EDUEKSOS: Jurnal Pendidikan Sosial dan Ekonomi 2022, Vol. XI, No. 2



DOI: http://dx.doi.org/10.24235/edueksos.v11i2.11272. ISSN: 2548-5008

Published by: Department of Social Science, IAIN Syekh Nurjati Cirebon, Indonesia.

Local Wisdom of the Fisherman Community of *Muara-Binuageun* in Lebak Regency Regarding Disaster Mitigation and Preparedness

Rian Fauzi^a, Samsu Bahri^b

a,b STKIP Setiabudhi Rangkasbitung, Banten, Indonesia

Corresponding author: rianfauzi.stkipsb@gmail.com

Article History	
Received: 22 - 08 - 2022	Received in revised form: 15 - 10 - 2022
Accepted: 07 - 11 - 2022	Available online: 30 – 12 - 2022

Abstract: The citizen of *Muara Binuangeun*, the traditions of their ancestors must be maintained. In this case local wisdom is a human effort by using his mind to act and behave towards something, object or event that occurs in a certain space and Mitigation is an effort to reduce disaster risk, in this case to save people's lives the need to understand local wisdom have in disaster prevention or actions to reduce disasters. This study uses a qualitative method. Conducting observations for initial research studies and interviewing informants as well as deepening research supporting documents. Analysis of checking the validity of the data in this study used qualitative data analysis. The research results obtained (1) Mitigation is very important for people living in disaster-prone areas. Mitigation based on natural knowledge based on experience makes it a reference in people's lives. Local wisdom that is owned by the community is able to make a cultural wealth that grows and develops in society. (2) the fishermen community of Muara-Binuagen applies local wisdom in the form of hereditary knowledge which is told through bedtime stories from parents' experiences in dealing with various disasters that have been experienced by seeing natural signs in the form of symptoms. (3) In the Muara-binageun area there are several people who are of different ethnic groups but have good relations, protecting and caring for each other is their good habit, Muara-Binuageun is a disasterprone area so in this case the community works together in preparing themselves if one day an unexpected disaster occurs.

Keywords: Local wisdom, Mitigation, Disaster Preparedness, and Fishermen of Muara-Binuageun.

Abstrak: Bagi masyarakat Binuangeun tradisi nenek moyang merupakan hal yang harus di pertahankan. Dalam hal ini kearifan lokal adalah usaha manusia dengan menggunakan akal budinya untuk bertindak dan bersikap terhadap sesuatu, objek, atau peristiwa yang terjadi dalam ruang tertentu dan Mitigasi merupakan upaya untuk mengurangi resiko bencana, dalam hal ini untuk menyelamatkan kehidupan masyarakat perlunya memahami kearifan lokal yang di miliki dalam pencegahan bencana ataupun tindakan untuk mengurangi bencana. Penelitian ini menggunakan metode kualitatif. Melakukan observasi untuk studi awal penelitian dan wawancara narasumber serta pendalaman dokumen penunjang penelitian. Analisis pemeriksaan keabsahan data pada penelitian ini menggunakan analisis data kualitatif. Adapun Hasil penelitian yang didapatkan (1) Mitigasi merupakan hal yang sangat penting bagi masyarakat yang tinggal di daerah rawan Bencana. Mitigasi yang bersumber pada pengetahuan alam yang berdasarkan pengalaman menjadikan sebuah acuan dalam kehidupan masyarakat. Kearifan lokal yang di miliki masyarakat mampu menjadikan sebuah kekayaan budaya yang tumbuh dan berkembang dalam masyarakat. (2) masyarakat Nelayan Muara-Binuagen menerapkan kearifan lokal berupa pengetahuan turun-temurun yang diceritakan melalui dongeng penghantar tidur dari pengalaman orangtua dalam mengahadapi berbagai bencana yang telah di alami dengan melihat tanda-tanda alam berupa gejala. (3) Di daerah Muara-binageun terdapat beberapa masyarakat yang berbeda suku akan tetapi memiliki hubungan yang baik, saling melindungi dan saling peduli merupakan kebiasaan baik mereka, Muara-Binuageun merupakan wilayah yang rawan bencana sehingga dalam hal ini masyarakat bekerja sama dalam menyiapkan diri mereka jika suatu saat terjadi bencana yang tak diharapkan.

Kata Kunci: Kearifan lokal , Mitigasi, Kesiagaan Bencana, dan Nelayan Muara-Binuageun.

INTRODUCTION

Fishermen according to the Indonesian Dictionary (KBBI) is people whose main livelihood is fishing. Meanwhile, according to Law No. 45 of 2009 - Fisheries, fishermen are people whose livelihood is fishing. Fishermen are people who actively carry out work in fishing operations. Furthermore, every cultural idea and practice must be functional in people's lives. If not, the culture will be lost in a not long time. Culture must help the survival ability of society or individual adaptation to their living environment. As a guideline for acting for citizens, the content of culture is the formulation of goals and the means used to achieve these goals, which are socially agreed upon by Kluckhon, in (Rustianingtyas, 2015).

