

Models and Challenges of Coordination in Regional Disaster Management

Erwin Musdah¹, Sulaeman Fattah², Sudarmi Narwis³

^{1,2,3}Study Program of Development Administration, Politenik STIA LAN Makassar, Indonesia.
Email: ¹erwinmusdah@stialanmakassar.ac.id, ²sulfattah@gmail.com, ³mi2noa@yahoo.com

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ABSTRACT

Disaster is a complex problem that requires coordination with many parties. The results of previous studies regarding disaster management in Wajo indicated that there were coordination problems in disaster management in Wajo. This study aims to explain the coordination of disaster management in Wajo from the perspective of the models and challenges of disaster management in Wajo. This study uses a qualitative approach with the Gadamerian hermeneutic method to find the meaning of coordination texts in the context of pre-disaster management. Data collection was carried out through document analysis and interviews. The results of the study revealed that the coordination of disaster management in Wajo was running well at the disaster preparedness stage but was still not optimal at the pre-disaster stage. We found three meanings of coordination in disaster management in Wajo. First, coordination because of their awareness of the limitations they have. Second, coordination serves as fulfillment of the requirements of sponsorship activities. Third, coordination is an innovation to overcome problems. Coordination in Wajo is hampered by the actors' interpretation of the subject and object of disaster management coordination.

Introduction

Coordination problems have started to appear since the paradigm of new public management has been massively implemented. Specifications, decentralization, and single-purpose organizations prevent organizations from overlapping so that organizations are more efficient, responsive, and accountable. However, when facing more complex public issues, horizontal coordination difficulties often occur because each organization is only authorized to carry out its duties. Complex public issues sometimes require intervention from various programs, ministries, or levels of government. Various issues, such as handling pollution in public transport in England, environmental sustainability in Sweden, and internal security in America, require the involvement of many government agencies (Cejudo & Michel, 2017).

Disaster is a complex problem and requires the coordination of many parties. In the case of flood disaster management in Gorontalo, for example, the results of a study by Taslim & Akbar (2019) revealed that there were approximately 22

government agencies involved from the pre-disaster stage to the post-disaster stage. These agencies include: the Regional Disaster Management Agency (BPBD), the Regional Development Planning Agency (Bappeda), Department of Public Works and Public Housing (PUPR), Department of Housing and Settlements, Department of Community and Village Empowerment, the Meteorology, Climatology and Geophysics Agency, (BMKG), Department of Environment and Natural Resources (DLHSDA), Finance Agency, Department of Agriculture, Department of Food Security, Social Service, Regional Research and Development Agency (Balitbangda), Education and Culture Office (Disdikbud), Public Health Office, Hospitals /Puskesmas, Civil Service Police Unit (Satpol PP), National Search and Rescue Agency (Basarnas), Department of Transportation, Office of Communication and Informatics (Kominfo), Manpower and Transmigration Service (Disnakertrans), Indonesian National Armed Forces (TNI), and Indonesian National Police (Polri). In addition to government agencies, private institutions, non-governmental organizations (NGOs), media and universities are also involved in the coordination of disaster management. In Purworejo, Bakti and Fadlurrahman (2020) describe BPBD coordination in disaster management as being carried out vertically with the Central Java Provincial BPBD and the National Disaster Management Agency. In addition, horizontal coordination was also carried out with the TNI, Polri, and other Regional Apparatus Organizations (OPD) in Purworejo. These two examples show the complexity of the problem of coordination in disaster management cases in Indonesia.

Attention to disaster problems in Indonesia is inseparable from the very high frequency of disaster occurrences there. Data from the National Disaster Management Agency (2020) shows that throughout 2020 there were 2,925 disaster incidents that left 370 people dead, 39 people missing, and 536 people injured. This data does not include data on the number of victims due to the non-natural disasters of the COVID-19 pandemic, which caused tens of thousands of victims to die.

Wajo is one of the districts with a high disaster index (Badan Nasional Penanggulangan Bencana, 2021). In the last 5 years, there have been 43 disaster incidents that left 9 people dead, 64 injured, hundreds of houses destroyed or damaged, and thousands of residents displaced. Among the four types of disasters that have occurred in Wajo in the last five years, floods are the most frequent and cause the most victims and losses (see Table 1). Flood management in Wajo is quite difficult because the water sources that cause Lake Tempe to overflow come from six regions around Wajo (Musdah & Husein, 2014). Thus, flood management in Wajo requires better coordination.

Table 1. Disaster events in Wajo 2016-2020

Disaster Event	Number of Events	Die	Injuries	Destroyed House	Damaged House	Evacuate
Flood	26	9	57	7	3	1778
Earthquake	1					35
Forest and Land Fires	1					
Tornado	15		7	56	61	
TOTAL	43	9	64	63	64	1813

Source: processed from <https://dibi.bnppb.go.id/>

The Wajo government has made various disaster management efforts. One of them is making a policy in the form of Regional Regulation Number 6 of 2015 concerning disaster management. Coordination issues have been regulated more specifically in Article 8 and Article 9. Article 8 describes the function of local government in disaster management. This article is explained in more detail in Article 9 concerning the function of coordinating disaster management, especially the form of coordination and with whom the coordination will be carried out. Thus, the implementation of coordination has a clear policy foundation. This study examines how local governments carry out the disaster coordination function.

