

Strengthening Legal Awareness in Mitigation: Education and Community Empowerment Study Based on Local Wisdom in Bengkulu

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ABSTRACT

This research explores the integration of local wisdom in community-based disaster mitigation strategies in Bengkulu, an area prone to natural disasters such as earthquakes and tsunamis. Although local wisdom holds significant potential in reducing disaster risks, there are still gaps in its application within formal mitigation policies. A qualitative approach was used to explore local wisdom practices through ethnographic study, in-depth interviews, and policy document analysis. The findings indicate that while there have been some integration efforts, existing mitigation policies are primarily technical and do not fully account for the potential of local culture as a significant adaptive resource. The study also emphasizes the importance of community empowerment through culture-based education to enhance disaster preparedness and compliance with mitigation regulations. The integration of local wisdom with spiritual principles is expected to provide a strong legal foundation for involving communities in disaster mitigation efforts, creating a more holistic, effective, and sustainable approach.

Keywords: *Community; Empowerment; Legal Awareness; Local Wisdom; Mitigation.*

Introduction

Bengkulu is an area with a high risk of natural disasters, such as earthquakes and tsunamis, which require community-based disaster mitigation strategies. However, there are several significant gaps (research gaps) in mitigation approaches in this region.¹ First, local wisdom that should be the foundation of mitigation strategies has not been fully accommodated in formal policies. For example, as a preventive measure, there are traditions² and earthquake-resistant wooden house architecture and social values of mutual cooperation have not been systematically integrated into government mitigation planning. Regional policies are still predominantly technical in

¹ Akhmad and Sinung Mufti Hangabei, "Review of Zoning Regulations for Seismic Area on the Southwest Coast of Sumatra, Indonesia," *Yustisia Jurnal Hukum* 12, no. 1 (2023): 60–76.

² W Eridiana, M Mustolikh, and B W Kertopati, "Disaster Mitigation on Indigenous People," in *IOP Conference Series: Earth and Environmental Science* (Bandung: UPI, 2024).

nature, without considering the potential of local culture as a significant adaptive resource, this shows the importance and challenges of disaster prevention and management.³ Second, local-based disaster education is limited to informal community programs and has not been part of the formal education curriculum. In fact, disaster literacy based on local culture can improve community readiness as a whole.⁴ In addition, community-based mitigation programs, such as the formation of disaster-resilient villages, although they have begun to be implemented, have not been widely evaluated for their effectiveness in the long term, making it difficult to assess their success or scalability.

Although ASEAN countries have adopted progressive environmental legal policies, the challenges in addressing climate change remain complex. Climate change is a global problem involving many factors, including greenhouse gas emissions, deforestation, environmental degradation, pollution, and socio-economic vulnerabilities.⁵ The issue of climate change, which involves increasing frequency and intensity of natural disasters, increasingly demands a holistic approach that combines formal policies with local wisdom in managing climate-related risks and explains the need for joint implementation.⁶

Countries located in disaster-prone areas must manage disaster risks with a long-term perspective, not just focusing on reconstruction and assistance after a disaster occurs. So that disaster risk reduction remains the main focus of sustainable development.⁷ The main strategy in managing disaster risk should not only be about financing to cover losses, but rather about strengthening development that aims to maximize post-disaster funding capacity and maintain budget sustainability in order to

³ L. Nottage, H. Nasu, and S. Butt, "Disaster Management: Socio-Legal and Asia-Pacific Perspectives," in *Asia-Pacific Disaster Management* (Berlin: Springer, 2014).

⁴ Setio Galih Marlyono, Gurniwan Kamil Pasya, and Nadi, "Peranan Literasi Informasi Bencana Terhadap Kesiapsiagaan Bencana Masyarakat Jawa Barat," *Gea. Jurnal Pendidikan Geografi* 16, no. 2 (October 2016).

⁵ Setyani Dwi Lestari et al., "Comparison and Implementation of Environmental Law Policies in Handling Climate Change in ASEAN Countries: A Comparative Study of Indonesia, Malaysia, and Thailand," *International Journal of Energy Economics and Policy* 14, no. 2 (March 15, 2024): 687–700.

⁶ R Djalante and F Thomalla, "Disaster Risk Reduction and Climate Change Adaptation in Indonesia: Institutional Challenges and Opportunities for Integration," *International Journal of Disaster Resilience in the Built Environment* 3, no. 2 (2012): 166–180.

