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Implementation Of Earthquake, Tsunami, And Liquefaction Emergency Response Policies At Palu Municipality

Subhan Haris¹, Slamet Riadi², Hasbullah³

¹Assistant Professor, Tadulako University Social Science Doctoral Program ²Professor, Tadulako University Social Science Doctoral Program ²Associate Professor, Tadulako University Social Science Doctoral Program

Abstract:

This study aimed to describe the implementation of the emergency response policy for the earthquake, liquefaction, and tsunami disaster in Palu City which occurred on September 28, 2018. The research used a qualitative descriptive method, with 9 informants selected purposively. with the analytical method starting with data collection, condensing data, presenting data, and drawing conclusions or verification.

The results of the study show that in the policy-making process for an emergency response to the disaster that occurred in Palu City, it should be designated as a national-scale disaster with the main mission of saving human lives during a critical period of 72 hours after the disaster, the basis of the policy is the consideration of compelling conditions so that it can use the adage Salus populis supreme lex esto (people's safety is the highest law), the use of policy discretion, and that the main responsibility for disaster management is the government, as well as the low capability of local governments in handling emergency response,

According to this disaster experience and learning, it is appropriate that in establishing emergency response policies, it is necessary to reformulate disaster management policies, especially emergency response that is adaptive according to the conditions of the disaster that occurs by using the logic of conformity, that in the implementation of disaster emergency response policies, communication indicators, and indicators are needed. Coordination shapes transaction patterns because handling requires the collaborative work of all parties.

Rearrangement of the bureaucratic structure for implementing the emergency response policy which explicitly includes the agency or institutions responsible for the emergency response period and hierarchically from the central government down to the village government structure, so that preparations and simulations can be carried out as preparedness, especially inclusion the duties of the Regional Secretary as the Head of the Regional Disaster Management Agency who are responsible for disaster management in the regions, that of program preparation, operational needs, financing, and others. especially in meeting the urgent needs of the victims, one should use a bottom-up pattern.

Local communities should not be positioned as target groups or policy objects in implementing policies, but should also be placed as policy subjects, which means involving an active role, especially those who are willing and able to help, as a participatory model, which is useful for empowerment, minimizing victims and tensions and reducing crystallization of transaction patterns.



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Environmental factors should be another major consideration in policy implementation, not only social, economic, and cultural conditions but also the environment from the perspective of physical conditions such as geological conditions, and impacts such as the condition of regional facilities and infrastructure.

Keywords: Policy, Emergency Response, Implementing Organization, Target Group, Environmental Factors.

BACKGROUND

Disasters always leave deep mourning, not only the loss of relatives, traumatic impacts, or loss of property, that disasters always occur suddenly when we are not prepared, as stated by Carter, Nick W (1991, xix) that disasters:

Disruption to normal patterns of life. Such disruption is usually severe and may also be sudden, unexpected, and widespread. • Human effects such as loss of life, injury, hardship, and adverse effects on health. • Effects on social structures such as destruction of or damage to government systems, buildings, communications, and essential services. Community needs such as shelter, food, clothing, medical assistance, and social care.

The four characteristics can be explained, that a disaster is a sudden, unexpected, and widespread disturbance of normal life, causing loss of life, damage to social structures and the order of government systems, buildings, communications, and essential services, causing community needs such as shelter, food, clothing, medical assistance, and other social needs, the impact of a disaster will be very large if the preparedness and prevention capacity is low or far below the strength of the disaster that occurred, especially if the policy for handling the emergency response is wrong because it will have implications for prolonged suffering for affected communities.

The disaster perspective is in line with the definition according to regulation Law 24 of 2007 concerning disaster management states:

Disaster shall mean an event or a series of events threatening and disturbing the community's life and livelihood, caused by natural and/or nonnatural as well as human factors resulting in human fatalities, environmental damage, loss of material possessions, and psychological impact.

From this definition of disaster, the criteria for an event or event to be called a disaster if it fulfills the first elements threaten or disrupt people's lives and livelihoods, second is caused by natural factors, non-natural factors, and human factors, third cause human casualties, environmental damage, property loss, and psychological impact.

The natural disaster that hit Palu City, Sigi Regency, Donggala Regency, and Parigi-Moutong Regency (Padagimo) Central Sulawesi Province, was initially reported by the BMKG with a magnitude of 7.7 SR Location 0.18 LS and 119.85E and a distance of 26 km from North Donggala, Central Sulawesi, with a depth of 10 km . which was later revised to 7.4 SR, but more accurately using the report Geotechnical Extreme Events Reconnaissance (GEER) Version 1.0;3 April 2019;1) states that:

The Mw7.5 Palu-Donggala earthquake occurred on 28 September 2018 at 6:02 PM local time and was caused by strike-slip faulting along the north-south trending Palu-Koro fault that extends through Palu City and the Central Sulawesi region of Indonesia. The United States Geological Survey (USGS) reports the epicenter was approximately 72 km north of Palu City at a depth of 10 km, and geodetic evidence indicates rupture of the fault over a length of 150 km The earthquake triggered a series of massive



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landslides, resulting in the collapse of both unreinforced and reinforced structures, and generated tsunami waves that impacted coastal areas in Palu Bay, devastating Central Sulawesi.

The magnitude of the earthquake reached 7.5 on the Richter scale, the shallowness of the epicenter at a depth of 10 km, the 150 km long fracture across Sigi, Donggala, and the center of Palu City, which is the regional Palu-Koro fault route, impacted a wide area coverage. The statement above also shows that this earthquake caused an underwater landslide which then triggered a tsunami in Palu Bay at 18:08 WITA with a runoff of 5.5 meters which hit settlements and destroyed 100 km along the coastline of Palu Bay. This is following the simulation results from EDIM (Earthquake Disaster Information system for the Marmara), a research project that is part of the University of Karlsruhe Germany).