In addition, fishermen are a group of people who live on the outskirts of the beach, a residential area close to the location of their activities. In its journey, fishermen are an entity that has its own culture and traditions. Where this shows existence in the embodiment of culture in its environment. For fishing communities, culture is a system of ideas or a system of knowledge that functions as a life guide, a reference for patterns of social behavior, as well as a means for interpreting and making sense of various events that occur in their environment. (Fauzi, 2019).

Knowledge obtained from generation to generation from their ancestors and combined with life experience in interacting with the natural environment and social environment is the main capital for the fishing community of *Muara-Binuengeun* to live as fishermen. With their scientific capacity, fishermen manage the marine environment in their own way according to their level of thinking ability and belief system as well as the traditions that develop in their community. By utilizing their knowledge and belief system, they are able to create ways and strategies for managing the marine environment.

This can be seen in how they catch fish, they are able to make fishing equipment and equipment such as nets, *bagang*, FADs, fishing rods and nets and use fishing vessels, whether propelled by oars, sails, or using machines. In addition, estuarine binuageun fishermen have the ability to recognize the season through natural signs, they also have the ability to recognize the types of fish, recognize seawater, and recognize seawater movements such as waves and currents. (Leba, 2017).

Coastal areas are fragile and disaster-prone areas that always cause serious problems and result in huge losses due to disasters. Coastal areas are very vulnerable to disasters because of their dependence on coastal resources. Disasters that occur in coastal areas are caused by land threats and sea processes such as floods, tsunamis and earthquakes. *Marfai in* (Maksimilianus., 2020).

Mitigation in the area of the fishing village of *Muara-Binuageun* itself still contains knowledge based on local wisdom passed down from generation to generation. the Muara

Binugeun Fishermen's Village which has a disaster risk, in this case the community is not only the indigenous people but many migrants who later settled. There were also the *Muara Binuageun* Fishermen's community who lived and settled where the majority live and work as fishermen. As a disaster-prone area, the community has hereditary and repeatedly experienced disasters, it is suspected that there is local wisdom in dealing with these disasters as a result of community recognition of their physical environment. (Maharani., 2019) so that it becomes an effort to reduce disaster risk and then must be passed on to the next generation.

Disaster mitigation is defined as efforts made to prevent disasters or reduce the impact of disasters. Disaster mitigation is actually related to the disaster management cycle in the form of handling efforts before a disaster occurs. This is done as a preventive action that serves to minimize losses caused by disasters that have the potential to occur. Disaster mitigation includes both the planning and implementation of actions to reduce known human-caused and natural hazards, as well as the planning process for effective response to disasters that do occur. Subiyantoro in (Fauzi & Angga Nurdin R, 2014).

In previous research on the Local Wisdom of the Fishermen Community in *Brakas Village, Ra'as District, Sumenep Regency*, in the journal *Paradigma Madani* by Nur Wahdatul Chilmy said that his knowledge in managing marine natural resources carried out by the Brakas Village community regarding natural phenomena the people of *Brakas* Village come from their ancestors from generation to generation. Knowledge of the seasons related to fishing, knowledge of the stars, signs that an event will occur, and so on, are forms of knowledge about natural phenomena that are owned by the people of *Brakas* Village. Knowledge that grows from these habits becomes a guide for them in meeting the necessities of life and avoiding danger. (wahdatul., 2015).

The second research by Marwan Armani and Agus Firmansyah with the title Identification of the knowledge framework of fishing communities in *Bengkulu* city in disaster preparedness as a basis for formulating disaster management models. Say that. The knowledge frame of the fishing community in *Bengkulu* City in viewing disasters can be categorized into two forms; knowledge that comes from internal or culturally inherited and there is also knowledge that is obtained as a result of new knowledge that is internalized from. The framework of knowledge that comes from cultural inheritance includes *bidai* house technology. 2. Forms of local initiatives that are known and culturally passed on to fishing communities on the coast of Bengkulu regarding preparedness for earthquake and tsunami disasters, one of which is the *bidai* house. However, due to ignorance of the usefulness of the *bidai* house technology, until now the existence of the *bidai* house has not developed and has even been abandoned. (Marwan., 2013).