⁷ Putu Eka Suarmika et al., "Reconstruction of Disaster Education: The Role of Indigenous Disaster Mitigation for Learning in Indonesian Elementary Schools, *International Journal of Disaster Risk Reduction*, 72 (2022).

protect and sustain current and future development projects.⁸ Of course, empowerment with a cultural approach through preservation, conversion and institutionalization efforts is an alternative that can be taken to maintain the sustainability of cultural values, as well as optimize their use in a broader context.⁹

The lack of information and education can increase the risks during a disaster. Moreover, without accurate information, post-disaster management issues may be neglected. Disaster-related problems extend beyond handling the victims; they also involve infrastructure repairs and improving the social and psychological well-being of the affected individuals. Therefore, communication serves as a bridge to resolve the confusion that arises in addressing the issues caused by disasters.¹⁰

Frequent disasters present challenges for Indonesia, but the country's diverse local wisdom offers valuable solutions for disaster mitigation. Each community, with its unique knowledge and understanding of the local environment, develops specific strategies to manage risks. This has led to the use of local wisdom-based disaster mitigation, where communities recognize and address potential hazards based on traditional knowledge, even before the introduction of modern technology.¹¹

By fostering legal awareness through education, communities can better understand the laws and regulations related to disaster management, ensuring compliance and proactive engagement. Empowering communities involves leveraging their local knowledge, such as traditional ecological practices, to create sustainable and culturally appropriate solutions. This synergy between modern legal frameworks and local wisdom enhances disaster preparedness, ensuring that mitigation efforts are not only effective but also deeply rooted in the cultural fabric of the region.

⁸ Benjamin Loh, "Disaster Risk Management in Southeast Asia: A Developmental Approach," *ASEAN Economic Bulletin* 22, no. 2 (2005).

⁹ Rusyanti et al., "Unearthing the Local Wisdom of Disaster Mitigation Based on Geoarchaeological Records in the Mainland of Sumatra, Indonesia," in *Indigenous Knowledge and Disaster Risk Reduction: Insight Towards Perception, Response, Adaptation and Sustainability*, ed. Panda Gopal Krishna et al. (Cham: Springer International Publishing, 2023), 515–537, https://doi.org/10.1007/978-3-031-26143-5_22.

¹⁰ Donna Asteria, "Optimalisasi Komunikasi Bencana Di Media Massa Sebagai Pendukung Manajemen Bencana," *Jurnal Komunikasi* 01 (2016).

¹¹ Akhmad Setiobudi and Husna Fadhilah Noval, "Tinjauan Teori Kearifan Lokal Dalam Upaya Mitigasi Bencana," *FTSP Series*, 2023.

Method

This study uses a qualitative approach to explore the integration of local wisdom in community-based disaster mitigation in Bengkulu. This approach was chosen to understand the phenomenon holistically in a social and cultural context. Through ethnography, researchers studied local wisdom practices, such as traditional house construction, farming methods, and mutual cooperation, by being directly involved in disaster-prone communities. In-depth interviews with community leaders, policy makers, and disaster mitigation practitioners revealed the role of local wisdom and the challenges of its integration in mitigation policies. Analysis of policy documents, such as local regulations and reports related to disaster mitigation, was conducted to evaluate the extent to which local wisdom has been taken into account in mitigation planning. This study relies on in-depth interviews, Focus Group Discussions (FGDs), and document studies to explore the challenges and opportunities for integrating local wisdom into disaster mitigation strategies.

Results and Analysis

A. Disaster Mitigation in Bengkulu

Developing a legal culture in all levels of society is considered very important to realize legal awareness and compliance. The implementation of legal counseling is a method used to increase legal awareness for the community.

In disaster mitigation, clear regulations and public understanding of these regulations are key to reducing disaster risks. Spatial planning regulations that govern development in disaster-prone areas, earthquake-resistant building standards, and environmental protection policies are some examples of regulations that can minimize the impact of disasters if implemented properly.

Legal awareness encourages the public to comply with these regulations, so that the risk of damage and loss of life due to disasters can be reduced. Mitigation has two main meanings. First, mitigation refers to efforts to reduce roughness or fertility, such as in soil. Second, mitigation is an action to reduce the impact of a disaster. This word has an equivalent in English, mitigation, which is defined as an action to reduce the severity, seriousness, or pain of something. According to the Cambridge Dictionary, mitigation is an action to reduce how dangerous, unpleasant,

or bad something is.¹²

This regulation is an important pillar in disaster mitigation planning. Without compliance with the rules, such as development that violates disaster-prone area zoning, the vulnerability of communities to disasters tends to increase. Legal awareness also helps encourage collective responsibility among the government, communities, and the private sector. The government is tasked with formulating and enforcing policies, while communities are expected to understand the importance of complying with regulations for the safety of all.

In addition, legal awareness encourages collaboration between stakeholders. For example, in the preparation of evacuation plans, emergency response training, and resource management, an understanding of each party's legal obligations can strengthen coordination and the effectiveness of implementing disaster mitigation strategies. However, if legal awareness is low, policy implementation is often hampered. Violations of regulations such as illegal logging, illegal construction, or negligence in maintaining infrastructure cause increased disaster risks and worsen their impacts. The legal system plays a very important role in supporting and implementing the principle of the rule of law in a country.

Therefore, the integration of legal education and regulation socialization in disaster mitigation strategies is very important. Through this step, the community not only understands the importance of regulations but also has a commitment to implement them. With high legal awareness, disaster mitigation can be carried out more effectively, creating a more resilient society and a safer environment from the threat of disaster.

