

## Coordination in Managing Earthquake Disaster Emergencies in North Tapanuli Regency in 2022

Rikki Andika Hutahaeen<sup>\*ip</sup>, Tunggul Sihombing<sup>ip</sup>

Public Administration Study Program, Faculty of Social and Political Sciences, University of North Sumatera, Medan

Corresponding Author Email: [rikkiandikahutahaeen2019@students.usu.ac.id](mailto:rikkiandikahutahaeen2019@students.usu.ac.id)

### ABSTRACT

Received : May 31, 2025  
Revised : August 29, 2025  
Accepted : September 27, 2025

#### Keywords:

*Coordination, Emergency Management, Earthquake Disaster, Organizational Structure*

This research aims to identify and describe in detail the coordination in the emergency response to earthquake disasters in North Tapanuli Regency in 2022. The research method used in this study is a qualitative approach with a descriptive method. Data collection was carried out through interviews, observations, and documentation. The data obtained were analyzed qualitatively using the coordination theory proposed by Sugandha (1988:83-101) which includes: organizational structure, planning, procedures, and supervision. The results of the study indicate that the formation of the organizational structure and planning was coordinated effectively. However procedures and supervision were not coordinated effectively. In the subvariable of organizational structure, the structure depicts important functions as part of the main tasks, the presence of unity of command, and a clear division of labor. In the subvariable of planning, the activity plans, implementation methods, and facilities used are well-coordinated. Furthermore, in the procedural implementation, the distribution of staple food aid to earthquake victims does not follow the procedure, as the distribution is not timely and inconsistent. In the subvariable of supervision, discrepancies are found between implementation and planning, where there are third parties providing direct assistance to victims; discrepancies between implementation and procedure, where the distribution of aid does not follow the correct procedures; discrepancies between implementation and objectives, in which the needs of the victims are not met evenly and not on time.

### INTRODUCTION

Indonesia is one of the countries prone to natural disasters. This is closely related to Indonesia's geographical location, which is situated in the Ring of Fire or the Pacific Fire Circle. One of the natural disasters that often occur in Indonesia is earthquakes. The number of casualties from earthquakes in Indonesia has reached hundreds of thousands of people (Husein, 2016). Various losses must be borne by the state, both materially and in terms of human casualties. The legal framework for disaster management in Indonesia is regulated by Law Number 24 of 2007 on National Disaster Management. Article 1 paragraph (5) states that disaster management is a series of efforts that include the establishment of development policies that are at risk of causing disasters, disaster prevention activities, emergency response, and rehabilitation. In its implementation, it is supported by the issuance of Presidential Regulation Number 8 of 2008 concerning the National Disaster Management Agency.

The National Disaster Mitigation Agency is a non-ministerial agency led by an official at the ministerial level that has the function of formulating, establishing, and coordinating the implementation of disaster mitigation activities in a planned, integrated, and comprehensive manner. With the existence of an agency handling disasters, it is hoped that disaster management can be carried out more optimally. In order to support disaster management in the Regions, in accordance with the provisions of Articles 18 and 19 of Law Number 24 of 2007 concerning disaster management, the

Regional Government must establish a Regional Disaster Management Agency.

The Regional Disaster Management Agency, hereinafter referred to as BPBD, is a set of regions established to carry out disaster management duties and functions in the area. The Regional Disaster Management Agency consists of provincial BPBD and district/city BPBD. With the establishment of BPBD, all matters related to disaster management in the region become the responsibility of the respective local government; however, this does not mean that the National Disaster Management Agency (BNPB) can wash its hands of the matter. Coordination can be well established between the central and local governments as well as cooperation between regions if a disaster cannot be handled by the concerned region, which may be due to the large capacity of the disaster.

