

THE LIFE OF SEAWEED FARMERS IN SELAKAN ISLAND, SEMPORNA, SABAH

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ABSTRACT: The beauty of Sabah with surrounding islands is undeniable and receives world-wide recognition. The revenue generated through solar resources, mineral from the ocean and ecosystem which allows Sabah to increase the economic resources through a wide range of industries including tourism, fisheries, agriculture and aquaculture. One of the aquacultural activities carried out is seaweed cultivation. This study focused on seaweed industry's importance to social and community development. The study examines the life of seaweed farmers, which includes the location and geographical structure, the history of the race, social organization, activity, employment, social activities and community, and religion. Documentation of the life of seaweed farmers is an entry-based studies conducted with ethnography which is a suitable method to understand their culture, values, and religion. Data were collected through structured and unstructured interviews and participating observation which was carried out for almost two years. Data collections were also conducted periodically. The study provides an overview of the life of seaweed farmers in Selakan Island that is very different from farmers on the mainland.

Keywords: life, seaweed farmers, Selakan Island, Sabah, ethnography

INTRODUCTION

Seaweed cultivation has long been a tradition in Semporna district since the discovery of the sea plants in 1978 in Karindingan Island, Semporna (Md. Nor et al., 2012). Seaweed cultivation is one of the economic resources of the Semporna District apart from fisheries. Before this, farmers used traditional methods to plant seaweed. When the seaweed was expanded and can be commercialized, cultivation technology also improved such as management system, crop yields system, tiding system and maintain their local ecosystem. Seaweeds can be used in different ways besides being served as food for the locals. According to McHugh (2003), one of the functions of seaweed is to serve as a source of hydrocolloid used in manufacturing food supplement, fertilizer, animal feed, biofuels, cosmetics and medicines because seaweed produces carrageenan gel that is used for the emulsion agents or become binders as well as a stabilizer in products that have large scale, such as food processing, pharmaceutical and cosmetic industries (Bixler and Porse, 2011).

Seaweed cultivation industry involves both upstream and downstream levels. Upstream level involves the process of cultivation of seaweed until the process of drying and sold to the operators of seaweed-based company. While the downstream level involves the production of seaweed-based products until the seaweed products are released. In Semporna, most local farmers are involved in the upstream stage. Seaweed cultivation also forms part of the livelihood of the community in Semporna. They are still holding fast to their beliefs and taboos during the planting process. This unique feature of custom and culture preservation by the Semporna Bajaus is worth exploring.

Seaweed cultivation was upgraded to Seaweed Cultivation Project, introduced by the Department of Fisheries Malaysia in 1999, which includes two phases involving Kudat and Semporna district (Ismail, 2004). Zulkafli (2009) explains that the cultivation project at Semporna is due to the districts that fulfil several requirements for carrying out large scale commercial seaweed cultivation. According to him, among the factors include possession of protected sea waters, wave height of 1-2 feet, 30-35 ppm salinity, marine water quality and rocky reefs.

In 2011, Universiti Malaysia Sabah (UMS) conducted a pilot seaweed planting project with systematic management. Plantation demonstration and commercial cultivation farm has opened up an opportunity for communities in Semporna (Hossin et al., 2013). The project was known as a Seaweed Mini Estate System, headed by the Director of Seaweed Research Unit, Assoc. Prof. Dr. Suhaimi Mad Yasir, The first project was in Sebangkat Island, Semporna. However, there are several factors that

prevent it from continue operating there, and it was later moved to Selakan Island, which is also under the area of Sabah Parks.

