www.bircu-journal.com/index.php/birci
Budapest International Research and Critics Institute-Journal (BIRCI-Journal)
Humanities and Social Sciences
ISSN 2615-3076 Online)
ISSN 2615-1715 (Print)
Budapest Institute

Local Wisdom in the Collection of Flying Fish Eggs (*Hirundicticthys oxycephalus*) (Case Study of Patorani Fishermen in Pa'lalakkang Village, North Galesong District, Takalar Regency, South Sulawesi Province)

Talitha Wenifrida Massenga
Faculty of Agriculture, Universitas Pembangunan Indonesia
talithawenifrida@gmail.com

Abstract

Patorani fishermen are the community living on the coast of Pa'lalakang Village, North Galesong District, Takalar Regency, South Sulawesi Province. Their main livelihood is to collect flying fish eggs (Hirundicticthys oxycephalus) which in the process of catching still apply local wisdom, namely norms that must be obeyed, and become an unwritten law in the process of catching flying fish eggs. Patorani as a local community was able to combine modern technology with traditional knowledge. Traditional knowledge used is erang passimombalang and erang pakboya-boyang, while modern technology (motorboat) used is only as a tool to facilitate work. Local wisdom (traditional knowledge) in addition to teach the relationship between humans and their creators, also teaches how humans relate to their natural environment. The manifestation of this knowledge was that Patorani changed their fishing gear from pakkaja to balla-balla, along with the transition from the main commodity, namely from fish to eggs. If they use pakkaja fishing, the flying fish (Torani) will also get caught, but when they use balla-balla, the flying fish will not get caught. Thus, the exploitation of marine resources can be minimized.

Keywords
local wisdom; patorani fishermen; flying fish eggs

I. Introduction

The local wisdom of the fishing community is more focused on livelihood systems that have global issues and at the same time have a very large influence on the survival of local communities. According to Nababan (1995), traditional wisdom was reflected in the behavior of those who had such high respect for the natural environment, which was an inseparable part of their lives.

Local wisdom is normative or unwritten, it is suspected that there is a lot of local wisdom in the management and utilization of marine resources that is not yet known by many people, especially in the scientific context. Even local wisdom that once existed, has begun to disappear or is no longer carried out by the community because of the rapid shift and change in social, cultural, economic and political value systems. Organization must have a goal to be achieved by the organizational members (Niati et al., 2021).

Furthermore, the potential of coastal and marine resources, in which there was local wisdom, showed that there was an inseparable relationship between typical human behavior and the environment, namely forming human behavior collectively in the form of norms that must be obeyed from generation to generation and become law in the activity of

looking for life on the coast and the sea, because it contained values, ethics, norms, rules and skills in meeting the challenges of life (Nababan (1995). The people believe that nature has a power that can give benefits, but nature can also punish them if they are greedy in using natural resources. This community perception can be used as a moral guide and institutions in regulating human relations with the use of coastal and marine natural resources in a responsible and sustainable manner.

Human behavior in managing coastal resources based on local wisdom is influenced by various factors, which can be broadly divided into two, namely internal factors and external factors. Internal factors are factors that come from within humans, in the form of obedience or adherence to various traditions, customary laws and customary institutions that regulate communities in utilizing coastal natural resources, while external factors are factors originating from outside that motivate or inhibit humans from using coastal resources local wisdom in managing coastal resources, such as demands for changes due to modernization of fishing gear, inter-ethnic relations in the living environment and coastal development policies that have not paid attention to the existence of local wisdom. In fact, people living in coastal areas are still limited to access to basic needs, especially education, health and basic infrastructure such as transportation, clean water supply, electrical energy and the quality of the residential environment, which can be an obstacle to implementing local wisdom in coastal resource management.

