

DISPARITY IN POST-DISASTER RESPONSE AND RECOVERY: A STUDY ON THE FUNDING OF THE MOUNT LEWOTOBI LAKI-LAKI ERUPTION IN EAST FLORES

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Abstract

Background This study examines the imbalance between emergency response funding and long-term recovery financing following the 2024 eruption of Mount Lewotobi Laki-Laki in East Flores. The research aims to determine whether the global pattern, marked by rapid and substantial funding during the response phase and a sharp decline during recovery, also appears in this local context.

Methods A qualitative approach was employed by combining a systematic review of disaster-financing literature in Asia with empirical data from East Flores. Data were collected through document analysis, official reports, and in-depth interviews with humanitarian practitioners and local authorities. Thematic coding was used to analyze patterns in funding flows, institutional constraints, and community experiences.

Results Findings reveal a structural gap between response and recovery funding. Support during the emergency phase was abundant, while recovery efforts faced limited and inconsistent financial resources. This shortfall contributed to delays in permanent housing, unclear relocation processes, disrupted education services, loss of livelihoods, and heightened social and psychological stress among affected communities.

Conclusions The study highlights the need for long-term recovery funding schemes, stronger coordination mechanisms, and greater community involvement in recovery planning. These insights underscore the importance of improving disaster-recovery governance in low-fiscal island regions such as Eastern Indonesia.

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Keywords

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Introduction

Indonesia is one of the most disaster-prone nations in the world due to its location in the Pacific Ring of Fire and its exposure to extreme hydrometeorological phenomena. The combination of geological factors and climate change has resulted in disaster events becoming increasingly frequent, destructive, and widespread in their impact on society. According to [Soetono et al. \(2024\)](#), approximately 40% of Indonesia's population resides in high-risk areas, while the [World Bank \(2011\)](#) indicates that the increasing value of exposed assets and disaster intensity significantly amplify the challenges of long-term recovery.

Post-disaster recovery extends beyond the reconstruction of infrastructure; it encompasses the restoration of social functions, economic stability, and the psychological well-being of the community. [North and Pfefferbaum \(2013\)](#) explain that the mental health impacts following a disaster can be long-lasting and influence social stability. [Forbes \(2017\)](#) adds that the success of recovery relies heavily on the sustainability of funding, inter-agency coordination, and psychosocial support. These findings are reinforced by [Amatya \(2023\)](#), who emphasizes the importance of sound funding governance and multi-sectoral collaboration in the recovery process.

The eruption of Mount Lewotobi Laki-laki in East Flores in November 2024 illustrates the complexity of recovery issues in an archipelagic region with limited fiscal capacity. [BNPB \(2024\)](#) recorded that over 13,000 residents were displaced, agricultural lands were damaged, educational services were disrupted, and social-psychological pressures increased. The initial response was relatively rapid due to strong support from the government and humanitarian agencies. However, as the situation entered the recovery phase, attention waned and funding became increasingly limited, thereby reflecting a common pattern in Asia: a dominance of funding during the response phase and weak allocation during the recovery phase.

Asian literature indicates that the funding gap between the response and recovery phases is a recurring phenomenon. A number of studies in Nepal ([KC & Thapa, 2021](#)), Bangladesh ([Mahmood et al., 2020](#)), India ([Patel & Sarkar, 2017](#)), the Philippines ([Lucero & Felicísimo, 2020](#)), Sri Lanka ([Athukorala & Resosudarmo, 2005](#)), Pakistan ([Niaz & Niyaz, 2018](#)), and Japan ([Edgington, 2015](#)) consistently depict the phenomenon of donor fatigue and weak recovery governance. These findings reveal that funding flows abundantly during the response phase driven by urgency and media coverage, but diminishes drastically when entering the recovery phase, which is longer and more costly.

This funding disparity is structural, not incidental. It arises from short donor attention cycles, priorities that do not always align with community needs, and suboptimal recovery governance systems. This conceptual framework serves as the basis for this study to analyze whether this global pattern is also reflected in East Flores following the eruption of Mount Lewotobi Laki-laki.