The magnitude and duration of the earthquake also triggered a series of landslides at 18:04 WITA in the form of liquefaction in 4 locations, namely Balaroa Village, Petobo, Sibalaya, and Jonooge.

This disaster prompted international concern, in a press release on 3 October 2018, the Head of the BNPB Data Information and Public Relations Center, revealed six needs for assistance to deal with disasters, including air transportation, tents, water treatment equipment, generators, field hospitals), and fogging, from 29 countries and 4 humanitarian agencies, several countries offering SAR teams and medical personnel have been decided not to be facilitated. So only 17 countries were facilitated according to the needs of the Indonesian government which had been determined, namely the USA, France, Czech Republic, Switzerland, Norway, Hungary, Turkey, the European Union, Australia, South Korea, Saudi Arabia, Qatar, New Zealand, Singapore, Thailand, Japan, India and China, South Korea's financial assistance will contribute US\$1 million, China through the Chinese Red Cross will contribute US\$200 million, and the European Union will provide emergency humanitarian assistance worth 1.5 million euros and activate the Copernicus satellite mapping service European Union emergency.

The Emergency Response Policy is normatively regulated through Law 24 of 2007 concerning Disaster Management, which is described in Government Regulation Number 21 of 2008 concerning the implementation of Disaster Management Article 21 contains that:

Implementation of disaster management during the emergency response includes a. quick and accurate assessment of location, damage, losses, and resources; b. determination of disaster emergency status; c. rescue and evacuation of people affected by the disaster; d. fulfillment of basic needs; e. protection of vulnerable groups; and f. immediate restoration of vital infrastructure and facilities.

The regulation above mandates that 6 (six) steps/procedure stages in handling emergency response, rescue, and evacuation actions are carried out after the assessment and determination of status or the third stage.

A rapid assessment by the BNPB Quick Response Team abbreviated as TRC BNPB, is a team formed by the Head of BNPB, consisting of related technical/non-technical agencies/institutions whose task is to carry out rapid disaster and disaster impact assessment activities during an emergency response including Needs Assessment, Damage, and Losses Assessment as well as providing mentoring support (assisting Command Post) in disaster emergency management.

In determining the status of a disaster, Law Number 24 of 2007 concerning Disaster Management Article 7 paragraph 2 it stipulates that:

Determination of the status and level of national and regional disasters as referred to in paragraph (1) letter c contains indicators covering: a. number of victims, loss of property, c. damage to infrastructure and facilities, d. wide coverage of areas affected by the disaster; and the resulting socio-economic impact.

The regulation mandates that in determining the status of a disaster whether it is the responsibility of



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the government or regional government based on 5 (five) considerations or criteria, namely first how many victims died, disappeared, were injured, or had to flee, the second consideration is the value of the loss suffered by the community and the government, the third consideration is damage to infrastructure and advice, namely damage that causes service functions to be unable to function, consideration, fourth consideration is the wide coverage of the area affected by the disaster, namely the number of affected areas, while the fifth indicator is the socio-economic impact caused.

For this reason, the following are the results of processing the damage impact data from the Earthquake that triggered the landslide (liquefaction) and Tsunami, as seen from the official BNPB website as of October 21 2018 as follows:

"The earthquake, tsunami, and liquefaction disasters hit 4 areas in Central Sulawesi, namely Palu City, Donggala, Sigi, and Parigi Moutong Regencies which were directly affected by the disaster. The impact of the disaster until Sunday (21/10/2018) at 13.00 WIB, 2,256 people had died. In Palu City, 1,703 people died, Donggala 171 people, Sigi 366 people, Parigi Moutong 15 people, and Pasangkayu 1 person. All the victims have been buried. A total of 1,309 people were missing, 4,612 people were injured and 223,751 people were displaced in 122 points. Many buildings and infrastructure were destroyed by the disaster. Damage included 68,451 housing units, 327 houses of worship, 265 schools, 78 offices, 362 shops, 168 roads with cracks, 7 bridges, and so on. This data is temporary data, which will increase as data collection continues. The BNPB Rehabilitation and Reconstruction Team continues to collect data and conduct rapid assessments to calculate the impact of the disaster. The results of the temporary calculation of losses and damage due to the disaster based on data as of 20/10/2018 reached more than 13.82 trillion rupiah. It is estimated that the impact of losses and damage due to this disaster will increase, considering that the data used are temporary. Of the IDR 13.82 trillion economic impacts caused by the disaster, losses reached IDR 1.99 trillion and damage reached IDR 11.83 trillion. The impact of loss and damage from this disaster covered 5 development sectors, namely losses and damage in the settlement sector reaching IDR 7.95 trillion, the infrastructure sector IDR 701.8 billion, the productive economic sector IDR 1.66 trillion, the social sector IDR 3.13 trillion, and across sectors reached IDR 378 billion."

This shows that a large number of victims, the high loss of property suffered, the paralyzed activities of the City, especially the entire area of Palu City, the large area affected, and the paralyzed trade economy, as well as the traumatic effects, did not necessarily inspire the government to immediately designate it as a national disaster. But guided by the official statement of incompetence in stages.