Keraf (2002) said that local wisdom was all forms of knowledge, belief, understanding or insight as well as customs or ethics that guided human behavior in life in ecological communities and local wisdom was part of moral ethics that helped humans to answer the question of what moral to do, how to act, especially in the field of environmental and natural resource management. The local wisdom of coastal communities who live in Pa'lalakang Village, North Galesong District, Takalar Regency, South Sulawesi Province, is closely related to the livelihood system, namely as fishermen collecting flying fish eggs (*Hirundicticthys oxycephalus*), known as "Patorani". “Patorani” fishermen are small or traditional fishermen and in the process of collecting flying fish eggs, they use local wisdom, as a guide in their work. For "Patorani", the sea is not merely a place to catch fish and collect flying fish eggs, but the sea is a mystery that is controlled by supernatural beings, therefore the activity of collecting flying fish eggs (*Hirundicticthys oxycephalus*) is always preceded by a ritual. Therefore, this study was conducted with the aim of obtaining information about local wisdom or socio-cultural Patorani fishing community in collecting Flying fish eggs (*Hirundicticthys oxycephalus*).

II. Review of Literature

2.1 Territory Condition

Takalar Regency is one of the regencies in South Sulawesi which is famous for its fishery resource potential. There are 3 sub-districts, namely Galesong, South Galesong and North Galesong, with an area of 566.51 km2. The Galesong District area is a fishing center for collecting Flying fish eggs. Galesong District consists of 14 villages with a population of 80,922 people. The topography is generally flat with a height of 0.1 meters above sea level. The open sea in Takalar Regency stretches for 108 km, consisting of 75 km in parts of Sulawesi Island, 21 km on Tanakeke Island, 7 km on Satangnga Island and 5 km on Bauluang Island. This situation is due to the fact that Takalar district is located between the Makassar Strait and the Flores Sea.

The fishing community in Pa'lalakang Village earns a living as the collectors of flying fish eggs (it is called Tuing-tuing fish or Torani in local language). This job is very profitable because flying fish eggs in the market reach a price range of between Rp. 300,000 – Rp. 500,000/kg. Meanwhile, the world market continues to experience a significant increase, namely in 2017 the selling value was $28, and in 2018 there was an increase of about 20%, which was worth $30 and in 2019 worth $31, flying fish eggs were exported mainly to Japan (Nadir and Mutmainnah, 2018).

The collection of flying fish eggs is carried out in early April to August, but preparation for catching begins in early March. The collection process is carried out for approximately 1 (one) month or if Patorani feels "enough" of his catch. Preparations for collecting flying fish eggs are carried out by the fishermen's wives, by preparing materials for the Patorani traditional ceremony before going to the sea. The traditional Patorani ceremony has been carried out since decades ago and is the legacy of the Patorani ancestors, which is still being preserved, although the implementation and the materials for the ceremony have been simplified.

2.2 History of Catching Flying Fish (Torani)

Galesong is the name of one of the sub-districts in Takalar Regency, which in 1610-1962 was ruled by "Karaeng Galesong", which roughly means the same as "King Galesong". During the reign of Karaeng Galesong from 1610 – 1962, there were 16 Karaengs who had ruled and the last Karaeng Galesong named A.J. Bostan Karaeng Mamaja.

It is estimated that in 1672, there was resistance from Prince Trunojoyo from Madura against the Mataram Amangkurat I structure, then Karaeng Bontomarannu (Karaeng Galesong III) and Karaeng Matorowa Riparallakkena (Karaeng Galesong IV) and their navy headed for East Java to help Prince Trunojoyo, while the Mataram composition was assisted by Dutch Company. In the battle that took place in Semarang, Karaeng Bontomarannu died, so Karaeng Galesong IV led his fleet to continue his resistance to East Java. But finally, in 1679 Karaeng Galesong IV was defeated by the Dutch with the help of the King of Bone, namely Arung Palaka and Karaeng Galesong died on the battlefield. In February 1680 all the surviving soldiers were returned to Makassar, which numbered an estimated 9,500 men (Mattulada, 1982). After the soldiers arrived at Galesong, they no longer continued their duties as *tabbuluk* or *tobaran*i (troops) of Karaeng Galesong. Some of them shifted their work to look for traces of fish which when they were still on the sea to the island of Java a lot of them flew around their boats, so many of these fish even fell on the boat. The effort to find traces of the fish was not in vain, they returned with very satisfying results. This business is done repeatedly and some of them even make it a livelihood.

