



RETHINKING RELIGIOUS MODERATION AND ANTHROPOCENTRISM: Understanding Islamic Ecofeminism and Environmental Violence in The Case of the Lapindo Disaster

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Abstract: This paper investigates the Lapindo disaster in East Java that affected religious and social changes over the past two decades. Tens of thousands affected community living in the periphery of urban areas have coped with land disputes. However, religion plays an important role in fostering resilient communities. Instead of medical clinics or hospitals, new worship buildings increased in the Lapindo area. This study demonstrates that the Lapindo case is an example of environmental violence by examining critical analysis on anthropocentrism. Anthropocentrism is derived from scripture, describing humans as the most superior beings. Ecofeminism theory of Islamic perspective is critical instrument to analyze environmental violence. In addition, this research includes the concept of religious moderation that denies environmental perspectives. Given the complex issues of environmental issues in the Indonesian context, religious moderation is merely viewed as a matter of interfaith dialogue on tolerance project, yet ignoring environmental trajectory as part of religious moderation campaign. However, it has rarely been viewed as a bridge to solving social problems, such as environmental crises. The research finding shows the rise of economic-based social crime, gender-based violence, women and children trafficking, as well as poverty.

Keywords: Lapindo Disaster, Religious Moderation, Anthropocentrism, Muslim Community

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Introduction

WHAT IS the definition of religious moderation? This question must be posed before proceeding with any further attention to Islamic ecofeminist criticism of environmental violence. Religious moderation emphasizes the importance of balancing spiritual beliefs with social responsibilities.¹ In the view of Islamic ecofeminism, this approach entails addressing environmental and gender challenges in a manner that supports justice and ecological sustainability. Religious moderation not only prevents violence in the name of religion but also encourages tangible actions to protect and respect nature as an integral part of humanity's stewardship of the earth. Being religiously moderate encompasses not only religious principles but also environmental norms and ethics. Thus, it is essential to view the Lapindo case as an example of how criticism of religious moderation can influence environmental violence. In 2006, while traveling from Yogyakarta to Sidoarjo in East Java, it happened to see a hot mudflow beneath my train surrounding the Lapindo mining location. A sudden hot mud flooded the villagers' houses as they were drifting off to sleep in the middle of the night, never expecting a nightmare to occur. The hot mud continued to flood and ruin their homes until they felt compelled to leave their town; else, they would drown or die. The majority of the victims were from suburban areas who lost their jobs, houses, and families. We visited and spoke to those who had been evacuated in traditional market buildings.

We could only imagine how hard the situation for those affected people who have been forced to live in shelters with small, unhygienic stalls within old buildings and dirty traditional markets, with no access to clean water for daily consumption. There were at least 124 villages that moved into traditional market buildings as shelters. Lapindo's mining project was intended to discover oil that had an impact on hot mudflow. According to a source from National Geographic, the Lapindo mining project must be responsible for the highest amount of methane gas

¹ Muhammad Yusuf et al., "Fazlur Rahman's Double Movement and Its Contribution to the Development of Religious Moderation," *International Journal of Islamic Studies and Humanities (IJISH)* 4, no. 1 (2021).

emissions on Earth.² Meanwhile, the Indonesian government elites who supported the mining activities stated that the Lapindo mining project was caused by natural disasters rather than human error. It was a denial to recognize that Lapindo's mining activities had an impact on the hot mudflow.

The hot mudflow occurred on the night of May 28, 2006, when hydrogen sulfide gas (H₂S) escaped from Lapindo Company's gas exploration station. Local government offices, large and small-scale companies, and agricultural lands were all at risk of destruction. Schools, hospitals, food shops, mosques, and all public facilities were closed. Approximately 90 hectares of rice crops have been flooded by the hot mudflow. According to Walhi (a think tank organization for environmental issues), there were 1,528 families (6,116 people, 546 children) who were forced to escape from this biggest environmental disaster in East Java—a mechanic with PT. Tiga Musim Jaya Mas said that "a technical error during the drilling of the well" was the reason for the gas explosion.³ The Head of the Geosciences Lab at Brawijaya State University also argued, "The leak was caused by bad luck, not a natural disaster."⁴

The Lapindo mining project was portrayed by the mainstream media as a natural disaster, which was intended for political interests. The Lapindo case was one of several environmental disasters that caused ecological harm, as well as social, cultural, and spiritual turmoil for those affected. From this standpoint, protecting the environment and natural resources is a component of moral values. It is related to existentialist philosophy asserting

² Utomo Priyambodo, "Studi Terbaru: Lumpur Lapindo Sumber Emisi Gas Metana Terbesar Di Bumi," *National Geographic*, 2021, <https://nationalgeographic.grid.id/read/132646416/studi-terbaru-lumpur-lapindo-sumber-emisi-gas-metana-terbesar-di-bumi?page=all>.

³ Laksana Agung Saputra, "15 Tahun Lumpur Lapindo, Lumpur Panas, Bencana Atau Kelalaian," *Kompas.Com*, 2021, <https://www.kompas.id/baca/arsip/2021/05/29/15-tahun-lumpur-lapindo-lumpur-panas-bencana-atau-kelalaian/>.

⁴ Kompas, "Penentu Kategori Bencana Lapindo Pengadilan," *Kompas.Com*, 2008, <https://nasional.kompas.com/read/2008/02/18/18424470/penentu.kategori.bencana.lapindo.pengadilan>.

that every creature, including nature and biodiversity, has a right to be preserved, emphasizing the need to protect all of God's creations. Several specialists and scientists, including an international organization working on environmental issues, Friends of the Earth International from Europe, have conducted earlier investigations on hot mudflows in the Lapindo area. According to the updated mapping of the area, 13,000 families were impacted by the mudflow in March 2007, compared to 6,000 families on the previous map.⁵ This led to a land dispute between the Lapindo Company and the victims. The Lapindo Company refused to compensate all of the victims who lost their homes and land. The Lapindo hot mudflow not only created health problems but also had economic and social effects that shaped the victims' collective memory and trauma.