North Tapanuli Regency is one of the regions in Indonesia that is prone to earthquakes. Based on data from the North Tapanuli Regency BPBD, the history of earthquakes located in Taput has been recorded since 1921, 1936, 1965, 1984, 1987, 2005, 2008, 2010, 2011, and 2022 (BPBD Taput, 2023). In early October 2022, a significant earthquake disaster again struck the North Tapanuli Regency area. The earthquake occurred at a depth of 10 KM below the surface, with a magnitude of 5.8. The epicenter of the earthquake was located in Huta Raja Village, Parmonangan District, which is relatively close to Tarutung District (the capital of North Tapanuli Regency).

The Regional Disaster Management Agency (BPBD) of North Tapanuli Regency is the authority responsible for disaster management in North Tapanuli. However, given the situation caused by the earthquake in North Tapanuli in 2022, it would not be optimal to rely solely on BPBD North Tapanuli. Therefore, to provide responsive services to the earthquake victims, the participation of each relevant agency must be coordinated. This is basically already regulated in the Regulation of the Head of the National Disaster Management Agency Number 03 of 2008, which in Chapter IV explains that in the implementation of disaster management, BPBD has coordination, command, and execution functions, therefore the working relationship between BPBD and related agencies or institutions can be carried out in a coordinated manner, with command and control.

To create optimal service, it must be supported by good coordination from each party involved. Coordination is a process of mutually binding agreement on various activities or different elements in such a way that all those activities or elements are directed towards achieving a predetermined goal, while on the other hand, the success of one activity does not undermine the success of another activity (Ndraha 2011). Coordination is the process of making agreements among several different individuals or units so that an activity is directed towards achieving a common goal.

Coordination in disaster management has been discussed in several previous studies. First, the research by Munawir Pamaun Sitompul (2021). The results of the study indicate that the coordination of BPBD (Regional Disaster Management Agency) in flood disaster management in Medan City is generally assessed to have fulfilled the nine variables set by the agency, although not perfectly. Then, the research by Vira Amalia Bakti and Fadlurrahman (2020). The results of the study show that the coordination of BPBD in Purworejo Regency during preduring, and postdisaster conditions is quite good for managing disasters, as seen through the basic coordination mechanisms (vertical and horizontal). However, coordination still faces obstacles, such as the presence of community organizations and private sectors that do not coordinate with BPBD during disasters. Next, the research by Gufran Thamrin (2021). The research findings indicate that the coordination of the Regional Disaster Management Agency (BPBD) in addressing the earthquake disaster in 2021 in Majene Regency has been carried out quite well.

## RESEARCH METHODS

The approach used in this study is a qualitative approach with a descriptive method. Qualitative research is research that produces findings that cannot be achieved using statistical procedures or in a quantitative way (Sidiq, et al. 2019). The research is conducted at the office of the Regional Disaster Management Agency (BPBD) of North Tapanuli Regency. The researcher chose this location because the BPBD of North Tapanuli Regency is the agency responsible for disaster management in North Tapanuli. The techniques for data collection used are interviews, observations, documentation, and literature study. The informants in this study are elements from the agencies involved in the emergency response to the natural disaster of the earthquake in North Tapanuli Regency in 2022. The data analysis techniques used are data reduction, data display, and data conclusion drawing/verification. Furthermore, in conducting the validity testing of the data, this research utilizes source triangulation and technique triangulation.

## RESULTS AND DISCUSSION

The emergency response to the earthquake disaster in North Tapanuli Regency in 2022 is an effort made by the North Tapanuli Regency Government to minimize the adverse impacts caused by the earthquake event. The policy taken by the North Tapanuli Regency Government is to establish coordination among all related agencies in North Tapanuli Regency that have the capacity to be involved in the emergency management of the earthquake disaster, with the hope that the earthquake response is coordinated effectively. There are 4 (four) indicators that must be achieved, namely: Organizational Structure, Plan, Procedure, and Supervision (Sugandha, 1988).

