

IMPLEMENTATION OF FLOOD DISASTER MITIGATION POLICY COMMUNITY-BASED IN CILACAP REGENCY, CENTRAL JAVA, INDONESIA



Rudi Subiyakto¹

Sri Suwitri²

Endang Larasati²

Prayitno Prayitno³

¹Doctoral Student on Public Administration Program Diponegoro University Semarang

² Public Administration Program Diponegoro University Semarang

³ Wonosobo District Regional Disaster Management Agency

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Abstract

Cilacap Regency is the region that has the highest Disaster Risk Index in the Central Java Province, this area has the risk of floods, water robes, landslides, droughts, tornadoes, earthquakes, and tsunamis. Data from the Indonesian Disaster Risk Index (IRBI) in 2016 shows the level of disaster risk in Cilacap Regency occupying the 17th position nationally and first from 35 regencies/cities in the Central Java Province with a score of 132 (high hazard class). Under these conditions, a Disaster Mitigation Policy is needed. Legally, the Mitigation Policy in Cilacap Regency has been regulated in Regional Regulation Number 1 of 2012 concerning Violation of disaster management, especially in article 43 which includes several activities, namely: (1) Spatial planning implementation (2) Arrangement of infrastructure development, governance buildings, (3) Organizing education, counseling and training, both conventional and modern, so that regional governments are expected to be able to develop disaster information, disaster databases, and maps in order to minimize the impact of disasters. Therefore, in this study, trying to describe the analysis of the implementation of disaster mitigation policies in Cilacap Regency. The research method used is a qualitative research method by looking at phenomena in the implementation of disaster mitigation and the factors that support and inhibit them.

The community plays a role according to the direction of the BPBD. The community continues to coordinate, communicate and cooperate in carrying out its role. The non-technical role is carried out through socialization, education, advocacy to the community in the flood disaster area.

Introduction

Based on data from the Regional Disaster Management Agency of Central Java Province, this region, including those that are very prone to disasters, is spread evenly throughout the region including floods, water robots, landslides, droughts, hurricanes, earthquakes and tsunamis, which requires vigilance and preparedness of the entire community to minimize the impact of the flood disaster.

Referring to a study conducted by the National Disaster Management Agency (BNPB) on the Indonesian Disaster Risk Index (IRBI) in 2015, Central Java ranked first in 27 provinces categorized as highly vulnerable to all types of disaster vulnerability. (IRBI 2011; Central Java BPBD 2015). Furthermore, based on the Indonesian Disaster Risk Index in 2016, Central Java Province ranks 13th at the National level from

26 provinces with a score of 158, including high risk (IRBI 2013; BPBD Central Java 2016).

Cilacap Regency is a Regency in the Central Java Province which ranks 3rd Nationally and ranks first in the Region in Central Java Province for disaster vulnerability (IRBI 2013; BPBD Central Java 2016). The Regional Disaster Management Agency of Cilacap Regency recorded the number of losses due to natural disasters that occurred throughout 2016 reached Rp.71.5 billion. The amount of this loss was caused because, throughout the year, Cilacap district was hit by disasters in the form of tidal floods, flash floods and submersions, landslides, and tornadoes. The highest amount of losses is due to rob floods in the southern coastal region of Cilacap district which reached Rp. 40,090 billion. Flash floods and submersions occur 25 times in 64 villages with losses reaching Rp. 20,899 billion.

Humans are the cause of natural disasters having increased scale especially in hydro meteorological disasters such as floods and wind storms (Cutter, Boruff & Shirley 2003; Vos et al. 2010). Floods always have a broad impact on human life, damage infrastructure, and the natural environment (salami, 2017).

Legally, the mitigation policy in Cilacap Regency has been regulated in Regional Regulation Number 1 of 2012 concerning Violation of Disaster Management, especially in article 43 which includes several activities, namely: (1) implementation of spatial planning; (2) arrangement of infrastructure development, building management; and to (3) the implementation of education, counseling and training, both conventional and modern. So that the regional government is expected to be able to compile disaster information, databases and disaster map in order to minimize the impact of disasters caused.

Flood-prone areas pose a risk of human casualties, and damage and loss of property.

Scholars explain that people living in flood-prone zones are able to resolve disturbances caused by floods, while those in flood-prone zones without conditions that threaten will have no risk of disaster (Muller and Weiland,2011; Wisner et al. 2004; Smit and Wandel 2006;, Turner et al. 2003, and Brenkert and Malone, 2005.