Most research on Lapindo's case has focused on technical issues, including material compensation, economic losses, and environmental consequences. Unfortunately, there are few academic works on the Lapindo disaster from an environmental, moral, and philosophical standpoint. However, this phenomenon is tied to the modern industry's challenge in managing natural resources. As a result of the Industrial Revolution, humans are capable of doing almost anything to satisfy their biological and material needs, even at the expense of destroying the environment. People think science and technology can provide everything they need for daily survival. Today's modern world is increasingly drawn into the turbulent development of scientific and technical progress brought about by a massive revolution in human knowledge. This revolution embraces and reshapes new areas of mass production. As Mikulinsky noted, "Several of these revolutions, particularly technological revolutions, had a tremendous impact not only on the industry, but also on people's lives, the organization of society, and civilization."⁶

⁵ Christine Pohl, *Lapindo Brantas and the Mud Vulcano, Sidoarjo, Indonesia* (FOE Europe, 2007), http://www.foeeurope.org/publications/2007/LB_mud_volcano_Indonesia.pdf.

⁶ E.P. Velikhov et al., *Science, Technology, and the Future: Soviet Scientists Analysis of the Problems of and Prospects for the Development of Science and Technology and Their Role in Society* (Pergamon Press, 1980).

There are several fascinating approaches to discuss environmental impact such as biocentrism. Biocentrism is a philosophical framework founded on the assumption that all living things have inherent value and that their existence has moral significance. All beings possess the same rights, including moral ideals. The idea of Lynn White holds that while protecting the environment is morally right, destroying it is morally wrong.⁷ This is how the word moral is used in this context. Exploiting or destroying natural resources is an unethical behavior that also perpetuates anthropocentrism. Anthropocentrism asserts that humans are the center of the earth. The second concept is inspired by Arne Naess's ecocentrism theory, which revolves around a deep ecology approach. Deep ecology emphasizes that all biospheres share the same rights as humans. It is stated that all live and dead species have their ideals and purposes. Naess stresses the need to modify one's lifestyle. He claims that we live in a more sophisticated and modern time of knowledge and science, yet we do not live to protect our ecosystem.⁸

Naess' ethics and environmental philosophy are distinct from Darwin's perspectives on deep ecology. Although Darwin's naturalistic knowledge of human origins is a valuable contribution to fundamental ecological philosophy, his work serves to eliminate teleological explanations for natural phenomena. However, it is difficult for non-anthropocentric environmental ethics.⁹ Human civilizations have the same demands and rights to protection as the societies of other organisms, and humans are unquestionably an integral part of the Earth's ecological systems.¹⁰ Using these ecological approaches, this paper aims to examine the hot mud disaster in Sidoarjo, East Java, as a collective memory of environmental and ecological harm that affected local

⁷ Willis Jenkins, "After Lynn White: Religious Ethics and Environmental Problems," *Journal of Religious Ethics*, 2009.

⁸ Arne Naess, "The Place of Joy in a World of Fact," *The North American Review* 258, no. 2 (1973): 53057.

⁹ Christian Diehm, "Darwin and Deep Ecology," *Ethics and the Environment* 19, no. 1 (2014): 73–93.

¹⁰ Arne Naess, "Culture and Environment," *Humboldt Journal of Social Relations* 20, no. 1 (1994): 143–49.

communities. The core analysis in this study also examines social, cultural, religious, and economic development in the aftermath of the Lapindo mining project disaster.

According to demographic data sources, Muslim community was the most effected population by the Lapindo disaster. Therefore, this paper focuses on the religious and social shifts that have occurred. It shows that religious community received significant compensation from mining to building worship places. In this context, religion is one of the components of overcoming psychological distress after losing their livelihood and land. Therefore, it is essential to examine this issue from a philosophical perspective on religious moderation. Religious moderation is a way of examining different religious perspectives and understanding, but these differences can become a bridge to finding common ground on social issues.

Religious Moderation and the Intersection of Anthropocentrism

As an archipelago country with a principle of believing in one God as the Indonesian *Pancasila*'s principle, the element of religion in the everyday life is very significant in achieving peace and harmony. The Lapindo disaster is the empirical example how the role of religion is essential meaning for local community. In this context, religious moderation is particular concept which has been widely discussed to prevent social problems among inter-religious communities. Unfortunately, this concept has not yet touched on the issue of environmental crisis affecting social and religious conflict such as the Lapindo case.

Religious moderation is crucial for maintaining social stability in the face of external ideological influences and internal social conflicts within society.¹¹ However, religious moderation is often interpreted as a network of harmony between religious communities and institutions related to the issue of tolerance for theological differences among these communities. It is essential to consider social and environmental issues in the context of religious

¹¹ R.F. Bhanu Viktorahadi, "The Meaning of Religious Moderation According to Franz Magnis-Suseno: A Phenomenological Approach," *Jurnal Iman Dan Spiritualitas* 2, no. 2 (2022): 177-86.

moderation. However, religious interpretation can be politically misused by elite business power and can affect disharmony in inter-religious communities. In this regard, religious moderation is a critical analysis of the intersection of anthropocentrism. Ideal religious moderation must be built through active participation from all religious communities to achieve the same goal based on togetherness, inclusive attitudes, mutual respect, and mutual understanding regarding the implementation of certain rituals and doctrines of each religion or belief.¹² To achieve such goals, it is necessary to support a conducive natural environment for the sustainability of peaceful human activities. To achieve peaceful human activities, harmony between nature and the environment is, of course, required.

However, humans and nature are interconnected in mutual symbiosis. Humans are seen as superior beings due to anthropocentric views. Anthropocentrism emphasizes that humans are the center of existence because they possess rationality, emotional sentiments, intelligence, and spirituality. In the Abrahamic religious perspectives, such as Judaism, Christianity, and Islam, the theological doctrine says that Adam and Eve were the first humans to represent all beings as anthropocentric power. Although this story has significant scientific implications for theologians, humans are considered God's most perfect creation, as Adam, the first human, was viewed as a unique creature among all species on the planet.¹³ Scripture, which acknowledges that humans are the most superior of all species, is often cited as the source of anthropocentrism. Val Plumwood, who rejects deep ecology as androcentric, argues that anthropocentric criticism is the primary ethics of environmental challenges, stating that "Human-centeredness must be transformed in the politics of meaningful ecological movement."¹⁴

¹² Viktorahadi, "The Meaning of Religious Moderation According to Franz Magnis-Suseno: A Phenomenological Approach."

