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Disaster Relief-Based on Local Wisdom (A Case Study of Flood Region Watersheds/Das Tuntang In Gubug Region of Grobogan District)

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ABSTRACT

This research based- by the flood, which nearly always occurs annually in Central Java. One of them occurred in Gubug region of Grobogan district. The flooding occurred due to the high discharge of the water that flows into Tuntang River resulted in many point. Based on data reported by the Government of Gubug region in October 2016 has occurred which resulted in the flooding of 3,530 houses inundated, three homes washed away and hundreds of acres of rice fields submerged in water up to 1 m. Similarly, in December 2017 flooding also occurred which resulted in the House and 140 acres of 2,124 rice fields is under water. The issues examined in this study is what impact experienced by the community due to the occurrence of flooding and flood mitigation efforts how based on local wisdom. Study of theoretical research in addition based on Act No. 24 in 2007 about disaster relief that mandated the need for respect for the local culture, also based on the philosophy those human beings in addition not only the object of disaster but also as subjects in disaster relief. Here local wisdom plays a role in disaster relief efforts, including floods. The research conducted using qualitative research methods perspective of Phenomenology. The location of the research conducted in three villages namely Gubug, Kuwaron and Ngroto villages, of Gubug region. The collection of data or information executed with in-depth interviews, observation and documentation. The analyses of the data or information are using technical analysis to cultural themes. The results showed that the flood resulted in a disruption of all aspects of community life that includes a social life, economics, politics or the Government's work. Flood disaster relief efforts in the forms of local wisdom like communally, the process of adaptation, celebrate the tradition, the role of community leaders proved being able to play a role in tackling as well as minimize the disaster risk. Based on the findings of the research efforts of repair, either by a structural approaches (physical improvements) and non-structural approach (behavioural or institutional) needs done. Similarly, local wisdom must continue developed and become one of the basic considerations of each policy in disaster relief.

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1. Introduction

Flood disaster is one of the issues that always occur every year in Central Java. This is because Java is an area that has many rivers ranging from small to large scale. Based on data that inventoried by the Central Java province that the Latest Data Center abbreviated as Pusdataru in Central Java there are 10 Rivers Basin/ with 202 Watersheds/ River Basin abbreviated as DAS. (pusdataru.jatengprov.go.id/sungai-di-jawa-tengah.html). One of large-scale River in Central Java is a Tuntang river, which is part of the territory of the region of Jratunseluna River (DAS of Jragung, DAS of Tuntang, DAS of Serang, DAS of Lusi and DAS of Juana) whose territory includes the Salatiga District, Semarang District, Boyolali District, Demak District and Grobogan District.

DAS Tuntang wide as long as 106.5 Km with an area of DAS is 830.82 M², water discharge (downstream) 722 M³/dt and slope (downstream) 0.0014. The upper reaches Watershed of DAS Tuntang are on Semarang District (Rawapening) while the lower parts are in Demak District. In every rainy season almost certainly experienced, that DAS Tuntang is getting flood. This caused by high rainfall, low embankment surface so that the river is not able to accommodate the overflow of water. These conditions are compounded by damage to land in the river basin should be planted with protected plants, have changed with annuals planted so not able to prevent the occurrence of soil erosion resulting in the river superficiality. The flood happened at DAS Tuntang resulted in inundation in several areas, among others, in Gubug Region of Grobogan District. According to the results identification of Agency Management Watersheds known as (BPDAS) Pemalijratun that there has been a flood on Sunday February 8, 2009 in Grobogan District covering Godong Village (Tinanding Village), Gubug Region (Kuwaron Village, Kemiri, Gubug and Rowosari), Purwodadi Village (Kuripan Region), as well as in Tegowanu District (Mangunsari Village). The transportation area disrupted is Gubug – Kedungjati, while the number of homes submerged = 1,320 units, the amount of farmland inundated = 374 ha, (www.pbdas-pamalijratun.net/.../95/identifikasi-permasalahan-banjir-di-das-tuntang). This condition always repeated almost every year.

