

Stakeholder Analysis In Flood Disaster Management Policy In Bojonegoro District

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Abstract—This article reviews the stakeholder analysis of flood disaster management in Bojonegoro district. The approach to the implementation of flood disaster management should use a hybrid/sinergy approach that is a mix combination of top-down and bottom-up approaches. The role and interaction of the community in disaster management should adjust to the empowerment paradigm. The role and interaction of the elements of government involved are more on improving coordination and intensifying communication, conducting community education, coaching, monitoring, and giving strict sanctions for sand miners. The Private Element must have a sand mining permit, especially an environmental impact analysis study from the Environmental Agency so that the sand mining undertaken does not damage the environment.

Keywords—*stakeholder, disaster analysis, management policy*

I. Introduction

Flooding is a threat of high risk disasters in Indonesia, especially to property and infrastructure and is very threatening to the wheels of the people's economy. As a result of the disaster risk study compiled by BNPB in 2015, it was seen that the number of people exposed to the risk of flood disasters spread across several islands with a number exceeding 170 million and the value of the exposed assets exceeding Rp. 750 trillion. Flooding can be caused by static natural conditions such as geography, topography, and river flow geometry. Dynamic natural events such as high rainfall, containment from the sea / tides in the main river, subsidence and siltation due to sedimentation, as well as dynamic human activities such as the existence of land use in floodplain land that is not appropriate, namely: by establishing settlements on the banks rivers, lack of infrastructure to control floods, subsidence of land surface and rising sea levels due to global warming [1].

Common problems that cause flood disasters in the Indonesian Disaster Risk Book (2016) include watershed conditions in critical condition as a result of rainwater

infiltration into the aquifer system decreasing and land erosion increasing so that sedimentation in the channel and river mouth is also high. The capacity of the existing flood control system such as river basin dimensions, water reservoirs, drainage systems and others is inadequate. The limited ability and number (quality and quantity) of HR in government and community organizations. As a result, the performance of the government, community and stakeholders related to flood risk reduction is still not optimal resulting in the high number of fatalities and material losses in the event of a flood disaster. The availability of up-to-date disaster risk reduction technologies such as information technology, databases and early warning technology in flood-prone areas is not sufficient and the community's role in empowering the early warning system is not well developed. The orientation of disaster risk reduction is still more focused on emergency or curative handling and has not yet led to prevention or preventive aspects (including flood disaster mitigation).

One indication of the lack of optimal efforts to deal with floods is the lack of funding allocation for operations and maintenance facilities and infrastructure for flood management. Licensing, supervision, and law enforcement are still project oriented so that they exacerbate efforts to reduce the risk of flood disasters. Disaster response management is still inefficient because agencies and communities are not sufficiently trained in disaster preparedness. Provision of funds to carry out flood disaster risk reduction programs that are flood mitigation in nature needs attention from the government (Indonesian Disaster Risk Book, 2016).

East Java Province is one of the provinces in Java whose regions are at high risk of flooding such as Sidoarjo, Lamongan, Jombang and Bojonegoro. The existence of the Bangawan Solo River which is the longest river on Java Island is also one of the factors that causes several regions to be included in flood prone areas. Especially for areas that are around the headwaters of the Solo

River. One of them is Bojonegoro district which is located along the Bengawan Solo River which has the potential and frequent floods. Topography (physical area) Bojonegoro is located along the Bengawan Solo River and area of lowland (*floodplain areas*) so that every year caused floods in Bojonegoro.

The flood disaster in Bojonegoro in 2007 which was the worst year-round flood compared to other areas at that time where there were up to 3 meters of water and the flood inundated 114 villages spread across 14 sub-districts in Bojonegoro district (source: www.tempo. Com). Furthermore, in May 2010, floods accompanied 3,511 hectares of rice plants, 176 hectares of moor, and 483 hectares of crops. It also submerged settlements of 94 villages and villages spread across 11 sub-districts. The flood also broke down the Benagawan Solo embankment along 51 meters located in Ngulanan Village, Dander District, Semanding Village, Bojonegoro District, and Kedungarum Village, Kanor District. Flooding also damaged 11 elementary school buildings and four places of worship. Losses caused by floods are estimated at 27.3 billion. The biggest losses due to damage to infrastructure and rice crops that failed to harvest after submerged for three days (source: www.tempo.com). Floods in December 2013 in Bojonegoro District were 126 villages spread across 14 sub-districts submerged by flooding. The flooded area is on the banks of the Solo River. Of the 14 districts in Bojonegoro, including in Ngraho, Padangan, Kalitidu, Kasiman, Gayam, Malo, Trucuk, Dander, Bojonegoro City, Cotton, Kanor, Sumberejo and Baureno Districts. November floods in 2017 also occurred in several villages in Bojonegoro including Growok Village, Kunci and Sumberarum Village[2][3][4].

