

# Mandar Rumpons: An Adaptive Marine Culture Work

## Authors

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**Abstract:** - This article reveals the FADs of one adaptive fisherman culture of the Mandar ethnic group. Rumpon is present in its function as a provider of fishing space for users of fishermen, FADs are houses where fish gather, FADs are social institutions, FADs a technology of catching aids, and FADs condition with rituals. The acquisition of data comes from reading various literatures and related research results, as well as the importance of the results of field research, with reference to the characteristics of a qualitative approach. The findings of the study show that FADs in their function cannot be compared to some fishing gear and other fishing aids. Rumpon does not have the features that make up the working mechanism like the use of other fishing gear technology that is required by the work system. FADs are also not as fish collectors, but providers of catching spaces / areas with the support of "lure" materials that are able to stimulate fish more easily approach and gather naturally.

**Keywords:** - FAD, Mandar, Adaptive

## Preliminary

The word Mandar shows the name of one language (Mandar language), one region (Tana Mandar), and the name of one ethnic group (Mandar people). Regarding the name of ethnic groups, Before South Sulawesi was divided, Mandar together with Bugis, Makassar and Toraja ethnic groups were the four major ethnic groups inhabiting the South Sulawesi region. After South Sulawesi was divided, and formed the Province of West Sulawesi based on the Act, No.26 of 2004, dated October 16, 2004 (Bodi, 2005: 63), since then the majority of the Mandar tribe inhabited the territory of West Sulawesi Province, in addition to several tribes other minority nations, such as Javanese, Bugis, Makassar, Toraja, and other ethnic groups.

Mandar tribes are associated with the life of the maritime world and the maritime world, since long ago many have been used as objects of study by scientists, especially researchers, both with regard to their society, moreover cultural products that have something to do with the maritime world, whether it is related to customs, religion / ritual, environment, and technology aspects of capture.

Such as depicting the position of the Mandar people as a formidable sailor / extraordinary archipelago, aligned with other seafarers in Indonesia, namely Bugis, Makassar, Madurese, Buton, and Bajo (Bajau) ethnic groups (Bahri, 2013: 2). Mandar people's soul so thick with the maritime world, in addition to the support of the sea area which is

Wider than the land area, the majority of the people live as fishermen. Mandar's maritime traces have been seen since the time of the kingdom, where people who settled in Tana Mandar have since been assigned responsibilities related to the supervision of the natural environment, namely one focused area in the land area and one focused part in the coastal / marine area . For the coastal area formed a joint venture of seven small kingdoms in one unit, called "Pitu Ba'bana Binanga", meaning seven small kingdoms centered in the river estuary area, and "Pitu Ulunna Salu", meaning seven small kingdoms centered in the area upstream of the river or mountains. Then later, the two royal joints were united in the union, called "Pitu Ba'bana Binanga Pitu Ulunna Salu", meaning seven kingdoms

centered at the mouth of the river, and seven kingdoms centered upstream (Lopa 1982: 19).

Especially the kingdoms that controlled the sea area at that time, such as the Kingdom of Balanipa; Tjenrana / Sendana; Banggae; Pamboang; Tappalang; Mamuju; and the Binuang Kingdom (Lopa 1982: 20), until now it remains a flashlight point for the development of the marine shipping and fisheries sector by the West Sulawesi provincial government. This is evidenced in the kingdom's regions where there are still maritime traces, such as sea transportation facilities and infrastructure, namely ports as berths for motorized boats / boats and fish landing piers; small size sandeq boats, lepa-lepa boats, body-bodies, jo'loro and other types of boats / motorboats, both as passenger transportation, transport when fishing, as well as transport equipment that has a package with fishing gear. Likewise, several types of fishing equipment and similar marine biota are still found in communities living in coastal areas, such as bagang, nets, trawls, fishing rods, bubu, gae, and FADs. Especially in Pambusuang, the evidence of the thickness of Mandar's nautical culture is inseparable from the support of facilities and infrastructure related to the life activities of fishing communities, such as transportation facilities, such as sandeq, jo'loro, lepa-lepa, and motorboat boats used by gae fishermen and fishermen group fishing. Regarding fishing gear technology, such as nets, gae, fishing rods, trawls, bubu, bagang, including fishing gears, are called FADs. While other activities in the form of boat building activities, fishing activities, fish drying activities, including weaving activities for making silk. Sandeq and Rumpon boats were even created from the hands of the Mandar fishermen who lived in Pambusuang. Equally important, Pambusuang is also thick with mystical issues, because working as a fisherman certainly experiences many obstacles in activities, let alone the disclosure of the marine environment which is assumed to be negative because it has a mysterious nature, such as a storm and sea waves that can arrive arrived (Bahri, 2013: 1-2).