Based on the information it reported KRjoga.com that on 9 October 2016 flooding has occurred on Tuntang River. The river levee broke at preached three points due to not being able to resist the flow of water after a heavy rain occurred in Grobogan District since Sunday, October 9, 2016 until Monday afternoon, 10 October 2016 overnight. As a result, approximately 2,050 houses and a hundred acres of farmland in 7 villages scattered across the four sub 0.5 metre-high floods inundated – two meters. It even these three houses, which carried by the currents, drifted briefly. In addition, the floods also cut off traffic between Gubug– Juwangi Boyolali, because the sections of the highway in Kemiri Village is under 1 meter high inundated and inundate sections of the highway around Gubug-Salatiga. In Kuwaron Village as high as 50 cm. Waterlogged House is located at As many as 450 houses in Kemiri village, three of which were washed away, Ngroto is 350 houses, Papamrejo is 300 houses, Rowosari is 300 houses, these fourth in Gubug District. Later in Tinanding Village Godong Village are 350 houses. Tanggirejo and Sujorejo villages of Tegowanu Sub-District are 300 houses. <http://krjogja.com/web/news/read/12175/Tanggul>

The following month reported also by the electronic media that Muria Newspaper on Wednesday, November 9, 2016 has occurred with the frequent floods of Tuntang River which resulted in some areas of the County, such as Grobogan, Semarang, and Demak Districts flooded. In Grobogan District, oGubugRegoin one of the areas most badly flooded. There are five villages inundated as result of River embankment such as Tuntang River i.e. Ngroto Village, Kuwaron Village, Rowosari Village, Papanrejo Village and Penadarhan Village (www.koranmuria.com/2016.published On Thu 10 Nov.2016).

In December 2017 based on official government reports that Gubug Region reported flooding has occurred with an altitude varying among 20 – 100 Cm in this area. There are reportedly as many as 2,124 homes, 1 school and 140 Ha of rice fields flooded (Gubug Region Government Flood Reports Arrest in 2017).

The problem of flooding in almost every rainy season occurs in DAS Tuntang ascertained brings harm to the community, both in social as well as economic. Social activities everyday society both social activities everyday society both in the family environment or society will be disrupted. While the

economic activities of the community to work in all fields of economic activities such as agriculture, trade, service, formal sector, the informal sector and so forth will be paralyzed. Similarly, with the course of conduct of the Government Region, both with regard to the implementation of administrative or public service to the community will be disturbed.

Numerous attempts in solving a flood at DAS Tuntang countermeasure had done by the Government or society. In Watershed Management Plan of Tuntang (RPDAS Tuntang) stated that the internalization management plan contained in DAS implemented by BPDASHL. PemalirratunTuntang area has organized various activities aimed at realizing the optimal water DAS area optimally, embody the condition of productive land suitable power support and capacity in a sustainable way, and institutional development and improving the welfare of the communities surrounding this WATERSHEDS. As for some of the activities within the WATERSHED management plan include protection of Tuntang Cliff River forest area, controlling erosion and sedimentation, the normalization of creeks, conducting Prokasih (River Cleaning Program), rehabilitation forest and land, includes the community in river maintenance, protection and conservation programs of natural resources and so on (bpdashl-pemalirratun.menlhk.go.id).

From the various program activities that have described that in essence aimed at tackling the flooding around DAS Tuntang. However, the activities of the various programs have not fully succeeded in liberating society from the threat of floods. The community still has to continue to take the initiative to address the flood every rainy season arrive almost certainly flood will occur.

As a country that belongs, to have high-risk levels are against the occurrence of the disaster, one of which is flood disaster, now Indonesia has had an ACT that became the umbrella law in disaster relief efforts. The umbrella law is law No. 24 in 2007 about disaster relief. In this ACT mentioned that one of the goals of disaster relief efforts is to appreciate the local culture (chapter II article 4 paragraph d). In other words in the legislation-contained mean appreciating the importance of local culture plays a role in disaster relief. This means that any form of disaster relief efforts should still consider sustainability and the role of the local culture. This is the local culture in the other sense is expressed as local wisdom (local wisdom). Thus, as mandated in the Constitution of the shrimp that disaster relief should appreciate the local culture so the focus of this research would directed at the efforts of disaster relief based on local culture or local wisdom. By placing local wisdom as the focus of the research then expected to find out how the capacity of the local wisdom plays a role in disaster relief efforts.

