

Development or Destruction?

The human rights impacts of hydropower development on
villagers in Southeast Myanmar



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Karen Human Rights Group

Documenting the voices of villagers in rural Burma

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Karen Human Rights Group and Karen Rivers Watch
June 2018

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I. Introduction

Executive summary

In Southeast Myanmar, electrification rates are among the lowest in the country, particularly in rural, conflict-affected areas near the border of Thailand.⁽¹⁾ Myanmar's ambitious National Electrification Plan (NEP) aims to provide electricity access to all Myanmar households by 2030.⁽²⁾ In response to the NEP and other national development goals, Myanmar's Energy Master Plan (MEMP) projects electricity demand to rise by 10 percent annually through 2030.⁽³⁾ To meet future demands, Myanmar must expand its energy infrastructure. Currently, hydropower comprises two-thirds of Myanmar's electricity generation capacity.⁽⁴⁾ Both the MEMP and alternative visions of electricity infrastructure development in Myanmar rely on hydropower as a key source of electricity through 2050, and include provisions for the export of hydropower to neighboring countries.⁽⁵⁾

Myanmar needs to acknowledge and address a number of salient concerns if it going to use hydropower to meet its future electricity needs. Most of Myanmar's abundant hydropower resources are located in ethnic areas, particularly Kayin, Kayah, Kachin, and Shan States, all of which are sites of ongoing ethnic conflicts and armed tension.⁽⁶⁾ In many cases, development of large dams in ethnic areas has resulted in conflict, severe social and environmental impacts for local communities and human rights violations.⁽⁷⁾ The overwhelming majority (42 of 50) of large hydropower projects planned in Myanmar in recent years have been situated in ethnic areas.⁽⁸⁾ With many more projects slated for development in these areas, this report highlights how hydropower projects impact ethnic communities in Southeast Myanmar.

This report aims to encourage reforms in the hydropower sector by building comprehensive recommendations for policymakers and hydropower developers. The report supports recommendations using the results of new research highlighting how hydropower projects have impacted ethnic communities in Southeast Myanmar. Report commentary assesses the degree to which Myanmar's legal and regulatory frameworks

1 Situation Analysis of Southeast Myanmar, Myanmar Information Management Unit Peace Support Fund, September 2016

2 Myanmar: Towards Universal Access to Electricity by 2030", World Bank October 1st 2014.

3 National Energy Management Committee. "Myanmar Energy Master Plan." The Government of the Republic of the Union of Myanmar, 2015. http://www.burmalibrary.org/docs22/2015-12-Myanmar_Energy_Master_Plan.pdf.

4 International hydropower association, <https://www.hydropower.org/%20country-profiles/Myanmar>

5 World Wildlife Federation, REAM, SPECTRUM, and IES. "Myanmar's Electricity Vision, Updating National Master Electrification Plan." WWF. Accessed June 4, 2018.

http://d2ouvy59p0dg6k.cloudfront.net/downloads/myanmar_s_electricity_vision_final_web.pdf

6 "The Contested Areas of Myanmar: Subnational Conflict, Aid, and Development", The Asia Foundation, October 2017.

7 See <https://www.internationalrivers.org/node/7370/see-all-resources> and <http://www.burmariversnetwork.org/title/resources/publications/damming-at-gunpoint> for some examples.

8 "The Contested Areas of Myanmar: Subnational Conflict, Aid, and Development", The Asia Foundation, October 2017.

measure up against international best standards and practices for hydropower governance. The report concludes with comprehensive recommendations on how to strengthen these national frameworks in order to provide greater social and environmental safeguards for rural ethnic communities impacted by hydropower dams.

Methodology

"Research areas:" Information is collected across seven research areas: Thaton, Toungoo, Nyaunglebin, Mergui-Tavoy, Hpapun, Dooplaya, and Hpa-an. These seven research areas are commonly referred to as 'districts' and are used by the Karen National Union (KNU), as well as many local Karen organisations, both those affiliated and unaffiliated with the KNU. Our use of the district designations in reference to our research areas represents no political affiliation; rather, it is rooted in the fact that rural populations commonly use these designations. In order to clarify the geographic boundaries used in this report, Map 1 represents 'Locally defined KNU and Myanmar government boundaries in Southeast Myanmar'.

"Focus group discussions:" To identify the concerns of communities impacted by hydropower dams, KHRG and KRW conducted community-based research in coordination with local populations in April and May 2018. KHRG and KRW collected data through site visits and focus group discussions with impacted ethnic community members. This data was supplemented by reports previously published by KHRG and KRW that document the human rights abuses and socio-economic impacts of large hydropower projects.

"Individual interviews:" Interviews were conducted with villagers residing in Pa Thi, Shwegyin, Thauk Yay Hkat I and II, and Hatgyi Dam project areas.

"Legal research:" In order to situate the concerns of local communities within the broader hydropower governance debate, this commentary is supported by extensive legal research into international best practices and standards on hydropower governance. This includes research into Myanmar laws and policies that govern and administer land, investment and electricity generation. In doing so, this commentary identified the potential causes and catalysts behind the injustices documented in the field. A comprehensive review of best international hydropower sector standards and practices was undertaken to identify steps that stakeholders can take to ensure that growth of hydropower does not occur at the expense of rural communities in Southeast Myanmar, to avoid further impacts on local communities, and to offer remedies for those already impacted.

