

Flooding the Future: Hydropower and Cultural Survival in the Salween River Basin

In April 2004, Thailand's Energy Ministry and Burma's Ministry of Electric Power agreed to develop four of the proposed projects. Joint feasibility studies began this past fall, prompting representatives from several different Burmese ethnic groups to urge Thailand to reconsider.

*"If the dam is constructed blocking the river, not only will the Salween River stop flowing, but so will Shan history. Our culture will disappear as our houses, temples, and farms are flooded."*¹

–Shan refugee (2000)

"If the Wei Gyi Dam is built, it will not only stop the river. The Karen and Karenni will lose their homeland, farmland... and culture. The dam will only support the regime, not the indigenous peoples of Burma."

–Shwe Maung, a Karen man working in Thailand (2004)

These fears are on the verge of becoming true. After years of speculation, the Royal Thai Government and the State Peace and Development Council (SPDC), the military regime ruling Burma, appear poised to begin major construction on a series of large hydro-powered dams in the Salween River basin.² In April 2004, Thailand's Energy Ministry and Burma's Ministry of Electric Power agreed to develop four of the proposed projects. Joint feasibility studies began this past fall, prompting representatives from several different Burmese ethnic groups to urge Thailand to reconsider.³ Their concerns emphasized the environmental costs of these dams and the fact that electricity produced from them would be exported abroad instead of supplying local populations who endure serious energy shortages.⁴ Their pleas appear to have fallen on deaf ears.

Fortunately, the arrest of Khin Nyunt in October 2004 has fomented rather than ended the power struggle between different factions within the SPDC. As a result, the ongoing political turmoil inside the country has created a brief window of opportunity. But constructive action is needed quickly.

In December of 2004, newly appointed Prime Minister Lieutenant-General Soe Win received members of the International Monetary Fund (IMF), the World Bank (WB), and the Asia Development Bank (ADB) in Rangoon.⁵ While the details of the meeting are not currently known, it is widely rumored that these multi-lateral development banks are considering renewing aid, especially humanitarian forms of assistance, to the country.⁶ Should such aid begin, there will be little international leverage to stop or to modify plans for building large-scale hydropower dams along the Salween River.⁷

EarthRights International has conducted fact-finding on such development projects in Burma since 1996. Given our past findings – the Yadana/Yetagun Natural Gas Pipeline being just one prominent example – the dams are likely to result in severe human rights abuses and

environmental degradation. This article will summarize the findings of several recent studies on this highly contentious issue, and offers a series of recommendations for addressing them.

Background

Burma's potential capacity for generating hydroelectric power is vast, though still largely untapped. Despite the military regime's human rights record—Burma is amongst the worst governed and most repressive countries in the world today—international financial institutions and energy companies have become increasingly aggressive in the hopes of exploiting this resource. Dozens of large-scale dams (> fifteen meters in height) have been already built or are currently under construction throughout Burma, especially in the central region of the country.⁸ Existing hydroelectric dams now produce about one-third of the country's electricity, though demand continues to far outpace supply in most parts of the country.

Feasibility studies are presently being conducted for many more dams, most of which are slated to be built in border regions, such as eastern Burma, where gross human rights abuses remain commonplace.⁹ Alarming, many of these projects appear designed to supply non-local consumers as part of the Asian Development Bank's proposed "Mekong Power Grid."¹⁰ The Mekong Power Grid is intended to supply power to urban areas, especially in Thailand and in Vietnam. However, there is little in these plans to suggest that the Mekong Power Grid will actually promote more sustainable forms of economic development throughout the region.

For example, the Tasang Dam in southern Shan State, if completed, will have a projected installed capacity of 3,500 megawatts, an amount three times Burma's current levels of electricity consumption. But nearly all of the electricity generated from the Tasang Hydropower Project is to be sent to Thailand via high voltage transmission lines, even though it currently enjoys an energy surplus. Indeed, the country's power reserve was as high as forty percent according to the Electricity Generating Authority of Thailand (March 2003 figures).¹¹

Again, such figures undercut arguments that the Tasang Dam, much less a half-dozen of them along the Salween River Basin, is urgently needed to meet projected shortages. Rather, the proposed dams reflect the agendas of political, economic, and military elites and their perceived needs. While the ethnically diverse communities in Burma, whose livelihoods and cultural survival depends upon free-flowing rivers will suffer the costs of hydropower development, and receive few if any of its benefits.¹²

