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Nahdlatul Ulama and Environmental Engagement in Coastal Bengkalis amid Ecological Crisis

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Abstract

This article explores how Nahdlatul Ulama (NU), through its local branch in Bengkalis (PCNU), responds to the worsening ecological crisis in one of Indonesia's most vulnerable coastal regions. Using a qualitative case study approach that combines field interviews, participant observation, and document analysis, this study investigates how Islamic environmental ethics – particularly figh al-bi'ah and maqāṣid al-sharī'ah—are translated into collective practices through grassroots religious initiatives. Two key programs are highlighted: Green Pesantren, which integrates ecological education, reforestation, and sustainable practices into Islamic boarding schools; and Mimbar Dakwah, which encourages preachers to include environmental themes in sermons as a form of moral advocacy. These initiatives show how religious discourse can shape environmental behavior and public consciousness at the community level. However, the study also identifies major obstacles, including economic hardship, weak policy enforcement, limited institutional support, and escalating climate impacts. Despite these barriers, PCNU plays a critical role in mobilizing religious networks, shaping local ecological narratives, and promoting community resilience. The findings contribute to the sociology of religion and environmental studies by demonstrating how faith-based organizations can serve as agents of social action and environmental engagement, especially in regions where state capacity is limited.

Keywords: Nahdlatul Ulama; PCNU Bengkalis; Islamic environmentalism; Green Pesantren; Mimbar Dakwah; Maqāṣid al-Sharī'ah

A. Introduction

The ecological crisis has emerged as one of the most pressing global challenges of the 21st century, manifesting in various forms such as climate change, deforestation, pollution, and biodiversity loss (Habibullah et al. 2022). In Indonesia, the impact of these environmental disruptions is increasingly palpable (Alicia 2024; Pirmana et al. 2021). For instance, 2023 marked the hottest year on record, with the global average temperature rising by 1.5°C—an alarming signal of climate instability (Febriani Irma 2024). Human interaction with the environment is inherently reciprocal: when nature is respected, it nurtures life,

VOLUME 6, ISSUE 1, MARCH 2025, PP. 85-96 E-ISSN: 2722-6700 | DOI: 10.22373/JSAI.V6I1.7518

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but when exploited or neglected, it reacts in ways that threaten ecological and social equilibrium (Amirullah 2015; Ojeda et al. 2022; Orrick, Dove, and Schmitz 2024). This reciprocal relationship is also underscored in the Qur'an (QS. Ar-Rum: 41), which attributes corruption on land and sea to human actions—a reminder of the moral and social consequences of environmental degradation.

Bengkalis Regency, located on the eastern coast of Sumatra, exemplifies a region under acute ecological pressure (Hayati et al. 2024). Annual coastal abrasion rates reach 2 to 7 meters (Cahyati 2020), recent forest fires have devastated over 145 hectares, and landfill infrastructure remains insufficient to manage the growing volume of waste. Further compounding the crisis is the widespread conversion of mangrove forests into shrimp ponds. These phenomena reveal not only an ecological emergency but also a social and institutional one, in which patterns of neglect, exploitation, and unequal access to environmental governance persist. While governmental intervention is crucial-through environmental regulations and sustainable development policies (Oktora 2023; Sarabdeen 2024) - such top-down approaches often require complementary community-based efforts. This is where the role of religious institutions becomes significant. Religion remains a powerful source of moral authority and social mobilization in many Indonesian communities. Islamic teachings, for instance, advocate ecological ethics that emphasize balance, stewardship, and responsibility (Syamsudin 2017). Yet, the operationalization of these teachings at the grassroots level largely depends on how religious actors translate them into practice.

In this context, Nahdlatul Ulama (NU)—Indonesia's largest Islamic mass organization—occupies a unique sociological position. It acts not only as a religious institution but also as a social force capable of shaping environmental awareness and collective behavior. Despite numerous studies exploring religion and ecology (Renger, Stork, and Öhlmann 2024; Smith 2018; Smith, Adam, and Maarif 2023), limited scholarly attention has been given to the concrete role of NU as an environmental actor, especially within vulnerable coastal communities like Bengkalis. This research addresses that gap by examining how NU mobilizes its religious authority and social networks to mitigate the ecological crisis.