Community legal awareness is a value that reflects the community's understanding, obedience, and compliance with applicable legal norms and regulations. This awareness is the result of an effective legal counseling process, marked by a sense of respect for the law. Communicative legal counseling that is able to touch the conscience of the community is the key to increasing legal

¹² “Mitigasi Adalah Upaya Mengurangi Risiko, Berikut Langkah-Langkah Dan Contohnya,” accessed January 15, 2025, <https://bpbd.bogorkab.go.id/berita/Seputar-OPD/mitigasi-adalah-upaya-mengurangi-risiko-berikut-langkah-langkah-dan-contohnya>.

awareness effectively.¹³

Law Number 24 of 2007 concerning Disaster Management is the main legal basis for implementing disaster management in Indonesia today. Therefore, every law and regulation must be in line with and integrated with the law. In addition, all disaster management programs and activities, both at the pre-disaster, emergency response, and post-disaster stages, must refer to the provisions stipulated in this law.¹⁴

Disaster education needs to be developed by universities, especially those located in disaster-prone areas. This program aims to reduce disaster risks by studying the potential for disasters, the history of events in the area, and the necessary anticipatory steps. In addition, this education aims to increase knowledge and awareness of disaster signs, their impacts on individuals, families, and communities, and provide an understanding of how to handle emergency situations, save yourself, and survive when a disaster occurs.¹⁵

Disasters consist of three types, namely natural disasters, non-natural disasters and social disasters. Natural disasters are the most frequent disasters that occur every year and one of them is floods. Flood management is not only carried out by the government but also requires coordination from various parties, both from related agencies and cooperation from the community.¹⁶

Disaster prevention includes various efforts to reduce or eliminate disaster risks, either by reducing the level of disaster threat or reducing the vulnerability of those at risk of being affected. Meanwhile, preparedness involves a series of steps designed to anticipate disasters through effective organization and the implementation of appropriate and efficient actions.

¹³ Freti Sintya Wulan Dari, "Kesadaran Hukum Masyarakat Dalam Pencegahan Pembakaran Hutan," *De Cive : Jurnal Penelitian Pendidikan Pancasila dan Kewarganegaraan* 2, no. 10 (October 31, 2022): 381–389.

¹⁴ Taqwaddin, "PERSPEKTIF HUKUM NASIONAL TERKAIT PENANGGULAN BENCANA Catatan Untuk Resistematisasi Buku Fikih Kebencanaan," last modified January 10, 2019, accessed January 15, 2025, <https://www.pt-nad.go.id/new/content/artikel/page/4/2023021306531712619347063e9de5dc31d5.html>.

¹⁵ Nursyabani, Roni Ekha Putera, and Kusdarini, "Mitigasi Bencana Dalam Peningkatan Kewaspadaan Terhadap Ancaman Gempa Bumi Di Universitas Andalas," *Jurnal Ilmu Administrasi Negara (AsIAN)* 8, no. 2 (September 2020).

¹⁶ M. Arsyad, "Modul Manajemen Penanggulangan Bencana Pelatihan Penanggulangan Bencana Banjir 2017," *Pusat Pendidikan Dan Pelatihan Sumber Daya Air Dan Kontruksi* (2017): 77.

Disaster mitigation is a series of efforts aimed at reducing disaster risks. This can be done through physical development, increasing awareness, and developing capabilities in dealing with disaster threats. According to Article 1 Paragraph 6 of PP No. 21 of 2008 concerning the Implementation of Disaster Management, mitigation is a step to reduce the impact of a disaster. A similar definition is also stated in Law No. 24 of 2007, Chapter I General Provisions, Article 1 Number 9, which states that mitigation includes efforts to reduce disaster risks through physical and non-physical approaches, such as raising awareness and increasing community capacity.

Disaster management is a series of activities aimed at controlling disaster situations to minimize or avoid losses caused by them. It encompasses various stages, including prevention, which focuses on reducing the likelihood of disasters occurring, and mitigation, which aims to minimize the adverse impacts of disasters. Preparedness involves creating action plans and ensuring readiness when disasters strike, while the response phase addresses the immediate needs and challenges posed by the disaster. Finally, recovery focuses on expediting the restoration process and helping affected communities return to normalcy as quickly as possible.

B. Ensuring compliance with policies to minimize disaster risks.

The Disaster Management Law of 2007 delineates the roles and responsibilities of various stakeholders across all phases of a disaster—before, during, and after its occurrence. It assigns the implementation of the legal framework and institutional arrangements to a range of national and local agencies.¹⁷

Indonesia has developed a robust and comprehensive legal framework for disaster management. The 2007 Disaster Management Law forms the foundation for disaster risk reduction (DRR) and management in the country. In conjunction with a series of regulations promulgated in 2008, this legal framework articulates a detailed set of provisions that delineate the roles and responsibilities of national and regional governments, the rights and obligations of local communities, as well as the roles of the private sector and international institutions. Additionally, it outlines the various stages of disaster management and establishes protocols for disaster relief financing

¹⁷ Zuzana Stanton-Geddes and Yong Jian Vun, “Strengthening the Disaster Resilience of Indonesian Cities,” *Time to ACT: Realizing Indonesia’s Urban Potential*, no. September (2019): 161–171.

and its administration.¹⁸

Disaster risk management, climate change adaptation, and sustainable development exhibit common traits, overlapping strategic goals, and potential synergies. Therefore, it is essential to align existing policies, legislation, plans, and frameworks across different levels of government to ensure optimal effectiveness and cohesion.¹⁹ Disaster risk reduction policy is a set of policies and strategies implemented to reduce disaster risks. The aim of this policy is to prevent new disasters, reduce existing disaster risks, and manage the remaining risks.

