Suddenly a surprise The parents rose up in protest The girls made themselves pretty Because more than 4,000 men came to town [...] Some of the girls got caught up And were showered with promises They said they had motorcycles and cars Lots of money And someday they would get married But something went wrong After the adventure, their bellies started growing And then came the suffering Children in their arms And no one to care for them [...]

Rosa Aguiar (In: A vida dos povos atingidos por barragens em poesia (The Life of Dam-Affected People in Poetry). São Paulo: Escola Nacional de Formação Política do MAB, 2010.)

The struggle of communities affected by dams emerged in the 1980s, when Brazil began building hydroelectric dams to produce electricity and meet the energy demands of the country's industrialization. In this context, the struggle of those affected by these projects grew from their need to demand respect for their rights from the Brazilian government and the companies involved.

The Movement of Dam-Affected People (Movimento dos Atingidos pelas Barregens, or MAB) was thus born as a way to provide a forum for the common people, and especially for affected populations. The aim of MAB is to denounce and oppose the current policies of the electric power sector. But struggling to guarantee the rights of the affected populations is not enough. In addition to denouncing the current model of energy production and consumption and fighting against violations of rights, MAB also promotes discussion of the need to develop a new Popular Energy Project, in which the basis for analysis is an understanding of for whom and for what energy is produced.

The current model of hydroelectric dam construction in Brazil "has repeatedly fostered serious violations of human rights, whose consequences ultimately aggravate serious pre-existing social inequalities, translating into situations of extreme poverty and social, family and individual breakdown," according to the Council for the Defence of the Rights of the Human Person (CDDPH). (1)

Women, who already "normally" suffer from gender inequality in Brazilian society, are the ones most affected by the situations of conflict and social, family and individual breakdown caused by the construction of dams.

As a result, within the movement we have begun to reflect in greater depth about the ways in which this model of energy production through the construction of dams impacts on the lives of the women affected. The key questions now under discussion include the following: In addition to the gender inequality historically experienced by women, what are the main violations suffered by the women affected by dams? How are women impacted by the forced displacement caused by the construction of dams? What are the main challenges women must confront in the resistance struggle?

The main consequences for the lives of dam-affected people, which have even more of an impact on women, are of two types. The first is economic, resulting from the loss of land; the loss of family income due to the jobs that disappear, the preexisting relations in production and marketing, and the various activities that are decimated by the flooding of reservoirs. The other type is emotional and psychological, because they see the places they live disappear, their entire relationship with their surroundings is dismantled, community structures and relations are destroyed, cultural traditions must be abandoned, and they face the insecurity of being forced to go and live elsewhere, worried about the lives of their children and the entire family.

The dams do not only impact on the lives of those living on the banks of rivers. The migration of thousands of workers to the regions where the projects are undertaken, as is happening with the dams under construction in Santo Antonio and Jirau (in the state of Rondônia), affect public health, housing and education services for the whole population. Another serious consequence is the increase in prostitution, teenage pregnancy and "single mothers" – a situation that directly affects women and contributes to the breakdown of families. We should also not forget the destruction of the environment.

WOMEN FIGHT BACK: What inspires us is the fact that, even when they are not seen, the affected women have always fought back. Tuíra, an indigenous woman from the state of Pará, is especially symbolic of these women. In 1989, the power company Eletronorte held a public hearing to discuss the construction of the Kararaô dam and hydropower plant (which was to be financed by the World Bank). During the hearing, while her fellow Kayapó warriors shouted "Kararaô will drown our children!", Tuíra rose from the audience, ran up to Eletronorte president José Muniz Lopes, and held the blade of her machete to his face, a traditional gesture of threat. Her actions contributed to the suspension of the dam's construction for ten years and the withdrawal of World Bank funding for the project.

In addition to Tuíra, there have been many other women warriors in the history of the struggle and resistance waged by MAB. The women who fought to defend their rights during the construction of the Machadinho dam, frequently clashing with the police; the women of Barra Grande who headed up the struggle; the women arrested in the struggle of the people affected by the Tucurui dam; the women who have stopped company officials from entering the communities where there are dam projects in Bahía; the women affected by the hydroelectric dams in Rondônia who confronted officials from the big companies in the capital; all of the mothers who suffer as they

watch their daughters prostitute themselves or get pregnant and end up as single mothers after being deceived and abandoned by construction workers, and yet never turn their backs on them; the women who cry over the loss of their land, their communities.