2. Research formulation

Based on the background of the problem, which has been described so formula problem that would covered in this research, are:

1. What does impact experienced by communities in Gubug Region of Grobogan District that caused by the floods that occurred in DAS Tuntang Region?
2. How does refiel flood implemented by community in Gubug Region of Grobogan District, especially various efforts based on local wisdom.

3. Literature review

As one of the countries, that have a high risk of the occurrence of various kinds of disaster, Indonesia has now has an ACT No. 24 in 2007 about disaster relief. In this ACT described that disaster is defined as an condition or series that threaten and disrupt the lives and livelihoods of society caused, either by natural factors and/or non-natural factors as well as humans factors resulting in the onset of human casualties, damage to the environment, loss of property, and the psychological impact. A natural disaster is a disaster caused by the condition or series caused by nature, among others, in the form of earthquakes, volcanoes, tsunamis, floods, droughts, hurricanes and landslides.

Central Java is one territory in Indonesia, which has a potential range of disasters, one of which was flooded. This is because in Central Java there are many rivers ranging from small to large. One of the river is Tuntang River in Central Java often experiencing floods inundate some areas which include Semarang, Grobogan, Demak Districts.

Floods are one of the types of natural disasters caused by high rainfall so that the river no longer has the ability to retain water capacity so abundant inundate the area around the river. Other than, by high rainfall flooding also occurred because of land use change, which was originally a forest that serves as backup water storage, transformed into cultivation and urban land. Studies conducted by HidayatPawitan (flood free 2015 wordpress.com) showed that according to 10 River basins (DAS) great changes had occurred in Java land functions of forests turned into land cultivation. Land use status of the ten main WATERSHEDS already dominated by the cultivation and urban land that shows the level of the region development. The use of farmland and rice has reached 50-85%, and urban reach almost 30% for Citarum and Brantas, while the vast majority of forestland had already been below 20%. The latest data from the body of the Planologi vast cover of Ministry of Forestry abbreviated as Dephut stated that forests of Java currently living 4%.

This will have an effect on hydrology of watersheds. Studies conducted by HidayatPawitan about "DAS Ciliwung Hydrology and its effect on flooding in Jakarta" shows that the study of the impact of land use change between 1981 and 1999. By using the hydrological model HEC-1 shows the rising flood discharge from Ciliwung (Katulampa) by 68 percent and Middle Ciliwung amounting to 24 percent, while the increase in the volume of flood for 59 percent of Upstream Ciliwung and Middle Ciliwung by 15%. This change has also followed by increased participation upstream towards the discharge and volume of flooding in downstream area of DAS.

Flood as a disaster certainly brings a very adverse impact for the community life. The loss experienced not only in the form of damage to the environment, loss of property, but also of human sacrifice. Studies conducted by the BagongSuyanto on "the impact of Floods among the poor in Bengawan Solo River WATERSHED" generate findings that for the people who live in the Bengawan Solo River WATERSHED as the flood resulted in Lamongan and Bojonegoro suffering be the first, and most common is flood caused their debts increase. Second, because of the flood of arable land and damaging their homes, most of the savings—if anyone—finally drained. Thirdly, flooding due to overflow of the river Bengawan Solo also caused their production on asset damaged particularly arable land or store/ that they manage. Fourth, the threat of the occurrence of health disorders poor families (<https://www.pressreader.com/indonesia/kompas/20161210/281646779769774>).

In order to minimize the impact caused by the occurrence of disasters, especially floods, numerous attempts need to be made or action so that the risk experienced by society is not getting bigger. Damage and losses from natural disasters is encouraging the community to take action to minimize the loss/damage (Lindell and Whitney, 2000). Intensita the impact felt by the community will affect the community in doing the Act of preparedness. The community preparedness actions undertaken after the community suffered a great loss and damage due to natural disasters (Lindell and Whitney, 2000). Community preparedness actions tend to do when losses began to emerge from the impact of the floods disaster appears (Takao et al., 2004). Disaster impact felt by the community will directly influence the actions of preparedness (Takao et al., 2004).