The marine environment includes a production space that is difficult to enter for survey activities because it can change at any time, in addition to the resources contained in the property and shared wealth. That is why all the methods that people do to conquer it, even fishermen with their shortcomings still see local knowledge as a driver in maintaining an increasingly challenging life due to the rapid advancement of science and technology that almost does not favor most fishermen. Whereas the improvement of lifestyle as used by the general community of fishermen can be realized if the sea as a production space is managed at the same time well used and wiser based on the order or rules and norms that apply, both by law and state law concerning the sea and customary norms that are applied traditionally (Bahri, 2011: 3). The presence of the sea as a source of economy whose status is shared property and the wealth of resources they contain all have the same right to deceive it. That is why Bavink (in Mustamin, 1995/1996: 1) said whoever controls the factors of production, in this case working capital, technology, skilled labor and high managerial knowledge, they are the ones who have high enough access to utilize wealth the sea as much as possible. Moreover, in the fishing community there are known social classes as found in the farming community, for example there are capitalist fishermen, small fishermen, and there are fishermen workers (Kinseng, 2014: 27). All levels mentioned can be seen in tracing the level of life of fishermen in each distribution area who know there are so-called land retainer (financiers), sea punggawa (juragan), and mustard (fisherman workers).

Specifically related to mastery of technology, in its application in the utilization of the marine environment is a socio-cultural phenomenon, even the emergence of technology, from the simplest level to a complex level as it appears today is the accumulation of level of social and cultural development (Naping, 2004: 2-3). It's just that according to Bahri (2015: 64), damage to marine ecosystems is caused by various mistakes made by fishermen themselves, such as the use of fishing

gear that is not environmentally friendly, the wrong way to catch, which is to make excessive arrests, including the pollution of the marine environment due to non-handling of the good waste disposal. According to Rivai (2007: 1) conditions like this are reflected in various forms of communal violence, namely the loss of potential social capital in the lives of our nation. Social capital is something that is intangible and functions effectively in bonding social relationships to realize a collective cooperative behavior in dealing with a common problem. Conditions like what is experienced by the nation, especially towards fishing communities are generally selected from a decent life. The occurrence of conditions like this so that the fishermen are required to look for something that can help smooth the work, increase income, and maintain the safety of his soul, which relies on strengthening the religious aspect (Ismail, 2007 : 2). All cultural works and activities related to maritime issues are mentioned, in addition to being responsive to the diversity of Mandar's maritime culture, it is certainly a strong reason for the Mandar people, especially in Pambusuang as a center for the development of maritime. culture (Alimuddin, 2017: 35).

