

Social Adaptation and Potential for the Development of Fisheries Empowerment in Barrang Lompo Island Indonesia

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Abstract

Fishermen are always positioned as a low-level, marginalized community. They are also considered to have various limitations and helplessness even weak social adaptability. However, for the case of sea cucumber fishermen the workers are slightly different. They actually have sides of adaptability and potential empowerment. This study aims to identify and describe the strength of social adaptation and the potential empowerment of sea cucumber fishermen labor communities on the Barrang Lompo Island of Makassar. The research approach method used is qualitative with the basis of case studies, namely a comprehensive, in-depth and specific study. Informants as many as 7 formal and informal community leaders were determined purposively. The method of data collection is in depth interview, observation and literature review. Data were analyzed in stages which included data collection, data verification, data exposure and analysis. The results of the study showed that there were identified and illustrated several potential empowerments and social adaptations possessed by the BECHZE-DE-MER fishing workers on Barrang Lompo Island which included: First; The existence of awareness and expectations, which are interpreted as enthusiasm, work ethic and motivation to improve their socio-economic status, second; The existence of participation and activity is interpreted as existence in social life which is manifested in the form of productive activities and actions, third; The existence of institutions as a means of adaptation is interpreted as part of membership that is used for facilities in meeting life's needs and fourth; Social accessibility and adaptation are intended as behaviors and actions to build relationships that are horizontal and vertical in nature as social processes and dynamics

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I. Research Background

Generally, Fisher Labor Community (Sawi) in Indonesia experience is helpless and impoverished condition. Phenomenon of impoverished and helpless society is colored by many fisher labor communities. One paradox condition experienced by fishermen community, where Indonesia, as second biggest maritime country after Canada, has abundant sea resource potential. Potential resource that should improve the welfare of society especially the coastal fisherman community as the representation.

To empower the fisherman community social mapping towards their potential is needed. This social mapping is intended to identify various potentials and problems experienced so that effective program interventions to solve the problems is encountered. Some important aspects in empowerment of community is the existence of critical awareness, ability to cooperate, ability to adapt and support local resources as societal institution. All of those aspects are main pillars for empowerment of society.

Fisherman Community especially fisher labor of sea cucumber in Barrang Lompo island have some basic pillars as prerequisite for empowerment and independency. Some of the potentials are marine and coastal resource, ability to adapt, cooperation and mutual cooperation, local institutions and awareness and strong motivation to advance and develop. The whole potentials if could be managed through collaborative approach of community empowerment, will then make fisher labors especially experience empowerment and independence.

Geographically, fisher labor community of sea cucumber as an object of this study is located in an archipelagic region. Administratively, it is the capital city of Sangkarrang District of Makassar City. This circumstance is a special potential owned by fisher labor community in the island which strengthen the adaptation process at once as resource potential for empowerment. Rappaport in Alfien Pandale, (2014) [1] empowerment is the way where people, organizations, and community are directed to be able to manage their living.

Marzali, (2003) [2] explains that the adaptation is human behavior in allocating their resources in facing problems as choices of action appropriate to social, cultural, economic, and ecology at the place where they live. Fisher labor community in the island of Barrang Lompo Makassar in managing the continuity of their life, make an effort of adaptation by realizing their own empowerment potential. In line with Mifathul, (2015) [3] who offers three methods of adaptation strategies, the adaptation strategies to sustain their lives economically, facing the changing of values in society due to the influence of foreign cultures, and overcome various problems and settlement environments. Adaptability in a community is important because the greater adaptability of a community the greater chance the community to sustain. Fisherman labor community of sea cucumber in the island of Barrang Lompo Makassar shows a tendency of change towards an increasingly approaching to empowerment.

II. Research Method

This qualitative research approach is intended to identify and describe the case in specific manner, deep and detailed about adaptation and empowerment potential of the fisher labor community of sea cucumber in the island of Barrang Lompo - Makassar. Data were collected through observation of fishermen activities, physical and social conditions and activities at the research location, and in-depth interviews using interview guidelines. Informant of fisher labors of sea cucumber is determined purposively. All data are analyzed inductively with a stage of analysis starting with data collection, grouping and data categorization, verification and data display as well conclusion and report.