Scholars' interest in disaster coordination has increased in recent years. Existing studies explain the coordination process between volunteers (Daddoust et al., 2021; Mutebi et al., 2020), military and civilian (Puckett, 2021), central government with local government (Ishiwatari, 2020), government with the private sector (F. Wang et al., 2022), between government agencies (Aldrich, 2019; Anwar et al., 2019; Liu et al., 2021; Opdyke, 2017), and between government and non-government actors (E. Wang et al., 2015). Most of these studies focus on describing ongoing coordination. The coordination process that should have been carried out but did not work has not been explored in existing studies. These studies have also focused more on organizational aspects. Research on aspects of how to interpret coordination is still lacking. For this reason, this research is focused on the meaning of the coordination process in disaster management.

Also, the studies that have been done so far focus more on coordination in the context of disasters. In fact, as the results of the study by Taslim and Akbar (2019) show coordination in the pre-disaster context involves more government agencies. In the case of spatial planning in Wajo, for example, the Environment Agency, which is responsible for dealing with solid waste issues, should coordinate with the Disaster Management Agency in Wajo. The results of Musdah and Husein's (2014) research in Wajo show that in the watershed that enters Lake Tempe, there is no planned temporary garbage disposal site (TPS). This allows people to throw garbage into the river. Garbage carried by river flow can add to lake sedimentation and exacerbate the effects of flooding. This shows the importance of coordination at the pre-disaster stage, so this research is focused on the pre-disaster coordination process. Thus, this study aims to describe the practice of disaster management

coordination at the pre-disaster stage in Wajo District and to reveal the meaning of disaster management coordination at the pre-disaster stage in Wajo District.

Literature Review

According to G.R. Terry in Hasibuan (2015), coordination is a synchronous and regular effort to provide the right amount and timing and direct implementation to produce a uniform and harmonious action on predetermined targets. Cejudo & Michel (2017) explained that coordination is the process by which members of different organizations assign tasks, allocate responsibilities, and share information in implementing policies and programs they choose to solve public problems so that work becomes more efficient.

Coordination is generally divided into two types: vertical coordination and horizontal coordination. As the name suggests, vertical coordination is a coordination activity between superiors and the work units below them or vice versa. Meanwhile, horizontal coordination is carried out by organizations at the same level. This coordination can be divided into two types, namely, interdisciplinary and interrelated. Interdisciplinary coordination is coordination between units that have the same task, both within one organization and outside the organization. Interrelated coordination is coordination between units that have different tasks and functions, but each of these units has an interrelated working relationship (Hasibuan, 2015).

According to Cejudo & Michel (2017), coordination has three levels. At the minimum level, coordination is present in the form of a regular exchange of information between members of the organization, which allows the goals of each organization to be achieved efficiently. At this level, each employee exchanges information both formally and informally. Each organization is also still focused on achieving its own goals. At the second level, coordination is carried out in the form of information exchange, which is carried out formally, and a common goal has been prepared. But at this stage, each organization is still working independently and is responsible for making decisions and allocating resources that support the achievement of the agreed-upon common goals. At the highest level, coordination is carried out by sharing resources and working together to achieve mutually agreed-upon goals.

In the context of disaster, Martin et al., (2016) explained the characteristics of coordination from the results of a literature review of various research results on the theme of disaster. Coordination requires moderate resources, frequency of interaction, and the ability to share risks. Meanwhile, coordination also requires a high degree of engagement, a willingness to share goals, and reciprocity among the coordinating institutions. One thing that is often exchanged in the coordination process is resources. Opdyke et al., (2016) stated that information resources are the resources most frequently exchanged in the coordination process, followed by budget, materials, and human resources.

Coordination does not always go as expected. Often there are obstacles in coordination. Peters (2018) identifies the obstacles that cause the government to fail to coordinate intensively, including: 1) The task specialization of government agencies is theoretically the antithesis of coordination. 2) Information is seen as power, so government agencies tend to collect it instead of sharing it. 3) Each organization has a performance target that causes them to focus on pursuing their respective performance targets and ignore common goals. 4) Every organization wants to maintain its budget, personnel, and policies, so coordination is sometimes seen as a threat that can reduce the resources they have. 5) Coordination is often carried out with organizations that have conflicting values so that the loyalty of members of the organization to their organizational values causes them difficulty accepting other values that are different from or even contradictory to their organizational values. 6) Differences in the political interests of organizational leaders can become an obstacle to horizontal and vertical coordination. 7) Accountability mechanisms and financial audits that are too rigid can make it difficult for organizations to coordinate.