### 1. Organizational Structure

The organizational structure is a very important part of an organization, as it allows one to understand the different components or specific areas within an organization. According to Sugandha, there are several principles that must be considered in the creation of an organizational structure, among others.

a. A well-structured organization illustrates the delineation of essential functions

Elaboration of important functions aims to ensure that every essential task is accommodated within each function. Based on interviews with several informants, it is known that the organizational structure in handling emergency natural disasters such as earthquakes in North Tapanuli Regency in 2022 reflects the crucial functions in earthquake disaster emergency management. This is evidenced by the presence of sectors required in earthquake emergency response, such as the service and health sector, logistics and equipment sector, as well as the infrastructure and facility recovery sector.

The results of the researchers' observations on the activities during the emergency response to the earthquake disaster in North Tapanuli Regency in 2022 show that the important functions in handling the earthquake emergency performed their duties according to their functions. Related to health services, a function of the Health and Service Sector was established, which is managed by the Health Office in coordination with the Tarurung General Hospital. Furthermore, the distribution of aid is managed by the Logistics and Equipment Sector, where the Social Service coordinates with the BPBD, TNI, POLRI, local government offices, and the village or urban community. Next, the activity of assessing damage to infrastructure such as residents' houses and places of worship is handled by the Infrastructure and Facilities Recovery Sector, where the PUTR Office coordinates with the PERKIM Office, TNI, POLRI, local government offices, and the village or urban community.



Figure 1. Distribution of Logistic Aid to Victims



**Figure 2.** Health services for victims of physical abuse

b. The Existence of a Unified Command

The second principle in organizing an organizational structure is the unity of command. In general, unity of command is a condition where a person only receives direction and reports only to one direct superior (Sugandha, 1988:86). This means that an individual does not receive instructions from two or more superiors. Similarly, for activities that require coordination, an employee only receives coordination from one superior. The aim is to make activities more directed and eliminate confusion.

Based on interviews with several informants, it is known that there is a command unity in the Emergency Response to the Earthquake Disaster in North Tapanuli Regency in 2022. Each field coordinator provides directions according to their respective functions. Coordinators direct their members based on the tasks that have been assigned. Likewise, members of each field provide reports or carry out the directions given by their respective field coordinators. Thus, it is known that the flow of communication between coordinators and members of each field in the Command Post for the emergency response to the earthquake disaster in North Tapanuli Regency in 2022 is very clear.

c. The number of subordinates that are the responsibility of the manager

The number of subordinates that a manager is responsible for affects the coordination of a job. The number of members in a field can sometimes make it difficult for the field coordinator to supervise their members. Based on interviews with several informants, it was found that there are challenges that hinder some fields from providing direct assistance to their members in carrying out a series of emergency response activities. The large number of members in the logistics field indeed helps in emergency situations because that field divides the team for the distribution of aid. However, the field coordinator cannot coordinate directly with all the teams distributing aid to the community. This certainly affects the weak oversight carried out by the logistics field coordinator in the distribution of aid. Similarly, in the field of infrastructure and facility recovery, with a large number of members, teams can share the task of collecting data on damaged houses in the community, but the field coordinator does not coordinate with his members directly in the field.

d. Division of Tasks

Task division is one of the principles that indicates the effectiveness of coordination related to organizational structure. With clear responsibilities for each person and each part (unit) in activities involving inter-agencies, the direction of the activities carried out by certain individuals or parts (units) also becomes clear. Based on interviews, observations,

and documentation related to the division of tasks in the formation of the organizational structure for earthquake disaster emergency response in North Tapanuli Regency in 2022, it is known that the task division is coordinated effectively. This task division is coordinated in the Forkopimda meeting attended by all elements of Forkopimda along with the leaders and staff from each agency involved in the earthquake disaster emergency response in North Tapanuli.

The division of tasks is coordinated according to the goals of handling the earthquake emergency as described above. In an effort to provide health services to the physical victims, it has been agreed to coordinate between the Health Office and RSUD Tarutung, in accordance with its capacity. Furthermore, regarding the provision of assistance such as basic food items, coordination has been agreed upon between the Social Service Office and elements of BPBD, the military, the police, the sub-district, and the village or urban village. Next, related to the recovery of damage to the homes of earthquake victims, coordination has been agreed upon between the Public Housing and Settlement Office and the Public Works and Spatial Planning Office, the sub-district, and the village or urban village.

