

## Socio-Cultural Intervention As Disaster Mitigation In Indonesia

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**History:** Received 01/07/2022 | Revised 11/07/2022 | Accepted 19/07/2022 | Published 30/07/2022

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**Abstract.** The Republic of Indonesia needs a mitigation system due to considering how vulnerable the archipelago to disasters. Compiled from The National Disaster Management Authority (BNPB) data in 2021, Indonesia will have to deal with 1,441 natural disasters in the period from January to June. This situation gets worse because until now Covid-19 is still high in various corners of the country. Various efforts in the context of handling the disasters have encountered obstacles that could slow down the recovery of the community. Indonesia's disaster management is still absent in playing its role. Therefore, it is necessary to optimize various aspects, including social and cultural capital as an important force. Natural disaster mitigation needs to be done by basing the wealth of cultural heritage, traditions and local wisdom. In addition to saving budget, mitigation models that use social power like this are more responsive so that prevention and recovery can be carried out earlier. This study aims to analyze and identify socio-cultural intervention as a disaster mitigation. This study uses a qualitative method with an explanatory descriptive approach. The data collection was done by using observation, interview, and documentation techniques. The result of this study indicates that disaster management in Indonesia is still spontaneous and does not optimize mitigation interventions in social and cultural aspects such as social networks and local wisdom values. The socio-cultural intervention system is very realistic because local wisdom exists in every community in the archipelago. This is good for the community to respond to disaster problems.

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**Keywords:** *Mitigation; Social Capital; Disaster*

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### INTRODUCTION

Indonesia's geographical location is in the ring of fire or the Pacific ring of fire (Soemabrata et al., 2018; Prasetyo, 2019) with the confluence of three active plates, namely the Indo-Australian, Eurasian, and Pacific (Pahleviannur, 2019). This condition makes Indonesia as an area that is very vulnerable to disasters. Generally, these disasters include disasters due to geological factors (Arsjad & Riadi 2013) and disasters due to hydrometeorology (Yanto et al., 2017).

Compiled from The National Disaster Management Authority (BNPB) data in 2021, Indonesia will have to deal with 1,441 natural

disasters in the period January to June. The types of disasters in Indonesia vary with their magnitude and relatively high frequency. Disasters in Law Number 24 of 2007 concerning Disaster Management referred to as events of series that threaten and disrupt people's lives and livelihoods.

The susceptibility of these events has brought about a paradigm shift in disaster management in Indonesia. According to (Buchari, 2020), the non-ministerial government agency has task of providing guidelines and directions for disaster management efforts including disaster prevention, emergency response management,

rehabilitation, and reconstruction in a fair and equal manner.

Manshur contends that to date there is no technology that can accurately predict the seconds, hours, days, and dates when a natural disaster will occur and where it will be located (2019). The community must be alert at all times because disasters occur spontaneously. Preparedness is one of the efforts to minimize the effects of disasters.

The level of preparedness of the Indonesians and government in dealing with major disasters has not been implemented properly recently. When a disaster occurs, it generally causes many casualties. Many confused and panicked people ran in all directions to escape. This condition is further exacerbated by the absence of clear evacuation routes and the lack of socialization from government and non-government institutions (Kurniawati, 2020)

Indonesia should be able to become a pilot country in handling disaster problems after experiencing many lessons learned from the disasters that had occurred. From this experience, the community can become more responsive to deal with various bad risks from disasters. However, we often encounter looting behavior during disasters, especially during the distribution of logistical assistance.

This situation is getting worse because Covid-19 is still high in various corners of the country at the moment. Various efforts in the context of handling have encountered

obstacles that could slow down the recovery of the community. Therefore, it is necessary to optimize various social capital and cultural aspects.

Indonesia's disaster management is still absent in playing the role of social and cultural capital as an important force so far. Natural disaster mitigation needs to be done by basing the wealth of cultural heritage, traditions, and local wisdom.

