



United by Nation, Divided by Understanding: A Journey Through Indonesia's Diverse Disaster Perspectives

By

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Introduction

Indonesia is located on several tectonic plates, making it one of the most disaster-prone areas in the world. Occurrences of disasters such as earthquakes, tsunamis, and volcanic eruptions point to the fact that the country experienced a wide range of natural hazards. In addition, the effects of climate change worsen the situation by raising the frequency and severity of weather-related catastrophes like droughts and floods.¹ These occurrences impact the communities' collective awareness. For example, the 2004 earthquake and tsunami in Aceh and North Sumatra claimed 166,080 lives, left 6,245 people declared missing, and injured 2,507 people. Afterward, the 2008 earthquake and tsunami in Palu, Central Sulawesi, caused an estimated economic loss of more than US\$3 billion, 2,113 fatalities, 2,010 missing individuals, 4,612 injuries, and the destruction of over 6,632 buildings. Meanwhile, the 2018 Mount Krakatau eruption left 159 people missing, 1,495 injured, and 437 dead. This disaster also illustrates the financial impact disasters can have, impacting local economies and necessitating years, if not decades, of recovery efforts.

Moreover, there are different perspectives on how these tragedies are perceived and dealt with, frequently impacted by educational, religious, and cultural variables. There is more to Indonesia's vulnerability to disasters than just geography. For its residents, it is an essential aspect of everyday existence. These disasters upend communities, claim lives, destroy infrastructure, and more. They also present serious threats to Indonesia's social cohesion and financial stability.³



Religious-Cultural Perspectives on Disaster in Indonesia

There are many different viewpoints about disasters in the Indonesian society. A sizeable segment of the populace views these unfortunate occurrences from a religious-cultural lens. This viewpoint frequently sees disasters as divine vengeance for wrongdoings committed by a particular society or group. This viewpoint, which holds that calamities are predestined and uncontrollable, is ingrained in the cultural narratives of many Indonesian communities.⁴ Some people may find comfort in these beliefs, but proactive steps for planning and mitigating disasters could possibly be hampered. The mistaken notion of predestination can make people feel powerless and resigned to their fate, preventing them from taking any action to reduce risks or prepare for future disasters. This fatalistic viewpoint is more common in areas with lower educational attainment, where it is more difficult to accept or understand scientific explanations for natural events. Conversely, individuals with higher levels of education are typically more aware of long-term disaster risks⁵ and resilience strategies.⁶

As an example, it was thought that the appearance of the pyroclastic flow shaped like *Mbah Petruk* signaled the 2006 eruption of Mount Merapi in Java.⁷ Over 90% of Javanese people thought that the destruction caused by these eruptions was the result of supernatural or divine forces.⁸ The foundation of this belief system was the idea that the mountain is going through a purification process. On the other hand, it can increase a sense of fatalism and frequently ignores the possibility of disaster. Similarly, the 2004 Aceh earthquake and tsunami were seen as divine vengeance.⁹

Scientific Perspectives

Scholars approach disaster mitigation from various perspectives influenced by their expertise in theology, sociology, technology, and scientific patterns. Academics have progressively turned their attention to disaster management, encompassing the critical facet of disaster mitigation to diminish potential liabilities arising from hazards and expedite aid to impacted parties. The essence of disaster mitigation revolves around risk reduction and loss minimization achieved through proficient planning, methodical organization, and effective implementation.

Moreover, enhancing disaster management in Indonesia remains challenging despite the concerted efforts of non-governmental organizations and the government. For instance, the National Disaster Management Agency (*Badan Nasional Penanggulangan Bencana*, hereinafter BNPB) and many organizations carried out research and scientific-based initiatives to leverage and implement





comprehensive disaster management rules,¹¹ such as collaborating with UNDRR to strengthen early warning systems and enhance national and local capacities in disaster management. In an emergency, early warning systems may include sirens, TV or social media announcements, and other methods. In addition, scientific research and the application of technology, as well as regional and international cooperation by BNPB are integral parts of disaster risk management. In certain cases, such as in Mentawai, the community can respond swiftly and follow instructions during early earthquake warnings. Besides, the communities residing in mountainous areas, such as around Mount Merapi, rely on historical experiences and natural indicators as their early warning system to comprehend the activities around volcanic mountains. Signs such as animal behavior are interpreted as a forewarning of an imminent eruption. However, there is still a need to enhance communication and awareness concerning early warning systems in order for communities to be more responsive and understand the necessary measures to mitigate risks and minimize the impact of disasters.

Studies have also demonstrated that socio-religious communities respond to disasters more from a social and cultural perspective rather than a scientific understanding¹² where they believe that disasters are a curse for sins and mistakes that have been committed. While understanding the scientific foundations of disasters, their prediction, and preventative strategies are essential to building a resilient society. However, some issues must be resolved upon the communities' adoption of these concepts, especially those with deep religious and cultural beliefs. Closing the gap between scientific understanding and cultural-religious interpretations of disasters is difficult and calls for consideration, needing inclusive methods that recognize and value different perspectives. People can benefit significantly from disaster mitigation education because of Indonesians' strong cultural and religious bonds.