Damming the Salween

The Salween River is the longest free-running river in mainland Southeast Asia. The river originates on the Tibetan Plateau in the Himalayas and runs south through Yunnan Province of China. After entering Burma, the Salween River flows through the Shan, Karenni, Karen, and Mon States in the eastern part of the country before reaching the Andaman Sea. The river's total length is approximately 2,800 kilometers, second only to the Mekong River. Currently, eight dams and water diversion projects are planned on sections of the Salween River in Burma alone (see below). Another series of large-scale dams, thirteen in total, are slated to be built on sections of the river further upstream in China, even though the area has been designated a "World

Heritage Site” by UNESCO due to its rich biodiversity.¹³ In the past, large infrastructure projects in Burma have led to grave human rights abuses committed by the increasing presence of military units providing security for the projects. The Yadana gas pipeline in Karen State is a prime example of how militarization led to earth rights abuses, which eventually were taken to trial in U.S. courts under the Alien Tort Claims Act. (Click here to read more about the Yadana pipeline case and the recent settlement with Unocal in Burma).

“I would like to encourage foreign countries to think about how much suffering and destruction the building of the dam would cause for us. Without the dam, we already face many problems and struggle to survive. If the dam were to be built, I don’t think we will be able to survive anymore.”

Elderly Karen Villager
(September 2003)¹⁴



Details of Planned Dams¹⁵

Name of Dam	Location in Burma	Megawatts (Estimated)	Status
Name unknown	Shan State	3,200	Proposed
Upper Tasang & Lower Tasang	Shan State	3,300-3,600	Feasibility Study Complete; Some Construction Underway
Name unknown	Shan State	4,000	Proposed
Weigyi	Karen State	4,540	Preliminary Studies Complete;

			Preparing Construction
Dagwin	Karen State	792	Preliminary Studies Complete; Preparing Construction
Hutgyi (a)	Karen State	5,850	Proposed
Hutgyi (b)	Karen State	6,000	Proposed
Hutgyi (c)	Karen State	10,000	Proposed

At present, ERI is most concerned about the following dams: 1) Tasang; 2) Weigyi; and 3) Dagwin, as some preparation for construction has already begun. To date, public participation has been completely absent surrounding these three dam projects, and any impact assessments, if conducted, remains closely guarded secrets. Importantly, the three dams are intimately connected to ongoing counter-insurgency campaigns carried out by the Burmese military in Shan, Karenni, and Karen States. ERI has gathered eyewitness testimonies that indicate human rights abuses are widespread in the areas surrounding these three sites as well. Forced labor and portering have already been linked to the three dams and their security.¹⁶ A summary of the situation follows:

Shan State

- *Militarization*: Since 1996, the Burmese military has implemented a forced relocation program of unprecedented scale to end support for the Shan State Army. Numerous studies have documented the Burmese military's deliberate use of rape and sexual assault against Shan women as well as women from other ethnic groups, which has been a central component of t¹⁷ his counter-insurgency strategy. Currently, at least seventeen army battalions are now based in the area around the Tasang Dam site according to local sources.¹⁸
- *Depopulation*: Over 365,000 people have been forcibly relocated either to or in Shan State, many of whom now live in 176 relocation sites controlled by the Burmese military. Shan State also has the largest number of internally displaced people in the country; recent estimates place the figure at 275,000.¹⁹ At least 2,000 of these households lived near the Tasang Dam site, prompting charges that they were moved so the SPDC would not have to pay land compensation claims later.²⁰
- *Catastrophic collapse*: The concrete-faced rockfill dam would be 188-193 meters high, making it the highest dam in mainland Southeast Asia. The reservoir is expected to flood an area of at least 640 square kilometers.²¹ The sheer size of both raises the possibility of collapse, as the dam is built in a region where earthquakes regularly occur.
- *Greater food insecurity*: The same reservoir will flood productive farmland in low-lying valleys. Such arable land is in very scarce supply in Shan State due to its mountainous terrain. A considerable portion of the water, which will hold one-third of the Salween River's average annual flow, is also likely to be diverted directly to Thailand.²² The reduced flow will adversely affect Burmese communities living downstream in a variety of ways.

