

Post-Disaster Mitigation: Material Assistance for Rehabilitation and Reconstruction by The East Java Provincial BPBD

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KEYWORDS	ABSTRACT
Post-disaster Rehabilitation; Reconstruction Procedures; Disaster Management	Indonesia is a disaster-prone country due to its geographical location between the Asian and Australian continental plates, making it vulnerable to natural disasters such as tsunamis, landslides, and earthquakes. These disasters cause significant damage to infrastructure and residential areas, particularly in East Java, which ranks among the top 10 disaster-prone regions. This study aims to evaluate the post-disaster mitigation procedures for rehabilitation and reconstruction, focusing on the material assistance provided by the East Java Provincial Disaster Management Agency (BPBD). This qualitative study adopts a descriptive approach, utilizing both primary and secondary data sources. Primary data was collected through interviews with staff from the East Java BPBD, while secondary data was gathered from relevant documents and regulations. The study identifies that the East Java BPBD follows a structured procedure, with specific Standard Operating Procedures (SOPs) for providing material assistance and financial support for rehabilitation and reconstruction efforts. The process involves multiple stages of administrative checks, proposal evaluations, and field verifications. The findings reveal the effectiveness of these procedures in ensuring smooth coordination and timely distribution of assistance. The post-disaster rehabilitation and reconstruction procedures employed by the East Java BPBD are well-organized, with clear stages and SOPs in place. These procedures help streamline the administrative process and facilitate the efficient delivery of material assistance and funding. However, challenges in implementation may still arise, requiring continuous monitoring and refinement of the procedures.

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Introduction

Disaster is an event that can threaten to share aspects of life, such as aspects of people's lives, which can result in obstacles to the survival of living things. According to Ultari et al. (2023), some factors cause disasters, both natural and non-natural, so they can take many victims, such as humans and other living things, and have a bad psychological impact.

Geographically, the Unitary State of the Republic of Indonesia has a geographical location that is sandwiched between the Asian continental plate and the Australian continent. What can be said is that the Unitary State of the Republic of Indonesia is a country that is very prone to natural disasters in various regions, such as tsunamis, landslides and earthquakes, so it has a huge disaster impact that damages the order of settlements and building infrastructure.

The Regional Disaster Management Agency (BPBD) is an institution under the authority of the National Disaster Management Agency (BNPB), which has the same duties and main points in dealing with disaster problems and policy guidelines of the National Disaster Management Agency (BPBD Lumajang, 2023) at the Provincial and City/Regency levels. The establishment of Disaster Management Agencies in each region in the Unitary State of the Republic of Indonesia has been based on (Peraturan Presiden (Perpres), 2008), the establishment of regional Disaster Management Agencies is the responsibility of each local government in the implementation of disaster management both natural and non-natural which is carried out in a planned manner. anticipatory in disaster management in each Providence/Regency.

Damage to community settlements can hinder the movement of access to public services for the community, such as health services, education services and others. so that it is necessary to carry out quick handling by the local government and the Disaster Management Agency in each region (Samad et al., 2020). Damage caused by disasters has a crucial potential that blinds people to losing their valuable assets. The a need for appropriate action in providing evacuation to people to safer places far from potential disaster areas.

To relieve the community's burden and help the local government of Ponorogo Regency affected by the disaster, the East Java Provincial Government and the East Java Provincial Disaster Management Agency plan to provide Rehabilitation and Reconstruction assistance by providing material assistance and labour wages to carry out recovery and development through the City/Regency Regional Disaster Management Agency.

However, there are procedural stages that must be undergone in providing material assistance and work wages, the need for a procedure that must be obeyed by the Regency/City Regional Disaster Management Agency (BPBD) based on (Decree on Building Materials and Wages (BPBD East Java Province), (Badan Nasional Penanggulangan Bencana, 2024). The mechanism in providing building material assistance and labour wages is an administrative stage for the Regional Disaster Management Agency of East Java Province and City/Regency so that the administrative process can provide convenience between the two parties in overcoming problems in budget costs and the adequacy of building materials.

