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NETWORK STRUCTURE IN THE EFFECTIVENESS OF THE POST- DISASTER RECOVERY HANDLING NETWORK IN PALU CITY

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Abstract

The purpose of this study was to determine the network structure in the effectiveness of the post-disaster recovery handling network in Palu City. This study uses qualitative qualitative methods to interpret phenomena by explaining in detail in this case how effective network governance takes place. The results of the study show that the governance of the network structure as one of the key factors in the effectiveness of disaster recovery is still weak in terms of coordination and integration of network participants due to the many institutions involved, from the central, provincial and regional/city governments with various complex problems faced, especially obstacles to land acquisition for the construction of permanent housing. The governance model in the form of a good decision-making mechanism which is expected to improve coordination and collaboration between network actors has not been effective due to the fact that coordination meetings are often represented only by staff but not attended directly by the heads of network participating organizations.

Keywords: *Network Effectiveness, Network Structure, Post-disaster.*

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1. Introduction

Indonesia is a country that has the potential and vulnerability to natural disasters in the form of natural disasters and man-made disasters. Most provinces fall into the category of disaster-prone areas, where this vulnerability can turn into a disaster at any time. Vulnerability to disasters is influenced by various causal factors, such as geography, geology, hydrology, hydrometeorology, demography and other factors such as global warming which causes climate change which has a broad impact on the earth (Hidayah, 2021).

The earthquake natural disaster that occurred in Central Sulawesi Province on Friday 28 September 2018 at 18.02.45 WITA caused panic in the people of Palu City and its surroundings. Data from the Meteorology, Climatology and Geophysics Agency said the magnitude of the earthquake was 7.4 on the Richter scale with an epicenter of -0.2 South Latitude and 119.89 East Longitude 25 KM East of Donggala Sea-Central Sulawesi at a depth of 11 Km. The earthquake was followed by a tsunami and liquefaction in several areas of Palu City.

As a result of the earthquake shaking, a few moments after the peak of the earthquake occurred, it was followed by liquefaction which claimed lives and damaged all the buildings above it. The two most obvious locations that experienced this disaster were the Petobo Village and the Balaroa National Housing Complex. Balaroa is right above the Palu-Koro fault line, when liquefaction occurs, the land surface rises and falls, in some parts it collapses 3-5 meters and in some parts it rises up to 2 meters, so that the buildings above it collapse into the ground. In Petobo, hundreds of houses were buried in the black mud that occurred after the earthquake. The soil in the area, like in the Balaroa National Housing Complex, turned into mud which submerged all objects and buildings on its surface.

The impact of the earthquake, tsunami and liquefaction caused victims to die, were injured, and hundreds of thousands of residents were displaced, damage to residents' houses, public facilities and social facilities with the level of damage categorized as severe, medium and light (Yulaelawati, 2008; Kryvasheyev et al., 2016). The earthquake, tsunami and liquefaction disasters that hit 4 (four) areas in

Central Sulawesi, namely Palu City, Donggala, Sigi and Parigi Moutong Regencies were directly affected by the disaster. The impact of the disaster recorded 2,256 people died. In Palu City, 1,703 people died, Donggala 171 people, Sigi 366 people, Parigi Moutong 15 people and Pasangkayu 1 person. 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 residential units, 327 houses of worship, 265 schools, 78 offices, 362 shops, 168 roads with cracks, 7 bridges and so on. While economic losses and damage due to the disaster amounted to Rp. 18.48 trillion, the largest came from the settlement sector which valued at Rp. 9.41 trillion, the infrastructure sector Rp. 1.05 trillion, the economic sector Rp. 4.22 trillion, the social sector Rp. 3, 37 trillion, and across sectors it reaches Rp 0.44 trillion. (Republika. 2018)

