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Raising Awareness of Disaster Mitigation Literacy: Shaping Student Character in Reducing Disaster Risk through Local Folklore of South Lebak Banten

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ABSTRACT: Local folklore can be used as a reference to estimate geological events that have not yet occurred, even folklore or local myths are sometimes proven to be helpful in solving geological problems. In the folklore of South Lebak, precisely in Panggarangan and Bayah Subdistricts, Tsunami Disaster has been told in oral folklore stories passed down from generation to generation in indigenous people. South Lebak is an area blessed with abundant natural resources, one of which is the sea. The blue sea as far as the eye could see, the lapping waves that sound intimate to the ear, present an incomparable intimacy and comfort, and most importantly, the sea is the backbone of the economy of the population. However, behind the beauty and economic blessings, there is an oral tradition that tells of a disaster that is ready to strike at any time in the South Lebak area, where the folklore has a correlation with academic research that should be relied upon so that the community is prepared to face the disaster. Literary works always have a connection with their environment even though they are packaged and presented in an imaginative framework. These connections can be with the social, cultural, political and natural environment. In disaster management, a one-way communication model is the most used, where emergency agencies disseminate information to provide warnings. Research from ITB in 2020 used a new data communication system drawn from the Indonesian Tsunami Early Warning System (InaTEWS) catalog reported by BMKG, along with data from the International Seismological Centre (ISC) catalog, to investigate the potential for megathrust earthquakes and tsunamis in southern Java. Communication is therefore essential to provide information on disaster mitigation. The form of experimentation in this research is in the form of providing training and debriefing as a means of increasing disaster literacy to teachers to be delivered again to students in their classes according to the subjects they teach. The stage of the experiment is that the teacher is given material about the Caah Laut folklore. Furthermore, the teacher gave the Caah Laut folklore to the students with the subjects he/she taught. The folklore was correlated with the subject with the aim of increasing disaster mitigation awareness to students. Therefore, research on myths is needed to reveal the way of thinking behind the mythical story so that it can find out the relationship between myths and the daily reality of society (Fauzan, 2013). In the discussion of Caahlaut folklore applied and correlated to subjects, it is evident that teachers and students get an increase in disaster mitigation awareness, and how to respond to predictions or messages implied in the folklore. Learning through folklore in each subject could increase insight and awareness of how to respond to disasters that will occur clearly proven to increase teacher and student awareness of disaster mitigation.

KEYWORDS - Mitigation Awareness, Megathrust, Folklore, Caah Laut

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I. INTRODUCTION

Most of the Indonesian society is a society that has traditions in the form of material and non-material cultural heritage from ancestors. Material Culture is clearly something that can be seen, touched and felt. While non-material culture is something that exists but is not seen, touched or felt. Non-material is in the form of moral values, norms that have been running in people's lives that have been attached and carried out by the community. These moral values are what shape the character of society into cultures that become heritage that should be studied and used as research material.

Myths are one of the cultural heritages that are widely spread in Indonesian society, which has its own uniqueness and becomes folklore which is a wealth of Indonesian culture. Myths and geology are related in several ways. Some myths are the result of human efforts to explain important features of their environment, such as striking or unusual landforms, while others try to explain striking natural processes, such as earthquakes, volcanic phenomena, and floods. Local myths sometimes prove helpful in solving geological problems. (Vitaliano. 2007. Geomythology: geological origins of myths and legends. Published by The Geological Society London).

Basically, all fairy tales, myths and legends are passed down through generations through traditional rhymes, songs or chants that are very implicit in the storytelling. Contain messages and stories that contain meaning and purpose in providing advice also forecasts of natural events such as disasters or other natural changes. Folklore is also one of the media sources that also stores and disseminates literary knowledge that can be a scientific dissection of regional literature.

Local folklore can be used as a reference to predict geological events that have not yet occurred, even folklore or local myths are sometimes proven to be helpful in solving geological problems. In the folklore of South Lebak, precisely in Panggarangan and Bayah Sub-districts, Tsunami Disaster has been told orally from generation to generation in the community culture.