Culture as the basis of the study in this paper, by Geertz (1973), is said to be a system of meaning behind empirical phenomena. Because culture can also be understood as a "symbol system". Culture can also be understood as a "series of adaptive strategies" to survive in relation to "ecology" (environment) and resources. While Daeng (2000) said, that a culture is obtained in a series of "dynamic networks", where the negotiation process occurs intensively in the construction process. The position of the Mandar people as maritime ethnic groups, specifically their involvement as fishermen capture rich cultural works in the form of fishing gear technology, including fishing aids. All of this is created as an effort by fishermen to make strategies to overcome the position of marine biota, especially fish and the like which do have different characteristics or patterns of life between one type and size, including the availability of natural

resources on land as a provider of fishing gear and tools. Help catch. According to Alimuddin (2017: 84) fishing gear developed by Mandar fishermen is strongly influenced by the surrounding natural environment. Like the marine environment is strongly influenced by the type of fish they will catch, and the influence of the terrestrial environment is contaminated with raw materials for making fishing gear, including FADs. According to Ahmadin (2009: 5) the use of modern technology is said to bring significant changes, especially those that occur in the structure of the life of the fishermen, when compared to the previous situation their activity depends on adjusting the natural conditions, such as the blowing of the wind which transports sailboat transportation. Because it can be predicted that the use of advanced technology the fishermen can go to sea at any time, even going to sea can reach a further search area out.

FADs are fishing tools that are constructed using local raw materials, such as bamboo for making floating materials, rattan for the manufacture of buffer ropes, mountain stones for ballast making or anchors, and coconut leaves for making fish lure. In its development, bamboo and rattan were no longer used to be replaced with instant materials, namely bamboo replaced with cork and rattan replaced by recycled rope. Changes in the use of raw materials in two components of FADs, namely floaters and buffer ropes due to the scarcity of raw materials, if any are found, in addition to the price is also expensive to assemble it more difficult and require much longer time with the raw materials used today. While related to the pluses and minuses, using bamboo and rattan as raw materials is more appropriate, because bamboo with waves hit sounds that can stimulate fish to get closer, bamboo is also quickly overgrown with moss which is a food for small fish that prey on fish become the target of catching fishermen, and having a smell that can stimulate fish to get closer. Likewise on ropes from rattan raw materials, when stretched in sea water emits a sparkling light that attracts fish closer to the catching area. Whereas cork and rope have no such criteria, but their use is only to adjust the times, the

procurement is considered to be much easier and the work is easier. Whereas in terms of its function it remains the same, namely cork as a component of floats and ropes as a component of the buffer rope.

FADs, although classified as one of the technologies in the capture fisheries sector, but the function is different from other capture fisheries technology so that it is said to be more interesting to study. Like the technology of mesh, gae, trawl, bubu, fishing rod, and bagang, its function as a fishing gear so that when operated can collect fish in large quantities. But it is different with FAD technology, because of its position as a fishing aid so that it does not accumulate in fish capacity (Alimuddin 2005; lampe, 1989).

### **Research methods**

Selection of research methods according to Creswell (2016: 23) always must be adjusted to the purpose of the study itself, whether the purpose is to explore the desired information or leave it simply from the participants or whether to analyze the type of data collected from research instruments or text information from the recording or all interpret general patterns that arise from research data. With this perception, this study was made possible using a qualitative approach, with the research setting of Pambusuang Village, Balanipa Subdistrict, Polewali Mandar District, West Sulawesi Province. Establishing Pambusuang as a research location, referring to criteria, such as the area facing the sea directly with the distance of the building of the houses farthest from the shoreline about 500 meters, so it is worthy of being called a village / fishing village; the majority of the population lives as fishermen, with a variety of fisheries sector businesses, such as fishing and other marine biota, seaweed cultivation, peddling fish, and boat craftsmen; one of the flashlight development areas in the marine fisheries sector in West Sulawesi Province; the central area for developing Mandar marine culture; and the pioneering site of the birth of the Sandeq boat, and the most specific area from the origin of the first use of FAD technology.

The informants were selected using a purposive method, namely the deliberate selection, but still paying attention to the criteria of the group of people who were determined, such as the government and community leaders chosen because of their experience in maritime and maritime sectors so that they were able to provide data on FADs globally; group of fishermen, both as owners of FADs, FAD makers; fishermen using FADs, namely Pa'gae, Pa'meang, Panjala, and Pa'bagang, including FADs and shamans who are the leaders of the ceremony. Data collection, in addition to being sourced from related literary readings, during field research using participatory observation techniques and in-depth free interviews. All data collected was analyzed, according to Miles and Huberman (1992), the research data was analyzed following the steps preceded by the flow of data reduction, data presentation, and ended in drawing a conclusion.

