Reckless Endangerment

Assessing Responsibility for the Xe Pian-Xe Namnoy Dam Collapse
This report is dedicated to those who perished in the Xe Pian-Xe Namnoy tragedy, their loved ones, and to the many others who have suffered adverse impacts due to this project, largely without recognition or redress.

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Executive Summary

Xe Pian-Xe Namnoy is a 410-megawatt hydropower complex under construction in the Xekong River basin in southern Laos. On July 23, 2018, one of the complex’s auxiliary dams collapsed, unleashing a wall of water that killed at least 71 people and flooded thousands of homes and family farms. The floodwaters reached into northern Cambodia, destroying crops and property some 80 kilometers away.

One year later, close to 5,000 Lao villagers made homeless by the disaster remain displaced and live in temporary camps, surviving hand to mouth on meager rations and daily allowances. After surviving the loss of their homes, loved ones and farms, they are being traumatized yet again by being denied adequate food, housing and dignity in the camps. Most are unable to return to their homes, and their futures remain highly uncertain. Thousands more people have suffered damage to property and have not been compensated.

To date, no one has been held accountable for the catastrophe. Yet a growing body of evidence suggests that the dam’s lead developer and builder, the Korean firm SK Engineering & Construction, may have caused the collapse by cutting corners in order to maximize profits. An independent investigation commissioned by the Lao government has ruled out force majeure, or an unforeseeable “act of god” such as a natural disaster, as the cause of the collapse. Korean media have reported that SK Engineering & Construction significantly altered the design of the project, including by lowering the walls of the collapsed auxiliary dam, in order to save money. A Stanford University researcher found that the failed dam was built on a sinkhole. SK Engineering & Construction has denied responsibility.

Regardless of the scope of SK Engineering & Construction’s apparent negligence, the Korean firm did not develop and finance the USD1.02 billion project alone. Three other firms joined SK Engineering & Construction in a private-sector consortium that contributed USD306 million to the project: Korea Western Power, Ratchaburi Electricity Generating Holding of Thailand, and the Lao government-owned Lao State Holding Enterprise. Ratchaburi Electricity Generating Holding, in addition to being a developer, was the project’s construction supervisor, making it directly responsible for oversight of SK Engineering & Construction’s work.

The Lao government was not just a developer of the project through Lao State Holding Enterprise; it also holds the ultimate authority for overseeing a project located within its borders.

A number of other entities helped fund the project and get it off the ground. Four Thai banks, Krung Thai Bank, Ayudhya Bank, Thanachart Bank and the Export-Import Bank of Thailand, loaned the developers USD714 million to build it. The law firm that structured the loan publicly disclosed the behind-the-scenes role played by the Asian Development Bank in moving the project forward, including by contractually committing to refinance part of the loan at a later date.

The Korean government and Thai governments also backed the project through entities they control. The Korean government provided a loan to the Lao government to develop the project, and it owns a number of shareholders of the dam’s developers. Meanwhile, the Thai government owns the major buyer of the dam’s electricity, one of the banks that provided the project loan, and shareholders of the Thai developer.

A project of this scale and risk needed a sizeable amount of insurance coverage to get off the ground. Most of that insurance protected the developers and banks. But USD50 million in liability coverage, backed by the U.S. firm AIG and the Korean insurers Samsung Fire & Marine and Korean Re, covers losses suffered by third parties. The displaced Lao villagers, many of whom lost everything, are largely unaware of the coverage. Even if they knew about it, making claims in a country where the judiciary lacks independence and repression is pervasive could prove perilous.

All of these actors have enabled the project to varying degrees. And all will profit from it—in some cases for years to come. Under international law and human rights frameworks, they bear responsibility for the suffering the collapsed dam has caused.
Entities that enabled and profit from Xe Pian-Xe Namnoy must take the following actions to ensure that adequate remediation is provided:

- **The Lao and Cambodian governments** should ensure people affected by the collapse have access to effective remedy through judicial and/or non-judicial grievance mechanisms, as appropriate. The Lao government should also ensure that conditions at the camps holding displaced people are immediately improved and that people are allowed to return to their former villages and land if they wish.

- **The Korean and Thai governments**, which backed the project through entities they control, should ensure affected people have access to effective remedy, including judicial remedy, and ensure that responsible corporations domiciled in their jurisdictions are held accountable.

- **SK Engineering & Construction and Ratchaburi Electricity Generating Holding** should establish a fund and an accessible claims process through which affected people in Laos and Cambodia can receive adequate compensation payments and restitution for the damage and harm caused. Compensation must be adequate to cover all of the losses and harms suffered due to the Xe Pian-Xe Namnoy project and include a process to fully restore community lives and livelihoods.

- **Xe Pian-Xe Namnoy Power Company Ltd.**, the joint venture created to develop the project, and the debt investors **Krung Thai Bank, Ayudhya Bank, Thanachart Bank** and the **Export-Import Bank of Thailand** should contribute to the fund and the establishment of the claims process.

- **AON Thailand**, the project’s insurance advisor, along with **AIG, Korean Re, Samsung Fire & Marine** and **Asia Capital Re**, should cooperate with their clients, the developers of the dam, to establish an insurance claims process, making the USD50 million in liability coverage directly available to claimants.

- **All shareholders of the four developers** of the dam should use their leverage with the companies to ensure adequate redress.
1. The Dam Collapse: “Suddenly There Was Water Pouring in from All Directions”

On the evening of July 23, 2018, an auxiliary dam in the Xe Pian-Xe Namnoy hydropower complex collapsed in rural Champasak Province in southern Laos. The collapse unleashed millions of cubic meters of water, enough to submerge an area the size of Manhattan with 28 feet of water. The sudden flood, carrying tons of mud and debris, inundated entire villages and engulfed thousands of people downstream, who received little or no advance warning.
More than 7,000 people in Sanamxai District, Attapeu Province, were displaced as their villages, homes and land were washed away. A total of 19 villages were affected. The official toll of those dead and missing is 71. Due to a lack of transparent surveying, the true number of lives lost may never be known. Survivors report being informed of the threat just hours before the incident, leaving little time to evacuate. Many of those affected say that they did not know of the existence of the huge hydropower project upstream until they were inundated by the floodwaters. Reports later showed that the dam company and local authorities had information that cracks were forming in the dam days before it collapsed. Yet they failed to act in time.

As the floodwaters subsided, homes, farmland, forests and wetlands were left buried in thick mud and sediment. Many who managed to escape were stranded on rooftops, in trees and on higher ground awaiting rescue. The search for the stranded and missing continued for days, impeded by the challenge of traversing the thick mud and accessing isolated and forested areas. Survivors took refuge in temporary camps, where many still remain a year after the disaster. They have been traumatized by the sudden appearance of the rushing wall of water and the heart-wrenching loss of family members and neighbors, together with homes, property, land and entire villages.

Across the border in Cambodia, an estimated 15,000 people in Stung Treng Province were also affected by the dam collapse. Water released by the collapse flowed from the Xe Pian River into the Xekong River, leading to heavy flooding in the northern Cambodian province. The flooding submerged homes and farmland along the river’s banks, destroying livestock and property and damaging fisheries. While no lives were lost in Cambodia, the provincial government temporarily evacuated more than 5,600 people from their homes.

Cambodians affected by the collapse have received limited assistance and no compensation.

Voices of Survivors

“I saw dead bodies floating by. It was something I never imagined I would have to see in my life. There was no warning at all. Suddenly water was pouring in from all directions. I fought to survive and to help others, but my sister and her family are still missing. My sister is Noy. She’s about 17 years old and has a new baby. I am going back to look for her. She might still be alive, and cold, hungry and thirsty. We’ve lost everything, and we have nothing left. I hope our government will feel our loss and help us.” (Ms. Mai)

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3 Ian G. Baird, site visit and community interviews, May and July 2019.
5 Oxfam Cambodia, Situation Report #1. ‘Transboundary flash floods from Xe Pian-Xe Namnoy dam collapse in Laos to Cambodia’s northern region’. 26 July 2018.
6 Ibid.
7 Testimony from survivors collected by two Lao nationals who requested to remain anonymous. The names of those providing testimony have been changed for confidentiality. These stories were also printed in: The Asia Times. ‘Brightness Turns To Dark: Stories from Survivors of the Lao Dam Collapse’. 6 August 2018. &lt;http://cms.ati.ms/2018/08/brightness-turns-to-dark/stories-from-survivors-of-laos-dam-collapse/&gt;
2. Xe Pian-Xe Namnoy and Hydropower in Laos

Spanning parts of Champasak and Attapeu provinces in southern Laos, the 410-megawatt Xe Pian-Xe Namnoy hydropower project is a massive trans-basin water diversion complex under construction on the Xe Pian and Xe Namnoy watersheds in the Xekong River basin.