¹³ Daniel Gordon, "The Lost World of Adam and Eve: Genesis 2-3 and the Human Origins Debate," *Theology and Science* 19, no. 3 (n.d.): 2021.

¹⁴ Mallory Mallory, "Val Plumwood and Ecofeminist Political Solidarity: Standing with the Natural Other," *Ethics and Environment*, 2009.

Anthropocentrism promotes ecological denial and blindness; it "tends to represent the other of nature entirely in terms of human needs" and "encourages a massive denial of dependency" and a sense of "hyper-separation."¹⁵ The problem of ecological and environmental crisis stems from the Industrial Revolution, which has led to mass production expanding daily.¹⁶ Industrial society fosters a consumerist lifestyle through mass production and economic demand. Mass production development is impacted by the stimulation of social and economic structures by consumerism. These development efforts are solely designed to meet the psychological and biological needs of industrial society. Mundane daily demands and objects of everyday production have always displayed significant ecological concern.¹⁷ Thus, "Modern man's sense of domination over nature and a materialistic perception of nature are mixed, furthermore, with a thirst and sense of avarice that imposes an ever-larger demand on the environment," Naes says.

According to the ecofeminist worldview, damaging nature is related to masculine activity. Ecofeminism is a contemporary philosophical approach that advocates for the protection of Mother Earth. The concept of ecofeminism rejects anthropocentrism as a critical feminist paradigm. Furthermore, ecofeminism is a philosophical approach to social challenges arising from the environmental crisis in the age of modern industry and global capitalism. The concept of ecofeminism, which addresses environmental and natural issues, is necessary because it has a profound impact on women's survival.¹⁸

The case of Lapindo's mining activities is linked to an environmental disaster caused by the exploitation of nature, and it

¹⁵ Bryan L. Moore, *Ecological Literature and the Critique of Anthropocentrism* (Palgrave Macmillan, 2017).

¹⁶ Arne Naess, "Industrial Society, Postmodernity and Ecological Sustainability," *Humboldt Journal of Social Relations* 21, no. 1 (1995): 130–46.

¹⁷ Nancy Ries, "Anthropology and the Everyday, from Comfort to Terror," *New Literacy History* 33, no. 4 (2002): 725–42.

¹⁸ Gwyn Kirk, "Ecofeminism and Environmental Justice: Bridges across Gender, Race, and Class," *Frontiers: A Journal of Women Studies* 18, no. 2 (1997): 2–20.

is also classified as environmental terrorism. Environmental terrorism must be recognized as a criminal act against humanity, nature, and the environment. Daniel Schwartz defines it as an action or behavior that threatens the safety of the environment, ecosystem, and local communities. The phrase "environmental terrorism" also refers to situations in which the environment is threatened or symbolically damaged.¹⁹ These acts of environmental terror demonstrate that humans appear to have a strong desire to exploit nature, resulting in dire implications for both environmental problems and human activity. Environmental terrorism is linked to the anthropocentrism viewpoint, which states that humans are the center of all species in the universe, neglecting elements of non-human species.

In the Western philosophical tradition, the anthropocentrism approach gained popularity and was justified by technological and scientific developments throughout the Industrial Revolution of the 18th century. Christian anthropocentrism has had a significant impact on the subjective development of modern philosophy. The history of science in the West, its methodology, and our understanding of nature have all been significantly impacted by related revolutions in philosophy and the history of science.²⁰ According to John Nolt, anthropocentrism supports personal ethical egoism and is harmful to the environment. Anthropocentrism focuses solely on human desires, economic interests, and happiness, with little regard for the needs of other species. Everything revolves around human interests, which are the essence of ethical egoism. Humans are the dominant creatures in nature and the environment due to their desire to be regarded as the most superior species. Similarly to anthropocentrism, egoism is self-centered.²¹

Anthropocentrism, which primarily addresses human material needs, has become a source of constant social criticism because its

¹⁹ Daniel M Schwartz, "Environmental Terrorism: Analyzing the Concept," *Journal of Peace Research* 35, no. 4 (1998): 483–96.

²⁰ George S Sessions, "Anthropocentrism and the Environmental Crisis," *Humboldt Journal of Social Relations* 2, no. 1 (1974): 71–81.

²¹ John Nolt, "Anthropocentrism and Egoism," *Environmental Values* 22, no. 4 (2013): 441–59.

impact on environmental concerns is becoming increasingly apparent. Anthropocentrism has a good aspect that develops human civilization in terms of economy and physical infrastructure. However, it harms other species and contributes to climate change. In 2001, the United Nations estimated that 816 species were extinct and 11,046 species were threatened with extinction.²² These days, conservative religious organizations often employ the intriguing anthropocentric viewpoint as a defense. Indonesia is an example of a country where conservative groups constantly blame natural and environmental disasters on God. In the context of nature, William Chittick proposes the word "anthropocosmic," which describes humans and the universe as one organic whole. Human life's mission is to adapt to the entire universe. Humans are intelligent beings, and as such, their knowledge is intended to help them comprehend nature, the ecosystem, and themselves, enabling them to coexist peacefully rather than destroy other beings.²³ In this case, we agree with Chittick's opinion that both humans and nature are equal as one entity that cannot be disconnected.

Environmental ethics is equally concerned with social and cultural issues in society. Natural geographical conditions influence human activities. When humans treat nature and the environment, disruptions to the ecosystem occur, influencing social and cultural change. The social and cultural conduct of society is shaped by its geographical configuration and vice versa. An excellent approach to analyzing local communities impacted by the Lapindo tragedy is Clifford Geertz's book, "Agricultural Involution: The Process of Ecological Change in Indonesia." According to Geertz, humans, and ecological structures are inextricably tied to one another. Ecological structure determines social and cultural patterns; for example, when ecological structure changes as a result of human activity, this has an impact

²² Andrew J. Hoffman and Lloyd E. Sandelands, "Getting Right with Nature: Anthropocentrism, Ecocentrism, and Theocentrism," *Organization and Environment* 18, no. 2 (2005): 141–62.