The Central Government through the National Disaster Management Agency (BNPB), in this case the Deputy for Rehabilitation and Reconstruction, immediately compiled a post-disaster needs assessment calculation in Palu City and other affected areas, as an effort to build and revive the spirit of the people who were disturbed by the disaster. Based on Law Number 24 of 2007 concerning Disaster Management, it is a legal umbrella in the implementation of disaster management in Indonesia, where it is explained that post-disaster recovery efforts in the form of rehabilitation and reconstruction activities are the shared responsibility of the Government/Regional Government and the community. In the provisions of articles 57 and 75 of Government Regulation Number 21 of 2008 concerning the Implementation of Disaster Management, it is stated that the implementation of rehabilitation and reconstruction activities in post-disaster areas, one of which includes socio-economic and cultural recovery activities aimed at helping communities affected by disasters in order to restore social living conditions, economy, and culture as they were before the disaster.

Particularly in post-disaster rehabilitation and reconstruction activities, in the economic sector it can be carried out through the economic empowerment of disaster-affected communities in a planned, coordinated and

integrated manner starting from data collection activities, socialization, forming groups, to mentoring activities. In general, the material contained in the RI Law. Number 24 of 2007 concerning Disaster Management includes the stages of implementing disaster management, the objectives of which consist of three stages covering planning, funding and the role of disaster agencies with the authority to carry out coordination, command and implementation functions.

Currently, the majority of people still have limited knowledge about disaster issues. This condition is due to the lack of understanding and awareness in disaster mitigation. Knowledge of disaster preparedness to the culture of disaster prevention has not reached all of society, even among government apparatus and organizations (Pearce, 2003; Waugh, 2015; Rahman, 2016). Indicators of low understanding of disaster mitigation can be seen from the low efforts of the government in efforts to reduce disaster risk, both the current condition of physical buildings, as well as public awareness through periodic and ongoing outreach about disasters, so that information about disasters is not well understood. This condition should have been anticipated jointly, bearing in mind that Indonesia has the potential to experience various types of natural disasters that can take a huge number of lives.

The President of the Republic of Indonesia has also followed up on the handling of the disaster that occurred in Palu City by issuing Presidential Instruction (INPRES) Number 10 of 2018 Concerning the Acceleration of Post-Earthquake and Tsunami Disaster Rehabilitation and Reconstruction in Central Sulawesi Province and Other Affected Areas which was issued on 28 November 2018 or 2 (two) months after the disaster occurred on September 28 2018. The parts that are the responsibility of the Regent/Mayor in this Presidential Instruction are; (a) Responsible for ensuring the smooth implementation of rehabilitation and reconstruction activities; (b) Collect damage data, determine damage data on community houses and public service facilities and propose a post-earthquake and tsunami rehabilitation and reconstruction needs plan to the provincial government and/or the National Disaster Management Agency through the provincial government; (c) Provide the Regency/City Regional Revenue and

Expenditure Budget and carry out activities according to the actions that have been determined; (d) Coordinate with relevant ministries/agencies to ensure smooth implementation of rehabilitation and reconstruction activities. This Presidential Instruction is valid until 31 December 2020.

The implementation of accelerated rehabilitation and reconstruction can also involve, involve, cooperate with, and/or institutions, business entities, communities, international organizations and other parties as deemed necessary. The regulation issued in the form of a Presidential Decree emphasizes the need for all stakeholders involved to coordinate efforts to deal with the aftermath of the disaster in Palu City.

When a disaster occurred in Palu City, mutual blaming and shifting of responsibility between organizations in post-disaster management still occurred. This condition actually does not solve the problems in the field. In an emergency, the responsible party seems panicked by the situation that is happening, this situation can make the atmosphere not conducive. All parties should work together and fill each other's gaps so that all capabilities/resources can be optimally utilized to help people who are victims of disasters.