On the other hand, there are several gaps in the literature that have not been widely discussed. First, research on recovery funding for volcanic eruptions remains limited compared to other disasters such as earthquakes, floods, and cyclones. Yet, eruptions possess unique damage characteristics, particularly regarding land degradation, recurring risks, and relocation needs. Second, most studies utilize macro data from institutional reports, thereby failing to fully capture the micro-experiences of the community. Third, studies examining the

impact of funding disparities on the socio-economic and psychosocial conditions of communities in remote archipelagic regions, such as East Nusa Tenggara (NTT), remain rare.

The novelty of this research lies in the integration of Asian literature studies with qualitative data from East Flores. This approach not only maps funding patterns at the regional level but also illustrates how these patterns are reflected in local experiences. Furthermore, this research highlights issues of justice and inclusivity in recovery funding, which are still under-discussed in the context of volcanic eruptions in Eastern Indonesia. This approach provides a methodological contribution that balances global conceptual analysis with local empirical reality.

This study aims to analyze the funding disparity between the response and recovery phases in the case of the Mount Lewotobi Laki-laki eruption, and through the theory of disaster recovery governance, this study as well as to examine its impact on the community's socio-economic and psychosocial recovery processes. Furthermore, this study seeks to compare local findings with the funding patterns that have been mapped in Asian literature. Therefore, the research questions are formulated as follows:

- 1) How does the funding pattern between the response and recovery phases of the Mount Lewotobi Laki-laki eruption manifest, and to what extent is this pattern consistent with the trends of funding disparity found in Asian literature?
- 2) What are the implications of this funding disparity for the community's socio-economic and psychosocial recovery processes, and what factors contribute to the decline in funding during the recovery phase in an archipelagic region with limited fiscal capacity?

Methods

This study employs a qualitative approach that integrates a Systematic Literature Review (SLR) with local empirical data from East Flores. The SLR was conducted following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, encompassing the stages of identification, screening, eligibility assessment, and the final selection of relevant articles.

Literature data were retrieved from various academic databases, including Scopus, Web of Science, ScienceDirect, JSTOR, Google Scholar, and Garuda, with a specific focus on publications regarding disaster funding in Asia. The analysis covers literature published between 2000 and 2024, thereby capturing current developments in disaster funding while also considering the historical context.

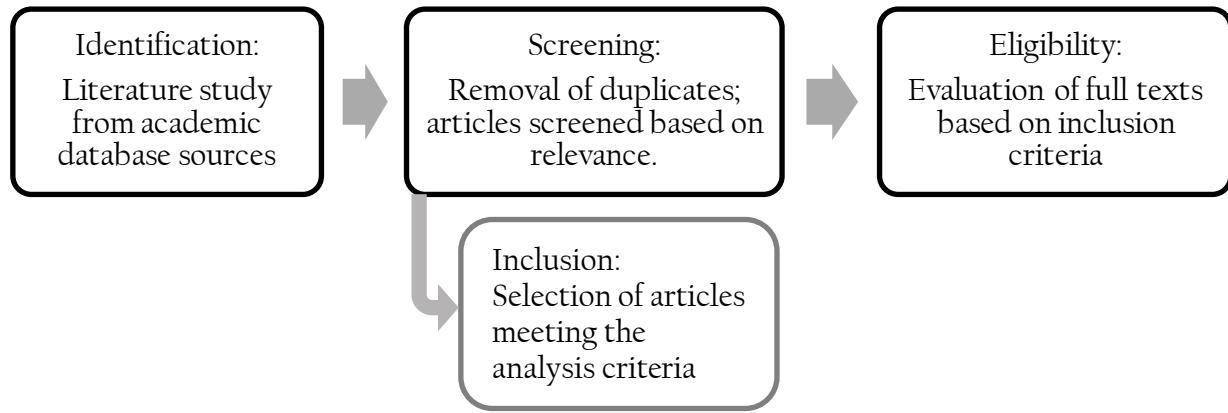


Figure 1. PRISMA Flow Chart for the Selection of Studies on Disaster Funding in Asia
Source: Processed by researchers (2025)

To complement the literature review, this study collected qualitative empirical data from East Flores Regency during the period of June–July 2025, following the eruption of Mount Lewotobi Laki-laki in November 2024 ([Sinexus, 2025](#)). Data collection was conducted when the region had transitioned past the emergency response phase but remained in a dynamic recovery process, thereby allowing for an observation of funding flows across both phases. Field data were obtained through in-depth interviews with volunteers, humanitarian workers, local government officials, and board members of the East Flores Disaster Risk Reduction Forum (FPRB) who were directly involved in response and recovery efforts. Informants were selected using purposive sampling based on their experience, operational knowledge, and roles in managing disaster funding. The collected data encompass the informants' experiences in accessing funding, barriers to inter-agency coordination, the dynamics of donor relationships, and their perceptions regarding the funding disparity between the response and recovery phases. These qualitative data are not utilized to quantitatively calculate cost requirements, but rather to provide an empirical context that enriches the findings of the SLR.

