

A scenic view of a mountain range with dense green forests under a cloudy sky. The foreground shows a lush green forest with various tree species, including some taller, more prominent trees. The middle ground features rolling hills and valleys covered in dense forest, with some areas appearing slightly hazy. The background consists of more distant, layered mountain ranges under a bright sky with scattered white clouds.

“We Protect Our Kaw, and Our Kaw Protects Us”

Reciprocity and Resilience of Indigenous Communities in the Face of Climate Change and Militarisation in Thawthi Taw Oo Indigenous Park

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Yaw Hlo River

Executive Summary/ Introduction

Our planetary ecosystem, which is fundamental to the well-being and sustainability of all living beings is facing unprecedented threats and pressures as a result of polluting anthropogenic activities. Man-made ecological crises such as biodiversity loss, pollution and climate change are accelerating at an alarming rate. Recent reports tell us that if left unaddressed, global temperatures are set to increase by between 2.4 and 2.6 degrees Celsius, a scenario that would see the inundation of coastal regions, irreversible loss of biodiversity, and a substantial increase in climate disasters.¹

While world leaders, financial institutions, and corporate entities are fully aware that climate change is now an existential threat to the planet and the survival of human kind, the continued failures of their political leadership has left the climate catastrophe unaddressed. As climate change is a global crisis that threatens us all, addressing this existential threat should be a priority for all.

Marginalised communities, including Indigenous Peoples and local communities (IPLCs), are among the most vulnerable to climatic hazards, despite contributing least to greenhouse gas emissions. Furthermore, indigenous and local communities play a central role in climate change mitigation; 80% of the globe's remaining biodiversity is concentrated within the territories of indigenous peoples, and 35% of the world's remaining forest landscapes are under the direct control of indigenous communities.² Indigenous peoples are climate change mitigators.

Burma remains among the top three of the most vulnerable countries to the impacts of climate change worldwide.³

- 1 UN Environmental Programme (UNEP). 2022. *The closing window: Climate crisis calls for rapid transformation of societies*. Accessed at: <https://www.unep.org/resources/emissions-gap-report-2022>
- 2 Mongabay. 2020. *Indigenous land hold more than 36% of remaining intact forest landscapes*. Accessed at: <https://news.mongabay.com/2020/01/indigenous-lands-hold-36-or-more-of-remaining-intact-forest-landscapes/>
- 3 Eckstein, D., Künzel, V. and Schäfer, L., 2021. *Global climate risk index 2021. Who Suffers Most from Extreme Weather Events, pp.2000-2019*. Accessed at: https://www.developmentaid.org/api/frontend/cms/file/2021/03/Global-Climate-Risk-Index-2021_1.pdf

Successive extreme weather events, including cyclones, heat waves, droughts, storms, and floods have impacted Burma, and have caused huge destruction to humans and ecosystems over the past decades. Compounded by widespread armed conflict and authoritarian military rule, the climate crisis is a threat of the highest magnitude to communities and ecosystems throughout Burma.

The Indigenous Karen communities in Saw Tay Der Kaw, in Taw-Oo District, Kawthoolei, are victims of both climate hazards such as storms, landslides, floods and pest outbreaks, as well as seven decades of armed conflict, militarisation, displacement and dispossession at the hands of the repressive Burmese military regime.

Despite the considerable hardships and difficulties that they continue to face, the community has found resolve and resilience within their ancestral territory, known in Karen as their Kaw. The Kaw is central to the community's cultural, livelihood and social security, providing them with sanctuary, food, and water during periods of hardship. Furthermore, the indigenous knowledge, local institutions, and a spirit of community collectivism passed down through the generations promote harmonious relations between the community and their Kaw, enabling them to navigate through periods of difficulty, as well as sustaining their forests and resources for future generations. The community's resilience is grounded within the reciprocal relationship they maintain with their Kaw; their Kaw protects them, and in turn, they protect their Kaw.

In order to meaningfully address the impacts of climate change among indigenous communities, maintaining and restoring relationships between communities and the land must be prioritised, and the pressures that threaten to overturn these relationships such as conflict, displacement, and land dispossession must be addressed.

Conceptual Framework

The maintenance of the Earth's climate system is vital for the well-being and survival of humanity, biodiversity, and natural ecosystems. The majority of local communities in Thawthi Taw Oo Indigenous Park, Taw Oo District of Kawthoolei, derive their livelihoods through farming (lowland and Ku upland farming), livestock rearing, gardening, and collection of non-timber forest products.⁴ The traditional livelihoods that Karen communities in Thawthi Taw Oo Indigenous Park have maintained and practiced for many generations are reliant on balanced and stable climate and weather conditions. For example, in Ku, a rotational farming practice, predictable rainfall patterns and other related weather conditions play a critical role in local food production, crop yields that eventually ensure food security for the local community.

Regrettably, the climate system that supports our life-support systems has deteriorated due to anthropogenic activities. To an extent, we are all suffering from the impacts of climate change, yet the most marginalised, including local and indigenous communities, face its impacts more severely. In the case of Indigenous Karen community in Saw Tay Der Kaw however, it is not only the intensifying climate shocks and stresses that they have had to face, but also over forty years of traumatic shocks and stresses as a result of militarisation, armed conflict, and displacement.

The Intergovernmental Panel on Climate Change (IPCC) defines resilience as, “*coping capacity to climate change is composed of the ability of people, institutions, organizations, systems, and using available skills, values, beliefs and resources and opportunities to address, manage and overcome adverse conditions in short to medium term*”⁵. For indigenous communities in Saw Tay Der Kaw, their resilience is derived

from their lands and forests, and maintained through local knowledge, practices and communitarian values. In order to retain their resilience to a changing climate and continued militarisation, communities work hard to protect and sustain their forests from overexploitation and plunder. This forms the foundation of the reciprocal relationship that communities in Saw Tay Der Kaw share with their surrounding forests; their forests protect them, and they protect the forest.

While they are not well equipped or assisted by technological capabilities or financial resources to combat the many shocks and stresses that they face, continued access to and control over their land and forest, consolidated by the moral teaching and guidance of their ancestors have enabled the Saw Tay Der Kaw community to cope with insurmountable challenges. Local ecological knowledge passed down by the community's ancestors that teach communities to maintain harmonious and interdependent relationships with nature through sustainable natural resource management, and protection and preservation of their traditional culture, knowledge and way of life. Through this knowledge and practice, communities in Thawthi Taw Oo have managed to sustain forest landscapes that support rich wildlife and biodiversity within their territories for generations.

Despite the integral importance of this reciprocal relationship in forming the foundation of both community resilience and climate change mitigation, intensifying external forces threaten to overturn it. Continued militarisation and attacks by the Burma Army, aggressive land confiscations for commercial projects, and discriminatory land laws that undermine the community's relationship with their territory, put extreme levels of pressure on both the forest and the community. In order to address climate change and strengthen the capacity of communities to cope with increasing shocks and stresses, it is vital that militarisation and the commodification of land and resources are addressed.