When a disaster occurs, there are often deficiencies and many problems in handling it, especially for large-scale disasters, various cases will arise (especially in the early stages of a disaster during critical/panic periods). This condition creates uncertainty. Knowledge, experience, or expertise/capacity, abilities/resources from various parties should be synergized to solve problems. Social capital (gotong-royong or social solidarity/solidarity) can be a form of social concern that needs to be developed even though it is a short-term problem solving. Long-term solutions are expected to solve many problems regarding how disaster victims who are full of uncertainty can get through life's difficulties and be able to rearrange the future.

Post-disaster management efforts in Central Sulawesi, especially Palu City, have now entered their 3rd (three) year, so far there are still many problems. Rehabilitation and reconstruction activities which are the responsibility of the government certainly require careful preparation. After the disaster in

Palu City, the process of preparing and constructing permanent housing, which is the main need for survivors, has not been as smooth as planned and expected. Until now there are still 4,255 families of survivors of the earthquake, tsunami and liquefaction living in Temporary Shelters (Huntara) whose conditions are increasingly deplorable who are still waiting to move to Permanent Shelters (Huntap) whose construction is currently being carried out by the Ministry of Public Works and People's Development (Ministry of PUPR: 2021).

There are a number of obstacles, both at the planning level and in the implementation process in the field. A number of these obstacles include (1) relocation land for Huntap which is not completely clean and clear; (2) data on prospective Huntap recipients that are still incomplete; (3) there are still many residents who refuse to be relocated to locations that have been temporarily determined by the government; and (4) specifically for the Ministry of Public Works and Public Housing which is building shelters with loan funds from the World Bank, where a number of project documents have not been completed as required by the World Bank. (Length Sulawesi SKP-HAM Monitoring Report: 2020)

Based on data from the Mobile Central Sulawesi Non-Governmental Organization, it was stated that out of a total of 5,983 prospective households receiving permanent housing, only 1,728 families had been channeled. with a new percentage of 28.8 percent Heads of Families of Survivors get fixed housing from the targeted amount. So the plan of the Palu City Government is to build 5,983 Huntaps. It is planned that Huntap I will build 1,865 units but only 1,562 units have been realized. Then Huntap II (Tondo 2) is planned to be built 2,135 units and none has been realized, then Huntap III (Talise) is planned for 964 units which have also not been realized, then Huntap IV (Duyu) has 377 units and this has also not been realized, as well as permanent occupancy Mandiri as many as 526 units have also not been realized.

As for permanent housing (huntap) that has been realized 100 percent only in two places, namely Balaroa Satellite Huntap with 127 units and Mamboro Satellite Huntap with 39 units. Based on these conditions, it gave rise to an

assessment that the government's handling of disasters, starting from the emergency response to the rehabilitation and reconstruction period, was considered very bad, as stated by the Central Sulawesi Mobile Non-Governmental Organization "Because data matters have not yet been completed and we have also warned that handling this disaster tends to be unfocused and we also see that the implementation of rehabilitation and reconstruction related to development is out of sync with the regional spatial planning of Palu City,". (Sulteng Moving.org)

The slow response to the aftermath of the natural disaster in Palu City, Donggala Regency and Sigi Regency has also raised concern from the Chairman of Commission IV DPRD Central Sulawesi. Until now, the suffering of the survivors of the September 28 2018 earthquake, tsunami and liquefaction has entered its third year, while there are still thousands of heads of households who have yet to obtain their rights, especially obtaining Permanent Shelter (Huntap). One of the legislators from the electoral area of Palu City, regretted the slow handling of the disaster as if it were running in place, there were no significant changes from year to year. Even though in 2021, areas affected by natural disasters should focus on economic recovery, but so far the solution is still faced with providing permanent housing and stimulant payments.

The Central Sulawesi Regional People's Legislative Council through the Padagimo Special Committee has helped district and city governments to get out of the problem of handling natural disasters as soon as possible, the Padagimo Special Committee has even issued recommendations to each local government, institution and ministry up to the President. However, none of the recommendations from the Padagimo Special Committee were implemented. We are still struggling with the same issues from year to year, Huntap has not been completed, all stimulants have not been completed (Metro Sulawesi, 07/06/2021).

