The Wisdom, Knowledge and Customs of Indigenous Communities in Ban Chaung







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Tarkapaw Youth Group and the Ban Chaung Commuity Sustainable Environmental Conservation Committee





About Tarkapaw Youth Group and the Ban Chaung Community Sustainable Environmental Conservation Committee

Tarkapaw Youth Group

Tarkapaw Youth Group is a Dawei based civil society organization formed in 2010. Tarkapaw focuses on community mobilization and advocacy campaigns on land and mining issues, aiming to support communities to solve their own challenges. The organization has been working in solidarity with communities in Ban Chaung for the past six years to campaign against damaging coal mining and secure land and forest rights for indigenous communities.



Ban Chaung Community Sustainable Environmental Conservation Committee

The Ban Chaung Community Sustainable Conservation Committee was formed in 2013 by community members from 7 villages in Ban Chaung. The committee formed after receiving trainings from Dawei based CSOs, and now it has 21 elected members that represent the wider community. The objectives of the committee are to conserve, improve and protect the lands, forests, natural resources, rivers and environment for future generations.



Tarkapaw Youth Group would like to thank KESAN and TRIPNET for their support in providing trainings in local knowledge research, and we would also like to thank Tharthi Myay Foundation for kindly providing the financial support to conduct this research.

For more information on the wisdom, cultures and customs of the Ban Chaung community, please follow us on

facebook at: https://www.facebook.com/banchaung/

For more information on damaging coal mining in Ban Chaung, you can read 'We Used to Fear Bullets, Now We

Fear Bulldozers', available at: http://www.burmapartnership.org/2015/10/we-used-to-fear-bullets-now-wefear-

bulldozers-dirty-coal-mining-by-military-cronies-thai-companies-ban-chaung-dawei-district-myanmar/

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REPORT SUMMARY

Ban Chaung (Paw Klo), located in Dawei Township of Tanintharyi Region in Southern Myanmar, is a unique area, harboring a range of valuable habitats and ecosystems that support a vast biodiversity and a number of vulnerable and endangered mammal species. This landscape represents a portion of South East Asia's largest remaining contiguous low elevation evergreen forest.

Far from being an area free of human activity, Ban Chaung is a cultural landscape, home to indigenous Karen communities, who have conserved and protected this area for generations according to the customs, traditions and management systems that have been passed down from their ancestors. Local beliefs in spirits, and close ties with elders and ancestors means that cultural values and practices have remained largely intact.

Further, a set of locally based institutions ensures that land and resources are used and managed sustainably by community members through democratically developed rules and regulations that are monitored and enforced by the community. The strong and interdependent relationship that local communities have with their surrounding environment has been vital in the preservation of Ban Chaung's unique natural landscape.

Local knowledge research carried out by indigenous researchers has discovered a vast diversity of fish, medicinal plant and forest vegetable species, demonstrating the enormous amount of indigenous knowledge that local communities hold over their territories. Furthermore, research into the customs and practices of indigenous communities shows how the beliefs and cultures of Ban Chaung's communities provide both for the conservation of natural resources and ecosystems, and the sustainable livelihoods of communities.

This report presents the local knowledge research of four communities in Ban Chaung research, who have identified and documented a wide number of fish, vegetable and medicinal plant species in their villages. It also provides a snapshot into the customs, beliefs and customary tenure systems of communities in Ban Chaung, that work to protect and sustainably manage their natural resources. This research emphasizes the importance of recognizing the wisdom and traditions of indigenous communities, and the need to respect their land, resource rights and cultural rights if Tanintharyi Region's forests are to be protected and the health, wellbeing, and happiness of the future generations in Ban Chaung is to be guaranteed.

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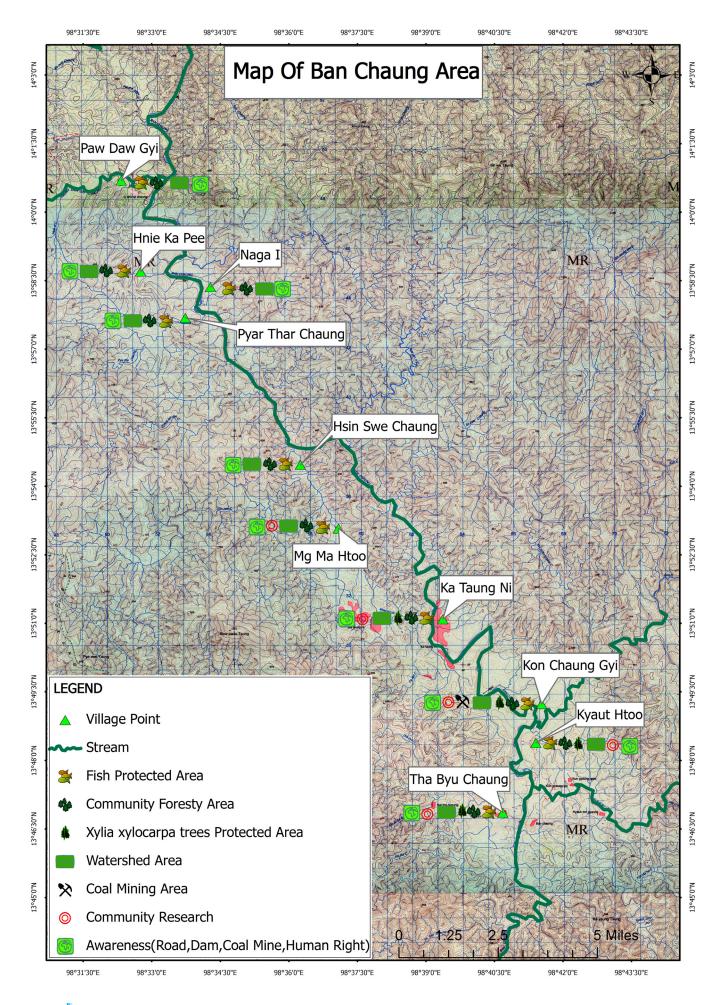
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INTRODUCTION:

Ban Chaung, known as Paw Klo in Karen language, is located in Dawei District in Tanintharyi Region, formerly known as Tenasserim Division, in the southeast of Myanmar. Ban Chaung comprises ten villages that sit on the bank of the Ban Chaung River, a tributary of the Tenasserim River. The area contains a large area of intact evergreen forest that harbors a range of habitats and supports a vast biodiversity and an array of vulnerable animal and plant species. Ban Chaung is home to indigenous Karen communities, who have managed these unique habitats and ecosystems for generations according to local customs, traditions and institutions. Starting at the KNU protected Kaser Doh Mountain, Ban Chaung is an area that has considerable cultural and spiritual significance for local communities, and also contains an important watershed for the surrounding area. The Ban Chaung river meets the Kamoethway river in Myitta Township, where they flow together to form the Great Tenasserim River, a vital water source for the whole of Tanintharyi Region.