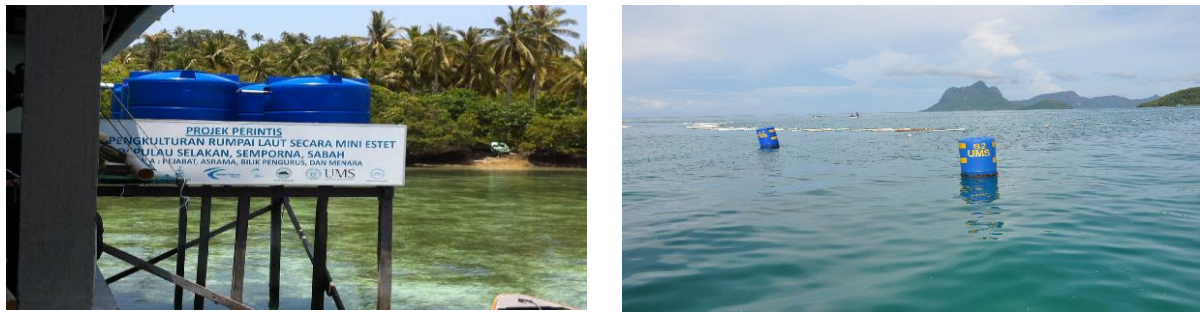


Figure 1: Platform of Seaweed Cultivation in Mini Estate Project and Demonstration Farm Estate, Selakan Island

Source: Fieldwork (October 2014)

At Selakan Island, seaweed cultivation project in mini estate was conducted through collaboration between the UMS, private companies and community. This cooperation is consistent with the national objective under the Economic Transformation Programme (ETP) and implementation through Entry Point Project 3 (EPP 3) to increase national income, improving the socioeconomic of the community, providing new job opportunities, promote industrial sector as well as the downstream environment to maintain the eco-system.

There are many differences in the way of life of the community that lived on the land with the community living near the oceans. For example, in terms of sources of livelihood, they carry out activities involving fishing and farming. In addition, inherited customs are still widely practiced to this day. For Semporna Bajaus, seaweed cultivation has been a part of their culture and lives practiced from generation to generation. Despite the introduction of many new technologies to increase the production of seaweed, the locals still hold their faith and taboos during planting seaweed. Therefore, this paper will review and explore many unique aspects of the community's life.

METHODOLOGY

The main source of the data was obtained through Design Ethnography, a qualitative method. As stated by Creswell (2007), ethnography is a qualitative design that allows researchers to explain and interpret something shared and learned about the culture, values, behaviours and language clusters that share culture (Creswell, 2007). Ethnography method usually uses participant observation, where researchers participate and live with the cluster in daily life, through observations and interview with focus group using structured or unstructured questions.

Data was gathered from participant observation where researcher lived with villagers starting from October 2014 until May 2015. Observation of daily activities started early in the morning until late night. Aspects observed and recorded include employment, social activities, nutrition, application, custom, language, behaviours. All data acquired directly or indirectly were recorded in daily notes. Researcher also interviewed a few farmers based on the interview protocol and unstructured interview to gather more information. The data has been analysed by using coding and thematic analysis.

Physical Background of Selakan Island

Selakan Island is one of eight islands listed under the Tun Sakaran Marine Park which is the ground seventh gazetted under Sabah parks in 2004. Travelling to this island requires about thirty to forty minutes by boat from the jetty in Semporna Town. The island is surrounded by coral reefs and the ocean and close to several other islands including Bodgaya Island, Maiga Island, Sebangkat Island, Bohey Dulang Island. From a geological perspective, the island was formed of quaternary pyroclastic

material where the formation of the island was the result of explosive volcanic activity. Therefore, the island is rich in natural resources because of the fertile soils and plenty of marine sources.



Figure 2: Selakan Island.

Source: Fieldwork, December 2014

Living Patterns of Seaweed Farmer on Selakan Island

Seaweed farmers comprise individuals of different age group, such as teenagers, adults and elderly and most of them are related to one another. The majority of those who live in Selakan Island area come from few ethnic groups which include Bajau Semporna, Bugis and others. A small number of Selakan Island residents originated from Pulau Banggi, Kudat which is typically resided by those belonging to Bajau Ubian ethnic. They have migrated from Kudat to work and some of them get married with the locals and continue to reside there.