The inhibiting factors for disaster coordination are disclosed by Chuang and Ho (2021). From a number of experiences in disaster management in Taiwan, they concluded that the factors that impede disaster coordination include: it is not clear who is responsible for mobilizing disaster management actions, disaster information systems are not yet integrated, communication mechanisms are ineffective, disaster management structures are not adequate, and there is a lack of joint training to integrate disaster management organizations.

For this reason, Peters (2018) proposes three mechanisms that can make coordination better: networking, collaboration, and hierarchy. The first is the networking mechanism. A coordination process that bridges interactions between employees who are friends with one another can improve inter-organizational coordination. The second is collaboration. In the case of coordination involving organizations that have different ideologies, visions, and missions, coordination can be done through collaboration. Collaboration is the equalization of perceptions about the program or about problems faced together. Contradictory ideas are sought to be resolved through negotiations so that common ground can be found. Third is the hierarchy. Coordination can be done better by using a hierarchy. Coordination can take the form of appointing a certain institution as coordinator or of establishing a certain institution with a coordinating function.

Research Methods

This study uses a qualitative approach with the hermeneutic method. Hermeneutics is used in this study to explore the meaning of coordination texts in the context of pre-disaster management. The hermeneutics chosen in exploring the meaning of coordination is Gadamerian hermeneutics.

This study chose the Wajo Regency Regional Disaster Management Agency as the main informant. The information collected from this agency is about whom they

coordinate with or should coordinate with. Furthermore, the research was developed at seven other government agencies, namely, the National Unity and Politics Service; the Department of Social Service, Population Control, Family Planning, Women's Empowerment, and Child Protection; Development Planning, Regional Research and Development Agency; Public Health Office; One Stop Investment and Services Office; Education and Culture Office, Public Works and Spatial Planning Office.

This research was conducted in 2021. Informants were selected using the snowball sampling method. Initial informants were employees of the Wajo District Disaster Management Agency, who handled pre-disaster affairs. The informants then grew to include 10 people, consisting of the head of service or agency, the secretary of service or agency, the head of section, or head of the Technical Implementation Unit (UPT) from each research location. Secondary data is sourced from documents specifically related to disaster management planning, such as regional disaster management regulations, disaster management plans, and the organizational structure and work procedures of regional apparatuses.

The data interpretation process is carried out by following the Gadamerian hermeneutic tradition. Analysis is divided into art, history, and language. In art analysis, the research aims to see what roles are played by actors and organizations in the coordination process. In this case, the analysis reveals the answer to how the coordination was carried out. In historical analysis, research reveals why coordination was carried out the way it was. And finally on language, research is analyzed to reveal the meaning of coordination for actors. Each answer from the research results is also interpreted with the help of the theories that have been disclosed in the theoretical review.

Results and Discussion

Disaster Institutionalization in Wajo

Referring to Wajo Regency Regional Regulation Number 6 of 2015 concerning Disaster Management, the implementation of disaster management in Wajo is carried out by the Wajo Regency Regional Disaster Management Agency (BPBD), which involves other regional apparatus to provide technical support. The Regional Disaster Management Agency is led by the Head of BPBD, who holds the ex-officio position of Regional Secretary. In carrying out BPBD's daily duties and functions, the BPBD Head is assisted by the BPBD Executive Head. This is regulated in the Regulation of the Minister of Home Affairs Number 46 of 2008 concerning organizational guidelines and working procedures of the Regional Disaster Management Agency.

In practice in Wajo, the terms Head of BPBD and Chief Executive of BPBD are still often used interchangeably. This can be seen from several official government documents that have not used the proper naming of the Head of the BPBD and the Chief Executive of the BPBD. In the Decree of the Wajo Regent Number 821.22/1950/2020 concerning the Appointment of Civil Servants in JPT Pratama at

the Echelon II.b Structural Level in the Wajo Regency Government and the Wajo Regent Decree Number 980 of 2019 concerning Results of Position Analysis and Workload Analysis on Regional Apparatuses in the Government Wajo Regency In 2019, the position name for the Chief Executive of BPBD still uses the term Head of BPBD. The the proper position name can only be found at <https://pusatdata.wajokab.go.id/>. The website contains brief profiles of all civil servants in the Disaster Management Agency. In the leadership position, it is written as the Chief Executive of the BPBD. In the context of disaster coordination, the use of the terms head and chief executive has different consequences. This will be discussed further in another section of this article.

Normatively, the implementation of disaster coordination refers to Article 9 of Wajo Regency Regional Regulation Number 6 of 2015 concerning Disaster Management. In the article, it is explained that the coordination function is carried out horizontally with service agencies, other organizations and parties related to laws and regulations, as well as international organizations and foreign non-governmental organizations carried out through BNPB. The regional regulations do not mention which institutions should coordinate with each other in disaster management. The document that clearly mentions several institutions involved in disaster management is the 2013-2017 Wajo District Disaster Management Plan (RPB). There are 17 regional apparatuses that are said to be involved in disaster management in Wajo. In addition, there are several other institutions outside the regional apparatus that are said to be involved in disaster management, including the TNI, the Police, and other institutions such as SAR, BMKG, and community organizations.