²³ William C. Chittick, "The Anthropocosmic Vision in Islamic Thought," in *God, Life, and the Cosmos: Christian and Islamic Perspectives* (Ashgate Publishing, 2017).

on human culture. The way humans interact with their natural environment and ecology is a key factor in preserving or destroying ecological structures. The goal of the ecological method is to more precisely define the interactions between biological exchanges, human activity, and specific natural processes—all of which are included in an analytical system known as an ecosystem.²⁴

This is also the case with the Lapindo disaster, which leads to sociocultural changes in the local population, aligning with Geertz's theory of the ecosystem and the function of human culture. However, the Lapindo hot mud disaster damages ecological structure, which has ramifications for social structure, economic livelihood, and so forth. Economically, farmers lost their land, laborers lost their employment, and small business capital owners lost their means of production. Material and social losses lead to changes in social and cultural activities, including religious practices. Due to the changes in the ecosystem brought on by the Lapindo Company's mining activities, the shift in economic demographics is somewhat uncertain. The ecosystem does not function alone; however, humans play a crucial role in protecting nature and the environment.

The Lapindo accident resulted in damage to at least three types of resources: air, water, and soil quality. After more than 15 years of the Lapindo hot mudflow, Mongabay Indonesia published an investigation report stating that the ecological system near Lapindo has suffered significant damage. First, the contamination of agricultural and fisheries products by heavy metals poses a risk to human health when consumed regularly. Second, drinking contaminated water from homeowners' wells is unhealthy due to the presence of heavy metals in water sources. Third, the Lapindo hot mudflow has left the surrounding villages with health issues and contaminated the air quality with heavy metals. For the local communities in Lapindo's area, this is indeed a precarious situation. While they must adapt to the changing

²⁴ Clifford Geertz, *Agricultural Involution: The Processes of Ecological Change in Indonesia* (University of California Press, 2003).

ecosystem and survive, they risk losing their homes and land if they relocate.²⁵

The empirical evidence demonstrates the impact of anthropocentrist behavior on environmental damage, especially the ecological crisis in the Lapindo area. Hence, how does religious moderation play in this context? There is a significant criticism that must be stated on how religion should serve as a bridge of preventive actions on environmental destruction. In this point of view, religious moderation not only drives normative views of tolerance and harmony among different religious communities but it must also be viewed as a spiritual ideal that can protect the natural environment. The concept of religious moderation in Indonesia has been narrowly interpreted; it merely focuses on religious tolerance yet ignoring environmental issues. At the same time, the lack of attention overlooks the ways in which humans interact with nature and the environment.

Muslim Solidarity and Religious Rituals

As clearly explained in the previous session, religion plays a significant role in Indonesian society. Religious institutions play a crucial role in helping individuals develop resilience during challenging times. This is similar to how they foster a sense of social solidarity. There is a capacity to maintain an optimistic outlook in the face of hardship and suffering. Religion has a considerable positive link with resilience.²⁶ This view relates to the Lapindo community that was forced to relocate from one shelter to another while they were struggling with mental health. In this instance, religious activities play a significant part, including the role of houses of worship in fostering social cohesion. Paradoxically, religious centers were increasing in number during the Lapindo disaster more than medical centers or hospitals. On the one hand, the impacts of air and water pollution from the

²⁵ A Asnawati, "15 Tahun Lumpur Lapindo: Darat, Air Dan Udara Sekitar Tercemar," *Mongabay*, 2021, <https://www.mongabay.co.id/2021/06/01/15-tahun-lumpur-lapindo-darat-air-dan-udara-sekitar-tercemar/>.

²⁶ Suhartini Suhartini, "Religiusitas Masyarakat Korban Lapindo," *Jurnal Dakwah Dan Ilmu Sosial* 1, no. 1 (2010): 50–65.

Lapindo hot mudflow are incredibly harmful to health, particularly in terms of respiratory illnesses.²⁷

The mudflow in Lapindo triggered a new spirit of religiosity among community members of the Lapindo victims. They attempted to rebuild their lives by participating in religious rites, such as collective prayers and meals, known as *slametan* in Javanese customs. The *slametan* ceremony is a cultural sign representing the daily social cohesion practiced by the Javanese people, in line with Bourdieu's concept of the realm of cultural production.²⁸ The cultural production of Javanese culture was expressed through communal prayers, known as *slametan*, and this custom can be understood as a habitus. Habitus is an interpretative reaction to a situation that leads to social behaviors being structured and repeated; these behaviors are practical, unconscious, and appear spontaneously. In addition, Bourdieu's concept of the arena explains social phenomena that are characterized by consensus and operate autonomously with their own rules, such as politics, art, and religion. Individual behavior is not independent; it is a product of interaction between social actors and social structures, a dialectical interaction between habitus and arena or framework. Similar to the Javanese people's response to the Lapindo tragedy, which caused environmental destruction, religious rites were used as a planned activity to receive salvation. However, these religious rites entail social capital, as religious elite leaders have the authority to interpret Lapindo victims' suffering as a test from God. This view drives Lapindo victims to establish religious ceremonies like *slametan* as a habitus.

Religion and ritual in Javanese culture relate to Geertz's theory; yet, for traditional Islamic communities in Java, the *slametan* rite holds significance in both social and economic interactions, serving as a symbol.²⁹ Geertz's vision of Javanese

²⁷ Sri Samsundari and Ima Yudha Perwira, "Sekitar Luapan Lumpur Sidoarjo Terhadap Kualitas Air Dan Budidaya Perikanan," *Jurnal Gamma*, 2011.

²⁸ Pierre Bourdieu, *The Field of Cultural Production* (Columbia University Press, 1993).