The way of life of indigenous communities in Ban Chaung is tightly entwined with the surrounding environment. Traditional animist beliefs and practices continue to be practiced by local communities in Ban Chaung, shaping the symbiotic relationship that community members have with their surrounding environment. Indigenous communities manage natural resources in their territories, protecting valuable resources from over extraction and promoting sustainable use through traditional customs and systems. Community based systems for resource management are democratic, sustainable, and adaptive to changing pressures and challenges. Institutions are comprised of elected members, who make decisions, enforce rules and monitor resource use. Rules and regulations for resource use are democratically decided through village assemblies and enforced by elected monitoring groups, who impose penalties on community members who break them. Through these beliefs, cultures and practices, land and forests have been protected and the livelihoods and wellbeing of indigenous communities has been maintained.

This community research was conducted by members of four villages along the Ban Chaung river over two years. The research documents the indigenous knowledge of community members, detailing the fish, vegetables and medicinal plants that are vital to the lives of local communities, as well as some of the customs, beliefs and systems that ensure that they are sustainably managed. This indigenous knowledge research shows the interconnectedness between indigenous communities and their environment, and the importance of this relationship in providing for the lives and livelihoods of local communities, as well as protecting the pristine forest and the biodiversity that it supports. For the forest in Ban Chaung and throughout Tanintharyi region to be protected, the wisdom and knowledge of indigenous people must be recognized and their rights respected.



Methodology

This local knowledge research was conducted in 2016 and 2017 by indigenous communities in four villages along the Ban Chaung river. Indigenous communities in Ban Chaung are well known for their strong beliefs and long-standing customary system for resource management and environmental protection, as well as their vast knowledge of their surrounding environment. This community research documents some of the vast knowledge that community members have of the enormous diversity of fish, vegetables and herbal medicines that can be found in the Ban Chaung area, as well as some of the systems, customs and beliefs that community members use to protect them. Further, the research process acted as an important mobilization tool, helping to reaffirm the role of community members as forest and resource experts, and empowering community members to come together to protect their environment.

The research was conducted by indigenous researchers in Kyaut Htoo, Tha Byu Chaung, Khon Chaung Gyi, and Ka Taung Ni villages. The research was supported by Tarkapaw Youth Group, TRIP NET and KESAN, who trained community members in the research methodology. After research training, communities returned to their villages and collected, photographed and identified the different natural resources that they rely upon. In total, indigenous researchers found there to be 70 fish species, 245 species of herbal medicines, and 188 vegetable species, each documented in Karen language. The research process is still ongoing, as community members continue to discover new medicinal plants, vegetables and other resources in their territories.

Posters of community findings have now been distributed among villagers in Ban Chaung, and are being used as educational materials throughout the villages. Findings will also act as a

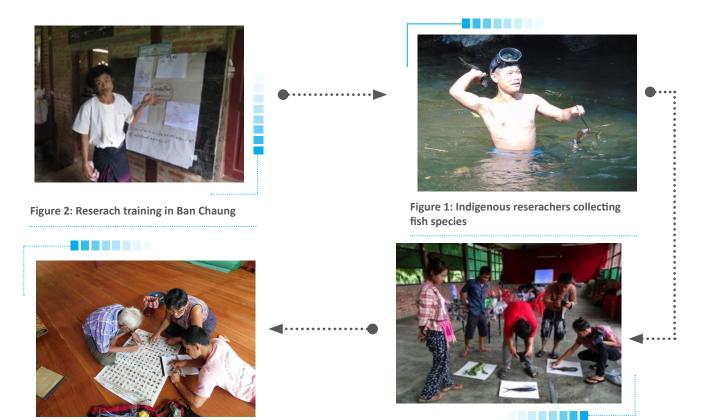


Figure 4: Documenting fish species

Figure 3: Identifying medicinal plants species

baseline for future environmental campaigns. Furthermore, community research brought together communities throughout Ban Chaung to share and talk about the vast diversity of resources that they depend on. This process empowered them both as custodians of their own knowledge and to continue to practice their customs that are integral for environmental protection.

Additional research was carried out by Tarkapaw Youth Group into the customs, traditions and beliefs of communities in Ban Chaung that are used to manage resources and conserve the environment, which have also been included as part of this community research.



Figure 5: Posters of resources are used as educational material



Figure 6: Indigenous researchers celebrate after finishing local knowledge research

INDIGENOUS CUSTOMS AND PRACTICES

Communities in Ban Chaung have an interdependent relationship with the land and natural resources. Local beliefs, cultures and customs are central to village life and guide the ways in which resources are used and managed. Strong beliefs in spirits that guard over land and forests bring full harvests, protect the village and punish those who brake the rules. Further, ceremonies and festivals are regularly held to please the spirits and ensure that the village and resources receive protection. Herbalism also plays an important part of village life. Rather than visiting state hospitals, villagers often rely on local herbal medicines and the wisdom of herbalists to cure ailments and illnesses. These belief systems, customs and practices are integral to the lives of indigenous communities in Ban Chaung and ensure that resources are sustainably managed and protected for future generations.

Herbal Medicines and beliefs

Rather than traveling long distances to the clinic, villagers in Ban Chaung often rely on herbal medicines administered by locally trained herbalists. Herbal medicines are widely believed to be effective in curing specific illnesses and ailments, and also help to keep villagers healthy throughout the year. People in Ban Chaung say that because of the community's innate knowledge of herbal medicine, some villagers live to be over one hundred years old. The indigenous knowledge of herbalists is passed down through the generations and is vital to Ban Chaung communities.



Figure 7: Herbal medicines in Ban Chaung are used to cure illness and keep villagers healthy throughout the year

Becoming an Herbalist

Herbalists play an important role in Ban Chaung villages, administering herbal medicines when people fall sick as well as guiding groups into the forest for annual forest treks.

In Ka Taung Ni village, the herbalist previously had no interest in herbal medicine. However, many years ago he became ill with a gall bladder disease. He tried many different kinds of medicine but nothing would help, so he decided to try herbal medicine at the advice of a friend. It took months for him to find the special place in the forest with the herbs that would heal him, and by the time he got there he had no strength left, and thought we would die. However, after he took the medicine he was full of energy again, and his illness was cured. After this, he began following another herbalist into the forest, learning the techniques for four years until he was ready to lead groups into the forest on his own.



Figure 8: Herbalist in Tha Byu Chaung Village

Healing

Those with special knowledge of herbal medicine can heal people with broken bones, poisonous insect bites, or scorpion stings. Healing requires lighting candles and making specific offerings of coconut, sugarcane, banana, and betel nut. Before conducting the healing ceremony, the healer must leave their house very early in the morning, before the rooster crows, without anyone noticing in order to gather the required herbs. They collect leaves from a special plant and chew them up to a pulp, being careful to spit it out and not swallow anything. After reciting a magic prayer, the healer will wrap the injured area in cloth and hold it in place with sticks, like a splint. The injured person must stay very still and the healer will rub sesame and tamarind oil along with the special herbs on the injured area. Within days the injury will be completely healed. The healer must give their services for free, although the family requesting the healing must offer a small amount of money to "cool down the hands" of the healer. Later, the healer will donate this money to the Church, since they are not allowed to earn money from this practice. However, if they do not accept the money to cool down their hands at the time, the healer would get dizzy and sick after performing the ceremony.