The Bengkulu Regional Disaster Relief Agency stated that a key issue is the high risk of disasters. This is attributed to the lack of optimal early prevention and management of victims of natural disasters. In the release of the Performance Report of Government Agencies, several steps are outlined that the Bengkulu Regional Disaster Relief Agency will take to address disaster risk challenges.²⁰

Disaster risk education and outreach are efforts to raise public awareness about the potential disasters in their local areas. The goal is to enable communities to take appropriate actions when a disaster occurs. Disaster risk education and outreach can be conducted through various methods, such as: (1) Evacuation training; (2) Disaster simulations; (3) Creation of hazard maps; (4) Construction of earthquake-resistant buildings; (5) Mangrove tree planting; (6) Reforestation efforts.

The Bengkulu Provincial Government implements disaster management policies as an effort to reduce the risks and impacts of disasters that frequently occur in the region. As an area prone to natural disasters such as earthquakes, tsunamis, floods, and landslides, Bengkulu Province has an integrated policy to address prevention, mitigation, preparedness, response, and recovery from disasters.²¹

¹⁸ Checklist Assessment Report, “Strengthening Law and Disaster Risk Reduction (DRR) in Indonesia CHECKLIST ASSESSMENT REPORT 2 International Federation of Red Cross and Red Crescent Societies Strengthening Law and Disaster Risk Reduction (DRR) in Indonesia | CHECKLIST ASSESSMENT REPORT ” (n.d.).

¹⁹ United Nations Office for Disaster Risk Reduction (UNDRR), “Disaster Risk Reduction in The Republic of Indonesia: Status Report 2020,” *Undrr* (2020): 1–36, <https://www.undrr.org/publication/disaster-risk-reduction-india-status-report-2020>.

²⁰ Dionni Ditya Perdana, Lisa Adhrianti, and Dwi Aji Budiman, “Disaster Communication Through Social Media As A Means Of Information And Education For Bengkulu Communities,” *Ultimacomm: Jurnal Ilmu Komunikasi* 14, no. 2 (2022): 206–218, <https://ejournals.umh.ac.id/index.php/FIKOM/article/view/2535>.

²¹ “Pemprov Bengkulu Fokus Tekan Risiko Bencana Gempa Banjir Dan Longsor - ANTARA News Bengkulu,” accessed January 17, 2025, <https://bengkulu.antaraneews.com/berita/387486/pemprov-bengkulu-fokus-tekan-risiko-bencana-gempa-banjir-dan-longsor>.

To support these policies, the provincial government has initiated various efforts, including the development of a master plan for disaster management that involves stakeholders at both the local government and community levels.²² One of the main steps taken is strengthening community capacity through outreach and education programs related to disaster risks, enabling the public to be more prepared and responsive in the event of an emergency.

Additionally, the provincial government implements structural mitigation policies, such as constructing earthquake-resistant infrastructure and managing disaster-prone areas by creating hazard risk maps. The local government also promotes reforestation and mangrove planting along the coastline as mitigation efforts against natural disasters, such as flooding and coastal erosion.

The Bengkulu Provincial Government also focuses on disaster preparedness and response by establishing and training rapid response teams, as well as providing the necessary facilities and equipment for disaster management. Moreover, regular disaster simulations are conducted to test the readiness of both the community and authorities in responding to disasters.

Disaster Management Plan in Bengkulu Province is a crucial regulatory framework for disaster risk management in Bengkulu Province. It provides clear guidelines on the roles and responsibilities of provincial and local authorities, as well as other relevant stakeholders, including communities and the private sector. This regulation aims to enhance the disaster management system in the province by ensuring that disaster response, preparedness, mitigation, and recovery efforts are effectively coordinated and in alignment with national policies.

Through these policies, it is hoped that Bengkulu Province can strengthen the resilience of its communities and region in facing potential disasters and ensure a fast and effective recovery process after a disaster. In Bengkulu, following disaster management regulations is crucial due to the area's susceptibility to earthquakes, tsunamis, and landslides. The local government plays a pivotal role in executing policies related to disaster prevention, mitigation, preparedness, and response.

²² Nola Ririan Putri, Achmad Aminudin, and Nour Farozi, "STRATEGY OF THE REGIONAL DISASTER MANAGEMENT AGENCY OF BENGKULU PROVINCE IN HANDLING FLOOD DISASTER IN BENGKULU CITY," *International Journal of Policy and Public Administration* 5, no. 2 (2024): 137–146.