Building on the framework of *fiqh al-bi'ah* (Islamic environmental jurisprudence) and *maqāṣid al-sharī'ah* (the objectives of Islamic law), this study investigates NU's environmental strategies through a sociological lens. These concepts are not only theological in nature but also deeply social—emphasizing the protection of life, intellect, property, and posterity as public goods. By focusing on NU's grassroots programs such as *Pesantren Hijau* (Green Islamic Boarding Schools) and environmental preaching platforms, this article explores how religious norms are internalized, negotiated, and enacted within everyday ecological practices. Ultimately, this study seeks to contribute to the sociological

VOLUME 6, ISSUE 1, MARCH 2025, PP. 85-96 E-ISSN: 2722-6700 DOI: 10.22373/JSAI.V6I1.7518

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discourse on religion and environmentalism by highlighting how faith-based organizations, such as NU, serve as agents of ecological resilience and social change—particularly in marginalized, ecologically vulnerable regions.

B. Method

This study employed a qualitative case study design, combining field research with library-based analysis. Qualitative research was chosen to explore, in depth, the experiences, meanings, and social practices constructed by Nahdlatul Ulama (NU) actors in responding to the ecological crisis in Bengkalis' coastal areas. As Sugiyono (2019) explains, qualitative inquiry emphasizes meaning over generalization, positions the researcher as the main instrument, relies on inductive reasoning, and uses triangulation to validate data. The main unit of analysis in this research is the Bengkalis Branch of Nahdlatul Ulama (PCNU) and its environmental initiatives. The focus is on understanding how NU, as a religious and social institution, interprets ecological challenges and mobilizes collective action through culturally embedded programs and religious narratives.

Data collection was conducted through three methods: in-depth interviews, participant observation, and document analysis. Interviews were conducted in a semi-structured yet dialogic format with five key informants—comprising the chairperson, secretary, and three core members of the 2022–2027 PCNU Bengkalis leadership. Participants were selected purposively based on their active involvement and strategic roles in environmental initiatives. Observations were carried out during NU's ecological campaigns, training sessions, and public sermons, allowing researchers to directly examine community engagement and the application of religious-environmental discourse. Documentary sources—such as internal reports, religious texts, and prior academic literature—were used to enrich and contextualize the empirical data.

To maintain analytical rigor, data analysis followed the Miles and Huberman (2014) model, which includes three stages: data reduction, data display, and conclusion drawing/verification. In line with best practices in qualitative research, source triangulation was applied to enhance validity. Interview data were cross-verified with observations and textual documents to identify consistencies, contradictions, and the broader patterns of NU's engagement with environmental issues. Moreover, this study incorporated key theoretical concepts to interpret the empirical findings. The principles of *fiqh albi'ah* (Islamic environmental jurisprudence) and *maqāṣid al-sharī'ah* (the objectives of Islamic law) were employed as interpretive lenses. These frameworks are particularly useful in understanding how religious norms are localized and translated into environmental ethics and collective behavior. In doing so, this

VOLUME 6, ISSUE 1, MARCH 2025, PP. 85-96 E-ISSN: 2722-6700 | DOI: 10.22373/JSAI.V6I1.7518

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study bridges religious discourse and sociological inquiry, highlighting how NU's environmental programs are not only theological responses but also social interventions aimed at transforming community attitudes and practices.

C. Result and Discussion

1. The Role of PCNU Bengkalis in Addressing the Ecological Crisis

Nahdlatul Ulama (NU), through its regional board in Bengkalis (PCNU), has actively responded to the worsening ecological crisis by promoting environmental awareness and initiating faith-based community action. The organization views environmental damage not only as a physical or scientific problem but also as a moral and theological concern. In coastal regions like Bengkalis, where erosion, mangrove deforestation, and climate change are visibly affecting people's lives, PCNU positions itself as both a religious authority and a social actor, calling for the protection of the environment as part of Islamic stewardship (*khilāfah*).

Among the initiatives carried out by PCNU Bengkalis is the "Save Our Earth" campaign, which combines education on waste reduction, tree planting, and renewable energy with Islamic preaching. Through this program, NU promotes the idea that safeguarding the environment is not only beneficial but also a spiritual duty. In an interview, the chairman of PCNU Bengkalis explained:

"Through collaboration with various parties, including the government and non-governmental organizations, NU strives to develop sustainable programs that not only improve environmental conditions but also increase public awareness of the importance of protecting the ecosystem."

Another board member echoed this sentiment, highlighting NU's internal commitment:

"NU has a strong commitment to contribute toward building a better Earth for future generations. One of our strategies is to empower members to engage with environmental issues through education and training."

A concrete form of this commitment is the Green Pesantren (Pesantren Hijau) program. Through this initiative, NU encourages Islamic boarding schools across Bengkalis to implement environmental education, sustainable agriculture, waste management, and reforestation efforts. The program targets both students (santri) and surrounding communities, emphasizing that environmental protection is a collective and religious responsibility. It integrates Islamic teachings on nature, moderation, and cleanliness into daily school life while promoting sustainable behaviors such as composting, recycling, and tree planting.