All data were analyzed using thematic coding techniques as developed by [Braun and Clarke \(2006\)](#). The analysis process involved data familiarization, initial coding, theme generation, and the integration of findings from the Asian literature with the field data. A constructivist approach ([Crotty, 1998](#)) was employed to understand how actors interpret funding dynamics based on their subjective experiences. The synthesis of the SLR and local empirical data enables this study to generate a more comprehensive understanding of response and recovery funding patterns in Asia and how these patterns are reflected within the local context of East Flores.

This study has significant limitations, primarily because the eruptions of Mount Lewotobi Laki-laki occurred recurrently during the research period. This condition presents challenges in delineating a clear boundary between the emergency response phase and the recovery phase; each time the region transitioned into the recovery stage, volcanic activity escalated again, causing a shift in disaster status. This situation complicates the establishment of a definitive cut-off point for analyzing recovery funding and potentially affects the temporal consistency of the empirical data obtained in the field.

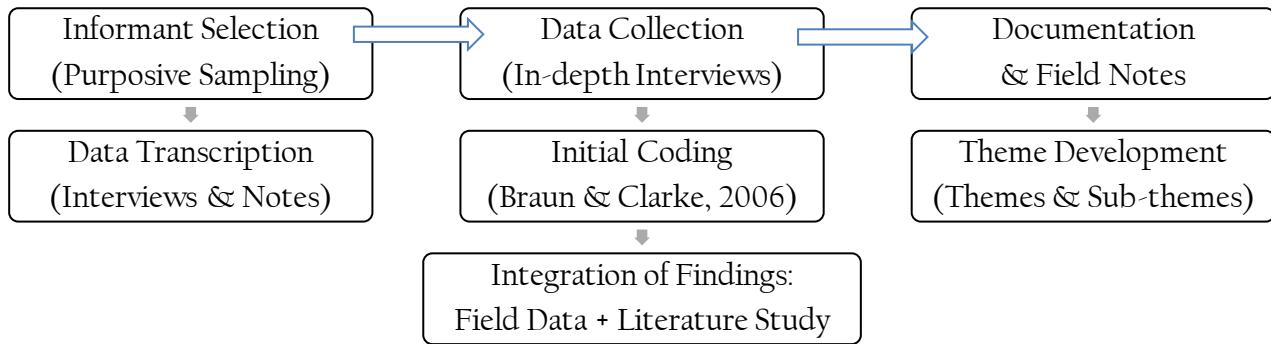


Figure 2. Qualitative Data Collection and Analysis Workflow

Source: Processed by researchers (2025)

Result and Discussion

The results of the literature review indicate that the funding disparity between the response and recovery phases is a prevalent pattern across Asia. Response funding flows rapidly due to its perceived urgency, whereas recovery funding is delayed and often inadequate as donor attention wanes. Donor fatigue and weak governance emerge as the primary factors contributing to these recovery delays.

Qualitative findings from East Flores reveal a highly similar pattern. During the response phase, the community received intensive support in the form of logistics, evacuation, and basic facilities from the government and humanitarian agencies. However, upon the commencement of the recovery phase, support declined drastically. Assistance for livelihood recovery, permanent housing, and social services proceeded slowly. Many residents remain in a state of prolonged uncertainty due to unclear relocation plans, the incomplete restoration of schools, and severe damage to agricultural land.

Informants further explained that governance challenges exacerbated the situation. Inconsistent data on displaced persons, suboptimal inter-agency coordination, and the local government's fiscal constraints hindered recovery programs. Consequently, the qualitative data demonstrate that the funding patterns identified in the Asian literature are re-manifested within the Lewotobi context.