The project consists of three main dams and a large storage reservoir on the Xe Namnoy River enclosed by five auxiliary (or "saddle") dams, which are used to reinforce the boundaries of the reservoir. The reservoir is 73 meters high and 1,600 meters long, with capacity to store 1,043 million cubic meters of water. The project also includes underground tunnels and waterways, including a 16-kilometer tunnel to discharge water into the transboundary Xekong River, which flows from Laos into Cambodia.8

When saddle dam D collapsed in July 2018, work on the Xe Pian-Xe Namnoy project was approximately 90% complete. Despite ongoing safety concerns and lack of accountability for the devastation wrought by the collapse, construction resumed a short time later. The project is expected to be operational in late 2019.9

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8 Power Technology, 'Xe Pian-Xe Namnoy Hydroelectric Power Project'. <https://www.power-technology.com/projects/xe-pian-xe-namnoy-hydroelectric-power-project/>

Development of the Xe Pian-Xe Namnoy Project

The Xe Pian-Xe Namnoy project was initiated over 25 years ago. At the time, the Lao government, having recently opened up the country to foreign investment, was exploring large-scale hydropower development and electricity export as a means to transform the economy and facilitate economic growth.

In 1994, a Korean conglomerate, Dong Ah Construction, began exploring the possibility of developing a dam in the Xe Pian and Xe Namnoy watersheds that would supply electricity to Thailand. But by 1998, the project developer was facing financial troubles and the Asian financial crisis had unfolded across the region. Following some initial construction work and resettlement of a number of villages in the area, progress on the project ground to a halt.

The project was not revived until 2006, when the current developers signed an agreement to study the project with the Lao government. Construction on the project finally recommenced in 2013. At the time of the saddle dam collapse, construction was mostly complete and commercial operation was expected to commence by the end of 2018.

Project Timeline

2006: New memorandum of understanding for the Xe Pian–Xe Namnoy project signed.
2007: Environmental and social impact assessments initiated by Thailand's TEAM Consulting.
2010: Environmental and social impact assessment studies submitted to the Lao Water Resources and Environmental Agency, which sent back comments and requests for further information (later addressed in final reports prepared by the Lao Consulting Group).
2011: Project concession agreement finalized.
2012: Xe Pian-Xe Namnoy Power Company, the Lao-registered joint venture developing the project, approached the Asian Development Bank (ADB) and International Finance Corporation (IFC) for an investment loan. IFC/ADB contracted an international consultant to carry out a due diligence assessment and issue findings related to additional requirements for the project to comply with IFC Performance Standards and ADB Safeguards. Xe Pian-Xe Namnoy Power Company contracted the Lao Consulting Group to carry out additional studies for the purposes of IFC/ADB safeguards compliance. The findings of the IFC/ADB assessment informed the terms of reference for the Lao Consulting Group study.
Late 2012: Xe Pian-Xe Namnoy Power Company moved forward with alternative financing and insurance from Thai, Korean and Singaporean investors.
February 2013: Power purchase agreement signed for 370MW for sale to the Electricity Generating Authority of Thailand and remaining 40MW to Electricity du Laos over a 27-year concession period.
2013: Construction commenced.

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10 Comments from WREA included: lack of baseline data specific to project-affected ecosystems, lack of mitigation measures considered for affected biodiversity areas, lack of studies and consideration of ongoing mining in the area, lack of rationale for the project and specific project site, lack of consideration of ways to stabilize reservoir banks or to respond to sedimentation issues, inadequate information about project affected communities and provisions for drinking water, lack of sufficient compensation considered per household, no contingency fund allocated to correct problems during construction or operation stages. Team Consulting, Environmental Impact Assessment: Final Report. Chapter 1, Introduction, pages 1.2-1.11. <http://www.pnpclaos.com/images/PDF/EnvSocialDoc/EnvImpactAssessment/Chapter1/PNPC_EIA_Chap01_Introduction_Final.pdf>

11 The final assessments conducted by LCG are available on the Xe Pian-Xe Namnoy Power Co. Ltd. website. However, not all studies have been made publicly available, in particular assessment chapters relating to social impacts and resettlement. <http://www.pnpclaos.com/index.php/en/environmental-social/control-documents>

Twenty Years of Suffering

Prior to the collapse of saddle dam D, the Xe Pian-Xe Namnoy project had already caused significant social and environmental damage and infringed on the human rights of local communities. These violations date from the first incarnation of the project and included the forced resettlement of 10 indigenous Nya Heun (or Heuny) communities out of the project catchment and reservoir area on the eastern side of the Bolaven Plateau in Paksong District, Champasak Province, to a resettlement area known as Ban Chat San. There they faced abysmal conditions: a lack of suitable land for farming or livestock raising, insufficient water, and conflicts with neighboring villages, upon whose traditional lands they had been resettled. This led to severe food security concerns—sometimes, in the absence of assistance from the project developers, international relief agencies provided food aid to the resettled villagers. Following the suspension of Xe Pian-Xe Namnoy in 1998, and despite government prohibitions, many of these people slowly returned to their former village sites and fields so as to resume their traditional subsistence agricultural and forestry-based livelihoods.

When Xe Pian-Xe Namnoy recommenced construction in 2013, villagers from these 10 communities, plus two more that had resisted the initial resettlement, faced a second traumatic relocation back to the original resettlement site. In a 2013 visit to this resettlement area, researchers found that people were struggling with a lack of access to sufficient food, water and land. During interviews, locals reported not being properly consulted or informed by the developers about the impacts of the impending project on their housing, agricultural land and forests, and fishing livelihoods.

More recently, as project construction proceeded, the damming and diversion of the Xe Pian River’s headwaters into the project reservoir caused a de-watering of the river. This adversely affected the fisheries-based livelihoods and food security of ethnic Jrou Dak (Laven Nam) indigenous people and the ethnic Lao people who live downstream in Sanamxay District, Attapeu Province. These are the same people who then faced the inundation of their communities in the dam collapse. A 1995 draft study commissioned by the Wildlife Conservation Society estimated that a minimum of 19 villages would suffer significant fishery losses from the construction of the Xe Pian-Xe Namnoy project. However, these downstream impacts were never properly acknowledged or mitigated for by the developers in subsequent planning.

The Laos Hydropower Surge

Xe Pian-Xe Namnoy is one of many hydropower dams currently under construction in Laos, as part of the government’s plan to transform the country through hydropower development and export to neighboring countries. As of May 2019, the Lao government reported having 63 operational hydropower plants with a total installed capacity of 7,213 megawatts, an additional 112 under construction projects with a total installed capacity of 7,598 megawatts, and a further 340 planned projects with a combined installed capacity of 19,494 megawatts.

Growth in the Lao hydropower sector is largely driven by demand for electricity in neighboring countries, in particular Thailand, and to a lesser extent Vietnam and Cambodia, and more recently Malaysia and Singapore. The government’s hydropower expansion plans are aimed at generating export revenues to drive economic development and alleviate poverty. The advance of the hydropower sector in Laos has been supported by a range of actors. These include multilateral development banks, in particular the World Bank and its private sector lending arm, the International Finance Corporation, and the Asian Development Bank, together with a host of bilateral donors and international and domestic investors, developers and construction companies [for more on the role of the Asian Development Bank and multilateral development banks, see Section 6].