⁴ Ku in S'gaw Karen language refers to upland shifting cultivation or swidden agriculture, whereby communities clear an area of land for cultivation for a one-year period, and then move to the next location leaving the soil and forest time to regenerate.

⁵ The Intergovernmental Panel on Climate Change. 2022. Annex 1: Glossary. Accessed at: https://www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SR15_Annex1.pdf

Indigenous Karen Peoples' Coping Strategies



Social Structure Systems

Community values of collectivism, unconditional support and care, and spiritual dedication



Nature-Based Livelihood Practices

Traditional rotational farming, native seeds saving, diversified food cropping, and agroforestry



Sustainable Natural Resource Management

Integrated landscape approaches within Kaw system-residential areas, watershed, herbal medicinal forest, agroforestry, forested land, social and religious areas, cultural sacred sites, fish conservation, rotational farms, and orchards



Traditional knowledge and practices

Traditional knowledge of weather forecasting, food processing and preservation, biocultural protocols, traditional handicrafts, and bamboo trapping



Pressures

- Storms
- Floods
- Forced Displacement
- Militarisation
- Land Confiscations
- Insect outbreaks
- Landslides



Objectives and Methodology

Report Objectives:

The primary purpose of this case study is to examine as well as gain a better understanding of Saw Tay Der Kaw (also known as Kaw Htee Moo Shee) Indigenous Karen communities' mitigation measures and coping strategies in dealing with climate change impacts, shocks and stresses. The findings of this research in terms of climate change mitigation and adaptation measures will also be integrated and mainstreamed into Thawthi Taw Oo Indigenous Park's governance structures, policies, and landscape management strategies.

The specific objectives of the case study are as follows:

1. To examine how Indigenous Karen communities in Saw Tay Der Kaw in Thawthi Taw Oo Indigenous Park are affected by climate change and other threats, and to what extent the challenges and threats affect their environment, livelihoods, and culture, and
2. To document how the Indigenous Karen communities manage and respond to these challenges, and what specific coping strategies they use to endure and overcome these threats and challenges.

Methods:

The research for this case study was conducted using participatory methods, based upon the following principles:

1. Community based research that is grounded in the needs, issues, and concerns of local communities,
2. Research that understands and recognises community members as knowledge-holders and participatorily involves them in the entire research process, and
3. Action-based research that supports actions that lead to the continuous empowerment of local communities.

**Map Of Burma
(Myanmar)**



Thawthi Taw Oo Indigenous Park (Taw Oo District)

In order to empower, as well as recognise the important role that local indigenous youth play in leading research processes and facilitating collective decisions in addressing community's needs, concerns and challenges, this research was led by four indigenous youth (2W;2M) comprising three youth from TTIP of Taw Oo District and one from the Salween Peace Park of Mutraw District. In order to carry out research activities and processes in a successful and effective manner, a stakeholder consultation was conducted with the TTIP's governing committee and KNU Taw Oo District's leaders in order to obtain their guidance, insights, and permission.

A community-based participatory research training was conducted for the four local enumerators on data collection methods. This case study research was executed between

July 1st to 8th, 2022 in Kler Khaw Hti, Wa Mi Per Kho and S' Wa Daw Kho villages located in Saw Tay Der Kaw, Maw Nay Pwar Area, Htaw Ta Htu Township, Taw-Oo District of Kawthoolei/Burma.

In upholding the international principle of Indigenous Peoples' right to Free, Prior and Informed Consent (FPIC), a consultation was held with community members and elders prior to the implementation of research activities and data collection. During the research period, six key informant interviews with the indigenous elders (3W;3M with their ages ranging between 60 to 90), two online interviews with TTIP's committee members, four focus group discussions, and the direct observation of local livelihood activities and natural resource management were completed by the enumerators.



Indigenous Karen housing in Saw Tay Der Kaw, Thawthi Taw Oo Indigenous Park

Saw Tay Der Kaw at a Glance:

The Historical Background of an Indigenous Ancestral Territory

“Before colonisation by the Burman empire and British government as well as the emerging of the contemporary political parties, systems and governance models throughout the world, our Indigenous Karen peoples and communities exercised a system of self-governance within our own territory and/or village for generations”

Saw Eh Wah, TTIP’s Chair Person

For Indigenous Karen communities, Kaw customary land is intrinsically rooted in their social, cultural, ecological, and spiritual values. The Kaw system also plays an instrumental role in climate change mitigation and carbon sequestration through the forests and land situated within. It is the source of cultural and food sovereignty for Indigenous Karen communities.⁶

According to the Indigenous elders in Saw Tay Der Kaw, the territory was first settled and established by two brothers named Saw Mu and Saw Tay. Saw Mu was the older brother, and Saw Tay was the younger. As time passed, the two brothers got married and had their own families, and finally decided to establish their own villages. The village that Saw Mu established was named after him-Saw Mu Der village, while Saw Tay Der village was named after the younger brother, Saw Tay. Traditionally, any Karen village name ending with ‘Der’ is recognized as the native, first, or original settlement.

Even though the exact year of the village’s establishment is untraceable, community elders estimate that Saw Tay Der Kaw has been in existence for around 500 years. The only physical evidence to prove their claim is a ‘giant banyan tree’ in Kler Khaw Hti village, one of the three villages of Saw Tay Der Kaw. The tree was planted by Saw Tay when he first set up the village. According to the historical account given by the elders, when this banyan tree’s branches fell

to the eastern side, communities living to the east would encounter many kinds of difficulties and hardships as a result.

Saw Tay Der Kaw is located in Maw Nay Pwar Tract, Htaw Ta Htu Township, Taw Oo District, and is part of the Thawthi Taw Oo Indigenous Park (TTIP). TTIP is well-known for having diverse Karen tribal groups⁷, but local communities in Saw Tay Der Kaw are recognized as S’gaw Karen, or locally known as Paku. The three villages located inside the Kaw are Kler Khaw Hti, Wa Mi Per Kho and S’Wa Daw Kho, and they are surrounded by several important rivers and streams, including Lay Baw Hlo Klo, Hti Ni Lo Klo, Taw Na Lo, Htee Pa Htaw, Day Kee Klo, Hto Klu Po Kee Klo, Lay Gaw Klo. And the ancestral territory of the Kaw spans a total geographical coverage of 7,567 acres.⁸ Si Khei Der and Plo Mu Der villages are located to the eastern side of Kaw, Kho Pweh Der Kaw to the west, Saw Mu Der (Kaw Nay Tha) to the north and Yaw Mu Per and Kaw Yu Kaw Sweh are located to the south of Saw Tay Der Kaw.