III. Result and Discussion

Discussion (Adaptability and Ability of Potential Empowerment of Sea Cucumber Fishermen)

Fisher Labor of sea cucumber in the island of Barrang Lompo has a strong adaptability power in terms of their geographical position because they are situated in an island region near the city of Makassar. Including its administrative empowerment potential since they occupy a region of sub-district Sangkarrang a capital city with its own resource such as means and facilities to meet the needs of society. In terms of institution, they have formal and non-formal institutions that provide services for social, economic and culture of the community. Research results of (Derta Rahmanto , et al., 2015) [4] mentioned that independence and empowerment of the coastal society is marked with supporting factors which include (1) The concept of awareness has been built in carrying out all kinds of activities in accordance to the existing laws, (2) tourism potential and fishery products, (3) Village officials who are quite active and (4) HR readiness to motivate themselves and receive assistance as well as various trainings. Identification and picture about ability and adaptation and empowerment potential of fisher labor community of sea cucumber in the island of Barrang Lompo is presented in the following:

The existence of Awareness and Expectations

The workers' highest education background of sea cucumber fishermen is Senior High School. However his experience as fisher labor of sea cucumber grow strong awareness, motivation and expectations in their lives. Working as fisher labor of sea cucumber is a special experience, many of them have known and visited other islands in Indonesia such as Maluku and Papua. Experience which becomes inspiration for them to succeed in the future. Fisher Labor of sea cucumber also knows this specialization based on their experience and the expertise gained by autodidact. Work specialization as sea cucumber fisher labor include divers, engine guards, hose holders, compressor guards and kitchen parts. The existence of specific work division describes that fishermen affair, especially for sea cucumber also indicate the importance of professionalism in the field. Fisher labor also has a lot of work experience such as selling fish in the island with a cart, selling fish at Makassar auction market, working as

clothing trader delivered to such islands as Maluku, Nusa Tenggara even to Papua, working in an iron factory business and furniture company in Makassar City, working as a small scale fishery with small boats.

Strong motivation coupled with experience is a reflection fisher labor potentials of sea cucumber fishermen in adapting their vertical social mobility. The schedule of searching and catching sea cucumbers is divided in two categories, first schedule is from September to March, workers of sea cucumber fishing boat had a break from April to August. During the break sea cucumber fishermen usually conduct various productive activities like: selling fish, look for and selling scrap metal, go fishing with small boat. The profit obtained is to meet household and others needs. Second schedule is all year long, for fisher labors who do not have a choice of other alternative job for living.

Average experience of sea cucumber fisher labor is between 5 - 10 years, while the area as a place to search for sea cucumbers is in the coastal waters of West Sulawesi (around Mamuju), the coastal waters of Kalimantan (Balikpapan and Banjarmasin) even to the border areas of other country such as Australia.

Furthermore, the highest sea cucumbers price found by fisherman is biba type. Sea cucumber of this type is on sale between IDR. 500,000 to 1.000.000, - per kilogram. Trading process of sea cucumber catches is fully carried out by the skipper either through traders or directly to exporters in Makassar city. The profit of the sea cucumber sale becomes the main income source for paying all workers. Average income earned by sea cucumber fisherman in every month can be seen in Table 1.

Table 1
Sea cucumber Fishermen's Labor Income

Name of Fisherman	R.
Dg. Muppo	IDR. 2-3 million
Rusdi	IDR 3-4 million
Ramli	IDR. 1.800.000
Aruna	IDR. 5 million
Tama	IDR. 2-3 million
Misi	IDR. 1.500.00
Haya Eppe	IDR. 1 million
Syamsuddin	IDR. 1 million

Fisherman reports on average salary figures.

One of the challenges faced by sea cucumber fishermen is unstable income. Because of that they are not able to sufficiently manage their success. One of the strategy they usually undertake to manage their unstable

income is to set up a priority scale in spending his or her income. Another strategy they usually do is to borrow money or goods from others, such as the neighbor, family or fellow workers fishermen. The party that is always available to borrow money is his the leader (Punggawa), because punggawa usually has much capital, workers also assume that borrowing money is the same his punggawa not bound by deadline of payment so that they do not become a burden to return his debt.

Although the income is unstable, working as a sea cucumber fisherman is considered a pleasant job. The pleasant condition for them is the cooperation between fellow fishermen in the preparation process to obtain results, especially in searching and catching sea cucumbers. For example, the divers ethics are carrying out their duties to search for sea cucumbers on the seabed, those who serve as hose holders and compressors always give a warning or code by shaking the hose from the boat so that divers know the diving time warning and it's time to return to sea level. After all the catches are on the boat, the one who is in charge of cleaning and cooking is the kitchen workers assisted by several other members. Although there is a labor division, they help each other while they are still in the middle of the ocean and when they have returned to mainland. Pleasant working determinant, motivation and cooperation of a good team, are indicators of very successful team work determinant. This happens on sea cucumber fisherman group in the island of Barrang Lompo Makassar.