For the disaster that occurred on September 28, 2018, an initial interview with the Head of the Palu City BPBD,. States that:

At the time of the earthquake, we were at Talise Beach preparing for the opening of the Palu Nomoni Festival, and when the tsunami came. we were with several BPBD personnel after checking the family, immediately returned to the BPBD office, to join the Pusdalops (Control and Operations Center) Personnel of the Palu City BPBD, around eight o'clock (20:00 WITA) we divided into two teams, I and 4 other people returned to Talise Beach to help Tsunami victims and collect data, while Secretary of BPBD with 2 other people went to Vatulemo Field to help refugees who started arriving, from Talise beach, together with residents and 2 other teams we were instructed to go along the beach to the north until the Mamboro Village, was immediately reported to the residence of the Mayor of Palu to then return to Talise Beach, which was then agreed that the following day the Office of the Deputy Mayor of Palu would be made into an Emergency Response Command Post.

This statement shows that the Palu City BPBD did not immediately inform the public about the disaster



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and the BPBD also did not immediately report to BNPB through the SSB. however, trying to carry out a rapid assessment and even help the refugees and tsunami victims, the power outages and communication were cut off, the BPBD Pusdalops should have been equipped with generators and emergency communication devices (SSB and RIG), mobility facilities were not in place, making it difficult to carry out coordination, this statement also implies a lack of understanding about emergency response management.

Based on these considerations, the Governor of Central Sulawesi on Sunday, September 30 2018 at around 23:00 WITA, then determined the status of an emergency response through Decree Number No.466/459/BPBD/2018 dated September 29 concerning Central Sulawesi Disaster Emergency Response and took effect within 14 days of the disaster.

The Governor's Decree appointing the Military Resort Command 132/Tadulako, is also a policy that is considered inconsistent with regulations that mandated the Regional Secretary of Central Sulawesi Province as Head of BPBD, on the other hand, Korem 132 is type B while the Central Sulawesi Regional Police is typed A where from the point of view of the Kapolda rank is higher, the appointment of the Korem refers to Presidential Decree No. 83 of 2005 concerning the National Coordinating Agency for Disaster Management (Bakornas PB) or the regulation before Law Number 24 of 2007 concerning Disaster Management.

This earthquake disaster also caused other socio-economic impacts in the form of looting triggered by panic and the Statement of the Minister of Home Affairs, Tjahjo Kumolo, on September 30, 2018. At that time, Tjahjo said "people can pick up groceries at the Indomaret and Alfamart department store networks"

This policy was accused of being a misstep when freeing the people of Palu to collect groceries at shops and minimarkets, shortly after the earthquake and tsunami, which triggered looting at several points in the city. However, the police claim they have methods to take action against looters. Investigators promised to distinguish between thieves and disaster victims who take goods based on emergency needs. A criminologist from the University of Indonesia, Purniati, reported by BBC Indonesia, Tuesday (02/10) stated that:

The government is responsible for assisting, and not inviting people to take other people's belongings under the pretext of helping victims. If something like this happens, who will be responsible? Everyone washes their hands, why are there victims of the Palu earthquake-tsunami who instead looted television sets?" Because of panic, people easily loot. Money is not there, they can just take what they see. If other people take it, why can't I? So taking cover behind the actions of the mob, and criminal responsibility in cases is difficult, it takes a long time to distinguish between looting and taking goods to survive, but allowing disaster victims to take whatever they need like in Palu can be a bad precedent.

The statement above shows that natural disaster conditions can trigger public panic, especially regarding basic matters of survival. The government's permission to take merchandise without the seller's agreement turns the panic into uncontrollable mass actions.

The Minister of Home Affairs, Mr. Tjahjo Kumolo, then defended himself by stating:

This policy is urgent because it was difficult for humanitarian aid to be transported to Palu due to damaged highways and airport runways. We have ordered Alfamart and Indomaret to collect the goods. Keep a record of all that is taken, and inventoried. We'll pay for it all.

As a result of this statement, people flocked to collect goods from many shops and malls. The residents did not stop there. The residents also had time to stop passing fuel tankers and scramble before the ration distribution process took place.



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Another phenomenon showen indicators of socio-economic impact from the Head of BNPB Mr. Willem Rampangilei when explaining the 2018 disaster management evaluation at the BNPB Building, Matraman, East Jakarta stated:

Based on data from Bappenas, before the disaster hit, economic growth in Central Sulawesi was at 6.24 percent. However, after the disaster, it was corrected to 1.75 percent. Not only that but before the earthquake hit, inflation in Central Sulawesi was recorded at 3.65 percent. Whereas after the incident increased to 10.28 percent, due to the disaster, economic growth in Sulawesi was corrected to reach 4.49 percent and inflation increased to 6.63 percent. This resulted in an increase in new poor people in Central Sulawesi by 18.4 thousand people or an increase of 14.42 percent. Recovery is estimated to cost up to Rp 22 trillion, based on projections from Bappenas, it is estimated that it will take three years to restore the economy of Central Sulawesi after the disaster.

This loss then seemed to be justification for the government to owe the Asian Development Bank (ADB) US\$1 billion. Assistance in the form of emergency budget loans and project loans was conveyed to President Joko Widodo at the 2018 IMF-World Bank Annual Meetings in Bali as stated by the President ADB Takehiko Nakao:

The Asian Development Bank (ADB) officially provided assistance worth US\$ 1 billion for Indonesia which was intended for handling disaster-affected areas in Central Sulawesi. Assistance in the form of emergency budget loans and project loans was conveyed by ADB President Takehiko Nakao to President Joko Widodo at the 2018 IMF-World Bank Annual Meetings in Bali. "The US\$1 billion aid consists of a US\$500 million emergency budget assistance loan. ADB is also ready to provide additional financing of around US\$500 million through project loans.

From the description of the implementation of the disaster emergency response management policy that has been described above, it shows that even though the government already has policies in the form of regulations from laws to its derivatives regarding the disaster, at the implementation stage, especially for large-scale disasters such as in Palu, it failed.