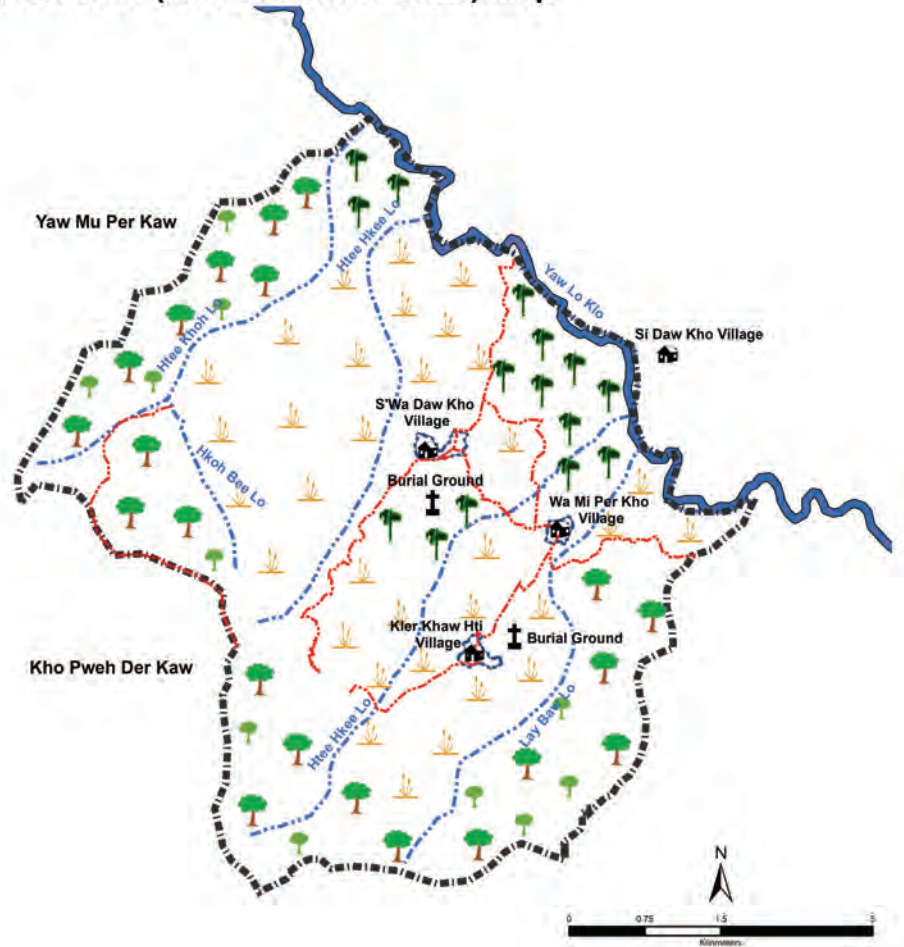
Before the first arrival of Christian missionaries in 1860, local communities were practicing animism called *Tar Or Khei Or Bwa*, and followed the customary authority the Master of the Kaw (Htee Poe Kaw K’ Sar), who was key to territorial management and governance of Kaw system. Kaw governance system is deeply embedded within the

⁶ KESAN, 2017, *The Kaw in Times of Change*. Accessed at: <http://kesan.asia/wp-content/uploads/2020/07/The-Kaw-in-times-of-change.pdf>

⁷ KESAN. 2021. *Thawthi Taw-Oo Indigenous Park (TTIP)*. Accessed at: <https://kesan.asia/resource/thawthi-taw-oo-indigenous-park-ttip/>

⁸ GIS measurement conducted by Taw-Oo’s Karen Agricultural Department

Saw Tay Der Kaw (Kaw Htee Moo Shee) Map





Saw Tay Der's Church, which was re-established in 2017

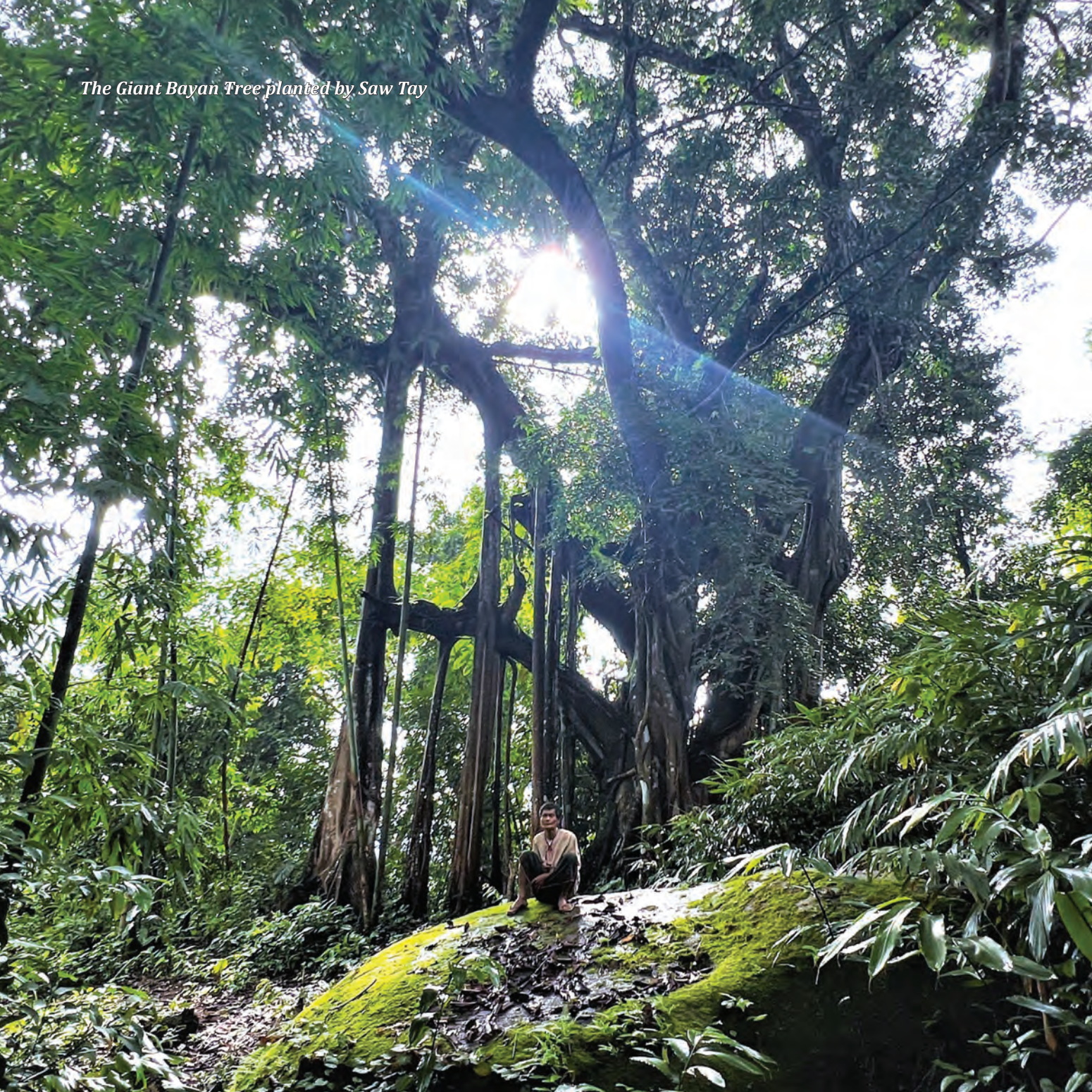
cultural practices, spiritual values, belief systems, and socio-political characteristics of the community. After the second arrival of Christian missionaries, almost the entire community had converted to Christianity. Saw Tay Der Church affiliated itself with Taw Oo (Taungoo) Paku Karen Baptist Association of the Karen Baptist Convention (KBC) in 1887.

