

One Santri, One Tree, One Ummah: Vernacularizing the Sustainable Development Goals through Fiqh al-Bi'ah and Pesantren Ecotheology in Indonesia

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ABSTRACT

This study examines Indonesia's 2025 national Gerakan Ekoteologi Satu Santri Satu Pohon (One Santri, One Tree Ecotheology Movement) - launched by the Ministry of Religious Affairs at Pondok Pesantren Tebuireng on 22 September 2025 and culminating in a presidentially attended national event at Taman Mini Indonesia Indah on 25 October 2025 - as a case of state-religious vernacularization of global sustainability norms. Using qualitative document and netnographically informed media-content analysis of a corpus of institutional, journalistic, and academic sources published between 2011 and 2026, triangulated with the internationally recognized exemplar of Pesantren Ekologi Ath-Thaariq in Garut, West Java, the study traces how doctrinal concepts of fiqh al-bi'ah (Islamic environmental jurisprudence) migrate from classical exegesis into state bureaucracy and everyday pesantren praxis. Findings show a policy assemblage evolving from Majelis Ulama Indonesia fatwas (2011, 2014) through provincial eco-pesantren pilots to a national ecotheology programme encompassing seven flagship pesantren and framed explicitly as iman (faith) in action.

INTRODUCTION

The 2030 Agenda for Sustainable Development was adopted as a universal framework, yet its implementation is inescapably local: the seventeen Sustainable Development Goals (SDGs) acquire meaning only as they are translated into the institutions, languages, and cosmologies through which particular communities already organize collective life (United Nations General Assembly, 2015). UNESCO's own operationalization of the Education for Sustainable Development agenda concedes that learning objectives must be adapted to "cultural contexts" if they are to shift values rather than merely transmit information (UNESCO, 2017). Faith-based education systems are an obvious, if under-examined, site for this translation. They combine moral authority, mass enrollment, and everyday pedagogical routines in ways that secular environmental campaigns rarely achieve. Nowhere is this more consequential than in Indonesia, home to the world's largest Muslim population and to the *pesantren* (Islamic boarding school), a centuries-old institution that today enrolls approximately 1.37 million *santri* (students) across 42,391 registered institutions nationwide, concentrated in West Java, East Java, Banten, and Central Java but present in every province (GoodStats, 2025a, 2025b).

Pesantren have long been analyzed as engines of religious transmission and social order (Dhofier, 1982; Lukens-Bull, 2005), and more recently as sites of contested modernization (Gazali & Budiana, 2023). Over the past decade, however, a distinct strand of *pesantren* life has drawn scholarly and policy attention: the eco-*pesantren*, an institution that reorganizes its curriculum, economy, and ritual life around environmental stewardship (Subaidi et al., 2023). This strand has deep roots. The Majelis Ulama Indonesia (MUI, the national council of Islamic scholars) issued fatwas on environmentally sound mining in 2011 and on waste management in 2014, part of a broader corpus of at least seven environmental fatwas documented since the 1980s (Mangunjaya & Praharawati, 2019). Grassroots exemplars such as *Pesantren Ekologi Ath-Thaariq* in Garut, West Java - founded by Nissa Wargadipura and KH Zezen Zainal Abidin and later recognized by United Nations bodies for its agroecological curriculum - demonstrated as early as the 2000s that Islamic pedagogy and ecological restoration could be fused into a single institutional practice (Fahrurrazi, 2018). Provincial environmental agencies in East Java (Banyuwangi, Lumajang) subsequently formalized "eco-*pesantren*" award schemes (Dinas Lingkungan Hidup Kabupaten Banyuwangi, n.d.; Pemerintah Kabupaten Lumajang, n.d.), and by 2023 the phenomenon had generated enough published output to support the first Scopus-indexed bibliometric mapping of *pesantren* scholarship (Gazali & Budiana, 2023) and, more recently, a dedicated scoping review of "green fatwa" studies (Izudin, 2026).