The results of the analysis of the Wajo Disaster Management Plan document show that the Regional Disaster Management Agency is the central agency for disaster management in Wajo. BPBD is responsible for 30 activities and supports two activities mentioned in the Wajo RPB. Apart from the BPBD, the Kesbangpol Agency, Social Service, Public Health Office, and Bappeda also have a role in more than 50% of the activities mentioned in the RPB.

Depending on the type of disaster, the RPB document also says which agencies are involved in disaster management. There are 12 agencies involved in disaster management strategies based on the type of disaster. For flood disasters, BPBD and the Office of Public Works are responsible. For forest and land fire disasters, the Forestry Service is responsible. For droughts, landslides, and extreme weather, BPBD is mostly responsible for activities. For extreme waves, the Office of Public Works is mostly responsible. For the tsunami disaster, the Regional Disaster Management Agency, the Public Health Office, and the Social Service were mostly responsible. For epidemics and outbreaks, the Public Health Office is most responsible. Based on this data, BPBD is involved in all types of disasters and, at the same time, is responsible for most of the activities. Apart from BPBD, Bapedalda, the Forestry Service, the Agriculture Service, and the Public Works Service are the agencies most involved in developing disaster management strategies based on each type of disaster.

All the data described above refer to documents, which are of course normative ideals. In addition, the documents referred to were compiled in 2013. Since the enactment of the Regional Government Law in 2014 and its derivative regulations, there have been many changes to the institutional structure of the Wajo Regency government. There are agencies that are withdrawn to become part of the provincial government, There are agencies that are removed, or merged with other agencies. For this reason, in practice, it is very possible for adjustments to occur. This research is focused on disaster management coordination at the pre-disaster stage in Wajo. The next section describes the practice of coordination between agencies involved in disaster management in Wajo.

Disaster Management Coordination Practice in Wajo

Hasibuan (2015) divides coordination into horizontal coordination and vertical coordination. Horizontal coordination is carried out between institutions that are on the same level. In this context, coordination is carried out with fellow regional apparatuses of the Wajo Regency Government and central government institutions operating in the Wajo Regency. The Wajo Regional Disaster Management Agency plays an important role in disaster management in Wajo, so that the BPBD becomes a horizontal coordination node. In addition to the results of document studies, the six Wajo Regency regional apparatuses that we encountered besides BPBD explained the close relationship with BPBD in their respective activities in disaster management efforts. The linkages between BPBD and each of these institutions include:

Table 2. BPBD Linkages with Other Wajo Regional Apparatus

Regional Apparatus	Affairs
National Unity and Political Agency (Kesbangpol)	Social disaster and early detection of disaster
Regional Planning, Research and Development Agency (Bappelitbangda)	Coordination of development planning and determining an unexpected budget
Public Health Office	Disaster Emergency Response
Education and Culture Office	Disaster safe school
Public Works, Spatial Planning and Land Office	Determination of disaster-prone areas and post-disaster reconstruction and reconstruction
Social, Population Control, Family Planning, Women's Empowerment, and Child Protection Agency	Preparation of social contingency documents and disaster emergency response
Regional Secretariat Legal Section	Circular letter
Environmental Services	Making strategic environmental study documents
Agricultural Agency	Management of the impact of disasters for farmers

Regional Apparatus	Affairs
Civil Service Police Unit	Disaster Emergency Response
Indonesian National Army	Disaster Emergency Response
Indonesian National Police	Disaster Emergency Response
Meteorology, Climatology and Geophysics Agency	Weather forecast information

Source: Processed from the interview data

In addition to BPBD, the Kesbangpol Agency, PUPR and Land Office, and BappelitBanda also have a horizontal coordination function with several other regional apparatuses. In carrying out the function of preventing social conflict, the Kesbangpol Agency coordinates with the PUPR and Petanahan Office for many defense conflicts that occur in Wajo, as well as coordinating with the PMD Office for early detection of the Village Head Election Conflict. Bappelitbanda coordinates unexpected expenditure management (BTT) with agencies that will access BTT funds and inspectorates that will verify the proposed data on the use of BTT funds.

Vertical coordination is done with a government institution that is not the same as the one below or above it. Vertical coordination is carried out by BPBD with the National Disaster Management Agency (BNPB) in relation to the Operational Control Center (Pusdalops) Program for Disaster Management, Disaster Safe School Programs, and Facilitating Disaster Management Plan Documents. In addition to BPBD, the PUTR and Land Office, also coordinated with vertical agencies, namely the Pompengan Jeneberang River Basin, especially for disaster mitigation related to the management of water resources, as well as the South Sulawesi National Road Center for the management of national roads in disaster-prone areas . In addition to vertical coordination with a higher level, disaster coordination is also carried out at lower levels. BPBD, for example, coordinates with the sub-district government in terms of disaster information and the village government in terms of fostering tough disaster communities. Likewise, the Kesbangpol Agency coordinates early conflict and disaster detection with the sub-district government.