According to the elders, there are different classifications of Kaw, but Saw Tay Der Kaw is traditionally categorised as the 'male Kaw'. It's believed that the female Kaw's are more vulnerable, sensitive, and less resilient when exposed to the challenges and hardships, and the entire Kaw can even be destroyed as a result. The male Kaw type like Saw Tay Der is more resilient, can withstand and overcome any difficulties, and easily restore itself after the disasters. Currently, there are a total of 90 households with population of 541 members (254W;287M) in the Kaw.

Kaw, in Karen language refers to a territory or country. It does not refer to land or territory alone, but includes the forests, water, and spirits that exist within, and traditional institutions and knowledge systems that are custodian to it. According to Kaw systems communities must take care to balance relations with spirits embodied within it, and in turn, the Kaw takes care of them. In this way, the Kaw is a territory, a governance system, and ecological management system for Indigenous Karen peoples.

"There are no rich nor poor people in our Kaw. We are all equal, and have sustainable livelihoods and never experience hunger" Indigenous Elder Saw Hser, vice-chair of Kaw Htee Moo Shee (Saw Tay Der Kaw) Committee

The Giant Bayan Tree planted by Saw Tay



Saw Tay Der Kaw, Thawthi Taw Oo Indigenous Park



Climate Shocks and the Impacts of Militarisation

“In our TTIP territory, we are currently experiencing intense heatwaves, longer dry seasons, and shorter cold seasons. As a result of intense heatwaves and unpredictable rainfall patterns, many streams have dried up and the water level in some rivers is gradually getting lower. It is a serious concern and a threat to our livelihoods such as farming and animal husbandry. Our plants’ roots are drying up and becoming withered, their stems are easily broken and vulnerable to insects”

Before the Burmese military regime, under the dictator Ne Win, launched its notorious four cuts counter-insurgency campaign to annihilate the Karen revolutionary movement in 1974, Saw Tay Der Kaw’s ancestral territory was rich in deep forest, abundant biodiversity, water resources, supported by healthy ecosystems. Natural weather cycles were predictable, stable and balanced. Local communities’ lives were very peaceful back in those days. However, after the four cuts military campaign, indigenous communities of Saw Tay Der Kaw faced tremendous pressures from Burma Army such as increasing militarisation, large-scale military offensives, houses and rice barns burnt down, human rights violations, and forced displacement. Subsequently, they experienced food shortages and disease outbreaks while escaping the Burma Army’s military offensives.

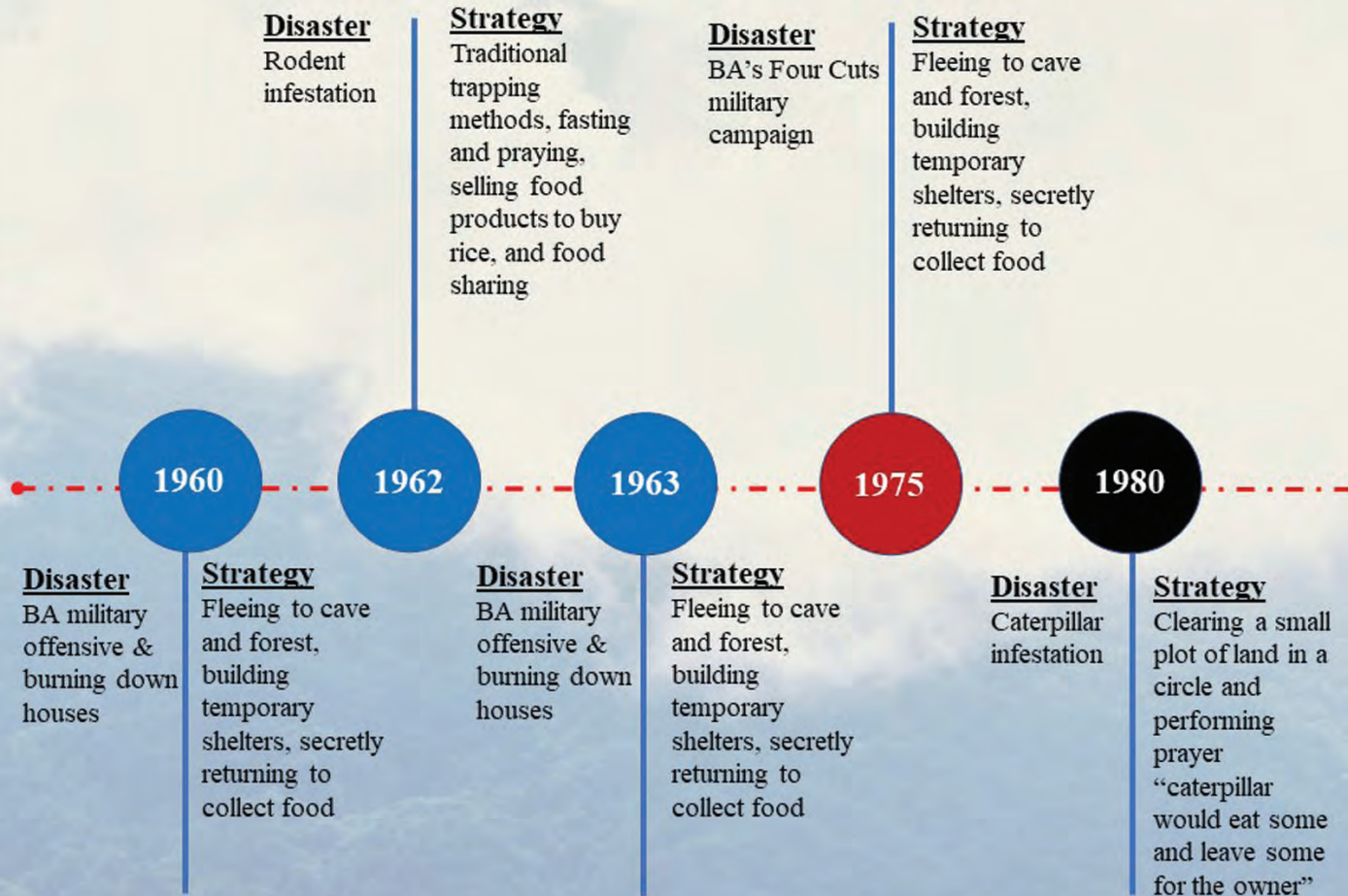
Indigenous communities stressed that the Burma Army’s four cuts campaign was not conducted to merely suppress

the Karen revolution; but aimed to establish political control over Indigenous Karen ancestral territories, followed by the plunder of their natural resources and permanent expansion of militarised areas. . Communities of Saw Tay Der Kaw continue to face trauma as a result of over forty years of militarization under the brutal military dictatorship in Burma.

