

# **TRADITIONAL MARITIME SKILLS AND KNOWLEDGE OF SOCIAL AND ECONOMIC DEVELOPMENTS IN INLE LAKE**

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## INTRODUCTION

*"The region where no road is found on the ground, where only water can be found; the trip is not traveled on carts but by boat, and the boat is not rowed by hand but with leg; and the house is not built on land but on water."* This anecdote refers to the Inle Lake.



Figure 1. Livelihood of Intha by Kyaw Kyaw Win (STY)

The Inle Lake is the second largest freshwater shallows in Myanmar, located on the western edge of the Shan Plateau of the eastern part of the country. The estimated surface area is 44.9 square miles and the highest elevation is 2900 feet (880m). Inle Lake is a major tourist destination in Myanmar, attracting tourists by the picturesque beauty of the lake surrounded by mountains, houses standing on poles in the lake, beautiful floating gardens, and the cultural practices of the Intha fishermen. The main ethnic people of Inle Lake are Inthan while Pa Oh, Taungyo, Kayan, and Shan people also add to its diversity.

The people who live in Inle Lake are called Intha (people of lake). They live on the shore and on the lake, making a living by fishing, engaging in handicraft activities, cultivating on floating gardens as well as on the delta of the lake. For transportation, the Intha people use wooden boats; for long trip they use long tail boats with engines, carrying local passengers and goods. Small boats are used for their daily activities.

The main economy of Inle depends on cultivation and fishing. The unique style of the Intha people is rowing the boat with one leg by standing. They paddle this way because reeds and water plants are many in the lake, and if they row sitting down on the boat they could not see reeds and water plants. There is no gender for this rowing style, from an early age; people are trained to paddle with their feet.



Figure 2. Inle village by Kyaw Kyaw Win (Swealtawyate)



Figure 3. Rowing with one leg by Kyaw Kyaw Win (STY)

## FLOATING GARDEN AS A TRADITIONAL MARITIME PRACTICE

The Floating Gardens are attraction, natural beauty and significant lifestyle of Inle Lake. "*Fisherman for six months and farmer for six months*" are saying for the Intha people's livelihood. In a year, the Inthas cultivate gardens for six months and next six months are for fishery. The floating agriculture is the main livelihood of the Inthas and locally called "*ye-chan*" which is a remarkable cultivation method found in Inle Lake. The floating Island (*Kyawn Myaw*) has two types as Natural Island and Man- made island. Natural floating islands are floating islets, formed over time by water hyacinth, reed and flotsam with silt, sand, and mud. The thickness of the natural island ranges from 100 to 120 cm. These are saw as they want and towed with boats and staked to the

lakebed by bamboo poles on which they can freely slide up and down with the water-level fluctuation. Nowadays, natural floating islands are prohibited by the government in pursuit of sustainable environment. Hence, man-made floating islands are being used.



**Figure 4. Floating gardens by L Zin Ko (Inlay)**



**Figure 5. Fertilizing for gardens by L Zin Ko (Inlay)**

Manmade floating islands are made with the grass from the garden, reed, water hyacinths, and old soil removed from the surface of floating island and placed in calm water by systematic line-up and repair for 3 years. These islands are thinner than natural island and mostly cultivated in low-water villages. The lifespan of a floating islands is only about 5 years, and are covered with mud scooped out from the lakebed, a layer of lake-weeds, and more silt for repair and stored for about a year, they can be replanted. Formerly, the farmers saw islands from the shore of Lake and prepared for cultivation themselves, but now they buy the already-prepared island. The floating agriculture is started around the month of July to November. Tomatoes are the main crop on the island. Other crops are beans, cucumbers, gourds as well as flowers sold to ornate domestic altars. For the cultivation the Intha people use only boats throughout the season of cultivation. The cultivated crops are sold directly at the five-day markets, and to brokers at Nyaung Shwe, Taunggyi, and Aung Pan Town.



**Figure 6. Brokers are buying at the garden by L Zin Ko (Inlay)**

## TRADITIONAL FISHING IN INLE LAKE

In Inle, the second major livelihood of the Intha people is fishing. Fishing skills with using only one leg of the fisherman a symbol of Inle Lake. The fisherman balances himself on one leg at one end of the small wooden boat and the other leg is wrapped around the oar while rowing the boat. While they row the boat, they can do with their hand trawling, forking, and fishing.