The healer in Ka Taung Ni village is the only person in the village with this knowledge, which was passed down from the community's ancestors. He wants to pass it along to the next generation, but so far nobody has approached him to learn it. According to him it could save people a lot of money from going to the doctor. He has healed 56 people already, and never failed to cure anyone of their ailment. He can heal people anywhere. Sometimes, patients in Dawei or elsewhere will send oil back to the village to be blessed by the healer, who will then send it back to them for application to their injuries. According to the healer, he's not sure who is doing the healing – an animist spirit or Christian God – but "if you believe in something it will come true."

The Annual Medicinal Forest Trek

Although herbal medicine can be taken at any time in the village or in the forest, the annual trek holds special significance as a cultural tradition. First of all, this trek is held around the time of the April full moon, at the time of the Burmese holiday Thingyan, when the healing effects of medicinal herbs are believed to be especially strong. Secondly, it is much safer to sleep for a few days in the forest while taking herbal medicine, in order to avoid serious side effects from eating the wrong foods back in the village. So every year at this time, the village herbalist will lead a group of up to 20 villagers on a walk of up to five days through a special area of the forest. The community conserves this area to maintain supply of herbal medicine, and everyone knows to respect it.

On the trek, villagers will split into three separate groups to take care of cooking, hunting for food, and herb collection. It is very important that they work well together, be respectful, and avoid swearing. Anyone who gets angry during the trip must return to the village. It is forbidden to throw waste into the river, drop firewood, or sleep across a path. Each day on the trip the villagers must wake up at 3am to bathe, eat breakfast at 4am, and then at 5am start the day's search for herbs while walking to a new location before setting up camp for the night.



Figure 9: Ban Chaung locals embark on herbal medicine trek through the forest

While they walk, the herbalist will point out herbs for people to collect, which they will later drink as tea or boil for a steam bath. In the past, it was forbidden to call a medicinal plant by its name while you were picking it, as this was considered disrespectful to the plant. However nowadays, one herbalist told us that he always tells people the name of the plants, because he wants to pass on his knowledge to the next generation. It is important to alternate days between taking "hot" and "cold" herbs in order to soften and then harden your blood. After several days walking, taking herbal medicine, and sleeping in the forest, villagers must pray before they can return to the village.

While taking herbal medicine in the forest it is very important to follow strict dietary guidelines. You cannot eat tadpoles, tortoise, or certain vegetables. You also cannot take seasoning powder or tamarind with you into the forest. Once you return to the village, you still must avoid certain foods so as to prevent side effects. You can only eat rice, salt, fish and certain vegetables for a while. After this you can take a laxative to clean the herbal medicine out of your system, and then you are free to eat anything again. Villagers take these restrictions very seriously, and we were told that in the past, a villager was poisoned when he came back from taking herbal medicine because he didn't follow the dietary rules.

RELIGIOUS BELIEFS, TABOOS AND CUSTOMS

Villagers in Ban Chaung are Animist, Christian and Buddhist. Despite the diversity in religious beliefs, many villagers maintain a close relationship with spirits and ancestors, and some continue to practice animist customs. Ceremonies and offerings to spirits keep villagers safe and protect the land and forest from depletion. Further, it is believed that those who break village taboos will be punished by these spirits, ensuring that village rules are followed and forests and resources are conserved for future generations. While these beliefs systems have weakened in recent years, they continue to influence the relationship that communities have with their surrounding environment.

Spirits in Ban Chaung

While in the past, all community members in Ban Chaung would make offerings to the spirits, this custom is now only practiced by some. Some of these spirits and their respective ceremonies are described below:

Ti Mo To:

In the past, villagers would offer betel nut, candles and bamboo in a dish to Ti Mo To in order to ask for protection or wealth. In order to make the offering, everyone must join hands while touching the dish. While you are praying to Ti Mo To inside the house, you cannot let any animal inside or something bad will happen. You can make an offering to Ti Mo To once a year for protection, or whenever you are facing trouble.

Jai:

In the past, villagers prayed to Jai in a similar ceremony as to Ti Mo To, only this time using small cups instead of a dish. All of the items used in the offerings to Jai must be passed along to the next generation. But if you make a mistake during the offering ceremony Jai will punish you, so villagers are scared to continue this practice because they no longer remember how to do it exactly right. One elder says that he feels safer with the Christian God, which is why he no longer practices these kind of animist ceremonies. He said when he was young his grandparents would make him participate in the offering to Jai, but now nobody in the village

practices this offering anymore. Instead of passing the offering cups onto the next generation, families have buried the cups when their old relatives die. One villager mentioned that Jai has a brother named Bo, but did not discuss any further information about Bo.

Pi Bi Yaw:

Pi Bi Yaw is similar to a spirit of the harvest. Villagers interviewed said they don't really know what Pi Bi Yaw is, but they still practice ceremonies at harvest time for Pi Bi Yaw, just as their ancestors did, in order to thank him for the successful crops.

Punishment and Protection

Fear of punishment by spirits or seeking protection is a strong belief held by communities in Ban Chaung. One villager explained it this way: "The old gods belong to the devil, but if you pray you will be protected, unless you challenge them." Challenging the gods often involved cursing. For example, it was told that one time, some villagers went to the forest to gather medicinal herbs. When they couldn't find any, they got angry and cursed the mountain. Soon after, they were found dead with their necks broken, believed to be punished by the god of the mountain. Villagers also described that in the past, they could ask the mountain gods to hurt someone else who had wronged them.

Although villagers lived in fear of punishment by these Gods, they also would ask them for protection from various harms. For example, when fighting was still active in Ban Chaung, the military would always try and invade during the dry season. So every year before the dry season villagers would hold a big ceremony to ask the gods for protection. They would sacrifice pigs, dance, and beat drums as part of this ceremony. Another villager explained that even though he is Christian, when his relative became lost in the forest, they had to pray to the god of the forest for his protection, not to the Christian god.

Maung Ma Htoo Cave

A good example of villagers' fear of punishment by the gods or spirits is the story of Maung Ma Htoo cave. In Maung Ma Htoo village there is a sacred cave, high up on the rocky mountain. In the past, villagers would borrow plates that were kept in the cave, and use them to make offerings to the gods in the village. They also would sometimes travel to the cave to make offerings inside the cave, and you can still see a small stone alter that may have been used for this purpose. Even though the villagers are now Christian, and no longer make offerings of this kind, they still pay respect to the cave, and believe that something bad might happen if they don't.

Villagers tell a cautionary story about a man who angered the spirit of the cave around 80 or 90 years ago. The story goes that a man got drunk, went to the cave, and shouted a challenge to the spirit of the cave, known as Thi No Ro. When the man shouted, he heard a voice respond, that said "wait, let me finish my betel nut grinding." Afraid of the voice, the drunken man ran away, shouting to villagers along the way not to tell anybody that they saw him pass through the village. Afterwards an old man with white hair, believed to embody the spirit of the cave, chased through the village looking for the drunken man who had challenged him. But all of the villagers denied seeing the drunken man. Angry that the villagers had lied to him, he cursed Maung Ma Htoo village with a diarrhea epidemic. At the time, there were around 70 households in the village, and half of the people died from diarrhea. The other half had to move to another village until it was safe to go back. Villagers still tell this story today, as a warning not to drink alcohol or curse, which could offend the god of the cave.