However, a significant challenge lies in ensuring that the community complies through education on disaster risks and readiness. Outreach initiatives by the Bengkulu Provincial Disaster Management Agency (*Badan Penanggulangan Bencana Daerah-BPBD*) aim to increase public awareness. Moreover, the private sector must follow regulations for constructing disaster-resistant infrastructure. Effective coordination among the government, private sector, and international organizations is vital for successful disaster management and aid delivery. By working together and adhering to these regulations, the impact of future disasters can be minimized.

C. Community Empowerment for Mitigation Based on Local Wisdom

Research findings on revitalizing disaster mitigation management and community empowerment through the Community-Based Disaster Risk Reduction (CB DRR) program show that the training provided in the CB DRR program positively impacts the community's capacity for disaster mitigation. This impact is evident in both the knowledge and skills variables of the community.²³ The changes in the knowledge and skills values can be observed from the initial measurement to the final measurement.²⁴

The increasing occurrence of disasters can be controlled by providing effective disaster communication to the public. Enhancing the information and knowledge available to communities will serve as the foundation for their preparedness when facing a disaster. Efforts to prepare for the potential occurrence of a disaster aim to reduce the risks or impacts resulting from the disaster event.²⁵

The effectiveness of the disaster mitigation model can be enhanced through scientific literacy, which involves the ability to acquire knowledge, explain phenomena, draw fact-based conclusions, understand science's role in shaping

²³ Asian Disaster Preparedness Center, *Community Empowerment and Disaster Risk Reduction in Chittagong City, Bangladesh*, vol. Program fo, 2008.

²⁴ Yustina Pacifica Maria Paschalia et al., "Revitalization of Disaster Mitigation Management and Community Empowerment Through Community-Based Disaster Risk Reduction (CBDRR)," *Jurnal Penelitian Pendidikan IPA* 8, no. 5 (2022): 2563–2574.

²⁵ Perdana, Adhrianti, and Budiman, "Disaster Communication Through Social Media As A Means Of Information And Education For Bengkulu Communities."

society, and engage with science-related issues.²⁶ Community empowerment based on local wisdom is an important strategy in creating sustainable development oriented towards community welfare.²⁷

Local wisdom plays a vital role in this approach, as each community has unique characteristics that require tailored solutions. Alternatively, human and environmental resource-based development emphasizes the sustainable use of both material and non-material resources. Community empowerment originates within the community itself, supported by the government. A "bottom-up" approach, guided by the principles of empowerment, enablement, and protection, is key to achieving sustainable empowerment.²⁸

Customary law and local wisdom can play a significant role in disaster management efforts. Local wisdom reflects the behaviors and cultural practices of communities that have adapted to their environment, including coping with disasters. Meanwhile, customary law provides guidelines and directives for decision-making and actions within the community.

The local customary regulations in Bengkulu's indigenous communities play a key role in disaster mitigation by protecting vital ecosystems like forests. These traditional practices help prevent environmental disasters such as floods and landslides, showcasing how local wisdom contributes to both ecological preservation and community resilience.²⁹

Local wisdom serves as one of the guiding principles in disaster management. It reflects community-based practices and knowledge that have been passed down through generations, enabling societies to adapt to and mitigate disaster risks effectively. Integrating local wisdom into disaster management strategies ensures that interventions are culturally appropriate, sustainable, and aligned with the community's values and traditions.

²⁶ Basuki Supartono, Muhamad DJazuli Ambari, and Muhamad Rudi, "Community Centered Mitigation Based on Science Literature to Reduce The Risk of Disaster in Indonesia," *Indonesian Red Crescent Humanitarian Journal* 1, no. 1 (2022): 26–33.

²⁷ Dedy Wijaya Kusuma, Nurshadrina Kartika Sari, and Abdul Wahid, "Management Analysis : Community Empowerment Based on Local Wisdom," *Image : Jurnal Riset Manajemen* 12, no. 2 (2018): 317–332.

²⁸ Handrie Kurniawan et al., "Sustainable Development Through Community Empowerment Based On Local Wisdom," *International Journal of Progressive Sciences and Technologies* 41, no. 2 (2023): 164.

²⁹ Muhammad Yamani, "Strategi Perlindungan Hutan Berbasis Hukum Lokal Di Enam Komunitas Adat Daerah Bengkulu," *Jurnal Hukum Ius Quia Iustum* 18, no. 2 (2011): 175–192.

Local wisdom refers to community knowledge tailored to local conditions, offering solutions that are unique to that area. In disaster management, it is crucial to recognize the community's role and provide opportunities for them to utilize their key resources: their people and their wisdom. This approach helps create more effective and context-sensitive disaster management strategies.³⁰

Local wisdom, as defined by Law No. 32 of 2009 on Environmental Protection and Management, consists of values that guide communities in maintaining sustainable environmental balance. These values, developed through long-term adaptation and local experience, are expressed through norms, ethics, customary law, and specific rules followed by the community.³¹

General Suharyanto, Head of BNPB, emphasized the importance of local wisdom in community resilience at the GFSR 2024.³² He noted that time-tested local practices help protect communities from disasters, with culture and institutions forming the core of sustainable resilience, supported by funding, technology, and infrastructure.