Previous research has focused more on the full role and responsibility of the government in disaster management. The government's contribution always requires a large budget that is packaged in the form of a program. In addition, funding programs are vulnerable to be misused for personal gain. In addition, disaster management based on government policies will require a lot of time and more energy.

Through disaster mitigation based on local wisdom, the burden of the government budget can be reduced and the misuse of program funds can be avoided. This is very possible because the local community actively participates to remind each other, help and operate all existing social capital. In addition to saving budget, mitigation models that use social power like this are more responsive, so prevention and recovery can be carried out earlier.

## RESEARCH METHODS

The research method used is a qualitative research with a type of descriptive

approach. The data obtained through the process of observation, in-depth interviews, documentation. The validity test is done by triangulation of sources. The data obtained were compared with different sources of information to obtain holistic information. Moleong states that checking the validity of the data needs to take advantage of something other than the data for checking and comparison purposes (2013). The data that had been validated were then analyzed using Coleman's social capital theory and Putnam's theory.

## DISCUSSION

Based on Law no. 24 of 2007, the implementation of disaster management consists of three stages, namely: 1. pre-disaster 2. during emergency response 3. post-disaster. Various disaster management activities that have been carried out by the Government of the Republic of Indonesia require no small amount of money with considerable energy and time (Prasetyo, 2019). Disaster factors that are always faced by Indonesia need the support of various parties, both the government, the community, and non-governmental organizations. One way to reduce state expenditure or economic capital in disaster management is to optimize social capital and cultural aspects.

One of the programs commonly carried out in disaster management is to create a disaster-aware and responsive community

through Disaster Risk Reduction (DRR) education. The concept of DRR solutions is adapted to the disaster, pre-disaster, during disaster and post-disaster cycle.

According to Suhardjo, the stages of implementing the solution are adjusted to the characteristics of the stages of the disaster cycle (2011).

1. During a disaster, there is a lot of activity in an emergency situation.
2. Post-disaster, reducing the complications of complex problems in reconstruction and rehabilitation.
3. Pre-disaster, requires thorough planning. Communities threatened by disasters are very diverse. Those who have been educated and those who have not been touched by formal education need to understand the importance of DRR. The most strategic way for DRR education is through formal and informal education.

Disasters will not stop and have a cyclical pattern. With empirical data, some disasters can be predicted to come again, for example floods and landslides occur every rainy season. In addition, some people's bad habits towards the environment can bring about predictable disasters. The crueler human treatment of the environment, the more potential for disaster to occur. On the other hand, the better human treatment of the environment will prevent disasters.

Some researchers believe that disasters originate from the social community itself,

such as the case of the Lapindo mudflow, floods, landslides and so on, these natural disasters originate from human activities always begin with environmental destruction (Handayaniingsih, 2018). These damages always cause disaster for humans themselves. Indiscriminate felling of trees can lead to deforestation. Deforested forests can create erosion and flooding.

Many green open areas have been turned into concrete buildings and paved roads recently. Concrete and asphalt buildings cause water to not be absorbed, stagnate, and flooding occurs. An example of human activity that is most often carried out as a cause of disaster is littering. The habit of littering is carried out on roads, in ditches, and in rivers. When it rains, garbage clogs waterways. As a result, the flow of water is blocked, overflows, and floods occur. The scattered garbage also invites the arrival of various diseases. Adi emphasizes that nature is no longer strong enough to accept the burden of the environment due to people's activities who pay little attention to the impact of environmental damage (2011).

According to (UNDP, 2004) disasters triggered by natural hazards are also a failure of human development (2004). Meanwhile, Cutter asserts that each unit of space has various levels of disaster risk because it consists of various units of supporting elements (2016). This shows that humans are not the only factor to reduce the impact of

disasters. Disaster is a natural or non-natural process that causes loss of life, property and pre-disaster stage is known as disaster mitigation.

Disaster is a natural or non-natural process that causes loss of life, property and disturbing the life orders (Suwaryo, &1. Yuwono, 2017). Substantially, all humans do not want if disaster happens. This condition happens as human behavior towards nature is good or unconsciously often invites disasters. Disasters are not only seen as something given or a gift from God, but are produced by human hands themselves. Thus, to minimize the occurrence of disasters, humans must be more careful and pay attention to behavior before a disaster occurs.