In the disaster relief effort Act No. 24 in 2007 on disaster mitigation have been instructed that the purpose of disaster relief is in addition to providing protection to the community dariancaman disaster, should also considering the appreciation of the local culture. This contains the intent that in disaster relief efforts cannot release from linkages with local wisdom.

Wisdom etymologically means human capabilities in using the sense of their mind for addressing an event, an object or a situation. While the local interaction space where shows are events or situations happen. Thus the local wisdom is the positive behavior of human beings in touch with nature and the surrounding environment, which is sourced from religious values, customs, ancestral or cultural, who woke up naturally in the a community of communities to adapt to the surrounding environment. Behavior that is common and widespread in the Community applies, hereditary, will develop into the values that firmly, and referred to as the culture or cultures (Ernawi, 2009 p. 7).

Other definitions of local wisdom to mention (Nurman Ali Ridwan, 2007) that the local wisdom or often called local wisdom can be understood as a human endeavor with the use of sense (cognition) to act and being against something, objects or events that occur in a particular space. Local wisdom to emerge is through a process of internalization that is long and lasts from generation to generation because of interaction with the environment. This long evolution process boils down to the rise of the value of the critilize system in the form of customary law, trust and the local culture. Thus, the local

wisdom is prevailing norms in a society that believed to be the truth, become a reference in Act, and behave in everyday (in Ernawi 2009, p. 7-8).

Nowadays local wisdom often becomes the theme of the scientific study of various fields of science, especially the social sciences, one of which is the study of disaster management. Managen disaster in the perspective of local wisdom becomes one of the basic considerations in disaster relief efforts. The philosophy that underlies the need for local wisdom to become one of the basic considerations in disaster relief is that the community in addition to being a victim or object of the occurrence of the disaster, but at the same time should also positioned as a subject or perpetrator in disaster relief efforts. Putting the community as the subject or perpetrator in disaster relief since the fact remains that the communities often faced or experienced a disaster is always trying to adapt and perform various ways that can be done in minimize the risks of disasters. By way of the sort of society become familiar, durable, and will know what is needed as well as able to do take an effort to do in facing a disaster.

In a study conducted by Sagala about "Adaptation a Non Strutural against Flood in Mention" Bandung Regency pointed out that people in the neighborhood Mention has a high preparedness in emergencies and there is a positive correlation between the actions with the impact of the disaster preparedness and the characteristics of the respondents. From the results of research show, that for people whose houses have a high risk of being affected by floods, then the community more initiative to improve preparedness. Similarly, if the social and economic impacts, including health care felt by the community judged detrimental, then the community is also increasingly more trying to improve preparedness (Sagaladkk., 2014, pp. 14-15).

Meanwhile Suparmini et al in his study on "disaster mitigation-based local wisdom" found that the Baduy community on the local wisdom of the forest and water in relation to disaster mitigation and flood longor reflected in function and layout of Woods and water. Baduy community forest divides into 3 namely the forest zoning restrictions, the forest of dungusan or dudungusan, and forest plots. Forests are forests that prohibition should not accessed by anyone who is in it, even Baduy community or indigenous leadership though. There are restrictions in the forest area of protected forest in the South are applied to BaduyTangtu. The forest of dungusan or dudungusan serves to protect the upper reaches of the river.

Dudungusan forest is a forest conserved because it is on the upper river, or in it considered there is a sacred ancestral place believed or applied. Meanwhile, the forest is forest plots that could till into the fields Applied by the community in General. Division of forest zoning and utilization in accordance with the functions defined as the rules or traditions that should adhere to by all citizens are applied (Suparmini et al.2014 p. 62-64). According to Suparmini et al.in one of her conclusion stated that the local wisdom of the community are applied in the form and custom rules in the management of land, forest, and water, by dividing the area of forest in three zoning proved able to do prevention or mitigation of disasters, both disasters earthquakes, floods, landslides, and fires.