The third research by Syaiful Anwar, Agus Winarna, and Priyanto in the National Resilience journal entitled Strategy for Empowering Coastal Areas in Facing Tsunami Disasters and Their Implications for Regional Resilience (Study in *Buakan* Village, *Cinangka District, Serang Regency, Banten*). Where Banten Province is geologically adjacent to the confluence of the Indian, Australian and Eurasian tectonic plates. Apart

from the confluence of the Indo-Australian and Eurasian plates, the Sunda microplate is a potential source of earthquakes around the province of Banten. The occurrence of earthquakes in Banten is generally caused by several microplate zones and also seismogenic structures. The normal load fault which is part of the seismic structure has been identified in the Serang area. Areas in Banten Province where earthquakes frequently occur are Tanjung Kait, Tanjung Alang-Alang, and Panaitan Island, which are located in the Sunda Strait. The land area where earthquakes often occur is in Ujung Kulon National Park, the western region of Pandeglang Regency, and areas that are included in the Halimun mountain complex. So that the impact of the disaster can result in a tsunami disaster. So it requires a regional empowerment strategy. Regional empowerment is aimed at synergizing functional agency strategies in fostering various existing resources, values, technology, and funds, so that they become a formidable regional force, to support defense interests. In dealing with a natural disaster in the form of a tsunami, empowering coastal areas is a central point in the regional empowerment strategy in Serang Regency, without leaving the potential for other natural disasters that may potentially affect other areas in Serang Regency. (Anwar., 2020)

From the previous research, the experience and knowledge that fishermen use as a mitigation for fishing and disaster. Mitigation is an effort to reduce the influence or impact of a hazard before a disaster Various potential natural disasters related to climate change can cause losses in the form of loss of property and casualties. Potential losses incurred by the disaster can be reduced through mitigation. Mitigation is defined as an effort to reduce and prevent the risk of loss of life and property through both structural and nonstructural approaches. Structural mitigation is an effort to reduce disaster risk through physical development and technical engineering of disaster-resistant buildings, while non-structural mitigation is an effort to reduce disaster risk that is non-physical in nature such as policies, community empowerment, strengthening institutions, awareness, in reducing disaster risk, non-structural mitigation is more sustainable because it provides security in the long term. Sugiharyanto in (Dewi et al., 2016) Non-physical mitigation that needs to be done immediately is making a tsunami hazard map. The next step is conducting socialization, awareness, training, drills, and providing counseling on various matters related to the tsunami, starting from the symptoms or characteristics of the tsunami, its impact, to efforts to evacuate or save oneself (Diposaptono, 2011).

In addition, according to (Rahman, 2015) states that mitigation takes 2 forms, namely: Structural mitigation, in the form of creating infrastructure as a driver for minimizing impact and using a technological approach. Structural mitigation is an effort to minimize disasters through the construction of various physical infrastructure and using technological approaches, such as building special canals for flood prevention, volcanic activity detectors, earthquake-resistant buildings, or an Early Warning System used to predict the occurrence of tsunami waves. Structural mitigation is an effort to reduce vulnerability to disasters by engineering disaster-resistant buildings. Disaster-resistant buildings are buildings with a structure that is planned in such a way that the building is able to survive or suffer harmless damage when the disaster in question occurs.

Technical engineering is a procedure for designing a building structure that has taken into account the characteristics of the action of a disaster.

The use of mitigation implies a number of fundamental changes in the behaviors of people at risk, in the processes of creating and modifying the physical environment and in the physical layout of a community. Mitigation or actions to reduce the impact of a disaster can actually be a powerful tool in dealing with earthquakes and tsunamis. Through this strategy, people can protect themselves from the ferocity of the earthquake and tsunami. It's like preparing an umbrella before it rains. (Coburn et al., 1994).

There are four important things in disaster mitigation, namely:

- 1. Availability of information and maps of disaster-prone areas for each type of disaster;
- 2. Socialization to increase public understanding and awareness in dealing with disasters, because they live in disaster-prone areas;
- 3. Know what needs to be done and avoid, and know how to save yourself if a disaster occurs.
- 4. Regulating and structuring disaster-prone areas to reduce the threat of disaster.

Seeing the condition of the *Muara Binuageun* fishing community, it is important to carry out disaster preparedness in dealing with the threat of natural disasters whether there has been an increase. The natural disasters referred to in this study include earthquakes and tsunamis, tidal waves, tornadoes. This research will also look at what factors need to be improved so that the preparedness of the fishing communities in *Muara Binuageun* increases. This research will focus on the local wisdom of mitigating disaster preparedness of the *Muara Binuageun* fishing community. In addition, to strengthen community resilience in dealing with a disaster, local wisdom has an important role in building disaster mitigation efforts in the community. Some of the main assets in dealing with the threat of disaster in society are through mutual cooperation, the spirit of self-help communities and so on which are efforts to protect nature and the environment. (Paradise., 2022)

This research will try to examine the traditional local wisdom of the Fishermen of *Muara Binuageun* related to disaster mitigation. The results of the analysis of the socioecological impacts felt by fishermen will be linked to a form of disaster mitigation strategy based on the local wisdom of the *Muara Binuageun* fishing community. The aims of this research are: (1) To identify disaster mitigation carried out by the *Muara Binuageun* fishing community, (2) To analyze the adaptation strategies carried out by *Binuageun* estuarine fisherman; and (3) analyzing how the *Muara Binugeun* fishing community applies local wisdom in disaster mitigation and preparedness.