Figure 10: Stone alter for making offerings inside Maung Ma Htoo Cave

Eclipse Ceremony

Whenever there is a lunar eclipse the Ban Chaung community will perform a special ceremony. This ceremony has been passed down by their ancestors, and is still actively practiced today. Villagers can predict when an eclipse will happen, because the betel nut trees will fail to bear fruit at the normal time. According to traditional belief, if the moon turns to a black color during the eclipse, then that means it has been swallowed by a spider, but if it turns to red color, then it has been swallowed by a centipede. During the eclipse, villagers will shout, beat drums, shoot guns, and make lots of noise in order to scare the spider or centipede into vomiting the moon. If the moon appears to be vomited out of the front side of the creature that swallowed it, that is a sign that the community will have good luck in the coming year. But if the moon appears to be excreted out of the backside of the creature, then this is interpreted as an omen of bad luck.

Spirit Medium

In Kyauk Htoo village there is a spirit medium who can help people communicate with their loved ones who have died. In order to perform the ceremony, he needs to light a candle made from beeswax, and to chew betel nut. When he breathes in the smoke from the candle he becomes unconscious. While he is unconscious, his own spirit goes to the cemetery to talk to the spirits of people who have died. Other villagers will ask questions to the spirits, and he will respond while still unconscious. When he wakes up, he has no memory of any of this. In order for the communication to be successful, the ceremony has to be performed exactly at midnight. Sometimes parents will want him to ask the spirit of their dead child how or why they died. Other times he will ask the spirits of sick patients in a coma to return to their bodies so they can wake up. Everyone in the village knows about his ability to communicate with spirits, because he usually performs this in front of everyone at big festivals. The ability to communicate with dead spirits is passed on through the bloodline automatically, and there is

no need to teach or learn it. Once the current Kyauk Htoo spirit medium dies, the youngest in his family will become the next spirit medium.

Relationship to Christianity

While in the past all villagers followed animist beliefs, many have now converted to Christianity. Even though missionaries discouraged many animist practices, villagers perceive Christianity as being compatible with animism, because teachings are well aigned with the proverbs and values taught by the communities' ancestors. These days, many older animist customs have been adapted to fit the current Christian belief system. For example, the traditional healer will pray to the Christian God before making the traditional offerings to begin the healing ceremony. The healer in Ka Taung Ni village said that even though this is an animist practice, it is not against Christianity so long as he is helping people. Villagers seem to happily combine Christianity with old practices that are still remembered. Another example is that when one villager's son-in-law got lost in the forest, even though the villager was Christian, they had to pray to the god of the forest to keep their son-in-law safe. After they came back safely, they had to fulfill the promises they made and make offerings.

DECISION MAKING AND NATURAL RESOURCE GOVERNANCE

Community conservation and resource management in Ban Chaung

In addition to the traditional beliefs and customs that guide the close relationship between indigenous communities and the environment in Ban Chaung, a customary tenure system that comprises a set of democratic community based organisations ensure that land and resources are sustainably used and managed. This system of natural resource governance in Ban Chaung is closely related to the cultures and customs of local communities, as well as the geographic features of their territories. This enables communities to make collective decisions with regard to their lands and resources, and to ensure that resources are used sustainably and equitably throughout the community.

The customary system determines who can access and manage different resources ensuring that resources are protected from outside incursions. Nested and democratically elected authorities and organisations ranging from village heads to forest committees are responsible for setting and enforcing rules, ensuring that resources are not overexploited and that conservation areas are not degraded. A customary justice system ensures that communal harmony is maintained and that resources are used and accessed fairly and equitably.

Village Institutions and Decision Making:

In Ban Chaung, the community resource management system is underpinned by a collection of democratically elected authorities and institutions which are responsible for a range of duties including; developing and enforcing rules, monitoring resource use, enforcing village boundaries and resolving disputes where they arise. These institutions are responsible for civil cases, as well as resource management and protection.



Figure 12: Annual fish sanctuary ceremony



Figure 11: Opening a community forest in Ban Chaung

Village institutions include a village head, secretary, a group of monitors, a forest committee, and a women's association all of which are elected positions and deal with village administration. In addition to these institutions, each village has a group of elders who provide advice and guidance to elected officials and religious and spiritual leaders. Village elections are held annually, and village members come together to cast their votes as to who will be elected to be the village head, secretary, and protectors, as well as members of the forest committee, which is follows a similar structure. All community members over the age of 18 are entitled to vote.

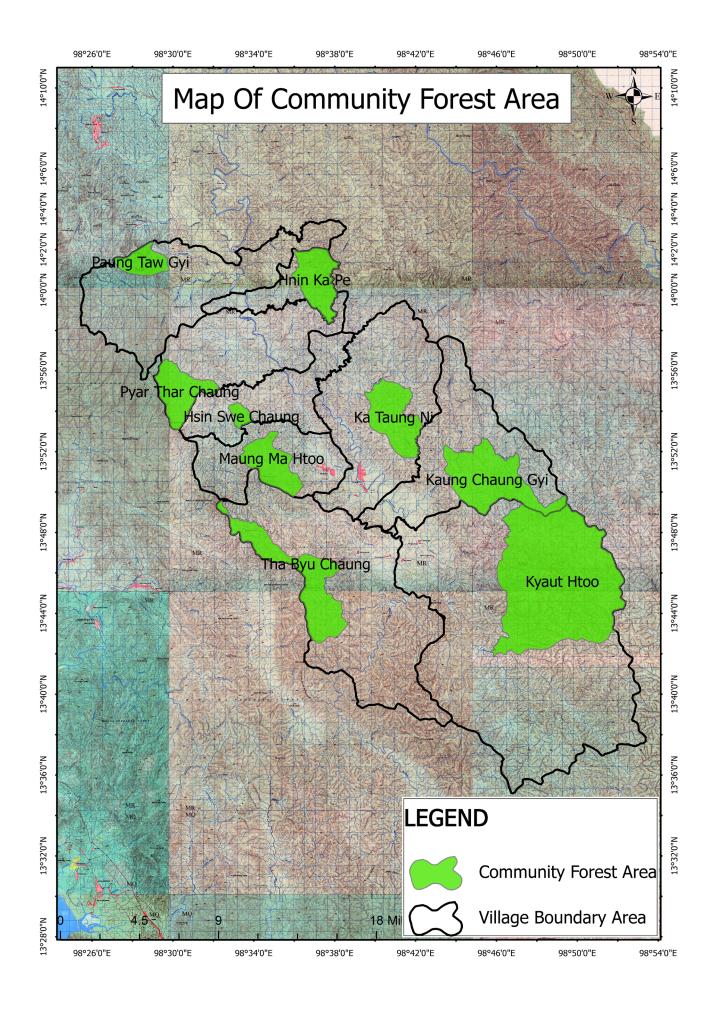
Decisions are made through participatory and democratic processes, whereby all villagers are able to participate in village governance through annual public meetings. Public meetings, usually held in January where villagers come and discuss issues in the village, hold elections for community authorities, and discuss, develop and amend rules for resource use. All decisions are made through consensus, and a decision concerning the community must be agreed upon by a majority of villagers before it is enacted.