Table 1. Review of Selected Asian Literature on Post-Disaster Funding Dynamics

No	Author & Year	Country/ Context	Disaster Type	Key Findings on Response-Recovery	Identified Funding / Governance Issues	Relevance to the East Flores Context
1	KC & Thapa (2021)	Nepal	2015 Earthquake	Initial response heavily funded, recovery slow and disproportionate; communities wait months to years for reconstruction.	Disparity between donor pledges and realization; slow reconstruction bureaucracy; weak coordination.	Explains why recovery tends to proceed much slower than response; parallels the Lewotobi experience.
2	Mahmood et al. (2020)	Bangladesh	Cyclones & Floods	Donors active in the emergency phase but withdraw rapidly during	Donor fatigue; donor dependency; minimal support for	Relevant for understanding the decline in

				the long-term recovery phase.	livelihood recovery.	donor support in East Flores as the recovery phase begins.
3	Patel & Sarkar (2017)	India	Floods & Cyclones	Response funding is episodic; recovery suffers from chronic delays.	Policy fragmentation; low local fiscal capacity; minimal recovery planning.	Similar conditions are observed in the East Flores Local Government, which has very limited fiscal capacity.
4	Lucero & Felicísimo (2020)	The Philippines	Typhoon Haiyan (2013)	Substantial aid during response; housing and livelihood reconstruction severely underfunded.	Mismatch between donor priorities and community needs; minimal long-term aid.	Highly relevant as the Philippines and Indonesia are both archipelagic nations with similar disaster patterns.
5	Bankoff & Hilhorst (2009)	The Philippines	Typhoons & Floods	Recovery is influenced by the political arena of aid; uneven distribution.	Politicization of aid; inequality in recovery access between regions.	Relevant for understanding aid disparity between villages in East Flores.
6	Athukorala & Resosudarmo (2005)	Sri Lanka	2004 Tsunami	Uneven recovery; remote areas left furthest behind.	Geographical inequality in aid distribution; limited access.	Similar to the hard-to-reach inland and coastal areas of Lewotobi.
7	Niaz & Niyaz (2018)	Pakistan	2005 Earthquake	Slow damage verification; recovery fund disbursement delayed for long periods.	Rigid bureaucracy; ineffective central-local coordination.	Relevant to the slow verification and data collection of displaced persons in East Flores.
8	Edgington (2015)	Japan	2011 Tsunami	Recovery remained slow despite the availability of massive funding.	Socio-geographic complexity; recovery is not just about money but governance.	Emphasizes that increased funding is insufficient without strong recovery governance.
9	Leaning (2006)	Sri Lanka	2004 Tsunami	Vulnerable groups receive the least recovery support.	Distributional justice issues; bias in recovery allocation.	Relates to the impact of the Lewotobi recovery on women, the elderly, and vulnerable groups.
10	World	The	Typhoon	Recovery requires multi-	Multi-sectoral	Relevant for

	Bank & GFDRR (2014)	Philippines	Haiyan	sectoral investment; huge gap between needs and funding.	funding unmet; weak institutional coordination.	explaining cross-sectoral recovery needs in Lewotobi (housing, economy, education).
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Source: Processed by researchers (2025)

The findings presented in the literature review table underscore that the funding imbalance between the response and recovery phases is a recurring phenomenon across various Asian nations, irrespective of the disaster type or the country's economic capacity. This pattern manifests not only in low-income countries such as Nepal and Bangladesh, but also in middle-income nations like the Philippines and Sri Lanka, and even in developed countries such as Japan. Consistently, the table demonstrates that response funding tends to flow rapidly and in substantial amounts during the initial phase of a disaster, whereas recovery funding is systematically delayed, fragmented, or insufficient.

To visually clarify this general pattern, the following graph presents a comparison between the magnitude of emergency response funding and the recovery needs of four major disasters in Asia. This visual comparison starkly illustrates the vast gap between short-term funding and long-term recovery needs, while simultaneously providing an empirical context that reinforces the conclusions drawn from the literature review table. Subsequently, this graph serves as the basis for further analysis regarding how this global pattern is reflected in the recovery experience following the Mount Lewotobi Laki-laki eruption in East Flores.