The Regional Regulation of Bengkulu City Number 02 of 2017 on Disaster Management Implementation, along with Regional Regulation Number 5 of 2016 in Central Bengkulu Regency and similar regulations in other districts within Bengkulu, underscores the critical role of integrating local wisdom and encouraging active community involvement in disaster management. These regulations acknowledge that traditional knowledge, cultural practices, and local heritage passed down through generations are vital in reducing disaster risks and ensuring that disaster management strategies are culturally and environmentally appropriate. Moreover, they emphasize the importance of community participation at every stage of disaster management—from prevention and preparedness to recovery—promoting collective responsibility

³⁰ Untoro Hariadi et al., “Kearifan Lokal Komunitas Sebagai Modal Sosial Dalam Manajemen Bencana Alam,” *Majalah Geografi Indonesia* 33, no. 2 (2019): 1–7, http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELESTARI.

³¹ “Kearifan Lokal: Strategi Ampuh Dalam Mitigasi Bencana! - Cerita Baik Indonesia,” accessed January 17, 2025, <https://ceritabaikindonesia.id/kearifan-lokal-strategi-ampuh-dalam-mitigasi-bencana/>.

³² “Global Forum for Sustainable Resilience - Navigating Uncertainty: Advancing Sustainable Resilience in a Changing World | PreventionWeb,” accessed January 17, 2025, <https://www.preventionweb.net/event/global-forum-sustainable-resilience-navigating-uncertainty-advancing-sustainable-resilience>.

and strengthening community resilience. These regulations also prioritize collaboration among government bodies, private sectors, non-governmental organizations, and local communities to create a holistic, inclusive, and effective disaster management framework that addresses both immediate disaster responses and long-term resilience-building.

Local wisdom, developed through years of experience and observation, provides valuable knowledge about disaster patterns, early warning signs, and traditional mitigation methods. Communities, for example, may recognize signs of landslides or changes in groundwater, allowing them to identify risks and take preventive actions. Beyond risk knowledge, local wisdom also includes practical solutions, such as earthquake-resistant building techniques, early warning systems using animals or birds, and methods for storing food and water in emergencies. These practices are passed down through generations, ensuring communities are equipped to manage disaster risks.³³

The integration scheme of local wisdom in disaster management involves combining traditional knowledge with modern science. Its goal is to enhance community awareness and preparedness in facing disasters. Integrating local values into national law creates a stronger, more sustainable legal framework that is relevant and culturally supported.³⁴ Integrating local wisdom with spiritual principles creates a strong legal foundation for community involvement in disaster mitigation, ensuring strategies are rooted in both technology and cultural values, thus enhancing participation and resilience.³⁵

³³ “Membangun Komunitas Tangguh Bencana: Peran Kearifan Lokal Dalam Pengelolaan Bencana Alam - Panda,” accessed January 17, 2025, <https://www.panda.id/membangun-komunitas-tangguh-bencana-peran-kearifan-lokal-dalam-pengelolaan-bencana-alam/>.

³⁴ Supono, Nanik Prasetyoningsih, and Indira Naquita Adilah, “Aligning National Legal Development with Local Wisdom: A Study in the Special Region of Yogyakarta,” *Pena Justisia: Media Komunikasi dan Kajian Hukum* 23, no. 3 (2024): 1–11.

³⁵ Mella Ismelina, Anton F Susanto, and Ahmad Sudiro, “THE PRINCIPLE OF LOCAL WISDOM AS A BASIC FRAMEWORK IN THE FORMATION OF COSMIC RELIGIOUS ENVIRONMENTAL LAW THE PRINCIPLE OF LOCAL WISDOM AS A BASIC,” *Indonesia Law Review* 14, no. 2 (2024).

Conclusion

The integration of local wisdom into disaster mitigation strategies in Bengkulu is crucial for enhancing community resilience and sustainability. Local wisdom, derived from generations of adaptation to the environment, provides valuable insights and practices that can contribute to disaster risk reduction and preparedness. This study highlights the importance of incorporating cultural values, traditional knowledge, and community participation into formal disaster management policies.

By combining local wisdom with modern legal frameworks, policies can become more effective and culturally relevant, ensuring broader acceptance and deeper impact. Local wisdom also enhances disaster preparedness by offering practical solutions such as earthquake-resistant construction and early warning systems based on natural signs. Additionally, incorporating local wisdom with spiritual principles strengthens community involvement, creating a holistic and inclusive disaster management system.

Ultimately, recognizing the value of local wisdom and fostering legal awareness and community empowerment is essential in developing sustainable disaster mitigation strategies that ensure both immediate and long-term resilience in the face of natural disasters.

