

Advancing Eco-theology in Islamic Educational Framework: A Systematic Review of Indonesian Research Landscape

Sukma Eka Saputra¹, Zennanta Agustia^{2*}, and Nur Kolis³

^{1,2,3}Study Program of Islamic Education, Postgraduate Faculty, Kiai Ageng Muhammad Besari State Islamic University of Ponorogo, Indonesia.

*Corresponding author

ARTICLE INFO

Article history

Received March 8, 2026

Revised April 12, 2026

Accepted April 17, 2026

Keywords: Eco-theology, Islamic education, Sustainability, Pesantren, Environmental ethics, Systematic review.

ABSTRACT

This study aims to systematically map and synthesize the research landscape on eco-theology within the framework of Islamic education in Indonesia. This study addresses this gap by identifying research trends, thematic patterns, and key findings, while highlighting the role of Islamic education in responding to contemporary ecological challenges aligned with sustainable development principles. A systematic literature review was conducted following PRISMA guidelines. Data were collected from the Scopus database, covering journal articles and conference papers published between 2020 and 2025 by Indonesian-affiliated authors. Quantitative mapping was supported using Bibliometrix (R package), while qualitative data were analyzed through reflexive thematic analysis based on Braun and Clarke's six-phase framework. The results show a growing research trend on eco-theology within Islamic education in Indonesia, with a significant surge in publications in 2025 and an annual growth rate of 24.57%. This development may be linked to the increasing prominence of eco-theology in Indonesia, particularly through its institutional promotion by the Ministry of Religious Affairs. Four dominant themes emerged: (1) the integration of Islamic teachings in environmental conservation, (2) the role of religious institutions and communities, (3) the internalization of eco-values through education, and (4) practical conservation efforts and outcomes. The findings demonstrate that pesantren and major Muslim organizations function as key educational and social actors in translating eco-theological principles into concrete environmental action. The review is limited to Scopus-indexed publications and Indonesian-affiliated authors, which may constrain broader generalization and international comparison. This study offers the first systematic thematic synthesis of eco-theology research in Indonesian Islamic education, providing a conceptual foundation for future comparative, policy-oriented, and sustainability-focused studies.

1. INTRODUCTION

The world today is confronted with a complex and profound ecological crisis, demanding holistic and transdisciplinary approaches to pursue sustainable solutions. Amid global discourses on sustainability, the role of religion, particularly Islam, as a source of environmental values and ethics has increasingly garnered attention (Kurbiyanto et al., 2024, p. 17). Islam, with its rich teachings on tawhid (the oneness of God), khilāfah (humanity's role as vicegerent of God on earth), and mīzān (balance and equilibrium), offers a robust ethical framework for promoting ecological responsibility (Rahman & Jalil, 2021, p. 1756). The

concept of eco-theology within the Islamic context has emerged as an endeavour to unearth and articulate the theological foundations that underpin environmental preservation. Islamic eco-theology thereby positions environmental stewardship as both a moral and spiritual imperative for the Muslim community. Integrating the principles of Islamic eco-theology into educational frameworks has become increasingly crucial. Contemporary environmental challenges, such as climate change and biodiversity loss, have grown ever more urgent, confronting humanity with profound crises (Pörtner et al., 2023). The IPCC (2023) affirms that environmental degradation is accelerating rapidly due to anthropogenic activities. In Indonesia, the Environmental Performance Index (EPI) records a score of 33.6, placing the country at 163rd globally (EPI, 2024). In the context of education, the ecological devastation caused by floods and landslides in Sumatra, resulting in over 990 deaths and the displacement of 884,889 people, highlights critical deficiencies in environmental resource management within educational and community settings (Saudale, 2025). Eco-theology offers a vital response by re-emphasising the inseparable link between faith, ethics, and environmental stewardship (Imran, 2023, pp. xxvi–xxvii). Consequently, examining the role of eco-theology within the framework of Islamic education is of significant importance.

Eco-theology education in Indonesia has recently emerged as a topic of growing discourse and enthusiasm. Massively promoted by the Ministry of Religious Affairs (Kemenag) of the Republic of Indonesia in mid-2025, this educational initiative seeks to integrate religious teachings with environmental responsibility, aiming to cultivate awareness and tangible actions among students to safeguard the natural world (Kementerian Agama RI, 2025, p. 3). Various programs in Islamic eco-theology education have been implemented, with internalization efforts manifesting in movements such as zero waste, the 5R principles (Ringkas (Concise), Rapi (Neat), Rawat (Maintain), Resik (Clean), and Rajin (Diligent)) (Sabtina & Mahariah, 2025), and river sanitation and cleanliness initiatives (Marpaung, 2024). Therefore, it is compelling to conduct a systematic review of the research landscape on eco-theology within Islamic education in Indonesia. Extensive research on eco-theology has been conducted across five distinct typologies. First, the historical-philosophical typology examines the historical roots of the relationship between religion and nature, alongside ethical and philosophical reflections on human ecological responsibility (Öhlmann & Swart, 2022). Second, the theological-normative typology investigates the formulation of theological and moral principles across religious traditions that affirm humanity's spiritual responsibility toward the natural world (Mustofa et al., 2025). Third, the social-critical and contextual typology highlights the interplay between social issues, ecological justice, gender, and spirituality, serving as a critique of domination and the exploitation of nature (Sabogal, 2021). Fourth, the practical-implementative typology focuses on the application of eco-theological values in real-world social practices (Afandi et al., 2024). Fifth, the bibliometric typology maps key trends, influential works, and thematic clusters within environmental and religious discourse (Purwanto et al., 2025). Nevertheless, these studies tend to be partial and fragmented, whether focusing on theological aspects, local practices, or educational approaches separately. To date, there has been no study that systematically maps and synthesizes the entire landscape of ecotheology research in Islamic education in Indonesia, especially those based on international databases such as Scopus. The absence of such a comprehensive synthesis leads to limited understanding of research trends, thematic patterns, and the development trajectory in this field. Based on this gap, this research aims to conduct a systematic literature review (SLR) to identify research trends, main themes, and empirical findings related to ecotheology in Islamic education in Indonesia. Conceptually,

the term "Islamic education" in this study is limited to the context of formal and non-formal education based on Islamic institutions, curriculum, and pedagogy in Indonesia.