Karen State

- *Militarization*: Between 1992 and 2004, the number of army garrisons in Papun District, where the Weigyi Dagwin Dams will be located, increased from ten to fifty-four. Of these, a dozen are located around the dam sites.²³
- *Depopulation*: Between 1992 and 2004, 210 villages in Papun District have been destroyed. Of the 85 village in areas close to the two dam sites, only a quarter remain. Former residents were either forcibly moved to one of 31 relocation sites controlled by the army, where forced labor and other human rights abuses are common. Alternatively, they became an internally displaced person (IDP) trying to survive in the jungle, or fled to Thailand.²⁴
- *Increased Environmental Degradation*: New road construction to the dam sites will facilitate illegal logging, gold mining, and hunting in the Upper Mae Tha Lot Forest Reservation, the Dar Gwin Forest Reservation, and the Dar Gwin Wildlife Sanctuary.²⁵
- *Greater food insecurity*: The reservoir from the Weigyi Dam alone is expected to stretch 380 kilometers upstream, which will force villages in Karen State and Karenni State to relocate. More seriously, the reservoir will inundate one of the two main wet-rice producing areas in Karen and Karenni States. Given the loss of this important food source and the large numbers of troops in the area, food security for ordinary people, especially Karenni, is expected to decline significantly.²⁶

Over the past several years, the International Labor Organization (ILO) has taken unprecedented action against the SPDC in the effort to curtail the continued use of forced labor by the Burmese military, but to little effect. Given the regime's abysmal record on this issue, the increased militarization of the areas surrounding the Tasang, Weigyi, and Dagwin Dams, suggests that history is likely to repeat itself. But this time, the scale of the abuse is likely to be far larger than seen in the past.

If the projects go ahead as currently planned, tens of thousands of people will need to be relocated. People currently living in forced relocation sites under military control near the sites are also at great risk. Many of them are likely to be forced to help construct a dam that will provide them with little or no material benefits. Credible accounts of rape, torture, and extra-judicial killings, currently common now, will also increase.

Conclusions

While hydropower projects have brought economic benefits, they have also adversely affected millions of people worldwide who depend upon rivers for their survival. These projects have irreversibly damaged ecosystems and led to the loss of livelihoods, cultures, and the rights of populations displaced by dams. All of the dam projects proposed for the Salween River basin in Burma fail to meet the standards established by the World Commission in Dams, particularly those related to open and transparent decision-making.²⁷ In every instance, advocates for the dams have failed to include the affected communities in the decision-making process, which

raises concerns that profits are again being put before local interests and needs.

The projects also fail to meet the basic principle of distributive justice, which is embedded in the notion of sustainable development and other rights-based approaches. Sustainability, according to the 1980 World Commission on Environment and Development, cannot be achieved if policies do not consider the ramifications of resource accessibility and the equitable distribution of benefits and burdens across all affected stakeholders, including non-human ones.²⁸

Current conditions inside Burma do not permit any of the above principles to be honored.

For these reasons, further construction should be halted until other, less destructive options, can be explored, discussed, and agreed upon by all the stakeholders.

Recommendations

To the State Peace and Development Council (SPDC):

- Release Daw Aung San Suu Kyi and other members of the National League for Democracy still under house arrest or in prison for political reasons.
- Begin a credible tripartite dialogue to create a legitimate roadmap for democratization with specific criteria, timetable and milestones for measuring progress.
- Review and revise criminal laws listed above relating to freedom of nonviolent expression and association as defined in articles 19 and 20 of the Universal Declaration of Human Rights (1948).
- Accede to the following international human rights treaties: the International Covenant on Economic, Social and Cultural Rights; the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, and its Optional Protocol as well as the ILO Convention on Forced Labor No. 105.
- Require social and environmental impact assessments to be conducted by a qualified and neutral agency for all large-scale development projects.
- Conduct all matters related to the development of hydropower in a transparent and open manner, which includes the meaningful involvement of local people in the decision-making process.

To the International Labor Organization (ILO):

- Call on its members to review their relations with Rangoon, especially that engage the regime through their involvement in hydropower development. Pressure the following to cease providing technical and financial assistance to the dams: Nippon Koei (Japan); World Impact Co.; the Electric Power Development Corporation (Japan); the Japan Bank for International Cooperation; the Japan International Cooperation Agency; the Electrical Generating Authority of Thailand; and the Asian Development Bank.
- Call on international bodies, such as other UN agencies, and multilateral development banks to review their activities in Burma.

To Multi-Lateral Banks:

- The Asian Development Bank should cease providing technical assistance to Burma via the Greater Mekong Subregion Scheme and soliciting funds connected to the Tasang Dam. Additionally, the Asian Development Bank should immediately expel the regime's representative serving on its Board of Executive Directors.
- The World Bank should not engage with the SPDC nor support development projects in Burma due to the military regime's history of human rights abuses, including the pervasive use of forced labor.
- International financial institutions should reject all grants to develop large-scale hydropower development in Burma until democratic rule is restored and mechanisms are in place for ordinary people to participate in decision-making, which would include a functioning framework for transboundary watershed governance.
- Any humanitarian assistance awarded to the country should not include funds or technical assistance for large-scale hydropower development in Burma.