Sea cucumber fisherman laborer is the main work source of livelihood, however they also have side work to support their household needs. Some type of work they usually do as side work is catching fish and squid around the island with small boat (jolloro) or going to the city of Makassar as daily laborer.

Sometimes the household income of sea cucumber fisherman Labor from the main and the side income is not yet sufficient to fulfill all their needs, however, they still exist because they have skipper who can help to cover their deficiency in meeting their household needs. The forms of help a skipper give to fisherman laborer is a gift during the Eid al-fithri celebration, money for shopping for their children, like a gift from parents to their children. Sincere attention from a skipper to the laborer is an energy and strong motivation to sustain work ethics and high employment.

Besides the positive aspects of the profession as a sea cucumber fisherman, they also have negative risks and vulnerability. The concept of vulnerability is defined as the tendency for complex adaptive systems to experience the adverse effects of their openness to external pressures and surprises (Turner et al., 2003). [5] The vulnerability can be seen from two elements, namely exposure to risk and the ability of adaptation carried out by fishermen laborers. The forms of adaptation are carried out especially when there is insufficiency in fulfilling needs, namely making loans to the skipper and rationalizing the fulfillment of life needs based on the priority scale and the level of urgency.

The more vulnerable the condition, the lower the tendency they will be able to adapt and carry out life normally so that income management is not only related to meeting life needs on a regular basis but also related to the ability to make small investments as a form of gradual anticipation of potential sustainability of vulnerability being experienced. In this context, vulnerability is a function of character, magnitude, rate of climate variation due

to exposure, sensitivity and adaptive capacity (McCarthy et al., 2001). [6] Vulnerability is interpreted as an external (non-psychological) factor in the livelihood system that causes difficulties or suffering faced by fishermen. This conception is in accordance with the formulation of Twigg (2007) [7] that the context of vulnerability is a collection of external pressures which are key factors causing the difficulties or suffering suffered by sea cucumber fishermen.

Participation and social activities of sea cucumber workers.

Social activities cover all activities carried out by sea cucumber fishermen in their neighborhood both at the RT, RW and Kelurahan (sub district) levels. Activities carried out generally in the form of voluntary work or mutual cooperation to clean the aisles, places of worship and existing social facilities. In addition to the incidental nature of such activities there are also fixed times but not continuous, for example every Friday or before the fasting and feast days. The forms of community involvement and participation in some of these activities varied, some were directly involved, some others were only donating perfunctory dishes to residents who did community service.

As citizens residing in the area, the sea cucumber workers feel obliged to participate in activities carried out in their environment. Except they were at sea looking for sea cucumber, they do not participate in social activities.

Awareness of sea cucumber fisherman laborer to get involved in social work activities, besides devoting all the time and opportunity they have, the work devotion worthed economically (paid). Community leaders as well are involved so that there is a feeling of guilt if the fishermen workers do not participate in any of those voluntary works. The involvement of community leaders in each implementation of community service became the glue and attraction for the community to be involved. Role character of society is very relevant as an agent of change in society.

Other activities the commonly do in their living environment is non-physical social activities such as religious gathering and youth activities. Religious gathering activities are generally carried out by groups of mothers such as PKK, *dasa wisma*, *arisan*, and other groups. Their limited understanding about religious gathering activities is a reason why sea cucumber fisherman laborer never attend the gathering. They understood that the religious gathering activities were only for the group of mothers, women and children. They understand that religious activities such as the gathering are good and important, but they assume the gathering is special for mothers and children.

Similarly, with the youth activities, the fishermen workers still get less or not involved at all. Youth activities are usually conducted by youth clubs, youth mosques and sports groups. Factors which makes sea cucumber fisherman laborer do not get involved in youth and sport activities is a lack of understanding, lack of talent or conflict of time and chance between looking for sea cucumber at sea and the youth activities.

Existence of an Institution as Social Adaptation Facilities

Neighborhood Organization Unit (RT) and organization of Organization unit (RW) is the formal institution closest to sea cucumber fishermen. Generally fishermen workers know and get familiar with the RT and RW chief, a number of the RT and RW chiefs also become bosses of sea cucumber fisherman. Another indicator of their proximity is almost all the population administration managed by sea cucumber fishermen are always related to RT and RW administration, so that proximity is very much beneficial to social life of sea cucumber fisherman workers. Frequently the heads of the RT and RW visit their residents including the sea cucumber fishermen. The chairman of RT and RW both institutionally and privately are close to and contribute to the fulfillment of social life for sea cucumber fishermen. Their social relationships were very close and is supported with their relation as skipper, kinship relationship and social relations as chairman of ORT and ORW.