Smith (1973;198-199) states that:

Even if a government of a Third World nation is committed to the implementation of a particular policy, the bureaucracy that must implement the policy cannot often implement this situation usually not found in Western societies. Generally, Western bureaucracies are relatively efficient and effective in policy implementation. For the Third World nations, a myriad of factors can contribute to the accumulation of any government policy: lack of qualified personnel, insufficient direction, and control from political leaders, opposition to the policy itself, corruption, etc. The process by which the government made the policy may have been the most rational, elaborate, "modern" method. But this may not be meaningful if the administrators cannot implement it.

The opinion above shows that even though Third World country governments are committed to implementing certain policies, the bureaucracy that implements policies often lack the capacity to implement them. This situation is usually not found in Western societies, where in general, Western bureaucracies are relatively efficient and effective in policy implementation. For Third World countries, a myriad of factors can contribute to the castration of government policies: lack of qualified personnel, lack of direction and control from political leaders, opposition to the policies themselves, corruption, etc. The process by which governments make policy is perhaps the most rational, complex, "modern" method. But this may not be meaningful if administrators can't implement it.

Especially in the implementation of policies that have high pressure such as policies in disaster, Smith



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(1971; 201) also cites George K. Zollschan's opinion about a more comprehensive model, how tensions produce changes in society, where Zollschan and friends prefer to use the term "urgency" replaces the word tension, namely the gap between the ideal policy and the actual situation:

Zollschan identifies three main types of discrepancies that may, alone or in combination, make up an exigency: (1). A discrepancy between a legitimate pattern or arrangement and an actual situation. (2). A discrepancy between a prediction (or explanation or expectation) and an observation. (3). A discrepancy between a desired objective and what is achieved. Exigencies (tensions) are linked directly with changes in society. Zollschan postulates that tensions "must trigger a series of phase processes.

In explaining the gap between policy and the reality of conditions, Zollschan identified three main types of differences that might occur either independently or in combination, which form an urgency, namely: (1). Gaps Differences between legal regulatory patterns or arrangements and the actual situation. (2). The difference between predictions (expectations) and observations (3). The difference between desired goals and achievements.

In addition to the bottom-up perspective of the community as victims of disasters, a top-down perspective is also needed from the government side, for this reason, this study also uses policy implementation analysis from Edward III in kanji (2008: 40) suggests, there are two premises for studying policy implementation, namely: (1) What are the preconditions for successful policy implementation? (what preconditions are needed for the successful implementation of the policy?); (2) What are the main obstacles to successful policy implementation? (what obstacles are experienced in its application?). to answer this important question Edwards III (1980) offers and considers four factors in implementing public policy, namely communication (communication); resources (resources); disposition (disposition or attitude of executor); and bureaucratic structure (bureaucratic structure)

This is the background for the author to examine the implementation of disaster response policies, especially from 2 (two) perspectives, namely from the top-down government side, and from the community side (bottom-up). developed by Smith, with an emphasis on a bottom-up perspective or the target group side.

FORMULATION OF THE PROBLEM

Based on the facts stated above, the authors are interested in researching how the implementation of emergency response policies for earthquakes, liquefaction, and tsunami disasters in Palu City.

METHOD

This study focuses on qualitative descriptive research, with qualitative and quantitative data types used in this research, which originate from primary data and secondary data, and are collected through observation, interviews, and documentation.

The data analysis model used in this research was the model developed by Miles and Huberman starting from data collection, analyzed with the stages of data condensation, data display, concluding, and verification.

RESEARCH RESULT

Overview of Palu City and Disaster Preparedness Geographically, Palu City is located at a geographical position of 119045'–121001' East Longitude and 0036'–0056' South Latitude. three) classification namely plains (valleys), hills, and mountains which are shaped by graben structures due to tectonic activity, especially the regional sinistral shear faults of Palu-Koro Bammelen (1970) and Katili (1978), which are



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inhabited by 381,572 people (BPS 2023).

The 2009 Disaster Risk Assessment (KRB) from the United Nations Development Program (UNDP) Safer Communities through Disaster Risk Reduction (SCDRR) program for the 2009-2014 KRB documents. Then it was reviewed by BNPB in 2015-2020 to identify 11 types of disasters that have the potential to occur. namely earthquakes, tsunamis, floods, flash floods, landslides, extreme waves and abrasion, epidemics and disease outbreaks, forest and land fires, technological failures, drought, and extreme weather, which are summarized in the 2009 Indonesian Disaster Risk Index Book (IRBI) namely 181.2 then experienced a decrease in the index to 162.7, thus placing the disaster risk level of Palu City from 11th to 164th out of a total of 514 cities/cities in Indonesia. This study also shows low regional capacity in managing disasters.

The regional government of Palu City (BPBD) has facilities and infrastructure which are assistance from various agencies and institutions, including the Tsunami Early Warning System (TEWS) and one unit of tsunami siren tower in 2011, Earthquake Monitoring and Climatology (DVB) in 2012, earthquake micrometer 2 (two) units, and link opening for climatology in 2017 from BMKG, other equipment in the form of Microsonation of Land Movement Detection in 2015, support for Single Side Band communication tools 1 set in 2013, Radio Iguaneoudon Gironde (RIG) 3 sets in 2013 for 1 in Pusdalops and 2 operational cars for the Palu City BPBD control and operations center, but during the earthquake, tsunami and liquefaction all the equipment could not function.