Figure 7. Fishing styles of Inle Lake, photo by Ko Thu Ra (fisherman)

Inle fishermen used a variety of fishing methods. There are four main types of gear: set gillnet (*Htaungpyite*), hook and line (*Nga Myar Tan*), bamboo conical net (*Saung*), and fish trap (*Myone*). The famous and attractive traditional style is fishing with a big bamboo conical net (*Saung*), which is an icon of the Intha fishermen. Recently, there's been a decline in the use of *Saung* in practice because its catch is low and the local fishes (carps) are decreasing for catch with this gear and for demonstrate and intend to take the pictures for tourists. In daily life, fishermen common use the set gill net and hook and line. When they use net, they choose the water area and place net. This actually frightens the fish by hitting on the face of water with long bamboos or their oars. Fishes get scared and run into the net.



Figure 8. Traditional fishing bamboo conical net by Yin Yin Myo (DOA)

The main fish species currently caught by gill net are tilapia, featherbacks (*ngape*, *Notopterus* spp.), and snakehead (*ngayant*, *Channa* spp.). The local species (type of carps) that are unique to the lake such as Inle carp (*ngaphaine*, *Cyprinus intha*) are caught by bamboo conical. The most famous species of Inle have recently been declared as rare.





**Figure 9. fishes from Inle Lake**

According to the mythical ancestry, the whole community is the son of the lake. Therefore, there is no control and no restraint to use on the resources of Lake. For instance, any fisherman can cast his net in any village, in any place of the lake. They don't demarcate the territory for fishing other than in the villages. Most of the Intha people are fishermen as well as agriculturalists. For instance, they go fishing only after the completion of agricultural work.

After keep to consume the fishes at home, most are sold either within the village, buyers who buy fish on the boat or on the five nearby market days or Nyaung Shwe and Taunggyi through brokers. Generally fishing season is from May to November. Traditionally, the fishermen do not fish in the great day of religious, Sabbath days and market days. As the fishing and marketing system, Intha fishermen are not really “commercial fishermen” but income sufficient is only for subsistence.



**Figure 10. Selling fishes in Market by Sai Lone (TGI)**

## HANDICRAFTS AND LOTUS WEAVING SKILLS ON THE LAKE

The maritime skills found at the Inle Lake are not only floating garden and fishing, but the traditional handicrafts are also livelihoods of the Intha people. The knowledge of black smith, silver smith, building boat, rolling tobacco, and weaving are traditionally transmission from generation to generation.

Lotus weaving is an exquisite handicraft and one more symbol of the Inle Lake. The origin of lotus weaving is only for offering to Buddha and monks. Nowadays, lotus textile is woven as splendor product and precious brands. Most of the lotus weavers are women and as can do household. The process of extracting lotus fibers is that two inches of lotus stems are cut with knife and the fibers are extracted and rolled to form the long and fine threads, and then it is immersed into the water to moisturize. The original color of lotus thread is creamy and dyed with the natural dying such as tree barks, seeds, flower petals and fruit and so on. After the extraction process, dying with natural dye and weaving on handloom are carried out. Though the pure lotus textile is expensive, silk mixed with lotus textiles are quite reasonable price. Lotus weaving workshops are attraction for tourists and local visitors.



Figure 11. Sacred lotus for weaving workshops



Figure 12. Extracting Lotus fabrics at Ko Than Hlaing Weaving



Figure 13. Weaving lotus textile at In Pow Khon Village



## THE CULTURAL PRACTICES OF INLE LAKE

Most of the people of the Inle Lake are Buddhists and the festive events are related with Buddhism. The Phaung Daw Oo pagoda festival is famous among Myanmar Festivals. Four Buddha images are placed on the Royal Karaweik barge which is towed with long boats manned by up to a hundred leg rowers. The Royal barge stops at 21 villages around the Inle lake and the images stay in the main monastery of these villages for one night. The traditional long boat races are the highlight of festival, the rowers standing and rowing with one leg. One of the biggest days of the festival is the day that the Buddha images arrive at Nyaung Shwe where many pilgrims from the whole country gather to celebrate and pay homage. This festival is concerned with other cultural practices of the Inle Lake.