According to Mulyadi (2001; 5) in Munawar et al. (2020), procedures are steps in the form of a cricket activity; they can usually be binding on a group or department formed to ensure simultaneous handling of transactions between partners and companies that are carried out repeatedly.

Definition of Rehabilitation Based on (Regulation ff The Head of The National Disaster Management Agency Number 17 of 2010 (Badan Nasional Penanggulangan Bencana, 2010) It is an improvement and recovery in various aspects of public or community services to an adequate

level in the post-disaster area with the main means for the normalization or reasonable running of all forms of government and community life in the disaster area.

Reconstruction is the return of one based on the original event, arranging or re-depicting with available materials and rearranging as the original event (Marbun, 1996) (Hidayah et al., 2024).

The purpose of this study is to evaluate the procedures involved in the provision of material assistance and rehabilitation support by the East Java BPBD, focusing on the effectiveness and challenges encountered during the implementation phase. The research aims to assess whether these procedures are being followed properly and to identify areas for improvement. The contribution of this research lies in providing insights into the operational processes of disaster recovery in East Java, highlighting best practices for other disaster management agencies, and contributing to the refinement of post-disaster assistance mechanisms at the provincial level.

Research Methods

The author uses a qualitative research method and a descriptive approach in this study. Qualitative research is research that can be described as explaining and analyzing a phenomenon, event, activity, social, attitude, belief, perception, and individual or group thinking. This study uses 2 locations, namely within the scope and outside the scope of the Regional Disaster Management Agency of East Java Province. This research focuses on the Regional Disaster Management Agency of East Java Province. The purpose of this study is to understand whether the procedure process is going well or not.

Primary and secondary data sources are 2 types of sources that will be used in this study. The primary source of data is an interview that will be conducted with an informant. There are two informants from employees of the East Java Provincial Regional Disaster Management Agency, namely the Data Management staff and the Post-Disaster Recovery Staff. Secondary data sources.

The data analysis process followed a thematic approach, where the interview responses and secondary data were transcribed and categorized based on key themes such as procedural stages, administrative checks, verification processes, and coordination among agencies. This analysis helped identify common patterns, strengths, and weaknesses in the disaster response process. Additionally, the study compared the actual practices of the BPBD with the SOPs outlined in official regulations to identify any gaps or inconsistencies in the implementation of procedures. By systematically analyzing the data, this research provides a comprehensive understanding of the management of material assistance and reconstruction efforts at the provincial level. It also highlights areas for improvement to enhance future disaster recovery operations.

Results and Discussions

In applying for post-disaster Rehabilitation and Reconstruction material assistance from the Regional Disaster Management Agency of East Java Province, it is necessary to have Post-Disaster SOP Stages of Material Assistance based on (...). SOP according to Arini T. Seomohadiwidjojo (2024) explains that, Standard Operating Procedures (SOPs), also known as "Procedures", are clearer and more detailed documents that describe the methods used to implement and implement

policies in an organization as set out in the guidelines (Achmad, 2023; Cahyono et al., 2022; Nugroho et al., 2023). SOP is a set of work orders or steps that must be followed to carry out a job guided by the goals that must be achieved. so that the material assistance procedure has stages and SOPs that must be carried out to provide material assistance. 6 stages of the procedural process must be carried out based on the rehabilitation and Reconstruction SOP of the Regional Disaster Management Agency of East Java Province in providing Material Assistance, namely: (Framesthi et al., 2023)