Terms and abbreviations

EAO – Ethnic Armed Organisation

ECL – Environmental Conservation Law 2012

EIA – Environmental Impact Assessment

IFC – International Finance Corporation

KHRG – Karen Human Rights Group

KNU – Karen National Union

KRW – Karen Rivers Watch

MEMP – Myanmar Energy Master Plan

MOECAF – Ministry of Environmental Conservation and Forestry

MONREC – Ministry of Natural Resources and Environmental Conservation

NEP – National Electrification Plan

NLD – National League for Democracy

SIA – Social Impact Assessment

IEE – Initial Environmental Examination

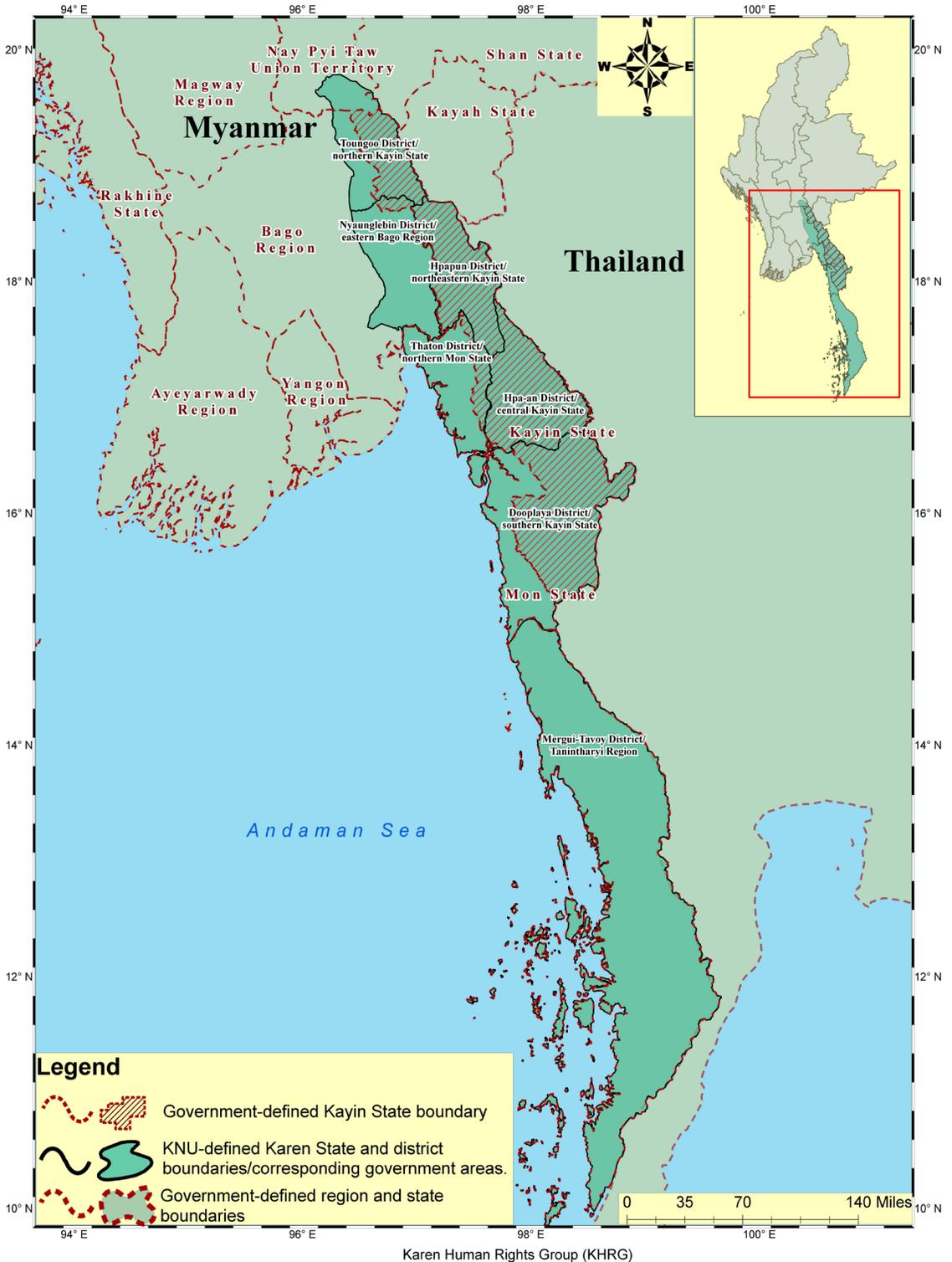
ECC – Environmental Compliance Certificate

Kyat – Burmese currency; US \$1 equals approximately 1,374 Myanmar kyat (June 2018)

Tatmadaw – Burmese language name for the Myanmar government armed forces

Maps and infographics

Map 1: KNU-defined Karen State and Myanmar government region and state boundaries