Figure 3. Emergency Response Funding vs Recovery Needs in Major Asian Disaster
 Source: [UN OCHA \(2011, 2014, 2015\)](#); [Government of Nepal \(2015\)](#); [Government of the Philippines \(2014\)](#); [Asian Development Bank & World Bank \(2010\)](#); [Government of Japan \(2011\)](#)

The comparative graph of emergency response funding versus recovery needs for four major disasters in Asia reveals a structural, systemic, and recurring pattern of disparity in disaster financing governance. The divergence between the funds allocated during the response phase and the scale of recovery needs not only indicates a financial gap but also illustrates the orientation of the global disaster funding system, which tends to be biased toward the initial phase of disasters.

In the case of the 2015 Nepal Earthquake, for instance, the UN OCHA Financial Tracking Service reported that total humanitarian response funding was only approximately USD 221 million, far below the total recovery needs of USD 6.7 billion calculated through the Post-Disaster Needs Assessment (PDNA). A disparity of this magnitude reflects not merely the scarcity of funding, but also the high complexity of post-disaster recovery, which encompasses the reconstruction of basic infrastructure, housing, and public services, as well as the restoration of the community's socio-economic functions. A similar phenomenon appeared during Typhoon Haiyan in 2013 in the Philippines, where response funding reached USD 865 million, while recovery needs, based on the PDNA, were in the range of USD 12.9 billion. This disparity not only affects the pace of recovery but also creates significant differences in community access to basic services, decent housing, and livelihood recovery.

When comparing these two cases with the 2010 Pakistan Floods, the same pattern re-emerges, albeit within the context of a different hydrometeorological disaster. Pakistan received approximately USD 1.9 billion in emergency response funding from international mechanisms; however, the total damage estimated by the ADB and the World Bank reached USD 9.7 billion. This figure indicates that response funding covered less than one-fifth of the recovery needs. Since the agricultural sector is the backbone of Pakistan's economy, unaddressed damage to land and irrigation infrastructure has generated cascading effects on national food security, prolonging the period of economic recovery for the population.

A different context is observed in the case of Japan, a country with significantly stronger fiscal capacity compared to Nepal, the Philippines, and Pakistan. During the 2011 Tohoku Earthquake and Tsunami, the Japanese government allocated an emergency response budget of approximately USD 50 billion, yet the estimated total for recovery and reconstruction reached USD 210 billion. The fact that a developed nation with high fiscal capacity also experienced a major disparity between response funding and recovery needs demonstrates that this phenomenon is not solely due to funding limitations, but rather a reflection of the nature of disaster recovery itself, complex, multi-year, and involving cross-sectoral interventions that cannot be fully accommodated by emergency relief mechanisms.

Theoretically, the pattern visible in this graph reinforces the literary argument that the global disaster funding system tends to be emergency-centric, with few instruments specifically designed to support long-term recovery. Many prior studies have shown that international donor attention is temporal and highly influenced by media exposure, political visibility, and the perception of urgency. In the initial phase of a disaster, fund mobilization is relatively rapid; however, as global attention wanes, financial support also weakens, even as recovery needs actually increase. This phenomenon, known as "donor fatigue," plays a major role in generating the structural disparity between response and recovery. On the other hand, recovery funding often requires more stable fiscal mechanisms, such as multi-year budgets, reconstruction loans, or national development programs, which are not available quickly and often require lengthy bureaucratic processes.

The interpretation of this graph holds significant academic implications for understanding disaster recovery in developing countries, including Indonesia. The comparison between emergency response funding and recovery needs displayed in the graph reveals a consistent systemic pattern: response funding is relatively large and rapid, whereas recovery funding lags significantly behind in both amount and timeliness. This pattern not only reflects the global dynamics of disaster financing but also manifests concretely in the local context of the Mount Lewotobi Laki-laki eruption in East Flores in 2024. Field qualitative data ([Sinexus, 2025](#)) show that the community in East Flores experienced a similar phenomenon, where emergency assistance in the form of evacuation, logistics, and basic services flowed quickly in the initial phase through a combination of aid from the government, humanitarian agencies, volunteers, and community solidarity. However, upon entering the recovery phase, financial, technical, and institutional support declined significantly, creating a critical gap between the real needs of the community and the available recovery capacity.