Because those who go to catch flying fish are ***to barani***, their catch (fish) is then known as ***jukuk to barani***. However, due to the development of language, the fish was named Torani (ikan terbang = Indonesian) and later the word Torani got the prefix "Pa" which means "people who ...". Thus Patorani means people who catch Torani or flying fish (Manyambeang, 1984).

However, in the 70s, there was a shift in Torani fish commodities to their eggs. This shift was the result of the increasing economic value of Torani fish eggs from Torani fish itself, namely the price of Torani fish was Rp.65,-/kg while the eggs reached Rp.7,500,-/kg at that time. The price of Torani eggs in 2020 was Rp.400,000, -/kg - Rp.500,000, -/kg, while Torani fish have no value in the eyes of Patorani and Torani fish are caught only for consumption while at sea or brought ashore as gifts for families and other relatives.

III. Research Method

This study used a descriptive qualitative research method to describe the fishing community in collecting flying fish eggs (*Hirundicticthys oxycephalus*). As a research strategy, it was used a case study on Patorani Fishermen in Pa'lalakang Village, North Galesong District, Takalar Regency, South Sulawesi Province. The research context in data analysis was defined as the activity of discussing and understanding data in order to find certain meanings, interpretations and conclusions from the overall data in research (Ibrahim, 2015).

Primary data collection was carried out by compiling the household stratification of Patorani fishermen, based on the criteria for mastery of fishing gear, namely:

a. Papalele fishermen are fishermen who have business capital, motorized boats and fishing gear equipment, but do not go to sea in the production process. Papalele fishermen are called papalele.
b. A skipper fisherman is a fisherman who leads the production process, but does not own a boat. The skipper fisherman is called the skipper.
c. Sawi fishermen are fishermen who only rely on labor in the production process. The sawi fishermen are called Sawi.

Data was collected using the Snow Ball Sampling technique (Sugiyono, 2018), namely: respondents were selected according to the criteria, after being interviewed, respondents were asked to identify who could be selected later to be made respondents, until the researcher felt that the objectives to be obtained had been fulfilled. (Moleong, 2012).

Data analysis was carried out qualitatively with the aim of knowing and understanding more deeply about the Patorani fishing community in collecting flying fish eggs (*Hirundicticthys oxycephalus*). The research strategy used an interactive model as proposed by Miles and Huberman (2005). This model consisted of three main things, namely data reduction, data presentation and drawing conclusions (Miles and Saldana, 2014).

IV. Results and Discussion

4.1 Local Wisdom of Patorani fish Fishermen

a. Socio-Cultural Characteristics of Patorani

The typical behavior of Patorani at work is to apply two kinds of traditional knowledge called erang, which is the elaboration of "*pangngassengang*" (knowledge), namely *Erang passimombalang* (knowledge of shipping) and *Erang pakboya-boyang* (knowledge of catching).

1. Erang Passimombalang

The application of *Erang passimombalang* in the collection of Torani eggs is mainly aimed at the preparation and production stages. At the preparatory stage, a working group was formed using the principle of “Siri na pace”, namely affection (pace) for fellow human beings. This is in the form of papalele's moral responsibility to help his relatives who are in trouble by giving him work. On the other hand, the relatives who are given a job will feel ashamed (siri) if they do not do well in the work given to them. As said by an informant former skipper

"Selling the catch without the knowing of papalele is the most shameful act, if it is done by a group member, then that person will not be employed by all the papalele, even if the act is very embarrassing, then the person is killed in the middle of the sea."