In approximately the same perspective while the local wisdom is meant as one form of the traditions prevailing in society and hereditary inherited from generation to generation, then the results of the study conducted by Maskud entitled "Local wisdom In Tackling the disaster of flash flooding and Landslides in Panti Region of Jember Regency" worthy of becoming the reference. In the study, it found that local wisdom as a tradition people related to efforts to combat floods and landslides in Panti Region of Jember Regency IE: Ruwatan (Village Clean). Ruwatan is one of the traditional ceremonies with a primary purpose of safety so that people get free from all sorts of misadventures of life, ugly fate, and further in order to achieve a life peace or in Javanese stated as ayom-ayem-tentrem (safe, happy, peace). The tradition Ruwatan (clean village) in Jember Regency held on month of Sura (Javanese Month). The tradition begins with Selamatian (a ceremony), pray together, Nyekar (there and pray for the local ancestors), then proceed with cleaning the village environment communally.

Local wisdom as knowledge that comes from the experience of the community that inherited through tradition from generation to generation, local wisdom can also interpreted as a collection of local knowledge that could found the community surroundings community, as well as individuals. The knowledge used in guiding the life society in daily around its interaction with the surrounding and family environment. According to point of view stated that the local wisdom, it defined as a collection of local knowledge use as a guide in the daily life of the community. Then the local knowledge could

found on the results of research conducted by NovidaWaskitaningsih in her research entitled "local wisdom Sub-system of society in the face of the flood of Bringin Drainage". This research done is against the people in seven villages in the sub-system dainaseBringin, Semarang City.

In her research NovitaWaskitaningsih discovered that the local wisdom is reflected in an early warning system that includes a method of monitoring the impending danger of flooding, the method of communication used in informing the dangers of flooding, as well as the evacuation process done (Wakitaningsih, 2012 386-390 thing). In the monitoring of the impending flood dangerous, people doing observations on the intensity of the rainfall and the height of the water surface elevation of the river. If high rainfall intensity and a long period, then the elevation of the water level of the River would increased so that it is almost certainly the flooding will occur. While the method of communication that done in communicating the dangers of flooding done by traditional means such as the use of loudspeakers in mosques nearby, or by hitting the slit drum, electric pole while shouting out the flood. As for the evacuation process carried out in the places that are in the position of the height, either in houses or in public places like a mosque.

Based on the framework and the various references to the results of studies that have been put forward, then this study seeks to elaborate on how the attitudes and behavior of the community in flood disaster primarily shown through ways, habits, traditions, customs, and beliefs prevailing in the society in the hut that is the existence of local wisdom. With a growing number of studies of this kind expected to further strengthen the scientific rational argumentation that local wisdom has an important role and contribute to disaster relief.

4. Research method

This research approach uses qualitative research methods or techniques the perspective of Phenomenology, i.e. research methods that aim to describe facts or social reality by nature and deep. The location of the research established in Gubug Village, Ngroto Village, and Kuwaron is in Gubug Region Grobogan District. The third election of the village based on the consideration that the third elected village is a village that belongs to the most severely affected in the event of flooding.

This research includes the informant society, which affected flood, volunteers, and community leaders both formal and informal. The selection of informants is done using the method of purposif, i.e. the selection of informants is done by considering the knowledge, experience and the direct involvement of the informant with the phenomenon of flood and countermeasures based on the discernment the local is the theme of research. The selection process takes place in informant rolling from one informant-to-informant in gathered information in the hope of gradually getting complete and profound. This kind of process in qualitative research is often termed the process just snowball (snow boiling process).

The phenomenon of research that will be excavated from this research include an overview of the impact or consequences of flooding experienced by communities in these three villages penelitianseperti the impact of social, economic, political or Government at the local level. In addition, the study also seeks to explore and describe the various efforts made by community in these third research villages in tackling the flood based on local wisdom like a habit-with the ability, traditions, customs customs applicable in the community. All aspects that became the focus of the research is based on viewpoints and experiences of community or emic perspective as infoman research, that they as the perpetrator understand various phenomena, both concerning the impact caused both flood relief efforts by being performed based on local wisdom.