1. Acceptance of Rehabilitation and Reconstruction Proposal proposals

- a) The Chief Executive received a proposal for post-disaster Rehabilitation and Reconstruction Material assistance from the City/Regency Regional Disaster Management Agency. The Chief Executive reviews and gives a disposition to the Head of Rehabilitation and Reconstruction for follow-up.
- b) The Head of the Rehabilitation and Reconstruction Division reviewed the proposal for rehabilitation and post-disaster reconstruction from the Ponorogo Regency Regional Disaster Management Agency. Then, provide dispositions to the Young Expert Disaster Management Planner / Young Expert Policy Analysis for follow-up,
- c) Furthermore, the Young Expert Disaster Management Planner / Young Expert Policy Analysis Examines the Proposal for Rehabilitation and Reconstruction of the City/Regency Regional Disaster Management Agency.
- d) After that, the data management staff will record each content of the post-disaster Rehabilitation and Reconstruction proposal of the City/Regency Regional Disaster Management Agency into the list of Post-Disaster Rehabilitation and Reconstruction Proposals. Also, they will transfer the results of the proposal scan and upload them to the database of Proposed Rehabilitation and Post-Disaster Reconstruction Proposals.

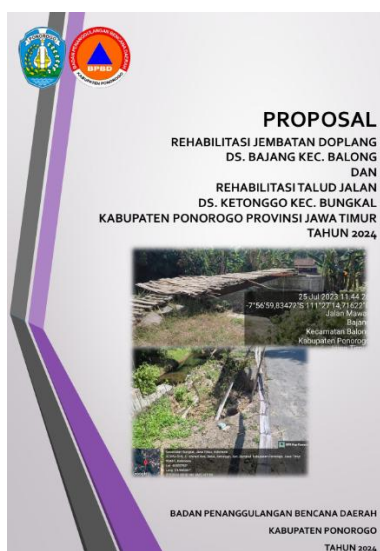


Figure 1. Example of City/Regency Material Assistance Proposal

Source: Personal Documentation, 2024

2. Review of the Completeness of Rehabilitation and Reconstruction Proposal Proposals.

- a) The data management staff will get the proposed Rehabilitation and Reconstruction proposal of the Ponorogo Regency Regional Disaster Management Agency on the field database, then review and check the suitability of the proposed post-disaster Rehabilitation and Reconstruction material proposal from the Regional Disaster Management Agency of East Java Province.
- b) The data management staff will make a report on the results of administrative verification, which is outlined in the form of a notification letter concept the results of the verification of the Proposal for Post-Disaster Rehabilitation and Reconstruction Material Assistance of the City/Regency Regional Disaster Management Agency The following are the results of the administrative verification of the proposal of the City/Regency Disaster Management Agency:

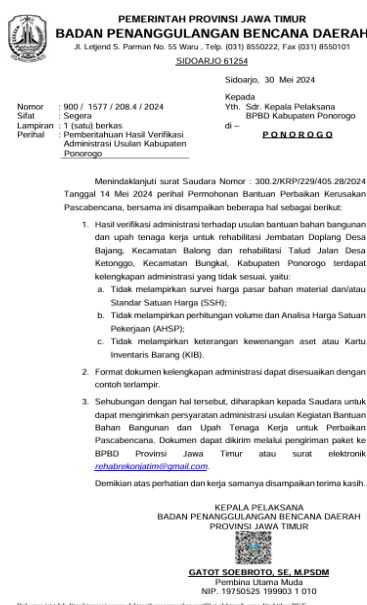


Figure 2. Letter of Verification Results of City/Regency BPBD proposal proposal

Source: Personal Documentation, 2024

- c) The data management staff will submit a concept of notification of the results of the administrative verification of the proposed Rehabilitation and Post-Disaster Reconstruction material assistance proposal to the Young Expert Disaster Management Planner / Young Expert Policy Analysis. Suppose the young expert disaster management planner/young expert policy analyst agrees with the concept. In that case, the young policy analysis staff will instruct the data manager to duplicate 3 (Three) and provide a coordination paragraph. However, suppose the young expert disaster management planner does not agree with the results of the administrative verification of the proposed proposal

for rehabilitation and reconstruction material assistance. In that case, the concept must be revised in accordance with the direction of the policy analysis of the young expert.