Following the Xe Pian-Xe Namnoy dam collapse, the Lao government announced a moratorium on new hydropower investments pending a review of the country’s hydropower strategy. However, this suspension only applied to projects that have not yet secured preliminary agreements. To date, 13

13 These conditions were first described in the publication: International Rivers Network. ‘Power Struggle: the Impacts of Hydro Development in Laos’. February 1999. <http://www.internationalrivers.org/sites/default/files/attached-files/powerstruggle.hires_.pdf>. They were subsequently detailed in a number of reports and journal articles, such as Baird, Ian G. 2013. Remembering old homes: The Houay Ho Dam, the resettlement of the Heuny (Nya Heun), and the struggle for space. Pages 241-263 in Oliver Tappe and Vaththa Pholsena (eds.), Interactions with a Violent Past: Reading Post-Conflict Landscapes in Cambodia, Laos, and Vietnam. University of Singapore Press, Singapore.
14 Ibid (Baird 2013).
there is little evidence of an overall rethinking or change to the policy.\textsuperscript{21}

Despite the stated objective of poverty alleviation, observers have questioned the extent to which hydropower construction in Laos has truly benefited local people, especially those communities who bear the direct cost of the projects’ environmental impacts. The country’s growth-driven development strategies, including those in the hydropower sector, have increased poverty for sectors of the population by depriving people of their access to land, livelihoods and resources.\textsuperscript{22}

Following a recent visit to Laos in March 2019, the United Nations Special Rapporteur on Human Rights and Extreme Poverty highlighted the vulnerability of local populations to the adverse impacts of large dams and other infrastructure projects. He emphasized that this vulnerability is heightened by social and political conditions that constrain affected people’s ability to speak out and access mechanisms to assert their rights. This includes:

- “…the absence of meaningful complaint mechanisms, the marginality of the judicial system for anything to do with people’s rights, the comprehensive government management of the media, the tight regulation of any potentially independent civil society, and the firm leash kept on foreign aid. The result is that efforts to promote meaningful consultation, to encourage participation in decision-making, to enlist genuine advice and criticism, or to propose alternative approaches, are all rendered difficult, if not impossible.”\textsuperscript{23}

While environmental and social standards for large dams have proliferated on paper, implementation has lagged and concerns abound over the ability of authorities to properly monitor and enforce regulatory requirements. Many dam projects in Laos bear significant social and environmental costs, yet impacts are often downplayed or obscured by project developers and in developer-commissioned impact assessments, enabling them to elude accountability for widespread and long-term damage to ecosystems and local communities.

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Voices of Survivors

“I heard the water coming from the north end of the village. It sounded like a strong wind. My husband grabbed our six-year-old son, and the three of us jumped from the house into our boat. But the boat had been damaged by the floodwaters. We looked at one another, no idea what to do, as fear set in. My husband was swept one way, my son the other way, and I drifted further and further from them. I shouted to my son, ‘Hold on to that tree, hold it tight! We’ll come for you soon!’ My little boy tried his best to hold on to the tree, but the water was coming too fast and he was washed away. Luckily, he managed to grab on to an electric pole. A neighbor came by with his boat and helped us all on to the roof of a house.” (Ms. Chanhdee)

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\textsuperscript{23} Ibid, p. 2.
3. Who is Behind the Project? Developers and Financiers

Xe Pian-Xe Namnoy is being developed under a build, operate and transfer (BOT) model. This means that a private-sector consortium will oversee the construction of the dam and operate it for 27 years, before transferring ownership to the Lao government. During the period that they control the dam, the consortium members will collect revenue and generate profit from it. Most hydropower projects built in Laos are developed under the BOT model.

The USD1.02 billion project is being funded through a combination of debt and equity financing. A 20-year, USD714 million syndicated loan from four Thai banks is covering 70% of the cost of the project's construction. The lending syndicate is composed of four Thai banks: the commercial banks Krung Thai Bank, Ayudhya Bank and Thanachart Bank, along with the Export-Import Bank of Thailand, the government's export credit agency.

The remaining 30%, or roughly USD306 million, is being provided by the project's four developers, each of which has taken an equity stake in a Laos-registered joint venture. That joint venture, Xe Pian-Xe Namnoy Power Company Ltd., is building and will operate the dam. The four consortium members that hold equity stakes in the project are:

**SK Engineering & Construction**, with a 26% stake, is a subsidiary of the large multinational Korean conglomerate SK Group. The consortium members selected SK Engineering & Construction to be the project's engineering, procurement and construction (EPC) contractor, which means it is in charge of designing and building the dam, for which it will receive a substantial fee.

**Korea Western Electric Power Co.**, with a 25% stake, is a subsidiary of Korea's publicly listed national electricity utility, Korea Electric Power Corporation. The consortium members selected Korea Western Electric Power to be the project's operations and maintenance contractor, which means it is responsible for running the dam when it becomes operational.

**Ratchaburi Electricity Generating Holding Public Company**, with a 25% stake, is a publicly traded Thai corporation. Ratchaburi is also the project's construction supervisor, making it responsible for oversight of SK Engineering & Construction's EPC work.

**Lao Holding State Enterprise**, with a 24% stake, is fully owned by the Lao government. The company operates as a holding company through which the Lao government buys equity stakes in privately developed infrastructure projects. Lao State Holding Enterprise also acts as the dam's administrative supervisor.

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Reckless Endangerment

Assessing responsibility for the Xe Pian-Xe Namnoy Dam Collapse
One year after the collapse, approximately 5,000 displaced people from six of the hardest-hit villages are still living in limbo in temporary camps.

Life is miserable in the displacement camps, according to people interviewed during recent site visits. For months following the tragedy, some survivors continued to live in tents provided in the emergency response by international aid agencies. All of the displaced people are now living in small, prefabricated metal structures. These houses lack appropriate areas for cooking, eating and sleeping. They are crowded, have limited ventilation and are built in close proximity, offering families little privacy. People reported that the houses are unbearably hot during the day, especially during the hot season. People also report a shortage of water in the resettlement areas—with some having to buy their own drinking water.

Under provisions of Laos’ national Law on Resettlement and Vocation, the displaced people are required to remain in the camps until designated resettlement sites have been fully developed with housing and infrastructure. The Lao authorities have stated that it will be 4-5 years until permanent replacement homes are provided in the new resettlement sites. The resettlement sites will contain only land for housing and not agricultural land. Land measurement has commenced at these cleared sites, but no construction work on homes or other infrastructure has begun. One of the designated sites is located in a recently cleared area previously zoned as a conservation forest.

Some villagers among the displaced communities said that they don’t understand why new houses are being offered only in the resettlement area, rather than in the former villages for those who wish to return. Some people want to move back—or have already done so—especially those with houses and villages that remain partially intact. Others say that they do not want to return due to loss, trauma and the fear of another dam collapse.

In May, 49 families from one village, Ban Mai, relocated back to their old homes. People interviewed from Ban Mai at the time explained that not all of the houses are badly damaged, and some had built new smaller houses in the old village. Without secure livelihoods, people are travelling back to the old village anyway in order to fish. But in early July, a flash flood occurred on the Xe Pian River. The Ban Mai villagers reported that representatives of the project company came to the old village and told them to leave immediately as the dam may be at risk of breaking again. Afraid, the families returned to the displacement camps.

For many, the extended existence in a state of uncertainty without adequate food, water and other basic necessities has greatly exacerbated feelings of frustration and despair. A resident interviewed for this report said he felt as though he was “living in jail.” Another woman said that it “would have been better to be counted among the dead” than to live under these conditions.

Despite losing all of their belongings, livestock and cultivated land, affected families have yet to receive compensation for their losses. There is no transparent process or grievance mechanism to evaluate losses and offer reparations. Media reports have stated that the Lao government is negotiating with the developers on payments of compensation for lost property.

In the direct aftermath of the incident, families received a one-time cash payment of USD 60-75 (500,000-700,000 Lao Kip). In early 2019, families whose relatives were counted in the official death toll (71 people) received a one-time cash payment of USD10,000. In the six most affected villages,
the authorities have also paid the displaced communities monthly cash stipends of 5,000 Lao Kip per person per day, characterized as an “allowance,” together with 100,000 Lao Kip as a monthly “salary” (together, approximately USD30 per month). According to interviews with villagers in March 2019, this amount fails to cover basic needs. As of July 2019, villagers reported that they had stopped receiving the stipend for a period of two months, but that they had received all of the payments owed in June. However, the stipend is paid retrospectively rather than in advance, and it is not paid according to a consistent schedule.37

In all of the villages displaced by the dam collapse, each person is continuing to receive a monthly ration of 20 kilograms of rice. But the rice ration is reported to often be of very low quality, nearly inedible and is not sticky rice - the familiar staple food of the villagers. The rice rations are reportedly being phased out after December 2019. It is not known how the food security of the displaced villagers will be maintained when the rations end. Some villages have been given plows and rice seed, but there is no new land for rice planting.