Stimulant funds, which are grants given by the government to disaster victims whose houses have been damaged, are divided into three categories, namely for heavy damage, Rp. 50 million, Rp.25 million for moderate damage and Rp.10 million for the lightly damaged

category. This fund is expected to be a stimulant for disaster victims to rebuild their homes. Because the amount is very limited, it is hoped that the grant recipients will be able to make good use of it, use the funds appropriately, and develop it so that the entire housing rehabilitation program/project can be completed independently.

The process of collecting data on potential recipients of stimulant funds for the repair of houses damaged by the earthquake in Palu City, Central Sulawesi, was also questioned and complained of by some of the survivors. Problems began to arise when data collection was carried out on victims affected by the disaster. Data on damaged houses, data on residents who became disaster survivors. So that the data was collected several times, both by the urban village and from the Regional Disaster Management Agency (BPBD) Office of the Palu City Government. The data changes and is out of sync, so another data collection is done to improve the existing data. Based on the information submitted by the Palu City BPBD, as of March 2021 for the progress of the distribution of phase II stimulant funds in Palu City, totaling 38,805 households, there have been 25,046 households whose data has been validated and SK-approved. Meanwhile, 23,000 families have been distributed with details of 18,974 lightly damaged, 15,690 moderately damaged, 4,141 families heavily damaged. From these data, the progress of the distribution of phase II stimulants has reached 64.54 percent. Meanwhile, the total funds provided for phase II amounted to Rp.789,047,000. 000 and has distributed Rp. 365,510,000,000. This achievement is of course still far from expectations because most of the victims have not received the stimulant funds they are entitled to.

The various efforts made by the current government to restore post-disaster conditions in Palu City should be appreciated, although there are still many things that need to be improved in practice. Even though many parties are involved, they are not necessarily able to solve the problem, the problem identified is the weak coordination between agencies. There are so many institutions/agencies involved in disaster recovery activities, but no party has taken the role and authority to lead, coordinate, including collaborating on the network actors involved in it.

Based on this information and thoughts, this dissertation will examine in more depth how to model network effectiveness in post-disaster management in Palu City. Another fundamental consideration that attracted the author to examine the effectiveness of the post-disaster management network in Palu City is that the target for achievement is still far away as set by the president through the Presidential Instruction issued, namely Presidential Instruction (INPRES) Number 10 of 2018 Concerning the Acceleration of Post-Earthquake Rehabilitation and Reconstruction and Tsunami in Central Sulawesi Province and Other Affected Areas.

2. Methods

This study uses a qualitative descriptive approach to interpret the phenomenon by explaining in detail in this case how effectiveness of network governance takes place in post-disaster management in Palu City. This research was conducted in Palu City, Central Sulawesi Province. The location is determined based on the development of the study of public administration science. Data will be collected in several ways and stages. First, in-depth interviews with the Chief Executive of the Palu City BPBD and other stakeholders involved in the post-disaster management network in Palu City. Second, observation through direct participation and analyzing the post-disaster management network in Palu City to obtain data as material for analysis. In this observation, researchers looked at how actors or organizations carried out network activities in handling post-disaster recovery efforts in Palu City. The documentation obtained was in the form of minutes of meetings regarding meetings between actors in discussing post-disaster management and other related data.

3. Results and Discussion

Network Structure in Post-Disaster Recovery Network Effectiveness in Palu City.

Network Structure, namely the organizational structure consisting of a central core connected through a network of relationships with external parties and other important service suppliers. The organization owns the core components and uses strategic alliances or outsourcing to provide the other components. In

network actor organizations, network structure refers to the pattern of connections or relationships between the actors involved in the network. The structure of a network can influence the communication, coordination and flow of information between actors, as well as affect how the network operates and achieves its goals.