These community management structures have existed traditionally for generations in Ban Chaung communities, however in recent years they have been reinforced by the Karen Forest Department (KFD)¹. The KNU system has supported and strengthened village structures to conserve and manage forests, Ban Chaung now has 9 community forests that have been established with the assistance of the KFD.

Village rules, sanctions and resolutions:

Land and resources are governed through a series of collectively agreed rules and regulations for how resources should be accessed and used, based on the traditional values and traditions of the community. Rules are decided upon through annual public meetings with men, women and youth from the village. Where problems with resources are experienced, village members discuss possible solutions, developing rules through consensus. The acting village head acts as the leader in the community, ultimately enforcing and sanctioning collectively made decisions. While these rules were previously village norms that were not strictly enforced, over past

The Karen National Union Forest Department manages forests in KNU controlled areas



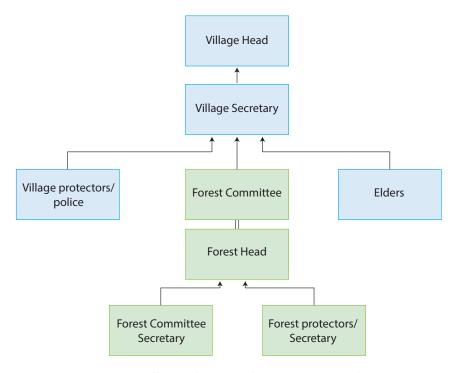


Figure 13: Village authorities and institutions in Ban Chaung

decades these rules have become strictly monitored and enforced in response to increasing population pressure.

Where rules are broken, communities enforce escalating sanctions in order to ensure sustainable resource use. Where rules are broken the first time, for example, village monitors issue a warning, if rules are broken a second time fines or punishments are imposed, and if rules are broken a third time, perpetrators are sent to the KNU township office, where they may receive a jail sentence or fine.

One example of village rules protecting forest resources was a recent case where a group of businessmen from central Myanmar came to the village and started mining in the forest. Village monitors approached the businessmen and told them that they needed to request permission from the village head before they could conduct their mining operation. Refusing to abide by these rules, the village leader came to the site and told the miners that they must pay 50,000 kyat for each hole that they had dug, and finally the miners left the village.

Forest and Resource Management

The forest is vital for community members in Ban Chaung. Forests act as important watershed areas, spiritual spaces, biodiversity conservation, or hunting grounds, and provide a wealth of vital produce to villagers including herbal medicines, fruits and vegetables, bamboo and timber for house construction. Forests in Ban Chaung have been carefully managed through the generations, through traditional customs and beliefs. Communities also have local institutions through which rules and regulations can be developed and enforced in order to ensure the sustainable use of forest resources.

Forest rules are enforced by the village forest committee, which is comprised of an elected head, a group of elected monitors and a secretary. The forest committee conducts regular monitoring trips through the forest, monitors resource use, and defends the forest from outside incursions.

Forest rules are agreed upon by the whole community and include regulations such as; domestic extraction of forest products only, no burning in the forest, permission must be sought before hunting, and no poison can be used for hunting. Sanctions for breaking rules are usually in the form of fines or public services, for example if someone fells timber from the protected forest without prior permission, the perpetrator is required to plant 10 trees for every one tree felled and pay the value of the timber extracted to the village fund.



Umbilical Cord Ceremony

In the past, villagers would hang or bury the umbilical cord of a newborn baby at a tree in a sacred place in the forest, but only a few people in Ban Chaung continue to practice this today.

Fish Conservation Zones

Every village in Ban Chaung has its own fish conservation zone that is in the deep part of the river where fish breed. These were established a long time ago as part of the indigenous system of managing natural resources, but the community has recently promoted these again with public gatherings. There are two kinds of fish zones. In one kind, catching any fish is strictly forbidden, but in the other, you can only catch fish if it is for the community's benefit, such as for food during a festival.



Honey Collection

According to traditional beliefs, when villagers go to collect honey from the forest, they must share it equally with everyone, including any wild animals that are present. It is important to carefully prepare the fire used to smoke out the bees, and avoid cursing during the process.

Hunting and Wild Animals

Villagers in Ban Chaung practice subsistence hunting, catching deers, wild pigs, monkeys, snakes and snails for household consumption. Villagers do not sell the animals they catch, and are expected to share what they have caught equally amongst other hunters and households. There are strict rules and taboos against catching vulnerable or endangered animal species, however in recent years there is an increasing number of poachers who encroach on their lands from Thailand to hunt tigers and other wildlife to sell.

The Ban Chaung community previously followed strict rules about hunting and the treatment of wild animals. While village elders remember these rules, they are not always practiced today. Here are some examples of rules that would need to be followed:

 A hunter must make an offering to the spirits and ask for precise permission of which animal he could kill. For example, a hunter might offer a specific number of pig heads and bottles of rice wine, in order to ask to kill a deer.

- It is prohibited to kill an elephant or a rhino, and you can only shoot the animal you ask for.
- Each hunter had their own territory, and would ask the spirits to punish other hunters who
 infringed on their territory.

In addition to these, there are strict rules and taboos against hunting endangered of vulnerable animal species, which are widely respected in villages throughout Ban Chaung today:

- You should not kill a tapir because it is believed that its flesh is made from many different kinds of animals.
- You should not kill a **hornbill**, because if you do then its mate will become depressed and kill itself. Hornbills mate for life, so it will never take another mate and will stop eating.
- You should not kill a **gibbon** (*Kayu Pah*) because it is believed that when the Gibbon population is high, then there will be peace in the country. Also it is said that a Gibbon cries like a person before dying.
- You should not kill a **To Kler bird** because they are "soldiers for chickens." They will protect your chickens from eagles that try to eat them.
- When you are clearing a paddy field, you must not kill a tortoise.
- You cannot eat the meat of a **woodpecker** that your parents killed, and must throw it away.
- You can only eat some meat of the Toe Di Pwar bird, and then throw the rest away.

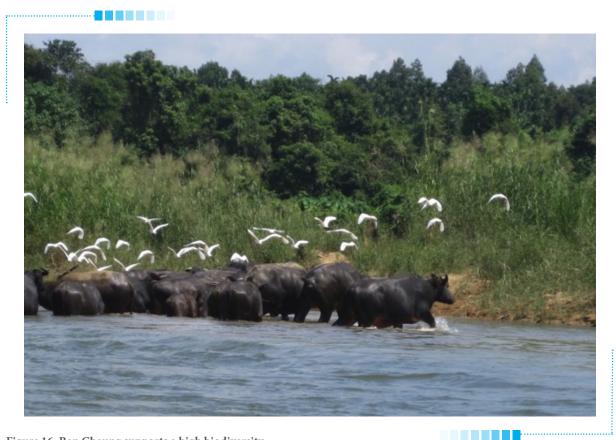


Figure 16: Ban Chaung supports a high biodiversity

Land Tenure, Land Use and Local Livelihoods

Communities in Ban Chaung have a diverse collection of land uses that ensure the conservation of valuable forest resources and a diverse and sustainable agricultural system that provides for livelihoods, food security and health of local communities. This system is successful and effective, because of local customs, traditions and institutions, which enforce rules over how resources are used and who can use them. This land management system is intimately connected to the indigenous knowledge, practices and institutions of Karen communities in the area.