- d) After the approval of the notification letter of verification results by the young expert policy analyst, a notification letter of the results of the verification of the administrative verification of the proposal for post-disaster rehabilitation and reconstruction material assistance is submitted to the Head of Rehabilitation and Reconstruction. If approved by the Head of Rehabilitation and Reconstruction agrees to the concept of a notification letter of verification of administrative files for the submission of post-disaster rehabilitation and reconstruction material assistance. The Head of Rehabilitation and Reconstruction will provide a coordination paragraph. However, if the concept is not approved, the concept needs to be revised in accordance with the direction of the Head of Rehabilitation and Reconstruction.
- e) Furthermore, the letter of results from the administrative verification that the Head of Rehabilitation and Reconstruction has paraphrased is submitted to the Chief Executive through the Secretary. The chief executive will see the concept of the resulting letter from the administrative verification that has been paraphrased from the head of the rehabilitation and reconstruction division. After that, the chief executive approves the concept of the results of administrative verification, and the Chief Executive signs a notification of the results of administrative verification of the proposal for material assistance. If the Chief Executive does not approve, then the Head of the Rehabilitation and Reconstruction Division orders the Young Expert Policy Analysis to improve the concept according to the correction from the Chief Executive, then make it into 3 copies and require a paraphrase to be submitted back to the Chief Executive through the secretary for signature.

3. Verification of the field of proposals on rehabilitation and reconstruction proposals.

- a) Coordinating related to schedule adjustments to conduct field verification to the City/Regency Regional Disaster Management Agency related to the Proposed Proposal for Rehabilitation and Post-Disaster Reconstruction material assistance.
- b) After that, verify directly to the field regarding the proposed Post-Disaster Rehabilitation and Reconstruction report, damage to the doplang site caused by the flood disaster, together with the Rehabilitation and Reconstruction Staff of the City/Regency Regional Disaster Management Agency. After verifying the field to see the damage to the Doplang bridge, the Disaster Analysis Team will then make a field verification report regarding the proposed material assistance for post-disaster Rehabilitation and Reconstruction.



Figure 3. Conducting field verification

Source: Personal Documentation, 2024

- c) Furthermore, the disaster analysis team will make a report on the results of field verification regarding the proposal for post-disaster Rehabilitation and Reconstruction material assistance for the Doplang bridge by attaching the results of the calculation of the cost budget plan based on the results of field verification on the doplang bridge in Ponorogo Regency.



Figure 4. Minutes of Field Verification

Source: Personal Documentation, 2024

- d) The disaster analysis team will report the results of the field verification regarding the proposed rehabilitation and post-disaster reconstruction material assistance of the Doplang bridge to the policy analysis of young experts by attaching the minutes of the field verification of the Doplang bridge. After that, the policy analysis of the young experts approved the concept of the field verification results report and the field verification minutes, immediately ordered the disaster analysis team to make 3 (three) copies and gave a coordination paragraph. If the policy analysis of young experts does

e) After being approved by the policy analysis, the young expert then reported the results of the field verification of the proposed post-disaster Rehabilitation and Reconstruction assistance to the head of the post-disaster Rehabilitation and Reconstruction Division. Approved by the head of the Rehabilitation and Reconstruction division and signed (Know).

4. Provision of rehabilitation and reconstruction material assistance

- a) The data management staff will draft a letter of approval for material assistance related to the Doplang Bridge to the City/Regency Regional Disaster Management Agency.