In this research, the collection of data or information has done using a variety of methods that include in-depth interviews, focused group discussions, observation and documentation. In-depth interviews and focused group discussion conducted with the aim to explore a wide range of experience and knowledge of the informant linked to the floods, a result of the experienced and the various efforts of the countermeasures that done based on local wisdom.

Observation and documentation carried out in order to observe and document the various events or incidents related to the phenomenon of flooding and its effects as natural by the community, as well as observing and documenting various attempts countermeasures carried out based on local wisdom.

In the process of collecting data or information, the researcher becomes the main instrument (reasecher instrument). It based on a view that the curiosity towards the various events that examined it only exists on the researcher. However, researchers also use tools in the process of collecting data or information, namely in the form of an interview guide are open, and the tool documentation.

Analysis of the data or information made in this research is by using technical analysis of cultural themes (discovering cultural themes analysis). Technical analysis is intended to discuss various aspects related to the phenomenon of research based on the viewpoint culture of the community is concerned. So the meaning or significance of an event that portrayed trying to understand as part of the culture of the community is concerned.

5. Result and discussion

Flooding is a natural phenomenon that occurs in every rainy season, caused by high rainfall so that the Lake and the river is no longer able to accommodate the water discharge water eventually overflowed inundate the Mainland either locality, fields, fields and so on. Flooding will be a disaster in the event of a large scale and cause damage to the environment, loss of property, as well as human sacrifices. Large and small scale flooding as well as the impact caused will be the basis for determining the situation of emergency.

From the results of research in the field revealed that almost every year flood have always occurred in Gubug Region of Grobogan District caused by the frequent of Tuntang River that source of water comes from Rawapening Lake located in Tuntang Sub-District Semarang Regency. History of flood events in Gubug Region has been going on for a long period, tens even hundreds of years ago. History of flooding in the Huts cannot release from folklore or mythology of Baruklinting, which has grown tens even hundreds of years ago. In the mythology of the beginning of the formation related to Rawapening Lake and the river flood in Genesis Tuntang. In the mythology of the story originated from the venue of the competition a wooden trunk, unplug plugged into soil that done by a little boy named Baruklinting. Because no one is able to revoke the unpluge, wood embedded by Baruklinting himself and immediately from the former embedded whole wood pulled out of the water that caused floods and resulting in the Rawapening Lake.

Associated with the collective memory of the community about the history, the intensity and scale of flood of the results of the interviews with the informant that the average 50-year-old stated that at the time they were aged children flood already often occur in Gubug Region. The informant's recollection of events based on flooding in large scale happened in 1993 in which the height of the water reaching up to 2 meters giving rise to the damage and some human sacrifice. It is therefore the opinion of informants representing the public events of the flood, as it has become a routine thing common in the hut. In other words, the public is already familiar with the Genesis flood, which nearly always occurs in its territory. Thus, at the time of entering the rainy season the community collectively undertake activities together contribute a work program of repairing drains and clean up the environment in order to anticipate the occurrence of floods.

Routine occurrence of flooding that occurred at Tuntang River could not release from the natural conditions in the area of river basin/WATERSHED in Tuntang. Based on the results of the study of secondary data and observations are in the field showed that natural conditions area Tuntang watersheds has the potential to contribute to the occurrence of floods along the basin river area in Tuntang, particularly in Gubug Region. Secondary data from the study noted that the river is the main river as Tuntang has nine sub DAS which which means potentially contribute to discharge water at Tuntang river. The level of the slope of DAS Tuntang dominated by areas with shape of flat region which has a slope of 0-8% slope level as wide as 74.22%.

The percentage rate of closure of land DAS Tuntang dominated by the area with the closing rate is very bad of 41.79%. While related to erosion class DAS Tuntang have heavy erosion rate of 32,475.15 Ha. Based on the results of field observations are in a way down Tuntang River from Gubug Region to Rawapening Lake retrieved the image of that level of sedimentation of Tuntang River experienced belongs to high so that many found the point location the flow of Tuntang River narrowing so that water capacity of Tuntang River is not optimal. Of the whole picture of natural conditions in the area of river basin/WATERSHED, Tuntang River indicates that existing natural condition belongs to bad and contributes to the occurrence of floods.

