Vol. 6, No. 1, January 2026
E-ISSN:2723 – 6692
P-ISSN:2723– 6595
http://jiss.publikasiindonesia.id/

Analysis of Local Government Response to Floods in Aceh: Netnography Approach

Dafit Hidayat*, Nur Fitriani Wulandari, Aldila Hisyam Hasrudin, Ovalia Rukmana
Universitas Bakrie, Indonesia
Email: dafithidayat020217@gmail.com* , uwlan29@gmail.com, aldilahisyam@gmail.com

KEYWORDS
floods, local government response, disaster management, crisis communication

ABSTRACT
The major floods that struck Aceh Province in November 2025 had a significant impact on the social, economic, and infrastructural aspects of life in various districts. Disaster management positions local governments as the primary actors in the emergency response phase, particularly in evacuation, logistics distribution, cross-agency coordination, and crisis communication. This study aims to analyze the response of the Aceh local government to the November 2025 floods and identify the factors that affect the effectiveness of the response. This study employs a qualitative approach with netnography methodology, which involves the systematic analysis of online digital traces to understand social phenomena in their natural digital context. The results show that local government responses were relatively swift in urban areas with good transportation access. However, significant delays occurred in isolated areas due to infrastructure damage and limited coordination. Additionally, the mismatch between the government's official narrative and on-the-ground conditions eroded public trust. On the other hand, the resilience of local communities played a key role as a buffer in the early phases of the disaster through self-evacuation initiatives and community solidarity. This study concludes that the effectiveness of local government responses in flood management is influenced by regional access factors, disaster management governance, and the quality of crisis communication. Strengthening cross-agency coordination, empathetic communication strategies, and the integration of local community roles are the main recommendations to improve future disaster management.

INTRODUCTION

The major floods that hit Aceh in November 2025 will have a significant impact on communities and infrastructure in various districts (Amra et al., 2025; Djunarsjah et al., 2025). Based on a report by the Aceh Disaster Management Agency, the extreme intensity of rainfall that reached more than 250–300 mm per day caused a number of major rivers to overflow and submerge more than 12,800 houses in North Aceh, Bireuen, East Aceh, Lhokseumawe, and Aceh Tamiang (BPBA, 2025). In addition, more than 28,500 people had to evacuate to 76

evacuation points provided by the local government (BPBA, 2025). The following is rainfall data in the Aceh region during the November 2025 flood period.

Table.1 Rainfall data (source: BMKG)

Regency/City	Rainfall (mm/day)	Source
North Aceh	280 mm	BMKG, 2025
Bireuen	260 mm	BMKG, 2025
East Aceh	300 mm	BMKG, 2025
Lhokseumawe	245 mm	BMKG, 2025
Aceh Tamiang	275 mm	BMKG, 2025

From the data above, the highest rainfall was in East Aceh regencies/cities of 300mm, while North Aceh 280mm and Aceh Tamiang 275mm. The low rainfall in Bireuen and Lhokseumawe Regencies/Cities was at 260mm and 245mm. Infrastructure damage also worsened the condition. Three connecting bridges were reported damaged and dozens of national roads were submerged and impassable, causing a number of villages in North Aceh and East Aceh to be isolated for 1-3 days (Serambi News, 2025). This situation hampered the evacuation process and slowed down the distribution of aid to the affected locations.

This disaster was triggered by a combination of meteorological, hydrological, and environmental factors. BMKG reported that Aceh experienced weather anomalies due to the strengthening of the Asian monsoon and the Madden–Julian Oscillation (MJO) phenomenon of the wet phase, which produced rainfall well above normal (BMKG, 2025). Hydrologically, the affected areas are located in the lowlands (floodplains) and downstream parts of several large watersheds (watersheds) such as the Krueng Keureuto watershed, the Krueng Pase watershed, and the Krueng Arakundo watershed which have experienced sedimentation and siltation in the last five years (BPBA, 2025). This siltation causes the capacity of the river to decrease drastically when receiving high water discharge.