The Green Pesantren model positions pesantren as both moral educators and ecological agents. Early childhood education on waste separation, cultivation of organic gardens, and mosque-based environmental campaigns are

VOLUME 6, ISSUE 1, MARCH 2025, PP. 85-96 E-ISSN: 2722-6700 | DOI: 10.22373/JSAI.V6I1.7518

just some of the strategies used. Teachers are encouraged to relate environmental issues to Qur'anic verses and hadith, embedding ecological awareness into spiritual learning. The aim is not only to change behavior but also to instill a long-term ethical orientation toward environmental responsibility.

To synthesize the program's design, the following table presents its core components and strategic contributions:

Table 1. Key Components of the Green Pesantren Program and Their Strategic Functions

Component	Description	Strategic Function
Environmental Education	Seminars and curricula integrating Islamic teachings and ecological science	Builds ecological literacy grounded in religious values
Sustainable Agriculture	Organic gardening, agroecology practices	Promotes food self- sufficiency and land stewardship
Waste Management	Plastic reduction, composting, early-age education	Cultivates long-term ecological habits
Reforestation	Tree planting within and around pesantren	U
Community Engagement	Joint clean-up campaigns with surrounding residents	Encourages collective action and cooperation
Spiritual Framing	Religious framing of environmental actions as worship and moral responsibility	Embeds sustainability within Islamic daily life
Partnerships	Cooperation with government agencies and NGOs	Enhances outreach and support
Monitoring & Evaluation	Indicators to track progress in awareness, waste reduction, and tree planting	Ensures effectiveness
Public Dissemination	Blogs, newsletters, and sharing best practices	Amplifies message and inspires replication

Source: Field data synthesized by the authors.

In addition to educational efforts, PCNU Bengkalis expands its ecological advocacy through the Mimbar Dakwah initiative. This program encourages muballigh (Islamic preachers) to incorporate environmental messages into religious sermons, both during Friday prayers and at other public events. Drawing from Qur'anic verses such as Q.S. Ar-Rum: 41 and prophetic traditions that emphasize balance ($m\bar{\imath}z\bar{a}n$) and justice, these sermons frame environmental protection as a divine mandate and moral responsibility.

VOLUME 6, ISSUE 1, MARCH 2025, PP. 85-96 E-ISSN: 2722-6700 | DOI: 10.22373/JSAI.V6I1.7518

To support this effort, PCNU provides written sermon materials that combine religious sources with current ecological challenges. These materials help preachers to relate local environmental degradation—such as mangrove deforestation, flooding, or coastal erosion—to core Islamic values. This strategy not only raises awareness but also influences community behavior by giving ecological practices religious significance. In a context where regulatory enforcement is limited, the moral authority of religious leaders becomes a crucial tool in promoting sustainable practices.

The success of both Pesantren Hijau and Mimbar Dakwah is made possible by NU's strong grassroots infrastructure and symbolic capital. Its widespread network of pesantren and mosques ensures that environmental messages reach deep into the community. While PCNU does not hold formal political power or access to large-scale funding, its ability to shape values, guide behavior, and build community participation gives it a unique position in local ecological governance. The initiatives undertaken by PCNU Bengkalis—particularly the Green Pesantren and Mimbar Dakwah—reveal how Islamic values can be translated into practical responses to environmental challenges. These programs not only reflect NU's moral engagement with ecological issues but also demonstrate its role in shaping collective behavior through education, religious communication, and community mobilization.

2. PCNU Bengkalis' Environmental Programs Through the Lens of Maqāṣid al-Sharī'ah

The ecological initiatives undertaken by PCNU Bengkalis can be meaningfully interpreted through the framework of $maq\bar{a}sid$ al- $shar\bar{i}$ 'ah—the higher objectives of Islamic law. Rooted in classical Islamic legal theory, this framework emphasizes the protection of five essential values: religion $(d\bar{i}n)$, life (nafs), intellect ('aql), progeny (nasl), and property $(m\bar{a}l)$. Contemporary scholarship has developed $maq\bar{a}sid$ into a flexible normative tool for evaluating policies and practices according to their contribution to social welfare and justice (G. Ramadhan 2019; M. Ramadhan 2019).