The existence of RT and RW tends to be very useful for sea cucumber fishermen, besides making it easy for all forms of population administration, they can also get social assistance such as rice for poors, assistance with boat engines, nemo fish seeds distributed through RT / RW. As stated by the informant, one of the factors that caused the existence of RT / RW institutions was felt beneficial by sea cucumber fishermen, is the concern of the RT / RW chairman both for the condition of the residents and the condition of the environment in which they live. Frequent visit to people's homes is a form of concern for the RT / RW chairman, to greet and to show their social concerns.

Other formal institutions are considered very important for sea cucumber fishermen workers is an institution that is very helpful in terms of costs because some components have been made free as well as its relatively complete infrastructure which is very helpful to the society in doing social, cultural and religious activities. The high awareness of society for education institution, is shown in their effort to propose building senior high school (SLTA) or vocational high school (SMK) so that the children who will continue their education after graduating from junior high school do not need to go to Makassar. This could help society to reduce school dropout rates.

Next formal institutions such as Village Guidance Board (BABINSA) from National Army Force (TNI) and Community Guidance (BIMMAS) from police department who play a role in maintaining public order and security both from within and outside the community, institution that play very important role in providing security for citizens. Those institutions are able to reduce misconduct and criminal action of citizens in the society such as reducing drunkenness caused by drugs, reducing gambling and fights between residents.

Non-formal institutions such as religious and custom institution, although their activities are few the existence of such institutions are considered helpful in the implementation and maintenance of moral values and customs of Barranglompo island communities. Rituals before going down to catch sea cucumbers are led by traditional leaders and religious leaders, including celebration for weddings, deaths condolence and birth initiation.

Workers of sea cucumber fishermen are always helped and facilitated with the role of institution both formal and informal. Individually they need population administration service, security and safety in doing his job

as sea cucumber fisherman laborer. Institution As non-formal institution, custom and religious institution, are needed as source of motivation and belief in running work full of risks and challenges. As an example, before leaving the land and after coming back from the sea they usually conduct salvation and prayer for thanksgiving together.

Accessibility as Social Adaptation of Sea Cucumber Fishermen Workers

Accessibility of sea cucumber fishermen workers includes affordability both geographically and administratively to be able to reach and utilize existing facilities and infrastructure. Health facilities and infrastructure is one of the important aspects for sea cucumber fishermen because every time they go to sea for cucumber catching activities they are advised to first check their health condition, especially for those who will do diving. Likewise, fishermen who are sick due to diving activities always use the health facilities and infrastructure around their homes.

Geographically, sea cucumber fishermen can easily reach the service locations around their homes, even when they have to go to Makassar. The government has prepared a speedboat which at any time can take Barranglompo residents who are in a state of emergency. Including easy health service and close location, sea cucumber fishermen also have a medical card for free. Makassar City Government has even prepared mobile health services that move to visit the homes of residents who need health services, such as mobile doctors who serve from the island to the islands in the island area including Barrang Lompo Island.

Access to some other resources such as the need for drinking water, staple food can be accessed within the island or from outside of the island such as the center of Makassar. Drinking water that is consumed in the form of gallon packaging, for bath, wash, and for toilet needs, they use well water or pipeline available in limited basis. While for food needs such as rice, vegetables and supplementary dishes they are mostly obtained and imported from the center of Makassar City with ships or engine boats on a regular basis every day or incidental.

To facilitate mobility and accelerate the access of sea cucumber fishermen to various places in the island area, besides being able to walk or by two-wheeled vehicles, both bicycles and motorbikes, including odong-odong vehicles (local terms) operating every day. Reaching other places outside the island area, it is done by using boats that goes both to the center of Makassar City and to other islands around Barrang Lompo Island.

IV. Conclusion

Fishermen Labor who is positioned as marginal community and powerless is corrected and is denied from results of the study on sea cucumber fisherman laborer in the island of Barrang Lompo Makassar. The results of the study show that this community has the potentials and strong power support as the main empowerment pillar of the society.

To describe about empowerment potential owned and social adaptation by community, first the existence of awareness and strong expectations as the main capital, second the existence of participation and activity, third the existence of institutional as means and amenities in meeting their needs of life, and fourth the existence of accessibility as a form of activities and empowerment action.

Creation of empowerment and social community adaptation sea cucumber fisherman laborer is supported by geographical condition that is close to Makassar city making it easy to access resources and for connectivity. Administratively it is located in capital city region of Sangkarrang sub-district with sufficient institutional facilities utilized to strengthen their adaptation and to fulfill their specific needs. Sea cucumber fisherman laborer community has products and export oriented products so that in terms of economy they have more opportunities to exist.

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