Among villages in Ban Chaung there are different land tenure arrangements for different land use types. Different land uses have different sets of access rights and management rules that are enforced to ensure sustainable use of resources, and protect valuable resources from over exploitation. For example, while household land is exclusively used and managed by household members, forestland is accessible to all village members under the management of the forest committee.

Land can be obtained and transferred through inheritance, purchase and the allocation of available land by the village authorities. Both women and men are able to inherit land, and land inheritance usually takes place when a child gets married. Land sales can be made to outsiders, however the community must agree to outsiders who wish to enter the village. Village and grazing land are administered by the village head, who enforces community rules over how land and resources are used, while spiritual and school lands are managed by religious leaders or teachers. Villages in Ban Chaung also have a limited amount of available or fallow land, which can be used by community members for shifting cultivation. Households that wish to obtain more land must first ask village authorities.



Figure 17: Shifting cultivation fallows in Ban Chaung

Agriculture

Communities in Ban Chaung practice a mixed agricultural system, comprising shifting cultivation, cash crop production, non-timber forest product collection and livestock raising. Villagers grow a wide variety of produce, including betel nut, cashew nuts, rice, elephant foot yam, cardamom, bananas, pepper, durian, limes, plumbs and mangos.

Shifting cultivation , known as ku in Karen, or taungya in Burmese, is a traditional upland agricultural system in which farmers clear and burn land to plant crops for one to two years, before moving on to the next plot, allowing fallow land and soil to regenerate before it is cultivated again. While in the past, communities in Ban Chaung were almost entirely dependent on taungya for their survival, the proliferation of the cash economy has led many to convert land to orchards, where they grow beetle nut and cashews for cash. This withstanding, a majority of community members continue to practice taungya integrated with alternative farming techniques.

Most households own several plots of taungya land, and those without enough are able to apply for an additional plot through the village head. While in the past, farmers would leave land fallow for 7-8 years, increasing pressures on land mean that fallow periods are now normally around 3 years. This may because of a growing population or because of land conversions to orchards.



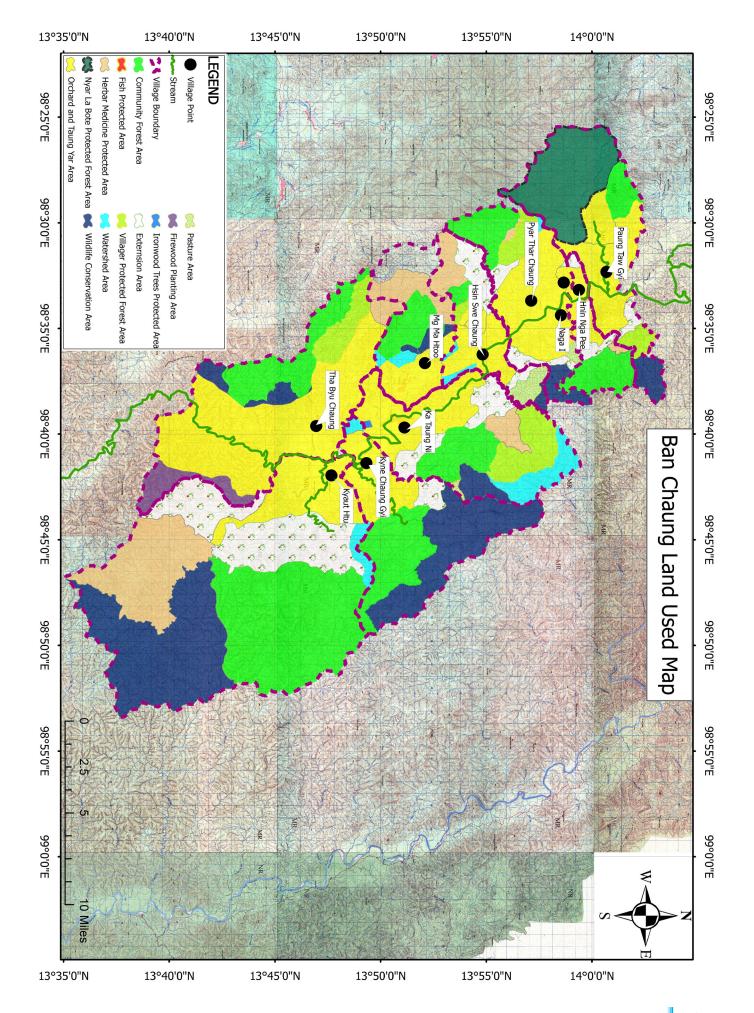
Figure 18: Villagers in Ban Chaung harvest a huge crop variety from their shifting cultivation plots

Taungya Rules and Customs

In the past, villagers followed very strict rules about planting *taungya* that appear to be based in animist beliefs or taboos. While many village elders know these rules today, they are rarely still practiced. Some examples of these rules include:

- It is forbidden to plant *taungya* in an area called a *maw2*. If a villager breaks the rules and plants in a maw, they will be punished and suffer from disease. Nowadays, villagers usually plant wherever they want. However, recently a villager died after planting in the wrong place, and before he died he had a dream that the god of the *maw* threatened him.
- It is forbidden to build your hut between two taungya areas.
- Before planting, farmers must build a small square and sprinkle paddy on it, and also mount
 a sickle on their hut. This is part of a ceremony asking the animist spirit *Pi Bi Yaw* for your
 taungya to flourish.
- After you harvest your field, you must hold a ceremony to thank Pi Bi Yaw for the successful
 harvest by building a tall pole, and putting offerings on top such as sticky rice and sugarcane.
 During this ceremony, villagers will then attempt to climb to the top of this slippery pole
 to claim the offerings. This is still often practiced at the end of November at harvest time.
 Even though many villagers now aren't really sure what Pi Bi Yaw is, they follow this custom
 because it is what their ancestors did.

² A natural salty area where wild animals often gather



CONCLUSION

Ban Chaung comprises a collection of unique ecosystems, ranging from meadows and mineral springs, to semi-evergreen and montane forests at higher elevations. This diverse and well-maintained landscape supports a vast range of flora and fauna, some of which have not been discovered yet, as well as several vulnerable and endangered mammal species. Further, Ban Chaung contains an important watershed area, which feeds into the Tenasserim River, a vital water source that supports communities and biodiversity throughout Tanintharyi Region.

Communities in Ban Chaung are well known in the region for their unique and valuable indigenous and cultural knowledge, perhaps one of the few places left in Tanintharyi region where communities still practice these animist traditions. These indigenous knowledge and management systems have served to effectively conserve Ban Chaung's forests for generations, as well as providing for the sustainable livelihoods of communities in the area.

Strong beliefs in spirits residing in the natural environment that protect and punish villagers, a deep respect for elders and ancestors, and a profound knowledge of the surrounding environment form a value system and set of traditions that tightly entwines the lives of Ban Chaung communities with their surrounding environment. Further, a customary system comprised of local democratically elected leaders, committees and monitors that holds these components together, developing clear rules for resource use and issuing sanctions where these are broken, protects resources from over-exploitation or outside incursions.

