The Impacts of the Use of the Bagan Apung on the Socio-Economic Life of Fishermen Communities

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ABSTRACT

Keywords: Bagan Apung; Fishermen Community; Socio-Economic.

This study aims to determine the considerations or reasons why fishing communities use the Bagan Apung and their impact on the socio-economic life of the fishing communities of Pasir Putih Village, Lembo District, North Konawe Regency. This type of research is using qualitative descriptive. Data collection techniques in this study were carried out through observation, interviews, and documentation. The results in this study indicate that using the Bagan Apung by fishermen is due to the consideration that it is simple to make, simple to use, and quickly gets the catch. The impact of the use of the Bagan Apung on the socio-economic life of the fisherman community, namely social impacts includes education, social interaction, and health. While the economic impact includes income, expenditure, and investment.

INTRODUCTION

Indonesia is one of the largest archipelago countries in the world which consists of thousands of islands, where two-thirds of its territory consists of oceans. This condition provides a huge potential for fishery resources. Since the first coastal communities or fishermen have known the benefits of the sea, both as a medium of transportation, defense, education, and as a source of natural food. With the diversity of potential marine resources, Indonesia can build a society for the sake of present and future prosperity.

The area of waters reaching 5.8 million Km² which is divided into territorial waters 0.3 million Km², the archipelago waters are 2.8 million Km² and the Exclusive Economic Zone (ZEE) is 2.7 million Km². From the data obtained, the utilization of the potential of fisheries resources in the territory of Indonesia has only reached half of the sustainable potential possessed. Based on the evaluation results, the sustainable potential of fishery resources reaches approximately 4.5 million tons/year, and the potential of ZEE is 2.1 million tons/year (Dahuri, 2000).

According to Ridwan (2017), Indonesia is also referred to as a maritime country. Besides, Indonesia has an estimated number of 17,508 islands with a beach length of 90,000 km. Small islands spread throughout the archipelago are 13,607 islands. Seen in terms of its geography, Indonesia is located between two oceans and two continents, the Indian Ocean and the Pacific Ocean, the Australian continent and the Asian continent which is the strategic location of a country. Meanwhile, in terms of oceanography, Indonesia has a variety of depths. The Indonesian Ocean which lies on the equator is also an advantage because many types of marine resources inhabit the vicinity. And is encouraged by having a tropical climate. Potential marine resources encourage to carry out effective utilization and processing. The emergence of fishing gear is a form of utilization of marine resources used. Fishing gear many kinds and types, such as nets, traps, gillnet, sero, fishing rod, payang, and so on. Fishing gear has its respective uses tailored to the behavior and characteristics of the fish. Where fish are attracted to light (photo taxis) this is used by fishermen to catch fish. There are various characteristics of fish life. As usual, living on the surface of the water (pelagic), ponds, and at the bottom of the waters (domersal).

In its development, the type of fishing equipment increased and more advanced with the emergence of a variety of new technologies. Fishing
gear is also a major factor in utilizing available fish resources. One type of fishing gear in Indonesia is a chart. A chart is a fishing gear classified into a group of lift nets. There are several types of Bagan in Indonesia, including Bagan Tancap, Bagan Rakit, Bagan Perahu, and Bagan Apung, as technology develops, fishermen prefer Bagan Apung. The purpose of capture in the form of small pelagic fish species.

The waters of Southeast Sulawesi are potential fishing areas in the capture fisheries business. Efforts to utilize fisheries resources in these waters are mostly carried out by floating fishing and trawl ring capture units that operate at night. Fishing activities carried out by utilizing the nature of the attraction of fish to light. Fish that are attracted to light will gather and interact with each other around waters that can be reached by light. The positive phototoxic nature of fish and potential fishing grounds is utilized by floating bag fishermen and trawlers to get the maximum catch of fish, using mercury lamps as lighting. Fishing activities with lighting can form optimal fishing grounds at night and increase the production of fishing results in each fishing unit.