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References

- Akhmad, & Sinung Mufti Hangabei. (2023). Review of Zoning Regulations for Seismic Area on the Southwest Coast of Sumatra, Indonesia. *Yustisia Jurnal Hukum*, 12(1), 60–76. <https://doi.org/10.20961/yustisia.v12i1.72856>
- Arsyad, M. (2017). Modul manajemen penanggulangan bencana pelatihan penanggulangan bencana banjir 2017. *Pusat Pendidikan Dan Pelatihan Sumber Daya Air Dan Kontruksi*, 77.
- Asian Disaster Preparedness Center. (2008). *Community Empowerment and Disaster risk reduction in Chittagong city, Bangladesh: Vol. Program fo* (Issue June).
- Benyamin Loh. (2005). Disaster Risk Management in Southeast Asia: A Developmental Approach. *ASEAN Economic Bulletin*, 22(2).
- Dari, F. S. W. (2022). Kesadaran Hukum Masyarakat Dalam Pencegahan Pembakaran

Hutan. *De Cive : Jurnal Penelitian Pendidikan Pancasila Dan Kewarganegaraan*, 2(10), 381–389. <https://doi.org/10.56393/decive.v2i10.1595>

Djalante, R., & Thomalla, F. (2012). Disaster risk reduction and climate change adaptation in Indonesia: Institutional challenges and opportunities for integration. *International Journal of Disaster Resilience in the Built Environment*, 3(2), 166–180.

Donna Asteria. (2016). Optimalisasi Komunikasi Bencana Di Media Massa Sebagai Pendukung Manajemen Bencana. *Jurnal Komunikasi*, 01.

Global Forum for Sustainable Resilience - Navigating Uncertainty: Advancing Sustainable Resilience in a Changing World | PreventionWeb. (n.d.). Retrieved January 17, 2025, from <https://www.preventionweb.net/event/global-forum-sustainable-resilience-navigating-uncertainty-advancing-sustainable-resilience>

Hariadi, U., Suratman, Gunawan, T., & Armawi, A. (2019). Kearifan Lokal Komunitas sebagai Modal Sosial dalam Manajemen Bencana Alam. *Majalah Geografi Indonesia*, 33(2), 1–7. http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_P_EMBETUNGAN_TERPUSAT_STRATEGI_MELESTARI

Ismelina, M., Susanto, A. F., & Sudiro, A. (2024). THE PRINCIPLE OF LOCAL WISDOM AS A BASIC FRAMEWORK IN THE FORMATION OF COSMIC RELIGIOUS ENVIRONMENTAL LAW THE PRINCIPLE OF LOCAL WISDOM AS A BASIC. *Indonesia Law Review*, 14(2).

Kearifan Lokal: Strategi Ampuh dalam Mitigasi Bencana! - Cerita Baik Indonesia. (n.d.). Retrieved January 17, 2025, from <https://ceritabaikindonesia.id/kearifan-lokal-strategi-ampuh-dalam-mitigasi-bencana/>

Kurniawan, H., Yulianto, Y., Setiawan, R., Mladenov, S. V., & M. Ardiansyah, M. A. (2023). Sustainable Development Through Community Empowerment Based On Local Wisdom. *International Journal of Progressive Sciences and Technologies*, 41(2), 164. <https://doi.org/10.52155/ijpsat.v41.2.5719>

Kusuma, D. W., Sari, N. K., & Wahid, A. (2018). Management Analysis : Community Empowerment Based on Local Wisdom. *Image : Jurnal Riset Manajemen*, 12(2), 317–332.

Lestari, S. D., Leon, F. M., Riyadi, S., Qodariah, & Putra, A. H. P. K. (2024). Comparison and Implementation of Environmental Law Policies in Handling Climate Change in ASEAN Countries: A Comparative Study of Indonesia, Malaysia, and Thailand. *International Journal of Energy Economics and Policy*, 14(2), 687–700. <https://doi.org/10.32479/ijeep.14998>

Membangun Komunitas Tangguh Bencana: Peran Kearifan Lokal dalam Pengelolaan Bencana Alam - Panda. (n.d.). Retrieved January 17, 2025, from <https://www.panda.id/membangun-komunitas-tangguh-bencana-peran-kearifan->

lokal-dalam-pengelolaan-bencana-alam/

Mitigasi Adalah Upaya Mengurangi Risiko, Berikut Langkah-Langkah dan Contohnya. (n.d.). Retrieved January 15, 2025, from <https://bpbd.bogorkab.go.id/berita/Seputar-OPD/mitigasi-adalah-upaya-mengurangi-risiko-berikut-langkah-langkah-dan-contohnya>

Nottage, L., Nasu, H., & Butt, S. (2014). *Disaster Management: Socio-Legal and Asia-Pacific Perspectives*. In *Asia-Pacific Disaster Management*. Springer.

Nursyabani, Roni Ekha Putera, & Kusdarini. (2020). Mitigasi Bencana Dalam Peningkatan Kewaspadaan Terhadap Ancaman Gempa Bumi Di Universitas Andalas. *Jurnal Ilmu Administrasi Negara (AsIAN)*, 8(2).