### **A description of Pambusuang as a settlement unit**

Pambusuang according to Alimuddin (2005: 12-13), is a residential area located on the stretch of the coast of the Gulf of Mandar. The settlement arrangement extends along the stretch of the coastline with the arrangement of house buildings and other building facilities are plastered following the pavement of the village road which is built from paving blocks, beside butas asphalt. Pambusuang is a fishing village that is quite dense so that between the left and right side of the house building there is almost no visible separation space. Most of the people's houses stand in the form of a stage, and others have been made of stone and there are still a small portion that is still seen as poorly inhabited houses. Almost all activities including the residential area are centered to the left of the trans Sulawesi road from Makassar to Majene, and there are only a few residential buildings located on the right of the axis road, including the Pambusuang Village Office which stands in a backward position. Especially for small sandeq boats that are found all the time along the shoreline, including in Pambusuang, besides giving a beautiful view, it is also important to reflect on the viewers, that a

parked boat with a bow facing the sea is a form of identity disclosure. that fishermen are Mandar at all times ready to go to sea. Another scene found in Pambusuang Village, is the activity of fishermen going and going to sea, the activity of transporting their needs to sea and lifting the catch from the boat to the mainland, the activity of buying and selling fish, the activity of cleaning fishing gear, and the activities of taking care of the boat. All of this illustrates the thickness of the maritime culture of the Mandar people, especially those living in Pambusuang.

In the Pambusuang Village Profile, in 2015, Pambusuang was a settlement unit called the village, in the distribution of Balanipa District, Polewali Mandar District, West Sulawesi Province. The sea area is wider than its land area. The narrow land area is also infertile, so that the development of the agricultural sector is not possible, and the marine sector, especially fishing activities is actually a priority livelihood, and almost all fishing gear users function as a fishing center.

### **Rumpon: Capture Aid Technology**

According to Kavlan and Menners (1999), technology is one of the "adaptive strategies" used by fishing communities in their efforts to adapt to the natural environment, especially the marine natural environment. Nature is statically understood as a passive and static condition and condition, but it stores so much potential in the form of physical material that humans need to carry on with their existence. This is related in formulating three forms of culture in a complex system that is realized in the form of ideas / ideas, activities and artefacts or the form of material culture. The making of FADs begins with the deliberation of fellow people who will be involved, both as owners / financiers, as builders of FADs, as shaman / sando ritual leaders, as well as fishermen (skipper and mustard ginger) who will be involved in utilizing FADs, including other communities. After there is clarity regarding the readiness of FAD construction, then the raw material is started to prepare, such as rattan for support straps; stones for ballast; and bamboo for floats; including coconut leaves for decoy

components. Especially the coconut leaves are done most recently and are separated from the work of other components, because in addition to being considered the work is easy, the ingredients are easy to obtain, while avoiding the dryness of the coconut leaves that will be used as a lure. All raw materials are mentioned, first taken from the forest, but over time all raw materials have been obtained by buying.

Preparing the stone for the ballast component, preceded by a search for the stone that will be used as the main stone. His search in the forest was carried out by someone who was equipped with knowledge / expertise about the classification of stones needed. The conditional stone is sometimes sought 2-3 days, because it is conditional on the surface there is a lump of water when it is found or if the stone is overgrown with herbaceous trees. Both of these conditions seem trivial, but according to the culprit behind the requirements the stone is meaningful and fertile, meaning that it will bring success when the FAD is functioned, the owner and fisherman both hope to always reap maximum results that are the hope of every fisherman. After the conditional stone was found, the stone was the first time it was tied or wrapped with a rope, and the work was done by clever FADs, after that the other stones were worked together with the fishermen. Such requirements are also treated the same as working on bamboo or cork as a floating material. In the number of bamboo stems used to build FADs, there is one bamboo bar that must be chosen to be a FAD center. Bamboo is also conditional, which is not defective and the most straight. This classification is meaningful later to be used, both the owner, especially the user, always acts honestly in response to everything that happens, especially regarding the results obtained must be revealed the correct amount. When using a central cork the FADs are still determined, and the location can be at the midpoint of the edge, depending on the clever FADs. Bamboo or cork is the center of the float float when it starts to be designed, first combined with the main stone, by comparing and then giving spells, with the aim that the main stone becomes a