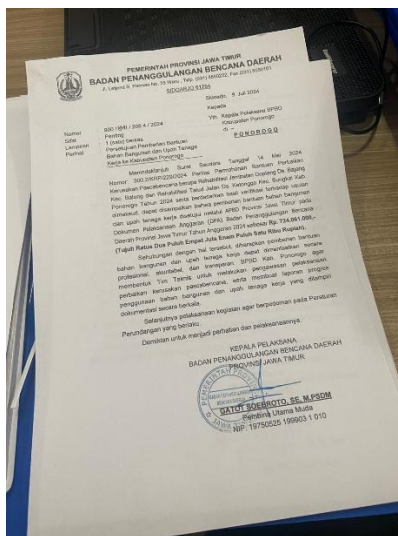


Figure 5. Material Assistance Approval Letter

Source: Personal Documentation, 2024

- b) Then, the data management staff will submit the concept of a letter of approval for the provision of materials and wages for rehabilitation and post-disaster reconstruction of the Doplang Bridge to the Policy Analysis of Young Experts. After checking the policy analysis of the young expert and being approved, the policy analysis of the young expert ordered the Data Management Staff to make a letter of agreement for the provision of material assistance in 3 (Three) copies and provide a coordination paragraph. However, if it is not approved by the policy analysis of young experts, it is necessary to make improvements to the concept.
- c) After the checking stage of the policy analysis of the young experts, the data management staff will submit a letter of approval for material assistance and labor wages regarding

damage to the Doplang Bridge in Bajang Village, Balong District, Ponorogo Regency to the Head of Rehabilitation and Reconstruction of the Regional Disaster Management Agency of East Java Province. After checking and being approved, the Head of Rehabilitation and Reconstruction will conduct a coordination draft (Signature). If it is not approved, it must be repaired in accordance with the direction of the Head of the Rehabilitation and Reconstruction Division of the Regional Disaster Management Agency of East Java Province.

- d) The Head of the Rehabilitation and Reconstruction Division will submit the results of the approval letter for the provision of material assistance and labor wages on the damage to the Doplang Bridge that has been paraphrased by the Head of the Rehabilitation and Reconstruction Division to the Chief Executive through the secretary for further review. If the chief executive has agreed and agrees, the chief executive will sign a letter of approval for material assistance and labor wages for post-disaster reconstruction on the Doplang bridge. If the Chief Executive does not approve, the head of the Rehabilitation and Reconstruction division will order a policy analysis of young experts to improve in accordance with the correction by the Chief Executive. After that, make a letter of approval for material assistance which is concurrent 3 (Three) and paraphrased back to the Head of Rehabilitation and Reconstruction, after which it is given back to the Chief Executive through the Secretary.
- e) Furthermore, they purchased material assistance equipment through the E-Catalog and carried out by the E-Catalog officer.
- f) The Young Expert Policy Analysis and the Head of Rehabilitation and Reconstruction will sign a contract between the provider and the PPK and approved by the KPA for Rehabilitation and Reconstruction of the East Java Provincial Disaster Management Agency.
- g) The Data Management Staff will make a report of the handover of work from the Regional Disaster Management Agency of East Java Province to the Regional Disaster Management Agency of City/Regency after the provider sends the goods according to the delivery time specified in the contract.
- h) The data management staff will submit the minutes of the handover of material goods to the Young Expert Policy Analysis and the Head of Rehabilitation and Reconstruction Division of the East Java Provincial Disaster Management Agency to be signed, then the data management staff will submit material assistance for rehabilitation and reconstruction recovery by signing the BAST Young Expert Policy Analysis with the City/Regency Regional Disaster Management Agency.

5. Monitoring and Evaluation of the Implementation of Post-Disaster Rehabilitation and Reconstruction

1. The disaster analysis team will monitor and communicate with the policy analysis of young experts in implementing the provision of post-disaster Rehabilitation and