South Lebak is an area blessed with abundant natural resources, one of which is the sea. The blue sea as far as the eye can see, the lapping waves that sound intimate to the ear, present an incomparable intimacy and comfort, and most importantly, the sea is the backbone of the economy of the population. However, behind the beauty and economic blessings, there is an oral tradition that tells of a disaster that is ready to strike at any time in the South Lebak area, where the folklore has a correlation with academic research that should be relied upon so that the community is prepared to encounter the disaster.

Based on the results of cross-sector collaboration research conducted by the Center for Earth Science and Technology (PSTK) ITB on September 17, 2020 (Mongabay.id 2020), it is stated that there is a potential megathrust earthquake in the southern sea of Java which can trigger a tsunami with a maximum height of up to 20 meters. The results of this research are enough to warn us to be more vigilant in facing disasters that are in sight by doing everything that can reduce disaster risk. It is undeniable that almost every disaster that occurs always takes a lot of casualties, as well as property, which has direct implications for the lives of disaster victims. The inadequate level of public understanding related to natural disaster issues is one of the causes of the high death rate due to natural disasters in Indonesia. On the other hand, according to (Permana et al., 2017), the current disaster education program has not been applied thoroughly in all aspects of society and institutions

However, it must be understood that recording such events can be a starting point for disaster risk reduction efforts. Anwar et al (2017) explain local wisdom as knowledge that emerges and is developed in the local system of the community. Local wisdom is not only a guide for community behavior but also the basis for the development of a more civilized and dynamic society (Anwar et al., 2017). According to Hasmira (2021), local wisdom is always connected to human life and environmental wisdom.

The environment is defined as the unity of space with all the contents in it. Communities living in disaster-prone areas are often believed to have the ability to convey information about impending disaster events, based on symbols and signs as a way of reading nature (Hasmira, 2021). According to Mukhtarov (2018), local folklore narratives become meaning in relation to other narratives held by the community.

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Therefore, community support is needed in the form of participation to reduce disaster risk through empowering disaster-related literacy. With this empowerment, it is hoped that a disaster-resilient community will be formed, which can increase its ability to deal with disasters and be more skilled, dexterous and trained in helping itself when a disaster occurs. (Basic Literacy Education Disaster Mitigation Literacy, t.t.). With this background, this research takes the title Increasing Awareness of Disaster Mitigation Literacy: Shaping Student Character in Reducing Disaster Risk through Local Folklore.

Based on the description in the background of the problem, the problem formulations in this study are.

- 1. Has Local Folklore in the oral tradition speech culture in the Bayah community which correlates with the Tsunami disaster been well socialized to students in high schools?
- 2. Why has Disaster Mitigation through Local Folktales in raising awareness and shaping the character of students to be prepared for disasters not yet become a school priority in local content?
- 3. How is the application model of local folklore in school subjects that has an impact on increasing student awareness implemented by schoolteachers?

Research objectives focus to increase public awareness of disaster mitigation through local folklore. Applying local folklore to school subjects to shape students' character in facing disasters and post-disaster. Introducing local folklore that has advice and meaning in disaster mitigation supported by research results from academics. Benefits of our research are:

- 1. Improving the quality of education in understanding local wisdom in the form of local folklore applied in school subjects.
- 2. Increased awareness of disaster mitigation literacy for students and teachers by shaping student character or disaster and post-disaster preparedness.
- 3. Increased synergy with the surrounding nature for students and teachers in preserving the surrounding nature for food security in the face of post-disaster.
- 4. Forming the preparedness of students and teachers in facing a tsunami disaster.

II. THEORETICAL STUDIES

Research related to disasters (natural) or caused by humans is not new in literary studies. Mahayana (2007) said that the issue of nature and its environment has long been echoed by writers. Literary works essentially always have a connection with their environment even though they are packaged and conveyed in an imaginative framework. The connection can be with the social, cultural, political, and natural environment.

In disaster management, the one-way communication model is the most used, where emergency agencies disseminate information to provide warnings. However, the sharing communication model is practiced mainly through social media as an emergency communication tool, which involves a two-way exchange of information (Dufty, 2020).