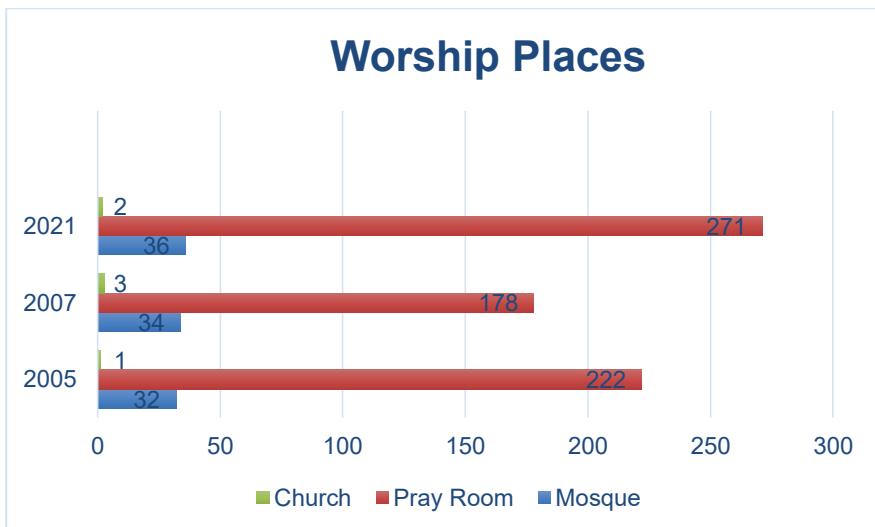
²⁹ Amanah Nurish, "Santri Dan Abangan After A Half Century of Clifford Geertz," *Jurnal Ilmiah Islam Futura*, 2021.

society is profound and complex in its anthropological implications. The ritual of *slametan*, or shared meals accompanied by communal prayer, holds meaning in the context of social solidarity, and this culture generates social capital. Therefore, the creation of religious rites to ease the psychological sorrow of Lapindo victims involves places of worship. It is not unexpected that there are a lot more places of worship following the Lapindo disaster than there had been in the past. Since the hot mudflow, Lapindo victims have suffered instability amongst themselves, triggering social tensions. This is why religious rituals have been able to foster social bonds. In a desperate circumstance, God is the only source of help remaining. For Lapindo victims, believing in God might strengthen rather than weaken their agony.³⁰

In addition to relying on economic resources as industrial workers, the Lapindo victims worked as farmers. Economic paralysis is a significant burden because the Lapindo Company failed to fulfill its expectations reasonably. Even if there was compensation, it was relatively small, around 5,000,000 rupiah for temporary housing and 300,000 rupiah for life insurance. The instability of life and economic circumstances disrupt the social order, leading to horizontal conflicts. Those who have lost their homes, property, families, and memories rebuild a new life in their shelters. Anthropologically speaking, humans have traditionally built cultural and social structures within their living environments. When their environment is destroyed, they will psychologically adjust to a new social existence. Similar to other disaster zones, we have observed that local communities in the Lapindo area are increasingly participating in sacred ceremonies. Their religious activities show how they cope with hardship through ritual. The number of prayer rooms (*musholla*) and mosques expanded substantially following the Lapindo hot mudflow.

³⁰ SPS UGM, "Fuad Faizi Raih Doktor Setelah Teliti Peran Agama Dalam Bencana Lumpur Lapindo," *Sekolah Pascasarjana UGM*, 2016, <https://www.pasca.ugm.ac.id/v3.0/news/id/265>.

Table 1. Statistical Central Agency



This phenomenon highlights the extraordinary role of religious institutions in the Lapindo case, as evident in the demographic information. In the Lapindo disaster area, Muslims represent a significant portion of the religious population. The region has 72,596 Muslims, 564 Protestants, 186 Catholics, 40 Hindus, 57 Buddhists, and three other religious groups (BPS, 2021). The Lapindo disaster is associated with a religious movement. Disasters have the potential to alter social structures, cultural norms, and belief systems, making religion a crucial component of Indonesian society in circumstances of hardship.³¹ Furthermore, the majority of Indonesians believe that religious rituals may relieve their pain, grief, and sadness.

Religious authorities around the area claimed that God delivered disasters as a result of human sin in the instance of Lapindo. In an attempt to stop hot mudflow, religious leaders in Porong, Sidoarjo, held *istighosah* or communal prayers. For Javanese people, communal prayers are an integral part of daily life, particularly in instances of misfortune such as the Lapindo hot mudflows. Religion and culture have intertwined roles. Clifford

³¹ R. Michael Feener and Patrick Daly, "Religion and Reconstruction in the Wake of Disaster," *Asian Ethnology* 75, no. 1 (2016): 191–202.

Geertz, an American anthropologist, asserts that religion is a form of culture, and this thesis was widely accepted in Indonesian studies during the 1950s and 1960s.

Unlike Geertz's theory, my opinion suggests that culture is a form of religion in Indonesian society, not the other way around.³² In terms of religious and cultural change in Porong-Sidoarjo, survivors are actively involved in religious activities and rituals, such as *slametan* (a food offering). This could be cultural evidence that religion can help people who have been affected by the Lapindo hot mudflow. Nonetheless, a mystical story about the interaction of religion, environment, and humanity is inspired by the Lapindo occurrence.³³ These narratives support different interpretations among social and economic classes. Using Geertz's analysis on *santri*, *priyayi*, and *abangan*,³⁴ religious interpretation based on social class has a significant impact on their perception of the Lapindo mudflow case.

Laborers and farmers who are religiously classed as *abangan* believe that the Lapindo tragedy was God's warning because the Lapindo Company exploited nature without permission from the spirits of ancestors in the mining area. Meanwhile, *priyayi* groups, which are government employees or public servants, have stated that the Lapindo accident was caused by technical recklessness, and that the Lapindo mining actors must be held accountable for the victims. Religious traders and businesspeople known as *santri* understand that the Lapindo disaster was a punishment from God because people commit many mistakes and sins, and as a result, they must all repent together. These divergent views inevitably lead to an increase in places of worship in the Lapindo disaster area. The rise in houses of worship is evidence of the critical role that religion plays in fostering social cohesion and collective

³² Amanah Nurish, *Agama Jawa: Setengah Abad Pasca-Clifford Geertz* (LKiS, 2019).