North Konawe is one of the regencies in Southeast Sulawesi. North Konawe Regency was definitively formed on January 2, 2007. At present North Konawe has 11 districts, namely Motui, Sawa, Lembo, Wawolesea, Lasolo, Molawe, Andowia, Wanggudu, Oheo, Wiwirano, and Langgikima. (BPS Konawe Utara, 2016). The area of North Konawe Regency is 500,339 Ha or 13.38% of the area of Southeast Sulawesi Province. The area of sea waters (referred to as the waters of South Konawe Regency and Konawe District) ± 11,960 Km² or 10.87% of the waters area of Southeast Sulawesi (BPS Southeast Sulawesi, 2016).

Pasir Putih Village is one of the villages in the Lembo District. The people of Pasir Putih Village mostly earn a living as fishermen, they use a fishing gear called a Bagan Apung. This fishing gear has been used for a long time by the fishing community of Pasir Putih Village. The business of catching fish using Bagan Apung fishing tools has considerable advantages and opportunities to be developed in the area because 13.38% of the area of North Konawe Regency is a waters/coastal area.

With the use of the Bagan Apung fishing gear, it greatly affects the socio-economic living conditions of the Pasir Putih Village community, where this tool greatly facilitates and benefits the fishing community in terms of fishing that has the potential to increase the income of the Pasir Putih Village fishing community so that they can meet their daily needs.

The floating chart is very easy for the fishing community to catch fish in the sea without having to use tools such as fish bombs and others that can damage the marine ecosystem and the results of the use of this floating bag are very beneficial and environmentally friendly. Based on the background of the above problems, the purpose of this study is to determine the factors that cause fishing communities to use floating fishing gear and to determine the impact of the use of floating fishing gear on the socio-economic life of the fishing communities of Pasir Putih Village, Lembo District North Konawe

**MATERIALS AND METHODS**

This research has been carried out in Pasir Putih Village, Lembo District, North Konawe Regency. The choice of location is based on the consideration that at that location many fishermen use floating fishing gear with a variety of factors that influence the use of floating fishing gear and their impact on the socio-economic conditions of community life.

This research is using qualitative research methods that aim to understand individuals in-depth and in detail because qualitative methods directly meet and conduct deeper interviews. The informants of this research are people who are sources of information that can provide data following the problem under study. This research technique is a purposive sampling technique where the researcher uses the consideration of the informant to be taken based on the research that the selected informant is the informant who best meets the requirements and is considered capable of providing information following the needs of research data. In this study, the informants were 1 person from the Pasir Putih Village government and 17 people from the Pasir Putih Village community as Bagan Apung fishing gear users, so the total number of informants was 18 people.

While the data sources in this study include primary data that is data sourced from the results of direct interviews from informants and observations...
of researchers in the field of informants and secondary data that is data sourced from libraries, previous research reports (scientific research reports/journals), books and documentation in the form of photos relevant to the research topic.

Data collection techniques in this study include Observation, namely by observing directly to obtain an overview of the factors that cause the use of Bagan Apung fishing gear and its impact on the socio-economic living conditions of the Fishermen community in Pasir Putih Village, Lembo District, North Konawe Regency.

Interview, this data collection technique is done by asking questions verbally and in person (face to face) with informants who are supported by interview guidelines. To obtain information about the factors that cause the use of the Bagan Apung fishing gear and its impact on the socio-economic conditions of the fishing community of Pasir Putih Village, Lembo District, North Konawe Regency.

Documentation, namely in the collection of data through written relics (documents) such as population data, socioeconomic data, and location description as well as photographic evidence when conducting interviews with research subjects and informants. In this study, documentation is used to obtain data related to the research objectives.

This study uses descriptive qualitative analysis techniques by collecting data through observation, interviews, and documentation. The data obtained will be presented in the form of explanations, descriptions and illustrates the real reality so that it becomes clear about the factors that cause the use of the Bagan Apung fishing gear and its impact on the socio-economic living conditions of the Fishermen community in Pasir Putih Village, Lembo District, North Konawe Regency.