## 2. Planning

In planning, there are several things that must be considered, including: What activities will be carried out, how to do them, what facilities are needed, and the timing of the activities (Sugandha, 1988:89)

a. What activities are being conducted?

In the handling of emergency situations related to the earthquake disaster in North Tapanuli Regency in 2022, the determination of activities carried out in the field is a matter discussed during the planning phase, so that it is clearly understood which activities are implemented during execution. Based on the results of interviews, observations, and documentation related to the planning of the types of activities carried out during the emergency handling of the earthquake disaster in North Tapanuli Regency in 2022, it is known that the planning of activities was coordinated effectively. At the first Forkopimda meeting, it was agreed to take strategic steps for emergency handling that include: health services for physical victims managed by the Health Office in coordination with Tarutung General Hospital and coordinated by the Head of the Health Office of North Tapanuli Regency; distribution of basic necessities assistance to earthquake victims, handled by the Health Office in coordination with BPBD, TNI, POLRI, Satpol-PP, sub-districts, and villages or urban villages, coordinated by the Assistant to the Regional Secretary of North Tapanuli; as well as the recovery of infrastructure and facilities, managed by the Public Works and Spatial Planning Office in coordination with the Housing and Settlement Office, TNI, POLRI, sub-districts, and villages or urban villages, coordinated by the Head of the Public Works and Spatial Planning Office of North Tapanuli Regency.

At the second Forkopimda meeting, a plan was agreed upon regarding the recovery of damaged homes and places of worship. The results of the agreement state that for each home and place of worship that was damaged due to the earthquake in North Tapanuli in 2022, cash assistance and building material will be provided with the ratio of 5:2:1. The distribution of cash assistance and building materials is differentiated according to the category of damage, with severe damage receiving 5 parts, moderate damage receiving 2 parts, and minor damage receiving 1 part.



b. How can this be done?

The next category in the plan is to determine how the methods or techniques for carrying out the formulated plan. Based on interviews with several informants, it is known that to obtain data on the damage to houses of earthquake victims in North Tapanuli Regency in 2022, a coordinated data collection method for damage was established. In the coordination, the mechanism for collecting data on house damage due to the earthquake was agreed upon using a Bottom-Up system (data collection coordination from the grassroots to the top). The Public Works and Spatial Planning Office coordinated with the Housing and Settlement Areas Office, as well as with the sub-district and village/locality officials where the earthquake-damaged houses were located.

**Table 1.** List of Damaged Infrastructure Due to Earthquake in North Tapanuli Regency in 2022

No	Jenis	Level of Damage			Total
		Slight Damage	Currently Damaged	Severely Damaged	
1	Residential Houses	2240	793	114	3365
2	Places of Worship	108	26	3	137
3	Educational Facilities	23	18	13	54
4	Health Facilities	16	0	1	17
5	Government Offices				27
<b>Total</b>		<b>2387</b>	<b>837</b>	<b>131</b>	<b>3600</b>

Source: SK Forkopimda Two regarding emergency response to the earthquake in North Tapanuli Regency in 2022

Coordination for collecting data on the damage of houses of earthquake victims is planned to start from the village/sub-district. Then, the collected data on house damage is submitted by the parties to the respective sub-districts. Subsequently, the sub-districts will submit the data on house damage to the Emergency Response Command Post. After all the damage data is collected at the Command Post, the Public Works and Spatial Planning Office coordinates with the Housing and Settlement Office in analyzing the damage to each house. The purpose of the damage analysis process is to determine the damage category of each house, which is divided into 3 (three) categories: minor damage, moderate damage, and severe damage. After the damage of each earthquake victim's house is categorized, the Public Works and Spatial Planning Office and the Housing and Settlement Office must conduct verification in the areas of each village/sub-district to verify the validity of the damage data.