The two types of coordination that have been revealed above are carried out with fellow government agencies. In disaster management, coordination is also carried out with non-government institutions such as the Department of Foreign Affairs and Trade (DFAT) Australia, Scouts, the Indonesian Red Cross (PMI), youth organizations, and the Disaster Preparedness Taruna (Tagana). DFAT Australia facilitates coordination between regencies related to the Danau Tempe Flood Disaster Management. Coordination with the Indonesian Red Cross (PMI), the Youth Organization, Scouts, and Disaster Preparedness Taruna (Tagana) is carried out in the context of disaster preparedness. Tagana has a unique pattern of coordination. Tagana is a disaster volunteer organization fostered by the Social Service. Its secretariat occupies a logistics warehouse owned by the Wajo Social Service, which is used to accommodate disaster logistics. If the logistics stock is

reduced, Tagana Wajo coordinates directly with Tagana, South Sulawesi Province, to get additional logistics. The equipment owned by Tagana is also a contribution from the Ministry of Social Affairs.

In addition to identifying the type of coordination, we also identify the form of coordination that is practiced in disaster management in Wajo. We categorize disaster coordination into two parts, namely, forms of formal coordination and non-formal coordination. Forms of formal coordination include coordination meetings, correspondence, the involvement of cross-organizational resources, and data and information exchange. The disaster management coordination meeting is held at the stage of preparedness, namely when there is a potential disaster or ahead of the annual disaster cycle. Generally, the meeting is carried out when the rainy season has begun. The Head of BPBD Executive Explain:

"The Regent chaired the meeting. Usually the meeting is before the flood, usually in March or April. There are Satpol PP, TNI, Polri, and related regional apparatus organizations, including the Education Office, Health. Including the Regional Leadership Conference (Muspida), which was also called." (Interview, May 27, 2021).

From the interview quote, it was obtained that the meeting presented all related OPDs and was led by the Regent. At the meeting, all OPDs are explained by the main tasks and functions of each regional apparatus so that there are no more overlapping tasks from each OPD involved. The meeting also presented the TNI and Polri as well as community organizations such as Scouts, PMI, and Tagana.

The second form of disaster coordination is correspondence, namely correspondence activities between agencies. Head of BPBD Wajo's Prevention and Preparedness Division explained:

"The legal department is always involved in making a circular ... we send a letter to the Agriculture Service for a coordination meeting with Agricultural-Related Agencies ... If we have lack of logistics, we send letters to agencies such as companies, banks etc. So they use CSR funds." (Interview, May 27, 2021).

In the practice of disaster management, BPBD coordinated with the legal section of the Regional Secretariat to make a disaster-related circular. In other cases, BPBD writes to private companies, banks, etc. To use CSR funds to provide logistics assistance in disaster management activities. Correspondence was also carried out by BPBD to the Agriculture Office in the context of overcoming the impact of floods for farmers.

The third form of disaster coordination is coordination involving cross-organizational resources. This coordination is carried out in the form of personnel appointments from other organizations to become executors in certain activities and team formation consisting of many organizations. BPBD uses the first form in disaster safe school activities. BPBD Wajo coordinated with the Education and Culture Office in the appointment of disaster-safe schools and used resources from the Education and Culture Office for facilitators of disaster safe school activities. The second form of involvement of cross-organizational resources was found in several activities carried out by Kesbangpol. The Head of Kesbangpol involves

many institutions in helping to conduct disaster detection. This involvement was also accompanied by the provision of a budget, so there were things that bound the personnel in carrying out their functions in this detection team.

The team formation model is also found in disaster preparedness activities. The local government formed an integrated disaster management team consisting of related OPDs and social organizations that assisted disaster management (interview with the Head of BPBD Wajo on May 27, 2021). This team was collected at the disaster preparedness coordination meeting, as explained earlier. For conflict disaster management, an integrated team was also formed. There is a special decree from the Regent in handling conflicts where all agencies that have a connection with the handling of conflicts, such as the Kesbangpol Agency, PUTR and Land Office, as well as the government section of the Wajo Regional Secretariat are involved in it (interview with the Secretary of PUTR and Land Services on July 1, 2021).

The last coordination model is the exchange of data and information. This model is found in every document preparation process. The agency responsible for compiling the document invites other agencies that have the required data. Disaster data and information owned by BPBD are needed in several documents such as regional spatial plans, strategic environmental studies, and making circulars. Apart from providing input to other documents, BPBD also receives and shares information from BMKG. Furthermore, the Head of the Prevention and Preparedness Division of BPBD Wajo explained:

"BPBD Wajo has Pusdalops, which always gets updated data from BMKG. Because of this, the TNI and POLRI routinely come to ask how the weather is in the sub-districts." (Interview, May 27, 2021).