³³ Suhartini, "Religiusitas Masyarakat Korban Lapindo."

³⁴ Amanah Nurish, "When Abangan Embraces Sufism: Religious Phenomenology to Counter Radicalism in Contemporary Java," *Teosofi: Jurnal Tasawuf Dan Pemikiran Islam* 11, no. 1 (2021): 20–45.

memory, enabling victims to overcome the pain brought on by the Lapindo disaster.

The religious rites performed by Lapindo victims are a testament to their resilience in rebuilding their everyday lives after suffering. Religious moderation must be presented in this context, and it may serve as a source of reassurance for victims to overcome the problems caused by the Lapindo tragedy. The term religious moderation refers to a critical approach to thinking in the context of environmental theology, where committing acts of violence against nature and the environment harms human well-being. The concept of theological moderation in environmental theology represents a compromise aimed at mitigating and preventing environmental destruction.

Social and Economic Change

As a tropical country with abundant natural resources, Indonesia occasionally experiences significant environmental damage due to extensive mining activities. The primary challenge in controlling mining activities and protecting natural resources in Indonesia is the lack of effective law enforcement. Mining activities are intentionally designed to increase industrial productivity for raw material import businesses, often without considering the associated risks and long-term environmental effects. In Indonesia case studies, environmental harm is primarily caused by industrial waste, deforestation, flooding, inadequate wastewater disposal systems, soil, water, and air pollution, a decline in biodiversity due to illegal wildlife trafficking, and climate change. Mining activities contribute significantly to environmental and ecosystem catastrophes. It is evident that the mining industry causes forest damage, the expulsion of land and indigenous communities, and socioeconomic disputes. Indonesia lost at least 10.2 million hectares of forest between 2002 and 2022, ranking it fourth globally in terms of significant deforestation after Brazil, the Democratic Republic of Congo, and Bolivia. Hopefully,

Indonesia will not be like Brazil, where forests the size of 11 football fields have lost per minute since 2022.³⁵

Based on statistical data, social and economic disputes in the Lapindo disaster area have increased. Though religion can play an important role in assisting Lapindo victims in healing from their psychological agony, religious institutions offer no tangible answers to the Lapindo victims. This viewpoint highlights how religious organizations can collaborate to prevent further environmental and social harm caused by development projects. According to Chapman, as an issue of peace, human rights, and social justice, religious institutions may be a tremendous force in driving national and international efforts to preserve the planet and ecology.³⁶ High rates of poverty and unemployment have led to a rise in social deviant behavior and crimes. The developmentalism project has two opposing effects: on the one hand, it enriches the wealthy capital owners exclusively financially, but on the other hand, the impacted communities suffer social losses and ecological damage.

We took one of the samples from the Porong sub-district area, which was the most severely damaged by the Lapindo hot mudflow. People living in this area were divided into two social and economic groups. They worked as laborers in the industry and farmers. Demographically, there were hundreds of factories, few large-scale businesses, and agricultural lands. Mindi, Jatirejo, Renokenongo, and Siring were the hardest-hit settlements. A hot mudflow inundated these agricultural villages, destroying all farmland. The Sidoarjo Central Statistics Agency's most recent report shows that there are currently 13 medium industries, six small industries, and 272 large enterprises in this area. These industries manufacture paper, leather, wood crafts, food, and beverages.³⁷ The statistical agency displays a comparison of

³⁵ Matt McGrath and Mark Poynting, "Deforestasi Melonjak Pada 2022, Indonesia Disebut Berhasil Menurunkan Pengurangan Hutan Primer," *BBC News*, 2023, <https://www.bbc.com/indonesia/dunia-66034123>.

³⁶ Audrey Chapman, "Science, Religion, and Environment," in *Consumption, Population, and Sustainability* (Island Press, 2000).

³⁷ BPS, "Kecamatan Porong Dalam Angka 2021," 2021.

agricultural fields before and after the Lapindo hot mudflow. The table below shows that agricultural land declined by more than 50%.

Table 2.³⁸
Agriculture

| Land Area | Year |
|-----------|------|
| 1162 ha | 2005 |
| 876 ha | 2007 |
| 559 ha | 2021 |

The majority of people in Porong-Sidoarjo made a living from agriculture. The growth of small and large-scale companies, which displaced agricultural land, is one of the reasons contributing to the issue of the shrinking agriculture sector. Since the Lapindo hot mudflow occurred, Supriyanto added, local inhabitants have been dealing with several poverty-related issues.³⁹ Following the collapse in agriculture, which demonstrates the poverty problem, crime rates have increased, especially violence against women and children.

Table 3.⁴⁰
Violence Against Women and Children

| Cases | Year |
|-------|------|
| 106 | 2014 |
| 363 | 2015 |
| 279 | 2016 |
| 185 | 2017 |

³⁸ BPS, "Kabupaten Sidoarjo Dalam Angka 2005," 2005; BPS, "Sidoarjo Dalam Angka 2007," 2007; BPS, "Kecamatan Porong Dalam Angka 2021."

³⁹ Supriyanto Supriyanto, "Warga Miskin Kecamatan Porong Sidoarjo Peroleh Paket Sembako," *Harian Bhirawa*, 2020, <https://www.harianbhirawa.co.id/warga-miskin-kecamatan-porong-sidoarjo-peroleh-1-200-paket-sembako/>.

⁴⁰ Bappeda, "Data Dinamis Kabupaten Sidoarjo," 2019.

One of the signs that the poverty issue has a significant influence on violence against women and children is the rising trend of such crimes. Women and children are the most affected and vulnerable groups. They have gone through trauma that needs psychological attention and professional treatment. Individual psychological therapy is necessary for communities such as the victims of Lapindo to recover and develop new identities for themselves in their social circles as part of the healing process.⁴¹ From this viewpoint, it is evident that the victims of Lapindo have had to deal with both the problem of poverty and gender-based violence. The tables also illustrate how the decline of economic resources, such as small-scale enterprises, affects the economy.