“In the time of prolonged displacement, the biggest problem that we faced was lack of rice, which was our staple food for survival”

As they had to struggle for their own survival, security and safety, their traditional responsibility to sustain, manage and protect their land, water, forest, and biodiversity remained unfulfilled. Indigenous communities also noted that militarisation and armed conflict were the main driving factors of environmental degradation. Some of the common climate shocks and stresses that the three local communities in Saw Tay Der Kaw faced included rodent and caterpillar infestations, storms, landslides, and floods, which occurred infrequently. The elders confirmed that these natural disasters had taken place over the last sixty years, but the impacts were not too severe.

The following infographic shows the timeline of natural disasters and militarisation and the coping strategies of indigenous communities



Disaster
Storm

Strategy
Scattering rice grains and fishpaste to reduce the impacts of the storm surge

1985

Disaster
BA military offensive and fierce fighting

Strategy
Some fleeing to refugee camps, those remained hide in the cave and forest

2006

Disaster
Flooding

Strategy
Replanting vegetable plants and waterlogged plants on the banks

1999

Disaster
Storm

Strategy
Scattering rice grains and fishpaste to reduce the impacts of the storm surge

2022

The Resilience of Saw Tay Der Kaw's Indigenous Communities:

Coping Strategies to Climate shocks and Militarisation in Thawthi Taw Oo Indigenous Park

Traditional Knowledge and Wisdom

Our ancestors instructed and guided us to have peaceful and harmonious relations with nature and ecosystems, because it is only due to their sustained existence and undisturbed natural cycles that we are able to survive and thrive. Indigenous Karen communities in Saw Tay Der Kaw also believe in this virtuous cycle of interdependency, whereby forests look after the community and the communities, in turn, look after the forest.

As a result, however of humanity's addiction to fossil fuel consumption, unsustainable consumerist lifestyles, and a carbon-based economic model forged in the name of development, our Earth's natural resources have been rapidly extracted, exploited, and plundered. Vast quantities of oil and natural gas are hauled from the earth to power different modes of transportation and industry, massive deforestation for large-scale industrialised farming, commercial logging, and urbanisation are increasing at an alarming rate. Resultantly, the earth is now set reach temperature rises between 2.4 to 2.6 degrees Celsius before the end of this century.⁹ The root cause of this catastrophic climatic breakdown is relentless extraction, consumption and greed of the world's most powerful.

In order to endure the impacts of climate change, Indigenous Karen communities depend on their Kaw, and the resources, skills, knowledge and institutions instilled within it. In order to predict and respond to changing weather conditions, they rely on traditional knowledge and wisdom to observe natural phenomena. For example, according to communities

in Saw Tay Der Kaw, the flowering young leaves on a tree or bamboo is the indication of the first rainfall which will then be followed by a regular rainy season. Community members also told us that when a clumping giant dragon bamboo young leaf has blossomed, it is the sign of regular rainfall.

The elders say that when the *Ter Er Na* (*ficus oppositifolia*) tree is bearing fruits beneath its trunk, it is the warning sign of severe floods. They also scatter rice grains and fishpaste to reduce the impacts and speed of the storm surge. The elders also say that when ants make their nests at trunk of a tree, heavy storm would be coming. These observations and uses of traditional knowledge and wisdom still remain reliable to this today.

Bamboo traps are frequently set up at the edge of *Ku* rotational farms to guard against rodent infestations during harvest periods. Spiritually, as a devout Christian community, prayer and fasting are an integral part of their coping strategies, used to overcome shocks and stresses. Likewise, spiritual coping mechanisms such as prayer and fasting are also used to deal with caterpillar infestations that destroy their rice crops. In particular, after marking a circle on the infested spots, the community pray that, "caterpillars can eat some (rice crops) and leave some for us". According to the elders, the belief of performing this ritual is to control caterpillars' expansion on the farm.

⁹ UN Environmental Programme (UNEP). 2022. *The closing window: Climate crisis calls for rapid transformation of societies*. Accessed at: <https://www.unep.org/resources/emissions-gap-report-2022>

In preparation for any potential disasters, their ancestors gave them the following instructions;

“For the young generation of my children, carve a wooden mortar and weave a rice bamboo tray; you will encounter intolerable hardships should you fail to prepare yourselves with these tools”

“For the young generation of my children, if you cling the knife handle firmly, you won’t face starvation, yet would have abundant food (food security)”

The teachings and instructions like these are to remind the present generation to prepare themselves with the necessary traditional agricultural tools for farming and to be diligent.

Resource-Based Traditional Livelihoods

The primary livelihoods of indigenous communities in Saw Tay Der Kaw include *Ku* rotational farming, agroforestry, small-scale trading, traditional weaving, animal husbandry, and collection of non-timber forest products from the forests.

At the beginning of dry season in early March, local communities start storing rice, salt, fishpaste, fermenting jengkol, bamboo shoots, and mustard leaves, as well as preserving dried bamboo shoots, beans and chili. This preparation is part of their mitigation strategy to cope with any potential and unforeseen disasters.

Saw Tay Der Kaw’s community have maintained *Ku* rotational farming practices as their main livelihood activity. *Ku* farming system is a form of sustainable land use management which has been practiced by indigenous Karen communities in upland areas for many generations. Following customary practices that promote agroecological principles of maintaining the balance of biological diversity and ecosystem services, local communities plant a variety of plants and vegetables among the rice in their *Ku*.

While the majority of the community had diversified their livelihood activities with agroforestry by 1990s, sustaining traditional upland rotational farming practices is still important to the sustenance and management of biocultural resources. For them, rice is intrinsically embedded in their cultural identity, as their food system is based on their ancestors’ teachings for sustaining the health of ecological systems.

After the crops are harvested in *Ku*, the fallow lands (*Thi*) are left to regenerate for 7 to 15 years before they are cultivated



Intercropping practices as an agroforestry in Thawthi Taw Oo Indigenous Park



Intercropping practices in Ku rotational farms



Ceremonial flowers in Ku

again. When the fallow lands are left for regeneration over this period, the soil again becomes fertile. Indigenous elders stressed that the rotation of fallow lands in mixed deciduous forest areas takes a minimum of 7 years, while fallow lands situated in lowland evergreen forests takes 15 years to regenerate.

According to the local elders, there are 34 different types of plants, herbs, fruits and yams and ceremonial flowers species planted in Ku rotation farms. For example, mustard, varieties of beans and peas, yams and taros, eggplant, cucumber, sponge gourd, basil, roselle, pumpkin, turmeric, ginger, cassava, sticky rice, pea, chili, millet, and other vegetables are found in Ku farms. In addition, there are

eleven species of rice and four species of sticky rice that can be found in the Ku farm. The use of ceremonial flowers in Ku is an integral part of the rotational farming system. The elders explained that the flowers are used to scare or expel the evil spirits as well as protect the cultivated plants from insects' attacks.