In addition to being applied in the disaster management system in the socio-cultural context, local wisdom is also a wealth that needs to be maintained. The social and cultural system of Indonesian society which is closely related to the environment is shown by the existence of local wisdom which gives specific characteristics. Efforts to recognize local wisdom especially related to environmental and disaster management are very useful for exploring the richness of the socio-cultural system of the community. (Maharani., 2019)

METHOD

In the research conducted, researchers used the Qualitative Method. This research was conducted on fishing community groups in the fishing village of *Muara Binuageun*. This location was chosen deliberately because the fishing communities living along the coast of *Binuangeun* are a group of fishing communities that have been carrying out their activities for generations as fishermen as well as managers of coastal resources. Second, the location of their settlement is an area that is classified as an earthquake and tsunami disaster preparedness area. To explore the construction of understanding, meaning and perspective of how the earthquake and tsunami were at the level of fishermen's cognition, this study used a qualitative research method with data collection techniques using observation and in-depth interviews.

Through in-depth interviews, it will be obtained how the views of fishing communities in their activities and interactions as managers of coastal resources are the result of an exchange of meanings using symbols that occur throughout their lives. Indepth interviews were conducted on seven informants. Interviews were conducted as an effort to strengthen field observations that have been made. Information obtained from the field can be validated based on information from several sources. (Khoirullah., 2019) Meanwhile, observations and literature studies were carried out to obtain data related to their daily activities in managing and utilizing coastal resources and how they see or view disasters on a daily basis.

This research was conducted in the fishing village of *Muara Binuageung*. This location was deliberately chosen for several reasons. First, the fishing community living along the coast of *Binuanggun* is a group of fishing communities who are active as fishermen. Second, the location of their settlement is an area classified as an earthquake and tsunami preparedness area. To explore how the earthquake and tsunami are understood at the level of perception, meaning and fishermen's perspective, this study uses qualitative research methods with data collection techniques using observation and in-depth interviews. Through in-depth interviews it is known that the perspective of fishing communities in their activities and interactions as managers of coastal resources is the result of an exchange of meanings through the use of symbols that appear throughout life. Then through field observations and increasing the Local Wisdom of the Muara Binuangeun Fisherman Community About Disaster Mitigation and Preparedness.

In the research, the use of qualitative methods greatly influences the research to be carried out. This is important for the smooth running of the research. This is where participation finds itself valuable, because the information is so useful. This research method provides a very large space for participants. Meanwhile, this research activity uses a descriptive approach. To describe how this research was carried out and the results expected in the research to answer the problems in the research. (Marwan., 2013)

Qualitative research is a form of approach that appears in post-positivism which is the result of a paradigm shift in viewing a reality, phenomenon, or symptoms. Where in this approach social reality is seen as something holistic/comprehensive, complex, dynamic, and full of meaning. According to (Creswell, 2010), qualitative research is:

"Methods for exploring and understanding the meanings that a number of individuals or groups of people ascribe to social or humanitarian issues. The research process involves important efforts, such as asking questions and procedures, collecting specific data from the participant data, analyzing data inductively from specific themes to general themes, and interpreting the meaning of the data. The final report for this research has a flexible structure or framework. Anyone who is involved in this form of research must adopt an inductive style of research perspective, focus on individual meanings, and translate the complexity of a problem".

Furthermore, with a descriptive research approach, it can also be said that it can be carried out in the laboratory or in the field and can use all data collection methods. Simple descriptive research deals with questions that say something about the size, shape, distribution, pattern, or presence of a variable in question. Therefore, this type of descriptive research has various objectives, including: a description of the symptoms or characteristics associated with a particular population, estimates or estimates of the proportion of the population that has these characteristics. (Zellatifanny & Mudjiyanto, 2018).

RESULTS AND DISCUSSION

Muara-Binuageun Fisherman Community Disaster Mitigation

Mitigation is currently seen as a priority to be carried out immediately rather than post-disaster response. As an effort to reduce the negative impact of a disaster that is expected to occur. Mitigation needs to be carried out in a comprehensive manner, namely a combination of physical/structural and non-physical/non-structural efforts. Physical mitigation can be done both naturally and artificially. Meanwhile, non-physical mitigation involves adjustments and arrangements regarding human activities so that they are in line with and in accordance with both physical and other mitigation efforts.