- Reconstruction material assistance by contacting the City/Regency Regional Disaster Management Agency.
2. The disaster analysis team will make progress in the realization of post-disaster Rehabilitation and Reconstruction material assistance work.
 3. The disaster analysis team will report on the progress of the realization of rehabilitation material assistance and post-disaster reconstruction work on the Dopleng Bridge to the policy analysis of the Young Expert; if it agrees to be implemented, the Disaster Management Planner/Policy Analyst conveys to be monitored and evaluated, if the Disaster Management Planner/Policy Analyst does not approve, then the monitoring and evaluation will be postponed pending the work according to the expected progress.
 4. Policy analysis of young experts will be submitted for Monitoring and Evaluation of the Progress of the Realization of Post-Disaster Rehabilitation and Reconstruction Material Assistance Work. If you agree to do the money the officer will make a draft of the assignment letter.
 5. The Head of the Rehabilitation and Reconstruction Division will convey the implementation of Monitoring and Evaluation activities on the Progress of the Realization of Rehabilitation and Reconstruction Material Assistance Work and sign a task order for monitoring and evaluation activities. If the Chief Executive approves, the task warrant is signed. After approval, the Head of Rehabilitation and Reconstruction will submit to the Disaster Management Planner/Policy Analyst, and the Disaster Management Planner/Policy Analyst will order the officer to carry out the evaluation monitoring.
 6. The disaster analysis team will monitor and evaluate the rehabilitation and reconstruction material assistance work at the repair site on the Dopleng Bridge caused by the flood disaster and make a report on the monitoring and evaluation of material assistance work to be submitted to the policy analysis of young experts.
 7. The disaster analysis team conveyed the results of monitoring and evaluation in the field of rehabilitation and post-disaster reconstruction material assistance in the repair of the Dopleng Bridge to the policy analysis of young experts. Furthermore, convey to the Head of Rehabilitation and Reconstruction the results of monitoring and evaluation during reconstruction monitoring.

6. Post-Disaster Rehabilitation and Reconstruction Recovery Reporting

1. The rehabilitation and reconstruction team of the Regional Disaster Management Agency of East Java Province will convey the need for complete reporting on rehabilitation recovery and post-disaster reconstruction of the City/Regency Disaster Management Agency.
2. Checking the lack of completeness of the rehabilitation recovery and post-disaster reconstruction reporting file on the Dopleng bridge in Ponorogo Regency. The files that must be completed are in the form of a Physical Implementation Results Report, Work

Documentation Report, Physical Implementation Wage Report, Decree on the Formation of the Technical/Supervisory Team, and Absolute Responsibility Statement Letter. The complete file report will then be submitted to the policy analysis of young experts and the head of the Rehabilitation and Reconstruction sector. If it is not complete, the file must be completed.

3. The data management staff will submit the completeness of the reporting file for material assistance for rehabilitation recovery and post-disaster reconstruction.

Conclusion

The procedures for providing post-disaster rehabilitation and reconstruction assistance by the East Java Provincial Disaster Management Agency (BPBD) are structured and effective, with clear Standard Operating Procedures (SOPs) that guide the administrative process and ensure the smooth distribution of material assistance and financial resources. The study demonstrates that the BPBD's procedures are largely in alignment with regulatory guidelines, facilitating efficient coordination among various agencies involved in disaster recovery. However, the research also identifies some challenges, particularly in the consistency and efficiency of administrative processes, which can hinder timely assistance delivery.

From a practical perspective, this research's findings underscore the importance of adhering to established procedures and SOPs in disaster recovery operations. These insights can assist disaster management agencies at the provincial and national levels in refining their operational practices, particularly in improving administrative processes and inter-agency coordination. Academically, the study contributes to the growing body of knowledge on disaster recovery management by providing an in-depth examination of the procedures involved in post-disaster assistance, offering valuable insights into the operational dynamics of disaster management agencies.

Based on the findings, it is recommended that future research explore the effectiveness of these procedures in different regions of Indonesia and consider the role of technology in streamlining administrative processes. Additionally, further studies could investigate the long-term impact of post-disaster assistance on community recovery, with a focus on the sustainability of the rehabilitation and reconstruction efforts. By addressing these areas, future research can enhance the understanding of disaster recovery mechanisms and contribute to the improvement of disaster management practices.

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