2. METHODS

This study is a systematic literature review (SLR) aimed at synthesizing and analyzing research findings on eco-theology within Islamic education in Indonesia. The review adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2021; Rethlefsen et al., 2021). Technically, the review process comprises three main stages: literature search, study selection, and data analysis and synthesis (Heymans et al., 2019; Irawan et al., 2024). The data sources used for this study include the Scopus database, with data downloaded as of November 25, 2025. Inclusion and exclusion criteria were defined to meet the research objectives, as outlined in Table 1. Based on these criteria, a literature search was conducted in the Scopus database using the query: “(all (ecotheology*) and all (islamic education)) and pubyear > 2019 and pubyear < 2026 and (limit-to (affilcountry , “indonesia”)) and (limit-to (doctype , “ar”) or limit-to (doctype , “cp”))”. this query is designed to find articles related to eco-theology and Islamic education, published between 2020 and 2025, with the results limited to Indonesian-affiliated authors. Additionally, it only includes journal articles (ar) and conference papers (cp). The search returned 27 pieces of literature related to eco-theology and Islamic education, authored by Indonesian researchers, as shown in Figure 1.

Table 1. Inclusion and Exclusion Criteria

Indicators	Inclusion	Exclusion
Publication Type	Journal Articles and Conference Papers	Books, Book Chapters, Reviews, Proceedings, Editorials, Erratum, Notes, and Short Surveys
Database Indexing	Articles indexed in Scopus	Articles not indexed in Scopus
Language	Articles written in English	Articles written in other languages
Author's Country of Origin	Indonesian	Outside Indonesia
Types of Research	Research Studies	Bibliometric analysis, systematic literature review, and meta-analysis
Focus of Study	Eco-theology through Islamic Education	Eco-theology unrelated to Islamic education
Publication Year	All years published	No exclusion

The literature selection for analysis was based on the inclusion and exclusion criteria outlined in Table 1. The screening process began with a search in the Scopus database, focusing on articles authored by individuals affiliated with Indonesia. Further screening was carried out based on the relevance of the research, determined from the all in the articles. During this process, sixteen articles not related to eco-theology were excluded, and two articles that involved bibliometric analysis were also identified. The next step involved obtaining the full manuscripts for each article. Full texts were successfully retrieved for eight articles, while one could not be located. Following these stages of screening, seven articles were selected for detailed analysis, as illustrated in Figure 1.

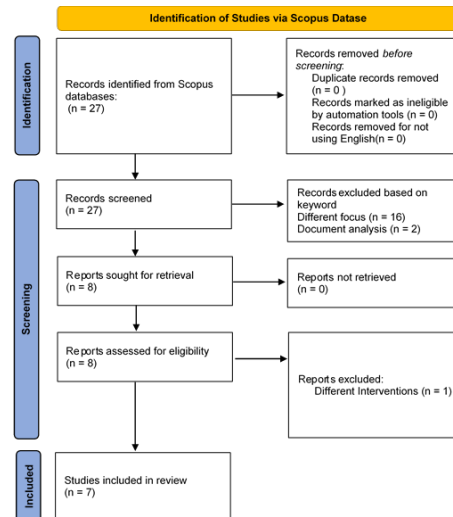


Figure 1. Literature Identification Process Using PRISMA Procedures

Data analysis in this study was conducted using a combined quantitative and qualitative approach. Quantitative analysis was performed using Bibliometrix (R package) and Biblioshiny web-interface to map the scientific landscape of eco-theology research within the framework of Islamic education in Indonesia (Aria & Cuccurullo, 2017). This bibliometric analysis generated key information including publication trends over time, most productive authors and institutions. Qualitative analysis was carried out through systematic content analysis using the thematic analysis framework developed by Braun and Clarke (2021) with the following six phases. The first phase centered on achieving an in-depth understanding of the dataset, which comprised seven full-text articles relevant to the research inquiry. In the second phase, initial codes were systematically developed to capture key features and recurring elements within the dataset. Coding was performed manually to maintain close engagement with the data, ensuring that codes reflected the nuances of the content. To enhance the coding process and visualize prominent concepts, a word cloud was generated using the Bibliometrix package in R. The third phase involved synthesizing the generated codes into potential themes. In the fourth phase, the preliminary themes underwent rigorous review and refinement to ensure their coherence and relevance. The fifth phase focused on articulating the essence of each theme through clear definitions and concise, descriptive names. The final phase culminated in the production of a comprehensive report that synthesized the thematic findings.

3. RESULTS AND DISCUSSION

RESULTS

This section may be divided into subheadings. It should provide a concise and precise description of the experimental results, their interpretation, and the experimental conclusions that can be drawn.

3.1 RQ 1: Trends in Eco-theology Research Within Islamic Education in Indonesia

The publication landscape on eco-theology within the framework of Islamic education by Indonesian researchers has been observable since 2020. The research trend over the six-year period from 2020 to 2025 is presented in Figure 2.