The Green Pesantren program, for instance, supports the protection of life (hifz al-nafs) through environmental activities that improve air quality, restore ecosystems, and ensure sustainable food systems. These efforts—tree planting, composting, organic farming—are preventive in nature and promote long-term ecological health. Herchet et al. (2022) further emphasize that access to healthy natural environments contributes directly to human physical and mental well-being, making ecological integrity a condition for social health. In parallel, the integration of environmental education into pesantren curricula reflects a commitment to hifz al-'aql, as students are encouraged to think critically about environmental degradation through both religious and scientific lenses. The

VOLUME 6, ISSUE 1, MARCH 2025, PP. 85-96 E-ISSN: 2722-6700 | DOI: 10.22373/JSAI.V6I1.7518

program also supports *ḥifẓ al-māl* by fostering community-based economies rooted in sustainability—such as organic agriculture and recycling—which reduce dependency on exploitative resource practices and help protect material livelihoods.

The promotion of ecological values through worship, sermons, and daily school routines affirms the importance of *hifz al-dīn*, in that faith becomes a source of ecological consciousness and moral discipline (Aripin and Nugroho 2024). The long-term, intergenerational nature of the program-emphasizing children's participation and future sustainability—also reflects hifz al-nasl, which underlines the moral imperative to protect future generations (Oropilla and Ødegaard 2021). The Mimbar Dakwah initiative further reinforces this integrative ethical vision. By training *muballigh* to frame environmental care as a religious obligation, PCNU activates a mode of public pedagogy that blends moral reasoning with social critique. As noted by Ramadhan (2019), the convergence of maqāṣid and environmental ethics allows for a broader interpretation of Islamic legal purpose that is responsive to contemporary crises such as climate change, deforestation, and pollution. Importantly, this religious framing democratizes environmental discourse, making it accessible to communities that may lack formal education but are highly receptive to religious messaging. The preacher is thus transformed from a mere transmitter of doctrine into a social educator and ecological advocate—an evolution that reflects the sociological expansion of religious capital into the ecological realm. Viewed through the lens of maqāṣid al-sharī'ah, the programs initiated by PCNU Bengkalis reveal a coherent alignment between Islamic ethical objectives and contemporary ecological responses. However, the extent to which these ideals are realized in practice also depends on various structural, cultural, and economic factors that shape the community's engagement with environmental action.

3. Challenges in Addressing the Ecological Crisis

The efforts made by PCNU Bengkalis to integrate Islamic values into ecological action face a range of deeply rooted challenges that reflect the complex interplay of culture, economy, policy, and climate vulnerability in the region. While the organization has shown moral leadership and social initiative, structural constraints at multiple levels often limit the depth, continuity, and reach of its environmental programs. One of the most persistent challenges is the lack of widespread ecological awareness across the broader community. While NU's sermons, pesantren curricula, and preaching programs have begun to introduce environmental messages, these often reach only those already within the orbit of the organization. Among the general population—particularly in rural coastal zones—there remains a significant gap between environmental concern and behavioral change. For many, environmental degradation is seen as

VOLUME 6, ISSUE 1, MARCH 2025, PP. 85-96 E-ISSN: 2722-6700 | DOI: 10.22373/JSAI.V6I1.7518

D-10011. 2722-0700 | DOI: 10.22070/00/11.7010

a background condition, not an urgent crisis. Waste is disposed of openly, mangroves are cleared for aquaculture, and plastic usage remains unchecked—not necessarily due to indifference, but because environmental damage is not directly linked, in people's minds, to personal or communal responsibility.

This disconnection is compounded by a limited access to environmental education. Few schools provide formal instruction on sustainability or climate change, and digital access to ecological content is uneven. Even within pesantren, environmental learning remains supplemental rather than integrated into core subjects. NU's attempt to religiously frame environmental ethics as part of *ibādah* (worship) has produced pockets of awareness, but has yet to catalyze a broader cultural shift. The process of transforming ecological values into everyday norms is gradual and frequently interrupted by more immediate social and economic concerns.

Indeed, economic precarity is perhaps the most formidable obstacle to long-term ecological engagement. A substantial portion of the Bengkalis population relies on activities that, while environmentally harmful, are economically indispensable. Small-scale shrimp farming on deforested mangrove land, subsistence agriculture with chemical inputs, and informal waste incineration are not ideologically motivated acts of environmental neglect—they are survival strategies in an unstable economic landscape. Calls for sustainability can appear abstract or even burdensome when weighed against the need for daily income. As Etuk and Inwang (2024) argue, this condition—what they term "ecological entrapment"—arises when structurally marginalized communities are locked into environmentally destructive behaviors by systemic poverty, absence of alternative livelihoods, and policy inattention.