The opening pilot project - Mini Estate Seaweed System by UMS which was initially located at Sebangkat Island provided the opportunity to work in Semporna. In the past, they worked in Banggi Island, Kudat under the research project by UMS. Then project transferred the operations to Semporna. From Sebangkat Island, the project was moved to Selakan Island which is one of the nearer islands due to the strategic location, more potential to be developed as well as having better facilities.

In terms of basic facilities, Selakan Island have a few facilities such as community hall, *surau*, primary school and preschool, cemeteries, field, rig, pier, the electrical power sites set up by SESB and others. Position and arrangement of the houses of the residents there are concentrated near the coastal ocean. Most of their houses are built on the water surface. Almost every home has a private boat which serves the dual purpose of work as well as transport to the town for basic needs and to other islands. Residents on Selakan Island also have almost complete home furnishings such as electrical appliance for daily use.





Figure 3: Facilities, houses at Selakan Island and their community
Source: Fieldwork, December 2015

Working Activities

While staying with the villagers on Selakan Island, there are many things that can be observed on the work carried out there. The working activities were carried out in phases with clear division of labour. Based on the observations and information provided by the farm managers, their duties according to the job description proposed under Seaweed Systems Mini Estate was introduced by UMS. The work includes seedlings, tying the seeds, fertilizing, and lead rope ready to be planted in the field. After the run phase, harvesting is done when the seaweed matures in 30-45 days, depending on the growth of the seaweed. Then, farmers brought the harvested seaweed to the rig, to undergo the process of drying and cleaning the strap of any foreign objects to be reused.

Based on the data collected, they begin their daily work as early at 7.30am in the morning. Two farmers will arrange and inspect the boat engines to ensure that the boat they will use on that day is in good condition. Then, both of them took other farmers using the boat which is already waiting in jetty at Pulau Selakan village to start the task on that day. This is the daily routine for employees working under UMS Research Division, located at the back of the Selakan Island.

For seaweed farmers who work under the company, they will work on the rigs in their own villages. The platform is used for training of new company that want to open a farm. Seaweed cultivation training process for the new company provide training on how to manage all the system. During the training, the company will provide 50 ropes for the early phase. Trainees will learn how to manage the farm and receive training by UMS staff on the process of cultivation and effective management system.

When all seaweeds have been planted, farmers will modify the new rope. They have to bind a new float over 100 meters each. These works involve all employees and are carried out according to the respective tasks.





Figure 4: Seaweed farmers and their working activities
Source: Fieldwork, March 2015

Social Activities and Interaction of Seaweed Farmers in Selakan Island

Seaweed farmers have different leisure time activities. On weekdays, after they finish performing their duties, they will be doing recreational activities such as playing football, or doing any other works such as cleaning or fixing the boat. For women, they will sit mingling with neighbours near their home, have a tea time together.

During holidays, some of them will be going to sea and do some activities together likes fishing, finding clams and '*memanah ikan*', shooting fish with arrow. The experience of participating with them was amazing. They will find a place with coral reefs in the water in the boat ride and jumping off the boat while diving to find the fish. The capability has the island's people in diving is remarkable as they do not require oxygen tank. The other villagers will go down to the town of Semporna by boat for about 40 minutes to buy daily necessities and other goods along their supply on the island.

Based on observation, the researcher found that this community have social interaction with others beyond the island because the communication system has been improved. They use social media such as Facebook, WhatsApp and Wechat to communicate. So, they do not have many problem in interacting through long distance with people from the mainland of Semporna.



Figure 5: Fish catches of the '*memanah ikan*' activities
Source: Fieldwork, May 2015

Community Activities, Culture and Arts

Semporna Bajaus are rich in tradition and culture. Community activities often involve cultural elements that represent their ethnic groups. Culture adopted by them to this day include dance, traditional clothing, food and the arts of their boat called '*Perahu Lepa-Lepa*'.