Table 2. Watershed (Watershed) Conditions in Flood-Affected Areas. (source: BPBA)

Watershed Name	Hydrological Conditions	Key Issues	Impact on Flooding
Krueng Keureuto Watershed	High sedimentation	River siltation	Rivers overflow faster
Krueng Pase Watershed	Slow flow	Upstream erosion & cliff damage	Discharge overflows into settlements
Krueng Arakundo Watershed	Declining capacity	Deforestation upstream	Increased surface runoff
Simpang Jernih Watershed	Slope	Sediment buildup	Long inundation in the lowlands
Tamiang Watershed	Extreme discharge fluctuations	Land Use Conversion	Local flash floods

Environmental factors also worsen conditions, especially the decline in forest cover and land conversion in upstream areas, which increase surface runoff. Research by *PloS One* shows

that the loss of vegetation cover accelerates surface flow and increases the risk of flooding in the North Aceh and Aceh Tamiang regions (Rahman et al., 2024). The combination of extreme meteorological factors, hydrological vulnerability, and environmental degradation made the November 2025 floods one of the largest in the past decade in Aceh.

The National Disaster Management Agency (*BNPB*) sent 27.6 tons of logistical assistance by air and sea to overcome limited access, including tents, ready-to-eat food, medicines, baby supplies, and satellite communication equipment (BNPB, 2025). However, media reports show delays in the distribution of aid in a number of isolated villages, where logistics arrived only on the second or third day (AJNN, 2025). Viral videos on social media show flooding conditions up to waist height, children trapped on rooftops, and residents crossing heavy currents (TikTok Reports, 2025), underscoring the contrast between field conditions and the central government's official narrative.

Controversy erupted when the Head of *BNPB* stated that "the floods in Sumatra are not as tense as shown on social media." This statement triggered reactions from the Acehnese people and humanitarian organizations, who assessed that the actual conditions were much worse than those described by the central government (BNPB, 2025; AJNN, 2025). These differences in narratives highlight the perception gap between the government and the public, as well as the importance of accurate and sensitive crisis communication.

Given the complexity of disaster response in Aceh's November 2025 floods, this study addresses the following specific research questions: 1. How effective was the local government's emergency response in different geographic contexts (urban vs. isolated areas)? 2. What were the key coordination challenges between government agencies during the flood response? 3. How did crisis communication strategies affect public trust and perception of government response? These operational questions guide the systematic investigation of government response mechanisms and their effectiveness in the context of the November 2025 Aceh floods.

This research addresses critical gaps in understanding disaster management in the Indonesian context and carries significant academic and practical implications. Academically, it contributes to disaster governance literature by examining the intersection of institutional response, crisis communication, and community resilience in a decentralized governance system. The study's methodological innovation lies in applying netnography to disaster management research, demonstrating how digital ethnography can capture real-time public perceptions and ground-level realities that often diverge from official narratives.

Practically, the urgency of this research is underscored by three factors. First, the increasing frequency and intensity of flood disasters in Aceh due to climate change necessitates evidence-based improvements in disaster management systems. Second, the November 2025 floods revealed critical gaps in coordination and communication that, if unaddressed, could lead to preventable casualties in future disasters. Third, the findings provide actionable recommendations for policymakers to strengthen disaster preparedness, improve inter-agency coordination, and develop more effective crisis communication strategies that can save lives and reduce disaster impacts on vulnerable communities.

In the context of disaster management, local government responses play a crucial role in the emergency phase, especially in life-saving efforts, meeting basic needs, and coordinating

across agencies. A number of previous studies have shown that the effectiveness of disaster response is not determined solely by the availability of resources but also by the quality of governance, clarity of command, and the ability to communicate with communities (Alexander, 2020; Tiernan et al., 2020). However, in practice, government responses often face obstacles in the form of limited access to affected areas, overlapping authority, and differences in narratives between the government and the community.