PCNU Bengkalis is aware of this tension. While its programs promote ethical behavior through faith-based education and community mobilization, it also recognizes that without structural economic change, its moral messaging may fall short of lasting behavioral transformation. Efforts to offer skills training in sustainable agriculture or waste processing have been modest but strategic, yet remain insufficient in scale to shift economic patterns at the community level. The organization finds itself in the position of both urging reform and advocating for policy-level support to create enabling environments for ecological citizenship.

Institutional and legal challenges further complicate these efforts. While Indonesia's national legal framework on the environment is fairly comprehensive, its local enforcement in Bengkalis is patchy at best. Permits for land use and extraction are often granted without rigorous environmental impact assessments. Community reports of environmental violations are not always followed up with action, and in some cases, local officials are either disinterested or beholden to economic interests. In this context, PCNU's role is inherently

VOLUME 6, ISSUE 1, MARCH 2025, PP. 85-96 E-ISSN: 2722-6700 | DOI: 10.22373/JSAI.V6I1.7518

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limited: as a civil society actor, it has no enforcement power, and while its legitimacy as a moral guide is strong, this does not translate into regulatory influence. Dialogues with local authorities have occurred, but implementation of PCNU's environmental recommendations often stalls or is diluted by bureaucratic inertia.

Moreover, NU's inclusion in policymaking remains largely informal. Although PCNU is occasionally invited to ceremonial or symbolic meetings, it lacks a consistent institutional mechanism to participate in the design, monitoring, or revision of local environmental policy. This marginality reflects a broader pattern in which religious institutions are acknowledged for their moral contributions but excluded from the political architecture of ecological governance. As Abdillah et al. (2024) note, meaningful environmental reform requires structural synergy between moral voices, legal frameworks, and participatory mechanisms—something currently lacking in Bengkalis.

Finally, the realities of climate change introduce conditions that both intensify ecological fragility and undermine long-term planning. Bengkalis faces severe and ongoing coastal erosion, saline intrusion into agricultural lands, and increasingly erratic weather patterns. These phenomena not only threaten local ecosystems but also undermine public morale and institutional bandwidth. In times of crisis—such as flooding or crop failure—communities focus naturally on recovery and survival, relegating conservation to the periphery. While NU provides pastoral care and mobilizes community assistance during disasters, its environmental agenda is frequently derailed by the unpredictable and accelerating consequences of climate volatility.

These conditions are especially harsh for the most ecologically vulnerable groups: small-scale farmers, fishermen, women-headed households, and youth with limited mobility or education. Lacking institutional support, many of these groups are excluded from adaptation planning and public policy discussions. Consequently, the ecological crisis deepens the existing patterns of social exclusion, turning the environmental struggle into a broader struggle for equity, voice, and recognition.

PCNU Bengkalis stands at the intersection of these intersecting crises. It is not only a transmitter of Islamic ecological values, but also a mediator between institutional power and community needs. While it cannot resolve all structural obstacles, its work continues to expand the moral and social imagination of environmental responsibility. Nonetheless, the future of its programs depends not just on religious commitment, but on the willingness of local and national institutions to engage NU as a partner in integrated, inclusive, and justice-oriented ecological transformation.

VOLUME 6, ISSUE 1, MARCH 2025, PP. 85-96 E-ISSN: 2722-6700 DOI: 10.22373/JSAI.V6I1.7518

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D. Conclusion

This study has examined how Nahdlatul Ulama (NU), through its Bengkalis branch (PCNU), contributes to environmental protection in one of Indonesia's most ecologically vulnerable regions. Through programs like Green Pesantren and Mimbar Dakwah, NU introduces environmental values into everyday community life by linking Islamic teachings with local ecological concerns. These efforts show that religious institutions can play a constructive role in encouraging collective environmental awareness and action. By applying the concepts of figh al-bi'ah and maqāṣid al-sharī'ah, the research highlights how Islamic ethical frameworks can guide sustainable behavior at the grassroots level. However, the study also finds that NU's ecological programs face several structural challenges, including economic constraints, limited legal authority, exclusion from policy processes, and ongoing climate-related risks. These factors often limit the scale and continuity of NU's environmental work. The findings of this study suggest that religious-based initiatives can support community-level environmental engagement, especially where formal governance is weak. Further research is needed to explore how such initiatives develop in different regions and contexts, and how partnerships between religious organizations, governments, and civil society can enhance efforts toward environmental sustainability.

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VOLUME 6, ISSUE 1, MARCH 2025, PP. 85-96 E-ISSN: 2722-6700 DOI: 10.22373/JSAI.V6I1.7518

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