Thus "siri na pace" shows the meaning of togetherness, kinship and unity that is upheld in bearing the joys and sorrows of doing work and daily life.

The application of *erang passimombalang* in the ritual ceremony, starting at the preparation stage of the ceremony until the implementation stage, which is in the form of prayers that are said by Sanro and skipper during the ceremony, while the form of action is when the skipper gets into his boat, the skipper takes sea water and rubbs it into the boat. This action has the meaning of "ablution" for the boat, because the skipper considers the boat to be like a human created by God's will. While these actions are being carried out, an imaginary dialogue occurs between the boat and the skipper, to find out whether the boat can be used and the safety of all crew members can be guaranteed. Meanwhile, the application of the *erang passimombalang* in the production process is astrology to determine the season, climate and shipping safety.

2. Erang Pakboya-boyang

Erang pakboya-boyang is also applied to the production process, namely: the skipper dips his hands up to the elbows into the sea water, to feel a certain warmth which indicates that there are a lot of Torani fish in this place, this is also reinforced by the Torani fish around the boat. If there are a lot of Torani whose flight is very low, it means that the Torani is ready to lay eggs, if the flight is high, it means that the Torani do not contain eggs.

Before the *Pakkaja* (fishing gear) is lowered into the sea, skipper will read a prayer which essentially asks Allah to get good sustenance and be blessed by Allah. After reading the prayer, the entire boat crew must be quiet for a moment while observing the fish and the direction of the wind so that if the *pakkaja* is lowered it will not collide or enter the bottom of the boat. During the operation of the *pakkaja*, the boat engine is turned off so that the boat and *pakkaja* are carried away by the current. While waiting for the fish to enter the *pakkaja*, skipper and sawi will sing pornographic songs. This is done because in Patorani's view, tobani fish are "tobarani" who have long left their lover or wife to the battlefield and fishing gear (pakkaja) is described as a gathering place for Tobarani's wives and lovers, so to invite "Tobarani" into the trap they sing porn songs to arouse passion and lust "Tobarani" to enter where his wife and lover are. These two kinds of traditional knowledge are a whole unity in the form of outer and inner knowledge. Outward knowledge is the interaction between Patorani and the natural surroundings, while inner knowledge is the interaction of Patorani with his creator.

However, at this time, the ability of erang has experienced a shift as the result of fishing technology,as stated by a skipper respondent:

"I have *erang*, but I don't use them, because other bosses who don't have *erang* get far better results than me, so I think that fortune depends on Allah. Without even having *erang* one can obtain satisfactory results."

b. Preparations for Catching Flying Fish Eggs (*Hirundicticthys oxycephalus*)

For Patorani, going to catch Torani fish and collecting their eggs in the sea is a tough job, because they will sail the ocean which at times can endanger their life. Because of that, they thought that in the sea resided spirits who had supernatural powers that could sink boats and failed their business. To overcome this, Patorani performs a ritual ceremony before going fishing. This ritual ceremony later developed into an unwritten rule that was

used as a guide in Torani fishing activities and was later known as Patorani culture (Ansaar, 1997).

The ceremony begins after mutually agreed upon the right time to start the voyage. The people involved in the implementation of the ceremony are: 1) Sanro, namely, the person who leads the ceremony. 2) The skipper is the person who leads the operation of collecting Torani fish eggs. 3) The skipper's wife is the person who prepares all the materials and equipment that will be used in the ceremony and 4) Sawi is the person who will participate in the operation of collecting Torani fish eggs.

The Patorani ceremony is divided into two stages, namely (a) the preparation stage, namely checking and repairing the equipment to be used for catching Torani fish and collecting the eggs and (b) the implementation stage, which is a ceremony carried out by the skipper before departure.

c. Preparation Phase

The work of inspecting and repairing boats and fishing gear is carried out with a ceremony, namely *massikko pakkaja* (repair of fishing gear), *massisi biseang* (repair of boats) and *accaru-caru* (safety ceremony).