Basically, a disaster management policy is a policy taken based on the basic principles of disaster management in local governments and in line with the principles of provincial and national disaster management which seeks the principles of fast and precise, priority, coordination and integration, transparency and accountability. Partnership and Empowerment (Haeril, 2021) state Artificial physical mitigation efforts are known as hard structural countermeasure approaches, for example making breakwaters, seawalls, revetment, groins, jetties, and retrofitting (strengthening house buildings. Disaster risk reduction through traditional wisdom is a form of from non-structural mitigation. Traditional wisdom is traditional knowledge that is unique to a particular community or culture that has been developing for a long time, and is the result of a process of reciprocal relations between the community and its environment, becoming a reference for behaving, practiced and passed down from generation to generation. (Komala, 2016).

From the results of the interview according to Mr. Husni (48 years) July 27 2022, community leaders and fisherman *Binaguen* said that his experience at sea made him able to know natural phenomena that did not usually occur. Seeing unnatural natural events, with this the community is able to save themselves and even reduce the risk of disasters,

the fishermen of *Muara Binuageun* to be prepared by evacuating to a safe area. Previously, the events that Pak Husni had seen made him a new knowledge, like seeing the erratic tides indicating that a disaster would occur. this makes a reference if something like this happens again so that the community is prepared. Knowledge is the main factor and is the key to preparedness. The knowledge possessed can usually influence attitude and concern for preparedness in anticipating disasters. (Jahirin., 2021).

The Early Warning System has also been implemented by the government in various ways. An early warning system is a system to notify of impending natural events, both disasters and other natural signs. This early warning system represents an important part of the community preparedness mechanism as an effort to provide information in a language that is easily understood by the public, for example through sirens, *kentongan* and so on. Furthermore, sounding sirens is one of the ways to convey information that needs to be done so that information is received more quickly to the public.

The use of disaster mitigation is very important to see the greatest possibility of natural disasters, mapping in mitigation forms the basis of the first disaster emergency response that must be carried out by the relevant agencies to see what the topography is like in disaster-prone areas. (Susanti., 2020) The alertness and speed of the community's reaction is needed because of the limited time from the time the information is issued to the (alleged) arrival of the disaster. Critical conditions, limited time, major disasters and rescue of residents are factors that require early warning. The earlier the information is conveyed, the less time it takes for residents to respond. Conversely, the slower the information is conveyed, the narrower the population to respond. (Juhadi, 2018).

Disaster An event or series of events caused by natural and/or non-natural and manmade factors, which threaten and disrupt human life and livelihood, resulting in human injury, environmental damage, and property damage, as well as causing psychological impacts. Especially in areas with high economic value, inadequate disaster response can result in losses (Nursyabani., 2020). Natural phenomena that are out of the ordinary cause unwanted things for fishermen who are fishing, for changes in nature or symptoms that can be seen at sea are a sign of a disaster. *Binuangeun* who has knowledge of local wisdom on mitigation as a fisherman. got that: "local wisdom obtained from parents which is passed down from generation to generation about natural phenomena such as low tide and if there is a disaster, immediately evacuate. I also know a little about the natural phenomena that exist. Sometimes, because you are used to the signs that are often encountered, you get a mediocre response, even though this is very risky. (Interview: Zaenal Abidin, 10 August 2022).

In the above case the *Muara Binuageun* Fishermen community has expertise in reading natural situations through unusual natural phenomena or events, not only those who work as fishermen, but the *Muara Binuageun* Fishermen community who do not work as fishermen also know the local traditional knowledge of the *Muara Binuageun* fishermen community. *Binuangeun* was clear from the sources that they carried out disaster mitigation using local wisdom by observing natural signs which made them a source of reference for their preparedness in saving themselves. An understanding that

forms an integrated view or behavior based on the collective mind that prevails in society and is believed to be both individually and collectively according to the tradition of its use. Belief in natural signs as clues that lead to an event is part of communication with the universe as a form of macrocosm of substitution and balance, (Hadi, 2014)

Mitigation carried out by the Fishermen in *Muara-Binuageun* is by non-physical mitigation in the form of knowledge based on experience gained by parents and even other people whose knowledge is used as a reference for self-rescue to reduce the risk of disasters that cause quite a lot of victims, through experience as a source of reference for them by seeing signs of nature that are not as usual.

Application of Local Wisdom in Mitigation in Muara-Binuangeun

Local wisdom which is contained in many traditional arts should not be opposed to any religion. The word local wisdom is used to indicate the existence of a concept that in local socio-cultural life there is nobility, high values, truth, goodness and beauty that are valued by members of the community so that it can be used as a guide or guideline for building patterns of inter-citizen relations or as a basis for to build their life goals that they want to realize (Pertiwi, n.d.).

According to (Njatrijani, 2018) that local wisdom as seen by Ki Hajar Dewantara is the pinnacle of culture, in the concept of national culture. local wisdom as local ideas that are wise, full of wisdom, of good value, which are embedded and followed by members of the community. Local wisdom is a human effort by using his mind (cognitive) to act and behave towards something, object or event that occurs in a certain space. With a wise attitude in dealing with life's difficulties to meet the needs of life is still seen as a trial in life that should be overcome with an attitude that does not damage nature and its surroundings, including in establishing social relations. (Hendra, 2016).