RESULTS AND DISCUSSION
1. Considerations for the Using of the Bagan Apung

a. Easy to Make

In the process of making the Bagan Apung fishing gear, it is quite easy because it is done in a group, that is, assisted by other fishing communities or by cooperation and the materials used are easily obtained so that the manufacturing process does not take a long time, the material is also easy is obtained.

b. Easy to Operate

As fishermen, of course, they need to use tools that can facilitate fishing activities that are effective and easy to operate because the results will be satisfying, this is what is done by the fishing community in the Pasir Putih Village where they move from the old fishing gear to the new one, the Bagan Apung because in operating it is easier it does not cost too much and saves energy. On the other hand, fishing communities use the Bagan Apung fishing gear because of the superiority of using the Bagan Apung, which is that the operators are very young, just turning the Bagan pole to lower the net and turning the Bagan pole back to lift the net.

c. Lots of Catches

Interest in using the Bagan Apung fishing gear because the results obtained are more and more promising than using other fishing gear. The use of the net trap (Budu) results obtained from the Bagan Apung can meet the economic needs of the family well. Aside from that the advantage of using the Bagan Apung makes it easier for fish to gather and the fish that are collected do not spread any more.

2. Socio-Economic Impacts of the Use of the Bagan Apung

a. Education Improvement

Education determines one's success in pursuing a career, both in formal and informal environments. In general, the level of education a person has can affect a person's social status in society. According to the results of the study, the fishermen of the Bagan Apung in the past did not have a good educational background due to the inability of their parents to pay for their children's schooling in education and for the present time the Bagan Apung fishermen do not want the same thing felt by the children their children. They hope that their children can succeed in education by relying on work as a Bagan Apung fisherman who can send their children to school and focus on educating their children.

Based on the results of research that has been done shows that informants with jobs as Bagan Apung fishermen have satisfactory results, as evidenced by their ability to send their children to college and succeed in education. The social environment also influences the attainment of children's education. Social conditions that affect individuals in two ways, namely directly and
indirectly. Direct influence such as family, social environment, work environment, organization, and others.

b. Social Interaction of Fishermen Communities

Every human being in his life in the community is always connected or interacting with other humans to meet their socio-economic needs. This is because humans are known as social creatures where humans live in a society that is aware of or needs help from others.

Based on the results of research and observations in Pasir Putih Village, Lembo District, North Konawe Regency, shows that social relations, especially interactions that occur between fellow fishermen and other communities go well. This is evident because of the ties of kinship and kinship or the absence of kinship ties, there is still a good relationship, for example, a). Help each other when there is a lack of capital for the needs of fishermen by borrowing money from relatives or neighbors without any agreement, b). When there are families who are grieving or having a wedding, etc. the fishermen will not go to sea but will help until the event is over c). When there is an announcement from the village head that community service will be held, the community will not go anywhere except to do community service together, d). Helping one another when people are affected.

This is in line with the concept of social interaction as intended by Syani (1994) that social interaction is a mutual influence between the two parties, between one individual and another group to achieve goals. In social interactions, reciprocal relationships occur according to the situation and their respective interests, so that the birth of a relationship or meeting physically, and association (non-physical) work together to solve a problem or allow a meeting in a dispute and so forth.

c. Better Health

Health is very important for those who work as fishermen of Bagan Apung. It is known that Bagan Apung fishermen are a process that does not require a lot of energy, power, or energy. From the research results obtained in the operation process of Bagan Apung, it does not require or drain a lot of energy because its use is enough to lower the net when it is lowered, fishermen of Bagan Apung can take time to rest while waiting until the time comes to increase the net, only a little staying up late when the fish are rising, so the risk of exhaustion or illness is very minimal.

Besides, the fishermen always maintain good health, to remain strong in working in addition to other things that aim to not get sick easily in the future. Compared to fishing, Bagan Apung is easier to operate. When fishing they cannot sleep due to staying up late waiting for the fish to eat their fishing lures, so it becomes sleepy and it is very dangerous when fishermen drive the boat, whereas when using Bagan Apung only lowers the net and turns on the generator so there is plenty of time to rest and when the Bagan Apung fishermen wake up the body condition is already getting back in shape to raise the net.