The theoretical framework for this study draws on three interconnected bodies of literature. First, disaster governance theory emphasizes the importance of multi-level coordination, clear command structures, and adaptive capacity in managing complex emergencies (Huang et al., 2021; Sari & Handayani, 2023). This framework helps explain variations in response effectiveness across different geographic contexts and administrative levels.

Second, crisis communication theory (Coombs, 2021) provides insights into how government messaging during emergencies affects public trust, compliance with evacuation orders, and overall disaster outcomes. The theory of situational crisis communication (*SCCT*) is particularly relevant for understanding the public backlash against *BNPB*'s minimization of flood severity, as it demonstrates how misaligned communication can damage organizational credibility during crises.

Third, community resilience theory (Cutter et al., 2021; Adger et al., 2020) offers a lens for analyzing how local communities' social capital, indigenous knowledge, and self-organization capabilities serve as critical buffers when formal response systems are delayed or inadequate. Previous research in Indonesian contexts has shown that community-based disaster management can complement official responses, particularly in geographically isolated areas (Nugroho & Suryani, 2022).

However, existing literature on Aceh's flood management has predominantly focused on hydrological causes and environmental degradation (Rahman et al., 2024), with limited attention to governance dimensions, crisis communication dynamics, and the interplay between institutional responses and community resilience. Furthermore, few studies have leveraged digital ethnography to capture the gap between official narratives and lived experiences of disaster-affected communities in real-time.

Research related to floods in Aceh generally highlights the environmental causes and physical impacts of disasters, while studies that specifically analyze local government responses from the perspectives of governance, crisis communication, and community resilience remain relatively limited. In addition, the dynamics of the information gap between the government's official narrative and community experiences spread through social media have not been studied in depth in the context of regional-level flood management.

This study makes three distinctive contributions to the disaster management literature. First, it employs netnography as a methodological innovation to systematically capture and analyze digital traces of disaster experiences, including social media posts, online news coverage, and government digital communications. This approach enables real-time documentation of the gap between official narratives and ground realities, providing a more comprehensive picture of disaster dynamics than traditional methods.

Second, the study advances crisis communication research by demonstrating how narrative misalignment between government officials and affected communities can undermine disaster response effectiveness, even when material resources are adequate. The analysis of the *BNPB* statement controversy provides empirical evidence for the critical importance of empathetic, context-sensitive communication in disaster management.

Third, this research contributes to understanding disaster governance in decentralized systems by examining coordination challenges across multiple administrative levels and geographic contexts. The findings reveal how decentralization, while enabling local responsiveness, can also create coordination gaps that disproportionately affect isolated communities—a phenomenon understudied in Southeast Asian disaster management literature.

Based on the research gap, this study aims to analyze the response of the Aceh local government to the November 2025 floods, focusing on the effectiveness of emergency response, inter-agency coordination, logistics distribution, crisis communication, and the role of community resilience. The results are expected to make an academic contribution to the study of disaster management and provide policy recommendations for improving disaster management at the regional level.

METHOD

This study used a qualitative approach with *Netnography* to analyze the response of local governments to floods that occurred in Aceh Province in November 2025. The qualitative approach was chosen because it allows researchers to gain a deep understanding of the processes, dynamics, and socio-institutional contexts in disaster management, which cannot be adequately explained through quantitative approaches (Creswell & Poth, 2018). *Netnography* is used because the research focuses on one specific event—the November 2025 Aceh floods—that are analyzed intensively in a specific space and time context. The case study allows for an in-depth exploration of inter-stakeholder interactions, response mechanisms, and coordination challenges faced by local governments in disaster situations (Yin, 2018)

The data collection technique was taken from document analysis documents and media analysis, which were then verified using source triangulation to increase the credibility and validity of the data (Creswell & Poth, 2018). The collected data were analyzed using thematic analysis as proposed by Braun and Clarke (2006), through the stages of data familiarization, initial coding, theme development, theme review, and interpretation of findings.