The varieties of Ku rotational crops

Rice species	11
Sticky rice species	4
Vegetables, herbs, basil, fruits, taros and yams species	34
Ceremonial flowers species	7

CUSTOMARY PROTOCOLS OF KU RATIONAL FARMING

1. In order to prevent wildfires, farmers are responsible for making proper firebreaks around the edges of their Ku.
2. No farmer is allowed to clear fallow lands around or within the boundaries of areas of ecological importance such as mountain ridges.
3. No farmer is allowed to clear around a spring-fed pool (Htee Meh K'la) area, which is believed to be the place of Nar Htee (guardian of water).
4. Farmers must follow customary practices by planting a variety of native plants, yams, herbs and taros in their Ku (mix/intercropping system).
5. During land preparation and clearing periods, farmers are not allowed to chop down whole trees, and instead have to leave some branches and twigs in order that Hto Bee Kah can land on it (it is believed that this spirit bird will take care of the rice yield and land).
6. Burial grounds, animal feeding grounds (Maw), Lo (Karen animist burial grounds) are not allowed to be cleared or cultivated, violating this will result in crop failure, Ku Ka Thwee (evaporation/steam at the underneath of cultivated land which can kill the crops), and family will experience unknown disasters.
7. It is believed that if a deer crosses in front of you on your way to Ku, it's a sign of a bad omen; therefore, you must return to your house immediately and take a rest. You can return to your farm the following day.
8. It is believed that if a Bengal Slow Loris and snakes are found in your Ku during land preparation and clearing periods, you must leave this land alone. Violating this will result in any unknown or unpredictable disasters happen in a household (health problems).
9. During rice harvesting periods, a visitor must not go and/or cross over a bundle of rice. It's believed that violating this will make rice guardian/spirit disappears that will result in food shortages (Karen says that "Ta Doh Bue Doh Hue")



The intercropping practices of jackfruits, durian, betelnut, and rambutan as agroforestry system in Saw Tay Der Kaw customary territory

Agroforestry

Agroforestry is another major livelihood activity among indigenous communities in Saw Tay Der Kaw. This forest-based livelihood includes cardamom, durian, mangosteen, lime, mango, coffee, jengkol, coconut, and rambutan cultivation. Agroforestry provides multiple benefits; for example, as an integrated forest-based livelihood activity that doesn't require forest to be cleared, agroforestry can play a critical role in addressing climate change impacts through CO₂ absorption, providing sanctuary for biological diversity, maintaining healthy ecosystems and undisturbed water cycles, regenerating soil fertility, and regulating climatic conditions. In addition, agroforestry can strengthen and promote local livelihoods, food security, income, and sources of nutritious food¹⁰. Agroforestry is also an important coping strategy during periods of shock and stress, providing communities with a stable income to purchase necessities.



Cardamon plantation in the forest

¹⁰ https://siwi.org/wp-content/uploads/2020/02/Agroforestry-for-adapation-and-mitigation-to-climate-change_web.pdf

“One of the major benefits from practicing agroforestry is that it fulfils our ongoing household needs by regularly providing earnings from the seasonal crops sold throughout the year”

Globally, agroforestry is recognised as an effective integrated landscape management system to combat climate change and strengthen local communities' livelihood activities. Acting as climate mitigation measure, agroforestry can reduce and/or remove a significant amount of greenhouse gas emissions through carbon sequestration¹¹, according to the IPCC. Indigenous communities in Saw Tay Der Kaw carefully select cultivation sites for agroforestry, for instance in areas nearby stream and under the forests because of the rich soil fertility and availability of water.



¹¹ https://www.ipcc.ch/site/assets/uploads/sites/4/2019/12/02_Summary-for-Policymakers_SPM.pdf



Collection of durian fruits from the orchard

Forest Product Collection

Forests are one of Earth's most vital resources. In addition to the vital role that forests play in carbon sequestration and maintenance of habitats for globally important biodiversity, forests are key to indigenous communities in Saw Tay Der Kaw. In defiance of the military orders given by the Burma Army to move to designated relocation sites, indigenous communities fled to forested areas and waterfall caves for safety and sanctuary. Forests and other natural landscapes in their Kaw act as sanctuaries from the Burma military regime's troops atrocities. There are two types of forest found in Saw Tay Der Kaw; mixed deciduous forest, and

tropical evergreen forest. As Saw Tay Der Kaw is situated on mountainous terrains, surrounded by forest, weather conditions are relatively stable and predictable. According to the community elders, they have identified 74 tree species, 13 bamboo species, 35 herbal medicinal plants, 29 mammal species, 27 bird species, and others in their Kaw.

There is a traditionally designated herbal medicine collection forest known as Ku Gaw Daw and it's recognised as a sacred area by local communities. There is a customary protocol that before the medicines are collected in the forest, one has to offer a small amount either silver or gold powder and/or betel nut chew. They believe that performing this

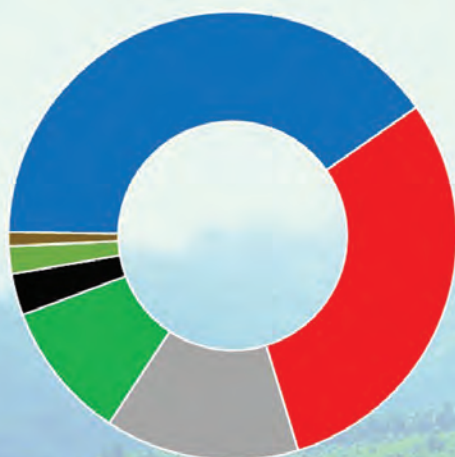
customary ritual will make the medicines more effective and cure illnesses. They also stress that any wounded animals that pass by this forest can be healed. Some of the internationally recognised endangered wildlife species, including leopards, bear, deer, gibbon, pangolin and guar and dhole are still present in Saw Tay Der Kaw.

Water is also a vital resource both to the sustenance of the community, and forests, wildlife and biodiversity. In Saw Tay Der Kaw, there are 12 streams/rivers flowing, one fish conservation zone established, and seven designated cultural sacred areas.