Hengkelere and Rogi contend that in the pre-disaster stage there is a stage of disaster risk reduction, which is carried out with the aim of reducing the negative impacts that may arise, especially in situations where there is no disaster (2021). Pre-disaster measures can delay and control disasters. A controlled disaster will not have a major and fatal impact on human life. The pre-disaster stage is known as disaster mitigation.

Haifani said that mitigation is a series of actions that should be taken before a disaster occurs, with the aim of reducing disaster risk. The pre-disaster stage is known as disaster mitigation (2018). Mitigation is an effort with the aim of minimizing the impact of a disaster by carrying out proper planning. Tunggal

et.al. claim disaster mitigation functions as a form of preparedness and early warning for the community in dealing with disasters (2019).

### **Social Mitigation**

The social structure experiences instability which affects the social system as a whole when a disaster occurs. Seeing the aid process that is structural in nature often encounters obstacles. It takes local social forces to take part in a responsive manner, so efforts for recovery can be earlier.

The social strength that is unique to the people of Sulawesi - South is social capital known as siri 'na pacce. Disaster response based on this principle also became first aid.

The surrounding situation and conditions will inspire a sense of pacce and siri' as social beings for the Buginese and Makassarnese in general (Tenrigau, A. M., Dahlan, 2020). Disasters will evoke a sense of pacce (empathy) for anyone who sees it. Pacce is a form of solidarity with the suffering of others (Syarif, Sumarmi, Fatchan, & Astina, 2016). The downturn of some people experience is also part of the downturn of the whole human being. This sense of pacce encourages the emergence of a sense of siri' (shame) in oneself so that every element of society will feel it and be encouraged to help.

Siri' na pacce is a mitigation capital because people who live in disaster-prone areas are not too worried because they know

that there will be other communities who will help in the event of a disaster. This concern of siri' and pacce culture or self-respect and empathy have developed widely in the people of South Sulawesi particularly, and Indonesia in generally. The government can save budget expenditures to help refugees or communities affected by disasters.

The philanthropic reactions of various groups in South Sulawesi are known to be very strong. Solidarity actions are never absent to contribute to fundraising for disaster victims. Humanitarian movements always respond to every disaster that exist.

This solidarity is also based on a very deep sense of empathy (pesse) and self-respect for humans, which is part of the actualization of the siri' and pacce culture which is typical of the people of South-Sulawesi.

The implementation of siri' and pacce values does not end there. Even after the disaster has passed, this local values are still implemented through the assistance of the people's livelihood recovery. Communities who are members of community organizations also gain up assistance both from within and from outside to restore the livelihoods of the people affected by the disaster.

These assistances are commonly referred to sustainable livelihood programs or advanced livelihoods. This program aims to restore the people's livelihoods that have been lost. With this program, disaster-affected communities can restore their economy, so

they do not sit idly by continuously. These donations come from the philanthropic solidarity of both individuals and from foundations that implement pacce's values..

One of the characteristics of Indonesian society, especially in South-Sulawesi, is the mabbulo sipeppa culture (united called gotong royong). Koentjaraningrat categorizes the culture of gotong royong which is known by the Indonesian people as mutual assistance and mutual cooperation. The culture of mutual assistance occurs in disaster event activities, such as activities of household, party, celebration and in disaster events. While the culture of mutual cooperation, community service is usually done to do things that are in the public interest (Dolorosa, 2019).

The loads of gotong royong in South Sulawesi are siri' and pacce. Siri' and pacce will be more easily implemented in social behavior if through social networks. Putnam suggests that social networks are a part of social capital (1993). Lawang also gives his view that basically social networks are formed because of a sense of knowing each other and helping each other in implementing or overcoming something (2005). Sakaria more sharply sees social networks as relationships between individuals that have subjective meanings related to things as knots and ties (2014).