Implementation of Disaster Emergency Response Policy

Implementation of Disaster Emergency Response Policy: Whereas the policy implementation model put forward by Thomas Brown Smith (1973) uses system theory with a bottom-up approach and is oriented toward the target group. This model views that policy implementation causes tension. Tension is generated between and within the four components namely ideal policies, implementing organizations, target groups, and environmental factors, tensions produce patterns of transactions that may or may not be following the expected results of policymakers. Transaction patterns can crystallize into institutions. Both transaction and institutional patterns can create tension which, through feedback to policymakers and implementers, can support or resist policy implementation, where the research results show that in making disaster emergency response policies it should be made in the form of adaptive policies using the logic of conformity, where this logic of conformity forms the basis of the policy because each disaster has different characteristics in each location so that this policy should be based on 3 (three) main considerations of the logic of conformity (1) experience from disasters that have occurred; (2) consider (adaptation) to the new environment (disaster); (3) consider (adaptive) experience for institutions and these three considerations are based on the time dimension.

The emergency response policy should come from the central government, especially for disasters that have the characteristics of an earthquake magnitude above ≤ 7 on the Richter scale, have a wide area coverage, damage to the environment and infrastructure, with the possibility of a large casualty impact, paralyzed service activities, and still have an after effect. shock), to be later evaluated and used as the basis for determining the scale of a disaster, whether on a national, provincial, or district/city scale, because the accuracy and speed of the determination have implications for rescue efforts because the process of implementing a disaster emergency response policy cannot be separated from the policy-making process (policy-making process) both related to status and as a basis for mobilizing resources.

Whereas the ideal emergency response policy regulated by Law Number 24 of 2007 concerning disaster



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management and its derivatives, namely Guidelines for Establishing Disaster Emergency Status Procedures for Determining National Disaster Emergency Status (2016; 15), especially regarding procedures for determining emergency status which must be accompanied by a letter statement of incapacity in stages, in the form of:

- 1. Official statement of the incompetence of the Regent/Mayor after an assessment and coordination meeting recommending the establishment of a province-scale disaster, no later than 24 hours.
- 2. An official statement of the Governor's inability to organize an emergency response after going through coordination meetings to propose a national-scale disaster, no later than 24 hours.
- 3. The governor's statement of incapacity becomes the basis for BNPB to hold a coordination meeting to designate it as a national scale disaster or return it to the provincial scale, the answer is given no later than 24 hours.

From the procedure above, there will certainly be no rescue measures but the evacuation of bodies, because the crucial time for rescue is a maximum of 72 hours after the disaster, even though there is a statement at each stage no later than 24 hours, this is reflected in the September 28, 2018, disaster, where the stipulation Disaster Emergency response status requires 51 (fifty-one) hours after the main earthquake (the main shock) occurs.

Determination of this status is very important because as a basis for authorizing authority, mobilizing resources (people, facilities and infrastructure, and funding), thus the central government has ignored the 1945 Constitution which is based on the main principle of Salus Populi supreme lex esto (safety of the people is the highest law).). The legal adage was first uttered by Marcus Tullius Cicero (106-43 BC), then quoted by John Locke (1632-1704 AD) making it one of the fundamental principles for the life of the state, then adopted by all countries in the world including Indonesia. This adage is a constitutional guarantee for the right to life and the right to health of the community. The second consideration is the existence of discretion which is normatively regulated by Law Number 30 of 2014 concerning Government Administration (UU AP). Article 1 point 9 defines discretion as decisions and/or actions determined and/or carried out by government officials to address concrete problems encountered in administering government in terms of regulatory arrangements because natural disasters and humanitarian disasters are two potential conditions that threaten security and human safety. The third consideration is that the government understands the low regional capacity in disaster management because this capacity is summarized in the Indonesian Disaster Risk Index (IRBI).

What is interesting is that there are 2 (two) levels of emergency response policy decisions, namely the decision of the Governor of Central Sulawesi and the decision of the Mayor of Palu, which creates ambiguity regarding the disaster that occurred on September 28, 2018, which was a provincial scale disaster or Palu city scale, p. this is reflected in the unification of aid at the Tadulako Military Command 132 office, then distributed to the Palu City Military Command 1306 on the fifth day, this has an impact on the handling of refugees because the Palu District Military Command 1306 only handles refugees in the Vatulemo field so that many evacuation points are not reachable up to the sixth day.

The policy of appointing the TNI as the Emergency Response Command is not following the spirit of establishing Law Number 24 of 2007 concerning Disaster Management because BPBD in Article 23 paragraph (2) is an implementing element for regional disaster management with functions; coordination, command; and implementers in the implementation of disaster management in the region.

For this reason, in the decision-making process related to emergency response, a logic of accuracy/appropriateness is needed to answer related to indicators of time and accuracy of policies. The



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logic of appropriateness (The Logic of Appropriateness) was put forward by James G. March and Johan P. Olsen (2015, 867-892), is a perspective on how human action should be interpreted in policy-making, which looks at the aspects of accuracy of rules including cognitive and normative components. in 5 stages namely First, sketching the basic ideas of rule-based actions. Second, it explains some of the characteristics of the contemporary democratic environment. Third, we present the relationship between rules and actions, and the elements involved in carrying out rules. The four dynamics rules and standards of precision. And, fifth, the possibility of reconciling different logics of action, where the time dimension has an important role, for a government to institute a sequential sequence of action logic, followed by technical-logical implementation, monitoring, and adjudication of decisions, especially the ideal policy of Disaster Emergency Response so that policies ideal for disaster management will be following the characteristics or type of disaster that occurs. For example, the emergency response policy for an earthquake with a magnitude above 7 on the Richter scale is certainly different from an earthquake below 7 on the Richter scale, especially if the earthquake triggers a tsunami and liquefaction. Likewise with other disasters such as flash floods, and others. so the policy must be adaptive which contains two sides, namely, the bureaucratic structure of the policy implementer and participatory groups (both local communities and volunteers), the policy also considers environmental factors both in the perspective of the physical environment and the non-physical environment where the disaster occurred.