Natural Resources Management

Tree species	74
Bamboo species	13
Herbal medical plant species	35
Mammal species	29
Bird species	27
Fish species	25
Snake species	14
River/stream	12
Fish conservation zone	1
Cultural sacred areas	7

Integrated Land Uses and Management



■ Ku Rotational Farms	40%
■ Agroforestry Areas	30%
■ Betelnut Orchards	14%
■ Forest Areas	10%
■ Residential Areas	3%
■ Burial Gronds	2%
■ Sacred Areas	1%



Tradational Ku rotational farming pracrices in Saw Tay Der Kaw

Community Values of Collectivism

Among the many positive social characteristics that indigenous communities in Saw Tay Der Kaw hold is unconditional care for others, known in the Karen language as *Tar Ma Dot Mar Kar*. The social character and spirit of *Tar Ma Dot Mar Kar* is highly valued amongst the community members, and can be defined as the basic act of altruism. The act of *Tar Ma Dot Mar Kar* usually happens during community house building, hunting, harvesting, wedding ceremonies, and other community events where collective labour and

community interdependency can be witnessed. This positive characteristic trait of caring for and helping others has been taught and guided by the ancestors generationally. And this is the basic moral character of Karen culture to express love, hospitality, care, and empathy towards one's neighbours. According to the indigenous elders, *Tar Ma Dot Mar Kar* is one of the critical components of resilience to endure natural disasters and militarisation, and culturally it's symbolic of community cohesion and collectivism.

Case Study: 40 years' experience as an IDP, defender of ancestral territory, and fighter against injustice

Tee Saw Hser, literally defined as Uncle Sweet, is a well-respected indigenous leader in Saw Tay Der Kaw. He is Kaw Htee Moo Shee's (Saw Tay Der Kaw) Committee's vice chairperson as well as assigned as the Church's elder. He was born in 1952, four years after Burma gained her independence from British colonial rule. Saw Hser, now 70 years old, is a native of Saw Tay Der Kaw, and the oldest son born to father Saw Poe Aung and mother Naw Reh Loh, with two younger brothers and sisters.

Unfortunately, his mother passed away from natural causes when he was just 10 years old. As a child, Saw Hser could only spend two months of schooling at Grade 5 in Si Keh Der Village, soon dropping out due to health problems. After quitting school, he started to help his father farming and supporting his younger siblings for their education.

Tee Saw Hser recalled that there was sporadic fighting that broke out in his village when he was young but not that intense. Local circumstances, however got worse after the Burma Army launched its notorious "Four Cuts" campaign, a military strategy designed to obliterate the Karen revolutionary movement and gain control over their ancestral territory and natural resources in June 1975. "It was a terrifying experience", recalled Tee Saw Hser. During that time, villages in mountainous areas, including his, were ordered by the Burma Army to move to military-controlled relocation sites called Play Hsa Hlo where they set up their military bases. This forced relocation site was designated by the Burma Army to be

a so-called peace village. Villages that refused to obey the orders of the Burma Army to move to their relocation sites were regarded as hiding villages.

In defiance of the Burma Army order to move to the relocation site, Tee Saw Hser and his fellow community members went to hide in the forest located within their ancestral territory of Saw Tay Der Kaw. In the period of the four cuts military campaign, military regime troops from Light Infantry Battalion (LIB) 39, stationed at Play Hsa Hlo were active in their area. The situation was desperate after another large-scale military offensive carried out by the Burma Army Division 66 to attack the entire Taw Oo (Taungoo) District in 2006. The biggest problem that local people encountered while hiding in the forest was food shortages. While the Burma Army had blocked every food supply route, local communities were taking risks to secretly travel to buy food in the lowland areas during the night.

"Despite the many hardships, threats, difficulties, war, oppression, and forced displacement that we faced, I firmly decided to remain in my ancestral land until the last breath", Saw Hser

Tee Saw Hser stressed that, *"during the 40 years of forced displacement under the Burma Army's military offensive, we were constantly hiding and moving from place to place within our Kaw territory. I've never left my ancestral territory. In some years, we would hide in the forest, some year in the cave, and other year in the watershed areas where we felt safe and wouldn't be easily spotted".*

In relation to climate change impacts, indigenous communities in Saw Tay Der Kaw haven't faced any intense and serious problems and shocks. He also claimed that, *"We have quite stable weather conditions and predictable rainfall patterns. Maybe this is due to the fact that we don't destroy our forests. We continue to follow our ancestors' pathways and teachings of sustainable forest and other relevant natural resources management...it is my earnest wish to have a peaceful life in my ancestral land, the stability of political situation, and the cessation of war, militarisation, and displacement".*

Protecting the Forest and Mitigating Climate Change:

Saw Tay Der Kaw's Customary Forest and Biodiversity Management and Conservation

As Saw Tay Der Kaw's forests form the foundation of the community's resilience and ability to cope during periods of hardship, communities reciprocate by taking great care in protecting and sustaining forests, biodiversity and wildlife within the Kaw. While communities in each Kaw have developed customary forest management practices through the generations in order to sustain their forests and biodiversity, communities have also coordinated their efforts with the support of civil society organizations and the KNU in order to form the Thawthi Taw Oo Indigenous Park (TTIP), a vast locally indigenous protected forest landscape, conserved and sustained by interconnected indigenous communities.

Customary Forest Management

Saw Tay Der Kaw's community protect their forest according to knowledge and practices that have been developed through the generations. Within the Kaw, cultivation and resource extraction in watershed areas and other culturally and ecologically significant areas, including mountain ridges and sacred areas is prohibited.

The community have designated just two forest areas within the Kaw (Htee Baw Hlo and Htee Ni Hlo), as areas in which community members can harvest timber for local uses, for example for household, religious or social buildings. It is against the values of the community for timber to be extracted or sold for profit. The Kaw hosts four locally designated areas where subsistence hunting can be practiced, these include Lay Baw Khee, Htee Nay Khee, The Kho Day, and Yer Khee. Again, the community believe that hunting can only be conducted for household use, and never for profit.

Saw Tay Der Kaw also includes a herbal medicine forest, where community members can find and extract a wide

range of herbal medicines to build strength or treat ailments. There is also one locally designated wildlife sanctuary in which hunting and non-timber forest product collection are strictly prohibited, and in which a range of vulnerable and endangered wildlife species can be found.

In order to prevent damaging wildfires, and to promote sustainable forest management, the community have also carried out inter-boundary firebreaks between Saw Tay Der Kaw (Kaw Htee Moo Shee) and Saw Mu Der Kaw (Kaw Nay Tha) in the five areas of S'Pweh Pwar, Thay Wah Law Daw, Khoe Baw Pwar, and Wah Por.

Locally designated areas for timber harvesting	2
Locally designated areas for hunting	4
Herbal medicine forest	1
Local Wildlife Sanctuary	1



The drawing of a community resource map of Saw Tay Der Kaw

TTIP's Forest and Landscape Governance and Protection Framework

Beyond protecting and maintaining their own Kaw, Saw Tay Der Kaw's territory is part of Thawthi Taw Oo Indigenous Park, a much wider indigenous driven conservation initiative. Thawthi Taw Oo Indigenous Park, a 575,450-ha indigenous community conserved landscape, was established in 2019. The goal of the Park is to revitalise and strengthen Indigenous Peoples' ancestral territories, cultural practices and areas of biocultural significance in Taw Oo District of Kawthoolei. The TTIP sits in northern Karen State adjacent to the Salween Peace Park and Thaw Thee Phgaw Ghaw Peace Park in Karenni State, coming together to form an expansive indigenous conserved corridor.