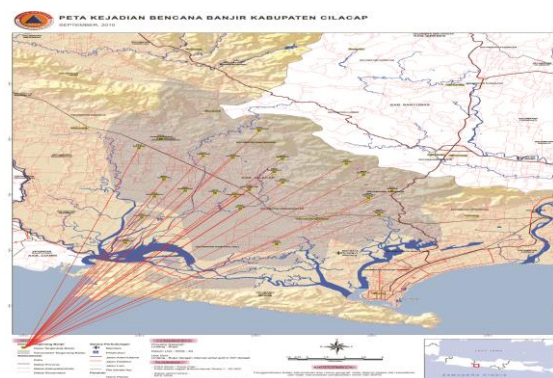
This shows that flood risk represents a function of vulnerability and danger. Cutter (1996) and Cutter (2000) in Isa et al. (2018) describe vulnerability as a condition that inhibits the ability of

people in certain areas to overcome flooding. Vulnerability has dynamic traits in line with the conditions, systems, and environment of a community. Scholar suggest that suggest that the vulnerability of flood areas consists of three aspects: exposure, sensitivity, and adaptive capacity (Douben, 2006; Smit and Wandel, 2006.

Low levels of flood risk represent a high level of community resilience (Isa 2015). The resilience as the ability to survive and overcome it flooding and deal with post-flood problems that will ultimately minimize risk (Djalante and Frank, 2011). The collective behavior of the community in overcoming flooding represents community resilience. The high level of community resilience is a product of community empowerment against flooding. Because the level of resilience is the conception of the effort produced, community resilience to flooding can be considered a product.

In disaster mitigation policies, the community becomes an important part involved in its implementation. The role of the community in disaster mitigation is a basic need, because of the disasters that occur in their lives. It is hoped that community participation in disaster mitigation can minimize the impact of the disaster. That is why this article is important to be a media in describing the role of the community in implementing disaster mitigation in Cilacap district.

The purpose of this study describes community-based disaster mitigation and the analysis of the role of the community in Cilacap district, Central Java Province, Indonesia.



1. Literature Review

Disaster is a serious disruption to the functioning of a community or community on any scale that has an impact on human, material,

economic and environmental. Readiness means knowledge and capacity developed by the government, response and recovery organizations, communities and individuals to effectively anticipate, respond to and recover from the possible, immediate or current disaster impacts. Prevention is taken to refer to activities and actions taken to avoid existing and new disaster risks. As far as possible, preventive measures seek to fully reduce the possibility of recurrence of disasters and reduce risk (vulnerability and exposure). Mitigation is defined as reducing or minimizing the adverse effects of a hazardous event. Mitigation actions/actions are taken with the recognition that although the adverse effects of hazards cannot be completely prevented, the scale/severity and severity can be significantly reduced.

UNISDR (2009) defines disasters as serious disruptions to the functioning of a community or society that involve extensive losses from human, material, economic or environmental impacts, which exceed the capacity of the affected community or community to cope with using the disaster itself. resource.

UNISDR considers disasters as a result of a combination of many factors such as exposure to hazards, existing vulnerability conditions, and capacity or inadequate actions to reduce or overcome potential negative consequences. Disaster impacts can include loss of life, injury, illness and other negative impacts on human physical, mental and social well-being, along with damage to property, destruction of assets, loss of services, social and economic disruption and environmental degradation.

DM Act 2005 defines disasters, accidents, catastrophes or serious events in any area, arising from natural or man-made causes, or due to accidents or negligence resulting in the loss of many lives or human suffering or damage to, and destruction, property, or damage, or degradation, the environment, and are of such or large magnitude beyond the coping capacity of the community in the affected area.

UNISDR Disaster Management defines disaster risk management as a systematic process for using administrative, organizational, skills and operational capacity decisions to implement policies, strategies, and capacities to address communities and communities to reduce the impacts of natural hazards and environmental disasters and related technologies. It consists of all forms of activities, including structural and non-structural actions to avoid (prevent) or limit (mitigation and preparedness) the adverse effects of hazards. The definition for the term Disaster Management Management 'is not included in the handbook of the

UNISDR terminology. However, it is proposed, but has not been adopted.

Disaster Risk Reduction 'UNISDR3 has proposed the following definition for the term Disaster Management (UNISDR 2015b): "Organization, planning, and implementation of the steps to prepare to respond to and recover early from a disaster. "According to this definition, 'Disaster Management' focuses on creating and implementing preparedness and other plans to reduce the impact of disasters and rebuild them better. Failure to make/implement a plan can cause damage to lives, assets, and loss of income. However, that may not completely prevent or eliminate threats.