The limitations of recovery funding in East Flores can be observed most clearly through the condition of the **housing sector**. Qualitative findings indicate that thousands of displaced persons were compelled to abandon their homes, land, and productive assets located in danger zones, leaving them without a stable social or economic foundation. While the government provided temporary shelters, permanent relocation faces structural challenges, such as distance from centers of economic activity, uncertainty regarding land tenure, and difficult social adaptation. In many relocation sites, families have lost access to the gardens, water sources, and social networks that previously sustained their daily lives. This situation demonstrates that recovery cannot be understood merely as the physical reconstruction of houses, but rather as a complex socio-economic process. The principle of “Build Back Better” becomes crucial, not merely as jargon, but as a foundation for the development of new settlements that consider ecological, economic, social, and legal land ownership conditions. Without sufficient recovery funding and strong coordination mechanisms, communities face the potential for recurring vulnerability, even after relocation has been implemented.

In the **education sector**, the impact of the recovery funding disparity is also stark. Qualitative data show that the majority of educational facilities are located in danger zones or have suffered severe damage, causing thousands of children to discontinue learning activities. Some families have even taken the extreme decision to prioritize work over schooling, as post-eruption loss of livelihoods has created significant economic pressure. While the construction of emergency schools and temporary classrooms is an urgent need, the challenge of educational recovery extends beyond infrastructure restoration. In the medium term, families require financial support such as scholarships, tuition waivers, and logistical assistance to ensure children can return to school without sacrificing the family’s economic needs. The lack of long-term funding in the education sector illustrates that recovery requires not only physical reconstruction but also sustained investment to ensure the educational continuity of the younger generation.

In the **economic and livelihood sector**, the recovery funding gap is most conspicuous. The majority of the East Flores community depends on agriculture and livestock, the two sectors that suffered the most severe damage due to the eruption. Land is covered in volcanic ash, gardens are destroyed, livestock have perished, and access to fields is cut off due to their designation as danger zones. When response aid in the form of food and basic necessities ceases, the community faces a vacuum of support for restoring their livelihoods. Many

survivors enter the informal sector as a survival strategy, while others risk returning to danger zones to salvage remaining crops or livestock. This condition demonstrates that economic recovery cannot proceed through one-off programs; rather, it requires a phased approach involving business counseling, skills training, initial capital assistance, and planned cash-for-work schemes. Without adequate recovery funding, the community's economic vulnerability will not only persist but potentially worsen.

The impact of funding disparity is also visible in the **infrastructure sector**. The repair of access roads, small bridges, and public facilities is vital for connecting relocation sites with economic centers and basic services. However, field findings indicate that infrastructure does not become a funding priority once the emergency response phase concludes. Yet, infrastructure is a prerequisite for the recovery of other sectors, such as economy, education, and health. In this context, the "Build Back Better" principle cannot be applied if recovery funding is minimal or uncoordinated. Without infrastructure investment that is resilient to geological and hydrometeorological risks, the affected region will remain in a vulnerable condition.

In the **health sector**, vulnerability has risen sharply because primary health facilities are damaged, service capacity has declined, and crowded displacement conditions increase the risk of infectious diseases. Qualitative data indicate that while emergency health services were available in the initial phase, medium-term support, such as mental health services, nutritional fulfillment, and the continuity of immunization, does not receive adequate funding. This aligns with the regional pattern illustrated in the graph, where health recovery funding is far lower than actual needs.

From a social perspective, the disparity in recovery funding exacerbates the vulnerability of marginalized groups such as women, the elderly, and persons with disabilities. The need for long-term psychosocial support is not covered in response funding schemes and is often excluded from recovery funding priorities. The strengthening of community social capacity, including the revitalization of local organizations and social safety nets, does not function optimally due to a lack of financial support.

Finally, an analysis of the **governance sector** reveals that recovery challenges are related not only to funds but also to management. Field data show weak cross-sectoral coordination, the absence of a dedicated data management team, and a lack of synchronization between central and local responses. Refugee data is repeatedly altered, aid distribution mechanisms are non-transparent, and local contingency plans remain outdated. The lack of funding to strengthen institutional capacity makes these obstacles increasingly difficult to overcome, thereby slowing the entire recovery sequence.

Overall, the synthesis of the quantitative trends illustrated in the graph and the qualitative evidence from East Flores demonstrates that the disparity in recovery funding cannot be dismissed as a situational anomaly or a technical administrative bottleneck. Instead, it constitutes a profound structural phenomenon that reflects deep-seated asymmetries in global and national disaster governance. The graph serves as more than just a visual comparison; it acts as a diagnostic tool revealing that the global pattern of 'emergency-centric' financing, characterized by a surge of resources during the high-visibility response phase followed by a sharp withdrawal during the critical recovery phase, is faithfully reproduced in the local context of Eastern Indonesia. This structural deficit exposes the

inherent limitations of current funding mechanisms, which are often rigid and short-term, as well as the fragility of institutional capacities that rely heavily on volatile external aid.