strength / defense in the carrying, and at the center of the float becomes the controlling element in all aspect at the top.

So while stones and bamboo are done while still using a rope from rattan raw materials, it is also done separately to produce a rope according to the needs or depth that will be the place to install FADs. But with the switch to the use of rope, the owner only works on connecting the rope between one bond with another, because one recycled rope has a maximum length of only one hundred meters, including the diameter of the rumpon rope is not the same, namely the smaller the diameter. In addition to ballast, floaters, and buffer straps, one FAD unit is equipped with a lure component, which is a component that is built by assembling whole coconut leaves with its liner. The way to assemble it is to tie the stem of the midrib to the rope, technically arranged from bring it up, so that when it is installed it appears to grow and bloom under the surface of the water. This decoy is structurally separated with a support rope, also equipped with a small buoy, formerly from a bamboo piece now from cork. At the end of the upper rope is tied to a small float, and the end of the carrying part is given a weight of stone which amounts to as needed, which is important for the lure position of this fish to float like a tree that is brought to the surface of the water. So when FADs are installed, the lure component is tied to the float. One FAD unit was built using stone as a weight of about 30 pieces and a flat stone weighing 30 kg. When using cork as a float the average size is 50 cm (width), 60 cm (length), and 50 cm (thickness).

For Mandar fishermen, FADs are built on three structures or three levels, namely the upper, middle, and carry parts. This condition is understood as the same as the philosophy of the structure of the human body which is also divided into three structures, namely the head, body and feet. Each component has a function according to its position. As humans have a head and are considered the most valued and honorable because in addition to being above, also in the human head becomes a function of control or control over everything that humans

will do. When this is associated with FADs, the function is likened to the float at the top. Floating on FADs is also a means of control because in this section various forms are placed, starting from the reinforcement spell, the owner's sign, the owner's name and the flag of the cloth. The second arrangement in the human body is the body, its position is between the head and feet. In the human body merges several vital elements, all of which are encased in the abdominal cavity, meaning that in this part of the body becomes the center of production, the human body where food is stored before being processed. When the human body is associated with a component of FADs, the component is a support rope as a link between the floaters and ballast stones. In this section there is a lure material whose function is to stimulate the arrival of fish and then the fishing process occurs by the fishermen. Whereas the third level in the human body is the foot that functions as a buffer standing strong and upright human. When the human foot is associated with the FAD component, the component is a support rock whose position is in the carrying part and is a support / support for a sturdy FAD unit.

Similarly, the age of FADs is similar to human age, namely not knowing when he died, whether at a young age, old age and childhood, even just seconds or even minutes when he saw that world he died. When the issue of human age is associated with the age of FADs, FADs are not known at all how long they can last. This means that the FAD installed is not known when it can be damaged or not used, it can just be installed, it can be a day, it can be a week and can be years. This means that FADs cannot be predicted when he broke up with humans when he died. The principle of the formation of FAD technology by the fishermen of Mandar at that time was to initiate a technology that would overcome the complexity faced by fishermen looking for and catching fish and other marine biota. Because fishermen beforehand when searching for fish must always chase in search of where pockets of fish hide. At that time the fish that were targeted by fishermen always hid in the trash