The potential advantages of the network structure are; (1) Organizations can work with a few permanent employees and do not need to be familiar with complex internal systems; (2) Reduce costs and can improve operational efficiency; (3) Operationally able to traverse long distances.

Potential disadvantages of the network structure; (1) Control and coordination problems may arise from network complexity; (2) Potential loss of control over non-permanent activities; (3) Potential lack of loyalty among network members who are rarely involved or involved.

The organizational structure of the disaster recovery network in Palu City refers to INPRES regulation No. 10 of 2019 concerning the acceleration of rehabilitation and reconstruction which provides instructions to elements of the central government as many as 35 ministerial and non-ministerial institutions. The regional government element consists of the provincial government and the affected district/city governments. Including building partnerships from non-governmental elements from the business world, international and local NGOs and involving local universities.

The Raab Network Management Model is a network governance framework developed by J. David Raab. This model divides network governance into six main areas, namely; (1) Strategic planning: this area covers the development of strategies and long-term plans for network management, including the selection of the right technology and identification of the resources needed to achieve long-term goals; (2) Needs analysis: this area includes business and technical needs assessment, risk and security analysis, and selection of the right network infrastructure to meet those needs; (3) Design: this area covers

detailed network design, including network architecture, infrastructure, topology, and device configuration; (4) Implementation: this area covers the installation and configuration of network devices, as well as testing and integration of networks into the operational environment; (5) Operations: this area covers the day-to-day management of networks, including monitoring, maintenance, capacity management, security management, and network performance management; (6) Evaluation and improvement: this area includes measuring network performance, evaluating overall network management, identifying problems and weaknesses in network management, and continuous improvement and improvement.

Governance Model

Network governance or more commonly known as government network governance is a pattern of cooperation that has been recognized as an important form of multi-organizational governance. Government networks can be interpreted as a combination of structures within government or simply so that it can be interpreted as a form of cooperation between government agencies. Governance in organizational networks is the process of managing organizational networks to ensure that networks function effectively and efficiently, and are in accordance with organizational policies and standards (Suryono et al., 2018). The following are some of the governance principles commonly used in organizational networks; (1) Strong leadership and organizational commitment to effective network governance; (2) Identification and clear understanding of the objectives, risks and opportunities related to network management; (3) Development of clear and transparent policies and procedures for network management, including security and privacy standards; (4) Assignment of clear responsibilities and roles to IT staff in managing the network and establishing oversight mechanisms; (5) Measuring network performance regularly, including in terms of resource usage, security, and effectiveness of network services; (6) Develop a disaster recovery plan and ensure that the network

infrastructure can operate quickly after a disaster or emergency occurs.

By applying the principles of good governance in managing organizational networks, organizations can ensure that their networks function effectively and efficiently and can be relied upon to support their operational activities. An established governance structure will bring many benefits to all collaborations, especially in terms of work efficiency and transparency. Several things from the organizational structure that are well laid out, including fewer disturbances or obstacles in the decision-making process because the procedures and division of tasks and responsibilities are clearly defined; increased reliability and trust as the risk of potential misunderstandings or communication problems is reduced to a minimum; better view of the progress of network governance due to the open and transparent attitude embraced by management at every level.

Network governance is inherently complex. Actors participating in the network have the power to build social relations and contracts, so that they can influence decision making. Thus, organizations will depend on each other, because the network becomes a medium for achieving the goals of network actors, it might even be a determinant of their survival. Governance also has an important role in encouraging the effectiveness of actor networks (Kharisma, 2014). The influence of governance on network effectiveness can be seen from the form of governance with the number of actors involved used by network participants used to assess the form of organizational governance of actors in post-disaster recovery in Palu City as follows:

Table 1. Effect of the Effectiveness of Network Governance Forms

Form of Governance	Level of confidence	Number of participants	Goal Consensus	Network Competency Requirement Level
Shared Governance	High density	A little	Tall	Low
Lead Organization	Low density, very centralized	Currently	Low Enough	Currently
Network Administrative Organization	Moderate density, NAO monitored by members	Moderate to many	High enough	Tall

Source: Provan, Kennis 2008

Based on the table above, network governance is divided based on 3 basic forms namely, Shared Governance, Lead Organization and Network Administrative Organization (NAO). Shared governance is the simplest and most common form of participant governance. the format is governed by the network members themselves without a separate, unique governance entity. Governance in this form can be done both formally; for example, through regular meetings of designated organizational representatives, or more informally, through the ongoing but usually uncoordinated efforts of those with a stake in the network's success. The

second form of Lead Organization governance, where all key network level activities and key decisions are coordinated through participating network members, who act as the lead organization. Thus, the governance of the network becomes highly centralized and brokered, with asymmetric power. The third form is a Network Administrative Organization (NAO) whose basic idea is that a separate administrative entity is created specifically to manage the network and its activities.

Based on the several forms of network governance stated above, linked to the results of the research, the form of disaster recovery

governance in Palu City has a tendency to use the Network Administrative Organization (NAO) model approach in its actor network governance. This is concluded based on the characteristics of network governance which has a large number of network participants, as well as a fairly high consensus on goals by network organizational actors and the level of need for network competence which is in the high category. This trend can be seen from the fact that there are still members of the network who lack the initiative to take an active role in disaster recovery activities. Be passive waiting for directions from the network coordinator, in this case the Palu City BPBD. When viewed from its composition, the majority of network membership comes from elements of the government so that bureaucratic administration is more prominent in network operations, causing no initiatives to appear because it is more focused on the main tasks and functions of each.

Furthermore, the results of the interviews also show that network actors carry out recovery activities based on their respective duties and functions, both at the central and regional government levels.

In particular, the Ministry of PUPR has a Head of the Disaster Management Task Force (Satgas) for the Ministry of PUPR in Central Sulawesi who is held by Arie Setiadi Moerwanto, the Director General of Cipta Karya of the Ministry of Public Works who is tasked with completing post-disaster rehabilitation and reconstruction in Central Sulawesi and coordinating the UPT/Balai that is under his authority. When compared to other ministries assigned to INPRES 10 of 2018 concerning Post-disaster Rehabilitation and Reconstruction in Central Sulawesi, the Ministry of Public Works and Public Housing is listed as the ministry that has reduced its resources the most, namely the Directorate General of Cipta Karya (BPPW Central Sulawesi). Directorate General of Housing (BPPP Sulawesi II Region & Central Sulawesi Housing Provision SNVT). Directorate General of Highways (BPJN XIV Palu). Directorate General of Water Resources (BWS Sulawesi

III). Regional Infrastructure Development Agency (BPIW).

At the local government level, involvement in the implementation of the actor network organization is also carried out based on the duties and functions of each Regional Government Organization.

Based on the results of several interviews conducted, it was shown that network participants work based on the main tasks and functions of each organization. Relationships that are built with other actors, both from government elements and with other stakeholders, are coordinative in nature. There is no governance model that has been made collectively capable of summarizing the various interests and resources owned by a very large number of actor network participants.

In general it can be said that organizational governance is a way to regulate and control the relationship between management (managers) and interested parties (stakeholders) to the organization. Because if an activity does not have a governance structure, it is easy to get stuck and lose direction in achieving its goals. So it is important to ensure that the governance model that will be used for activities is well structured before collaborating.

Cooperation Rules

The rules for cooperation in network organizations include guidelines or guidelines regarding duties, responsibilities, rights and obligations of members, as well as mechanisms for decision-making and conflict resolution. These Cooperation Rules aim to ensure that all members have clear guidelines in working together to achieve the goals of the network organization.