Data analysis was carried out using thematic analysis with the help of NVivo 12 Plus software. NVivo is used to help the process of organizing data, systematic coding, and identifying thematic patterns in a more structured and transparent manner

The limitations of this study have several limitations, including dependence on secondary data and the potential for information bias from social media. Nevertheless, the use of source triangulation and NVivo-assisted thematic analysis is expected to minimize bias and increase the credibility of research findings

RESULTS AND DISCUSSIONS

Figure 1. *Go Cloud*

Figure 1 shows the search results of *Word Frequency Query* NVivo from imported data sources, the word "sumatra" is the word with the most frequency that appears at 2.98% of all research data sources, followed by the word "aceh" which is 2.18%, the word "flood" which is 1.69%, the word "north" which is 1.59%, the word "west" which is 1.49%, and "2025" which is 1.39%, from all research data sources. Word *Clouds images* of the 1000 dominant words used from the source of this research and. While the data in the table below explains the percentage of dominant words.

Table 3. Dominant Word Percentage

Words	*Weighted Percentage* (%)
Sumatra	2,98
Aceh	2,18
Flood	1,69
Stuart	1,59
West	1,49
2025	1,39

Based on the hierarchy chart below, the order of the most frequencies of the data above is response, handling, government, delivery, refugees, and society.

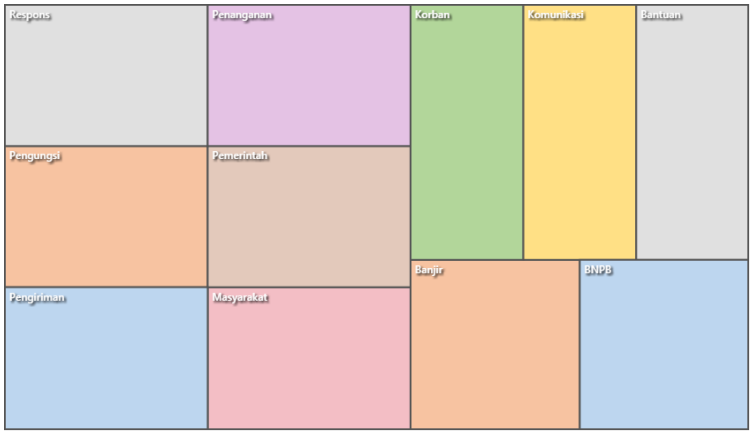

Figure 2. Hierarchy chart

Discussion

Overview of Local Government Responses

The Aceh local government has taken response steps since the first day of the flood through the establishment of posts, evacuation of residents, and distribution of logistics. However, the effectiveness of the measures differed between regions: cities and regions were easily accessible for quick service, while isolated villages experienced delays of up to three days

Effectiveness of Inter-Agency Coordination

Formal coordination between agencies has been established, but it only runs optimally on lines with good transportation access. In the isolation area, there is an overlap of instructions and a transfer of command, hindering the acceleration of the response. This shows that the concept of good disaster governance has not been fully implemented.

Logistics and Refugee Distribution

Logistical assistance has been delivered in large quantities (±27.6 tons), but the mapping of needs is not precise. Crowded evacuation points are experiencing shortages of special commodities such as baby milk, medicine, and blankets. The demand-based distribution system is not yet running, so the allocation is uneven.

Crisis Communication and Public Perception

Narrative differences are an important issue in this study. Official information from the central government that underestimates the severity of the floods has provoked negative reactions from the Acehnese people and humanitarian organizations. This emphasizes that crisis communication not only conveys facts but also contains elements of empathy and social sensitivity.

The Role of Community Resilience

When the government's official response was delayed, the affected communities showed a high level of resilience through self-evacuation, mutual cooperation, and the establishment of public kitchens. This initiative acts as the main buffer in the early phase of the crisis.

These findings confirm the theory of community resilience, which states that social capital and local networks are key elements in dealing with disasters (Cutter et al., 2021; Nugroho & Suryani, 2022). However, community resilience in this case is more compensatory and not part of an integrated disaster management system.