that was swayed by the waves, especially on coconut leaves scattered in the sea. The search and catching system takes place as described previously, so practically the fishing community uses the time to look for fish and similar marine biota for a long time, by itself is very influential on the high operational costs, the depletion of fishermen's power, including the effect on the use of operational costs. But the presence of FADs that have been built in a structured manner, can naturally overcome the complexity problems faced by previous fishermen, in the sense that they can capture time more efficiently because there is no need to chase after fish bags, but instead go directly to the area where the FADs are installed. By streamlining time, it is very influential on the issue of lower operational costs, and fishermen feel more easily looking for fish in the sea. More than that, FADs that present with their simplicity, and their function, in its development actually become a center for the development of maritime culture, because they are able to become an arena for the formation of strengthening the implementation of rituals in the form of ceremonies, able to become a space for the formation of norms or rules, able to become the presence of local knowledge, and able to become an integration space for fishermen, because the utilization process is carried out by fishermen with a variety of fishing gear technologies, including various ethnic origins.

### **Fencing Installation Process**

Before the FADs are demoted / installed in an area that has been determined previously, the first time the owner is made is looking for the best day / time that is determined by a book reader expert that contains a good day / time to start the activity, including a shaman who will lead the way. After the time has been agreed, the FAD owner and the fishermen who will be involved in the use of FAD prepares all the ceremonial needs, such as food made from glutinous rice of four colors, namely white, red, black and yellow, including traditional cakes, and food for ceremony participant. The four colors of glutinous food are meant, each interpreted as a source of life in the world, such as white sticky

rice symbolizing the wind, red sticky rice symbolizes fire, yellow symbolizes air, and black symbolizes land. In the Baransanji ceremony, it is required to cut off native chickens, because the blood is needed for paccera ingredients or rub vital parts of FADs, such as every corner of FADs, the center of FADs, including ropes and FADs. In this ritual event, it was also mixed with the repellent material containing spices in the form of betel nuts with betel leaves and lime and made in a bundle of cloth to be tied at the top of the FAD float, including the food served to be eaten with the ceremony participants. He treated it like this because it was believed that in the sea there were also supernatural beings who also became a concern because it was feared it would make a disaster, both for FADs and for fishermen who use the marine environment if they were not given attention through the provision of offerings that had been filled with spells. After this procession, users of fishermen roll around the FAD to the shore and then raise it to the boat that is used to transport FADs to the location of FADs. But two or three days before the installation of FADs, a fisherman is assigned to re-measure the depth of the sea to ascertain how long the buffer straps will be used, by using a piece of iron as a weight tied with a small rope or tation. How to get the depth of the sea in question is enough to calculate the number of rolls of rope used. This activity is very important, the goal is to keep the FADs from being lacking, as a result of lowering the floating ballast stones, even when the FADs are less able to cause the boat to be towed upside down, and not infrequently the FADs break and the installation is considered a failure.

After the FADs arrive at the placement area, the first activity is to lower the float, the condition is against the current position, then proceed to lower the ballast, provided that the stone is lowered away from the place where the float is lowered, meaning that it is away from the front of the float. Lowering the ballast must be done by winding, to avoid floats being attracted to it. Another condition when the ballast is to be lowered, the position of the carrying boat must be walked, with the position of the rock

lowered on the left side of the position of the float, meaning that the position of the right side is lowered the ballast, the reason is considered to be a good thing because it becomes the place where the fish is. Other restrictions when installing FADs, fishermen are forbidden to talk that is not polite, fishermen cannot issue words that say no, fishermen may not mention animal names, fishermen cannot urinate in the right bow of the boat, and families of fishermen who are left cannot do activities in the kitchen, not to the neighbor's house to tell stories, especially bad or disgraceful people.