1. *Massikko Pakkaja* Ceremony (Fishing Gear Repair)

This ceremony is carried out with the aim that the equipment to be used can function properly and obtain satisfactory results. The ceremony is carried out in the morning, not later than 07.00 am and is carried out at the skipper's house.

The ceremonial equipment are: *pakkaja*, *passikko (pakkaja* binder) made of rattan or plastic rope, *kalomping*, namely betel leaves that have been folded into a triangular shape, a large plate/tray as a container or a place to put *kalomping* and other ceremonial materials. *Umba-umba* is a kind of traditional cake, and *bente* is white glutinous rice that has been roasted (fried without oil) and a censer.

This ceremony begins by inserting incense into the *pakkaja* by Sanro. While reading the prayer, 2 *umba-umba* are inserted through the gaps in the *pakkaja*. Then proceed by scattering the bente into it and still accompanied by the chanting of the mantra. After that, the *sanro* binds the *pakkaja* starting at the center, which is called the *pangeppe*. This binding is done 3 times around. After the binding is complete, the next work is carried out by the sawi.

2. Massisi Biseangi Ceremony (Boat Repair)

The purpose of this ceremony, apart from avoiding leakage, is to keep the skipper and sawi safe in carrying out their activities. The ceremony is carried out 5 days or a week after the *Massikko Pakkaja* activities are completed.

The place where the ceremony is carried out is on the boat that will be used. The ceremonial equipment is: *umba-umba*, *kalomping*, incense/incense, 2 combs of bananas, *baruk gallang* (feathers of palm tree trunks) which will be used to be inserted into the leaking parts of the boat.

The recitation of prayers/mantras by *sanro* using a censer starts from the middle of the boat (middle keel), then to the front (front keel) and finally to the back (rear keel). After the reading of the prayers in the boat is complete, the *massisi biseang's* job is to insert the *baruk* into the leaking parts of the boat. This work was first carried out by *Sanro* by reading a prayer so that the work carried out could run well and then the work of the *biseang massisi* was continued by the skipper and his sawi.

3. Accaru-caru (Safety) Ceremony

The accaru-caru ceremony or safety ceremony is carried out with the aim of keeping the skipper and sawi safe and successful in catching Torani fish and collecting their eggs. The place where the ceremony is in or on a boat and is carried out in the afternoon. This ceremony is still led by *Sanro*.

The ceremonial equipment is *Kalomping*, betel nuts, bananas, a pack of cigarettes, 2 chickens (male and female), 2 boiled chicken eggs, 2 colors of sticky rice (black and white), *umba-umba*, chicken dishes and traditional cakes and a censer.

The process of the ceremony is: *Sanro* takes 2 chickens that have been prepared and then cut them on the keel of the boat. Accompanied by the chanting of the mantra, the blood from the two chickens is rubbed into certain parts of the boat, namely: the center of the boat (middle keel), the front keel and the back keel including the engine. When finished, *sanro* will join the ceremony participants consisting of relatives and pray together while eating food and cakes that have been prepared by the skipper's wife. While the offerings that have been prepared are placed in the middle of the boat and after the *sanro* has finished saying the prayer, the offerings will be contested by the small children who take part in the ceremony with the intention, as well as later the fish will scramble to enter the *pakkaja*.

d. Implementation Stage

After a series of ceremonies at the preparatory stage have been carried out, then the Patorani ceremony is carried out to start fishing Torani and collecting the eggs. As in the preparation stage, at this stage the skipper's wife still plays a role in preparing the materials for the ceremonial equipment. The material used must not be damaged or rotten because it will reduce the wisdom of the ceremony. The equipment that must be prepared is: a rectangular wooden crate, measuring 10 x 15 cm, 4 betel nuts, 4 betel leaves, 4 gambier leaves, 1 piece brown sugar, 1 spoon of incense and 1 spoon of lime. In addition, on the boat that will be used, offerings are prepared in the form of 1 comb banana, 2 eggs, 2 plates of black and white glutinous rice, 3 pieces of chicken organs, 3 betel leaves, 3 betel nuts and a candle.