This article addresses that gap by asking three questions. First, how does Indonesia's national *pesantren* ecotheology movement discursively frame environmental action as religious duty, and how does this framing relate to the established corpus of *fiqh al-bi'ah* (Islamic environmental jurisprudence)? Second, through what institutional mechanisms does a decade of grassroots and provincial eco-*pesantren* practice - exemplified by *Pesantren Ekologi Ath-*

Thaariq - become vernacularized into national state-religious policy? Third, what conceptual vocabulary can capture the mechanism by which pesantren convert sacred cosmology into measurable environmental infrastructure serving the SDGs? Drawing on qualitative document and media-content analysis of a verified corpus of institutional, journalistic, and scholarly sources, triangulated with official Kemenag EMIS (Education Management Information System) statistics and the Ath-Thaariq case, the article develops a Triadic Vernacularization Model and the construct of Barokah Infrastructure to answer these questions. The remainder of the article proceeds as follows: Section 2 reviews the literature on Islamic ecotheology and eco-pesantren scholarship and positions the study's contribution; Section 3 details the document- and content-analytic method; Section 4 presents findings organized around the policy assemblage, the flagship pesantren cohort, the Ath-Thaariq exemplar, and the discursive framing of environmental action as faith; Section 5 discusses theoretical and policy implications; and Section 6 concludes.

THEORETICAL REVIEW

Fiqh al-Bi'ah and the Genealogy of Islamic Ecotheology

Islamic environmental thought did not emerge in response to the SDGs; it draws on a much older exegetical tradition that scholars have progressively systematized into what is now termed *fiqh al-bi'ah*, or Islamic environmental jurisprudence. The foundational English-language synthesis remains Foltz et al.'s (2003) edited volume *Islam and Ecology: A Bestowed Trust*, which assembled contributions establishing that Qur'anic concepts of *khalifah* (human vicegerency over creation), *amanah* (trust), and *mizan* (cosmic balance) constitute an internally coherent environmental ethic rather than an apologetic retrofit. Khalid (2019) extends this synthesis into the climate era, arguing that the modern ecological crisis is, at root, a crisis of *tawhid* (the unity of creation under God) fractured by extractive modernity. Within Indonesian scholarship, Ardiansyah et al. (2026) recently demonstrated that even classical exegetes writing centuries before any environmental crisis - in their case, Fakhr al-Din al-Razi - articulated proto-ecological concepts through the interpretive vocabulary of *khalifah*, *amanah*, *mizan*, *fasad* (corruption or degradation), and *israf* (wasteful excess), concluding that the link between premodern exegesis and contemporary Indonesian ecotheological policy is best understood as an act of interpretive construction rather than a straightforward historical lineage. This is an important methodological caution that the present study takes seriously: doctrinal continuity between classical *fiqh* and today's state ecotheology programme should be treated as an accomplishment of contemporary actors, not an inevitability.

From Isolated Green Pesantren to a National Movement: A Field in Transition

A second and more empirically grounded literature examines eco-pesantren as institutions rather than doctrines. Subaidi et al. (2023), publishing in the *Fudan Journal of the Humanities and Social Sciences*, analyzed pesantren operating in forest-conservation landscapes and found that the *kyai*'s (religious teacher-leader's) personal authority - rather than formal curriculum design - was

the pivotal variable enabling pesantren to broker conservation partnerships with surrounding communities, an argument grounded in what they call the "dialectical" reading of *qauliyah* (scriptural) and *kauniyah* (cosmic/natural) verses. Muzakki et al. (2025) corroborate the curricular dimension of this picture through multisite qualitative research showing that when tree-planting and waste-management activities are explicitly grounded in *fiqh al-bi'ah* instruction, they measurably reinforce students' pro-environmental behavior, while Sulaeman et al. (2026) show, through a management-studies lens, that eco-pesantren outcomes depend on the alignment of institutional policy, spiritual guidance, and structured programming under a framework they term *Hifzul Bi'ah* (safeguarding of the environment) - while also documenting persistent obstacles such as insufficient green space and undertrained staff. Mujahidin et al. (2025) similarly find that pesantren cultivate ecological consciousness most effectively when the classical concept of *khalifah fi al-ardl* (stewardship on earth) is operationalized through experiential, contextual learning rather than didactic instruction alone.