Policy adaptation is carried out based on the type and characteristics of the disaster, the size of the affected area, the estimated number of victims, the condition of regional facilities and infrastructure, and the time limit (number of days) of emergency response.

The concept scheme can be described as follows:

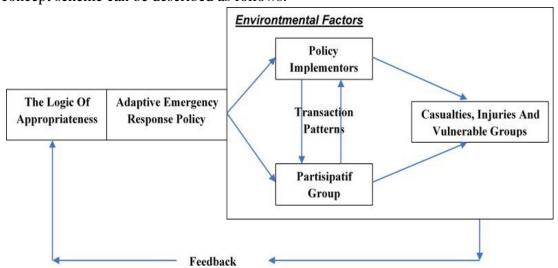


Figure 1; Concept of Alternative Disaster Emergency Response Policy

Implementing Organization

In the bureaucratic structure of the implementor of the disaster emergency response policy, the results of the research show that at the implementing organization level, there is a phenomenon of weak capacity of the policy implementor, denial of duties and responsibilities, emergence of ambiguity, ego-sectors, and other polemics so that disaster emergency response efforts become slow, reactions arise rejection that led to social disaster in the form of looting.

The bureaucratic structure in policy implementation has a central role as stated by Edward III (1980:125), namely "Policy implementors may know what to do and have sufficient desire and resources



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to do it, but they may still be hampered in implementation by the structures of the organizations in which they serve, two prominent characteristics of bureaucracies are standard operating procedures (SOPs) and fragmentation.", this shows that even though the implementers know and have the desire to implement the policy, it cannot be implemented due to weaknesses in the bureaucratic structure, that implementers are sometimes hampered because of operational standards and procedures (SOP) as well as fragmentation.

The urgency of the need for operational standards and procedures for disaster emergency response policies is urgently needed because the research results show that even though there are SOPs, the SOPs prepared are too ideal for conditions that are not ideal, SOPs are prepared uniformly and comprehensively, while each disaster incident has a character, scale, area size, local capacity, physical, social and economic environmental conditions of the community, differ in each location/region, especially in conditions of weak understanding of disaster emergency response which results in ineffective handling of emergency response, which will have implications for the high number of victims both dead and serious, moderate and light injuries. The need for operational standards and procedures in emergency response policies, especially in efforts to rescue and treat victims, needs adjustments.

The second problem in the bureaucratic structure of disaster emergency response policy implementation is fragmentation, namely the dispersion (shifting of the form) of responsibility for policy areas between several organizational units. Fragmentation is the distribution of responsibility for a policy to several different agencies that require coordination. Fragmented bureaucratic structures (divided or scattered) can increase communication failures because the opportunity for instructions to be distorted (biased) is very large. The more distorted the implementation of policies, the more intensive coordination is needed.

The fact shows that fragmentation on the one hand results in narrow views of many bureaucratic institutions, which have detrimental consequences for the successful implementation of policies. However, sometimes fragmentation is necessary when implementing a policy involving many institutions to achieve its goals. The need for fragmentation of responsibilities in the implementation of public policies, especially disaster emergency response, is urgently needed because at least several functions are running, namely (1) rescue efforts (Basarnas and BNPB) (2) evacuation of victims (volunteers), (3) information systems and communication networks, (Telkom, ORARI) (4) Handling of injured victims (medical personnel), (5). handling general refugees and vulnerable groups (6.) security, order, and regional quarantine (TNI/POLRI) (7). opening access and transportation (Binamarga and PU) (8) Trauma healing (9) distribution of logistics and warehousing/storage (transportation and BULOG) (10) public kitchens (Social and general volunteers) as well as involving government structures up to the RT/RW apparatus, This suggests that even if it is recognized that more actors and institutions are involved with a policy, successful implementation will be less likely, because fragmentation implies a diffusion of responsibilities and this makes the challenge of policy coordination even greater and more difficult. However, the resources and authority needed to solve emergency response problems require a comprehensive distribution of responsibilities across many organizational units.

Target Group Policy As Participatory Group

That the area occupied by the community can be a source of risk if a disaster occurs, especially in the case of an earthquake, tsunami, or liquefaction as happened on September 28, 2018, when the city of Palu and its surroundings is traversed by the Palu-Koro fault, a community building approach is needed in every disaster management phase starting from prevention, mitigation, preparedness, response, to recovery.



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To build a disaster-resilient society, communities need to be empowered to be able to overcome the adverse effects of natural disasters, through the implementation of various community-based programs as an important component of sustainable development. Activities include capacity building at every level of society such as dissemination, simulation, and training in disaster management, for this reason, the community is actively involved starting from program formulation, and disaster risk management initiatives. Information on potential disaster analysis.

Disaster victims are increasing along with population growth and regional development, not only in the number of victims, and physical and socio-economic losses, but also because it requires a long-term recovery process, both rehabilitation, and reconstruction. To minimize the damage caused by the disaster, various efforts have been made by the international community, including donor agencies. However, apart from the participation of these sectors during the program period, the facts show that most disaster management programs are not sustainable. This also happens in the city of Palu, which can be seen in the Safer Communities through Disaster Risk Reduction (SCDRR) program from UNDP in 2008-2011, Strengthened Indonesian Resilience Reducing Risk From Disaster (StIRRRD) grant program from New Zealand in 2011-2015, the National Program Officer of the Indian Ocean Tsunami Information Center from UNESCO-IOC in 2014-2015, these programs are not sustainable, due to weak capacity and concern from the Palu City government. For this reason, it is necessary to develop community participation in disaster management.