Coordination in planning the methods for carrying out the next activities is related to the distribution of food aid, clothing, and medicine to the earthquake victims. There are 2 (two) methods planned for the distribution of aid, namely:

1) Coordination in planning methods regarding the procedures for distributing humanitarian aid to earthquake victims;

Based on the results of interviews, observations, and documentation, it is known that the coordination in planning the methods for the distribution of food aid, clothing, and medicines to earthquake victims in North Tapanuli Regency in 2022 was not effective. There were convoluted and time-consuming steps in the distribution of aid. For

instance, the stage of requesting assistance coordinated by the requester to the main coordinator of the Command Post, this process is certainly convoluted and time-consuming, because the data of earthquake victims should have already been obtained in the process of assessing the damage to victims' homes. This data should serve as a reference for the Command Post to distribute aid to the earthquake victims.

2) Coordination in planning methods regarding the determination of parties allowed to coordinate in the direct distribution of aid packages to earthquake victims.

Based on the interview results, it is known that the distribution of aid directly to the victims of the earthquake in North Tapanuli Regency is only allowed to be channeled through the Emergency Response Command Post for the earthquake. In this case, as previously arranged through coordination between the Social Service, BPBD, TNI, POLRI, sub-districts, and villages or urban villages. Third parties are not allowed to directly hand over their assistance to the victims, but must submit it to the Emergency Response Command Post. Based on the Forkopimda agreement, it is known that the only entity allowed to distribute aid directly to the earthquake victims in North Tapanuli Regency in 2022 is the Emergency Response Command Post. Any third party that provides assistance directly to the earthquake victims must be directed to the Command Post so that the distribution can be coordinated through the Emergency Response Command Post.

c. What facilities are used?

This category explains the planned facilities that will subsequently be used in the scheduled activities.



**Figure 3.** Transportation of Logistic Assistance Distribution

Based on the results of interviews, observations, and documentation related to coordination in the planning of facilities used in emergency disaster response activities for the earthquake in North Tapanuli Regency in 2022, it is known that the coordination of facility planning for emergency response activities has been effective. The transportation of aid supplies to earthquake victims utilized vehicles from the Regional Disaster Management Agency (BPBD), the Social Service, the Transportation Office (DISHUB), Public Works (PUTR), Housing (PERKIM), the National Armed Forces (TNI), and the National Police (POLRI). The transportation of aid supplies to earthquake victims also utilized rental vehicles coordinated by the Social Service with the village or sub-district authorities.

### 3. Procedure

Procedures are something that greatly influences the success of a job, especially jobs that involve many participants

and a long process. Procedures refer to the steps or stages that must be taken in executing the work, which part should be done first, and what the time frame or duration is for completing it. The characteristics of a good procedure consist of several categories, including: efficient, effective, consistent, and flexible (Rasto in Hartati, 2022).

a. Effective

The effectiveness of procedural coordination is achieved when the objectives of the activities are achieved effectively. The effectiveness of the procedures in achieving the objectives is characterized by the quick accomplishment of goals using the established procedures. Based on the results of interviews, it is known that the procedures for distributing food aid, clothing, and medicines to earthquake victims in North Tapanuli Regency in 2022 were not coordinated effectively. This is due to the ineffectiveness of the aid management process at the storage warehouse of the Command Post. Packaging the aid is one of the stages in the procedure after the verification of requests. This process involves coordination from the storage officials managed by elements of the Regional Disaster Management Agency (BPBD) and the Social Services Department, coordinated by the Head of the Social Services Department. The ineffectiveness of the storage management indicates a lack of effectiveness in the coordination between the Head of the Social Services Department and the storage officials.

b. Efficient

Coordination in carrying out procedures is said to be effective if the activities governed by the procedure are implemented within the specified time. Based on interviews with several informants, in terms of the efficiency of distributing food, clothing, and medicine to earthquake victims in North Tapanuli Regency in 2022, the aid distribution procedures were not effectively coordinated. There were areas that received food aid five (5) days after submitting requests to the Command Post.