Local wisdom is also expressed by (Zulkarnain, 2008) in the form of certain principles and ways adopted, understood, and applied by local communities in interacting and interrelating with their environment and transformed into a system of values and customary norms. Local wisdom refers to knowledge that comes from the experience of a community and is an accumulation of local knowledge. Local wisdom and local knowledge possessed by a community are obtained through a long process. Its existence is the result of adaptation through a social learning process to the conditions and dynamics of its environment, both the natural environment and the social environment. (Hasrawaty, 2017).

In the desire to unite with other humans (society), humans tend to fulfill their life goals in the welfare of their lives, for example in terms of realizing a security in a place of residence and in various other things that are not spared by needing the help of others. Every good relationship will also produce good things, like the fishermen of *Muara Binuageun* who live in *Muara-Binuageun* who initially received a good response when they came to the *Lebak* Regency area, so this made the fishermen of *Muara Binuageun* get a new family in the area. Because the fishermen of *Muara Binuageun* uphold kinship, they also teach the people in the fishing village to do work at sea.

The process of interaction between humans is caused by a sense of mutual need, mutual protection and so on. These individual interactions have been established for a long time to form a community called society. If using the logic of Rousseau's thinking, interaction between humans produces an alienation in a tightly formed unit in the form of society. The formation of society begins with the existence of alienation and human interaction for all the necessities of life so that their style is determined by the needs that bind them.

The closer the kinship of the people of the *Muara-Binuageun* fishing village, makes them care for one another. In this case the area they live in is in a disaster-prone area, so with the expertise of the *Muara Binuageun* Fishermen community who know about natural phenomena that will occur, the *Muara Binuageun* Fishermen community is obliged to convey this through stories of their experiences to the surrounding community. A knowledge that is born from the local community, such as regularity that has been accustomed to in the community and becomes an alternative solution to solving problems. As an illustration, there is a certain time to take advantage of the potential that exists in the depths of the prohibition. Maybe there is something in particular that causes this with the terms of the time it is allowed. Local wisdom becomes important and useful only when the local people who inherit the knowledge system are willing to accept and claim it as part of their lives. Natural disasters and their impacts must be addressed wisely and appropriately.

Disaster management is a series of efforts that include establishing development policies that are at risk of disasters, disaster prevention activities, emergency response, and rehabilitation. The objectives of disaster management are (a) to provide protection to the public from disaster threats; (b) harmonizing existing laws and regulations; (c) ensure the implementation of disaster management in a planned, integrated, coordinated and comprehensive manner; (d) respect local culture; (e) building public and private participation and partnerships; (f) encouraging the spirit of mutual cooperation, solidarity and generosity; and (g) creating peace in the life of society, nation and state. The implementation of disaster management consists of 3 (three) stages including: (a) predisaster; (b) during an emergency response; and (c) post-disaster. (Suparmini, 2014).

The good relationship between the Fishermen of *Muara Binuageun* and the local community means that they do not have a skate even though they are of different ethnicities, as evidenced by the absence of inter-ethnic riots in the area. This makes peace even though there are disputes like younger and older siblings who will then get along well again. In the application of mitigation, the fishermen community of *Muara Binuageun*, of course, not only consume their own knowledge, but they also convey that, although not everyone, now it is not a small village consisting of several houses. Because of this, the fishermen community of *Muara Binuageun* interact only with people who are close to where they live as is appropriate for other communities, so their expertise in knowing natural phenomena through their findings or experiences is shared with friends or close relatives who are in the same profession and or neighbors. Fishermen have an obligation to comply with all the rules that have been set relating to local wisdom

traditions. Both consciously and unconsciously, because of a tradition that has been passed down from generation to generation and has become the culture of the local community, especially fishing communities. The form of the community's attitude in terms of local wisdom is the ban on fishing which can damage marine ecosystems, fishing for wild animals, not to litter because it can damage the marine environment and the environment. (Furqan, 2021).

With that the local community and the fishermen community of *Muara Binuageun* always protect their marine environment. The fishermen community of Muara Binuageun, who settled and later married many local people, made their kinship even stronger. Therefore, another thing that makes the Muara Binuageun Fishermen's community just like the local community and is well accepted, makes the community protect and help each other, as well as with various other things even though the local wisdom of the *Muara Binuageun* Fishermen's community no longer applies in seeing the signs nature they still often talk about it. Furthermore, based on the results of an interview with Mrs. Siti Maesaroh (40 years) as the wife of a fishing crew from Muara Binuanguen, it was found that: "The fishermen community of Muara Binuageun who live in Muara-Binuageun village are not too many compared to the local community, in disaster mitigation and preparedness in the fishing village, Muara-Binuageun has been assisted by the government in disaster preparedness such as having evacuation routes or shelters, other things notification in the form of a siren. Apart from natural phenomena through knowledge based on local wisdom in the people of the *Muara-Binugaeun* fishing village. (Interview: Siti Maesaroh. 13 August 2022).