Consequently, distinct systemic reform is imperative. It is insufficient to merely advocate for increased funding; there must be a fundamental restructuring of financing mechanisms at both national and global levels to prioritize multi-year flexibility, strengthen the humanitarian-development nexus, and ensure predictable resource allocation. Without such comprehensive reforms, peripheral and archipelagic regions like East Flores risk being perpetually trapped in a cycle of prolonged vulnerability, where the inability to fully recover from the socio-economic shocks of one catastrophe erodes the resilience necessary to withstand future risks.

This study discusses that the dynamics of response and recovery funding in the Lewotobi case are not isolated phenomena, but rather part of a global and regional pattern documented in Asian literature. Nuanced findings indicate that while response funding is substantial, recovery funding is unsustainable. This is consistent with studies from Nepal, Bangladesh, the Philippines, and other Asian nations.

Governance challenges in East Flores also reinforce the literature regarding governance bottlenecks in disaster recovery. The limited capacity of the local government, low cross-sectoral coordination, and unclear funding flows cause recovery to proceed slowly. In the socio-economic aspect, the community faces layered vulnerability due to the loss of livelihoods, the disruption of basic services, and prolonged psychosocial pressure. This aligns with the theory of recovery justice proposed by [Leaning \(2006\)](#), which posits that vulnerable groups are often the parties most impacted when recovery funding is inadequate.

Theoretical Discussion

Research findings regarding the funding disparity between the response and recovery phases in the case of the Mount Lewotobi Laki-laki eruption demonstrate a pattern consistent with theories and studies from the last decade concerning disaster recovery governance. In the context of funding, the humanitarian funding cycle theory and the concept of donor attention proposed by [Fink and Redaelli \(2020\)](#) provide a significant explanatory framework. The short nature of the donor attention cycle results in rapid funding flows during the emergency phase, followed by a drastic decline upon entering the recovery phase. The phenomenon of donor fatigue identified during fieldwork in East Flores aligns with global findings indicating that public and political attention dictate the intensity of aid in the immediate aftermath of a disaster, whereas long-term needs are frequently neglected. Consequently, the decline in recovery funding in East Flores is not merely a local issue, but part of a structural pattern confirmed by international literature.

From a governance perspective, the theory of disaster recovery governance developed by [Tierney \(2014; 2020\)](#) offers a critical analytical framework. Tierney emphasizes that the success of recovery is heavily influenced by coordination capacity, institutional legitimacy, and clarity of authority. Field findings indicate that fluctuating data on displaced persons, inconsistent inter-agency coordination, and the absence of a clear recovery authority exacerbate governance obstacles known as governance bottlenecks. Suboptimal central-local coordination and the slow verification of damage observed in East Flores reflect conditions described in recent studies on recovery in Nepal, Pakistan, and the Philippines, where weak recovery institutions prolong both the duration and cost of recovery.

The concept of "Build Back Better," popularized within the Sendai Framework for Disaster Risk Reduction (SFDRR) ([UNDRR 2015–2022](#)), is also relevant in explaining the recovery dynamics in East Flores. This principle emphasizes reconstruction that not only restores pre-disaster conditions but builds systems that are safer, more resilient, and sustainable. However, research findings reveal that settlement relocation, temporary housing, and the recovery of the education and economic sectors have not met "Build Back Better" principles due to funding limitations, uncertainty regarding land status, and weak multi-year planning. This aligns with the research results of [Fan and Mostafavi \(2019\)](#) and [Mannakkara and Wilkinson \(2016\)](#), which state that implementation almost always fails when recovery governance and funding are inadequate.

Studies on recovery equity developed by [Cutter \(2016\)](#) and further elaborated by [Rufat et al. \(2019\)](#) are also relevant for analyzing recovery disparities in East Flores. This theory emphasizes that vulnerable groups, including women, the elderly, persons with disabilities, and low-income communities, face slower recovery due to limited access to resources. Qualitative field data indicate that women in Lewotobi lost their livelihoods due to garden damage, children faced educational setbacks because schools were located in danger zones, and vulnerable groups struggled to adapt in relocation zones. These conditions illustrate that post-eruption recovery is not only slow but also uneven, reinforcing the concept that social inequality deepens post-disaster vulnerability.