Research from ITB in 2020 used a new data communication system drawn from the Indonesian Tsunami Early Warning System (InaTEWS) catalog reported by BMKG, along with data from the International Seismological Centre (ISC) catalog, to investigate the potential for megathrust earthquakes and tsunamis in southern Java. Communication is therefore essential to provide information on disaster mitigation.

The local folklore that is the subject of theoretical study in this research, is a folklore from Bayah, Lebak Regency, entitled Caah Laut, which tells the story of the occurrence of a Tsunami given to teachers by conducting training in codifying folklore through ToT, where the Caah Laut folklore is combined so that it can be applied in several school subjects to increase disaster mitigation awareness of teachers and students.

III. RESEARCH METHODS

This paper is part of research related to disaster mitigation in Bayah, South Lebak, Lebak, Banten and is an explorative case study with a grounded theory approach. This paper aims to see how local wisdom becomes part of disaster mitigation in the area and the role of schoolteachers in disaster mitigation efforts with a folklore approach through school subjects.

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In the initial stage, high school teachers were trained using the training of trainer's model. Each teacher was given a briefing and training on Caah Laut folklore so that it could be applied in their subjects. After briefing and training, teachers provide lessons in their respective classes according to the subjects they teach using Caah Laut folklore so that students can explore the meaning and advice contained in the folklore.

We researchers observed the field, witnessing directly how each teacher provided teaching materials through Caah Laut folklore in each subject. The subjects expected to be sampled in this study were all subjects. Because not all subject teachers participated in the Training of trainers from researchers, not all subjects could apply Caah Laut folklore in their teaching.

During the learning process, each teacher was directly observed by the researcher, from the learning delivered by the teacher, then recorded and analyzed, each student in the class was given several questions by the researcher, how the Caah Laut folklore could provide increased disaster mitigation awareness to students.

The research method used in this study is included in the experimental research method. According to Creswell (2012) experimental research is research to test an idea, practice or procedure to determine whether it affects outcomes or dependent variables. Experiments are used to establish the possibility of cause and effect between the independent variable and the dependent variable.

The form of experimentation in this study is in the form of providing training and debriefing as a means of increasing disaster literacy to teachers to be delivered again to students in their classes according to the subjects they teach. The stage of the experiment is that the teacher is given material about Caah Laut folklore. Furthermore, the teacher gave the Caah Laut folklore to the students with the subjects he/she taught. The folklore was correlated with the subject with the aim of increasing disaster mitigation awareness to students.

The population and samples in this study were high school teachers from several subjects and high school students. In collecting research data, we are familiar with research instruments. In general, research instruments are tools for the success of the data collection process whether it uses observation, interview or other methods. In this study, the instruments of observation and interview methods were used. Observation when the teacher teaches local folklore by applying it to the subject, and afterwards the researcher conducts interviews with teachers and students to explore the increase in awareness in disaster mitigation after learning local folklore.

The research method in collecting and analyzing data uses a modern approach proposed by Danandjaja in Pudentia (2019) which pays attention to the folk and lore aspects of the oral tradition studied. The modern approach is more holistic in the sense that when conducting the study, it will be associated with the background or cultural context of the oral tradition so that the results of the study are emic, namely looking from the point of view of the people who are the object of study of oral tradition.

The implementation of data analysis in qualitative research is the process of systematically searching and compiling data obtained from interviews, field notes, and other materials, so that it can be easily understood, and the findings can be informed to others.

In this study, data analysis was carried out on the results of observations and interviews with teachers and students who had learned local folklore with increased awareness of disaster mitigation. The data that has been collected, processed and used as a source for the description of the research results.

IV. RESULT

The hypothesis in this study is to increase awareness of mitigation literacy through folklore with listening methods associated with various subjects in Senior High Schools and equivalent. According to Locke (in Khotimah, 2015) that humans develop according to the temperament of each individual and the environment that influences the formation of one's thinking so that parents and teachers have a very important role in improving preschool children's literacy skills optimally. One simple and easy step to take is through storytelling.