The *Muara Binuageun* Fisherman Community and the local community are helping each other. Disaster mitigation and local wisdom have a connection where people have direct contact with nature. When humans behave wisely towards nature, nature will be kind to humans, and vice versa, so that people try to apply customs or ways of life that behave wisely towards nature. (Eka, 2018). The mitigation carried out by the Fishermen of *Muara Binuageun* community was conveyed orally by means of family conversations. Because the Fishermen of *Muara Binuageun* have a role in clearing land, making them trusted people, through conversations in the form of mitigation stories based on local wisdom through natural signs that refer to experience, with the community, the Fishermen of *Muara Binuageun* make them well received. until now and they are trying to prevent it through cleaning the beach or sea environment.

CONCLUSION

Based on the results of the research described above the researchers concluded that: first, Mitigation is very important for people who live in disaster-prone areas. Mitigation based on natural knowledge based on experience has become a reference in the *Muara-Binuangeun* Fisherman Village Community. Local wisdom owned by the people of *Muara Binuangeun* is able to make a cultural wealth that has grown and developed to date and has become part of local wisdom which continues to be transformed from generation to generation. Second, various experiences as the local wisdom of fishermen

parents are always conveyed to their children through bedtime stories. The majority of the *Muara Binuageun* Fishermen Community who live in *Muara-Binuageun* have expertise in reading natural phenomena. Third, in the fishing village of *Muara-Binuageun* there are several people from different ethnic groups who have good relationships, protecting and caring for each other is their good habit, *Muara-Binuageun* is a disasterprone area so in this case the community works together in preparing themselves if one day an unexpected disaster occurred.

REFERENCES

- Anwar., S. d. (2020). Strategi Pemberdayaan Wilayah Pesisir Dalam Menghadapi Bencana Tsunami Serta Implikasinya Terhadap Ketahanan Wilayah (Studi di Desa Bulakan, Kecamatan Cinangka, Kabupaten Serang, Banten). Jurnal Ketahanan Nasional. 108-131.
- Coburn, A. W., Spence, R. J. S., & Pomonis, A. (1994). Mitigasi Bencana. In Disaster Management Training Program.
- Creswell, J. W. (2010). Research design: pendekatan kualitatif, kuantitatif, dan mixed. Yogyakarta: PT Pusataka Belajar.
- Dewi, I. K., Istiadi, Y., & Istiadi, Y. (2016). Mitigasi Bencana Pada Masyarakat Tradisional Dalam Menghadapi Perubahan Iklim Di Kampung Naga Kecamatan Salawu Kabupaten Tasikmalaya (Disaster Mitigation on Traditional Community Against Climate Change in Kampong Naga Subdistrict Salawu Tasikmalaya). Jurnal Manusia Dan Lingkungan, 23(1), 129. https://doi.org/10.22146/jml.18782.
- Diposaptono, S. (2011). Sebuah Kumpulan pemikiran Mitigasi Bencana dan Adaptasi Perubahan Iklim . Jakarta : Direktorat Pesisir dan Lautan Direktorat Jenderal Kelautan, Pesisir dan Pulau-pulau Kecil Kementerian Kelautan dan Perikanan.
- Eka., A. P. (2018). Mitigasi bencana berbasis kearifan lokal di Desa Tieng, Kabupaten Wonosobo. Jurnal Geografi Lingkungan Tropik, 2(2), 42-49. doi: http://dx.doi.org/10.7454/jglitrop.v2i2.51.
- Fauzi, L. M., & Angga Nurdin R, I. N. (2014). Peran Tentara Nasional Indonesia Dalam Penanggulangan Bencana Di Provinsi Daerah Istimewa Yogyakarta. Bencana, IV, II. http://jipsi.fisip.unikom.ac.id.
- Fauzi, R. (2019). Pola Struktur dan Magang Pada Sistem Manajemen Tangkap Ikan Nelayan Muda Di Binuageun. Jurnal IPTEKS, 222-228.
- Firdaus., d. (2022). Approach to Local Community Wisdom in Mitigation of Coastal Abrasion Disasters in North Galesong District, Takalar Regency. Formosa Journal of Sustainable Research (FJSR), 397-408.
- Furqan, d. (2021). Studi Kearifan Lokal Masyarakat Nelayan Dalam Upaya Pemanfaatan Berkelanjutan Terhadap Konservasi Laut di Kawasan Lampulo Kota Banda Aceh. Jurnal Al-Ijtimaiyyah, 287-304.
- Hadi, I. (2014). Form and Meaning Signs of Mitigation Disasters: Anthropolinguistic Analisys of Fishermen at Air Bangis. SALINGKA, 11(1), 108—117.