Apart from the BMKG, BPBD is also coordinating with the Kesbangpol Agency to request input for preparing disaster-prone areas for social conflict, Public Works for disaster management roadmaps, and the Social, Population Control, Family Planning, Women's Empowerment, and Child Protection Agencies for social contingency documents.

Coordination is also carried out informally by disaster management actors. The head of the Kesbangpol Agency explained:

"For example, the Kesbangpol embraces more external people, such as the police, military, BIN. What we do, sometimes when we have a little more money, we invite them for coffee. Sometimes those informal issues also make us familiar." (Interview, 27 May 2021).

The explanation from the Head of the Kesbangpol Agency shows that non-formal coordination is carried out with the aim of strengthening formal activities. Kesbangpol maintains a network of cooperation through informal discussions in coffee shops.

The Head of the Social, Population Control, Family Planning, Women's Empowerment, and Child Protection Agency talks about other ways to coordinate that are not official. He recounted his experience when he served as District Head:

“When I was sub-district head, all sub-districts were flooded. But we are looking for help from a village that is in charge of distributing it. Coincidentally, someone from Jasa Raharja said that there would be assistance. But it must be deposited at the post office first. So we communicate if there is assistance like that to the posko. So it must be controlled.” (Interview, July 1, 2021).

The informal coordination that the Head of the Social Service talked about was done to make sure that people in their area could get the help they needed. Informal coordination is done with the source of help, in this case Jasa Raharja, and with the aid manager at the aid distribution post. Informal coordination is based on using primordial networks with people from the same area.

The types and forms of coordination that have been described previously indicate the coordination that has been carried out. The results of the study also show that some coordination has not worked, or at least has not gone well. In terms of development planning, there is no program synchronization between the related institutions. All of the informants we interviewed admitted that there had never been a special meeting to synchronize disaster management programs, which were spread across many regional apparatuses. Bappelitbanda, which plays a role in the administration of regional development planning, stated:

“We are not authorized to synchronize programs. For disaster management, there is an ad hoc structure. So there is an executor. The disaster management agency is only the chief executive. The regional secretary is the head of the disaster management agency. So the function that you explained earlier (the program synchronization function) is actually there... Like in the social services, they already understand when to prepare a public kitchen, when to deploy tagana, when to carry out an evacuation, they already understand the stages. At the disaster management agency too, when the Pusdalops is working, there is already a procedure. We don't get to do technical work. So the question is more appropriate for the regional secretary as the head of the disaster management agency.” (Interview, 28 May 2021).

The statement explained the reasons why program coordination and synchronization were not carried out. Coordination and synchronization of disaster management programs should be carried out by the regional secretary as the Head of the Regional Disaster Management Agency and not by Bappelitbangda.

The generic disaster management strategy in the disaster management plan document mandates many disaster management programs and the institutions that should be involved in them. Setting up a Disaster Risk Reduction Forum (DRR) in Wajo is one of the most important parts of the capacity building and community participation strategy. The BPBD and the Community Empowerment Agency are in charge of these activities. The supporters of this activity are the Kesbangpol Agency, the Social Service, and the Health Service. In practice, this forum did not run well, and the Community Empowerment Agency that was appointed as the person in charge was not involved in the meetings that were held. The meeting that was held was not initiated by the BPBD but by the Indonesian Nahdatul Ulama Institute for Disaster Management (LPBI NU).

The problem of a coordination gap is increasingly visible in the disaster management strategy for each disaster. Coordination is generally only done for intense disasters. Disasters are still potential and have not been well coordinated. For example, earthquakes are stated in the document to be the responsibility of PUTR and Land Affairs, and BPBD. PUTR said they received information about earthquake and liquefaction-prone areas in Wajo from the BPBD. But for the follow-up, it seems that there is still no good coordination. PUTR considers that the inclusion of earthquake and liquefaction information as a disaster-prone area should be the responsibility of the BPBD, even though the Disaster Management Planning document states that this is a shared responsibility.

The Meaning of Disaster Management Coordination

There are specific reasons why disaster management actors coordinate. We identify several meanings of coordination, which we believe are the reasons actors involve themselves in coordination activities. First, the coordinating actors are aware of the limitations they have. Limitations can be in the form of limited information, limited authority, or limited resources. The limited information can be seen in the case of the involvement of BPBD personnel in activities that require disaster information, such as the preparation of the RTRW and KLHS. The PUTR Office, as the person in charge of preparing the RTRW, is aware of the limited information they have in the disaster sector, so they coordinate with BPBD.

Another limitation is the limited authority. This limitation can be seen in the authority to manage Lake Tempe's water resources. This authority lies with the central government, in this case, BBWS Pompengan Jeneberang. On the other hand, the problems arising from these water resources have had an impact on the people of Wajo Regency, so that the PUTR Office feels the need to coordinate with the owner of this authority. The limited authority was also disclosed by the BPBD in the case of land use in disaster-prone areas. The BPBD is only authorized to put up signs warning of disaster-prone areas without being able to prevent or prohibit the community from using the land as a housing location or other uses prohibited by regulations. These limitations require the BPBD to coordinate with the PUTR and Land Affairs Offices, those with the authority to control spatial planning.