Figure 14. Phaung Daw Oo festival by Kyaw Kyaw Win (STY)



Figure 15. Towing the pagodas barge by hundreds of boat men by Pha Phu Sar (Inlay)





Figure 16. Villagers pay homage to Phaung Daw Oo pagoda during festival by Kyaw Kyaw Win (STY)



Figure 17. Racing boats during festival by Pha Phu Sar (Inlay)

## COMMUNITY, LOCAL ECONOMY, AND SOCIAL COHESION

The Intha people live according to a balance between the natural environment and modernization, managing to create surviving cultural practices from generation to another based on skills in various workplaces. Their culture as they call their own is truly remarkable. The economy of the Intha ethnic group depends on floating gardens or farm on the land nearby, livestock breeding, and fishing. The main economy

of Inle is tomato production and communities depend on agricultural farming. Fishing is just for daily subsistence. Because of biodiversity and cultural heritages, the Inle Lake is the target of tourists, which supports to the local economy. For the local commercial, the lake-dwellers close links with hill tribes such as Pa Oh, Taungyo and Danu and relate by five-day market cycle around the lake. As five-day markets and floating markets are the major center for exchanging products, important exchange poles and ethnic groups can meet and trade around the Lake.



Figure 18. Senses of Marketing the products from Inle Lake (at Taunggyi)

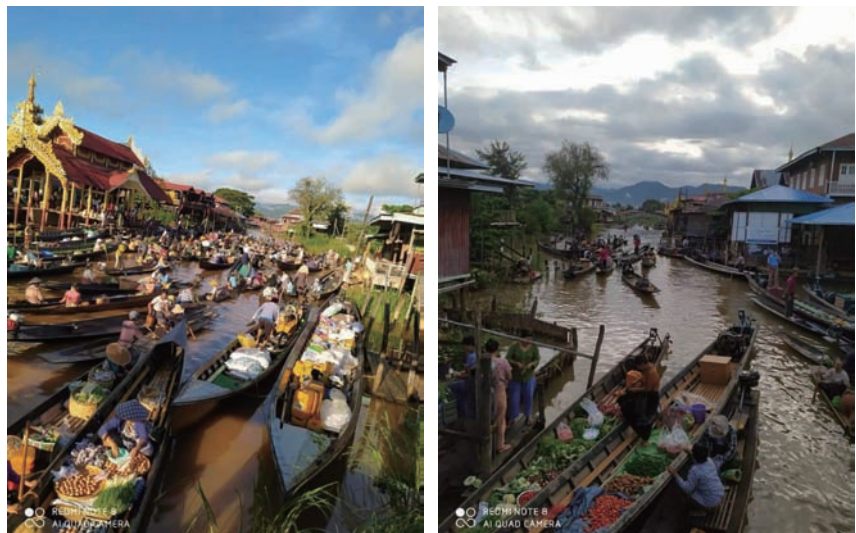


Figure 19. Floating Market by Pha Phu Sar (Inlay)

These networks have been completed by a strong social coherence that all the ethnic groups are Theravada Buddhism and organized by the Phaung Daw Oo Pagoda Festival. This festival is held for one month and takes place in around October. This process is a key factor in the regional unity and social cohesion by involving all the villages, lake

and hills tribes' population, and all the ethnic groups and rules the inter-ethnic relationship.

## **DISASTERS AND EMERGENCIES: A LOOK AT THE COMMUNITY DURING THE COVID-19 PANDEMIC**

As Inle Lake is a famous place for tourists and local visitors, the local communities have many chances for occupation and income depends on the tourism. However, during the covid-19 pandemic period, tourism is declined, and the businesses that relied on tourism are failed. The crops and tomatoes are selling at a lower price because of lockdown, registering heavy losses to the economy. When the cultivation business is not enough for daily life, fishing is support for daily income. Fishing is not affected during the COVID-19 period, but income was low due to low fish trade. Five-day markets are also prohibited because of pandemic and cannot be traded between tribes regularly. Even though facing with these difficulties, the Inthar people straggle for daily life by fishing and selling their farm products and handicrafts at Nyaung Shwe and Taunggyi Market. Nonetheless, the ethnic groups in the Inle region are challenging the pandemic and trying to survive by practicing their traditions and customs.



Figure 20. The situation of Market in the covid- 19 period by Sai Lone (TGI)



## CONCLUSION

In conclusion, traditional maritime skills of Inle Lake are activated not only with Intha community but with the other ethnic groups. The knowledge of traditions is transmitted as activities of daily life. In Inle traditional practices, there are gender identities i.e fishing is the work for men and weaving is for women. In the religious practices, only men can tow the Phaung Daw Oo barge. Even they have gender perspective, Intha persist with the balance of social and cultural activities. Because of diverse cultures and rich natural resources, Inle Lake has many economic activities which are accompanied with tradition, culture and customs. The Intha people adapt to their environment for their living while trying to hand over the traditional customs to the next generations.