- Haeril, d. (2021). Penerapan Kebijakan Mitigasi Bencana (Fisik dan Non Fisik) Dalam Mengurangi Resiko Bencana di Kabupaten Bima. Journal ofGovernance and Local Politics (JGLP), 23-47.
- Hasrawaty, E. d. (2017). Peran Kearifan Lokal Suku Bajo dalam Mendukung Pengelolaan Kawasan Peran Kearifan Lokal Suku Bajo dalam Mendukung Pengelolaan Kawasan. Jurnal Penyuluhan Perikanan dan Kelautan, 25-34.
- Hendra, A. d. (2016). Kearifan Lokal Masyarakat Nelayan Desa Olele. Jurnal Ilmiah Perikanan dan Kelautan, 38-44.
- Jahirin., d. S. (2021). (The Relationship of Disaster Mitigation Knowledge With Community Preparedness In The Face Of Flood Disaster. Healthy Journal, 19-26.
- Khoirullah., M. A. (2019). Mitigasi Bencana Terhadap Abrasi Pantai Di Kuala Leugekecamatan Aceh Timur. Jurnal Samudra Geografi, 2(1), 1-4.
- Komala, I. D. (2016). Mitigasi Bencana Pada Masyarakat Tradisional dalam menghadapi Perubahan Iklim di Kampung Naga kecamatan Salawu kabupaten Tasikmalaya . Manusia dan Lingkungan, 129-135.
- Lebba. (2017). Laut Manusia dan Kebudayaan. Yogjakarta: Kaukaba Dipantara.
- Juhadi, d. (2018). Kearifan Lokal dalam Mitigasi Bencana. Semarang: Fastindo.
- Maharani., S. F. (2019). Kearifan Lokal Masyarakat Pesisir Dalam Mitigasi Bencana di Kota Pariaman. Jurnal Pendidikan Tambusai, 3(3), 1591-1597. doi:https://doi.org/10.31004/jptam.v3i3.406.
- Maksimilianus., A. G. (2020). Pemberdayaan Kelompok Nelayan Sukolilo Dalam Upaya Peningkatan Sustainable Livelihood, Dan Mitigasi Bencana Di Wilayah Pesisir Kota Surabaya. Sinergi:Jurnal Pengabdian, 2(2), 35-39.
- Marwan., a. d. (2013). Identifikasi Kerangka Pengetahuan Masyarakat Nelayan Di Kota Bengkulu Dalam Kesiapsiagaan Bencana Sebagai Basis Dalam Merumuskan Model Pengelolaan Bencana. Jurnal Dialog Penanggulangan Bencana, 57-64.
- Nursyabani., d. (2020). Mitigasi Bencana Dalam Peningkatan Kewaspadaan Terhadap Ancaman Gempa Bumi Di Universitas Andalas. JURNAL ILMU ADMINISTRSI NEGARA (AsIAN), 8(2), 81-90.doi:https://doi.org/10.47828/jianaasian.v8i2.12.
- Suparmini, d. (2014). Mitigasi Bencana Berbasis Kearifan Lokal Masyarakat Baduy. Jurnal Penelitian Humaniora, 19(1), 48-63. doi: https://doi.org/10.21831/hum.v19i1.3511.
- Susanti., E. d. (2020). Analisis Mitigasi Penanggulangan Bencana Di Kabupaten Ogan Komering Ulu Provinsi Sumatera Selatan. Jurnal Ilmiah Wahana Bhakti Praja, 324-332.
- wahdatul., N. C. (2015). Kearifan Lokal Masyarakat Nelayan Di Desa Brakas, Kecamatan Raas Kabupaten Sumenep. paradigma Madani, 27-50.
- Njatrijani, R. (2018). Kearifan Lokal Dalam Perspektif Budaya Kota Semarang. Gema Keadilan Edisi Jurnal (ISSN: 0852-011), Volume 5,(September), 17–18.

- Pertiwi. (n.d.). Nilai-Nilai Karakter Peduli Berbasis Kearifan Lokal. 4, 1–22.
- Rahman, A. Z. (2015). Kajian Mitigasi Bencana Tanah Longsor di Kabupaten Banjarnegara. Jurnal Manajemen Dan Kebijakan Publik, 1(1), 1–14.
- Rustianingtyas, P. (2015). Kearifan Lokal Masyarakat Nelayan Di Desa Brakas, Kecamatan Ra'as, Kabupaten Sumenep. Paradigma Madani, 2(2), 27–50.
- Zellatifanny, C. M., & Mudjiyanto, B. (2018). The type of descriptive research in communication study. Jurnal Diakom, 1(2), 83–90.