Fence installation areas in the Pambusuang area and its surroundings are close to 30 miles and at most 50 miles away. For large investors, the installation of FADs is not only around the Pambusuang area, but some are located in the area of Ujung Lero (Pinrang Regency), in the Lombok area (East Nusa Tenggara), in the North Mamuju area (West Sulawesi), including in the Palu area (Central Sulawesi), but the size of FADs is designed to be larger than FADs found in the vicinity of West Sulawesi (Polewali mandar, Majene and Mamuju), and the South Sulawesi Region (Pinrang and Sinjai). The installation distance between one FAD and another FAD is above one mile or also follows the length of the fishing net used to catch fish. As is the case when fishermen use gae fishing gear, so as to avoid disturbing one FAD with the surrounding FADs, the distance is further fostered, which is between 1500-2000 meters. Because the average length of the gae net which is also called the trawl ring is a thousand meters.

### **FADs: Mandar Fishermen's Initiative**

Several reviews of research results that reinforce that FADs are the fruit of the work of Mandar fishermen, such as Schlais (in Alimuddin, 2013), that FADs have been known since the X century, are the Mandar fishermen's cultural work, even the Mandar fishermen were the first to develop. The results of the study (Lampe, in Alimuddin, 2013) said that FADs were originally developed by fishermen of Mandar, only recently adopted by fishermen from other regions, especially in the distribution area of fishermen in South Sulawesi.

Similarly (Host, in Alimuddin, 2013), said that the fishermen of Mandar spread the technology of FADs as their creation to various places in the archipelago. Even Lopa (1982) said that initially FADs were installed or placed in the sea as inter-kingdom boundaries in Tana Mandar at that time. In addition to some research results revealed earlier, other evidence that strengthens FADs as a work of fishermen's culture is also ignored by a natural event, namely land waste in the form of coconut leaves and several types of plant tree trunks such as nipa and mangrove stems carried by water flow into the sea when it rains. The rubbish was scattered, and the search results from the fishermen at that time were actually used as shelter, as well as gathering fish caught by fishermen. Fishermen find it difficult to catch it because the fish always follow the rubbish that is swayed by the impact of the waves. Therefore, by studying the fish characters who like to take refuge in the trash, especially behind the coconut leaves, the fishermen then take the initiative to create a shelter as well as a gathering place for fish with structured technology, in order to find solutions to make fishing systems previously unstructured because of fishermen. not faced with a productive work mechanism, even seemingly wasteful because they are looking for fish there is no choice where to catch. But with the presence of FADs, the catching area is clear, fishermen feel the ease of finding fish advice, while getting time efficient and very influential in reducing operational costs.

### **FAD: In the Integration Function**

Talking about integration issues is inseparable from talking about networks that are patterned in a single bonding union of various components. In research (Kusnadi, 2000), the point is to look at some patterns of adaptation strategies developed to maintain survival, namely (1) to do various jobs to earn income, and any kind of work done even though it is considered to be demeaning is still accepted even though the wages are low; (2) If the activities are still inadequate, the poor will turn to the supporting systems in their environment. The kinship system, neighboring, and reciprocal

exchange arrangements are very valuable resources for the poor; (3) Working more even though there is less income, this economic strategy is pursued to reduce the level of daily consumption needs; and (4) Choosing other alternatives if the three strategy models presented previously are difficult to do and the possibility of survival in the village is very critical. In connection with the concept of adaptation and social networks previously stated, FAD as a provider of catchment space has the legitimacy of integrating several fishermen groups that make it a fishing tool, both in the use of fishing gear and classification based on social groups as users. The use of FADs as catching aids, some are carried out with no strings attached, meaning that the fishermen use the FADs area without any compensation to the FAD owners, not being obliged to share the catches with the FAD owners. Whereas on the other hand there is a group of fishermen who indeed make the FAD area as a catch target, meaning that without FADs the fishermen group cannot make arrests, and this group is obliged to issue the results to FAD owners. Integrated fishing group, such as:

1. Fishermen fishing, some are done by individuals and some are done in groups. For individuals in carrying out fishing activities take place alone by boat. Their technical catching is not anchored, but is done by surrounding the FAD area at a distance of about 20-30 meters from the FADs circulation center. There is no obligation to share the catch with the owner of FAD. Whereas anglers who came in groups in one motorboat called body, the members were on average 6-7 people, each catching technically carried out fishing activities using lepa-lepa type boats. The total of the catches that have been sold, the owners of FADs get one share.
2. ala User Fishermen, install it in a circular way around the FAD area. The nets used by fishers are shorter in size than the gae nets that are up to a thousand meters long, the net model is formed of a kind of mosquito net. The technique of catching is by manual method,

that is, starting with installing or lowering the weight of the float as a marker of the end of the net, then then breathing the net to the second buoy. Likewise the lifting process or pulling the net, starting with lifting the float and ending with a second float. For fishermen, fish users are obliged to give one part to the FAD owner. Today the fishing gear is almost no longer used because it is considered to be less competitive with gae fishing equipment whose operation has been driven by engine power, including the means of transportation used less support anymore because the FAD installation area is farther away, so to reach it requires greater and adequate transportation.

3. Gae Fishing Equipment Users, in principle something that cannot be separated from FADs. Because Gae can only be operated when FADs are available. Operate the gae in the FAD area by circling a net in the FAD area. The results of the arrest of fishermen must be issued to the owner of one-piece FADs, and for the owners of FADs the hope of returning capital makes FADs to the fishermen users, which is why so it is said, these two technologies are true partners. FADs are first occupied by activity when the age of installation is more than one week. However, to accelerate it can be done in other ways, namely the lure of the old FADs installed into new FADs within a period of 3-4 days, with the aim of accelerating the process of luring fish. After FADs are ready to be used as catch areas, then the next use between 7-10 days later can be circled again. But for fishermen, fishing gear users can use it as a catch area at any time. There is no fundamental rule when the revenue is received by the owner of FAD depending on the season of catching, if it improves, it can be in a matter of days, and vice versa when the fishermen's income is not good, the owner of FAD can also take longer, which is between one to two weeks.

### **Rumpon: in the ritual media function**

FAD is a very functional fishery equipment, which is as a provider of fishing space for some groups of fishermen users, also requirements with ritual content as well as full of meaning and norms. Rituals began to be found when searching for raw materials, specifically ballast stones which will be used as the main stone until the process of assembling FADs which take place in the middle of the sea are all followed by rituals. All forms of ritual treatment that are carried out are asking for salvation prayer (reject reinforcements), and are given generosity of sustenance, including prayers of desire so that FADs that are built can last long. That is why the implementation of ritual is inseparable from the beliefs of the fishing community, that the sea has inhabitants who like to be recognized as being supernatural beings, creatures that should not be harassed (Ismail, 2007: 110). The rituals are generally realized through ceremonial demonstrations by presenting ceremony supporters, such as dukun or sando (Mandar) as ceremonial leaders, owners of FADs, labor users (skipper and mustard greens), as well as relatives and neighbors as ceremony participants.

### **Conclusion**

FADs in the life of Mandar people have long been known, is one of the tools in the field of marine fisheries that is quite familiar in addition to several other fishing tools, such as gae, nets, bubu, fishing rods, and bagang. FADs according to the local community were first present in Pambusuang, by revealing one of the evidences, namely the making of FADs installed in the sea as a sign that limited a kingdom in Tanah Mandar at that time. Kingdoms that are specifically centralized in the coastal areas remain evidence that fishermen from Mandar have indeed been skilled with their works in the maritime field, so that it is not wrong with the support of these cultural works Mandar people are famous for their maritime culture, even in the shipping sector even Mandar people have long been considered as one of the Pelaut Ulung Nusantara ethnic groups. FADs in the life of fishermen Mandar is a work related to the marine fisheries sector. FADs are like

an atmosphere that can change the fishermen's work system in a more efficient, selective and functional direction. Rumpon even became a center for the development of maritime culture, because it was able to become a space for fishing activities that came with carrying flags of different types of fishing gear, including differences in ethnic groups as users. Included with FADs illustrated various rituals displayed in the form of traditional ceremonies, in addition to not underestimating the birth of local knowledge as a basic capital for fishermen in anticipating the mysterious natural marine environment.

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