During the researcher's stay with the seaweed farmers on Selakan Island, it was found that they really hold on to their culture and arts, namely Semporna Bajaus. Regardless of their age, they will participate in any activities involving culture and the arts. The researcher even managed to experience events organised by the villagers such as *gotong royong* which means all villagers work together to

clean out the island, New Year celebration, and birthday celebration which are infused with their traditional culture such as dance, traditional clothing and traditional food.

They also perform the Bajau traditional dances such as *Daling-Daling* and *Igal-Igal* which is danced by man, women and children. These dances are becoming increasingly popular as a result of promotion and presented during a big ceremony such as *Regatta Lepa* began in 1996.

Community activities also take place during the wedding ceremony. This dance is also performed during weddings. Weddings of Semporna Bajaus are full of traditional and cultural customs. Similarly, seaweed farmers who live in the same community. Based on the interviews conducted by the author with one of the seaweed farmer, Julaiha (46 years), there is a long-standing custom carried out during the wedding ceremony known as '*berbedak*' where the bride will bathe and put powder on their face for 7 days before the ceremony. They are also not allowed to go out from the room and have to wear white clothing until the wedding days. Weddings were also under way with vibrant accompanied by dance, will wear custom dresses and treated with traditional food.

Arts of Semporna Bajaus are also reflected in tombstones carved patterns. On Selakan Island, carving patterns in tombstones can still be seen in the cemetery located in the village. The pattern has a distinctive emblem and their meaning according to the type of carving. According to Haji Rabani (65 years), tombstones are known as '*tunjuk*' by the Bajau communities in Semporna.



Figure 6: Cultural activities in Selakan Island
Source: Fieldwork, May 2015

Religious Practice

All seaweed farmers in Island Selakan are Muslims. Based on interviews conducted with Hj. Rabani bin Imam Isnin, 65 years, elders in the village learn about Islamic practices from their parents. For the younger generation who go to school, they receive formal education at primary and secondary school, but most of them do not continue their study. Based on observations, seaweed farmers on Selakan Island practice Islam as others do. However, due to limited knowledge of their religion, they only perform according to their rather limited knowledge of Islam. The practice of prayers, fasting, recitation, performance of Umrah and Hajj, *Hari Raya Aidilfitri celebration* and *Hari Raya Aidiladha celebration* are carried out as usual.

Religious and cultural assimilation is also reflected in the seaweed farmers. Cultural practices among Semporna Bajaus ethnic are still strong and practiced to this day. Examples can be seen in the community's practice in marriage, death, feast such as *kenduri arwah*, *kenduri kesyukuran* and more. There are a few beliefs involving the cultivation of seaweed. For example, the ritual for facing disease and disaster, they still practice a ritual called '*patulak*', releasing small boats tied with yellow cloth to exorcise ghosts and demons. This information is obtained through narration of younger generation in this community. The practices are also related to the belief in they called '*tolak bala*'. The community also have rituals for opening new areas. The ceremony begins with a white feather chicken, the feather at the chicken's head and tail were removed and a small amount of blood is drawn. After that, the chicken is released. The chicken cannot be caught again by the same person. According to

interviews with UMS Research Officer, Norazwan Juri, 28 years old, during the process of construction of the UMS building starts, they receive advice from the villagers to perform these ceremonies so that building will 'safe'.

CONCLUSION

The life of seaweed farmers in Selakan Island, Semporna is unique and needs further exploration by future research. Their lives should also be documented in the form of expanded academic knowledge in social sciences. Seaweed farmers were the main contributor to the increase in production of the seaweed. With research of seaweed from various fields, hopefully, economic of this community could be increased.

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Interview

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- Norazwan Juri, 28 years old. Research Officer, Seaweed Research Unit, UMS. Selakan Island. March 2015.