Map 2: Proposed and completed dams in Southeast Myanmar

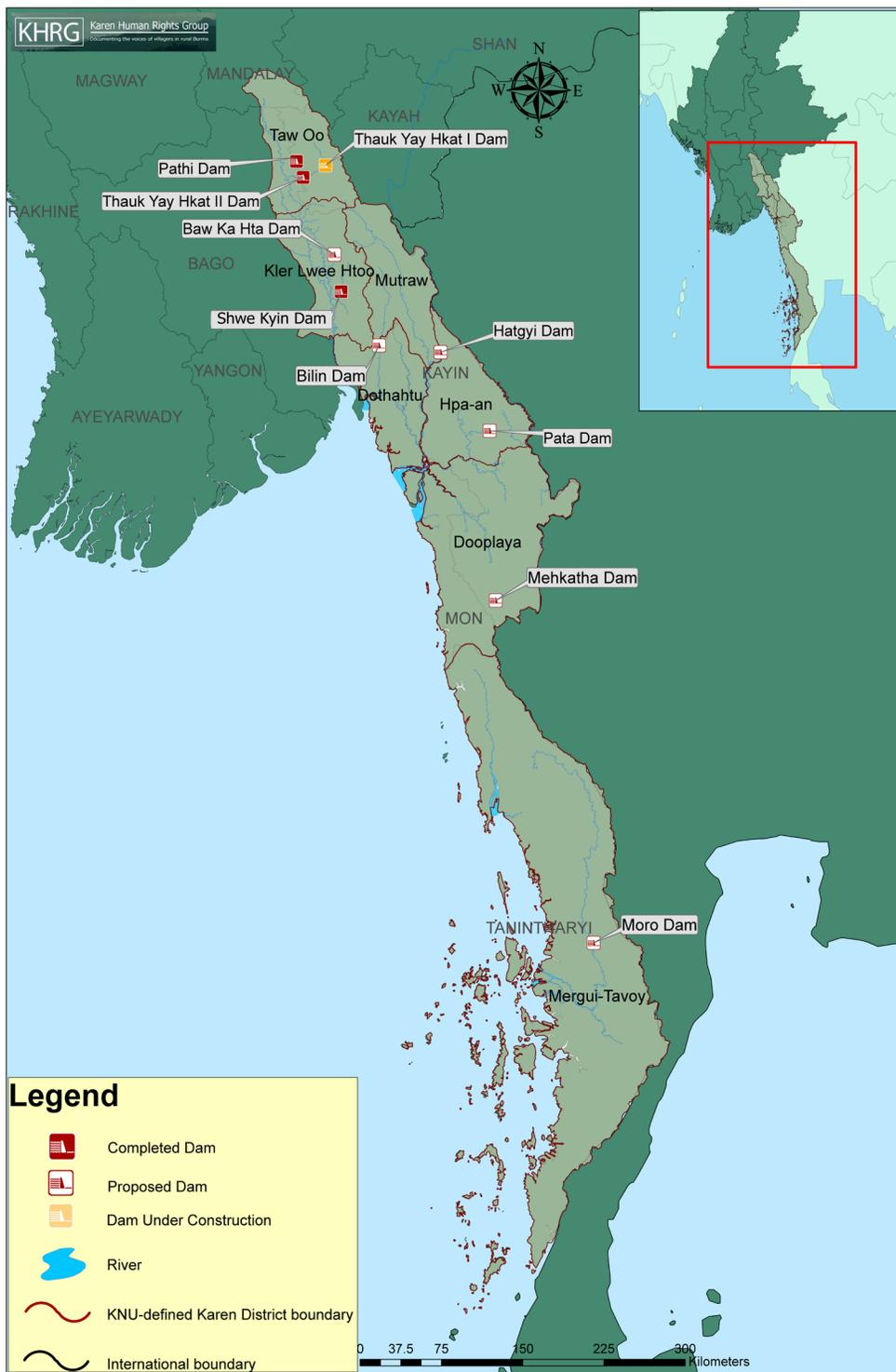


Table 1: Selected list of planned and implemented dams in research areas

No	Project	Location	Installed capacity	Estimated completion date	Investor
1.	Hatgyi	Hlaingbwe Township	1380 Mega Watt	2021 - 2022	EGAT, Tyrone Henry Holding Co.Ltd.
2.	Thauk Yay Hkat I	Thandtaung Township	120 Mega Watt	Not specific	Asia World
3.	Thawkahtar	Kyaukkyi Township	160 Mega Watt	2021 - 2022	Norway NVE
4.	Bilin	Bilin Township	280 Mega Watt	2021 – 2022	Japan
5.	Pata	Kawkareik Township	5 Mega Watt	Not specific	Not specific
6.	Mehkatha	Kyain Seikgyi Township	120 Mega Watt	Not specific	Japan
7.	Tanintharyi	Hteekhee Township	200 Mega Watt	Not specific	Thailand + Myanmar
8.	Shwegyin (Kyauk Naga)	Shwegyin Township	75 Mega Watt	2008 – completed	China + Japan
9.	Thauk Yay Hkat II	Toungoo Township	120 Mega Watt	2010 – completed	Asia World
10.	Pa Thi	Toungoo Township	10 Mega Watt	2008 – completed	Not specific

II. Hydropower in Southeast Myanmar

Despite Myanmar's vast energy resources, including hydropower, coal, and natural gas, electricity consumption in Myanmar remains among one of the lowest in Southeast Asia.⁽⁹⁾ Global energy statistics indicate that roughly half of Myanmar's rural population lacks access to electricity,⁽¹⁰⁾ while a recent Asian Development Bank report suggests that over 80% of the rural population lacks access to electricity.⁽¹¹⁾ The Myanmar government has responded to this deficit by developing a National Electrification Plan (NEP) in collaboration with the World Bank, which aims to provide electricity access to all Myanmar households by 2030.⁽¹²⁾

In response to the NEP and other national development goals, Myanmar's Energy Master Plan (MEMP) projects electricity demand to rise by 10 percent annually through 2030.⁽¹³⁾ Accordingly, large-scale electricity generating projects are a high priority for the Myanmar government.⁽¹⁴⁾ Both the MEMP and alternative visions of electricity infrastructure development in Myanmar rely on hydropower as a key source of electricity through 2050, and include provisions for the export of hydropower to neighboring countries.⁽¹⁵⁾

Due to its topographic and climatic conditions, about 50 percent of Myanmar's technically feasible hydropower potential is located in Southeast Myanmar.⁽¹⁶⁾ Most of these hydropower resources are located in ethnic areas, particularly Kayin, Kayah, Kachin, and Shan States, all of which are sites of ongoing ethnic conflicts and armed tension.⁽¹⁷⁾ The overwhelming majority (42 of 50) of large hydropower projects planned in Myanmar in recent years have been situated in ethnic areas.⁽¹⁸⁾ Out of the 26 largest dams existing in Myanmar, 12 are in ethnic areas.

9 Situation Analysis of Southeast Myanmar, Myanmar Information Management Unit Peace Support Fund, September 2016

10 Asian Development Bank. Myanmar: Energy Sector Assessment, Strategy, and Road Map. Mandaluyong City, Philippines: Asian Development Bank, 2016. <https://www.adb.org/sites/default/files/institutional-document/218286/mya-energy-sector-assessment.pdf>.

11 International Energy Agency (IEA) and the World Bank. Sustainable Energy for All 2017—Progress Toward Sustainable Energy. Global Tracking Framework Report. Washington DC: World Bank, 2017.

12 Myanmar: Towards Universal Access to Electricity by 2030", World Bank October 1st 2014.

13 National Energy Management Committee. "Myanmar Energy Master Plan." The Government of the Republic of the Union of Myanmar, 2015. http://www.burmalibrary.org/docs22/2015-12-Myanmar_Energy_Master_Plan.pdf.

14 International Energy Agency (IEA) and the World Bank. *Sustainable Energy for All 2017—Progress Toward Sustainable Energy*. Global Tracking Framework Report. Washington DC: World Bank, 2017. <http://trackingenergy4all.worldbank.org/~media/GIAWB/GTF/Documents/GTF-2105-Full-Report.pdf>

15 World Wildlife Federation, REAM, SPECTRUM, and IES. "Myanmar's Electricity Vision, Updating National Master Electrification Plan." WWF. Accessed June 4, 2018.

16 "Hydropower development in Myanmar and its implications on regional energy cooperation", International Journal of Sustainable Society, March 2015.

17 "The Contested Areas of Myanmar: Subnational Conflict, Aid, and Development", The Asia Foundation, October 2017.

18 "The Contested Areas of Myanmar: Subnational Conflict, Aid, and Development", The Asia Foundation, October 2017.

Proponents of hydropower development in Southeast Myanmar see dams as a reliable, cheap and clean energy source essential for the sustained development of the region.⁽¹⁹⁾ Hydropower dams would also reduce the nation's dependency on fossil fuels. However, dam projects in rural ethnic areas have historically been the sites of violent conflict. Dams are often associated with infringements of human and socio-economic rights.⁽²⁰⁾ Villagers in these areas often face the immediate and long-term negative impacts of dams, while receiving little in return. This is because hydropower development tends to benefit a narrow set of local and national elites. Because some of the planned hydropower dams are set to export electricity to neighbouring states, they would result in few long-term benefits for Myanmar. Many of these proposed projects are designed primarily to export electricity to Thailand or China.⁽²¹⁾ The Mong Ton (Tasang) Dam, for example, would export 90 percent of its generated electricity to Thailand.⁽²²⁾

Instead of benefitting local communities, hydropower development in ethnic minority areas has resulted in severe livelihood consequences for villagers, most of whom rely on their land to secure their food and income. In Southeast Myanmar, approximately 70 percent of the population earns a living through agriculture. This means that access to land has a significant impact on the right to food and an adequate standard of living.⁽²³⁾ Hydropower development in Southeast Myanmar often occurs without adequate consultation and due process of law. Compensation is not usually provided for local communities who have lost their land, possessions, or been displaced. Without proper safeguards, hydropower dams can damage relations between local communities and the government.

19 World Wildlife Federation, REAM, SPECTRUM, and IES. "Myanmar's Electricity Vision, Updating National Master Electrification Plan." WWF. Accessed June 4, 2018.

20 See <https://www.internationalrivers.org/node/7370/see-all-resources> and <http://www.burmariversnetwork.org/title/resources/publications/damming-at-gunpoint> for some examples.

21 "The Contested Areas of Myanmar: Subnational Conflict, Aid, and Development", The Asia Foundation, October 2017.

22 <https://frontiermyanmar.net/en/its-time-to-renegotiate-hydro-contracts-on-the-thanlwin>

23 "Thematische Report on Labour Force", Department of Population, Ministry of Labour, Immigration and Population, June 2017

III. Social and environmental impacts of hydropower projects on rural ethnic communities

The following section presents first-hand accounts of rural ethnic communities in Southeast Myanmar, outlining their perspectives and experiences related to hydropower dams.