The most appropriate involvement of community elements is the participation and partnership model. Emphasis on disaster management efforts must be focused on communities and people who live in the Palu City area, because without sustainable disaster management efforts at the community level, it will be difficult to reduce losses if the tragedy occurs, strengthening local content, changing the paradigm from reactive to proactive and fragmenting responsibilities needs to be done as an effort to build long-term commitment, with the hope that it is this community that forms what is known as the front guard when a disaster occurs, the community needs to have the capacity to respond to the threat itself. It is for this reason that communities must be involved in managing risks that could threaten their well-being.

The National Earthquake and Tsunami Rehearsal that was held in Palu city by BNPB in 2012 seemed to be just an entertainment drama for officials who sat on the stage as spectators, the determination of Urban Resilience from PUPR in 2015 was only limited to providing corrections to the RUTR without carried out in-depth testing and assessment,

Determination of Disaster Resilient Villages by BNPB in 2015 in 2 (two) namely Baru and Lolu Sub-Districts, and in 2019 in 3 (three) namely Talise, Duyu and Lere Sub-Districts only up to the formation of forums without any follow-up or delegation to the community, as well as schools Disaster Safe Madrasah (SMAB) by BNPB in 2018 in one school namely SMPN 10. This shows that all programs are not sustainable, the project approach and positioning them as the target group, causes a lack of effective participation and builds local community participation commitment.

Law 24 of 2007 stipulates that the government and local governments are responsible for disaster management, the community only has rights and obligations without taking responsibility, the top-down and command-and-control approach models are always used to manage the consequences of disasters. Whereas the community only plays the role of "victims" or beneficiaries of assistance, the facts show that this approach has proven to be ineffective. It failed to meet a precise and urgent humanitarian need. This is because the community as the main stakeholder and direct recipient of the disaster is not given the opportunity to participate in the decision-making process and implementation of activities. On the other



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hand, communities have limited resources to deal with disasters.

That those who suffer the most are the poor, as people who have limited survival resources and do not enjoy adequate infrastructure and access to social services. Community empowerment for disaster risk management requires their participation in risk assessment, mitigation planning, capacity building, participation in implementation and development of monitoring systems that ensure their interests. This is in line with Bishnu Pandey and Kenji Okazaki (2012:3), stating that "Most of disaster responses can be characterized as a command and control structure one that is top down and with a logistics center approach. Because of this, we observe, the lack of community participation that results into failures in meeting the appropriate and vital humanitarian needs, unnecessary increase in requirements for external resources, and general dissatisfaction over performance despite the use of exceptional management measures." The statement shows that generally disaster response is characterized as a top down command and control structure and with a logistics center approach, they observe, a lack of community participation which results in failure to meet appropriate and vital humanitarian needs, an increase in the need for unnecessary external resources, and general dissatisfaction with performance despite the use of extraordinary management measures.

From the three-year study, they found the key factors to increase participation:

- 1. Building a culture of overcoming crises and a culture of disaster reduction.
- 2. The risk assessment process involves community participation and incorporates their perceptions of vulnerability and capacity
- 3. Communities and supporting institutions share the same motivation and ownership for the initiation and continuation of CBDM
- 4. Genuine community participation in capacity-building goals, with a special focus on sectoral groups such as women, the elderly, children, and ethnic minorities.
- 5. Submission of good training input following project objectives and community needs for training.
- 6. Wider stakeholder engagement and participation
- 7. Accumulation of physical, technological, and economic assets to reduce hazards and vulnerabilities
- 8. Integration of these projects into regular development planning and budgeting to ensure sustainability The importance of community participation was also expressed by Jim Ife and Frank Tesoriero (2008: 294). As a concept in community development, it is a central concept and basic principle of community development. Increasing community participation is a form of community empowerment that is oriented towards achieving the results of the implementation carried out by the community, that community empowerment in disaster management, they also assume that community participation is a form of exercising human rights (HAM).

The space for the right to participate and the obligation to enter community empowerment has been contained in Law No. 24 of 2007 concerning Disaster Management, where (1) Everyone has the right to a. get social protection and a sense of security, especially for disaster-prone groups of people; b. receive education, training, and skills in the implementation of disaster management. c. obtain written and/or verbal information regarding disaster management policies. d. participate in the planning, operation, and maintenance of health service provision assistance programs including psychosocial support; e. participate in decision-making on disaster management activities, especially those related to oneself and their community; and f. carry out supervision following the mechanism regulated for the implementation of disaster management. (2) Every person affected by a disaster has the right to receive assistance to meet basic needs. (3) Every person has the right to obtain compensation due to a disaster caused by a



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construction failure. While the obligations of the society include a. maintaining a harmonious social life of the community, maintaining balance, harmony, harmony, and preservation of environmental functions; b. carry out disaster management activities, and c. provide correct information to the public about disaster management. However, the rights and obligations of the community until the time the research was conducted were still far from being realized.

Transaction Pattern

The pattern of transactions in policy implementation, especially in the distribution of logistical assistance, must take into account the extent of the affected area, the number of exposed residents, and the point of evacuation locations so that the government's presence at the time of a disaster is immediately felt by the community because the facts show that logistical assistance is only distributed on the fifth day for residents who located outside the evacuation site such as Vatulemo Field, this can also be seen from the length of time and the length of the queue in front of the Danrem 132 Tadulako which fills the surrounding protocol streets. The difficulty in finding food, drinking water, and fuel oil, and the limited personnel to distribute it indicates the need for community participation and active role in helping, although at the same time the aftershocks that continued to occur, it was this panic that was considered to trigger chaos (chaos) by some communities. In addition to the official's statement, which was later misinterpreted by the public, to be able to collect directly from supermarkets, supermarkets, and even to warehouse areas (mass looting), this indicates the need to organize a communication and coordination system.