Indigenous knowledge, customs and practices are vital to the protection and conservation of nature and wildlife in Ban Chaung and throughout Tanintharyi Region. Despite the vital role they play as custodians of the environment, the rights of indigenous people are rarely respected in Myanmar. In order to ensure the health, happiness and well-being of the people of Ban Chaung, and to protect Tanintharyi Region's remaining forests and biodiversity and the rights of indigenous people must be recognized, and their relationship to land and resource respected.

RECOMMENDATIONS:

Indigenous communities in Ban Chaung have a unique set of cultures and customs that enable the sustainable management and conservation of important land and water-based resources. In order to support Ban Chaung communities to continue protecting their forests and resources, the following recommendations have been made:

- The Myanmar Government and KNU should fully respect the United Nations Declarations on the Rights of Indigenous People, to which the Myanmar government is a signatory, respecting the rights of indigenous people to self-determination and to control their land and natural resources
- The Myanmar Government should develop land and forest laws that accommodate and recognize the diverse ways in which indigenous communities use and manage resources. This includes recognizing community tenure, indigenous forest management systems, and upland agricultural practices.
- The Forest Department and Nature Wildlife and Conservation Department should recognize the knowledge, customs and practices of indigenous communities in conserving and managing their resources by recognizing Indigenous Community Conserved Areas (ICCAs)
- Government departments, companies and non-governmental organisations must ensure that projects do not move forward without the Free, Prior and Informed Consent (FPIC) of local communities and that indigenous communities in Ban Chaung are centrally involved in all projects within their territories
- The wisdom and knowledge of indigenous communities in Ban Chaung must be recognized, and their cultural rights fully respected.

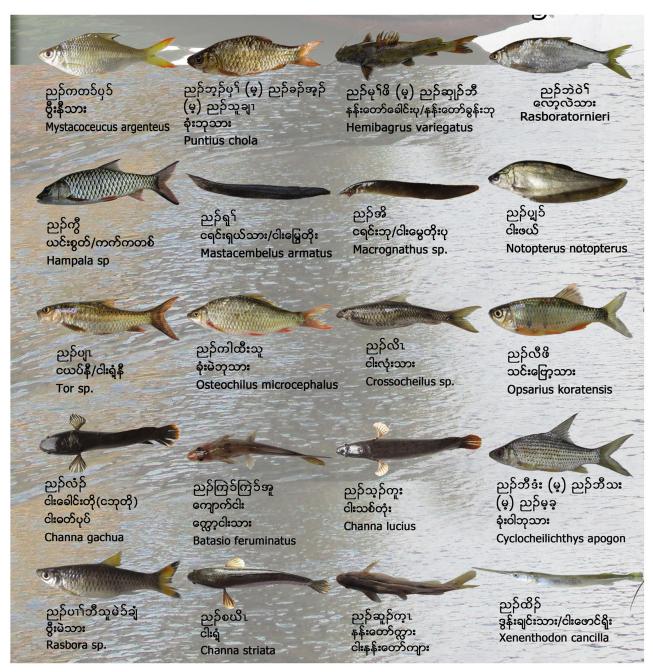
Land Use Type	Tenure	Land Use	Management Rights
Village land	All villagers – all community members – no outsiders.	Public space, taunya, tree plantations	Village leader
Grazing land (village land)	All community members		Community
Spiritual land	All community members – possible for outsiders of same religion	Building churches/ religious structure	Managed by religious leaders
School land	All villagers can access	Can build a school, teachers house	Managed by village leader and school committee
Cemetery	Village land		
Household land	Family/ household members	Orchards, housing,	House owners – subject to village rules
Extension area	All villagers (those in need of more land)	Taunya or conversion to orchards	Land is available to all villagers, those without land can apply for access.
Community forest	All villagers can use – but with permission of village forest and following rules	Conservation, hunting, NTFP collection, fishing, domestic timber	Forest land is managed by the forest committee
Wildlife conservation area	All village members (Strict use rules)	Conservation area – hunting and tree felling strictly prohibited	Managed by community
Watershed area	All village members (Strict use rules)	Conservation area – no trees can be taken	Managed by community
Medicinal forest	All villagers	For medicine	Managed by community – if inside forest managed by the forest committee
Fish conservation zone	Whole community at ceremonies or special events (not for individual use)	Fish conservation, fishing on special occasions only	Fish sanctuary can be used for entire community, but not for individual use.

Local Knowledge Research Findings: Fish and Aquatic Species

ဘန်းချောင်းဒေသရှိ ဌာနေ တိုင်းရင်းသားများ၏ပညာဗဟုသုတကို အခြေခံသော သုတေသနပြုချက်အရ တွေ့ရှိရသော ငါးနှင့် ရေနေသတ္တဝါများ (၇၀) မျိုး

(70) species on fish and Aquatic species found in Bangchaung Region by indigenous Researches While Conducting Local Knowledge Based Research

ပုံ(၁)





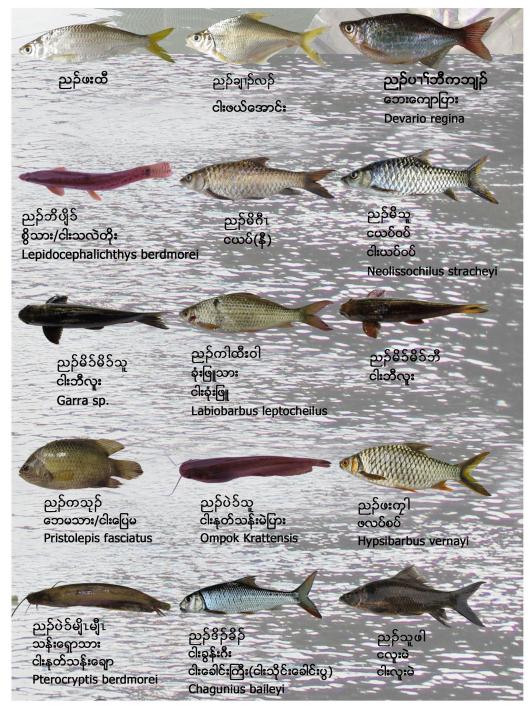




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(70) species on fish and Aquatic species found in Bangchaung Region by indigenous Researches While Conducting Local Knowledge Based Research

ပုံ(၂)