The type of story used in this study is a local folktale or commonly called forklore entitled 'Caah Laut'. Before delivering the folklore, the teachers were given ToT (Training of Trainers) by the researcher which was expected that the high school teachers were able to socialize mitigation literacy awareness wrapped in folklore

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through listening methods as expected by the researcher. The following are the results of observations and interviews with teachers and students:

1. English subject

The teacher divided the students into several groups, each of which was asked to analyze the story, which was then presented in front of their friends, the teacher, and the researcher, then the teacher and researcher conducted a reflection on the learners regarding the local folklore material 'Caah Laut.' After the reflection, the researcher found that most of the learners had mitigation literacy awareness and knew what to do when a tsunami disaster struck in the future after linking folklore to the teaching materials used by teachers at school.

How are folktales taught through English lessons? The teacher explained,

"The Caah Laut folktale is discussed through grammatical deepening by students, and after the lesson is over, students are asked to present the results and explain the local folktale 'Caah Laut' in front of the class."

By examining the story as the English teacher did, students automatically understand the plot and message of the folktale about the Tsunami told in the folktale.

2. Physical and Health Education Subjects

For Physical Education and Health subjects at SMAN 1 Bayah and SMKN 1 Bayah, the teacher explained the health benefits of physical exercise such as running or walking fast.

"The most important thing in carrying out rescue when an earthquake and tsunami disaster occurs, we must run to the designated gathering point."

The teacher explains all the physical activities to the students, then the teacher begins to relate the local folklore 'Caah Laut' to the subject. This, of course, is closely related in the form of what activities must be done when facing a disaster. This was followed by a reflection on the students conducted by the teacher and researcher.

After the teacher explained the benefits of physical activity and linked it to the folktale 'Caah Laut,' the researcher found that students had an awareness of disaster mitigation literacy, knew clearly how to apply it when disaster struck, one of which needed physical fitness to run and take shelter in a safe place when an earthquake occurred.

3. Religious Education Subjects

For the Religious Education subject at SMKN 1 Bayah, the teacher explained about a verse of the Quran, QS: Ar-Ra'd;11.

"That we as humans need to try ourselves if we really want to change something, destiny. This is where the verse works and can be linked to the folklore of 'Caah Laut' regarding disaster that God will not change the condition of a people if it is not the people themselves who change it."

The Religious Studies teacher explained examples of disasters that had occurred that were told in the Qur'an. So, the researcher found that students understand what they should do when facing a disaster, not just resignedly accepting the fate of God, but also must try, move with efforts to prepare what to do when pre-disaster, disaster, and post-disaster, and be vigilant to face disasters in the future.

4. Indonesian Language Subjects

For the Indonesian language subject at SMAN 1 Bayah and SMKN 1 Bayah, the teacher gave and explained the folklore 'Caah Laut' to the students in the form of narrative text in Indonesian language which then in the explanation inserted messages and morals about disaster in accordance with the content of the folklore

"Analyzing folklore by emphasizing the narrative side of the story, can facilitate students' understanding more quickly and easily also understand the message and content of the folklore."

After the teacher explained the folktale, students were asked to analyze the folktale and then the teacher asked one of the representatives of the students to come forward to retell the folktale with their respective

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messages and morals according to the students' point of view. Furthermore, a reflection was conducted by the teacher and researcher to the students.

The researcher found that most students have mitigation literacy awareness and know what to do when a tsunami disaster strikes in the future after linking folktales to the teaching materials used by teachers at school.

5. Geography Subject

For the Geography subject at SMAN 1 Panggarangan, the teacher opens the class with a discussion about 'plates' and an explanation of earthquakes and their consequences.

"This is where the role of the teacher works, how a geography teacher explains to students from the basic knowledge of the earth, from the plates to the consequences if the plates shift causing an earthquake, then a tsunami hits."

In discussing geography, the researcher analyzed the subject teacher's explanation and saw how clearly and clearly the Caah Laut folklore could correlate with the subject. The students also seemed to understand better, because when the researcher interviewed the students, most of them were able to answer the researcher's questions.

After the lesson was over, the teacher and the researcher reflected on the students, and the researcher found that most of the students understood and knew what to do after linking the folktale 'Caah Laut' to the teaching materials at school.