To Non-Governmental Organizations (NGOs):

- Publicly support the ILO towards taking the above steps.
- Apply pressure on government agencies and companies in Thailand and Japan, urging them from moving forward with the proposed dams on the Salween River.
- Lobby elected officials in your countries of origin to lodge diplomatic protests via formal government channels and the United Nations.
- Work in collaboration with Burmese organizations and civil society groups to develop alternate plans to large-scale dams. Such plans should:
 - promote the more effective utilization of existing power plants;
 - seek to reduce overall power consumption;
 - improve demand-size management; to develop more "clean" energy through small-scale projects (e.g. biomass, wind, solar, geothermal, rainwater harvesting techniques, and mini-hydro power);
- decentralize water management through the greater use of small-scale reservoirs and forms of water storage;
- prevent wastage in existing irrigation systems by fixing leaks and limiting evaporation.
- Draft mechanisms for transboundary watershed governance that include economic and other instruments to promote sustainable use, legal and regulatory frameworks for allocating river rights, and so on.
- Prepare and disseminate information in local languages regarding legal rights.

For further information on the Salween River:

Burma Issues

www.burmaissues.org

Friends Without Borders

www.friends-withoutborders.org

International Rivers Network
www.irn.org

Mekong Watch
www.mekongwatch.org

Salween News Network
www.salweenews.org

Salween Watch
www.salweenwatch.org

Southeast Asia Rivers Network
www.searin.org

Shan Herald Agency for News
www.shanland.org

Shan Women's Action Network (SWAN)
www.shanwomen.org

Karen Rivers Watch
http://www.freewebs.com/ka_rw2003/

¹ EarthRights International (ERI), *Fatally Flawed: The Tasang Dam on the Salween River* (Chiang Mai: ERI, 2001).

² Pradit Ruangdit, "Ties with Burma: No Backing for Rebels, PM Tells Junta," *Bangkok Post* (26 August 2004).

³ Piyaporn Wongruang, "Plea to Stop Supporting Salween Dam Projects," *Bangkok Post* (11 November 2004).

⁴ The Baluchaung / Lawpita Hydro-power Plant in Karenni State offers an excellent example of how local populations bear the high costs of such projects but reap few of the benefits. All electricity from the site is sent to Rangoon and Mandalay. Salween Watch & et al., *The Salween Under Threat: Damming the Longest Free River in Southeast Asia* (Chiang Mai: October 2004), p. 40-1. RWESA, "Baluchaung Hydropower Plant No. 2 Proposed Principles and Scope for Human Rights and Environmental Survey to the Ministry of Foreign Affairs, Japan" available at <http://www.rwesa.org/document/baluchaung.pdf>.

⁵ Prime Minister receives officials of IMF, WB and ADB," (14 December 2004) available at

http://www.myanmar.com/nlm/enlm/Dec15_h3.html. For further background, see Bank Information Center, "Status of Burma at the MDBs," available at http://www.bicusa.org/bicusa/issues/status_of_burma_at_the_mdbs/index.php.

⁶ Yuki Akimoto, "The Multilateral Banks and Burma," *The Irrawaddy* 2004 (12)4 available at <http://www.irrawaddy.org/database/2004/vol12.4/guest.html>.

⁷ For example, in 2001, the Government of Japan provided a US\$ 28.6 million grant to reconstruct turbines for the Baluchaung hydropower dam, arguing that the electricity it generated supplied hospitals in the country. The grant, which was the largest aid package since the 1988 crackdown on pro-democracy demonstrators, was widely seen to be a reward provided to the regime for renewing negotiations with Daw Aung San Suu Kyi. See Thomas Crampton, "Japan Rewards Burma for Political Opening," *International Herald Tribune* (26 April 2001). Credible reports indicate that forced labor remains common around the dam. See ERI, "Japanese ODA to Baluchaung Hydroelectric Power Plant in Burma," available [here](#).

⁸ In recent years, over 160 dams have been hastily built across the country. This figure was reported in the *Myanmar Times* (2 October 2004). For a current map of hydropower projects in Burma, see <http://www.burmainfo.org/env/DamMapBurma.jpg>.

⁹ For a recent overview, see Amnesty International, *Myanmar: Lack of Security in Counter-Insurgency Areas* (London: AI, 2002).