Table 4.
Industry

| Small Industries ⁴² | Handicraft Industry ⁴³ | Year |
|--------------------------------|-----------------------------------|------|
| 133 | 607 | 2005 |
| 235 | 7851 | 2007 |
| 8 | 280 | 2021 |

The tables above illustrate the financial support provided by various industries to Porong's local communities. People have lost their homes and livelihoods. They have become the poorest area in East Java Province, with the most significant number of unemployed people. The unemployment rate in Sidoarjo has risen

⁴¹ Sunday M. Moulton, "How to Remember," *Society for Applied Anthropology* 74, no. 4 (2015): 319–28.

⁴² BPS, "Kabupaten Sidoarjo Dalam Angka 2005."

⁴³ BPS, "Sidoarjo Dalam Angka 2007"; BPS, "Kabupaten Sidoarjo Dalam Angka 2005"; BPS, "Kecamatan Porong Dalam Angka 2021."

by at least 10.89 percent.⁴⁴ The most significant effects are evident in the pattern of economic circumstances.⁴⁵

In this case, religious organizations often fail to address specific social and economic issues. Therefore, in this particular instance, religious moderation principles should ideally play a key role in the recovery process for Lapindo victims. The serious issue of religious moderation is that it has not played an active role in resolving socioeconomic concerns; nevertheless, the role of religion and economic welfare are not distinct.⁴⁶ Religious moderation only focuses on normative issues and ignores the social and economic welfare problems of the community.

Islamic Ecofeminism and Women Solidarity

The women's community in Sidoarjo has played a crucial role in surviving and fighting for their rights in the Lapindo disaster case. They have been intriguing in every way in their efforts to rebuild their livelihoods following the hot mudflow disaster. To defend their families, they frequently staged protests against the Lapindo Company by uniting their communities through social solidarity. However, we cannot deny that women, nature, environment, and ecology are related to the feminine symbolic character.⁴⁷ This is demonstrated through social actions based on the environment at the local level of the Lapindo community. Women's communities in the Lapindo areas, such as *Ar-Rohmah*, *Korban Lapindo Menggugat*, and *Sanggar Al-Faz*, aggressively protect their rights. These women's groups attempted to sue Lapindo Company, but they received no government attention. As many women suffer from chronic and major illnesses, including

⁴⁴ Abdul Aziz Mahrizal Ramadan, "Pengangguran Tertinggi Di Jawa Timur Ada Di Kabupaten Sidoarjo, Kok Bisa?," *SuaraJatim.Id*, 2021, <https://jatim.suara.com/read/2021/06/05/060736/pengangguran-tertinggi-di-jawa-timur-ada-di-kabupaten-sidoarjo-kok-bisa>.

⁴⁵ Derek Kellenberg and A. Mushfiq Mobarak, "The Economics of Natural Disasters," *Annual Review of Resource Economics* 3 (2011): 297–312, <https://doi.org/10.1146/annurev-resource-073009-104211>.

⁴⁶ Richard H. Roberts, "Religion and Economic Life," in *International Encyclopedia of the Social and Behavioral Sciences*, Second Edition (2015).

⁴⁷ Moore, *Ecological Literature and the Critique of Anthropocentrism*.

cancer, heart disease, and several other critical diseases, they battled for their rights to health insurance and compensation since the hot mudflow.⁴⁸ Following the Lapindo disaster, a primary social concern in Sidoarjo is not just the health issues that women face but also the trafficking of children. Many children lived in small settlements with poor social and economic conditions after losing their homes, lands, livelihoods, and parents. These elements are what have led to the problem of child trafficking.⁴⁹

Thus, many young women between 16 and 35 years old worked as prostitutes for economic reasons.⁵⁰ In addition, polluted water is another source of suffering. Homemakers in the Lapindo disaster region struggle to access clean water for their daily needs. These problems demonstrate the double burden that women endure: on the one hand, they must provide for their families and households, and on the other, they must work to support themselves financially.

It is interesting to grasp Bassam Tibi's Islamic perspective, which claims that the universe is theocentric in the sense that God governs the world in a nonfinite manner.⁵¹ Human beings prefer denying God's decision: "*Wakaanal insane akhara saying jadala*" (Al Kahfi: 54). This holy Quran verse can be understood to mean that humanity is constantly destroying nature and other creatures. The divine revelation of the Holy Qur'an is an essential criterion for Muslim believers. The Qur'an emphasizes the transcendental significance of nature. Humans are responsible for the preservation of natural resources, including water, air, soil, forests,

⁴⁸ Walhi, "Peringatan 13 Tahun Lumpur Lapindo: Suara Perempuan Korban Lapindo," *Walhi Jatim*, 2019, <https://walhijatim.or.id/2019/05/peringatan-13-tahun-lumpur-lapindo-suara-perempuan-korban-lapindo-untuk-gubernur-jawa-timur-pulihkan-hidup-warga-tolak-pengeboran-baru-pt-lapindo-brantas/>.

⁴⁹ Liputan6, "Korban Lumpur Lapindo Dipaksa Menjadi Pelacur," *Liputan6*, 2007, <https://www.liputan6.com/news/read/147449/korban-lumpur-lapindo-dipaksa-menjadi-pelacur>.

⁵⁰ TribunNews, "Korban Lumpur Lapindo Banyak Jadi PSK," *TribunNews.Com*, 2010, <https://www.tribunnews.com/nasional/2010/05/28/korban-lumpur-lapindo-banyak-jadi-psk>.

⁵¹ Bassam Tibi, "The Worldview of Sunni Arab Fundamentalists: Attitudes Towards Modern Science and Technology," *JSTOR* 28, no. 2 (1994).

seas, and animals. The Qur'an, which encompasses all scientific knowledge, accurately describes these ethical precepts. The Islamic viewpoint must cope with the crisis in the case of Lapindo. These arguments prove that Islam supports environmental protection in the concept of ecofeminism. In the Islamic theological approach, the interpretation of nature and the environment is not rigid and debatable.