The rules of cooperation agreed upon in a network organization are very important for achieving common goals and maximizing the potential of network members. Here are some cooperative rules that can be implemented in a network organization:

Effective communication: Members of networked organizations must always communicate clearly and openly. Effective communication will help ensure that all

members have the same understanding of the goals and plans of the organization.

Transparency: Network organizations must be transparent in all aspects of cooperation. Information must be available to all members and decisions must be made collectively.

Respect for differences: Members of networked organizations may come from a variety of backgrounds and hold different perspectives. Therefore, it is important to value differences and encourage inclusivity.

Respect the responsibilities of individual members: Each member of the network organization has different responsibilities and roles. It is important to respect the responsibilities of each member and ensure that all duties are fulfilled.

Pay attention to security: Information and data security is very important in network organizations. It is important to ensure that all important data and information is properly protected.

Time commitment: Time is a valuable resource in network organizations. Members must adhere to established schedules and deadlines to ensure effective cooperation.

Periodic evaluation: Network organizations should conduct regular evaluations to ensure that organizational goals are being achieved and organizational members are still actively involved. By applying these cooperative rules, network organizations are expected to be able to achieve common goals and maximize the potential possessed by members.

The rules of cooperation that are supposed to be guidelines for cooperation in post-disaster recovery joint efforts in Palu City have never been made as a basis and guide in efforts to achieve the goals of network organizations.

This condition indicates that the majority of network participants from local government elements do not have guidelines in collaborating with other stakeholders and have an understanding that related to disaster documents are under the authority of BPBD which does have authority in coordinating

disaster management in Palu City. The same thing happened to other network participants who worked based on the Standard Operating Procedures of their respective organizations.

In general, BNPB has issued Regulation of the Head of the National Disaster Management Agency Number 11 of 2008 concerning Guidelines for Post-Disaster Rehabilitation and Reconstruction. The objectives of issuing the General Guidelines for Rehabilitation are: 1. To provide a reference/handbook for the implementation of rehabilitation; 2. Ensuring order and smooth implementation of rehabilitation; 3. Ensure the achievement of rehabilitation goals. These Guidelines for Post-Disaster Rehabilitation and Reconstruction are then used as a guide for the Government and Regional Governments in preparing Post-Disaster Rehabilitation and Reconstruction plans. It is hoped that the Rehabilitation and Reconstruction Guidelines will reduce confusion, encourage clearer coordination of the parties involved in the disaster rehabilitation phase so as to produce more effective disaster management. As a general guideline, this document is expected to apply to various types of disasters throughout Indonesia with their own characteristics.

The elaboration of Regulation of the Head of BNPB No. 11 of 2008 mentioned above should be a joint guideline for stakeholders in post-disaster recovery activities, but its implementation is not known by all stakeholders involved in disaster management in Palu City, so it seems that the parties are working according to guidelines based on the main tasks of each institution.

Law Number 24 of 2007 concerning Disaster Management, Government Regulation Number 21 of 2008 concerning Implementation of Disaster Management, and Minister of Home Affairs Regulation Number 22 of 2020 concerning Procedures for Regional Cooperation with Other Regions and Regional Cooperation with Third Parties. Providing opportunities for local governments to build collaboration as a joint effort for joint disaster management in the form of a Cooperation Agreement (PKS). Palu City together with the

3 regencies affected by the September 28 2018 disaster should realize this opportunity for cooperation, considering that the region has a relatively high disaster vulnerability. However, cooperation between disaster-prone areas has never been carried out until now.

Rules of cooperation should be an important part of overall disaster management as a basis for cooperation between network actors, and become a guideline for the implementation of the rehabilitation phase which must be linked to other stages. In this sense, the activities of the rehabilitation phase are not only related to the pre-disaster and emergency response stages, but also to the reconstruction phase. The relationship and coordination between these stages will determine the effectiveness and efficiency of disaster management. Therefore, the stages of disaster management should not be placed as a goal but as a way to achieve overall disaster management efficiency and effectiveness. From this understanding, synchronization and coordination contained in the rules of cooperation should be the keywords for disaster management that must be carried out by various parties.