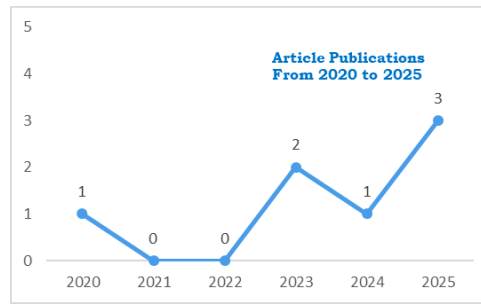


Figure 2. Trend in The Number of Eco-theology-Related Publications in Islamic Education in Indonesia

Figure 2 illustrates the annual scientific output on eco-theology within the framework of Islamic education in Indonesia over the period 2020–2025. The first publication emerged in 2020, represented by a single article. No publications were recorded in 2021 or 2022. A modest increase occurred in 2023 with two articles, followed by a slight decline to one article in 2024. The year 2025 marked a significant surge, with three articles published, the highest number within the observed period. All seven selected studies were authored by Indonesian researchers and published in Scopus-indexed journals. Research trends in eco-theology within the framework of Islamic education in Indonesia exhibit a distinctive publication pattern. While the first publication in this domain emerged in 2020, there was a noticeable absence of recorded publications in 2021 and 2022, indicating a period of limited scholarly output in this specific field by Indonesian researchers as indexed in Scopus (Samala et al., 2024). A modest increase was observed in 2023 with two articles, followed by a slight decline to one article in 2024. However, the year 2025 marked a significant surge, with three articles published, representing the highest number within the observed period.

Table 2. Main Information Publications Related to Eco-theology in Islamic Education in Indonesia

Description	Results
Timespan	2020:2025
Sources (Journals, Books, etc)	6
Documents	7
Annual Growth Rate %	24,57
Document Average Age	1,43
Average citations per doc	3,286
References	62
Keywords Plus (ID)	0
Author's Keywords (DE)	33
Authors	25
Authors of single-authored docs	0
Single-authored docs	0
Co-Authors per Doc	3,86
International co-authorships %	0

Table 2 complements Figure 2 by summarizing the bibliometric profile of the seven analyzed publications. In addition to showing recent growth, the table indicates that this field is characterized by relatively new publications (average age 1.43 years), collaborative authorship (3.86 co-authors per document), and the absence of single-authored papers. These indicators suggest that eco-theology research in Indonesian Islamic education is still emerging, but it is increasingly developing through collaborative scholarly work.

3.2 RQ 2: Initial Codes and Themes in Eco-theology Research Within Islamic Education in Indonesia

In alignment with the reflexive thematic analysis framework, initial codes were systematically generated across the entire dataset to identify and label discrete segments of meaningful data (Braun & Clarke, 2021; Naeem et al., 2025). These codes serve as foundational units of analysis, encapsulating key concepts, patterns, or insights extracted from textual excerpts, empirical findings, and principal author arguments within the selected studies (Ahmed et al., 2025; Polat, 2025). The coding process was enriched by integrating visual tools, including a word cloud generated from the dataset (as depicted in the figure 3), which highlighted the prominence of terms such as “eco-theology,” “environmental awareness,” and “pesantren,” providing a preliminary overview of dominant themes. Additionally, a treemap (shown in the figure 4) was utilized to quantify the frequency of these terms, with "eco-theology" (6%) and “adaptation and mitigation” (3%) emerging as significant focal points.

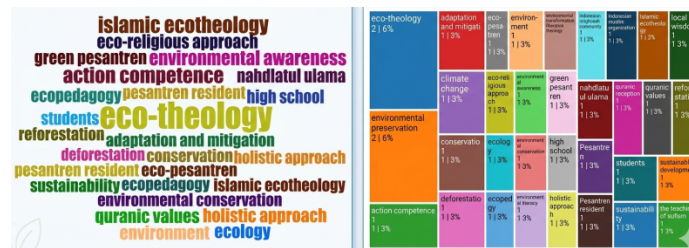


Figure 3. Picture Presents a visual synthesis of the eco-theology research within the framework of Islamic education in Indonesia (a) displays a word cloud generated; (b) presents a treemap visualization.

Over 20 codes were manually developed and organized by source article to ensure traceability and methodological rigor. The selection presented in Table 3 below is representative rather than exhaustive, prioritizing recurrent and salient codes that illuminate key aspects of the literature. Each code is annotated with its corresponding source article, referenced by number as detailed in the table, facilitating a clear connection to the original corpus.

Table 3. Initial Code Related to Eco-theology in Islamic Education in Indonesia

No.	Initial Code	Brief Description	Article Sources
1.	Eco-theology	Focuses on the integration of theological principles with ecological responsibility.	(Maghfiroh et al., 2024); (Mustofa et al., 2025)
2.	Environmental awareness	Emphasizes raising consciousness about environmental issues within Islamic contexts.	(Maghfiroh et al., 2024); (Mustofa et al., 2025)
3.	Pesantren	Highlights the role of Islamic boarding schools in promoting eco-theological practices.	(Karman et al., 2023; Maghfiroh et al., 2024; Maslani et al., 2023; Mustofa et al., 2025)