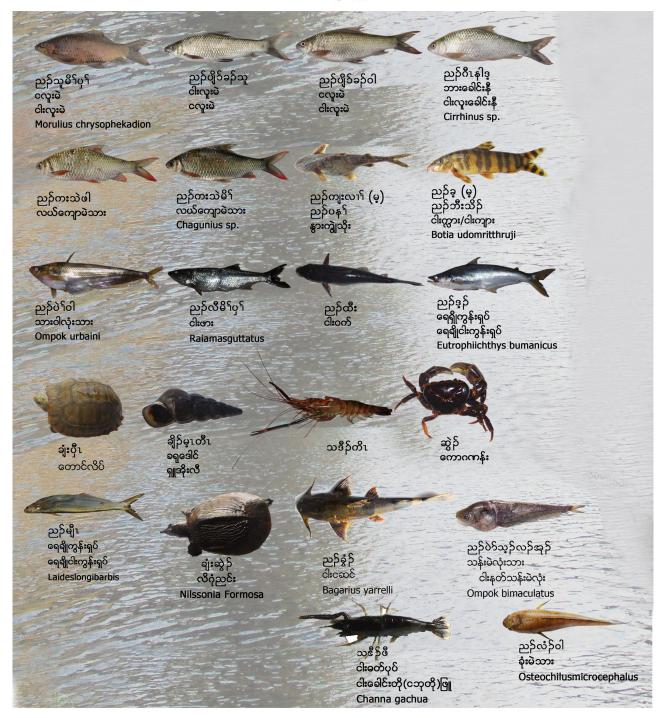




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(70) species on fish and Aquatic species found in Bangchaung Region by indigenous Researches While Conducting Local Knowledge Based Research

ပုံ(၃)









ဘန်းချောင်းဒေသရှိ ဌာနေ တိုင်းရင်းသားများ၏ပညာဗဟုသုတကို အခြေခံသော သုတေသန<mark>ပြုစျက်အရ တွေ့ရှိရသော ငါးနှင့် ရေနေသတ္တဝါများ (၇ဝ) မျိုး</mark>

(70) species on fish and Aquatic species found in Bangchaung Region by indigenous Researches While Conducting Local Knowledge Based Research

ပုံ(၄)







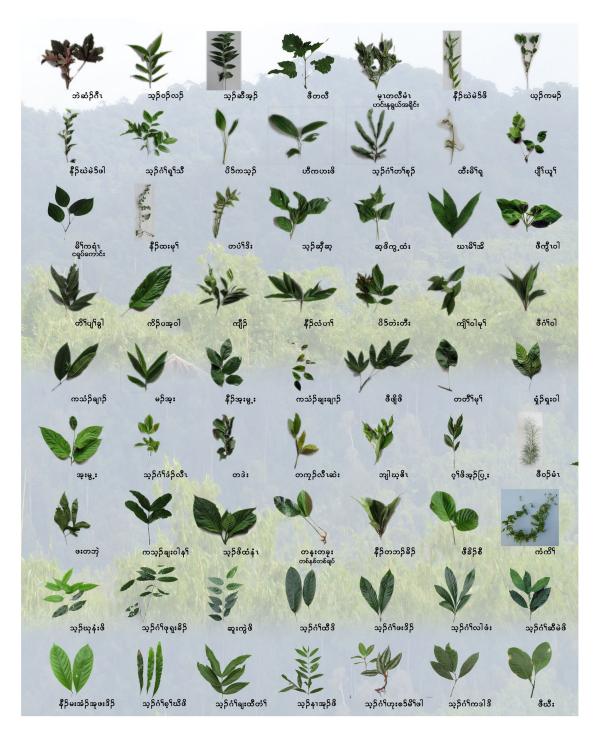


Local Knowledge Research: Medicinal Plant Species

သန်းရောင်းခဲ့သေရှိ ဌာနေ တိုင်းရင်းသားများ၍ ပညာပောုဘုတ်ကို အခြေခံသော ဘုတေသနပြုချက်အရ တွေ့ ရှိရသော ပရသေးပ၆များ (၂၄၅) မျိုး

(245) species on Herbal medicine found in Bangchaung Region by indigenous researches while conducting local knowledge based research.











သန်းရောင်းစေသရှိ ဌာဓန တိုင်းရင်းသားများ၏ ပညာဗဟုဆုတတို အခြေစံသော သုတေသနပြုချက်အရ တွေ့ရှိရသော ပရစေားပင်များ (၂၄၅) မျိုး

(245) species on Herbal medicine found in Bangchaung Region by indigenous researches while conducting local knowledge based research.











သန်းချောင်းခဲ့သေရှိ ဌာဓန တိုင်းရင်းသားများ၍ ပညာမဟုဆုတတို့ အခြေခံသော ဆုတေသနပြုချက်အရ တွေ့ ရှိရသော ပရစေားပင်များ (၂၄၅) မျိုး

(245) species on Herbal medicine found in Bangchaung Region by indigenous researches while conducting local knowledge based research.

ပုံ(၃)









သန်းချောင်းစသေရှိ ဌာဓန တိုင်းရင်းသားများ၍ ပညာမဟုဆုတတို အခြေစံသော သုဓတသနပြုချတ်အရ ဓတ္တု့ရှိရသော ပရစေားပင်များ (၂၄၅) မျိုး

(245) species on Herbal medicine found in Bangchaung Region by indigenous researches while conducting local knowledge based research.

ပုံ(၄)









Local Knowledge Research Findings: Edible Vegetables

်စာရိုးကျောင်းတော်၍ ရွှာရေး တိုင်းရင်းတေးများ၍ တစ္ဆာ့တော့တူတုတလို အခြောင်တော တုတော့အဖြူချစ်အရ တွေ့ရှိရတော တပ်ဆပ်းတမ်းရှတ် နှင့် တေဝိများ (ဝ၁၁)မျိုး

(188) species on edible vegetables and plants found in Bangchaung Region by indigenous researches while conducting local knowledge based research.











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(188) species on edible vegetables and plants found in Bangchaung Region by indigenous researches while conducting local knowledge based research.





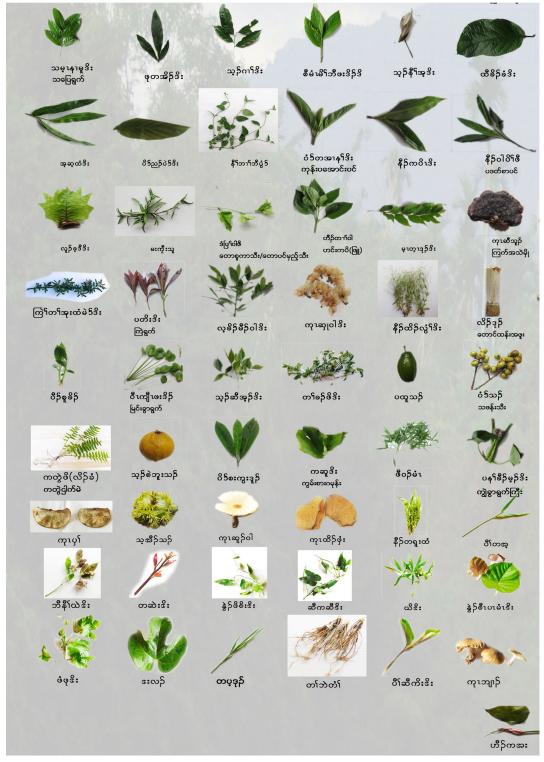






(188) species on edible vegetables and plants found in Bangchaung Region by indigenous researches while conducting local knowledge based research.

ပုံ(၃)









ලනුදුිල්ලනෙ ගණිතියන් දිලි නෙවේඩුනෙ දිලි නෙවේඩුනු දිලි නෙවේඩුනු දිලි නොවීදා (ලගා)දිලි

(188) species on edible vegetables and plants found in Bangchaung Region by indigenous researches while conducting local knowledge based research.

ပုံ(၄)