Conclusion and Recommendation

There is an immediate need to raise awareness of disasters in Indonesia. This requires a multifaceted strategy considering structural, non-structural, and cultural factors. Buildings, bridges, and roads built to endure disasters are examples of resilient infrastructure that is part of the structural strategy.¹³ This means building embankments or terraces to reduce soil erosion and landslides, which are frequent hazards in Indonesia's varied terrain, especially in rural areas vulnerable to these calamities. Meanwhile, tsunami shelters must be built throughout coastal locations.





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The non-structural strategy centers around actions that reduce the likelihood of disasters without requiring actual building. This plan includes training initiatives, educational campaigns, and the creation of early warning systems and programs for anticipating disasters. The goal is to integrate religious and cultural practices with the scientific understanding of disasters while providing communities with sufficient information and abilities to respond to disasters efficiently. Implementing community-based disaster risk reduction (CBDRR) programs, which actively involve local populations in disaster preparedness activities, could be a key non-structural technique and in line with cultural and religious beliefs to incorporate local values as an example of togetherness in action.

Finally, the cultural strategy acknowledges the value of regional knowledge, customs, local wisdom, and ways of life in disaster assistance. This strategy combines disaster preparedness measures with local knowledge and religious convictions. Its goal is to increase community adaptability. For example, conventional narrative techniques through folk stories can be used to spread concepts about preparedness for disasters and resilience. Therefore, religious leaders should take action to inform the public about the importance of being prepared for emergencies. Taken as a whole, these strategies offer a thorough method of improving disaster knowledge and preparedness in Indonesia, considering the various cultural and religious settings that influence inclusive and successful disaster mitigation programs.





Endnotes

- 1 Anwar Kurniadi & Fauzi Bahar, "The Review of Disaster Preparedness School Program in Indonesia Elementary and High School," *Nationalism Dan Integrity*, Vol. 6, No. 1 (2020): 2549–9459, <https://doi.org/10.33172/jp.v6i1.703>
- 2 APEC Climate Center, *Disaster Management Research Roadmap for the ASEAN Region*, (Busan, Republic of Korea: ASEAN Science-Based Disaster Management Platform (ASDMP) Project, 2017).
- 3 Beth Barnes, Sarah Dunn, & Sean Wilkinson, "Natural Hazards, Disaster Management and Simulation: A Bibliometric Analysis of Keyword Searches," *Natural Hazards*, Vol. 97 (2019): 813–40, <https://doi.org/10.1007/s11069-019-03677-2>
- 4 Andi Nurlaela, Abdillah, & Naan, "The Concept of Destiny and Free Will According to the Asy'ariyah Theology Relevant to Human Efforts to Overcome Covid-19," in Avid Leonardo Sari, Irwandi, & Robbi Rahim (eds.), *1st Virtual Workshop on Writing Scientific Article*, (Sciendo, 2022): 330–33, <https://doi.org/10.2478/9788366675827-059>
- 5 Raya Muttarak & Wolfgang Lutz, "Is Education a Key to Reducing Vulnerability to Natural Disasters and Hence Unavoidable Climate Change?" *Ecology and Society*, Vol. 19 (2014): 42, <https://doi.org/10.5751/ES-06476-190142>
- 6 Elizabeth Frankenberg, et al., "Education, Vulnerability, and Resilience after a Natural Disaster," *Ecology and Society*, Vol. 18, No. 2 (2013): 16 <https://doi.org/10.5751/ES-05377-180216>
- 7 The community believes this phenomenon represented one of the four Pandava servants in the Mahabharata epic. See Irsasri, and Yohanes Adhi Satiyoko, *Mitos, Budaya, Dan Pembangunan: Sebuah Tinjauan Psikologi Konservasi*, (Pohon Tua Pustaka, 2020).
- 8 Valentin R. Troll, Frances M. Deegan, & Nadhirah Seraphine, "Ancient Oral Tradition in Central Java Warns of Volcano–Earthquake Interaction," *Geology Today*, Vol. 7 (2018): 204–13, <https://doi.org/10.1111/gto.12350>
- 9 Wignyo Adiyoso & Hidehiko Kanegae, "The Preliminary Study of the Role of Islamic Teaching in the Disaster Risk Reduction (A Qualitative Case Study of Banda Aceh, Indonesia)," *Procedia Environmental Sciences*, Vol. 17 (2013): 918–27. <https://doi.org/10.1016/j.proenv.2013.02.110>
- 10 Center for Excellence in Disaster Management & Humanitarian Assistance (CFE-DM), *ASEAN Disaster Management Reference Handbook*, (2022), <https://reliefweb.int/attachments/Of4e6ccb-97cc-47ca-9429-b184fab1c531/CFE-DM-DMRH-ASEAN2022.pdf>
- 11 Nina Käsehage, "The impact of covid-19 on abrahamic fundamentalist groups." *Interdisciplinary Journal for Religion and Transformation in Contemporary Society*, Vol. 7, No. 2 (2021): 406–425, <https://doi.org/10.30965/23642807-bja10025>
- 12 "OECD Economic Surveys Indonesia," *OECD*, n.d., <http://www.oecd.org/economy/indonesia-economic-snapshot/>
- 13 Seunghoo Jeong & D. K. Yoon, "Examining Vulnerability Factors to Natural Disasters with a Spatial Autoregressive Model: The Case of South Korea," *Sustainability (Switzerland)*, Vol. 10 (2018): 1–13, <https://doi.org/10.3390/su10051651>





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