Only a small portion of their old farmland has been planted. Much of the farmland in the flooded villages is still covered in silt and debris, with no known plans or action to rejuvenate the damaged fields for planting.38 For example, in Thasengchanh village, only 67 of 386 hectares of lowland rice farmland is presently viable.39

“It is very hot and very difficult to stay in the camp. That’s why many people started to move back to their own village. The amount of money we been given is not even enough to afford food, so we decided to go back to our villages even if the authorities did not permit us to go.” Woman interviewed in temporary camp. March 2019

37 Ian G. Baird, site visit and community interviews, May and July 2019.
38 Ibid.
39 Ibid.
Villagers interviewed from Ban Mai village reported that in recent months, representatives of the project company had visited the displacement site to discuss compensation payments for lost assets. During an initial visit, company officials offered amounts for property items (such as motorbikes, tractors and other vehicles) reflecting significant depreciation in value based on the age of the asset. The Ban Mai villagers refused to accept these amounts, as they are insufficient to enable them to repurchase lost items and do not include the livelihoods lost due to the loss of the assets.

Recent reports and interviews indicate that the company has returned to the camps, in some cases offering higher amounts of compensation for items. But many villagers still say the amounts offered are too low. They are also being asked to sign agreements to receive 50 percent of the compensation, with the assurance that the remaining 50 percent will be paid at a later, and as yet undetermined, stage. According to media reports, the project developer will take responsibility for compensation payments, which will be paid directly into affected families’ bank accounts.

In late May 2019, media reports stated that a plot of land, cleared by authorities for use by Samong Tai Village victims of the disaster to grow crops during this year’s rainy season as “compensation,” had instead been granted to a Chinese company for a banana plantation. According to reports, some of the survivors have been hired to work as laborers on the plantation. In Ban Mai, villagers said in interviews that they have also had land opened up for them, but were told that they had to work with a Vietnamese company to plant cassava or sugar cane on the land. They are not allowed to grow anything other than what the company wants. After the company expenses have been taken out of the income generated, they would receive the remainder. In interviews, villagers said that they have refused to participate, as they feel they might end up with very little if production is lower than anticipated. Some people said they felt they were expected to be slaves for the company.

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40 Ibid.
43 Ian G. Baird, site visit and community interviews, July 2019.
There is a sense of anger among many of the displaced people, as well as a feeling of having been forgotten. All of the humanitarian agencies that initially provided aid have left. During site visits conducted for this report, people expressed distrust in those responsible for overseeing the ongoing relief effort. They feel that donations, supplies and even compensation payments are not reaching their intended recipients. Many people described frustration at having to rely on donations and cope with shortages of medical and other supplies. The loss of transportation such as motorbikes and handheld tractors have left many feeling trapped. Several people said that once they have access to transportation, they will regain a sense of self-reliance, enabling them to fish, gather food and travel to central market areas.

Other villages, beyond the six hardest hit, were also affected by the dam collapse but have not received much from relief efforts beyond a monthly rice allocation. This ration is often not enough to feed them after losing their entire rice crop in the flood. Ethnic Oi people in Tha Ouan village successfully protested to increase the monthly rice allowance from 12 to 18 kilograms per person per month.

Also affected are communities of indigenous Nya Heun (Heuny) people, who rely on subsistence farming on the slopes adjacent and above the Xe Pian-Xe Namnoy saddle dam and reservoir. More than 20 years ago, when the dam was initially planned, these communities were among a group of approximately 3,000 people required to move to a consolidated resettlement site (known locally as Chat San 8). The resettled communities were not provided with adequate infrastructure to meet their needs or allocated sufficient land holdings to engage in subsistence cultivation or cash cropping. In order to survive, many returned to their ancestral lands close to the Xe Namnoy River and the construction area for the reservoir and saddle dam. As of May 2019, while some have moved back to the resettlement area, 72 households are still refusing to leave their former homelands. They continue to live there, in homes built according to their customs, maintaining livelihoods based on shifting cultivation and gathering wild food. While none of these villages suffered fatalities in the dam collapse, land that they cultivated with coffee, rice, vegetables and fruit trees was destroyed and rendered useless by the deluge of water. No recognition or support has been provided for these losses.

Voices of Survivors

“We had no idea the flood was coming. I heard people yell outside my house, ‘Flood! Run, brothers and sisters!’ I ran outside and found the water already rushing over my door. My wife and daughter had not yet returned from the rice fields. I took refuge on a nearby roof, sick with worry. When the rescue team took us to the emergency shelter, I didn’t rest but ran here and there searching for my family. Finally, I spotted my daughter sitting alone, crying. I ran to hug her, and we both cried together. I couldn’t find my wife. I grabbed my daughter’s hand and we walked to another camp, where we finally found my wife. It was a miracle. From the moment the flood hit, I thought we would all die. I don’t know who will take responsibility for this loss of life, and I don’t know what’s next for my family and the others. If we settle down again in the same village, we will live with the fear of not knowing when this might happen again.” (Mr. Vee)

44 Ian G. Baird, site visit and community interviews, May and July 2019.
45 Ibid.
46 Interviews during site visit, March 2019.
47 Ian G. Baird, site visit and community interviews, May 2019.
5. Who Is at Fault?

In the immediate aftermath of the collapse, the Lao government publicly pledged to conduct a transparent and comprehensive investigation into the causes of the disaster and to hold those responsible to account.\(^{48}\)

The Lao Prime Minister and Cabinet established a National Investigation Committee to examine the reasons for the collapse and to determine the degree of responsibility of the actors involved. According to reports, the committee is comprised of 14 representatives of Lao government ministries and organizations and is chaired by Deputy Prime Minister Bounthong Chitmany, who is also Chairman of the Government Inspection Authorities.\(^{49}\) The National Investigation Committee is supported by an International Expert Panel, comprised of representatives from the International Commission on Large Dams, an organization dedicated to sharing technical information and knowledge regarding the design, construction and maintenance of large hydropower projects.\(^{50}\) The National Investigation Committee gave authority to the International Expert Panel to conduct an independent investigation and report on the results. Foreign parties were also invited as observers to the investigation process, including representatives of the Korean and Thai governments.\(^{51}\)

During the investigation process, little information was made public about the probe's scope, methodology or preliminary findings. Spokespeople from the Lao government attributed the collapse to "substandard construction" and stated that the project companies would be held responsible for the damage and loss.\(^{52}\)

In March 2019, the International Expert Panel submitted its report and findings to the Lao government. The investigation report has not been released to the public. However, in May 2019, Lao government representatives commented publicly on the findings of the investigation and the expert panel's report. This included comments at a media conference on May 28 by Singphet Bounsavathiphanh, Vice President of the National Investigation Committee and the Government Inspection Authority.

"The failure incident cannot be considered as ‘force majeure’," Mr. Singphet is reported as stating.\(^{53}\) "The International Expert Panel found that the major cause of the Xe Pian-Xe Namnoy dam collapse was the high-absorbency of the foundation of saddle dam D, coupled with soil being porous and easily eroded, and the level of rising water. Those conditions caused erosion within the foundation. When the erosion reached a certain level, the dam became unstable and sliding began at the higher saddle dams. At some point, saddle dam D broke, causing a massive amount of water to flow out of the reservoir."\(^{54}\)

Following these public statements, which suggest that the International Expert Panel has concluded that construction problems were the primary cause of the collapse, SK Engineering & Construction immediately dismissed the findings, questioned their scientific basis, and asserted that it had strictly adhered to industry standards in the development of the project.\(^{55}\) The company has yet to offer an alternative explanation for the collapse.