6. Civics subject

For the Civics subject at SMKN 1 Panggarangan, the teacher opens the class with material on the importance of working together and helping each other. After a broad explanation of the material, the teacher began to relate it to the folktale 'Caah Laut.' The teacher reads and explains the folktale 'Caah Laut,' and then reemphasizes the previous material about living together and helping each other. In preparation for pre-disaster, during disaster, and post-disaster, of course we need to help each other, live together, not just thinking about ourselves.

"Civics lesson is a lesson on how students' character can be formed when facing the upheaval of panic if an earthquake and tsunami occurs in Bayah, because the most frightening thing is panic from ignorance and indifference of others, so, it is hoped that in this Civics lesson, students can form the character of caring for others."

After explaining at length, the teacher and researcher reflected to the students. Most students understand and know what must be prepared to deal with disasters, as well as emphasizing students to care more about others

7. Economics Subjects

For the economics subject at SMAN 1 Panggarangan, the teacher opened the class by calculating the loss, as well as the material loss when the disaster struck. The teacher began to relate the folktale 'Caah Laut' to the students, reading in detail and explaining the content of the story. The teacher explained at length about the content of the folktale and the moral message in it, as well as what losses would be faced. In this way, it is hoped that students will be more aware and prepared to face disasters in the future to reduce disaster risk.

"In the face of disaster, it is not only the readiness of food or shelter that is needed, but how students can know the value of the calculation of supplies and also the losses that befall their families, so that they can save and also calculate the economic value of the remaining assets."

The researcher and teacher reflected to the students, the researcher found that most of the students knew what should be prepared, even proficient because class XII SMAN 1 Panggarangan has often received socialization about disaster, even to extracurricular activities on disaster mitigation.

Myths or folklore are seen as the result of the cultural construction of a region, then used as truth in the community that has the myth without knowing the meaning behind the mythical story. Similar thoughts expressed by Carl Jung (in Dhavamoni, 1995) that primitive societies do not perceive myths but live them.

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Therefore, research on myths is needed to reveal the way of thinking that lies behind the mythical story so that it can find out the relationship between myths and the daily reality of society (Fauzan, 2013).

Oral tradition or local folklore is included in literature, where literature can enter the territory of all existing subjects. In the discussion of Caahlaut folklore that is applied and correlated to subjects, it is evident that teachers and students can gain an increased awareness of disaster mitigation, and how to address the predictions or messages implied in the folklore.

Teachers and students can interact well to discuss the sustainability of disaster mitigation planning strategies, in the Caah Laut folklore analyzed and discussed, it can be found that disasters can come at any time. So, countermeasures in the face of disasters and after disasters must be well planned and build higher awareness for teachers and students such as forming school disaster mitigation groups and scheduling disaster simulations.

V. CONCLUSION AND RECOMMENDATIONS

After conducting a study and discussion of research problems related to increasing disaster mitigation awareness through folklore, it can be concluded that: Teachers and students can be more familiar with the Caah Laut folktale as a whole text and context.

Learning through folklore in every subject can increase insight and awareness of how to respond to disasters that will occur. Almost all students interviewed by researchers were able to answer how to respond to disaster mitigation.

Schools and teachers visited and interviewed by researchers are increasingly aware of how important it is to form a disaster mitigation cluster at school so that all students can get training and simulations as well as sustainable explanations about disaster mitigation.

The suggestions that researchers can convey based on the research results include the following. The Lebak Regency Government should make local wisdom traditions included in the regional development strategy. Revitalization of oral traditions that contain messages about disaster mitigation should continue to be developed and socialization should be carried out in preserving oral stories with words conveyed from the older generation to the younger generation. Do not let the myth of local oral tradition be eroded by globalization and extinction.

The oral tradition of Caah Laut which tells the story of earthquake and tsunami prediction should be made a follow-up product or deeper research, so that it can be well socialized, not only for the people of Bayah and Lebak district, but for indigenous peoples and the public in other parts of the world. A conclusion section must be included and should indicate clearly the advantages, limitations, and possible applications of the paper. Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extentions.

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