The last limitation is limited resources. Disasters in Wajo often occur on a large scale. Floods caused by the overflow of Lake Tempe usually affect four districts. During the rainy season, disasters sometimes occur simultaneously, including the flooding of Lake Tempe, floods of rivers in the Pitumpanua and Keera areas, and tornadoes in several locations. The BPBD Wajo's Rapid Reaction Team did not have enough personnel to handle the effects of the simultaneous floods. This condition requires BPBD to coordinate with many government agencies and community organizations. This finding reinforces the argument of Pazirandeh and Maghsoudi (2017), which state that coordination in the form of sharing resources can improve organizational performance.

Second, coordination is interpreted as fulfilling the requirements of the program sponsor. The Disaster Safe Schools Program, funded by BNPB, requires

regional involvement in the form of APBD allocation for these activities, as well as the involvement of the local education office in determining which schools are targeted for the program. The same goes for disaster management programs that are integrated with rehabilitation. The program uses funds from BNPB. BPBD as the program manager is required to include personnel from the Public Works Office. Due to these requirements, the BPBD coordinates with the Education Office, the Regional Financial Management Office, and the PUTR and Land Affairs Office.

Third, coordination is interpreted as a form of innovation. The Wajo Kesbangpol Agency has the main task of being the eyes and ears of the Regent. Information is very important for the Kesbangpol Agency. The information collected is used as input for the Regent in making decisions. In conflict management as part of social disaster management, information becomes an important input in resolving conflicts. The independent team formed by Kesbangpol is an innovation to solve the problem of lack of information. This team brought together a number of elements from the local government and the community to serve as a source of information for the Kesbangpol Agency. Coordination carried out in the form of an independent team can ultimately be seen as an innovation.

Conversely, the way actors interpret subjects and objects can also become an obstacle to coordination. The subject of coordination is the actor along with the institutional attribution attached to him. In disaster coordination, the attribution of subjects seems to have an effect on the implementation of coordination. The Head of the Kesbangpol Agency describes this phenomenon in the context of the positions of the Head of the BPBD and the Chief Executive of the BPBD. The Head of the Kesbangpol Agency recounted his experience while serving as the Chief Executive of the BPBD:

"I conveyed to the regional secretary, I am only the chief executive and you are ex officio. But the regional secretary always said that you should take care of it, I have to take care of the others. If it is said that you are the only one who takes care of it, then, of course, ego will be born there. Because if we were equal they would say how come we want to be ruled by fellow echelon 2B. Especially when they see I'm young."
(Interview 28 May 2021)

The interview excerpt indicates two things. First, sectoral ego arises when the coordinator is the Chief Executive of the BPBD. Equal structural positions cause the BPBD Executive Head to be unable to coordinate optimally with other institutions. The disaster management policy seems to have accommodated such phenomena. The appointment of the Regional Secretary as ex-officio Head of BPBD allows for a hierarchy of positions to be able to mobilize the resources of institutions related to disaster management. Unfortunately, in practice, a second phenomenon appears in Wajo. The Regional Secretary of Wajo did not carry out his function as the coordinating node for disaster management optimally. The phenomenon in Wajo is different from the findings of Chuang & Ho (2021) in Taiwan. In Wajo, the structure and responsibilities are clear and adequate. Executors are those who do not carry out their functions to the fullest.

The role of regional secretaries and other related OPDs in disaster management coordination is not maximized due to the meaning of the object of disaster management coordination. The object in question is the disaster itself. We identified three things related to the meaning of disaster, which are the reasons why disaster management coordination is not optimal. First, the issue of disaster is considered not to be a strategic issue in Wajo. The head of the Kesbangpol Agency explained:

“The problem is in the RPJMD. I see that the Regent’s Vision and Mission do not make disaster a priority. When we invite Bappeda (to pay attention to disasters), we always lose because there is no basis in the RPJMD” (Interview, 28 May 2021).

We found a similar explanation when we conducted interviews with the Head of Social, Population Control, Family Planning, Women's Empowerment and Child Protection Service, and the Head of Bappelitbangda Wajo. The three regional apparatus leaders in Wajo explained the same point. Disaster issues are not a priority in regional development in Wajo.

This was also confirmed in the 2019–2024 Wajo RPJMD document. There are fifteen strategic issues in Wajo. There are three issues that are very close to disaster management, namely: increasing spatial use and control, revitalizing Lake Tempe, and improving the quality of a sustainable environment. After going through the process of weighting the issues, each of these issues is in positions 10, 11, and 12. For example, compare the three issues with the highest priority, among others: reducing poverty, increasing regional economic growth, and improving public health status. The priority of this issue has an impact on the vision and mission but does not touch disaster management. Neither the vision nor mission of Wajo District mention disaster. This confirms that the issue of disaster is not an important one in Wajo.