However, the expert panel's findings appear to be consistent with other independent analyses as well as several pieces of information that suggest that the developers may have cut corners in the planning and construction process in order to reduce project costs. Richard Meehan, a Stanford University scientist, analyzed satellite and other data and concluded that the dam's reservoir was being filled a wave of groundwater shifted toward the fifth saddle dam, causing it to sink and crack. Rising water, exacerbated by the rainy season, then

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\(^{48}\) Lao News Agency, 'Government Will Investigate XepianXe Nam Noy Case In The Most Transparent Manner; PM', 30 July 2018.

\(^{49}\) Vientiane Times, 'Steps taken to investigate dam failure', 10 August 2018.

\(^{50}\) The members of the Independent Expert Panel are Professor Anton J. Schleiss of Switzerland, Honorary President of ICOLD, Mr Ahmed F. Chraibi of Morocco, former Vice President of ICOLD, and Dr Jean-Pierre Tournier of Canada, a Vice President of ICOLD. Vientiane Times, 'Investigators: Dam collapse not a “force majeure” event', 29 May 2019. <http://www.vientianetimes.org.la/freeContent/FreeContent_Investigators.php>

\(^{51}\) Ibid.


\(^{53}\) Vientiane Times, 'Investigators: Dam collapse not a “force majeure” event', 29 May 2019.


cascaded over the fragmented dam, causing it to collapse entirely.\textsuperscript{56} Meehan has stated that his findings broadly concur with the results of the International Expert Panel’s investigation.\textsuperscript{57}

Evidence from Korean sources and media reports suggests that there were differences between the project’s original design plan and its construction, which may indicate compliance failures and an effort to maximize profits.\textsuperscript{58} The source of the reported information is a document from SK Engineering & Construction, the project’s EPC contractor, dating from November 2012, entitled “Laos Dam Project Implementation Plan.” The document was acquired by Korean Democratic Party lawmaker Kim Kyunghyup and shared with the media in the aftermath of the collapse. The alleged design alterations include lowering the height of the project’s saddle dams by an average of 6.5 meters from the original plans, as well as changes to materials used in project construction. The document also made reference to a USD19 million decrease in construction costs through design changes and the early completion of the project. Media reports also indicate that in the same year that it reported these design changes, SK Engineering & Construction obtained “maintenance costs and profits” amounting to up to 12.2 percent of construction costs (USD83 million) from Xe Pian-Xe Namnoy Power Company, the joint venture developing the project.\textsuperscript{59}

Further questions remain regarding the oversight of the design, planning and implementation of the Xe Pian-Xe Namnoy project, both by the Lao government as well as the governments of Korea and Thailand, home to many of the project’s developers and financiers. For example, Korean media reports have also noted that while the project involved Korean government funding in the form of official development assistance, the necessary procedures for such projects were not undertaken, including a National Assembly budget review and an international development cooperation committee project review.\textsuperscript{60} Moreover, it is unclear what level of oversight the Thai company Ratchaburi Generating Holding Company, the project’s construction supervisor, provided over SK Engineering & Construction’s EPC work.

The failures by company and government officials to respond in time to the disaster, despite having information about the threat prior to the collapse, raise further questions with respect to oversight and compliance. The project’s Environmental and Social Impact Assessment and

\begin{itemize}
  \item \textsuperscript{58} Seo Young-ji, ‘SK &C’s attempts to cut costs led to design changes that resulted in collapse of dam in Laos’, Hankyoreh, 15 October 2018. <http://english.hani.co.kr/arts/english_edition/e_international/866595.html>
  \item \textsuperscript{59} Ibid.
  \item \textsuperscript{60} Ibid.
\end{itemize}
mitigation plan, conducted by the Lao Consulting Group for Xe Pian-Xe Namnoy Power Company, indicates that areas downstream of the project (these are identified within Laos, but do not include Cambodia) are considered vulnerable to flooding as a result of the project. The impact assessment suggests Xe Pian-Xe Namnoy Power Company should be responsible for developing and implementing a warning system with response plans agreed upon by affected communities. Such a system does not appear to have been effectively developed or implemented.

Construction on the Xe Pian-Xe Namnoy project continues. Several other dams continue to be built upstream and downstream of Xe Pian-Xe Namnoy. Survivors of the collapse, and communities living downstream of other hydropower projects, continue to express serious concerns and fears for their safety in the aftermath of the disaster. The legitimacy of these concerns is evident given the lack of accountability for the collapse. Following the disaster, the media reported donations and commitments of support to the disaster relief effort and humanitarian response. However, while the displaced villagers received benefit from some of these gifts, other donations disappeared or appear to have been taken to benefit others rather than the dam collapse survivors.

The Lao military and authorities maintained a high degree of control and oversight over relief efforts by United Nations agencies, the World Bank, the Asian Development Bank and other international aid agencies. Given the current state of survivor communities, it appears that several core principles of the United Nations Inter-Agency Guidelines for Post-Disaster Relief, which stipulate adherence to a rights-based approach for all UN-affiliated entities involved in post-disaster relief, have not been met. In particular, these include principles related to the recovery of possessions and property and the planning and implementation of housing programs that meet criteria for accessibility, affordability, habitability, security of tenure, cultural adequacy, suitability of location and access to essential services.

“I had no idea that there was a Xe Pian-Xe Namnoy dam upstream from our village. We only knew there was a dam when the dam collapsed. I could not imagine what a dam collapse was until I saw it with my own eyes.” Young woman interviewed in Ban Mai displacement camp, March 2019

Reckless Endangerment  Assessing responsibility for the Xe Pian-Xe Namnoy Dam Collapse
6. Who Is Profiting from the Project? Financiers and Investors

Xe Pian-Xe Namnoy’s consortium members are directly profiting from the project through their equity investments and their roles as contractors. Beyond these four companies, a number of other entities are also profiting from the dam.

**Banks**

A syndicate of four Thai banks has provided 70% of the cost of the dam through debt financing. On November 28, 2013, these banks provided a 20-year loan worth approximately USD714 million. These banks are collecting interest on the loan until it is paid down in 2033. The lending syndicate is composed of Krung Thai Bank, Ayudhya Bank and Thanachart Bank, three commercial banks from Thailand; and the Export-Import Bank of Thailand, the government’s export credit agency. Ayudhya Bank’s parent company, with a 76.55% stake, is the prominent Japanese financial institution Mitsubishi UFJ Financial Group.

**Korean Government**

The Korean government has enabled and profited from the project through entities it controls. The government’s Economic Development Cooperation Fund loaned USD80 million overseas development aid to Lao Holding State Enterprise, one of the project’s consortium members, to fund its equity investment in the dam. Several Korean government-connected entities are significant shareholders in the two Korean conglomerates involved in the dam consortium. These are:

- The Korean Development Bank, which owns 32.9% of the Korean Electric Power Corporation, the parent company of dam consortium member Korea Western Electric Power Co.
- The Ministry of Economy and Finance, which owns 18.2% of the Korean Electric Power Corporation.

The government-owned National Pension Service, which invests the retirement savings of Korean citizens, owns 7.19% of the Korean Electric Power Corporation and 8.37% of SK Holdings and 7.15% of SK Discovery, the largest shareholders of the dam’s lead developer and builder, SK Construction & Engineering.

Moreover, the Korean government’s export credit agency, the Export-Import Bank of Korea, advised on the dam’s financial structure, according to an article written by staff from one of the project lenders and the law firm representing the lenders. The Export-Import Bank of Korea also reportedly participated in a feature of the project loan called a “take-out mechanism,” which allowed the dam’s developers to transfer a portion of the project loan to the Export-Import Bank of Korea at a later date. (The Asian Development Bank was also reportedly an early financial advisor and participated in the take-out mechanism, according to the same source. However, in correspondence with the authors of this report, the Asian Development Bank denied playing a role in the dam, without providing evidence. See textbox for more details.)

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65 Bloomberg terminal, accessed November 2018.
Thai Government

The Thai government is also an important backer and beneficiary of the project. The Thai government’s export credit agency, the Export-Import Bank of Thailand, was a member of the project loan syndicate, as discussed above.