4.	Reforestation	Addresses efforts to restore forests as part of environmental stewardship.	(Karman et al., 2023; Maghfiroh et al., 2024)
5.	Sustainability	Encompasses sustainable practices and long-term ecological balance.	(Maghfiroh et al., 2024); (Mustofa et al., 2025)
6.	Green pesantren	Refers to eco-friendly initiatives within pesantren communities.	(Maghfiroh et al., 2024); (Mustofa et al., 2025); (Maslani et al., 2023)
7.	Eco-religious approach	Integrates religious teachings with environmental conservation strategies.	(Maghfiroh et al., 2024); (Maslani et al., 2023)
8.	Climate change	Addresses the impact of climate change and adaptive measures in Islamic education.	(Maghfiroh et al., 2024); (Karman et al., 2023)
9.	Nahdlatul Ulama	Highlights the involvement of this organization in eco-theological efforts.	(Husamah et al., 2025; Karman et al., 2025; Maghfiroh et al., 2024)
10.	Quranic values	Draws on Quranic principles to support environmental ethics.	(Maghfiroh et al., 2024)
11.	Action competence	Focuses on developing practical skills for environmental action among students.	(Maghfiroh et al., 2024; Mustofa et al., 2025)
12.	Adaptation and mitigation	Covers strategies to adapt to and mitigate environmental challenges.	(Maghfiroh et al., 2024)
13.	High school	Includes environmental education initiatives at secondary Islamic schools.	(Maghfiroh et al., 2024)
14.	Students	Emphasizes the role of students in eco-theological learning and action.	(Karman et al., 2023, 2025; Maslani et al., 2023; Mustofa et al., 2025)
15.	Local wisdom	Incorporates indigenous knowledge into eco-theological frameworks.	(Karman et al., 2023, 2025)
16.	Deforestation	Addresses the issue of forest loss and related conservation efforts.	(Karman et al., 2023, 2025)
17.	Ecology	Explores ecological principles within an Islamic theological context.	(Karman et al., 2023)
18.	Environmental conservation	Focuses on preserving natural resources through Islamic teachings.	(Karman et al., 2023; Maslani et al., 2023)
19.	Holistic approach	Promotes a comprehensive strategy combining faith and environmental care.	(Karman et al., 2023, 2025)

Table 3 presents a comprehensive inventory of 24 initial codes systematically derived from the qualitative analysis of the seven full-text articles included in this review. These codes represent discrete units of meaning identified through close reading of the data, capturing recurring concepts, practices, actors, theological constructs, and contextual elements central to eco-theology within Islamic education in Indonesia. From the comprehensive set of initial codes presented in Table 3, a rigorous process of collation, comparison, and refinement was conducted to identify broader patterns of meaning across the dataset. Following the established principles of reflexive thematic analysis (Ahmed et al., 2025; Braun & Clarke, 2021; Naeem et al., 2025; Polat, 2025), the 24 initial codes were clustered into higher-order themes that capture the dominant conceptual frameworks and recurring emphases within the reviewed literature. This phase involved iterative mapping of

relationships among codes, ensuring that each theme is internally coherent, distinctly bounded from others, and sufficiently supported by multiple data extracts. Four dominant themes emerged as central to the research landscape of eco-theology within Islamic education in Indonesia. These themes, along with their respective sub-themes and illustrative codes, are systematically outlined in Table 4 to provide a clear hierarchical representation of the thematic structure.

Table 4. Themes Related to Eco-theology in Islamic Education in Indonesia

Dominant Theme	Definition	Sub-Themes	Article Sources
Integration of Islamic Teachings in Environmental Conservation	The use of Islamic doctrines (e.g., Qur'an, Hadith, Sufism) to frame and motivate environmental actions, linking faith with ecology.	Theme 1: Eco-theology as a framework Theme 2: Humans as caliphs/stewards Theme 3: Conservation as worship/accountability	(Karman et al., 2025; Mustofa et al., 2025; Wargadinata et al., 2020)
Role of Religious Institutions and Communities	Pesantren, Muslim organizations (e.g., NU, Muhammadiyah), and communities as agents of change in eco-religious efforts.	Theme 1: Pesantren as hubs for eco-education Theme 2: Organizational initiatives (e.g., NU, Muhammadiyah) Theme 3: Community involvement and dialogues	(Husamah et al., 2025; Karman et al., 2023, 2025; Maghfiroh et al., 2024; Mustofa et al., 2025)
Internalization and Education of Eco-Values	Processes of teaching, internalizing, and applying eco-religious values through education, recitation, and practical guidance.	Theme 1: Qur'anic/Hadith-based learning Theme 2 :Spirituality and literacy enhancement Theme 3: Blending with local wisdom	(Husamah et al., 2025; Karman et al., 2025; Maslani et al., 2023; Wargadinata et al., 2020)
Practical Conservation Efforts and Outcomes	Concrete actions (e.g., reforestation, waste management) and their impacts on mitigating environmental issues like deforestation.	Theme 1: Reforestation and greening Theme 2: Waste management and sustainability practices Theme 3: Mitigation of crises (e.g., deforestation, degradation)	(Wargadinata et al. 2020; Karman et al. 2025; Mustofa et al. 2025; Maslani et al. 2023; Karman et al. 2023)

Table 4 presents the four dominant themes that emerged from the reflexive thematic analysis of the selected literature on eco-theology within Islamic education in Indonesia. These themes represent the primary conceptual patterns that consistently organize and give meaning to the initial codes, reflecting the core ways in which Indonesian scholars conceptualize, implement, and theorize the intersection of Islamic teachings and environmental responsibility. The four dominant themes are as follows: Integration of Islamic Teaching in Environmental; Role of Religious Institutions and Communities; Internalization and Education of Eco-Values; and Practical Conservation Efforts and Outcomes. Taken together, these four themes illustrate a coherent and

progressive trajectory in the Indonesian literature: from theological grounding to institutional mobilization to educational internalization to concrete environmental action and impact. They collectively demonstrate that eco-theology in Islamic education is not treated as an abstract academic exercise but as a holistic framework that seamlessly connects doctrine, institution, pedagogy, and practice in response to contemporary ecological crises.

3.3 RQ 3: Main Research Findings

Building upon the thematic structure identified in RQ2, the following section synthesizes the principal empirical and conceptual findings reported across the reviewed studies. These findings illuminate the specific contributions of each article to the advancement of eco-theology within Indonesian Islamic education, highlighting theoretical insights, documented initiatives, observed outcomes, and identified challenges. Table 5 presents a systematic compilation of the main findings, organized by source article to ensure traceability and to facilitate a clear understanding of how individual studies collectively enrich the broader research landscape.