The theory of institutional capacity in disaster recovery, as proposed by [Comfort et al. \(2019\)](#) and [Anson and Watson \(2020\)](#), further elucidates these research findings. Both studies emphasize three essential pillars: coordination capacity, financing capacity, and information capacity. Field findings reveal weaknesses across all three pillars. Inter-agency coordination is weak, recovery funding flows are unclear, and information systems such as displaced person data collection are unstable. When these three capacities are low, recovery potentially becomes fragmented and inefficient, similar to what has occurred in the context of the Lewotobi eruption.

In the context of long-term planning, the theory of long-term recovery planning proposed by [Smith and Wenger \(2020\)](#) explains that sustainable recovery requires a policy framework encompassing risk-based multi-year plans. However, this study found that the East Flores recovery plan lacks a clear roadmap, partly due to recurring eruptions and partly due to limited fiscal capacity. This situation confirms the theoretical argument that high-risk regions require more systematic recovery planning than merely responding to ongoing disaster events.

The integration of these theories reinforces the argument that the recovery funding disparity is not a technical issue, but rather a structural phenomenon arising from the interaction between international aid cycles, local governance capacity, and socio-economic vulnerability factors. Consequently, the Lewotobi Laki-laki case not only reflects patterns found in Asian literature but also confirms contemporary theories in disaster recovery studies. This theoretical discussion demonstrates that effective recovery can only be achieved if supported by strong governance, adequate multi-year funding, equitable recovery, and integrated long-term planning. Ultimately, this synthesis suggests that without a fundamental shift from reactive response strategies to proactive, multi-year recovery investments, the aspiration of "building back better" will remain elusive. This failure to align funding mechanisms with the temporal reality of recovery leaves peripheral regions exposed

to a recurring cycle of unfinished reconstruction and deepening pre-existing inequalities.

Conclusion

This study aims to examine whether the pattern of funding disparity between the response and recovery phases, prevalent in Asian literature, is also evident in the case of the Mount Lewotobi Laki-laki eruption in East Flores. The research focus is directed toward how funding flows move unevenly between the rapid emergency phase and the recovery phase, which requires a more extended timeframe. Through the integration of Asian literature studies and local qualitative data, this research intends to elucidate the relationship between funding dynamics, governance conditions, and the vulnerability of affected communities.

The results indicate that the response-recovery funding disparity pattern observed in Asia is clearly reflected in the Lewotobi context. Response aid flowed rapidly through government and humanitarian agencies due to high urgency and intense media coverage. However, upon entering the recovery phase, funding support experienced a drastic decline, evidenced by the slow process of permanent relocation, minimal support for livelihood recovery, and delayed rehabilitation of the education and health sectors. These findings confirm that the phenomena of donor fatigue, local fiscal constraints, and weak cross-agency coordination exacerbate the challenges to long-term recovery sustainability.

The primary contribution of this research lies in the integration of Asian literature perspectives with local empirical evidence from an archipelagic region with low fiscal capacity. This approach yields a more comprehensive understanding of how global disaster funding patterns operate within a geographically and institutionally distinct context. Furthermore, this study highlights the dimension of recovery equity, particularly how vulnerable groups face more severe impacts when recovery funding is inadequate.

Nevertheless, this study has several limitations that should be noted. The field data obtained are qualitative, and the number of informants is limited; thus, the variation in community experiences may not be fully represented. Additionally, this research did not perform a quantitative estimation of recovery needs, and therefore could not numerically map the magnitude of the funding disparity. This limitation leaves room for the development of further studies that are more comprehensive in terms of data and methodology.

Future research needs to conduct a recovery financing analysis based on Post-Disaster Needs Assessments (PDNA) to calculate requirements more precisely. Moreover, comparative studies between volcanic eruptions in Indonesia could provide insight into whether funding disparity patterns are general or context-specific. Subsequent research also needs to examine the design of multi-year financing schemes and more adaptive governance mechanisms so that recovery processes in archipelagic regions can proceed in a manner that is more equitable, inclusive, and sustainable.

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