The flood happened in Gubug Region caused by the frequent of Tuntang River certainly have impacts on various aspects of public life. From the research results, can known that in the aspect of social life of the community disrupted by the flood Genesis. The public could not be fully running in daily activities such as work, activities in the household, social activities in home environment, school activities for children of school age and so on. In the aspect of economic life also disrupted. Economic activities such as the buying and selling in the markets, shops and places of activities of other shopping can not run normally. Not even a little bit of the traders in the market, in stores and other compelled shopping does not open his efforts caused floods inundate the region where its efforts. This lasts approximately 2 to 5 days until the flood receded again.

In the aspect of the Organization of the Government, especially to community service as a Ministry in the Village Offices, district, health centers, hospitals, schools, police, banking or other financial institutions and as also experienced interference. Not all activities of the Organization of Government and community service can progress normally. However, in the aspect of political life that is associated with the trust of the community towards local government belongs to the still strong. Although people's lives disturbed by floods which occurred in its territory but the community still hope and believe the Government is capable to help community in saving, safeguarding security and alleviate the burden of suffering the community's flooding. From the results of research conducted through in-depth interviews with the informant revealed that in the event of flooding. The County Government to the village in collaboration with various stakeholders such as institutions, Police, TNI, BPBD, SAR, PMI, KSB, Simbad, Scout, Caretaker, and various social institutions, religious organizations and other community components work together helping communities in the face of floods. A variety of activities undertaken such as the rescue of the victim (the evacuation), secure the property, maintaining the security of the environment, help the necessities of life, health aid and so on. All of which ultimately provide a sense of security to the people so that the kepercayaan community against the Government continue to run as usual and do not experience a decrease (distrust).

The occurrence of floods that is always recurs every year when the rainy season pushed the Government and all parties need to conduct a relief effort. Flood disaster relief is a series of activities conducted by the Government together with the elements of society that intended to prevent, avoid, mitigate and recover from the impact brought about by catastrophic flooding. Flood disaster relief efforts can made by means of two approaches i.e. the structural approach and non-structural. A structural approach to disaster response is the response that emphasizes on how to repair the physical buildings such as rivers, levees, floodgates, dredging of sedimentation and so on. While the approach is non-structural countermeasures are with the how to grow and maintain a social and institutional change community behavior.

Research on flood disaster mitigation in Gubug Region focused on disaster relief through non-structural approach. The philosophy underlying the research of disaster relief through non-structural approach is that humans often in addition to being the object of the disaster but at the same time also became the subject of or perpetrators of the disaster relief effort. In the relief disaster, community disaster efforts evidently have their own various ways and habits that do to avoid or reduce the risk of disaster. Various ways and habits that have done is the existence of local wisdom. As expressed by Nurma Ali Ridwan that local wisdom can be defined as human effort by use a sense (cognition) to act and behave against an object or event that occurred (in particular spaces of Imam SantosoErwani, in RespatiWikantiyoso and PindoTutuko (editor), 2009. 7). The results of the research conducted in the community revealed that Gubug Region of Grobogan District have ways and habits that are often done in avoiding and reducing the risks posed by floods to occur in its territory. Various ways and habits include developing an attitude also reflects life among the public by doing work of communally in Tuntang River embankment strengthening, cleaning up the environment, water, garbage and so on When entering the rainy season. It is intended in the wet season has occurred then the neighbourhood will avoid or minimize from the puddle. It also reflects life contribute a mutual undertaking to tackle and stanch job to minimize risk caused by flood events shows that in Gubug Region existing social institutions play a role in efforts to combat disaster. The development of social institutions such as Tagana (midshipman disaster preparedness), Simbat (community-based disaster management system), Karangtaruna and many others helped play a role in disaster relief efforts.

Other habits conducted among residents in Gubug Region disaster relief related to each impose restrictions village for residents who live near Tuntang river embankment so as not to plant the embankment with annuals or annual plant. This is because with plant levee with plants or annual season will make the soil labile embankment landslide and easily eroded river water so that will result in flooding embankment, which can endanger people's lives. Despite the ban by the community adhered to the real but still found some people who plant the embankment with annuals such as maize, cassava, bananas and so on.