c. Consistent

Effective procedural coordination can also be seen from the consistency in the implementation of regulated activity procedures. The consistency referred to is the consistency of time in the implementation of activities. Based on interviews with several informants, it was found that there was a lack of coordination in the distribution of food, clothing, and medicine to earthquake victims. This is due to the inconsistency in the distribution of aid with the stipulated time in the procedure. In the aid distribution procedure, it is explained that after the aid request is submitted, the assistance will be distributed within one day; however, in its implementation, there were instances where aid was distributed to a village after the deadline. This shows that the goal of responsive service through the distribution of aid to earthquake victims has not been achieved.

d. Flexible

A flexible procedure is a procedure that can adjust to different conditions, situations, and needs, but does not diminish the effectiveness of achieving goals. The flexibility of the procedure is crucial for an organization in handling urgent or emergency situations. For example, the emergency situation caused by the earthquake in North Tapanuli in 2022. The emergency caused by the earthquake necessitated quick coordination from the government to address the adverse effects of the earthquake. Each series of emergency response

activities aims to meet the basic needs of earthquake victims during the emergency period, such as providing food, clothing, and medicine.



**Figure 4.** Distribution of aid in Aek Raja Village, Parmonangan District

Based on the interpretation of the results of interviews, observations, and documentation conducted by the researcher, it is concluded that the procedure for distributing food aid to earthquake victims in North Tapanuli District in 2022 was not effectively coordinated. This is due to the distribution of aid not following the proper procedures, both in terms of timing and the processes outlined in the procedures. Regarding the effectiveness of aid distribution to victims, the aid was not delivered quickly; Based on its efficiency, the distribution of aid is not timely; furthermore, according to the consistency of time set in the procedures, it is also not implemented consistently. This improper aid distribution is due to inadequate coordination between the Head of BPBD, the Regional Secretary of North Tapanuli, and the Main Coordinator of the Command Post, who should be focusing on the aid application process but are instead monitoring in the field, causing the application process to be delayed.

#### 4. Supervision

Supervision is an activity carried out by a person or referred to as a supervisory apparatus to monitor, control, and evaluate the progress of an activity or work. To achieve the effective and efficient implementation of activities, it must be supported by good supervision. According to Sugandha (1988:101), good supervision is characterized by several factors, namely: the conformity between implementation and planning, the conformity between implementation and established objectives, and the conformity between implementation and established procedures.

a) The conformity between implementation and planning

The effectiveness of coordination in supervision can be assessed from the alignment between implementation and plans. This means that activities are implemented in accordance with the planned activities. The study in this category discusses the effectiveness of coordination in supervision viewed from the alignment between the coordination of activity implementation and the plan regarding who is allowed to directly distribute aid to earthquake victims. Based on interviews with several informants, it was found that there were third parties distributing aid directly to earthquake victims. They came from humanitarian volunteers who came to help the victims directly. This indicates a mismatch between the implementation of aid distribution and the plan regarding who can coordinate to distribute aid directly to earthquake victims.

The parties allowed to distribute aid directly to earthquake victims are the Command Post. If there are third parties wishing to deliver their aid directly to the earthquake victims,

the Forkopimca should refuse and direct them to the Emergency Handling Command Post. The involvement of third parties as described above handing out food aid directly to the earthquake victims indicates that the coordination from Forkopimca is not effective in monitoring the situation in the community. Therefore, it can be concluded that the coordination in monitoring the situation in the community, which should be part of the duties of the Assistant to the Regional Secretary (Setdakab) with Forkopimca, shows ineffective oversight coordination.

b) The alignment between implementation and objectives

The effectiveness of coordination in supervision can be seen from the alignment between implementation and objectives. The alignment of implementation with the intended objectives refers to the achievement of goals set within the organization through the coordination of activity execution. Similarly, the effectiveness of coordination in supervision during the emergency response to the earthquake disaster in North Tapanuli Regency in 2022 is deemed effective if the goals in emergency earthquake handling are achieved.