Table 5. Main Findings of Eco-theology Research in Islamic Education in Indonesia

Author and Year	Article Title	Research Approach	Research Subject	Main Findings
Wargadinata et al. (2020)	Eco-Religious Approach to Deforestation by Indonesian Istighosah Community	Qualitative (observation, interviews, documentation)	Indonesian istighosah community	The implementation of Sufism teachings fosters nature conservation awareness among pilgrims, viewing forests as "brothers" to preserve; doctrines are inherited via recitation and direct actions; suggests further studies on other religious groups' involvement in sustainable conservation.
Maslani et al. (2023)	Ecopedagogy in Action: An Ethnographic Exploration of Environmental Preservation Strategies in Pesantren	Qualitative ethnographic	Islamic boarding schools (pesantren): Biharul Ulum Agroecology, Daarul Falah (Bogor), and Ath-Thoriq (Garut)	Pesantren cultivate environmental consciousness through ecopedagogy, including planting productive trees, livestock raising (chickens, goats, cows, fish), and activities like seed selection, planting, fertilizing, harvesting; rooted in Al-Qur'an and Hadith, delivered via face-to-face instruction, discussions, and field guidance.
Mustofa et al. (2025)	Towards an Islamic Ecotheology: Indonesian Muslim Organizations in Climate Mitigation and Adaptation Efforts	Qualitative with case studies	Muslim organizations (NU, Muhammadiyah, MUI, Pesantren)	Organizations actively contribute to conservation: NU focuses on greening and waste management; Muhammadiyah on education and renewable energy; Pesantren instills ecological awareness via religious values; integrates Islamic concepts of humans as caliphs protecting nature, avoiding waste, and upholding mandates.

Karman et al. (2023)	The Qur'anic Learning Based on Islamic Eco-Theology at Pesantren	Qualitative ethnographic	Pesantren Biharul Ulum Agroecology pesantren (BUAP) in Bogor	Eco-theology-based learning leads to environmental transformation, protecting from ecological crises; process involves community dialogues on local issues, intensive Qur'anic study under kyai guidance, and pesantren-led conservation actions; mitigates environmental and social crises.
Maghfiroh et al. (2024)	Promoting Green Pesantren: Change, Challenge and Contribution of Nahdlatul Ulama in Indonesia	Qualitative (interviews, documents)	Pesantren Nahdlatul Ulama's (NU)	NU's green pesantren program addresses environmental problems; resolves debates on Islam-ecology relations; focuses on teaching Islamic doctrine, individual piety, and real-world issues; roles of kyai, students, and alumni include education, engagement, advocacy, and modeling for sustainability.
Husamah et al. (2025)	Relationship of Environmental Literacy and Action Competence for Sustainability: Indonesian Islamic Junior-Senior High Students	Quantitative correlation	Muhammadiyah junior and senior high school	Strong positive relationship between EL and ACS; regression model explains over half of ACS variation; enhancing EL improves sustainable behaviors; implications for environmental education in Islamic schools.
Karman et al. (2025)	The Qur'an and the Earth: Qur'anic Reception Among Pesantren Residents toward Environmental Conservation	Qualitative ethnographic	Pondok Pesantren Biharul Ulum Agroecology (PPBUA)	PPBUA integrates Qur'anic principles with local wisdom, motivating conservation as worship; initiatives like reforestation and organic farming foster sustainability; holistic approach combines spiritual, social, and ecological dimensions for lasting solutions.

Table 5 synthesizes the core empirical and conceptual contributions of the eight reviewed studies, revealing a consistent progression from theological reinterpretation to institutional action and measurable environmental outcomes within Indonesian Islamic education contexts. The findings collectively demonstrate that eco-theology is operationalized primarily through pesantren and major Muslim organizations (NU, Muhammadiyah, MUI), where Qur'anic and Hadith-based teachings, particularly concepts of *khilāfah*, avoidance of *isrāf* (waste), and nature as *āyāt* (signs of God), serve as the doctrinal foundation for cultivating ecological piety and responsibility. Studies employing qualitative ethnographic and case-study approaches (Karman et al., 2023, 2025; Maghfiroh et al., 2024; Maslani et al., 2023; Mustofa et al., 2025; Wargadinata et al., 2020) document successful integration of faith-based education with concrete practices such as large-scale reforestation, organic farming, livestock-based agroecology, waste management, and community greening programs, resulting in tangible mitigation of deforestation, water degradation, and climate vulnerability. Quantitative evidence (Husamah et al., 2025) further confirms a strong

positive correlation between environmental literacy and action competence among Islamic school students. Overall, the reviewed body of work affirms that Islamic educational institutions in Indonesia function as effective incubators of eco-theological consciousness, successfully bridging doctrinal commitment with practical conservation and offering scalable models for faith-driven environmental stewardship