Decision Making Mechanism

A network organization is an organization consisting of several independent entities that are connected and work together to achieve a common goal. In network organizations, decision making usually involves several stages and involves various related parties. Following are some of the decision-making mechanisms commonly used in networked organizations:

Discussion and consensus: Members of network organizations meet to discuss issues or problems encountered, and try to reach consensus on solutions or actions to be taken.

Delegation: An entity or individual within a networked organization can be assigned to make decisions on behalf of a group or organization as a whole.

Voting: Members of networked organizations can vote or vote in a meeting or forum to decide what action or solution to take.

Collaborative decision: This involves a combination of all of the above mechanisms, in

which members of a networked organization work together to arrive at the best solution or course of action.

Autonomous decisions: Members of network organizations can make their own decisions regarding the actions or solutions to be taken, depending on the level of autonomy possessed by the members.

In networked organizations, decisions are often not made hierarchically or centrally, but through discussion, consensus, and collaboration among members of the organization. This allows networked organizations to be more adaptive and responsive to changes that occur in their environment.

As for the results of research through observation and interviews related to the decision-making mechanism for participants in the disaster recovery network in Palu City, it shows that decision making depends on the type of decision to be taken, if the decision is related to the organizational unit of the network, it will be left to the respective units. For decisions that are binding for all members of the network will be decided by the network manager in accordance with the results of the agreement and consensus among network participants.

These important decisions are usually taken through coordination meetings specifically made for this purpose. If the decision concerns the authority of the regional government, it will be left to the regional government to make a decision, then if the policy is related to a vertical agency, it will be handed over to the head of the task force to make a decision in accordance with the authority they have.

Decision making is considered as a process that results in selecting an action among several possible alternatives. Every decision-making process results in a final choice; who follow the process of identifying and selecting alternatives based on the values and preferences of the decision maker. The relationship between actors with each other is an important aspect of the decision-making process, in order to reduce conflict. Many projects, strategies or modification decisions fail for various reasons, an important one of which may be the lack of

support from the key actors involved in the plan.

Different information related to decision-making by network managers came from informants from NGOs who stated that they were not involved in the decision-making process.

The assessment presented above arose because there were differences of opinion and interests between network participants from local government and non-governmental organizations in addressing the interests of disaster-affected residents. They think that so far the government has been negligent in paying attention to the interests of the people affected by the disaster so far. Related to the issue of providing permanent shelter, there have been several demonstrations by disaster-affected residents to the Mayor facilitated by NGOs who have been providing assistance to disaster-affected residents in Palu City.

The decision-making process does pose a big challenge in organizational networks because different actors have different backgrounds, demands and resources, but all of them depend on one another to achieve common goals. When having a network-like structure, actors need certain support from other actors. In this case, actors need to work together to achieve certain goals or actors need support to facilitate approval of decisions on action plans taken.

Conclusion

Governance of the network structure as one of the key factors in the effectiveness of disaster recovery is still weak in terms of coordination and integration of network participants due to the many institutions involved starting from the central, provincial and regional/city governments with various complex problems faced especially obstacles to land acquisition for hunting development. Palu City has geographical and topographical conditions that are prone to disasters, so the existence of the Regional Disaster Management Agency (BPBD) which has the function of controlling and coordinating disaster management is very important in handling emergency situations and post-disaster recovery does not yet have a

Steering Committee from related agencies and professionalism/experts in the organizational structure. The rules of cooperation that are expected to guide the division of work tasks and the division of responsibilities have not regulated in detail the division of tasks and are still general in nature. The governance model in the form of a good decision-making mechanism which is expected to improve coordination and collaboration between network actors has not been effective due to the fact that coordination meetings are often represented only by staff but not attended directly by the heads of network participating organizations.

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