Disaster Risk Reduction, according to UNISDR, consists of a framework of elements that will help minimize vulnerability and disaster risk throughout the community, to avoid (prevent) or limit (mitigation and preparedness) the adverse effects of hazards, in the broad context of sustainable development. Especially disasters are triggered by natural or human-caused hazards, or the result of a combination of both.

According to Law Number 24 of 2007 concerning Disaster Management, the definition of mitigation is a series of efforts to reduce disaster risk, both through physical development and awareness and capacity building in the face of disaster threats.

In general, in practice mitigation can be grouped into structural mitigation and non-structural mitigation. (BAKORNAS PBP 2002, Direction of Urban Disaster Mitigation Policy in Indonesia). Structural myths are an effort to minimize disasters and disaster risks carried out through the construction of various physical infrastructures and using technological approaches, such as the creation of special canals for flood prevention, volcanic activity detection devices, earthquake resistant buildings, or the Early Warning System used to predict the occurrence of a tsunami wave.

Non-structural mitigation is an effort to reduce the impact of disasters other than those mentioned above. Can be within the scope of policy-making efforts such as making a regulation. The Disaster Management Act (PB Law) is a non-structural effort in the policy field of mitigation. Another example is the creation of urban spatial planning, capacity building of the community, and even reviving various other activities that are useful for strengthening community capacity, as well as part of this mitigation. This is all done for, by and in the communities living around disaster-prone areas.

Non-structural policies include legislation, regional planning, and insurance. Non-structural policies are more related to policies aimed at avoiding unnecessary and destructive risks. Of course, before you need to identify risks first. Physical risk assessment includes the process of identifying and evaluating the possibility of a disaster and the possible impacts.

Mitigation policies, both structural and non-structural, must support each other. The use of technology to predict, anticipate and reduce the risk of occurrence of a disaster must be balanced with the creation and enforcement of an adequate set of regulations that are supported by an appropriate spatial plan. Frequent occurrences of floods and landslides in the rainy season and drought in several places in Indonesia during the dry season are mostly caused by weak law enforcement and regional spatial use that is not in accordance with the surrounding environment. Technology that is used to predict, anticipate and reduce the risk of a disaster must be sought so as not to disrupt the balance of the environment in the future.

Technically, in the implementation of natural disaster mitigation in Cilacap Regency, it has been regulated in the Cilacap District Regulation No. 1 of 2012, so to minimize losses due to natural disasters, the Cilacap District government must be guided by these regulations, wherein the Article points governing Implementation of Disaster Mitigation

Community-based disaster risk management (CBDRM) is an emancipatory approach to risk management that aims to empower communities to reduce the forms of local risk and underlying vulnerabilities, thus building a stronger community (Zweig, 2017).

Community risk assessment (CRA) is an important element of CBDRM, which combines a very participatory risk identification and risk analysis process. Conducted on a relatively small geographical scale, community-led risk assessments can determine the nature, spatial level, temporality and reality of local risks and related vulnerabilities experienced. It also offers a 'bridge-to-practical strategy for integrating local development efforts on the one hand with strategies to reduce the impact of disaster risk priorities on the other' (Holloway & Roomaney 2008: 18). By incorporating local knowledge and insights, CRA can identify the nature of local risks, taking into account the many hazards, realized impacts or potential impacts on local communities.

2. Methodology

Qualitative design methods used in research (Creswell, 2013). All communities are used as resource persons. Data collection is done through interviews and observations. Data processing is done in qualitative descriptive. The analysis technique includes the phenomena of the role carried out by the community in disaster mitigation in the Cilacap district.

3. Discussion and results of research

Implementation of flood disaster mitigation policies in Cilacap Regency is a process that must be followed continuously by the community in managing all hazards through efforts to minimize the consequences of disasters that may arise from these hazards. The community consists of individuals and groups.