Land confiscation, forced relocation, and livelihood impacts

“If the dam is constructed, there will be flooding over all the villages, including villagers’ land, farms and plantations around that area. They [villagers] do not want it because the dam construction project will cause flooding. The flooding will drown all of their land and farms. Because of this, we will not have land to farm for our livelihoods.”

Pu Bm--- , (male), Bn--- village, Ler Muh Lah Township, Mergui-Tavoy District/ Tanintharyi Region (Interviewed in March 2017) ⁽²⁴⁾

Rural communities in Southeast Myanmar rely on land and water resources for their livelihoods. The negative impacts of hydropower dams on the natural environment can negatively impact the wellbeing of local communities. According to local communities, the registration and survey of land at project sites is often accompanied by the loss of or damage to the land. Villagers from Ler Muh Lah Township, Tanintharyi Region, Mergui-Tavoy District reported that their lands were damaged when the Nippon Koei Company and the Italian-Thai Development (ITD) Company assessed their area for a hydropower dam. In order to access certain areas along the Tanintharyi River during its initial assessment in 2012, ITD Company constructed roads to transport equipment. The construction of these roads damaged the lands of local villagers. Although this project was temporarily put on hold in 2012, it was restarted in February 2017. The villagers most likely to be affected by the hydropower dam rely on subsistence agriculture. They depend on plantations, hill and plain farms for their livelihoods. Local residents are concerned that villages located on the banks of the Tanintharyi River will be flooded if dam construction goes ahead. This would damage their homes and agricultural lands:

“I do not think the dam project will benefit villagers, but rather, it will cause multiple negative consequences such as submerging the lands [farms, plantations, villages] we rely on. As we are native people from this area, we seasonally collect vegetables such as bamboo shoots and fruits from the forest for free. We would have to buy food after the dam is constructed”.

Naw A--- (female, 41), B--- village, Ler Muh Lah Township, Mergui-Tavoy District (interviewed in August 2017)⁽²⁵⁾

24 This information is taken from unpublished KHRG report received from Ler Muh Lah Township in March 2017.

25 “Mergui-Tavoy Interview: Naw A---, August 2017”, KHRG, December 2017.

Villagers from 5 out of the 10 investigated proposed and implemented dam sites have reported cases of land confiscation and property damage.⁽²⁶⁾ In all of these cases, villagers have reported that adequate compensation was not provided for land confiscation. Compensation was not provided for extensive damage to crops and natural fauna from which their livelihoods are derived. Because meaningful consultations were not conducted, rural ethnic communities were not able to negotiate for compensation.

Table 2: Dam Related Land Confiscation and Flooding

Dam Name	Responsible Entity	Flooded Area (Acres)	Flooded Villages	Documented Confiscated Land (Acres)	Compensation
Pa Thi	Ministry of Irrigation	30,500	2 Villages		No compensation received
Thauk Yay Hkat II (Toh Boh Dam)	Ministry of Electric Power No. 1, Shwe Swan In Company	40,000	1 Village	Over 1,400	Some compensation received
Shwegyin	Ministry of Electric Power No. 1	28,000	31 Villages	Over 2,500	Some compensation received

Villagers are also worried that planned hydropower dams could lead to displacement. In Southeast Myanmar, hydropower development often results in the forced displacement of local ethnic communities. A villager from Mergui-Tavoy shared his concerns about displacement if the proposed Tanintharyi Dam is implemented:

“I want to express that, if the proposed dam project is implemented, it can cause a worse displacement for local people in Htee Moh Pwah, Tanawthri river [Tanintharyi] area. The displacement because of the dam project will be worse than the armed conflict displacement that we experienced in the past. Therefore, we want to share this to the world so that the world will know and consider for local people who live in Htee Moh Pwah, Tanawthri river area because every village in the local area will face with trouble.”

Pu Bm---, (male), Bn--- village, Ler Muh Lah Township, Mergui-Tavoy District/ Tanintharyi Region (Interviewed in March 2017)⁽²⁷⁾

When local people are forcibly displaced from their lands, it disrupts the resource

26 Hatgyi, Shwegyin Dam, Thauk Yay Kat (II), Pa Thi, and Tanintharyi Dam

27 This information is taken from unpublished KHRG report received from Ler Muh Lah Township in March 2017.

systems of local communities, negatively impacting their livelihoods. For rural ethnic communities in Southeast Myanmar, access to agricultural land is necessary for villagers to sustain their livelihoods. The loss of agricultural land results in a loss of income, resources, and cultural identity.

“If they build the Hatgyi Dam, it will cause many concerns. The first one being flooding, the second – destruction of villages, the third – the destruction of wildlife and plantations of betel, areca, durian trees, dog fruit and cardamom. We rely on those to survive. All of our properties will be flooded if they construct the dam. We would not be able to transfer our heritage and our land to our children”.

A villager from IDP site in Myaing Gyi Ngu (interviewed in May 2018)⁽²⁸⁾

Although local communities have the right to participate in project planning meetings to express their preferences for resettlement, there are limited opportunities for participation in practice. Not being able to voice their grievances meaningfully limits a community’s ability to negotiate for adequate compensation.

In cases where local communities have received compensation, the compensation method most commonly used is a lump-sum repayment for the market value of the property. Villagers are not satisfied with this method because it does not take into account the social, cultural, and religious value of the land. It also does not take into consideration the long-term negative impacts of land confiscation on livelihoods. In the words of one villager from Mergui-Tavoy District:

“Even if we get compensation money for our destroyed land and plantations, we will face [livelihoods] difficulties after we use up the money. We are ordinary villagers from the rural area and we do not have the knowledge to do business with the amount of the money we get. Even if we get some support, we will be in trouble when our money is gone.”

Naw A--- (female, 41), B--- village, Ler Muh Lah Township, Mergui-Tavoy District (interviewed in August 2017)⁽²⁹⁾

Many hydropower projects were approved before the military junta left power. In those cases, villagers are still unable to voice their grievances. Access to meaningful consultations and hence the ability to demand for compensation was limited. A villager from Mergui-Tavoy District voiced his concern during an interview with KHRG:

“We strongly disagree with the project but we also do not know how to stand up for our rights. We are in a state of worry about [potentially] losing our land and villages and we seriously do not know how to survive in the future [if that happens]. [We do not know what we will do] if they do not consider our concerns.”

News bulletin written by KHRG staff (Published in June 2017)⁽³⁰⁾

28 Quote from an interview with a villager in Hapa-an Township, Hpa-an District in May 2018. Interview conducted by KHRG and KRW .

29 “Mergui-Tavoy Interview: Naw A---, August 2017”, KHRG, December 2017.

The focus groups held by KHRG and KRW revealed that meaningful consultations between hydropower developers, government authorities, and villagers rarely occur. When consultations were conducted with communities impacted by hydropower projects, they were often of poor quality and failed to meet international standards and best practices. KHRG and KRW reports indicate many consultations are not inclusive or even accessible by the affected communities.

“...some village [representatives] could not reach the meeting because the meeting was held in a town which is very far from their villages. Some villagers [from certain villages] have never been to the town so they didn’t know where to go for the meeting and some of them do not have money [to pay the taxi fee to get to the meeting]. Some villagers had money for the taxi fee and could attend the meeting.”