One of the great challenges we face is for these women to be increasingly recognized and valued. And this why we must courageously continue to fight for justice, social equality and gender equality, so that women and men can be the subjects of a new history.

Water and energy are not commodities!

By MAB (Movimento dos Atingidos por Barragens), sent by Sonia Mara, <u>sdjsonia@yahoo.com.br</u>, <u>http://www.mabnacional.org.br/</u>

(1) The CDDPH is the Brazilian state body equivalent to the Inter-American Commission on Human Rights of the Organization of American States (OAS) and the United Nations Commission on Human Rights. The Council was created through Federal Law 4.319 of 16 March 1964 and is comprised of the following members: the Minister of Justice, a representative of the Ministry of Foreign Affairs, a representative of the Federal Cultural Council, a representative of the federal Attorney General's Office, the president of the Federal Council of the Order of Attorneys of Brazil, the head professor of constitutional law and the head professor of criminal law at one of the federal universities, the president of the Brazilian Press Association, the president of the Brazilian Association of Education, and the leaders of the majority and the opposition in the Federal Chamber of Deputies and Senate. The Council has the power to initiate inquiries, investigations and studies to evaluate the effectiveness of rules to ensure human rights enshrined in the Federal Constitution and the Universal Declaration of Human Rights (1948), as well as to receive delegations denouncing human rights violations, determine their legitimacy, and adopt pertinent measures to punish the individuals or authorities responsible for these violations.

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- DRC: INGA dams for big business

Along the Congo River in the Democratic Republic of the Congo the Inga hydropower scheme has developed a series of hydroelectric dams, two of them already built – Inga I and Inga II- and two more under development – Inga III and Grand Inga (see WRM Bulletin 138, 77).

The Inga III is being developed by the Westcor consortium and would be a tunnel diversion hydropower scheme producing 3,500 MW of electricity with a total cost up to \$8 billion. The Grand Inga Dam includes the related Inga 3. This World Bank US\$80 billion project is the world's largest hydropower scheme and could produce more up to 39,000 MW of electricity, over twice the power generation of Three Gorges Dam in China, and more than a third of the total electricity currently produced in the whole Africa.

Despite such massive energy provision, there is no plan to provide Congolese household with electricity in a country where an estimated 62 million people – 94% of the population – do not have access to electricity and daily power outages plague those few who are connected to the state's dilapidated power grid.

Inga III has been designed to produce electricity for export to industries and urban consumers of South Africa and other neighboring countries, and to attract energy-intensive industries to DRC.

As for Grand Inga, International Rivers Network (IRN) informs that "the mining giant BHP Billiton tried to wrest control over the project by offering the DRC government a sweeter deal. Billiton would use the power from Inga 3 to feed a smelter that will produce 800,000 tons of aluminum per year" and will consume 2,500 MW of electricity, more than DR Congo's entire current power supply.

This confirms concerns that it would be foreign companies which will gain vast economic benefits from the Inga mega-project, and not the vast majority of the Congolese people.

Recently, 14 African and international organizations sent a letter to the chairman of BHP Billiton urging the corporation to impose a moratorium on the project until the Congolese government first fulfills its commitments to bring electricity to its citizens. (http://www.internationalrivers.org/en/2010-12-15/ngos-call-moratorium-bhp-billiton%E2%80%99s-congo-smelter)

Grand Inga and Inga III dams threaten many people who will lose their farmland and their livelihoods in order to build these dams. The Bundi Valley would be flood while paths for transmission lines will imply deforestation of swaths of the second largest rainforest in the world which plays a crucial role in global ecosystem and climate balance. The Congo River, with the second richest diversity of fish on earth, will be affected by damming and turbines that lead to loss of fish populations and destruction of river ecosystems.

As if this were not enough the Grand Inga project is being sold as "clean and environmentally friendly" energy that can offset carbon emissions elsewhere "by harnessing run–of–river hydroelectricity as opposed to damming up a river". As such it might get a push by the CDM (Clean Development Mechanism)

Indeed, large scale dam projects are not meant for the sake of people's needs and needles to say of environment. They are designed to meet the needs of big business and of big industry that produces in an unsustainable way for unsustainable markets.