The Electricity Generating Authority of Thailand (EGAT), the country’s electricity utility, is by far the largest buyer of electricity from the dam, making it an important player in making the project “bankable” and getting it off the ground. In 2013, EGAT signed an agreement to purchase 90% of the dam’s electricity. EGAT is also the largest shareholder, with a 45% stake, of Ratchaburi Electricity Generating Holding, one of the dam’s consortium members and the construction supervisor. Another government-connected entity, the Thai Social Security Office, is Ratchaburi’s fourth-largest shareholder, with a 3.27% stake.

Voices of Survivors

“We got no warning of the dam collapse. If we had at least a couple hours’ advance warning, we could have managed to run to safety. My son and I had just arrived home and were about to start dinner when I heard people yelling, ‘Run! Run! The water’s coming!’ The floodwaters hit, and all I could do was jump from my house and swim. Houses collapsed one by one as the water raged around me. I had drifted far from home when I realized that my small son was still asleep inside the house. I swam back, but the water had risen over the front door. I managed to swim up to the roof, where many of our neighbors had taken refuge, and carried out my son. I held him in my arms and watched as bodies floated by – one, then another, then another – along with big trees and collapsed houses. I don’t want to talk any more. I can’t get the image of those bodies out of my head. My elderly parents are still missing, and I have no idea if they are dead or alive.”

(Ms. Chansai)
The Asian Development Bank’s Hidden Role in Xe Pian-Xe Namnoy

The Asian Development Bank (ADB) played an important, behind-the-scenes role in getting Xe Pian-Xe Namnoy off the ground, according to a public document written by people closely involved in financing the project. According to the document, the ADB acted as an early financial advisor for the project. The ADB's expertise would have been important for the dam's consortium members and lenders, which lacked experience in structuring complex hydropower projects of this nature in Laos.

The ADB also appears to have backed the project loan through a feature called a take-out mechanism, according to the document. This mechanism allowed Xe Pian-Xe Namnoy Power Company to take a portion of the loan off the books of the Thai banks and transfer it to the ADB (and Export-Import Bank of Korea, the other participant in the mechanism). Xe Pian-Xe Namnoy Power Co. had the option to do this for a period of three years from the signing date of the project loan, with the permission of the Thai banks. Even if the take-out mechanism was not exercised, the ADB's backing of the project through this feature likely helped ensure that the project was bankable.

The ADB's role in the dam is described in an article written by staff from Krung Thai Bank, one of the project lenders for the dam, and Latham & Watkins, the law firm representing the lenders. The article was published in March 2014, four months after the project loan agreement was signed. The authors were closely involved in negotiating and executing the loan deal. When presented with this evidence, an ADB spokesperson denied in an emailed response that the bank had advised on the project and participated in the take-out mechanism. The spokesman did not specifically address the article describing the ADB's involvement or provide evidence that it was not involved.

The ADB's indirect support for the Xe Pian-Xe Namnoy Hydropower Project is illustrative of the ways in which it has supported the development of the Lao hydropower sector, together with other multilateral development banks, in particular the World Bank and its private sector lending arm, the International Finance Corporation.

Following the initiation of extensive economic reforms in 1986, through the New Economic Mechanism, Laos opened large sectors of the economy to large-scale private investment. An important area identified to support the country’s economic transformation was the exploitation of water resources through construction of large hydropower dams in the Mekong basin intended to export electricity to neighboring countries. This initiative was encouraged and supported by international financial institutions, in particular

the World Bank and ADB. In the early 1990s, when the Xe Pian-Xe Namnoy project was initiated, both banks had hydropower projects in the planning stages and were also assisting the Lao government to develop mechanisms to facilitate private hydropower investment, as well as financing the construction of transmission lines and related infrastructure. Over the years, the multilateral development banks began to shy away from direct financing of large-scale hydropower in the region, conscious of the steep reputational risks involved. They have instead opted for more indirect support for the sector. This includes developing financing plans and constructing transmission lines to enable cross-border and regional power trade. In some cases it has included providing guarantees for commercial loans for hydropower projects.73

The ADB continues to support the construction of transmission lines and infrastructure to facilitate regional power trade—much of it from large hydropower projects—through the development of the Greater Mekong Subregion regional energy grid.74 The International Finance Corporation has positioned itself as a knowledge broker to promote the development of so-called “sustainable hydropower” initiatives in the region. In Laos, the International Finance Corporation has led multi-stakeholder analyses of the hydropower sector and helped establish the rules for hydropower investments and identify sites for exploitation.75 This indirect support for the development of the hydropower sector and individual dam projects raises questions over application of the banks’ safeguard policies to projects that benefit from their involvement.

73 Such guarantees can be provided by international financial institutions or Export Credit Agencies (ECAs), and enable sharing of political risks (for example, political, legal, policy change affecting taxes and duties regimes, property rights, force majeure or other specific sovereign obligations of a sovereign nature): Vincent Merme, Rhodante Aylers & Joyeeta Gupta (2014). ‘Private equity, public affair: Hydropower financing in the Mekong Basin’ Global Environmental Change, Volume 24, January 2014, Pages 20-29.


7. Survivors Have a Claim: The Dam’s $50 Million Liability Insurance

Insurance coverage is vital for the development of an infrastructure project as large and risky as Xe Pian-Xe Namnoy. The project has roughly USD50 million in liability coverage that affected people in Laos and Cambodia may be able to claim for the damages they have suffered. However, most affected people are unaware of the existence of this coverage, much less their right to make claims, because it has not been disclosed publicly.

AON Thailand, the project’s insurance advisor, was responsible for arranging insurance for the project’s various components, including the liability coverage. The USD50 million in liability coverage is divided between two policies: USD10 million that is part of a larger construction insurance policy taken out by the EPC contractor, SK Engineering & Construction, and a USD40 million excess of loss liability policy taken out by the joint venture developing the dam, Xe Pian-Xe Namnoy Power Company.

Three insurers are backing the $50 million in liability coverage spread across the two policies. The U.S. firm AIG is backing the bulk of the liability coverage. Two Korean insurers, Korean Re and Samsung Fire & Marine, are backing the remainder of the coverage. The two Korean firms have reinsured their exposure with the Singaporean firm Asia Capital Re.

Inclusive Development International learned the following details about the policies from a confidential source. The insurance companies did not respond to requests to confirm this information:

Construction Liability: As EPC contractor, SK Engineering & Construction was responsible for securing construction insurance coverage for its work on the dam. This policy would have focused primarily on damage to the dam structure itself, but it also had a USD10 million liability component. AIG holds 25% of the policy, and thus USD2.5 million of the liability component. Korean Re and Samsung Fire & Marine hold the remaining 75% of the construction policy and the corresponding portion of the liability component. Asia Capital Re is reinsuring the two Korean insurers.

Excess of Loss Liability: After the USD10 million liability component of the construction insurance is exhausted, the USD40 million excess of loss liability policy comes into play. The same insurers backing the construction policy are also understood to be backing the excess of loss liability policy. AIG backs 59.5% of this policy; Samsung Fire & Marine backs 30%; and Korean Re backs 10%. As with the construction policy, Asia Capital Re reinsures the two Korean firms’ exposure.

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78 Ibid.
Voices of Survivors

“The flood came without warning. First, the water reached my waist, then the next moment, it was up to my neck, and the next moment it was over my head and I was carried away by the current. I couldn’t see anything but the tops of big trees. I did my best to try to swim, feeling my unborn baby inside me. My husband swam up to me and tried to push me up, but that left him struggling under the water. I can’t remember how long we fought to survive until my parents came with a boat and helped us to safety. Now I’m staying here in this camp with my family. It’s dirty and we only have a tiny space. We grabbed whatever we could to put on the floor to sleep, but some people have nothing and sleep on the floor just like that. But most of us can’t sleep. We just cry. We miss our homes, we miss our loved ones, and know we have lost everything. My body is tired. My mind is tired. I don’t know who will take responsibility for our loss.”

(Ms. Yae)
8. Who is Responsible for Violations of Human Rights?

Victims of the dam collapse have suffered, and continue to face, violations of human rights. The disaster and the victims’ treatment in the aftermath have had adverse impacts on, among others, the right to an adequate standard of living, including food and housing,79 the right to privacy,80 the right to liberty of movement and freedom to choose one’s own residence,81 the right to physical and mental health,82 and the right to life.83 These human rights are enshrined in the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Economic, Social and Cultural Rights (ICESCR) and the Convention of the Rights of the Child (CRC).