Saw A--- (male, 28), Ap--- village, Ler Muh lah Township,
Mergui-Tavoy District/Tanintharyi Region (Interviewed in March 2017) ⁽³¹⁾

31 “Mergui-Tavoy Interview: Saw A---, March 2017,” KHRG, September 2017.

Table 3: Forced Displacement for Hydropower Development

Dam Name	Perpetrator	Displaced Villages	Relocation Details
Pa Thi	Tatmadaw	<p><u>Village:</u> Nant Thar Kone</p> <p><u># Households:</u> 58</p> <p><u>Population:</u> 342</p>	In 1993, staff from the Ministry of Irrigation gave villagers three days' notice to vacate the dam site and provided 4,800 kyat per villager to cover the cost of relocating.
	Tatmadaw	<p><u>Village:</u> Ywar Gyi</p> <p><u># Households:</u> 47</p> <p><u>Population:</u> 216</p>	In 1994, villagers were given three days' notice to vacate the dam implementation site and were provided with 4,800 kyat to cover the cost of relocating. As villagers were forcibly relocated during the rainy season, they were unable to bring all of their belongings due to the treacherous travelling conditions.
Thauk Yay Hkat II (Toh Boh Dam)	Myanmar Military Government	<p><u>Village:</u> Hto Boh</p> <p><u># Households:</u> 63</p>	In 2002, villagers were asked to move back to Hto Boh village when plans to build the dam were postponed. After relocating back to their original homes in 2002, villagers were again forcibly relocated to Na Ga Mauk from Hto Boh. In 2014, villagers again returned to Hto Boh. They were not able to return to their original homes so they formed a new village near their previous plantations.
Hatgyi	Myanmar Government and Tatmadaw	<p><u>Village:</u> 30 villages in total</p> <p><u>Population:</u> 5,000+ villagers</p>	Due to the fighting near the proposed Hatgyi Dam area, villagers from 30 villages were forced to relocate to an IDP camp.

(32)

32 Hatgyi Dam fighting caused the displacement of villagers from the following villages: Kyaung Ma, Chaung

Armed conflict

Villagers felt that hydropower projects could also reinforce ethnic grievances and trigger armed conflict. The Hatgyi Dam, currently in its exploration phase, serves as a sobering example of the issues that can occur even before a hydropower project is implemented. The proposed project site has become synonymous with violent conflict, forced displacement, and violent targeting of activists.

When the National League for Democracy (NLD) government declared its support to hydropower development along the Salween River, military clashes erupted between Tatmadaw, its aligned Border Guard Forces on one side and Karen National Liberation Army and Democratic Karen Benevolent Army⁽³³⁾ on the other. The Salween River is important because it is the location for 14 large hydropower projects that are planned or currently under construction. Military confrontations occurred around the proposed Hatgyi hydropower project site several times in 2014, 2015, and 2016. Since the first military confrontation was reported, more than 5,000 people were forcibly displaced from 30 villages around the planned Hatgyi Dam site. The latest confrontation occurred as recently as 26 April 2018. It reportedly displaced another 2,400 villagers from at least 5 villages.⁽³⁴⁾

Research conducted by KHRG and KRW reveals that the villagers displaced from Hatgyi Dam site are fearful of the ongoing conflict. They are worried about the residues of military clashes, including landmines and unexploded shells.

“The government showed up since 2016 saying we can return to our homes then. They promised to clear the planted mines just around the village which makes no sense since the villagers also move around in the forest for wood and chips, into the streams and rivers to hunt for meat. By saying that they would only clear up the village but not in those areas, we cannot risk going back to our places and be lack of guarantee of life.....Ask everyone from all of the 30 villages whether they wanted to return to their own places. Of course, everyone does, but dare not because of the danger of the landmines.”

A local villager from IDP site in Myaing Gyi Ngu, (interviewed on May 2018).⁽³⁵⁾

Wa, Htee Yeh Kloh, Kyone Htaw (Kloo Htaw), Htee Ta Doh Peh, Htee K’Neh, Htee K’Neh Hta, Htee Kloh Thaw, Htee Htaw Kyoh, K’Law Kwee, K’Law Day, Ta Baw Thaw, Yaw Hku Hkee, Mote Wa, Meh Th’Waw, Tha Daw Kyoh Boh, Htee Htaw Hplaw, Meh Ploh Hkee, P’Doo Pu, Leh P’Deh, Wa Bway Tu, Taung Kyah, Kyauk Taung, Baw Tha Raw, Htee Tha Hta, Htee Naw Hta, Ta Mu Hpoh, K’Law Teh Hta, Htee Htaw Hplaw.

33 The Democratic Karen Buddhist Army (DKBA) was re-formed on January 16th 2016 as a splinter group from the Democratic Karen Benevolent Army (2010-present), and is also referred to as Na Ma Kya (‘Deaf Ear’) and DKBA (splinter). During fighting between the Tatmadaw and DKBA Benevolent throughout 2015, there was internal disagreement within the DKBA Benevolent which resulted in a number of commanders being dismissed in July 2015. These former commanders then issued a statement in January 2016 declaring the formation of a new splinter group. This organisation has phrased the formation of this group as the revival of the original Democratic Karen Buddhist Army which was formed in 1994 until it was broken up in 2010 into the BGF and the still-active DKBA Benevolent. The group is led by General Saw Kyaw Thet, Chief of Staff and General Saw Taing Shwe aka Bo Bi, Vice Chief of Staff. Other lower ranking commanders in the DKBA Buddhist splinter group are San Aung and late Kyaw Moh aka Na Ma Kya (reportedly killed on August 26th 2016)

34 “KNLA and Tatmadaw Clash Near Site of Planned Hatgyi Dam”, The Irrawaddy, 27 April, 2018.

35 This quote is taken from an interview conducted with a villager in Hpa-an District in May 2018. Interview conducted by KHRG and KRW.

The armed clashes and the proposed project site resulted in mass displacement and a high degree of uncertainty for the possibility of return. The breakdown of the ceasefires between the Myanmar government and the KNU is being recognised as an increasing threat. If implemented, the Hatgyi Dam could displace 30,000⁽³⁶⁾ people from around 50 villages upstream of the proposed project site.

Absence of benefit sharing mechanisms

“They said that they will provide the electricity but now they set up the electric power tower through our houses so that they said we need to cut our trees in front of our houses otherwise it can be the electric shock. So that we had to cut our trees but we received nothing and the electric power grip pass through in front of our houses but we do not receive any electric.”

Naw P--- (Female), Y--- village, Thandaung Township, Pathi Dam Site, Toungoo District/ Northern Kayin State (Interviewed in May 2018)

Local communities are opposed to hydropower projects because they see little to no returns from the project implementation. Villagers do not believe they will get any benefits from planned hydropower projects. Focus group discussions revealed that rural communities at the dam sites believe that the projects are not designed with the needs and expectations of local populations in mind. Instead, hydropower is believed to benefit the wealthy and the powerful, such as military, business actors, and political elites.