Environtmental factors

Environmental factors as one of the indicators in policy implementation is very important to be the main consideration in the policy implementation process because environmental factors are factors that can influence or be influenced by policy implementation. Environmental factors can be considered as a kind of limiting corridor through which the implementation of policies may even have to be forced.

The environmental component in this sense prioritizes the environment which plays a very important role in the effective implementation of disaster emergency response policies. Environmental conditions have an important role both as a supporter of the policy implementation process so that public policy objectives can be achieved, but on the other hand, without considering environmental factors as a whole, it also has the potential to become an obstacle to the policy implementation process so that policy objectives are not achieved.

The importance of environmental factor components in policy implementation was stated by Smith (1973:261) that:

environmental factors can be thought of as a sort of constraining corridor through which the implementation of policy must be forced. For differing kinds of policies, differing cultural, social, political, and economic conditions may prevail. For example, in policies related to local self-government in the Third World Nations, the basic cultural and social lifestyles at the village level may be an environmental constraint of great magnitude.

This shows that the environment is an element that can influence the policy implementation process, the environment can be in the form of socio-cultural conditions, political conditions, economy, security, health, and so on. The existence of the environment will affect the implementation of the policy because every policy implementation will always adjust to the existing environmental conditions.

James E. Anderson, et al (2022:42) argues that:



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The environment both limits and directs what policy-makers can effectively do. The environment, broadly viewed, includes geographic characteristics such as climate, natural resources, and topography; demographic variables such as population size, age distribution, racial composition, and spatial location; political culture; social structure, or the class system; and the economic system.

Anderson's statement above shows that environmental factors are not only reviewed from the perspective of basic culture and social lifestyle as stated by Smith, but also include physical aspects such as geography, climate, natural resources, and topography in addition to demographic aspects such as population size, distribution age, racial composition, and spatial location; political culture; social structure, or class system; and economic system. This is in line with the understanding of the environment from the perspective of disaster policy where one of the criteria for a disaster is environmental damage that leads to physical geographical conditions caused by a disaster.

The condition of the physical environment in the implementation of the disaster emergency response policy in Palu city is described as follows. Physical conditions are more appropriate using the understanding of geological conditions after the 7.4 SR earthquake (the main shock) at 18:02 WITA to 03:55 WITA BMKG released that there were 76 aftershocks with the largest magnitude M 6.3 SR and the smallest M 2.9 SR (within 9 hours 53 minutes), environmental conditions were also described causing a 150 km long rift, the main force shifting between 5-6 meters (not including secondary and tertiary cracks = shear fault structures), this not only adds to the damage to the building but more importantly, this condition causes an increase in the number of victims and trauma. The earthquake also caused subsidence around the coast and below sea level in Palu Bay which triggered a tsunami, the magnitude, and duration also caused liquefaction in 4 locations. This is what causes damage and paralysis of regional facilities and infrastructure.

CONCLUSION

From the results of the study it was concluded that in the policy-making process for an emergency response to disasters such as what happened in Palu City, it should be designated as a national disaster with the main mission of saving human life during the crucial period (72 hours) with consideration of compelling conditions so that it can use the adage Salus populis supreme lex esto (safety of the people is the highest law). The use of policy discretion, that the main responsibility for disaster management is the government, the low capability of local governments in handling emergency response,

Moving on from this valuable experience and learning, in determining the emergency response policy, it is proposed to reformulate disaster management policies that are adaptive to the disaster conditions that occur using the logic of conformity,

In the implementation of disaster emergency response policies, communication and coordination indicators are needed to form transaction patterns, because handling requires collaborative work of all parties.

Structuring the bureaucratic structure for implementing the emergency response policy which explicitly lists directly the institutions or institutions responsible for the emergency response period and hierarchically from the central government level, related institutions/institutions, to village governments so that they can carry out preparations and simulation as preparedness, especially the clear inclusion of the duties of the Regional Secretary as the Head of BPBD who is in charge of disaster management who compiles programs, operational needs, financing, and others, especially in meeting the urgent needs of the victims.



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Society should not only be positioned as a target group or policy object but also placed as a policy subject in the sense of involving an active role for exposed victims who can still work in a group participatory model to minimize tension and crystallization of transaction patterns.

Environmental factors should be the main consideration in policy implementation, not only limited to social, economic, and cultural conditions but also the environment in terms of physical conditions such as geological conditions, and impacts such as the condition of regional facilities and infrastructure.

SUGGESTION

From the results of the conclusions put forward above, suggestions are proposed as a solution in the implementation of disaster emergency response policies as follows:

- 1. Increasing the institutional capacity of local governments in disaster management, especially during the emergency response period for areas that have a level of vulnerability according to potential disaster threats and re-arrangement of the organizational structure of disaster management from the central government level to the lowest level of government according to the hierarchy by taking into account the involvement of agencies or institutions related activities including the participation of national and international volunteers and also involving the third element in disaster management, namely the business world in every stage of disaster management.
- 2. Disaster communication and information when a disaster occurs, especially during the emergency response period, is the main thing in reducing tension or pressure for crystallization of transaction patterns.
- 4. Active involvement of community participation through community development in every stage of disaster management from pre-disaster (prevention and preparedness), emergency response, and post-disaster (rehabilitation and reconstruction) through simulations and education about disaster for the community routinely every year involving all parties and using a group participatory model.

THANK-YOU NOTE

The author expresses his highest gratitude and appreciation to all parties for helping, especially to Prof. Dr. Slamet Riadi, M.Sc. and Dr. Hasbullah, M.Sc. for guidance and direction during the writing process.

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