The Bojonegoro district Regional Disaster Management Agency notes that there are 7 types of disasters in Bojonegoro district. Among them, flash floods, Bengawan Solo River floods, landslides, tornadoes, fires, drought and industrial impacts. Among the seven types of the flood disaster is a disaster Bengawan Solo river with highest loss level. Vulnerability of Bojonegoro area to natural disasters require regional governments also played a role in protecting the whole community. In the context of organizing disaster management in the area of Bojonegoro district. The Bojonegoro district Government established the Regional Disaster Management Agency (BPBD) in accordance with Law Number 24 of 2007. Based on this Bojonegoro district Government issued a Bojonegoro District Regulation No. 11 of 2010 concerning the organization and work procedures of other Bojonegoro Regencies with the issuance of the Government Regulation officially formed the Bojonegoro BPBD. Considering the importance of systematic, integrated and coordinated disaster management, it is certainly not enough if it is only regulated by the Regional Regulation of Disaster Management Institutions, so in 2012 Regional Regulation No. 7 of 2012 published in Bojonegoro district on Disaster Management.

Bojonegoro district policy on disaster management aims to implement a systematic, integrated and coordinated response. The purpose of the policy is concerning to;

- a. Reducing the potential for disasters
- b. Minimizing the number of victims of disasters;
- c. Realizing the implementation of disaster management in a planned, integrated, coordinated and comprehensive manner;
- d. Maintaining security, sustainability and environmental harmony
- e. Realizing public and private participation and partnerships in disaster management efforts
- f. Encourage the spirit of mutual cooperation, solidarity, and generosity;

Results of research conducted by Kiswanto on the implementation of local regulations No. 07 of 2012 Bojonegoro District on disaster management in Bojonegoro District (case study of flood disaster management Bengawan Solo) implementation of regional legislation Bojonegoro Disaster Management still achieve the expected goals, the government is still slow in dealing with a disaster that occurs and also in providing assistance to victims is still lacking, disaster management funds are lacking [5]. In addition, many people do not understand disaster reporting procedures and tend to wait for people who understand about disaster reporting procedures that will later report on disaster events. The number of staff is small or limited, there is mechanical sand mining around the river.

Problems of implementation regulations in Bojonegoro district on flood prevention, as mentioned above, can be analyzed through the stakeholders analysis. Flood disaster management in Bojonegoro expects the role and interaction of stakeholders to work together to support the achievement of policy objectives. This article reviews the stakeholder analysis of flood disaster management in Bojonegoro district.

II. Research Method

This study uses a qualitative method. This approach will be able to provide a deep understanding of complex social phenomena. Data related to the stakeholders involved and how they interact in implementing flood disaster management policies were obtained from interviews, observations and documentation

III. Result and Discussion

Stakeholders in public policy may include any person or organization whose interest may be positively or negatively affected. This includes government organizations and private businesses of all sizes, local authorities, the general community, other interested parties such as voluntary and community organizations, disadvantaged groups, indigenous groups, and people of non-native language speaking background. Every public service involves a wide range of relationships between policy makers and its stakeholders, and enhanced partnerships with those stakeholders potentially provides a

cost-effective way of obtaining good or better quality knowledge in an increasingly resource-constrained environment. Indeed, legitimacy of public policy now often depends upon a process of exchange between society and government [6].

Freeman provides a definition of stakeholders as those who are affected by the policy and those who can influence the policy ("... who is affected by the decisions and actions they take, and who has the power to influence their outcome is stakeholders")[3]. From Freeman's definition it can also be said that stakeholders are those who affect or are affected by a decision or action. According to Eden and Ackerman in Bryson stakeholders are "people or small groups with the power to respond to, negotiate with, and change the strategic future of the organization"[7].

The stakeholder theory helps to identify the external people, groups and organizations that claim the organization's attention by employing resource dependence and institutionalism. Freeman suggested a method called stakeholder analysis by which an organization is able to scan its environment looking for threats to be avoided or opportunities to be exploited[8]. Several scholars have proposed a methodology for doing so. Among them, Bryson and Joyce suggested the following checklist [9][10]:

1. Identification of stakeholders;
2. Identification of how stakeholders influence the organization;
3. Identification of what the organization needs from each stakeholder;
4. Identification of the criteria used by the stakeholder in evaluating the organization; and
5. Ranking the stakeholders in a rough order of important

Stakeholder mapping can help in the environmental assessment of activities and can determine the best way to negotiate in discussions about activities. The results of stakeholder mapping are as follows:

1. A description of the interests of the stakeholders in relation to formulation or implementation of policies;
2. Identification of potential conflicts between stakeholders due to different interests that can threaten the successful implementation of a policy;
3. Help map the structure of relationships between stakeholders so that they can be taken into consideration to arrange cooperation or coalition;
4. Helps in formulating the types of participation expected from different stakeholders .