After the materials for the ceremony are ready, *Sanro* is called to lead the ceremony. *Sanro* will ask for the equipment that has been provided and choose the best material (the material is prepared more than needed). After the ingredients are selected, *Sanro* cleans the ingredients with clean water that has been provided in a white bowl. After cleaning, the betel leaves are folded with special folds called *kalomping*. Then the ingredients such as 1 sheet of betel leaf, 1 gambier, 1 betel nut, a little incense, a little lime and a brown sugar are put into a wooden crate. Meanwhile, 3 betel leaves, 3 betel nuts and 3 gambier seeds are placed outside the crate. Before the chest is closed, *Sanro* will read a prayer while circulating incense on the crate and blowing the smoke into the crate. After the crate is closed it is placed on the skipper's bed.

After the crate is placed on the skipper's bed, then the skipper goes to his boat to check all the boat equipment and when it is ready he will return home to continue the ceremony. Meanwhile, the sawi who will go sailing are waiting on the boat.

Arriving at home, the skipper immediately goes to bed and faces the East. Saying a prayer, he lifts the crate and without looking back walks to the center pillar of his house, then takes a *kalomping* which is outside the chest and places it on the center pillar of the house. Then he walks again without looking left or right towards the stairs of the house and slowly down the stairs. Arriving on the ground, he crouches down to put a *kalomping* at the end of the ladder on the ground. Then without looking back he goes straight to his boat.

On the boat, sawi and his family are waiting for the ceremony. Arriving near the boat, he crouches down again to put the third *Kalomping* outside the crate. When he puts it down, he still faces the rising sun. After laying the third column he continues to climb into his boat, goes straight to the stern and put the crate in the place where he usually sits. After that the boat engine is turned on and then they head to Sanrobengi Island.

Before arriving at Sanrobengi Island, the boat engine is turned off and the skipper calmly and slowly lower the offerings on the sea which consist of 1 banana comb, 2 boiled eggs, 2 plates of black and white glutinous rice each and 3 pieces of chicken organs. After this event is over, the boat engine is turned on to Sanrobengi Island.

Arriving at Sanrobengi Island, the skipper then takes the crate under his seat, takes out the *Kalomping* that is in the crate. Then Kalomping is placed with other equipment, namely an egg, 3 betel leaves, 3 areca nuts and a candle on a tombstone that has always been used as a place for ceremonies.

After completing the prayer, the skipper then takes the gosse (a type of seaweed) that is on the island, because it is believed that if you take the gosse elsewhere, the skipper will fail in collecting Torani fish eggs. If the gosse collection has been completed, the skipper and his family will celebrate it by eating together and after that they return to their village to wait for the right time to collect Torani fish eggs. If this ceremony has been completed, then the entire series of Patorani ceremonies are considered complete and Patorani can start the activity of collecting Torani fish eggs.

Sanrobengi Island is located to the east of Pa'lalakkang Village with a distance of approximately half a mile or approximately 15 minutes away by Patorani's boat. The area of Sanrobengi Island is approximately 1 ha. According to history, a man who lived on the island was a powerful shaman, as the name of the island is Sanro which means shaman and *bengi* is magic. In the heyday of Karaeng Galesong, he was expelled so he left Sanrobengi Island for Selayar Island and stayed there until he thought Karaeng Galesong's anger had subsided, he returned with 100 coconut trees and planted them on Sanrobengi Island. The coconut trees thrive so that the island is also known as "Kaluku Sibilangang". The Patorani take coconut leaves on the island as well as made a pilgrimage to the tomb of the shaman.

4.2 Local Wisdom of Flying Fish Egg Collection

The activity of collecting Torani fish eggs is carried out in the Makassar Strait, which according to Patorani history was the first place where Torani fish were caught, but because the sea is an "open access" resource. The Patorani do not have rights to these marine resources or own certain places in the middle of the sea, even though their ancestors had caught fish in that place before.