According to Wellman, one of the characteristics of network theory is the concentration of thinking at the macro level,

meaning that actors or actors can be individuals or may also be groups, companies, and communities (Ritzer, G & Douglas, 2014). In essence, the concept of network in social capital refers to all relationships with other people or groups allowing activities to run efficiently and effectively. By building a relationship with each other, each individual can work together and make it easier to get out of difficulties.

Social networks are a valuable asset. Social networks occur because of the interconnectedness of various individuals or groups in society. This network will be colored by a distinctive typology in line with the characteristics and orientation of the group. In social groups that are usually formed traditionally on the basis of lineage similarities, hereditary social experiences and shared beliefs tend to have high siri na pacce power, but are vulnerable to being built very narrowly. On the other hand, groups built on the basis of common orientation and goals with more modern management characteristics will have a better and wider level of participation or siri 'na pacce power.

If the local value of siri na pacce can be managed not only in terms of the similarity of traditions but can be built based on the similarity of orientation and humanitarian goals with more modern management, it can increase active participation in disaster mitigation to be higher, larger and wider.

## Cultural Mitigation

Mitigation in the cultural approach is disaster control and prevention through culture and traditions as well as local wisdom of the community (Triana, 2017). One of the cultures and traditions as well as local wisdom of the people that developed in South Sulawesi is the songkabala tradition.

Songkabala basically reflects the system of human relations with the creator and nature as fellow creations. As people in South-Sulawesi generally understand land as the beginning and source of life. This tradition exists through ritual practices in several places in South Sulawesi. Various hopes and prayers are offered to the almighty God, so the community remains harmoniously side by side. The songkabala tradition is believed by the Buginese and Makassarnese as a sacred tradition that can prevent the community from calamities.

Agustina says that songkabala is a tradition that is carried out to reject all reinforcements, disasters, or calamities that will befall the community (2021). Songkabala is carried out at certain times and in certain areas it is usually carried out during the Islamic month such as the month of Muharram, the month of Sha'ban and also the month of Rajab which has been agreed upon by the community previously together. Songkabala which is held during the month of Muharram is commonly referred to as Jepe 'Shura or Shura porridge.

However, it is also a difficult scientific explanation to accommodate local wisdom as a mitigation system, so the step that is often taken is to rely on advanced technology, and more was done when the disaster took place. In fact, it is important to see what social practices are carried out by the community that can maintain environmental resilience. The principles of science are too empirical and deny local wisdom with social facts that are important for development.

We have known that several disasters can occur due to human activities, such as the case of the Lapindo Mud, floods, landslides, and so on. Sabiq Manshur mentions the sociological factors of natural disasters as a result of excessive exploitation of natural resources, development that is not environmentally friendly and the use of inappropriate technology (2019).

Considering that Indonesia is also an area that is prone to disasters, all aspects need to be seen as a system that is related to one another. Besides, we have to think that the damage caused by humans, thus we pay attention to aspects of behavior that can take care of that existence is very important. The people of South Sulawesi generally believe that they can still enjoy the fruits of natural wealth because they maintain their good practices with the environment.

In order to maintain good practices and human obedience to the environment, some forests are sacred and strict action is taken

against those who destroy them. These traditional efforts are able to preserve the forest and everything contained in it such as water, stones, wood, bamboo, shrimp and other land animals. Such activation of local values can be a disaster mitigation. All disasters caused by human activities are contrary to local values that require humans to respect, protect and purify the environment.

Local culture is very important to be preserved and developed because it contains normative values that can be a unifying tool (Safitri, A., & Suharno, 2021). Local culture is built on the basis of communal interests, not individual so that every action is always born from social considerations.

The socio-cultural intervention system is very realistic because local wisdom exists in every community in the archipelago. This is a big capital for the community to respond to disaster problem.

## CONCLUSION

Based on the description aforementioned, it can be concluded two things; disaster management in Indonesia is still spontaneous and does not optimize social and cultural interventions as a mitigation system. The social approach is optimized through the use of social capital and social networks. While the cultural approach, by optimizing local knowledge and traditions of mutual cooperation.

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