The vision of indigenous communities living within the Thawthi Taw Oo Indigenous Park is to live interpedently and

harmoniously with their surrounding natural environment, enjoy secure livelihoods, sustain their traditional cultural practices, and fully realise their customary land and resource governance rights. The 575,450-ha Indigenous Park brings together 18 Kaw territories, each with their own locally crafted management systems, as well as 6 reserved forests, 4 community forests, 1 watershed conservation area, and 1 wildlife sanctuary.

The Thawthi Taw Oo Indigenous Park demonstrates the ingenuity of indigenous communities in Taw Oo District, and their determination to protect not only their own Kaw territories, but the expansive forests and biodiversity around them.



Threats to Saw Tay Der Kaw's Forests and Communities

Despite the considerable efforts that Indigenous communities in Saw Tay Der Kaw have made to protect their forest, and the critical role that the forest plays in protecting them, the community continue to face significant hardships that threaten to overturn their interdependent and harmonious relationship with their forests and biodiversity. These challenges have become increasingly difficult following the 2021 military coup, which has led to a resurgence in military offensives and resource grabs across the country.

Threats Prior to the 2021 Coup

While armed conflict in large part had desisted, Indigenous Karen communities in Taw Oo continued to face significant challenges during the so-called democratic period (2011-2021). A series of land reforms introduced in 2012 categorised over 30% of land across the country as vacant, fallow or virgin (VfV), some 82% of which is located within the Burma's seven ethnic states.¹² Such laws facilitated the initiation of large-scale commercial projects, including hydroelectric dams and agribusiness plantations, while also enabling further land confiscations for the construction of new military bases in Taw Oo District. During this period, both central government administration and commercial companies were able to expand into the territories of indigenous communities in Taw Oo, threatening to upset the relationship between communities and their Kaws.

Threats After the 2021 Coup

On February 1st 2021, the military staged a coup d'état, abruptly ending the ten-year quasi democratic period that had preceded, and launching a resurgence in conflict and militarisation across the country. This has brought a host of new challenges to indigenous communities in Taw Oo.

Within Thawthi Taw Oo Indigenous Park, since the coup there has been renewed sporadic armed conflict, as the military has made incursions into the area. Communities have also seen a proliferation of military checkpoints, travel restrictions and ad hoc interrogations imposed by SAC troops. In addition to this, there has been frequent aerial surveillance in the area, and on three occasions aerial attacks that have caused casualties and damage among civilian communities.

Decades of militarisation mean that there are now 52 military camps within the TTIP area. While Taw Oo has not been among the worst impacted areas by resurging violence following the coup, community members continue to live in fear, in the knowledge that attacks could break out at any time, forcing them to flee from their Kaw again. With over forty years of experience of military oppression, Indigenous Karen communities in Saw Tay Der Kaw have been forced to relive past traumas, in an endless cycle of violence.

¹² Gelbord, J., 2018. *Implementation of Burma's Vacant Fallow and Virgin Land Management Law: At Odds with the National Ceasefire Agreement and Peace Negotiations*. TNI. Accessed at: <https://www.tni.org/en/article/implementation-of-burmas-vacant-fallow-and-virgin-land-management-law>

Conclusion

The impending impact of climate change poses significant risks and challenges to rural Indigenous and local communities across the globe, who depend on land and forests, underpinned by stable ecological conditions for their continued survival. For communities in Saw Tay Der Kaw, the impacts of climate change have been compounded by over four decades of military oppression, which continues to this day. Despite these hardships, Saw Tay Der Kaw's community have found resilience and resolve within their Kaw, and the knowledge, values and practices passed down by their ancestors through which to sustain it. Where communities have experienced floods or insect infestations, they have relied upon traditional teachings and practices to resolve them, and where there have been incursions, attacks and displacement caused by the Burma Army, communities have found sanctuary within their forests.

Where the communities Kaw has looked after the Saw Tay Der Kaw's community, the community has looked after their Kaw, working hard both to sustain their resources through local management practices and systems, as well as contributing to wider Indigenous-driven conservation initiatives such as the Thawthi Taw Oo Indigenous Park. Despite the reciprocal relationship that has sustained both the community and the Kaw for generations, continued threats from climate change, land confiscations and military offensives threaten to upturn this virtuous cycle – a transgression that would be catastrophic for the community, the forest and the climate.

In order to address the intensifying impacts of climate change, we call for urgent global action to protect, support and elevate Indigenous communities, and the relationships that they have maintained with their territories.

Recommendations

For Indigenous Karen Communities, TTIP's Committee and Taw Oo District's Leaders:

1. Undertake further research on the impacts of climate change, and the coping strategies used by indigenous communities in TTIP,
2. Document, strengthen, revitalise, and enforce Kaw customary laws, rules, and regulations as well as the overarching governance system in TTIP,
3. Mobilise and organise awareness raising and community outreach trainings on sustainable forest management, biodiversity conservation, and other relevant natural resources such as watershed areas and fisheries for indigenous communities in TTIP,
4. Establish a reforestation programme and undertake tree plantation campaigns, especially for native species in deforested and degraded areas,
5. Ban all large-scale development and extractive projects that may lead to illegal confiscations of indigenous land, destruction of forests and threats to local livelihoods,
6. Empower and involve youth and women in natural resource management and biodiversity conservation activities, and
7. Collectively consult and develop natural resources benefit sharing rules and regulations in order that resource use is equitable for all members of the TTIP.

For the Future Democratic Government of Burma:

1. Indefinitely end systems of military dictatorship and chauvinism in Burma,
2. Abolish the military-drafted 2008 Constitution that provides a pathway for the Burma Army take control over the indigenous peoples' ancestral territories, plunder their natural resources, and prolong the repressive military rule,



3. Guarantee and protect indigenous communities' land and resource rights in all legal frameworks,
4. Recognise, support and strengthen forest-based livelihoods such as agroforestry, which generate multiple social, environmental, economic and even climatic, benefits,
5. Officially recognise and support indigenous communities' coping and mitigation strategies to climate change impacts, and
6. Officially recognise, respect, and promote indigenous communities' traditional knowledge, skills, wisdom, and practices in all relevant policies and realise them effectively.

For International Community, UN Agencies, INGOs, Donors and Governments

1. Address climate catastrophes, by ensuring that all political agreement and treaties, either binding or

- non-binding, are implemented and enforced effectively and sincerely,
2. Officially recognise the role of indigenous communities in combating climate change and provide financial, political, and technical support to them to effectively address the impacts of climate change. And directly channel funding sources to indigenous communities and organisations,
3. Uphold social and climate justice through legal assurances and protections of indigenous communities' land rights, and
4. Officially recognise, respect, and promote indigenous communities' traditional knowledge, skills, wisdom, and practices in all relevant policies, and realise them effectively.



“We Protect Our Kaw, and Our Kaw Protects Us”

Reciprocity and Resilience of Indigenous Communities in the Face of Climate Change and Militarisation in Thawthi Taw Oo Indigenous Park

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