For the fishing process, Patorani uses a motorized boat for time efficiency, but the fishing gear used is still traditional, namely *pakkaja* and *balla-balla*. *Pakkaja* (bubu floating) is cylindrical in shape, made of bamboo slats with a length of 80 cm and a diameter of 40 cm. This fishing gear is equipped with coconut leaves which serve as spawning grounds for Flying fish fish and gosse (a type of seaweed) which has a sharp aroma that serves to attract the attention of Torani fish to enter the fishing gear. *Pakkaja* serves to catch Torani fish, while *balla-balla* is only for laying eggs.

The method of operation is to tie a number of *pakkaja/ballas* on a long rope with a distance of approximately 25 – 30 meters between 1 *pakkaja* and another. The end of the rope that connects the fishing gear to the boat is attached with a light that serves as a sign that fishing is being carried out in that place.

The production of Torani fish and their eggs has decreased from year to year, as stated by a skipper.

"We often meet motorized boats from other areas, they catch fish with better tools than ours, so getting only 50 kg of eggs is very difficult. Whereas in the past, to obtain such results, it could be done in less than 20 days at sea."

It is suspected that over fishing has occurred in that place because with the modernization of fisheries, fishermen from other areas can easily get to that location and they catch fish without taking into account the sustainability of marine resources.

In contrast to Patorani, because what is needed are eggs, so to preserve fish, the fishing gear of *pakkaja* is replaced with *balla-balla* fishing gear. If you use *pakkaja*, the Torani fish mothers are also caught, while the balla-ballas are only a place for Torani fish to lay eggs. In the production process, *pakkaja* fishing gear is still used, to maintain the balance of the boat during fishing activities.

a. Marketing System

The production of Torani fish that is sold is the eggs, while the Torani fish is not sold, only for own consumption or as gifts for relatives, because the price is very cheap. The marketing system of Torani fish eggs is different from the marketing system of fish in general, because Torani fish eggs are not intended for the public, but for export commodities, with the main goal of Japan. The marketing system is: The skipper hands over the produce to the *papalele* and the *papalele* determines where the produce will be sold, without asking the skipper's approval. Because the production of Torani eggs is wholly owned by *papalele.*

The marketing process does not take a long time, because each *papalele* already has a marketing channel that has been fostered long ago, so there is mutual understanding between *papalele* and traders/exporters with a price agreement that is mutually beneficial to both parties, even though there is actually no attachment to selling to certain parties. However, the reality shows that *papalele* prefers to sell their products on a regular basis to familiar traders/exporters. This was also done to prevent the possibility that if papalele needed a loan, it would be easy to obtain it from the trader/exporter and they did not hesitate to lend money to papalele.

b. Profit-sharing System

The profit-sharing system was determined by the *papalele* himself, without deliberation with the skipper, so the skipper only agreed to it. There are 2 profit sharing systems, namely:

Method 1.

From the gross income, 20% is issued first (the cost of depreciation of the equipment), then how much is the operational cost calculated. This operational cost is calculated entirely as a skipper's loan. After deducting operational costs, the net result will be obtained, which is then divided as follows: 2 parts for boats, 2 parts for engines, 1 part for skipper and 1 part for each sawi. From this division will be obtained: *Papalele* get 2 parts boat + 1 part engine; skipper gets 1 part of the machine + 1 part of the skipper, while each sawi will get 1 part.

Method 2.

20% of gross income is removed (depreciation cost of equipment), then the operational costs are calculated. After deducting the operational costs, it will be reduced again by 25% as part of the *papalele*. The rest is divided into 1 part for the boat, 1 part for

the engine, 1 part for the skipper and 1 part for each sawi. The boat part will belong to the *papalele* and the engine part to the skipper.