The ecofeminist movement in the Indonesian context has been widely promoted by religious organizations such as Aisyiyah. Aisyiyah is a forum for women within Muhammadiyah who are active in campaigning for Islamic theology and ecofeminism. Aisyiyah, a well-known Muslim women's organization, has campaigned for its vision and mission, focusing on ecofeminism and health issues, through educational programs on several Indonesian islands. Ecofeminism is the intersection of ecology and feminism. The two are connected, as well as Aisyiyah, which serves as the catalyst for women who are represented by the feminist movement and their participation in protecting nature and the environment.⁵²

In recent decades, Islamic organizations in Indonesia, such as Muhammadiyah (often referred to as modernists) and *Nahdlatul Ulama* (often referred to as traditionalists), have become more progressive in their approach to Islamic theology and ecofeminism, including the green Islamic boarding school movement, which has led to advocacy for victims of environmental disasters, as seen in the Lapindo case. According to Sulistyati, theological considerations are almost always related to the principles of ecology and femininity. Ecological principles include being aware of equilibrium and sustainability. At the same time, the principles of femininity include being aware of all ethnic issues, the struggles of vulnerable groups, and the rights of

⁵² Fitri Mardiani and Mohamad Zaenal Arifin Anis, "Ecofeminism and Aisyiyah's Role for the Environment in Banjarmasin City," *Proceedings of the 2nd International Conference on Social Sciences Education (ICSSE 2020)*, ICSSE 2020, 2021, 300–307.

displaced community groups—to obtain their right to life.⁵³ This phenomenon indirectly demonstrates that Islamic ecofeminism is a form of religious moderation that bridges the divide between women, the environment, and ecology. Similarly, Islam is concerned with women's issues, environment, and ecology.⁵⁴

Conclusion

After more than 17 years since the Lapindo accident, the hot mudflow has continued to flow and ruin the surrounding area. The Lapindo disaster has caused not only material infrastructure losses but also social, economic, and cultural infrastructure loss. The mudflow has currently covered villages, farmland, and public facilities across an area of about 600 hectares. This circumstance leads to the loss of the primary source of subsistence for the Lapindo victims as well as severe environmental degradation.⁵⁵ The Lapindo disaster has sparked extensive debate among scholars, civil communities, and religious leaders. A well-known Salafi cleric declared that the Lapindo mudflow was a punishment from God.⁵⁶ This differs from the opinion of prominent religious organizations, such as NU (*Nahdlatul Ulama*) and Muhammadiyah, which claim that the Lapindo mudflow was caused by human negligence.⁵⁷ A fatwa was issued by approximately 37 Muslim religious figures, denouncing the environmental damage and instructing the Lapindo company to provide the victims with their

⁵³ Mardian Sulistyati, "Locality, Equality, and Piety: Pesantren Ecofeminism Movement in Indonesia," *Studia Islamika* 30, no. 2 (2023): 319–248.

⁵⁴ Frederick M. Denny, "Islam and Ecology: A Bestowed Trust Inviting Balanced Stewardship," *Earth Ethics* 10, no. 1 (1998).

⁵⁵ Ghazaliq Ghazaliq, "Bagaimana Kondisi Lumpur Lapindo Saat Ini? Apakah Sudah Berhenti?," Blog, *Ghazaliq.Com*, 2023, <https://ghozaliq.com/bagaimana-kondisi-lumpur-lapindo-saat-ini/#:~:text=Kondisi~Terkini~Lumpur~Lapindo,lahan~pertanian%2C~dan~infrastruktur~penting.>

⁵⁶ Sunnah TV, "Ketika Ust. Khalid Melewati Lokasi Lumpur Lapindo. Ust. Dr. Khalid Basalamah, MA," Youtube Channel, *Sunnah TV*, 2018, <https://www.youtube.com/watch?v=YrthEMzQ0z8>.

⁵⁷ NU Online, "37 Tokoh Agama Keluarkan Fatwa Lumpur Lapindo," *NU Online*, 2007, <https://nu.or.id/warta/37-tokoh-agama-keluarkan-fatwa-lumpur-lapindo-9F91C>.

rights, including financial assistance and land recovery, as per Islamic law, or *fiqh*.

These views can be understood as interpretations of how religious moderation is ideally implemented in tangible actions to achieve the rights of Lapindo victims and promote prosperity and justice. Religious moderation is ideally not only a theological movement, but it must also address ecological issues. However, it is essential to address social problems, including environmental crises caused by erroneous views on religious interpretations of anthropocentrism, which harm ecosystems. Ecosystem disaster not only destroys species and natural cycles but also has a profound impact on the affected communities.

The Lapindo victim communities are still struggling with social and economic issues. All chaos stems from the modern age, beginning with the human desire to accumulate ever more material wealth. This ethical crisis describes material fantasies justified by religious doctrine through anthropocentric behavior, which claims that humans are the center of the earth and have the right to exploit natural resources. The Earth's biodiversity and ecological integrity are being lost at an ever-increasing rate due to human impacts.⁵⁸ Thus, collective awareness and action on environmental ethics play a significant role in protecting nature rather than destroying and taking away the rights of other species. However, human beings are the manifestation of God's creatures. This is also how we should recognize that Islamic ecofeminism is a crucial discourse for promoting peace and religious harmony from an environmental perspective, as exemplified by the Lapindo case disaster.

In summary, we the need to re-examine anthropocentrism and critique the religious moderation discourse in light of empirical facts and theories concerning the Lapindo phenomenon. The early concept of religious moderation, especially in Indonesian case, was merely understood as a way to prevent religious violence. However, it has ignored the broader role of religious moderation,

⁵⁸ Haydn Washington et al., "Why Ecocentrism Is the Key Pathway to Sustainability," Blog, *Millennium Alliance for Humanity and the Biosphere*, 2017, <https://mahb.stanford.edu/blog/statement-ecocentrism/>.

such as environmental violence. The critical view of religious moderation only focuses on interfaith issues on religious tolerance. However, there are no genuine efforts taken by religious moderation programs to address how the anthropocentric behavior, which is based on religious interpretations, contributes to environmental violence and ecological crisis. Regarding the sociocultural and economic effects of environmental violence, religious moderation has not yet taken many significant steps.

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