Both the governments of Laos and Cambodia have ratified the ICCPR, ICESCR and CRC.84 These governments bear the primary obligation to respect, protect and fulfill the human rights recognized in these covenants for those affected by the Xe Pian-Xe Namnoy project. This obligation requires the Lao and Cambodian governments to ensure that there is no retrogression in the enjoyment of human rights, either as a result of their own acts or omissions, or the activities of third parties, including business enterprises.

81 ICCPR, art 12.
82 ICESCR, art 12;
83 ICCPR, art 6; UN Human Rights Committee, General comment No. 36 (2018) on article 6 of the International Covenant on Civil and Political Rights on the right to life, para. 62; CRC, art 6.
The Lao and Cambodian governments also have the primary obligation to ensure access to remedy for violations of human rights that occur within their territory and jurisdiction. As part of their duty to protect against business-related human rights abuses, states must take appropriate steps to investigate, punish and redress such abuse. The Lao and Cambodian governments therefore have a legal obligation to ensure those affected by the dam collapse have access to remedy and to hold accountable the individuals and companies responsible. The Lao government's human rights obligations are heightened due to its additional role as an investor in the Xe Pian-Xe Namnoy project through Lao Holding State Enterprise, a business enterprise that is wholly state-owned. The UN Guiding Principles on Business and Human Rights note that "States should take additional steps to protect against human rights abuses by business enterprises that are owned or controlled by the State (...) including by requiring human rights due diligence." 87

In addition to failures to protect against human rights impacts caused by the dam's developers, the Lao government itself is directly responsible for the multiple violations of human rights occurring at the temporary camps, and it is obligated to end these violations and provide prompt remediation. These include conditions causing food insecurity, inadequate access to water and other basic necessities, and the legislative requirement to remain in the displacement camps until the new homes in the resettlement area are completed.

The governments of Korea and Thailand have also acceded to the ICCPR, ICESCR in and CRC. 88 Although the violations of human rights described in this report occurred outside their territories, international law recognizes that a state's international legal obligations apply extraterritorially in a number of circumstances. 89 United Nations treaty bodies have affirmed that the obligation of states to protect against abuses of human rights extends to a duty to regulate the overseas conduct of businesses registered in their territory. 90 This principle has also been recognized in the UN Guiding Principles on Business and Human Rights. 91

The Thai government has explicitly recognized its obligation to protect against business-related human rights violations involving Thai companies operating abroad, in two Cabinet resolutions in 2016 and 2017. Additionally, in 2018 the Thai government instructed the country's 55 state-owned enterprises to show leadership in aligning their practices with the UN Guiding Principles on Business and Human Rights. 92 Thailand's draft National Action Plan on Business and Human Rights designates "cross-border investment and multi-national enterprises" as one of its four priority areas. 93

The dam's developers and investors are registered in Korea and Thailand and fall under the jurisdiction of their home governments. These governments therefore have a duty to regulate these companies' activities in Laos and elsewhere, with a view to preventing and redressing human rights violations that they have contributed to through their conduct.

The developers of the dam have a responsibility to respect human rights. The United Nations Guiding Principles on Business and Human Rights affirmed that while states have the primary obligations under international human rights law, this does not absolve business enterprises of their own responsibility. 94 This responsibility requires that business enterprises avoid causing or contributing to adverse human rights impacts through their activities and address such impacts when they occur. 95

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90 See, for example, CRC/C/THA/2-3 paras. 20, 21; CERD/C/CAN/CO/19-20 para 14; CERD/C/CAN/CO/18 para. 17; CERD/C/AUS/CO/15-17 para 13; E/C.12/AUT/CO/4, para. 12.
91 UN Guiding Principles on Business and Human Rights, Principle 1. As part of their duty to protect against business-related human rights abuse, States are required to take appropriate steps to “prevent, investigate, punish and redress such abuse through effective policies, legislation, regulations and adjudication.” This requires States to “state clearly that all companies domiciled within their territory and/or jurisdiction are expected to respect human rights in all their activities.”
94 UN Guiding Principles on Business and Human Rights, Principle 11.
95 Ibid, Principle 13. In order to identify, prevent, mitigate and account for how they address their adverse human rights impacts, business enterprises should carry out human rights due diligence: Principle 17.
SK Engineering & Construction is the project’s EPC contractor, which means it is in charge of designing and building the dam. If reports of faulty engineering design and cost cutting decisions are accurate, SK Engineering & Construction caused the adverse human rights impacts and is primarily responsible for addressing them. SK Engineering & Construction’s responsibilities are heightened in light of its 26% equity stake in Xe Pian-Xe Namnoy Power Company, since it substantially contributed to the financing of the project.

Ratchaburi Electricity Generating Holding Public Company, with a 25% stake in the joint venture, is the project’s construction supervisor, giving it oversight of SK Engineering & Construction’s EPC work. As such, the company had a responsibility to investigate and supervise all key aspects of the project, including safety issues arising from the location of the dam and engineering designs flaws. It had a human rights responsibility to assess the potential human rights risks of problems identified and ensure that adverse impacts were prevented and mitigated. Its failure to identify and mitigate risks, when it was in a unique position to do so, arguably means that Ratchaburi, along with SK Engineering & Construction, caused the adverse human rights impacts, and at minimum it substantially contributed to them.

Korea Western Electric Power Co., the project’s operations and maintenance contractor, will run the dam when it becomes operational. It therefore did not directly cause the failures that resulted in adverse human rights impacts. However, as a joint venture partner and major equity investor in Xe Pian-Xe Namnoy Power Company, the company had a responsibility to conduct human rights due diligence of the project prior to investing and on an ongoing basis.96 A failure to do so, along with a failure to insist that robust dam safety and human rights safeguards were built into the joint venture agreement for the project—which has not been publicly disclosed—would mean that Korea Western Electric Power at a minimum is linked to the adverse human rights impacts by its business relationship, and arguably contributed to and was complicit in these adverse impacts.

Lao Holding State Enterprises, with a 24% stake and the dam’s administrative supervisor, bears a similar responsibility. In addition, as state-owned enterprises, both Korea Western Power Company and Lao Holding State Enterprises are expected to observe the highest standard of responsible business conduct, including the conduct of human rights due diligence.97

The banks that financed the project and the insurance companies that underwrote it directly enabled the development of the dam. The four Thai banks, Krung Thai Bank, Ayudhya Bank and Thanachart Bank and the Export-Import Bank of Thailand, provided 70% of the cost of the project’s construction. AON Thailand, AIG, Korean Re, Samsung Fire & Marine and Asia Capital Re all advised on or provided insurance coverage to the developers, which was vital to the project moving forward. Unless these banks and insurers insisted on conditions to prevent and mitigate adverse human rights impacts, including dam safety measures, in their legal agreements with the developers, they too contributed to the adverse human rights impacts suffered by directly enabling a high-risk project. The degree of contribution is arguably higher for the insurers, who are in the business of assessing risk, including risk to human life and property. Insurers have a responsibility to extend these assessments to human rights risks, as part of their human rights due diligence.

If the banks and insurance companies did ensure that there were robust conditions in their legal agreements to guard against human rights impacts, but these were breached by the developers, the banks and insurers may not have contributed to the impacts. But, even if so, they are nonetheless directly linked to the impacts through their business relationships, in particular their financing and underwriting products and services provided to the developers for the project.98

96 Ibid, Principle 17.
98 UN Guiding Principles on Business and Human Rights, Principle 13 and Commentary.
Who is Responsible for Ensuring Access to Remedy?