Although most hydropower dams are located in Myanmar’s ethnic rural areas, at about 20% average, their electrification rates fall far behind Yangon (78%), Mandalay (40%) and Nay Pyi Taw (39%). This is particularly evident in Kayin and Thanintharyi states where rural electrification rates remain below 10%.⁽³⁷⁾ This trend is reinforced by the fact that a high number of planned hydropower dams are designed to export electricity to neighbouring countries.

“This planned dam will not be benefit for our country and people in Myanmar but only poor farmer would impact. They will not provide the electric to the farmer even if they get the electric power and they will only sell the electric to the China and Thailand. So think, who will get the benefit.”

Saw O--- (Male), T ---village, Hpa-an District, Hatgyi Dam Site (Interviewed in May 2018)

36 “Karen Villagers Protest Hatgyi Dam, Other Projects on Salween River”, The Irrawaddy, 14 March 2018.

37 Asian Development Bank, “Myanmar - Energy Sector Assessment 2016”, Accessed June 4, 2018. <https://www.adb.org/projects/documents/mya-46389-001-tacr-1>

IV. Environmental and social protections in Myanmar:

The concerns outlined in our research are representative of rural communities across Southeast Myanmar. Local communities believe that hydropower dams should not be implemented in their current form. If the Myanmar government, KNU, and their partners are committed to developing electrification in an inclusive and sustainable way, the participation of local villagers is essential during all phases of the hydropower project cycle. In this section, KHRG and KRW will highlight villagers' concerns within the context of Myanmar's evolving legal framework establishing social and environmental safeguards. This analysis will enable the development of sustainable and inclusive solutions to address the impacts of hydropower projects on rural communities. It focuses on integrating environmental and social concerns and sustainable development principles into Myanmar's hydropower regulatory framework.

Legal requirements for Environmental Impact Assessment (EIA) in Myanmar

The 2012 Environmental Conservation Law (ECL) and the accompanying 2014 Environmental Conservation Rules have important implications for domestic and foreign investors in Myanmar. Article 7 of the ECL establishes the duties and powers of the Ministry of Natural Resources and Environmental Conservation (MONREC),⁽³⁸⁾ the main body responsible for ensuring compliance with this law. MONREC is in charge of facilitating the settlement of environmental disputes. It is also responsible for developing and implementing a system of environmental impact assessment (EIA) and its social impact assessment (SIA) component.⁽³⁹⁾ On 29 December 2015, the Myanmar government enacted the Environmental Impact Assessment Procedures that establish the requirements and procedures for environmental impact assessments. They also regulate the review, approval and monitoring of projects under the 2012 Environmental Conservation Law. All hydropower projects in Myanmar are required to comply with the Environmental Impact Assessment Procedure, whether they are undertaken by the Myanmar Government, a multilateral bank or a private company.

Depending on their type and size, proposed projects may be legally required to undergo an EIA or an Initial Environmental Examination (IEE). Additionally, MONREC can also require hydropower projects that were initiated prior to the enactment of the EIA procedures to undergo EIA or IEE,⁽⁴⁰⁾ or attach new conditions to existing investments in order for them to comply with Myanmar's evolving environmental regulations.⁽⁴¹⁾ Once MONREC has issued the decision that an EIA must be conducted, it is the responsibility of the hydropower project implementer to commission and finance the EIA. This responsibility includes financing the costs of public consultations. Through the EIA

38 MONREC was formerly known as the Ministry of Environment, Conservation and Forestry (MOECAF)

39 "Environmental and Regulation", Directorate of Investment and Company Administration, last access date 25, June 2018.

40 "Safeguarding Myanmar's Environment", The Asia Development Bank, last access date June 25, 2018.

41 "Environmental and Regulation", Directorate of Investment and Company Administration, last access date 25, June 2018.

procedure, hydropower implementers must assess environmental risks. They must also identify appropriate mitigation and monitoring measures. Finally, they have to develop an Environmental Management Plan (EMP) detailing how they will carry out these measures. After careful review of the EIA, MONREC decides whether to approve or reject the project. If approved, MONREC issues an Environmental Compliance Certificate (ECC) which is necessary for project construction and operations to commence. Approved projects must commence within two years of the issuance of the ECC. Project implementers must submit EIA compliance reports to MONREC every 6 months. Any breach of the EIA procedures by the project implementer may result in penalties or administrative punishments.

Table 4: EIA and IEE assessment levels for hydropower projects

Initial Environmental Examination (IEE)	Environmental Impact Assessment (EIA)
Install capacity of >1 MW but <15MW	Install capacity of >15 MW
Reservoir volume (full supply level) <20,000,000m ³	Reservoir volume (full supply level) >20,000,000m ³
Reservoir area (full supply level) <400 hectares	Reservoir area (full supply level) >400 hectares

EIA in the context of Myanmar hydropower governance

With increased demands for electricity generation, hydropower development in Myanmar has the potential to create significant environmental and social impacts on local ethnic minority communities. As villager testimonies show, local ethnic communities have faced severe consequences from hydropower development including land loss, property damage, displacement, livelihood impacts, and limited access to natural, religious,⁽⁴²⁾ or cultural sites. Most existing hydropower projects in Southeast Myanmar were authorised by Myanmar’s military regime with little or no input from local communities, who suffered significant environmental and social burdens. In this “legacy model” of hydropower, decisions about hydropower projects were carried out with little transparency despite significant potential impacts on local populations. This model has shaped existing anti-dam sentiments among local ethnic communities. As detailed in the Peace and Conflict Baseline Assessment part of the Strategic Environmental Assessment undertaken by the International Finance Corporation (IFC),⁽⁴³⁾ hydropower development in recent conflict zones has been associated with an increased risk of armed conflict, forced relocation, landmine contamination, and human rights abuses.

42 Pa Thi Dam and Toh Boh Dam construction resulted in churches being submerged. Shwegyin Dam construction resulted in a monastery being submerged.

43“Baseline Assessment Report Peace and Conflict: Strategic Environmental Assessment of the Hydropower Sector in Myanmar”, The International Finance Corporation, 2017. https://www.ifc.org/wps/wcm/connect/e0d299b0-a141-44c5-84e3-7286f14bc28f/Chapter+8_SEA_Baseline+Assessment_Peace+and+Conflict+SEA+Baseline+Assessment.pdf?MOD=AJPERES

Since many of the proposed hydropower projects are within or nearby recent conflict zones, they have potential to exacerbate existing tensions in these areas and negatively impact the current peace process.

The prevailing model of hydropower development fuels ethnic minority grievances regarding land rights and autonomy over the use of indigenous land, social and environmental injustices. This is linked to the lack of consultation and opportunities to engage in decision-making processes. Given the link between human rights abuses and hydropower development, ethnic communities have called for a moratorium on all hydropower development until a comprehensive peace agreement is reached. Currently, local community members express scepticism about the ability of the government and hydropower developers to reform hydropower governance. They do not believe that hydropower can be implemented in a way that respects human rights, benefits local communities, and improves rather than undermines the current peace process. Ethnic minorities residing in and around proposed dam sites are likely to continue facing severe environmental and social consequences from hydropower projects until the Myanmar government strengthens the implementation of its legal and regulatory frameworks for the hydropower sector. As many of Myanmar's hydropower investment projects in Southeast Myanmar are financed by private companies with weak social and environmental safeguards, strong national legislation is necessary to ensure ethnic minority communities in hydropower project areas are protected.