Based on interviews with several informants, it is known that the fulfillment of the needs of earthquake victims in North Tapanuli Regency in 2022 was not achieved responsively. This is because not all earthquake victims received emergency tent assistance. Therefore, the objectives in handling the earthquake disaster emergency were not achieved as established. The failure to achieve the objectives of the earthquake emergency response is closely related to the ineffectiveness of coordination in supervising activities during the emergency response. Essentially, when a disaster occurs, it is the government's responsibility to fulfill the basic needs of the victims. Any existing shortcomings must be closely monitored by the relevant institutions so that these shortcomings can be addressed promptly.

Similarly, regarding the shortage of emergency tents for earthquake victims in North Tapanuli in 2022, it has become a necessity for oversight agencies such as the Governor of North Sumatra, the Chief of Police of North Sumatra, the Regional Disaster Management Agency of North Sumatra, and the National Disaster Mitigation Agency to monitor the situation, such as checking whether there are enough tents for the earthquake victims. However, the failure to meet the tent needs for all earthquake victims indicates a lack of coordination among the oversight agencies mentioned above in monitoring the availability of necessities for the victims.

c) The conformity between implementation and procedures

The effectiveness of coordination in supervision can also be assessed from the alignment between coordination in the implementation of activities and the planned implementation procedures. Similarly, the effectiveness of coordination in supervision during the emergency response to the earthquake disaster in North Tapanuli Regency in 2022 can be determined from the consistency between the implementation of activities and procedural coordination in emergency response activities. This study in this category discusses coordination in supervision viewed from the alignment between implementation and the procedures for distributing food aid, clothing, and medicine to earthquake victims.

Based on the interpretation of the results of interviews, observations, and documentation conducted by the researcher, it is known that the supervision in handling emergency disaster response to the earthquake in North Tapanuli Regency in 2022

was not effectively coordinated. This can be seen based on three (3) aspects: the inconsistency of implementation with the plan, the inconsistency of implementation with the procedures, and the inconsistency of implementation with the objectives. The inconsistency of implementation with the plan is evidenced by the fact that a third party provided direct assistance to the victims, whereas it was previously planned that only the Command Post would be allowed to distribute aid to the earthquake victims; third parties providing assistance should have gone to the Command Post instead; The discrepancies between implementation and procedures can be seen from the improper distribution of aid, both in terms of the process and the timing of aid distribution; the discrepancy between implementation and goals is evidenced by the failure to distribute food aid procedurally, as well as the unmet need for emergency tents for each victim. This indicates that the goal of providing responsive services to victims has not been achieved. Based on these three aspects, it can be concluded that supervision is not effectively coordinated. Supervisory agencies such as BNPB, the Governor of North Sumatra, the Police Chief of North Sumatra, and BPBD of North Sumatra should be able to identify and oversee the obstacles faced during emergency handling.

## CONCLUSION

Based on the research findings and discussions, it is concluded that in the dimension of organizational structure, the formation of the organizational structure is coordinated effectively. The effectiveness of the coordination of the organizational structure is seen from several variables, including that the established structure outlines important functions as the main tasks during earthquake emergency handling, the presence of a unified command during the emergency response, the division of members in each field according to their competencies, and the division of labor is carried out clearly. Furthermore, in the planning dimension, it is concluded that the planning in handling earthquake disaster emergencies in North Tapanuli Regency in 2022 is coordinated effectively. Next, in the procedural dimension, it is concluded that the procedures for the distribution of food aid to earthquake victims in North Tapanuli Regency in 2022 are not coordinated effectively. This can be seen from the distribution of aid that does not follow the proper procedures, both in terms of timing and in terms of the process as outlined in the procedures. Lastly, regarding the oversight dimension, it is also concluded that the oversight in the emergency handling of the earthquake disaster in Tapanuli Utara Regency in 2022 was not effectively coordinated. This can be observed based on three (3) aspects, namely: the inconsistency of implementation with the plans, the inconsistency of implementation with the procedures, and the inconsistency of implementation with the objectives.