Why disasters are not important in Wajo cannot be separated from the meaning of the second coordination object, which is the disaster itself. All of the answers we got to the questions about disasters led us to a description of the most common disaster, which was a flood. We found a uniform impression of the flood disaster among local government officials in Wajo. Floods are not always considered a disaster. The Head of Bappelitbangda explained:

“Because our perception of disasters is different from theirs. Floods up to a certain height are considered a blessing. Because usually they have to go to the lake to catch fish, now (during a flood), the fish come... So if it's a flood itself, as long as the elevation is up to 6-7 meters, it's still considered normal. Because our brothers and sisters who live on the shores of Lake Tempe are already friends with floods. They already understand that we live in a different place. And they are not considered vulnerable because each of them already has a boat. They already have steps to anticipate. So, if the water level has reached here, they will understand what they are doing. If it's past the floor, what else should they do. They already have a procedure. Except when it reaches the roof, it's time to start evacuating... I once went around on a boat with the regent. At that time, Mr. Andi Asmidin was the regent. In that area, between the houses, it was very quiet. No turmoil. In fact, in some houses, you can

hear the sound of music. No one panics... I see it because I've lived around the lake since I was small. Don't worry about flooding. In Padduppa, when the water reaches the streets it becomes a public bath" (Interview, May 28, 2021)

The description above was also explained by the Chief Executive of the BPBD, Head of the Kesbangpol Agency, and Head of the Social, Population Control, Family Planning, Women's Empowerment, and Child Protection Services. All of our informants agree that the floods that regularly hit Wajo District are not a disaster. In certain cases, flooding is considered a blessing for the affected communities, most of whom are fishermen. If flooding is no longer considered a threat, then efforts to overcome it will, of course, not work optimally.

Third, the meaning of disaster as an object of coordination is related to disaster management. What the government understands as disaster management is more about emergency response. When we asked how development planning is used in dealing with disasters. The Head of Bappelitbangda replied:

"The problem of a disaster, when it was planned like that, is no longer a disaster. He is already a regular on the program. So he got into the business of general development planning. If he gets into disaster affairs, he will be financed by BTT. So our job is done with BTT" (Interview, May 28, 2021).

According to the Head of Bappelitbanda, disaster management is an action that cannot be planned and can only be done when a disaster has occurred. Whereas in the disaster management cycle, there are prevention and preparedness stages that are carried out before a disaster occurs.

Perhaps the head of Bappelitbanda can answer that this is not their main task and function, so it is only natural that their understanding is limited. Unfortunately, we got the same impression during our interview with the Wajo Regional Disaster Management Agency. When we asked the Head of the Prevention and Preparedness Division of BPBD Wajo the indicators of successful coordination, the answers we got were:

"When the implementation during the emergency response was completed, people's complaints decreased. Good public acceptance. There are fewer complaints from the postal staff" (Interview, 27 May 2021).

These answers indicate that the person in charge of disaster prevention and preparedness is more focused on preparing for emergency response. Meanwhile, indicators of successful prevention did not appear in the answers. From the field notes, we found that this phenomenon was evenly distributed across all regional sets. Almost all informants only described disaster management as an emergency response action. This condition explains why coordination at the pre-disaster stage did not run optimally.

Conclusion

Coordination of disaster management in Wajo runs better at the disaster preparedness stage, that is, when the signs of a disaster are known or the annual

cycle of disaster events is approaching. The coordination of disaster management is carried out with horizontal, vertical, and non-governmental organizations. There are four models of disaster coordination in Wajo, namely: coordination meetings, correspondence, involving cross-organizational resources, and exchanging data and information. In contrast, disaster management coordination at the pre-disaster stage in Wajo has not gone well in the prevention stage. Inter-agency development planning that has a disaster management program has not been integrated. In addition, coordination does not work well in disasters that are not routine or have never happened before.

Three meanings of coordination are what drive coordination in Wajo. First, coordination is carried out because they are aware of the limitations they have. Second, coordination is necessary to fulfill the requirements of the activity sponsor. Third, coordination is an innovation to overcome problems. Coordination is also hampered by the interpretation of the subject and object of disaster management coordination. The subject who coordinates disaster management is interpreted as the driving node of all the organizations involved, so the position hierarchy is very influential. In this case, the regional secretary, as the Head of the BPBD is the subject who can drive coordination. This function has not been carried out optimally, so the impact on disaster management coordination is not optimal. The object of disaster management coordination is the disaster itself. Disaster is interpreted in three ways. First, disasters are not considered a strategic issue. Second, the most frequent floods in Wajo are not considered a serious threat. Third, disaster management is more often interpreted as an emergency response action. These three things caused the coordination of disaster management in Wajo, especially at the pre-disaster stage, to not be able to work optimally.

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