This is in line with the concept of health as referred to by Sarwoto in (Nuraeda, 2003) that public health is the life of the community which is regulated in such a way that has sufficient ability to maintain and advance his own life and the life of his family which makes it possible to work, and aims to prevent the onset of disease, prolong life, and enhance health values.

d. Income Increases

The economic condition of a family depends on the results of the income obtained. This means that if the level of income as a family head is quite high, then welfare tends to be high, on the contrary, if the income of the head of the family decreases, then the level of family welfare will also decrease. This can be understood because the high level of income allows the optimal fulfillment of both material and non-material aspects.

Based on the results of research that those who work as Bagan Apung fishermen are sufficient to be able to help the economy in meeting the needs of the fishermen's lives because the income per day or one time fishing from the results of Bagan Apung is sufficient to meet the needs of daily life. But on the other hand, the income of Bagan Apung fishermen, there are certain seasons where they earn a lot and less. The Bagan Apung fishermen know two seasons, namely the east and west seasons, for the east season the income is lacking, while the west season has a lot of income and the change of the season occurs every six months.

e. Minimize Expenditure

As the times are increasingly demanding on fulfilling the needs of life that is increasingly high makes an individual or family pay more attention to
meet the needs of life that they need only or the needs that are important to continue to maintain the survival of individuals or families.

Based on the results of the study, it can be seen that in the operation of Bagan Apung, there are always costs every day, where starting from transportation equipment such as boats, the people of Pasir Putih Village have used boats that use engines and not only that in the operation of Bagan Apung such as generators or generators that help in lighting in Bagan Apung requires fuel and the amount of expense in one operation of Bagan Apung is 40 thousand rupiahs for purchasing fuel, then spending the family's needs is mainly starting from food and others.

Expenditures in the operation of Bagan Apung every day are specifically for fuel costs, but in this case to save the expenses of fishermen's fuel costs, usually Bagan Apung fishermen always condition equipment such as engines in boats and generator engines in Bagan Apung if the fuel is still there at the time of the previous operation, the fishermen only bought enough fuel, so that expenditure was not much.

f. Investment

Investment is the activity of allocating or investing current resources in the hope of the future. Investments that bring benefits to groups and individuals and certain environments, investing money now means that money should be consumed, but because of investment activities, the money is diverted to be invested for future profits.

It can be seen that the Bagan Apung has a period of around eight to ten years. Bagan Apung fishermen insert their income to prepare if Bagan Apung is damaged. If minor damage is sufficiently repaired, but if it has large damage, it will be replaced with a new one using the money that has been inserted so that it does not experience difficulties. Besides, in the profession of an informant as a fisherman in Bagan Apung for about 6 years he inserted some of his income and had bought land as an investment in the future because he thought that he had a child who would later settle down and of course, would build a house no longer difficult to buy land to build a house.

CONCLUSION

Based on the results of the research and discussion described, it can be concluded that the use of Bagan Apung by the fishing community in Pasir Putih Village is based on consideration of its ease of manufacture, its ease of use, and the abundant catch. Thus, the impact on the socio-economic conditions of fishermen. Social impacts include aspects of education, social interaction of fishing communities, and health. While the economic impact can be seen from the aspect of increasing income, expenditure, and investment.

REFERENCES

Dahuri, R. (2000). Pendayagunaan Sumber Daya Kelautan Untuk Kesejahteraan Rakyat. Jakarta: LISPI dan DKP.

Ridwan, Muhaamad. (2017). Kearifan Lokal Masyarakat Nelayan Pada Usaha Penangkapan Ikan dengan Teknologi Bagan Apung. Skripsi. Universitas Halu Oleo Kendari.

Badan Pusat Statistik. (2016). Luas Wilayah Perairan Sulawesi Tenggara. Kendari.

Badan Pusat Statistik. (2016). Luas Wilayah Perairan di Konawe Utara. Lembo.

Basrowi dan Siti Juariyah. (2010). Analisis Kondisi Sosial dan Tingkat Pendidikan Masyarakat Desa Srigading, Kecamatan Labuhan Maringgai, Kabupaten Lampung Timur. Jurnal Ekonomi dan Pendidikan. Vol 7 No 1 April 2010.

Abdulsyani. (1994). Sosiologi Kelompok dan Masalah Sosial. Jakarta: Fajar Agung.

Nuraeda. (2003). Kondisi Sosial Ekonomi Penjual Sayur. Skripsi.