Article based on information from:

Article based on information from: "Africa action at the United States Social Forum", <u>http://www.africaaction.org/1/category/d2d/1.html;</u> Grand Inga Dam, DR Congo, International Rivers Network, <u>http://www.internationalrivers.org/es/africa/grand-ingadam;</u> Information on the Inga Projects, World Energy Council, <u>http://www.worldenergy.org/documents/annex 3 information on inga projects.pdf</u>

- Actions against dams around the world

Indonesia: Since April 2005, two companies involved in the building of a mega-dam in Indonesia, both owned by the a former Vice President of Indonesia, have been compulsory purchasing land from people around the Sulewana river in Poso, Central Sulawesi to make way for the construction and the displacement it will cause.

The project, known as, Poso II will affect the lives of up to 2,000 people. Residents of Peura Village are attacked by police officers as they try to prevent construction access.

Friends of the Earth Indonesia /Walhi is calling on the Indonesian government to halt this project to until there is certainty that the rights of the local population will be respected, the military presence will be withdrawn and a thorough transparent environmental impact assessment has taken place. <u>http://www.foei.org/en/get-involved/take-action/halt-the-poso-ii-mega-dam/</u>

Mekong region: 263 non-governmental organizations from 51 countries submitted a letter on March 21 urging the Prime Ministers of Lao PDR and Thailand to immediately cancel the proposed Xayaburi Dam on the Mekong River's mainstream in Northern Laos.

The letter was submitted in advance of the Mekong River Commission's (MRC) 33rd Joint Committee Meeting, scheduled for 25-26 March in Sihanoukville, Cambodia, where the four member countries were expected to make a preliminary decision on whether or not to proceed with the dam. As an outcome of the meeting, the four countries have decided to hold a new special session meeting scheduled for April 21st to discuss the Xayaburi Dam in further detail.

However, the Technical Review report for the Xayaburi Dam acknowledged the "uncertainty about the scale of impact on fisheries and associated livelihoods, both locally and in a transboundary context."

Mexico: The Eighth Encounter of the Mexican Movement of Dam-Affected People and in Defence of Rivers (MAPDER), held in Huitiupán, Chiapas in March 2011, culminated with the Huitiupán Declaration, in which the 441 delegates from affected towns and communities spoke out against the numerous hydroelectric dam projects in Mexico and Guatemala.

The declaration concludes with a call to draw on the historical memory of social struggles and the wisdom of the peoples in order to develop new forms of relations between human beings and nature, and to construct "self-managed alternatives that ensure the autonomy and control of our territories." Rivers for life, not for death! Water and energy are not commodities! Change the system, not the climate! Free rivers for free peoples! <u>http://www.otrosmundoschiapas.org/index.php/represas/68-represas/925-</u> declaracion-de-huitiupan-viii-encuentro-mapder.html **Brazil**: The National Encounter of Women Affected by Dams, organized by the Movement of Dam-Affected People (MAB) and Via Campesina, will take place in Brasilia this April. A report will be presented on violations of the human rights of the communities affected, and specifically the violations against women in those communities. Brazilian President Dilma Rousseff has been invited "to learn about this reality, looking us in the eye," said one of the organizers.

The encounter will also include the presentation of a "truly popular model of energy development" which does not place natural resources and communities at the service of corporations that appropriate these resources for their own profit. http://www.radiomundoreal.fm/Mirarse-a-los-ojos

Ethiopia: On March 22, marking World Water Day, almost 400 organizations have signed a petition against the massive hydro-electric Gibe III dam on the Omo River which will destroy the natural flood patterns so vital for the Omo tribes' cultivation methods as while as threatens at least eight tribes and about 300,000 people living around the Lake Turkana in Kenya. More on the Gibe III dam at Survival International: http://climate-connections.org/2011/03/22/world-water-day-global-outrage-over-ethiopia-mega-dam/

World: a documentary by International Rivers telling the stories of people from all around the world – India, Mexico, Brazil – whose way of life, livelihoods, and homes are threatened by the proliferation of mega-dams.

"A River Runs Through Us" is a personal and hopeful introduction to one of the biggest threats facing our world's lifelines, as told by the people at the forefront of the global movement. Filmed at Rivers for Life 3 -- a 2010 gathering of 350 river activists from 50 countries, held in rural Mexico -- this documentary touches on issues such as how climate change will affect rivers and dams; what happens to communities displaced by or living downstream of large dams; and what kinds of solutions exist that both preserve our life-giving waterways while meeting our needs for energy and water.

The film is here available in English: <u>http://www.internationalrivers.org/node/6218 and</u> <u>http://vimeo.com/19757591</u>

The Spanish version is here: <u>http://www.archive.org/details/ARiverRunsThroughUs</u>

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