## REFERENCES

- Andrew, J., Herlina, L., & Wijanto, S. (2024). *Efektivitas Tingkat Dalam Evaluasi Seismik Bangunan Eksisting Berdasarkan Asce 41-17 Effectiveness Of Tier On Seismic Evaluation Of Existing Buildings Based On Asce 41-17*. 02(01), 73–78.
- Anies. (2018). *Manajemen Bencana: Solusi Untuk Mencegah dan Mengelola Bencana*. Gosyen Publishing.
- Bakti, V. A., & Fadlurrahman, F. (2020). *Koordinasi Badan Penanggulangan Bencana Daerah dalam Menanggulangi*



- Bencana di Kabupaten Purworejo. *Aspirasi: Jurnal Masalah-Masalah Sosial*, 11(2).
- Efendi, S., Hidayat, S., Abadi, K., & Yusuf, M. S. (2024). *Aspek Hukum Administrasi Dalam Pengadaan Barang dan Jasa , Prosedur dan Kontrol Yuridis atas Penunjukan Penyedia Barang / Jasa Pemerintah pada Masa Bencana Alam Gempa Aspects of Administrative Law in the Procurement of Goods and Services , Procedures and Juridical Control Over the Appointment of Government Goods / Services Providers During Natural Disasters Earthquake*. 7(12), 4945–4951. <https://doi.org/10.56338/jks.v7i12.6493>
- Handyaningrat, S. (1980). *Pengantar Studi Ilmu Administrasi dan Manajemen*. CV Haji Masagung.
- Hasibuan, M. (2016). *Manajemen Dasar, Pengertian, dan Masalah*. Bumi Aksara.
- Husein, S. (2016). *Bencana Gempa Bumi*. Universitas Gajah Mada. <https://doi.org/10.13140/RG.2.1.1112.6808>
- Meisino. (2012). *Manajemen Organisasi*. Citapustaka Media.
- Ndraha, T. (2011). *Kybernology Ilmu Pemerintahan Baru*. Rinake Cipta.
- Nasution, M. S., Hussin, H. B., Rusli, Z., Mayarni, M., Mashur, D., Zulkarnaini, Z., & Ananda, F. (2025). Integration of Environmental Policies in Sustainable Management of Mangrove Ecotourism. In *E3S Web of Conferences* (Vol. 611, p. 04003). EDP Sciences.
- Sidiq, U., & Choiri, M. M. (2019). *Metode Penelitian Kualitatif di Bidang Pendidikan* (A. Mujahidin (ed.)). CV. Nata Karya.
- Sitompul, M. P. (2021). Koordinasi Badan Penanggulangan Bencana Daerah (BPBD) Dalam Penanggulangan Bencana Banjir di Kota Medan. In *Repository Universitas Sumatera Utara*.
- Sugandha, D. (1988). *Koordinasi Alat Pemersatu Gerak Administrasi*. Intermedia.
- Syafiie, I. K. (2011). *Manajemen Pemerintahan*. Pustaka Reka Cipta.
- Terry, G. R. (1960). *Principles of Management*. Library of Congress Catalogue Card No. 60-10855.
- Thamrin, G. (2022). *Koordinasi Badan Penanggulangan Bencana Daerah (BPBD) Dalam Penanggulangan Bencana Gempa Bumi Tahun 2021 Di Kabupaten Majene*. IPDN Jatinangor.
- Zulkarnaini, Z., Sujianto, S., Wawan, W., Muchid, M., & Mashur, D. (2023). Strengthening Community Social Capital In Peatland Management. *Sosiohumaniora*, 25(1), 44-51.
- Zulkarnaini, Z., Rusli, Z., Nasution, M. S., Rinto, R., Mayarni, M., & Mashur, D. (2024). Policy Design For Peatland Management Based On Public-Private Partnership. *Sosiohumaniora*, 26(1), 97-105.