Paschalia, Y. P. M., Doondori, A. K., Sekunda, M. S., & Budiana, I. (2022). Revitalization of Disaster Mitigation Management and Community Empowerment Through Community-Based Disaster Risk Reduction (CBDRR). *Jurnal Penelitian Pendidikan IPA*, 8(5), 2563–2574. <https://doi.org/10.29303/jppipa.v8i5.2368>

Pemprov Bengkulu fokus tekan risiko bencana gempa banjir dan longsor - ANTARA News Bengkulu. (n.d.). Retrieved January 17, 2025, from <https://bengkulu.antaranews.com/berita/387486/pemprov-bengkulu-fokus-tekan-risiko-bencana-gempa-banjir-dan-longsor>

Perdana, D. D., Adhrianti, L., & Budiman, D. A. (2022). Disaster Communication Through Social Media As A Means Of Information And Education For Bengkulu Communities. *Ultimacomm: Jurnal Ilmu Komunikasi*, 14(2), 206–218. <https://ejournals.umh.ac.id/index.php/FIKOM/article/view/2535>

Putri, N. R., Aminudin, A., & Farozi, N. (2024). STRATEGY OF THE REGIONAL DISASTER MANAGEMENT AGENCY OF BENGKULU PROVINCE IN HANDLING FLOOD DISASTER IN BENGKULU CITY. *International Journal of Policy and Public Administration*, 5(2), 137–146.

Putu Eka Suarmika, Ida Bagus Putu Arnyana, I Wayan Suastra, & I Gede Margunayasa. (2022). Reconstruction of disaster education: The role of indigenous disaster mitigation for learning in Indonesian elementary schools, *International Journal of Disaster Risk Reduction*. *International Journal of Disaster Risk Reduction*, 72.

Report, C. A. (n.d.). *Strengthening Law and Disaster Risk Reduction (DRR) in Indonesia CHECKLIST ASSESSMENT REPORT 2 International Federation of Red Cross and Red Crescent Societies Strengthening Law and Disaster Risk Reduction (DRR) in Indonesia | CHECKLIST ASSESSMENT REPORT*.

Rusyanti, Ananta, Purwoarminta, Iqbal, Prahara, Eko, Sigit, P., Taufiqurrahman, Setiawan, Nurul, Laili, Imam, & Hindarto. (2023). Unearthing the Local Wisdom of Disaster Mitigation Based on Geoarchaeological Records in the Mainland of Sumatra, Indonesia. In Panda Gopal Krishna, U. and Chatterjee, and B. Nairwita, and S. M. Diah, & and B. Debarpita (Eds.), *Indigenous Knowledge and Disaster Risk Reduction: Insight Towards Perception, Response, Adaptation and Sustainability* (pp. 515–537). Springer International Publishing.

https://doi.org/10.1007/978-3-031-26143-5_22

- Setio Galih Marlyono, Gurniwan Kamil Pasya, & Nadi. (2016). Peranan Literasi Informasi Bencana Terhadap Kesiapsiagaan Bencana Masyarakat Jawa Barat. *Gea. Jurnal Pendidikan Geografi*, 16(2).
- Setiobudi, A., & Fadhilah Noval, H. (2023). Tinjauan Teori Kearifan Lokal dalam Upaya Mitigasi Bencana. In *FTSP Series*.
- Stanton-Geddes, Z., & Vun, Y. J. (2019). Strengthening the Disaster Resilience of Indonesian Cities. *Time to ACT: Realizing Indonesia's Urban Potential*, September, 161–171. https://doi.org/10.1596/978-1-4648-1389-4_spotlight1
- Supartono, B., Ambari, M. Dj., & Rudi, M. (2022). Community Centered Mitigation Based on Science Literature to Reduce The Risk of Disaster in Indonesia. *Indonesian Red Crescent Humanitarian Journal*, 1(1), 26–33. <https://doi.org/10.56744/irchum.v1i1.12>
- Supono, Prasetyoningsih, N., & Adilah, I. N. (2024). Aligning National Legal Development with Local Wisdom: A Study in the Special Region of Yogyakarta. *Pena Justisia: Media Komunikasi Dan Kajian Hukum*, 23(3), 1–11.
- Taqwaddin. (2019, January 10). *PERSPEKTIF HUKUM NASIONAL TERKAIT PENANGGULAN BENCANA Catatan untuk Resistematisasi Buku Fikih Kebencanaan*. <https://www.pt-nad.go.id/new/content/artikel/page/4/2023021306531712619347063e9de5dc31d5.html>
- United Nations Office for Disaster Risk Reduction (UNDRR). (2020). Disaster Risk Reduction in The Republic of Indonesia: Status Report 2020. *Undrr*, 1–36. <https://www.undrr.org/publication/disaster-risk-reduction-india-status-report-2020>
- W Eridiana, M Mustolikh, & B W Kertopati. (2024, December 16). Disaster Mitigation on Indigenous People. *IOP Conference Series: Earth and Environmental Science*.
- Yamani, M. (2011). Strategi Perlindungan Hutan Berbasis Hukum Lokal Di Enam Komunitas Adat Daerah Bengkulu. *Jurnal Hukum Ius Quia Iustum*, 18(2), 175–192. <https://doi.org/10.20885/iustum.vol18.iss2.art2>