A fundamental principle of international human rights law is that victims must have access to an effective remedy when their rights have been violated. The obligation of states to protect against human rights abuses within their territory and/or jurisdiction incudes a duty to ensure an effective remedy. States may be considered to have breached their obligations when they fail to take appropriate steps to prevent, investigate and redress human rights violations committed by private actors. Effective judicial mechanisms are at the core of ensuring access to remedy.99

The state duty to provide access to remedy includes taking appropriate steps to ensure that domestic courts are empowered to address business-related human rights abuses. This implies taking steps to remove legal, practical or other barriers that may prevent victims from presenting their cases and applies to judicial mechanisms in the states where the human rights abuses took place and in the home states of the business enterprises.100 States should also provide effective and appropriate non-judicial grievance mechanisms, alongside judicial mechanisms, as part of a comprehensive state-based system for the remedy of business-related human rights abuse.101

The UN Human Rights Committee has encouraged states to ensure access to remedy for people whose human rights have been violated by companies operating abroad.102 In the case of victims of the dam collapse, this should include access to the Korean and Thai court systems to hold responsible actors accountable. Given the well-documented lack of independent and effective judicial systems in Laos and Cambodia, the courts of Korea and Thailand have an important role to play in providing access to justice for those who have suffered human rights abuses due to the Xe Pian-Xe Namnoy project.

If a business enterprise causes or contributes to adverse impacts on human rights, including through its business relationships, it should immediately take all relevant steps to address those impacts. If an adverse impact is ongoing, the company must immediately cease the activity causing it. If a violation has already occurred, the company must provide for or cooperate in remediation through legitimate processes.103 If a human rights impact is directly linked to a company’s operations, products or services through a business relationship, it should seek to prevent or mitigate such an impact even if it has not contributed to it.104

In addition to participating in state-based remedial mechanisms, businesses should establish or participate in effective operational-level grievance mechanisms for people who have been adversely impacted by the business’s operations.105 To be effective, non-judicial grievance mechanisms must meet the criteria set out in the UN Guiding Principles on Businesses and Human Rights: they must be legitimate, accessible, predictable, equitable, transparent and rights-compatible.106 Remediation processes must occur in consultation with the affected individuals or groups to ensure that the remedy is comprehensive and legitimate in their view.

SK Engineering & Construction, the EPC contractor, and Ratchaburi Electricity Generating Holding Public Company, the construction supervisor, are primarily responsible for providing redress for the harms and human rights impacts they have caused, if reports of deliberate construction flaws and attendant oversight failures are accurate.

The companies that provided the funding for the dam all have a responsibility to provide for or cooperate in remediation for the adverse human rights impacts to which they have contributed. This includes all equity investors in Xe Pian-Xe Namnoy Power Company and the debt investors Krung Thai Bank, Ayudhya Bank, Thanachart Bank and the Export-Import Bank of Thailand. Depending on their level of human rights due diligence and the human rights safeguards in their legal agreements, these companies may have a responsibility to contribute commensurately to redress. At minimum, all of the investors and financiers, including the shareholders of the four developers, must use their leverage to the greatest extent possible to bring about redress.

Similarly, AON Thailand, AIG, Korean Re, Samsung Fire & Marine and Asia Capital Re, which provided insurance coverage to the developers for the project, have a responsibility and a unique opportunity to enable remediation by working with their clients to establish an accessible mechanism for victims to file claims.

99 Ibid, Principle 26 and Commentary.
100 Ibid.
101 Ibid, Principle 27.
103 UN Guiding Principles on Business and Human Rights, Principle 22 and Commentary.
104 UN Guiding Principles on Business and Human Rights, Principle 19 and Commentary.
106 Ibid, Principle 31 and Commentary.
9. Recommendations:

To the governments:

- **The government of Laos** should immediately ensure that the conditions at the temporary camps are improved so that minimum human rights standards are met and people can return to their former homes and villages, should they wish to do so.

- **The governments of Korea and Thailand** should work with the government of Laos to ensure full public release of the investigation findings and other information regarding the dam collapse. They should ensure those affected have access to effective remedy, including judicial remedies, and ensure accountability of the responsible individuals and corporate actors that are domiciled in their jurisdictions.

- **The governments of Laos and Cambodia** should ensure those individuals and communities affected by the dam collapse suffering infringements of their human rights have access to effective remedy, including through judicial and/or non-judicial grievance mechanisms.

To the investors:

- **SK Engineering & Construction**, the EPC contractor, and **Ratchaburi Electricity Generating Holding** should establish a fund and an accessible claims process through which affected people can receive compensation payments. Compensation must be adequate to cover all of the losses and harms suffered due to the Xe Pian-Xe Namnoy project and include a process to fully restore community lives and livelihoods.

- **Xe Pian-Xe Namnoy Power Company** and the debt investors **Krung Thai Bank, Ayudhya Bank, Thanachart Bank** and the **Export-Import Bank of Thailand** should contribute to the fund and the establishment of the claims process. Remaining disbursements, if any, should be withheld from the project until such time as the communities displaced and otherwise affected by the dam collapse and those in the consolidated resettlement site have been duly compensated and have dignified and secure living conditions.

- **AON Thailand, AIG, Korean Re, Samsung Fire & Marine and Asia Capital Re** should cooperate with their clients, the developers of Xe Pian-Xe Namnoy, to establish the claims process, making available the USD50 million in liability coverage available to claimants.

- **All shareholders of the four Xe Pian-Xe Namnoy developers** should use their leverage with the companies to ensure full and effective redress.

To the Asian Development Bank and other multilateral development banks:

- **The Asian Development Bank** should fully disclose its role in the Xe Pian-Xe Namnoy project and should use its leverage with the companies to ensure full and effective redress.

- **The Asian Development Bank and other multi-lateral development banks** should fully disclose their roles with respect to supporting or facilitating future hydropower projects in Laos, including through financial mechanisms and project loan guarantees.

- **The Asian Development Bank and other multi-lateral development banks** should consider putting SK Engineering & Construction, Ratchaburi and Korea Western Power Company on debarment lists until all communities affected by the collapse have been provided with homes, land allocations and infrastructure to allow for dignified living conditions, and have access to operational-level grievance mechanisms.
To the project developers:

- **Xe Pian-Xe Namnoy Power Company Ltd.** should immediately suspend filling of the reservoir and completion of the project until:
  - All of the people displaced by the dam collapse are fully supported in clearing their old land and repairing their homes or provided with new homes and land of comparable value to what they lost.
  - Land allocations for farming land are secured for people in the consolidated resettlement area near the project reservoir (known as Ban Chat San), along with any required infrastructure, including but not limited to, housing, water pumps, sanitation, health and education services.
  - A functioning grievance mechanism is in place offering effective and accessible means for all project-affected community members to submit concerns and have them addressed free of fear of reprisals, made operational through an independent body and in consultation with concerned civil society organizations in the countries where the project’s developers are domiciled.
- **Xe Pian-Xe Namnoy Power Company should disclose** all recorded financial flows related to compensation, grievance and reparations disbursements, as above, through a publicly accessible database made available on the company’s website.
- **Xe Pian-Xe Namnoy Power Company** should submit to a publicly disclosed assessment of the project undertaken by an independent advisory body to ensure it is compliant with international standards, to provide assurance that a future collapse will not happen, and that downstream river flows will be regularly assessed to provide assurances that the health of riparian ecosystems will be retained.
“Re-Thinking Hydropower”
Recommendations from the Report of the Special Rapporteur on Extreme Poverty and Human Rights on His Visit to Laos

“The Government should review the situation of those affected by the Xe Pian-Xe Namnoy dam collapse, including displaced people who remain in temporary accommodations and who have reported delays in receiving promised financial support. ...

People should promptly receive compensation for loss of their productive land and property. Although the Government has indicated that it intended to provide people with information about the response timeline and to meaningfully consult with them about potential plans, many interlocutors reported that they had had little or no information and had not been consulted. The Government should also provide psychosocial support, especially to women.”

“As the Prime Minister rightly recognized following the Xe Pian-Xe Namnoy disaster in 2018, the time has come for a national review of hydropower. The Government should be commended for opening a dialogue on the future of hydropower and the role of Lao PDR as an exporter of power. However, the contours of a suspension imposed after the collapse are unclear and appear not to apply to the many planned dams already under consideration. The scope of the current review is unduly narrow: The World Bank is leading a process that considers only dam safety rather than the full impact of existing and planned hydropower dams. One-off reviews of individual dams are inadequate.

...The Government should conduct a comprehensive review of the role and future of the hydropower sector looking at the current and future impacts of existing and planned dams, how many and which projects should go forward, and how construction and operation arrangements should be adjusted in light of social and environmental risks.”