Schmeer analysis stakeholders is useful to know who the key actors are, their knowledge, interests, positions, alliances, and importance related to the policy allows policy makers and managers to interact more effectively with key stakeholders and increase support for a given policy or program [11]. By carrying out this analysis before implementing a policy or program, policy makers and managers can detect and act to prevent potential

misunderstandings and/ or opposition to the implementation of the policy or program. A policy or program will more likely succeed if a stakeholder analysis, along with other key tools, is used to guide its implementation

The successful implementation of a policy is determined by the understanding of stakeholders who support and oppose it. Both groups must be well understood in:

- a. importance: things that are strived for or considered important by stakeholders.
- b. resources: what resources will be used by stakeholders to fight for their interests
- c. channel: the channel through which stakeholders will act in the fight for their interests
- d. likelihood of participation: the likelihood that they will participate or behave in relation to their interests.
- e. level of influence: the effect that will be obtained from the mastery of resources or stakeholder participation
- f. implications: implications of the influence of stakeholders on policy implementation strategies
- g. action: the actions we need to take to respond to or anticipate stakeholders with the influence they have.

Flood disaster management stakeholders in Bojonegoro district include: government elements, private elements and community elements. The role and interaction of these three elements must work together in efforts to overcome the flood disaster in Bojonegoro.

Government elements

Government elements in flood disaster management in Bojonegoro include:

1. Great Hall Solo yang implement water resources management including planning, construction, operation and maintenance in the context of the conservation of water resources, water resources development, utilization of water resources and control of water resources in the basin.
2. East Java Province BPBD, Bojonegoro district BPBD, Basarnas, Tagana are disaster management teams
3. The health department and PMI are tasked with providing health services at the disaster site, the social service provides social assistance to disaster victims, the public works service is tasked with assisting in the filling and construction of flood retaining embankments.
4. The military and police are tasked with protecting the disaster site and assisting in the SAR process.

Private Element

In some of the Sungai Bengawan Solo flow points there is sand mining activity. The activities of sand mining to make the damage area to dikes and increase the potential for disaster, so that the sand mining activities into resistor in an effort to minimize the potential for disaster. Sand mechanical mining has been done because mining mechanically get more results than traditional sand mining. Activities that generate economic value and

income of the community should be through legal means through sand mining permits in order to cope with any environmental damage so that they are able to manage and utilize natural resources sustainably.

Community Element

The obstacles of floods preventing is many people who refused to be evacuated because home and belongings if left displaced, causing the data collection needs of victims and channeling all assistance and help given is not in accordance with requirements in the field. The low awareness of the community to protect the environment also becomes an obstacle in the implementation of disaster management, marked by the presence of illegal sand mining activities that have the potential to increase disaster vulnerability in the area. The community also does not yet have an awareness of the flood disaster so that community independence and participation is still low in disaster management.

In carrying out disaster management, particularly with regard to emergency assistance, there are two known approaches, namely "conventional" and "empowering"[12]. The difference between the two approaches lies mainly in the way of "seeing": (1) the condition of the victim, (2) the estimated needs, (3) speed and accuracy, (4) the focus that is helped; (5) final target.

ASPECT	CONVENTIONAL	EMPOWERMENT
Condition of the victim	Victims are helpless and need goods that we have to give	Victims are active people with various abilities and capacities
Estimated need	Must do a quick / light needs assessment	Estimation of needs is carried out carefully with regard to existing capacity
Speed and accuracy	Needs are so urgent that speed and efficiency are priorities; there is no time for consultations involving the local community	From the outset must consider the long-term impact of external assistance and need to respect existing ideas and capacities in the local community
Focused help	physical and material objects	Although we provide the physical and material things we need, we must support the capacity and the social / institutional side and the attitude / motivation side.
Final target	The goal is to get things back to normal	The aim is to reduce vulnerability in the long run and to support capacity building

The conventional paradigm places the community as victims and recipients of aid so as to create powerlessness and dependency which will unwittingly slow down the recovery process because there is no self-sufficiency. So that community empowerment is one of them placing the

community as the center of disaster management, not only being an object, but also a subject.

IV. Conclusion

The approach to the implementation of flood disaster management should use a hybrid approach that is a combination of top-down (bottom-up) and bottom-up approaches. The role and interaction of the community in disaster management should adjust to the empowerment paradigm that is more actively involved in disaster management and abandon the conventional paradigm (the passive community in disaster management). The role and interaction of the elements of government involved are more on improving coordination and intensifying communication, conducting community education, coaching, monitoring and giving strict sanctions for sand miners. The Private Element must have a sand mining permit, especially an environmental impact analysis study from the Environmental Agency so that the sand mining undertaken does not damage the environment.

Acknowledgment

A big thank to the Dean of Faculty of Social Science and Law, State University of Surabaya. Thanks to international conference funding. By those, this paper conference can be carried out.

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