The environmental and social management frameworks in Myanmar have only been recently developed. In 2012, Myanmar passed its Environmental Conservation Law (ECL), developing the legal framework to investigate the environmental and social impacts of projects. In 2015, MOECAF⁽⁴⁴⁾ enacted the EIA Procedure, establishing the requirements and procedures for environmental impact assessments.

Myanmar's adoption of systematic EIA procedures is the first step in aligning national environmental policy with international standards. Current EIA legislation clarifies what type of consultation and disclosure companies need to undertake. It also defines which issues and impacts should be covered in the assessments and management plans. If the Procedures were properly implemented, villagers would be provided with substantial social and environmental safeguards. However, villager testimony showcases a persistent lack of implementation, particularly related to participation and consultation of project impacted communities. A factor compounding this problem is the lack of repercussions for companies who violate EIA procedures. Villagers report that companies who have failed to realise social and environmental safeguards in accordance with the EIA procedures continue to operate with relative impunity.

Myanmar has strong legislation safeguarding the environment. Yet, the country lacks the necessary administrative and legal structure to enforce these legal provisions. Ethnic minorities residing in proposed hydropower development areas still face many challenges, including a lack of genuine public participation, failure by projects to

44 The Ministry of Environment, Conservation and Forestry (MOECAF) changed its name to the Ministry of Natural Resources and Environmental Conservation (MONREC) in 2016.

comply with existing regulations, and inadequate analysis of alternatives for a project schedule to reduce identified impacts. Furthermore, the EIA procedure does not address the specific issues related to the local community and indigenous people for resettlement.

As regional trends show, the inability to meaningfully enforce EIA procedures often results in insufficiently conducted or incomplete EIAs being submitted for approval. In Myanmar, the study areas of hydropower projects are constrained. They do not commonly account for the complexity of watershed and river ecosystems. They typically fail to develop a holistic social impact assessment component by limiting the study to small parts of affected population or by collecting data from communities that are located further away from directly affected areas. When these studies are complete, it is very rare that they are presented for public review before being sent for official evaluation. Even when the EIA studies are made available, they fail to account for the local linguistic and cultural contexts.

The introduction of the EIA was an important step for Myanmar to manage negative development impacts on Myanmar's citizens and its environment. Comprehensive EIA procedures and their proper implementation will contribute to improved decision-making and decreased impacts of hydropower projects on rural ethnic communities. In doing so, it will better integrate environmental and social concerns and sustainable development principles into Myanmar's hydropower regulatory framework. Nonetheless, given the troubled history of large hydropower projects in the region,⁽⁴⁵⁾ and the legacy of hydropower development in Southeast Myanmar, the nation's EIA procedure and its implementation must be further strengthened. One potential option is to hold investors responsible for environmental and social risks associated with hydropower development.

45 Bello, Walden. "Paradigm Trap, The Development Establishment's Embrace of Myanmar and How to Break Loose." Amsterdam, The Netherlands: Transnational Institute, May 2018. <https://www.tni.org/en/publication/paradigm-trap>.

V. Recommendations

This section is designed to provide recommendations for Myanmar government authorities, Ethnic Armed Organisations (EAOs), civil society organisations and business actors that have a stake in hydropower projects in Myanmar. KHRG and KRW believe that the following recommendations are crucial to achieving inclusive development, social cohesion, and sustainable peace in Southeast Myanmar, and the Union as a whole.

KHRG and KRW recognise that rural communities in Southeast Myanmar are disproportionately exposed to the negative impacts of large hydropower projects. The following recommendations are modelled to address experiences and demands of these rural communities. Their voices are essential in debates on hydropower governance.

Recommendations to the Myanmar government

The Myanmar government has achieved substantial progress in bringing its investment and environmental laws in line with international laws and best practices. However, as this report reveals, the adherence to the Environmental Impact Assessment (EIA) procedural guidelines during the process of project approval needs to be strengthened.

Myanmar's citizens are concerned about the lack of transparency in the country. To increase accountability, the Myanmar government should:

1. Strengthen MONREC's mandate to ensure that project implementers:
 - a. Disclose information about the project,
 - b. Conduct consultations and stakeholder engagement at national, state, township, and local levels with communities, relevant government institutions, and other stakeholders, in accordance with Myanmar's EIA procedures.
2. Ensure that the completion of EIA should not grant development permits by default, bearing in mind that:
 - a. EIA evaluation should be held to a high degree of scrutiny.
 - b. In absence of comprehensive Environmental Management Plan (EMP) that is deemed acceptable by the affected communities, permits must not be issued for projects with high social and environmental risks.
 - c. MOEE and MONREC should work together to proactively identify potential environmental and social issues and work to alter the project at the Concept and Pre-Feasibility Phase stage rather than waiting for the feasibility assessment and environmental and social impact assessment process to be commenced.

3. Ensure that the reasoning behind positive or negative EIA approval decision is made publicly available, by:
 - a. Translating the EIAs and EMPs, and their compliance monitoring documents, into local languages.
 - b. Ensuring that these documents are accessible and readily understood by local communities.

Because many hydropower projects were approved before EIA requirements were mandated by Myanmar law in 2016, they lack comprehensive assessments of the impacts on local communities.

4. To remedy this situation, the Myanmar government should ensure that projects approved before 2016 are required to produce EIA before project implementation takes places, and that they are not exempt from the scrutiny required by the modern EIA procedures.

Since most hydropower projects are planned in ethnic areas, the Myanmar government must:

5. Ensure that hydropower projects do not jeopardise peace and stability, by respecting the commitments enshrined in Chapter 3 of the NCA.
6. Require actors to undertake comprehensive conflict vulnerability assessments⁽⁴⁶⁾ for hydropower projects in ethnic areas.

Construction of large-scale hydropower dams in ethnic areas has proven to heighten the risk of armed conflict between Myanmar Government Armed Forces and Ethnic Armed Groups. The stability of the NCA and the peace process negotiations should be the top priority. Therefore,

7. The Myanmar Government must assure that implementation and planning of large scale hydropower projects in Myanmar Ethnic areas should be suspended until a comprehensive nationwide peace agreement is reached.

Overwhelming evidence from Pa Thi, Thauk Yay Khat and other sites suggest that the civil society actors and that dam affected villagers that they are aiming to support are subjected to pressure and threats by both governmental and corporate actors. Therefore, the Myanmar government must ensure that:

8. Civil society actors are able to freely and without intimidation advocate for their objectives.

⁴⁶ Currently, there are no conflict sensitivity assessments/study requirements mandated for investments under Myanmar law. A permit from the Myanmar Investment Commission is required for investments made in conflict affected areas. However, what constitutes a 'conflict affected area' is not defined under the 2017 Myanmar Investment Law. Furthermore, the decision making regarding investments in conflict affected areas falls under MIC's sole discretion and decisions are not required to be publicly disclosed. For the 2017 Myanmar Investment Law, see: https://www.dica.gov.mm/sites/dica.gov.mm/files/document-files/myanmar_investment_law_official_translation_3-1-2017.pdf.