Table 1. Community Role In Disaster Mitigation

No	Community	Role		
		Pre-disaster	During a disaster	After a disaster
1	Muhammadiyah Disaster Management Centre (MDMC)	Socialization, education about disasters in Cilacap	Handle victims	Assistance to the traumatic center
2	Taruna Tanggap Bencana (TAGANA)	Disaster training for youth	Help with disaster victims	infrastruktur Recovery
3	Sentra komunikasi mitra polri	Dissemination, disaster information, early warning, pamphlets or disaster banners	Helps safeguard the environment, establish communication between affected areas	Helps secure and reconstruct infrastructure

All roles of communities in disaster mitigation in Cilacap district are in accordance with the directives of the Regional Disaster Management Agency as the leading sector in the implementation of flood mitigation in Cilacap district, each community has a similar role but in accordance with the background of the community's ability. MDMC has broader capabilities because it is motivated by a strong parent organization, Muhammadiyah with its hospitals and educational institutions, TAGANA supports young people in Cilacap flood areas to participate in mitigation, Sentar community.

Meanwhile, the obligations of the community are (1) Maintaining a harmonious social life of the community, (2) Maintaining balance, harmony, harmony, and preservation of environmental functions, (3) Carrying out disaster management activities, and (4) Providing the correct information to the public about PB.

In fact, the role of the community is involved in pre-disaster, during disasters, and post-disaster. The role of the community during pre-disaster includes (1) Participating in the making of disaster risk analysis, (2) Conducting research related to disaster, (3) Making Community Action Plans, (4) Active in the DRR Forum, (5) Making disaster prevention efforts, (6) Cooperating with the government in mitigation efforts, (7) Following education, training, and counseling for DRR efforts, and (8) Working together to realize Resilient Disaster Villages / Villages. The role of the community at the time of the disaster includes (1) Providing information on disaster events to the BPBD or related agencies, (2) Carrying out independent evacuations, (3) Conducting rapid assessments of the impact of disasters, and (4) Participating in emergency response according to their expertise. Meanwhile, the role of the community during the post-disaster period is (1) Participating in the making of an action plan for rehabilitation and reconstruction, and (2) Participating in efforts to restore and develop public facilities and infrastructure.

This is in line with the research conducted by Jurenzy (2011) in several villages in the affected Cilacap Regency which reported that if there were signs of a flood occurring, namely the status of the river level had reached alert 4, almost all respondents said they would move goods their valuables to a safer place. The results of this study were also reinforced by Dodon (2013) research which revealed that most people made the intensity of the duration of rainfall as a source of information based on their experience in dealing with flood disasters.

Communities need an early warning system that includes warning signs and information distribution in the event of a disaster. A good early warning system can reduce the damage experienced by the community (Sagala, 2014). A good system is a system

where the community also understands the information that will be provided by the early warning sign or knows what to do if one day the warning signs are sounding (Sutton and Tierney, 2006).

According to Latour in Katanha (2019), placing the community as a network of actors is not an object. The community is an interconnected object. Actors are individual entities; actor - network is a group of actors: a heterogeneous network of entities that are connected to each other through different relationships, whose resistance has been overcome (Law, 2007). In a network, there is a sense of belonging between actors and networks.

The response of the community in dealing with floods is very diverse, according to the flood experience felt by each individual. Psychologically, one of the responses expressed by the community can be described through feelings, feelings that arise in the community can provide a real picture of the feelings felt during a flood. According to Yulaelawati & Usman (2008), experiences experienced by individuals during a disaster can make a person become traumatized by a disaster, the response shown makes one translate through response expressions and expressions, including anger, sadness, loss, regret to depression. Flood events should make the public aware of the impact (Rohman & Suroso, 2012). Impacts experienced by the community, especially social impacts and economic impacts directly affect people's attitudes towards existing disasters. Communities make economic and social impacts their most important consideration in dealing with floods (Sagala, 2014). Based on the results of this study, according to researchers, various effects of flooding have been experienced by the community when there was a flood, for this reason, preventive action is needed to reduce the impact.

Conclusion and Recommendation

The community plays a role according to the direction of the BPBD. The community continues to coordinate, communicate and cooperate in carrying out its role. The non-technical role is carried out through socialization, education, advocacy to the community in the flood disaster area.

The government needs to provide disaster management technical training to the community to be able to develop skills, expertise in disaster mitigation. nodules should be given intensively and frequently so that communication skills and skills are maintained.

Research Limitations

Research is only conducted on communities that have institutions. Research has not touched individual or small group communities.

Implications of future research

Future research can observe small, non-institutionalized communities and play a role in flood disaster mitigation.

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The author conducts a study of the role of the community in implementing disaster mitigation as part of the dissertation. The author is a Doctoral student of the Public Administration Program at Diponegoro University, Semarang, Indonesia.

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