¹⁰ For details on the Asian Development Bank's proposed Mekong Power Grid, see Bank Information Center, "Quiet but Steady: The Asian Development Bank's Support for Burma," available at http://www.bicusa.org/bicusa/issues/misc_resources/1322.php. See also International Rivers Network, "Trading Away the Future: The Mekong Power Grid," available at www.irn.org/programs/mekong/030620.powergrid-bp.pdf.

¹¹ Cited in Salween Watch & et al., *The Salween Under Threat: Damming the Longest Free River in Southeast Asia* (Chiang Mai: October 2004), p. 73. See also ERI, "Fatally Flawed: The Tasang Dam on the Salween River" (2002) available at [here](#); ERI, "Stop Construction of Planned Tasang Dam," (April 2004) available [here](#).

¹² For details, see Yuki Akimoto, "Hydro-Powering the Regime," *Irrawaddy* (30 June 2004).

¹³ On the proposed dams, see ERI's "Lancang/Mekong and Nu/Salween Rivers: Promoting Regional Watershed Governance Distributive Justice for Downstream Burmese Communities" (ERI Report, September 2004) available at [a pdf 197.35 Kb](#). On the UNESCO designation, see UNESCO. Decisions Adopted by the 27th Session of the World Heritage Committee in 2003. Available at <http://whc.unesco.org/archive/decrec03.htm#dec8-c-4>. For environmental details, see also UNEP and WCMC, "Three Parallel Rivers of Yunnan Protected Areas," (10 August 2004), available at http://www.unep-wcmc.org/sites/wh/Three_Parallel.html.

¹⁴ Karen Rivers Watch, *Damming at Gunpoint* (Kathoolei: KRW, November 2004), p. 68.

¹⁵ See Salween Watch, SEA Rivers Network, and the Center for Social Development Studies, *The Salween Watch Under Threat* (Chiang Mai, October 2004), p. 7.

¹⁶ See ERI, “Overview of the Planned Tasang Dam,” available [here](#) . Evidence of similar problems in Karen State is submitted to the International Labor Organization on a periodic basis. These reports can be found at “Burma Project,” [here](#) .

¹⁷ See, e.g., Human Rights Watch. *Out of Sight, Out of Mind: New Thai Policy Toward Burmese Refugees and Migrants* (New York: HRW, 2004); Shan Human Rights Foundation and Shan Women's Action Network, *License to Rape: The Burmese Military Regime's Use of Sexual Violence in the Ongoing War in Shan State, Burma* (Chiang Mai: SHRF and SWAN, 2002); B. Apple and V. Martin, *No Safe Place: Burma's Army and the Rape of Ethnic Women* (Washington D.C.: Refugee International, 2003).

¹⁸ An army battalion usually consists of five hundred troops in Burma.

¹⁹ Burmese Border Consortium (BBC). *Internally Displaced People and Relocation Sites in Eastern Burma* (Bangkok: BBC, September 2002), available at [http://www.ibiblio.org/obl/docs/BBC_Relocation_Site_Report_\(11-9-02\).htm](http://www.ibiblio.org/obl/docs/BBC_Relocation_Site_Report_(11-9-02).htm);

²⁰ Salween Watch & et al., *The Salween Under Threat* (Chiang Mai: Salween Watch, October 2004), pp. 47-49

²¹ C. Vacharasinthu and M.S. Babel. *Hydropower Potential and Water Diversion from the Salween Basin*. Paper presented from the Workshop on Transboundary Waters: The Salween Basin held in Chiang Mai, Thailand (September 1999).

²² Salween Watch & et al., *The Salween Under Threat*, pp. 65-69.

²³ Karen Rivers Watch, *Damming at Gunpoint* (Kathoolei: KRW, November 2004), pp. 30-31

²⁴ *Ibid.*, pp. 1, 34, 35.

²⁵ Compare the maps in *Ibid.*, pp. 21, 23.

²⁶ Compare the maps in *Ibid.*, pp. 55, 64.

²⁷ World Commission on Dams. *Dams and Development: A New Framework for Decision-Making* (Earthscan Publications, 2000), p. 217. See also, “The World Commission on Dams: A New Framework for Decision-Making” available at <http://www.irn.org/programs/mekong/gmskit/01.wcdfactsheet.pdf>.

²⁸ WCED. *Our Common Future* (Oxford: Oxford University Press, 1980); R. Kuehn. A Taxonomy of Environmental Justice. *Environmental Law Reporter* (2000)