9. No barriers are set in place for villagers to benefit from the material, technical and legal aid offered by civil society actors.
10. The villagers whose lands were arbitrarily confiscated are not subjected to legal harassment or intimidation by businesses.

Recommendations for companies involved in hydropower projects

Companies intent on building hydropower dams in Myanmar should:

1. Adhere to EIA procedures to minimise the environmental and social impacts of hydropower dams on local communities impacted by them.
2. Consider EIAs, as mandated by Myanmar laws and regulations, to be the bare minimum standard that companies should aim to surpass.

Too often, local communities do not have access to meaningful consultations about the impacts of hydropower dams. To meet the requirements of domestic and international laws and regulations, companies must:

3. Ensure that consultations are held early in EIA mapping processes, and continue throughout project implementation. In doing so, community concerns can be incorporated in the design, implementation and operation stages of hydropower projects.
4. Make consultations accessible to local communities by:
 - a. Bearing all community's expenses related to the participation in EIA and consultation processes as mandated by EIA Procedure.
 - b. Holding consultations in easily accessible locations and during flexible hours.
5. Guarantee that consultations are accessible to local communities, by:
 - a. Holding consultations in local languages, and disseminating information in a way that is sensitive to the local context, avoiding the use of overly technical terminology.
 - b. Facilitating the participation of groups traditionally excluded from decision-making processes, including women and minorities.
6. Ensure that newly available information relevant to the project planning, implementation and operation stages is made continuously available throughout the project timeline.

Most planned hydropower sites are located in ethnic areas. To reduce the possibility of tensions or an outbreak of violence, companies should:

7. Undertake comprehensive conflict sensitivity assessments and plans to mitigate possible risks of building hydropower dams in ethnic areas.
8. Ensure that the consultations for projects in ethnic areas are held to the highest degree of scrutiny that far exceeds the minimum EIA requirements by:
 - a. Identifying potential unintended consequences in conflict-prone areas and developing comprehensive plans to address them before and throughout the consultation processes.
 - b. Build trust with local communities to achieve a higher degree of public participation in consultation and planning processes.
 - c. Affected communities should remain the core focus of consultation processes, EAOs and other armed groups should not pose as affected communities' representatives throughout the project cycle.

Myanmar law lacks necessary safeguards to secure and protect ethnic communities' housing, land and property rights. Until the necessary legal protections are put in place under Myanmar law, companies should:

9. Adhere to International Finance Corporation Standard 7 on Indigenous Peoples and Performance Standard 5 on Land Acquisition and Involuntary resettlement ⁽⁴⁷⁾ as guiding principles for hydropower project-related land acquisition procedures

Communities that have been displaced due to hydropower projects are entitled to compensation under national and international laws. Companies should:

10. Ensure that negotiations with the affected communities are held to define adequate compensation, considering different types of remedies, such as monetary compensation, offering land of equal value, or alternative compensation packages.
11. Ensure that commitments on compensation are followed through by formalising legally binding agreements between the company and affected villagers.
12. Ensure that the type and amount of compensation provided will be distributed in a transparent and fair manner to different community members.
13. Ensure that affected communities are not coerced or threatened into accepting compensation packages that they deem unfair or inadequate.

47 Performance Standard on Environmental and Social Sustainability, International Finance Corporation, January 2012. https://www.ifc.org/wps/wcm/connect/115482804a0255db96fbfd1a5d13d27/PS_English_2012_Full-Documents.pdf?MOD=AJPERES

Recommendations for all stakeholders

Governmental actors, EAOs, companies and civil society organisations should work to ensure the benefits of large hydropower projects are shared with communities, by:

1. Distributing a share of the profits from hydropower dams to local communities.
2. Including benefit sharing in the hydropower dam's planning, separate from compensation and mitigation packages.
3. Considering diverse benefit sharing mechanisms, including direct payments, community development funds, employment and supply chain opportunities, associated infrastructure or public service investment.

VI. Photos



The above photo was taken on March 2018, International Day of Action for Rivers. This photo shows local ethnic community members protesting the construction of the Hatgyi Dam.



The above photo was taken on March 2018 and shows the Salween River on which the Hatgyi Dam will be built. If the dam is implemented, it will flood plantations which villagers rely on for their livelihoods.



The above photo was taken in January 2012 in Htee Tha Daw Hta Village Tract, Bu Tho Township. The photo shows a local fisherman who supports his family with the money that he earns from his fishing business. Villagers who rely on the rivers to obtain their livelihoods worry that they will face difficulties if the dam is implemented.



The above photo was taken in February 2017 and shows the Tanintharyi River where the Tanintharyi Dam will be built. It shows villagers' betel nut orchards which are located close to the Tanintharyi River. If the dam is built, villagers' plantations will be flooded.



The above photo was taken in 2012 and shows villagers using a boat [known locally as 'Zat'] to travel. The roads were flooded during Thauk Yay Hkat II Dam construction. No new roads were constructed after the flooding. This is the only way villagers can travel to other villages.



The above photo was taken in September 2012 and shows local ethnic community members protesting the Thauk Yay Hkat Dam after their land was flooded. Villagers received no compensation for their losses.



The above photo was taken on May 2018 and shows villagers' confiscated lands which were used to build a golf resort. Villagers' lands were confiscated for the construction of for Thauk Yay Hkat II Dam. Leftover land after the dam was completed was not returned to villagers, but was instead used by Asia World and Aung Myanmar Aung companies to construct a golf resort, school, clinic and a water factory. These services are only available to company employees. Local ethnic communities must travel long distances to access health and education services.



The above photo was taken in July 2012 and shows Shwegyin Dam. Thirty villages were flooded during the construction of the dam.



The above photos were taken in May 2018 and show the Pa Thi Dam reservoir and electrification factory which were constructed atop of villagers' homes, lands, and plantations.



Karen Human Rights Group (KHRG) was founded in 1992 and documents the situation of villagers and townspeople in rural Southeast Myanmar through their direct testimonies, supported by photographic and other evidence. KHRG operates independently and is not affiliated with any political or other organisation. Examples of our work can be seen online at www.khrg.org, or printed copies of our reports may be obtained subject to approval and availability by sending a request to khrg@khrg.org.

Front cover: This photo was taken in July 2013 in the area of Shwegyin. The photo shows the area flooded by the Shwegyin Dam, on the border of Shwegyin and Kyauk Kyi Townships in Nyaunglebin District. The flooding has destroyed vegetation and farming lands used by the local community. The photo taken from a boat shows the impact of flooding on a local pagoda. Only the tip of the structure emerges from the water. [Photo: KHRG]water. [Photo: KHRG]

Back cover: This photo was taken in February 2018. It shows buffalo walking along the bank of the Tanintharyi River, near the planned Tanintharyi Dam construction site. If this dam is built, the lands that local communities use for animal husbandry and agriculture will be flooded. [Photo: KRW]