DISCUSSION

Discussion of Findings

For RQ1 (trends in research on eco-theology within Islamic education in Indonesia), this review finds that the field remains relatively small in the Scopus-indexed literature, but it has shown clear acceleration since 2023 and reached its highest output in 2025 with three publications. More specifically, the sharp rise in 2025 can be linked to the stronger public resonance and institutional promotion of ecotheology by the Indonesian Ministry of Religious Affairs, which intensified eco-theological discourse within Islamic education and helped expand scholarly attention to the topic (Kementerian Agama RI, 2025). The bibliometric profile—seven documents from six sources, an annual growth rate of 24.57%, an average of 3.86 co-authors per document, and no single-authored papers—indicates that this field is emerging through collaborative rather than individual scholarship. Taken together, these results show that eco-theology in Islamic education is moving from scattered contributions toward a more recognizable research agenda in Indonesia. This finding is consistent with recent studies reporting the growing integration of eco-theology into Islamic educational discourse and curriculum in Indonesia (Rohman et al., 2024; Taufikin, 2025). It is also compatible with the broader theoretical view that Islamic environmental ethics is grounded in tawhid, khalifah, and mizan, which frame ecological responsibility as part of religious duty (Kurbiyanto et al., 2024; Rahman & Jalil, 2021). However, our synthesis shows more specifically that publication growth has not yet been matched by breadth: the corpus remains limited, nationally concentrated, and largely non-comparative. Therefore, the distinctive contribution of this review is to show not only that the field is growing, but also that its institutional consolidation and internationalization are still in progress. For RQ2 (emerging codes and themes), this review identifies four dominant themes: the integration of Islamic teachings in environmental conservation, the role of religious institutions and communities, the internalization and education of eco-values, and practical conservation efforts and outcomes. Our own finding is that these themes are not isolated categories; rather, they form an interconnected structure in which theological doctrine, institutional agency, educational process, and environmental practice reinforce one another. In other words, the Indonesian literature conceptualizes eco-theology as a lived educational framework rather than as a merely abstract theological discourse.

This result aligns with earlier works that place ecological responsibility within Islamic educational and ethical frameworks (Rohman et al., 2024; Syafaruddin, 2025). It also resonates with studies emphasizing the role of Muslim communities and religious narratives in environmental activism (Hajar, 2024; Suprianto et al., 2023). However, our synthesis extends those studies by showing that the dominant Indonesian literature does not stop at normative claims about stewardship; it consistently links concepts such as khalifah, mizan, and ayat with specific institutional actors, especially pesantren, Nahdlatul Ulama, and Muhammadiyah. Thus, the main contribution of this review at the thematic level is to demonstrate a coherent trajectory from theological grounding to institutional mobilization, pedagogical internalization, and practical ecological action. For RQ3 (main findings), this review shows that eco-theology in Indonesian Islamic education is operationalized through concrete pedagogical and organizational practices, not merely through ethical discourse. Across the reviewed studies, pesantren and major Muslim

organizations function as the main mediating actors that translate Qur'anic and Hadith-based values into reforestation, organic farming, waste management, environmental literacy, and community-based conservation. A particularly important finding of this study is that eco-theological principles become effective when they are embedded simultaneously in curriculum, religious authority, communal routines, and local environmental programs. These findings strengthen earlier case-based studies showing that faith-based pedagogy can foster ecological awareness and sustainable character formation in Indonesian educational settings (Amrullah et al., 2025; Taufikin, 2025). They are also in line with studies of eco-pesantren and environmentally oriented Islamic learning communities, which show that religious values can be translated into everyday conservation practices (Maslani et al., 2023; Wijaya Mulya & Salvi, 2025), and with quantitative evidence that stronger environmental literacy is associated with higher action competence for sustainability among students (Husamah et al., 2025). At the same time, our review adds a broader synthesis by demonstrating that the most consistent pattern across the literature is the movement from doctrinal reinterpretation to measurable environmental action. Therefore, the specific contribution of this study is to show that Islamic educational institutions in Indonesia operate as practical incubators of eco-theological consciousness, bridging belief, pedagogy, and ecological intervention.

Limitations and Future Work

Despite comprehensively exploring the trends, themes, and main findings of research related to eco-theology within Islamic education in Indonesia, this study has at least three limitations. First, it is restricted to articles sourced solely from the Scopus database. Second, it includes only works produced by researchers affiliated with Indonesian institutions. Third, the review focuses exclusively on eco-theology within the context of Islamic education. These limitations open opportunities for more comprehensive future investigations. Regarding future directions, further Systematic Literature Reviews (SLRs) and meta-analyses should be conducted to compare the effectiveness of various approaches and integration strategies for eco-theology in Islamic education. Subsequent research should also expand to broader data sources to gain deeper insights. Moreover, we intend to design a didactic framework for integrating eco-theology into Islamic education that is tailored to learners' needs. This framework will then be implemented to gather data on the eco-theology acquisition process among students in Islamic education settings. Consequently, researchers will be able to conduct additional studies examining how eco-theology integration influences Islamic education learning outcomes and individual achievement.

4. CONCLUSION

Research on eco-theology within Indonesian Islamic education has grown significantly since 2023, with a sharp surge in 2025 yielding an annual growth rate of 24.57%. The seven analysed publications involve 25 authors from various universities and religious organisations across Indonesia. Although still lagging behind several countries in volume and timeline, Indonesian scholars' works have gained international recognition through Scopus-indexed journals. The diverse, interconnected themes, integration of Islamic teachings in environmental conservation, the pivotal role of religious institutions and communities, internalisation and education of eco-values, and practical conservation efforts with measurable outcomes, reflect the dynamic and rapidly maturing nature of eco-theology as an emerging interdisciplinary field in Indonesia. The reviewed studies demonstrate a coherent trajectory: from reinterpreting core Islamic concepts (*khalīfah*, *mīzān*, prohibition of *isrāf*, and nature as *āyāt*) as ethical foundations, via mobilisation by pesantren, Nahdlatul Ulama, and Muhammadiyah, to effective pedagogical internalisation and concrete actions including large-scale reforestation, waste management, spring restoration, and

sustainable food systems. These results affirm that Indonesian Islamic educational institutions act as powerful incubators of eco-theological consciousness, effectively linking doctrine to measurable conservation outcomes and providing scalable faith-based models for ecological crises. To advance the field, we recommend (1) enhanced collaboration among researchers, Islamic institutions, and government (particularly the Ministry of Religious Affairs) through domestic and international partnerships; (2) multidisciplinary design research combining Islamic theology, environmental science, education, and local wisdom; and (3) more frequent national/regional seminars, workshops, and training to promote knowledge exchange and curriculum development.