Positioning the Present Study

Table 1 situates the present study against this body of work. Three gaps recur across the literature reviewed above. First, single-institution case studies (Subaidi et al., 2023; Sulaeman et al., 2026; Muzakki et al., 2025) generate rich local detail but cannot show how such cases relate to national policy architecture. Second, bibliometric and scoping studies (Gazali & Budiana, 2023; Izudin, 2026) map the scholarly field comprehensively but, by design, describe publication patterns rather than the substantive mechanisms of institutional change. Third, doctrinal-textual studies (Ardiansyah et al., 2026; Halilah et al., 2026) clarify the theological resources available for ecotheology but do not test how - or whether - those resources are actually mobilized in a contemporary state programme. No study has examined Indonesia's 2025 national ecotheology movement, which is unsurprising given its recency, but this recency is precisely what makes it analytically valuable: it offers a rare opportunity to observe SDG vernacularization at the moment of state uptake, before retrospective narratives have settled. The present study addresses all three gaps simultaneously by triangulating a national-level policy document corpus with a decade-old grassroots exemplar (Ath-Thaariq) and by building, rather than merely applying, a cross-level theoretical model.

Table 1. Positioning of the Present Study within Existing Eco-Pesantren Scholarship

Study	Design	Level of Analysis	Gap Addressed by the Present Study
Gazali & Budiana (2023)	Bibliometric analysis (Scopus, 1994–2022; n = 154)	Field-level publication trends	Maps what has been published; does not explain mechanisms linking policy to practice
Izudin (2026)	Scoping review (37 studies, 2007–2026)	Field-level thematic clustering of “green fatwa” scholarship	Identifies fragmentation across the field; does not

			examine a specific national policy case
Subaidi et al. (2023)	Single-institution qualitative case study	Institutional (kyai leadership, forest conservation)	Provides rich local detail; not connected to national policy architecture
Sulaeman et al. (2026); Muzakki et al. (2025)	Single/ multi-site qualitative case study	Institutional and curricular	Institution-specific findings with limited generalization to a national programme
Ardiansyah et al. (2026); Halilah et al. (2026)	Doctrinal-textual reconstruction	Theological and exegetical	Clarifies theological resources; does not test contemporary institutional mobilization
Present study	Qualitative document and netnographically informed content analysis, triangulated with a case exemplar	Doctrinal, institutional, and pedagogical levels analyzed jointly (Triadic Vernacularization Model)	Integrates all three levels; theorizes the 2025 national movement as SDG vernacularization; introduces the Barokah Infrastructure construct

Note. Table compiled by the authors from the sources cited in Section 2.

Conceptual Framework: The Triadic Vernacularization Model

Figure 1. The Triadic Vernacularization Model of SDG Localization in Pesantren Ecotheology

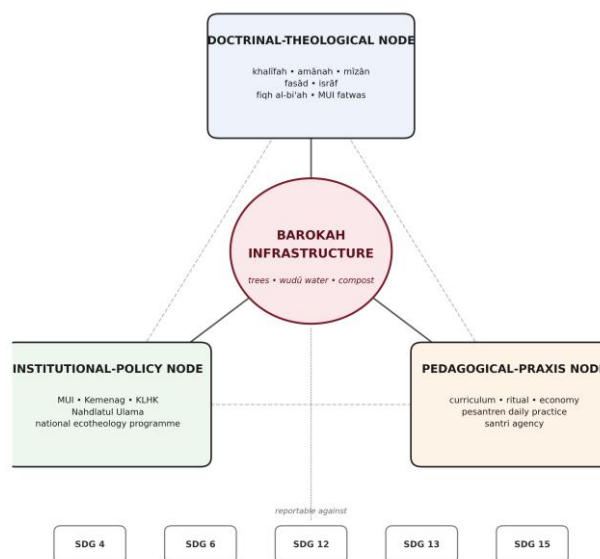


Figure 1. The Triadic Vernacularization Model of SDG localization in pesantren ecotheology.

The model depicts three interacting nodes - doctrinal-theological, institutional-policy, and pedagogical-praxis - converging on Barokah Infrastructure, the material practices through which sacred and bureaucratic value are jointly realized. Source: developed by the authors from the document analysis reported in Section 4.