The difference in the amount of the share received is not disputed by the skipper and the sawi, because both the skipper and the sawi feel that this method is able to guarantee the survival of his and his family, in addition to that there is an unwritten guarantee from *papalele* to provide social and economic security to the skipper and sawi, so that they feel protected and secure in their lives.

In addition, the feeling of not being harmed in the profit-sharing system is that the Torani fish obtained during the fishing season belong to the skipper and sawi, while the sawi can also get additional income from selling other fish caught during the trip back home. With such circumstances, it gives an advantage between the work relationship of *papalele* - skipper - sawi.

V. Conclusion

Local wisdom or local knowledge used by Patorani fishermen in the process of collecting flying fish eggs (*Hirundicticthys oxycephalus*) is more influenced by internal factors, namely obedience or adherence to trust. This can be seen in the stages that must be carried out by Patorani fishermen, starting from the preparation stage, the production process, the marketing system and the profit-sharing system, which are a series of activities that are interconnected and cannot be separated from one another.

Patorani as a local community, practicing local wisdom on collecting Torani fish eggs based on customs, was able to combine modern technology with traditional knowledge. Traditional knowledge used is *erang passimombalang* and *erang pakboya-boyang*, while modern technology (motorboat) is used only as a tool to facilitate work.

Local wisdom (traditional knowledge) in addition to teaching the relationship between humans and their creators, also teaches how humans relate to their natural environment. The manifestation of this knowledge is that Patorani changed his fishing gear from *Pakkaja* to *balla-balla*, along with the transition from the main commodity, namely from fish to eggs. If using *pakkaja* fishing gear, the Torani fish are also caught, while using balla-balla, the Torani fish will not be caught because the *balla-bala* only function as a place to lay eggs, not as fishing gear. Thus, the exploitation of marine resources can be minimized.

References

Ansaar, SH, 1997. Nilai-Nilai Budaya Yang Terkandung Dalam Upacara Patorani fish Di Kecamatan Galesong Kabupaten Takalar. Departemen Pendidikan dan kebudayaan Direktorat Jenderal Kebudayaan Balai Kajian Sejarah dan Nilai Tradisional. Ujung Pandang.

Ibrahim, M.A. 2015. Metodologi Penelitian Kualitatif. Alfabeta: Bandung.

Keraf, S.A., 2002. Etika Lingkungan. Pn. Buku Kompas. Jakarta.

Manyambeang Kadir, 1984. Upacara Tradisional Dalam kaitannya Dengan Peristiwa Alam dan Kepercayaan Propinsi Sulawesi Selatan. Departemen Pendidikan dan Kebudayaan. Ujung Pandang.

Mattulada, 1982. Menyusuri Jejak Kehadiran Makassar Dalam sejarah. Bhakti Baru-Berita Utama. Ujung Pandang.

Miles, Matthew B. and A. Michael Huberman. 2005. Qualitative Data Analysis (terjemahan). Jakarta: UI Press.

Miles, M.B, Huberman, A.M, dan Saldana, J. 2014. Qualitative Data Analysis, A Methods Sourcebook, Edition 3. USA: Sage Publications. Terjemahan Tjetjep Rohindi Rohidi, UI-Press.

Moleong, Lexy J. 2012. Metodologi Penelitian Kualitatif. Bandung: PT Remaja Rosdakarya.

Nababan, A. 1995. Kearifan Tradisional dan Pelestarian Lingkungan Hidup di Indonesia. Dalam Analisis CSIS. November-Desember Tahun XXIV No.6: 42-435.

Nadir dan Mutmainnah, 2018. Analisis Usahatani Perikanan Nelayan Patorani fish. CV.Inti Mediatama. Makassar.

Niati, D. R., Siregar, Z. M. E., & Prayoga, Y. (2021). The Effect of Training on Work Performance and Career Development: The Role of Motivation as Intervening Variable. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, *4*(2), 2385–2393. https://doi.org/10.33258/birci.v4i2.1940

Sugiyono. 2018. Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.