5. REFERENCES

- Afandi, A., Mardiyah, S., Ashfaq, A., & Saud, M. (2024). Islamic Eco-Theology in Practice: Revitalizing Environmental Stewardship and Tawhidic Principles in Agricultural Community. *MUHARRIK: Jurnal Dakwah Dan Sosial*, 7(2), 257–282.
- Ahmed, S. K., Mohammed, R. A., Nashwan, A. J., Ibrahim, R. H., Abdalla, A. Q., Ameen, B. M. M., & Khdir, R. M. (2025). Using thematic analysis in qualitative research. *Journal of Medicine, Surgery, and Public Health*, 6, 100198.
- Amrullah, A. M. K., Murfi, A., Fauzi, A., & Basri, B. (2025). Integrating Islamic Education with Environmental Programs: Strategies for Sustainable Character Development at SMAN 2 and 7 Malang Indonesia. *The Qualitative Report*. <https://doi.org/10.46743/2160-3715/2025.6020>
- Aria, M., & Cuccurullo, C. (2017). Bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959–975. <https://doi.org/10.1016/j.joi.2017.08.007>
- Braun, V., & Clarke, V. (2021). *Thematic Analysis: A Practical Guide*. SAGE.
- EPI. (2024). *2024 Environmental Performance Index—Indonesia*. Environmental Performance Index. <https://epi.yale.edu/country/2024/IDN>
- Hajar, A. (2024). Transforming Islamic Education for Environmental and Social Sustainability. *Sinergi International Journal of Islamic Studies*, 2(2).
- Heymans, A., Breadsell, J., Morrison, G. M., Byrne, J. J., & Eon, C. (2019). Ecological urban planning and design: A systematic literature review. *Sustainability*, 11(13), 3723.
- Husamah, H., Rahardjanto, A., Lestari, N., Permana, T. I., & Hudha, A. M. (2025). Relationship of Environmental Literacy and Action Competence for Sustainability: Indonesian Islamic Junior-Senior High Students. *International Journal of Environmental Impacts*, 8(4), 727–735. <https://doi.org/10.18280/ije.080410>
- Imran, M. H. (2023). *Seyyed Hossein Nasr's Ecological Ethics: Bridging Science, Religion, and the Environment*. Ethics International Press.
- IPCC. (2023). Summary for Policymakers. In *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report*. doi: <https://doi.org/10.59327/IPCC/AR6-9789291691647.001>
- Irawan, E., Rosjanuardi, R., & Prabawanto, S. (2024). Advancing Computational Thinking in Mathematics Education: A Systematic Review of Indonesian Research Landscape. *JTAM (Jurnal Teori Dan Aplikasi Matematika)*, 8(1), 176–194. <https://doi.org/10.31764/jtam.v8i1.17516>
- Karman, K., Anwar, R., & Hakim, L. (2023). The Qur'anic Learning Based on Islamic Eco-Theology at Pesantren. *Jurnal Pendidikan Islam*, 9(2), 169–186. <https://doi.org/10.15575/jpi.v9i2.24933>
- Karman, K., Yudhiantara, R. A., & Muhyidin, A. (2025). The Qur'an and the Earth: Qur'anic Reception Among Pesantren Residents toward Environmental Conservation. *Ulumna: Journal of Islamic Studies*, 29(1), 310–337.
- Kementerian Agama RI. (2025). *Kurikulum dan Silabus Pelatihan Teknis Ekoteologi*. Badan Moderasi Beragama dan Pengembangan Sumber Daya Manusia.
- Kurbiyanto, A., Yusmaliana, D., Fitriana, F., Altiarika, E., & Sabri, F. (2024). Environmental Ethics in Islamic Teachings: Discussing Ethical Principles in Islamic Teachings that Emphasize Environmental Protection and Preservation. In A. Sharifi, J. L. Candelaria, D.