In an effort to minimize disaster risk and to cope with the flood of people in Gubug Region made efforts of protection and adaptation to flooding almost every year. Protective measures and adaptation done by mean of elevating the floor of the House or renovating the building into terraced houses. This kind of habit or way of verily has long conducted by community which is predecessor generation custom build traditional houses of antiquity in the form of home staging by using wood. Building construction home staging of this sort in addition to avoid or minimize from Flood inundation is also easier to do renovations or demolition must done if the reconstruction with the aim to adjust the flood condition case. From observations in the field of traditional houses of this kind could still found though in very little quantities. Along with the development of human civilization headed into modern society, then this adult building in Gubug Region has experienced a change by building the modern-shaped House.

One of the other local wisdom done by people in Gubug Region in tackling the disaster of floods is a growing tradition of holding ceremonial called as Selametan. This tradition is meant to say a prayer to the Lord, the one who set up this life so that the public is given to safety, avoid the disasters mainly flooding disaster. Although in the tradition of holding ceremonial, (Selametan) implemented in a way that is different in each village but there is a commonality of purpose i.e. closer to God pleading for salvation as well as aligning yourself and the relationship of harmony with nature. In Kemiri and Ngroto Villages celebrate the tradition of organizing is done by means of istighosah read the manaqib, sholawatnariyah and prayer-the prayer of salvation previously done completing the reading of the Qur'an. The Organization of this kind of istighosah done in mosques, field, even in places that if such a catastrophe could cause in the embankment of the river. While in Gubug and Kuwaron Villages, celebrate the tradition known as Siweran i.e. the ceremony please salvation by way of surrounding villages led by a head of the village and religious leaders. This tradition of a Siweran procession starts from Village Hall runs heading into the corner of the West Village, then walk towards to the North corner of the village, to the eastern corner of the village, to the southern corner of the village, to the western corner of the village and ended up returning to the village hall.

From all forms of local wisdom in flood disaster relief efforts in Gubug Region, which has described as foregoing one thing no less important was the role of the leaders of the community. Community leaders such as village chief, leaders of religious and other community leaders have a very important role in moving society to cope jointly with the disaster. Not rarely the leaders of this community was directly involved in various activities such as cleaning the environment, rescuing victims, seeking logistical support to help maintain the security of the victims, the environment and so on. With the involvement of directly the community leaders is community then moved to strive jointly to cope with the catastrophic flood happened in Gubug Region.

6. Conclusion and suggestion

Based on the successful findings compiled through research that includes the cause of the occurrence of floods, as well as the impact of effort handling based on local wisdom, which has described earlier, then the results of this research it can concluded as follows:

1. The phenomenons of flooding in Gubug Region has lasted long enough and occur almost every year because of the frequent of Tutang River which resulted in river embankment at some point.

2. Flooding in Gubug Region caused by increasingly poor condition of the area upstream to downstream in Tuntang River like superficiality of Rawapening Lake. The high sedimentation and the superficiality of the river and the riverbanks for land use planted with annuals in Tuntang River capacity

resulted in the more limited so it is no longer able to accommodate the discharge water that exceeded the normal threshold.

3. Flooding in watersheds of Tuntang, especially in the area of Gubug Region resulted in disruption of the various aspects of people's lives that include social life, economics, politics and the operations of the Government.

4. Develop and continue towards local wisdom occur in Gubug Region proven capable role pushing society in tackling and minimize the risk of catastrophic floods that occur every rainy season.

Suggestions

1. To solve the problem of flooding as well as minimize the impact brought about necessary improvements in efforts ranging from tackling the superficiality of Rawapening Lake area as a shelter and a water source of Tuntang River. As well as the environmental conditions, watersheds of Tutang way normalize the flow of the River with the structural approach (physical improvements) and non-structural approach (improvement of community behavior).

2. Local wisdom turns out proven capable of encouraging community efforts in tackling the disaster of floods. Therefore, any policy formulation in the disaster relief effort needs to put on local indigenous knowledge as one of the factors that form the basis of any policy of disaster relief efforts.

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