Table 4. Field-relevant findings

Field Findings	Relevant Theories	Conclusion
Evacuation is fast in the city but slow in the village	Disaster response cycle	Uneven response performance
Distribution lines are hampered	Disaster governance	Poor coordination when physical access is disrupted
Inconsistencies in official information	Communication crisis	Public trust is declining
High self-government	Community resilience	Resilience is the support of the system

CONCLUSION

The study on the Aceh local government's response to the November 2025 floods reveals a mix of institutional readiness and structural limitations, with responses proving relatively effective in accessible areas but facing major barriers—such as limited access, poor coordination, and communication gaps—in isolated regions. Crisis communication asynchrony between officials and communities eroded public trust, while local community resilience served as a vital buffer during early disaster phases. These findings highlight the need to bolster disaster management governance through empathetic communication strategies and systematic community integration. For future research, longitudinal studies could track the long-term implementation of these recommendations, comparing Aceh's evolving systems with other Indonesian provinces prone to flooding to assess scalability and sustained impact.

REFERENCES

Adger, W. N., Safra de Campos, R., Mortreux, C., & Barnett, J. (2020). Mobility, displacement and migration, and their interactions with vulnerability and adaptation to environmental change. *Global Environmental Change*, 65, 102194. https://doi.org/10.1016/j.gloenvcha.2020.102194

AJNN. (2025). *Late Aid Arrives in Aceh Flood Isolated Areas.* Aceh Journal National Network.

Alexander, D. (2020). *Disaster and emergency planning for preparedness, response, and recovery*. Oxford University Press.

Amra, R. N., Bancin, F., Ningsih, R., Noviana, I., & Sanjaya, I. (2025). The Impact of Flood Disasters on Public Health in Sultan Daulat District Subulussalam City in 2025. *Unram Journal of Community Service*, *6*(4), 1019–1023.

BMKG. (2025). *Report on Extreme Weather and Rainfall in the Aceh Region for the Period of November 2025.* Meteorology, Climatology, and Geophysics Agency.

BNPB. (2025). *Official Release of Sumatra Flood Management 2025.* National Disaster Management Agency.

BPBA. (2025). *Aceh Flood Situation Report November 2025.* Aceh Disaster Management Agency.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.

Creswell, J. (2016). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches.* Sage Publications.

Coombs, W. T. (2021). *Ongoing crisis communication: Planning, managing, and responding* (6th ed.). Sage Publications.

Cutter, S. L., Ash, K. D., & Emrich, C. T. (2021). The geographies of community disaster resilience. *Global Environmental Change*, 29, 65–77.

Djunarsjah, E., Wisayantono, D., Julian, M. M., Putra, A. P., Samudra, S. A., Maulana, S., Lubis, N. S., Angdrico, Pradana, A. A., & Aji, A. B. (2025). Identification of flood causes and flood modeling for the reconstruction of affected land in Bireuen District, Aceh Province, Indonesia. *Natural Hazards*, 1–40.

Huang, X., Li, Z., & Zhang, Y. (2021). Coordination and governance in disaster response: Evidence from flood management. *International Journal of Disaster Risk Reduction*, 54, 102043.

Nugroho, S., & Suryani, E. (2022). Community resilience in disaster-prone areas of Indonesia. *Journal of Disaster Management*, 13(2), 101–115.

Rahman, F., Abdullah, S., & Maulida, N. (2024). Environmental drivers of flooding in Aceh. *PLOS ONE,* 19(3), e0298745.

Sari, D. P., & Handayani, T. (2023). Disaster governance in decentralized systems: Lessons from Indonesia. *Journal of Asian Public Policy*, 16(1), 45–61.

Serambi News. (2025). *Thousands of residents were displaced due to the Aceh floods, three bridges broke.*

Tiernan, A., Drennan, L., & Nalau, J. (2020). A review of governance challenges in disaster management. *Progress in Disaster Science*, 7, 100118.

TikTok reports. (2025). *Compilation of Video Impacts of the Aceh Flood in November 2025.*

Yin, R. (2018). *Case Study Research and Applications: Design and Methods.* Sage Publications.