- Simangan, & S. Kaneko (Eds.), *Navigating Peace and Sustainability in an Increasingly Complex World*. Springer Nature. https://doi.org/10.1007/978-981-97-8772-2_2
- Maghfiroh, M., Iryani, E., Haerudin, H., Yani, M. T., Zaini, N., & Mahfud, C. (2024). Promoting Green Pesantren: Change, Challenge and Contribution of Nahdlatul Ulama in Indonesia. *Nazhruna: Jurnal Pendidikan Islam*, 7(2), 409–435. <https://doi.org/10.31538/nzh.v7i2.4668>
- Marpaung, J. (2024). Analysis of Eco-Theology Understanding of Islamic Boarding Schools in North Sumatra. *International Journal Of Humanities Education and Social Sciences*, 4(2). <https://doi.org/10.55227/ijhess.v4i2.1360>
- Maslani, M., Hidayat, W., Qadir, A., & Muhyidin, A. (2023). Ecopedagogy in Action: An Ethnographic Exploration of Environmental Preservation Strategies in Pesantren. *Jurnal Pendidikan Islam*, 9(2), 211–222. <https://doi.org/10.15575/jpi.v9i2.29347>
- Mustofa, M. L., Zenrif, M. F., & Barizi, A. (2025). Towards an Islamic Ecotheology: Indonesian Muslim Organizations in Climate Mitigation and Adaptation Efforts. *Problemy Ekorozwoju*, 20(2), 21–31.
- Naeem, M., Smith, T., & Thomas, L. (2025). Thematic Analysis and Artificial Intelligence: A Step-by-Step Process for Using ChatGPT in Thematic Analysis. *International Journal of Qualitative Methods*, 24, 16094069251333886. <https://doi.org/10.1177/16094069251333886>
- Nuryana, Z., Haryadi, H., Rahman, A., Ichsan, Y., Saifuddin, M. F., Aziz, M. T., & Herdian, H. (2024). Sustainable Food Management Systems in Pesantren. *BIO Web of Conferences*, 148, 04014. <https://doi.org/10.1051/bioconf/202414804014>
- Öhlmann, P., & Swart, I. (2022). Religion and Environment: Exploring the Ecological Turn in Religious Traditions, the Religion and Development Debate and Beyond. *Religion and Theology*, 29(3–4), 292–321.
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). *The PRISMA 2020 statement: An updated guideline for reporting systematic reviews*. <https://doi.org/10.1136/bmj.n71>
- Polat, A. (2025). Thematic Analysis in Qualitative Research: Common Pitfalls and Practical Insights for Academic Writing. *International Journal of Qualitative Methods*, 24, 16094069251372835. <https://doi.org/10.1177/16094069251372835>
- Pörtner, H.-O., Scholes, R. J., Arneth, A., Barnes, D. K. A., Burrows, M. T., Diamond, S. E., Duarte, C. M., Kiessling, W., Leadley, P., Managi, S., McElwee, P., Midgley, G., Ngo, H. T., Obura, D., Pascual, U., Sankaran, M., Shin, Y. J., & Val, A. L. (2023). Overcoming the Coupled Climate and Biodiversity Crises and Their Societal Impacts. *Science*, 380(6642), 4881. <https://doi.org/10.1126/science.abl4881>
- Purwanto, E., Silalahi, F. H., & Ate, J. P. (2025). A Comprehensive Bibliometric Analysis of Eco-Theology: Mapping Key Trends, Influential Works, and Thematic Clusters in Environmental and Religious Discourse. *African Journal of Religion Philosophy & Culture (AJRPC)*, 6(3). <https://journals.co.za/doi/pdf/10.31920/2634-7644/2025/v6n3a1>
- Rahman, N. A., & Jalil, M. H. (2021). Awareness of the Role of “Religious People” in Environmental Conservation from the Perspective of Islamic Studies Students. *Creative Education*, 12(8), 1755–1772. <https://doi.org/10.4236/ce.2021.128133>
- Rethlefsen, M. L., Kirtley, S., Waffenschmidt, S., Ayala, A. P., Moher, D., Page, M. J., Koffel, J. B., Blunt, H., Brigham, T., Chang, S., Clark, J., Conway, A., Couban, R., de Kock, S., Farrah, K., Fehrmann, P., Foster, M., Fowler, S. A., Glanville, J., ... PRISMA-S Group. (2021). PRISMA-S: An extension to the PRISMA Statement for Reporting Literature Searches in Systematic Reviews. *Systematic Reviews*, 10(1), 39. <https://doi.org/10.1186/s13643-020-01542-z>
- Rohman, A., Kurniawan, E., Syifauddin, M., Muhtamiroh, S., & Muthohar, A. (2024). Religious Education For The Environment: Integrating Eco-Theology In The Curriculum of Islamic Religious And Character Education To Enhance Environmental Education In Indonesia.

-
- Nadwa: Jurnal Pendidikan Islam*, 18(2), 201–226.
<https://doi.org/10.21580/nw.2024.18.2.21094>
- Sabogal, A. R. (2021). From Liberation Theology to Feminist Ecotheology. *Chasqui*, 50(2), 159–174.
- Sabtina, D., & Mahariah, M. (2025). Internalizing Islamic Ecotheology through School Culture to Foster Eco-Character: Internalisasi Ekoteologi Islam melalui Budaya Sekolah untuk Menumbuhkan Karakter Peduli Lingkungan. *Halaqa: Islamic Education Journal*, 9(2), 21–41. <https://doi.org/10.21070/halaqa.v9i2.1754>
- Samala, A. D., Soha Rawas, Santiago Criollo-C, Olha Bondarenko, Abelriadne Gentarefori Samala, & Dony Novaliendry. (2024). Harmony in Education: An In-Depth Exploration of Indonesian Academic Landscape, Challenges, and Prospects Towards the Golden Generation 2045 Vision. *TEM Journal*, 13(3), 2436–2456. <https://www.cceol.com/search/article-detail?id=1262053>
- Saudale, A. C. (2025). *Sampah Program MBG Capai 3.500 Ton per Hari, Menteri Hanif Ingatkan Bahaya Pencemaran*. VOI.id. <https://voi.id/berita/524820/sampah-program-mbg-capai-3-500-ton-per-hari-menteri-hanif-ingatkan-bahaya-pencemaran>
- Suprianto, B., Triandini, Y., Abdullah, I., & Atuti, T. M. P. (2023). Islamic Ecological Principles in Muslim Environmentalism Narratives for Religious Moderation in Indonesia. *International Journal of Islamic Studies Higher Education*, 2(3).
- Syafaruddin, B. (2025). Ecotheology in the Perspective of Islamic Education: A Conceptual Review. *ETDC: Indonesian Journal of Research and Educational Review*, 4(3), 720–731. <https://doi.org/10.51574/ijrer.v4i3.3253>
- Taufikin. (2025). Integrating Eco-Theology In Islamic Education: A Case Study On Fostering Ecological Awareness Through Religious Pedagogy. *Journal At-Tarbawi*, 18(1). <https://doi.org/10.20885/tarbawi.vol18.iss1.art1>
- Wargadinata, W., Maimunah, I., & Indah, R. N. (2020). Eco-Religious Approach to Deforestation by Indonesian Istighosah Community. *Journal for the Study of Religions and Ideologies*, 19(56). Gale Academic OneFile Select. <https://link.gale.com/apps/doc/A631810197/EAIM?u=anon~b6f80989&sid=sitemap&xid=2dbbcd6b>
- Wijaya Mulya, T., & Salvi, F. (2025). ‘Grass, rice, and aubergine’: A case study of an Islamic ecopasantren in Indonesia. *Pedagogy, Culture & Society*, 33(4), 1437–1455. <https://doi.org/10.1080/14681366.2024.2385049>
-