METHODOLOGY

Research Design

This study employs qualitative document analysis (Bowen, 2009) combined with directed content analysis (Krippendorff, 2018) of publicly available institutional, journalistic, and scholarly sources, informed by a netnographic sensibility (Kozinets, 2015) toward the digitally mediated character of the phenomenon under study - a movement that was announced, narrated, and contested largely through institutional websites, press releases, and online news media rather than through offline channels alone. No primary interview or survey data were collected. This choice was deliberate rather than a compromise: the *Gerakan Ekoteologi Satu Santri Satu Pohon* was launched in September 2025 and reached its national culmination in October 2025, weeks before this analysis was conducted, so that any interview-based account would necessarily rely on informants' own reconstructions of an event cycle already extensively self-documented in public institutional and media discourse. Document and content analysis of that self-documentation - read critically rather than at face value - is therefore the methodologically appropriate strategy for capturing how the movement was framed, sequenced, and institutionally anchored at the moment of its emergence. This design follows an established tradition in Islamic studies and religious studies more broadly, in which fatwas, policy documents, sermons, and institutional communications are treated as primary data amenable to systematic qualitative analysis (e.g., Mangunjaya & Praharawati, 2019, on fatwa corpora; Ardiansyah et al., 2026, on exegetical texts).

Data Corpus

The document corpus (Table 2) comprises thirteen primary sources published between 2011 and 2025: seven institutional press releases and policy communications issued by the Ministry of Religious Affairs, the Ministry of Environment and Forestry's regional environmental control center for Sulawesi-Maluku, Nahdlatul Ulama's official news portal, and two provincial environmental agencies; two government open-data compilations of Kemenag EMIS Pontren statistics; two independent news reports on Pesantren Ekologi Ath-Thaariq; one peer-reviewed master's thesis providing ethnographic depth on the Ath-Thaariq case; and one secondary documentation of the 2011 and 2014 Majelis Ulama Indonesia fatwas. This primary corpus was read against, and interpreted through, the twenty-five peer-reviewed, foundational, and policy-framework sources reviewed in Section 2, which supplied the doctrinal and conceptual vocabulary (*khalifah*, *amanah*, *fiqh al-bi'ah*, and related terms) used to code the primary corpus. All sources are publicly accessible institutional or media documents; none required privileged or paywalled access, and all URLs and access details are reported in the reference list to enable replication and audit.

Table 2. Corpus of Public Documents Analyzed

No.	Document / Source	Type	Publisher / Outlet	Year	Analytical Focus
1	Semarak Hari Santri 2025 (Aksi Satu Santri Satu Pohon)	Institutional news	Kemenag RI	2025	National movement launch and framing
2	Santri Jawab Tantangan Zaman	News report	Waspada.id	2025	Movement scale; official statements
3	Kampus dan Pesantren, Ujung Tombak Gerakan Ekoteologi	Institutional news	NU Online	2025	Flagship cohort; official quotations
4	Sinergi Pengelolaan Lingkungan Hidup ... Eco Pesantren	Institutional report	PUSDAL LH SUMA (KLHK)	2025	Six environmental pillars
5	10 Provinsi dengan Pondok Pesantren Terbanyak 2025	Open statistical data	GoodStats (EMIS Kemenag)	2025	National pesantren distribution
6	10 Provinsi dengan Santri Terbanyak 2025	Open statistical data	GoodStats (EMIS Kemenag)	2025	National santri distribution
7	Ath-Thaariq, Pesantren Ekologi dari Garut yang Dilirik PBB	News report	Detik.com	2022	Ath-Thaariq case; international recognition
8	Perjuangan Nissa Wargadipura Mendirikan Pesantren Ekologi	Institutional profile	Kemenko PMK	n.d.	Founder narrative; institutional history
9	Tentang Kami	Institutional website	Pesantren Ekologi Ath-Thaariq	n.d.	Self-representation of ecological practice
10	Planting for God: The Ecological Islam of Pesantren At-Thaariq Garut	Master's thesis	Universitas Gadjah Mada (Fahrurrazi)	2018	Ethnographic-doctrinal analysis
11	Eco Pesantren, Edukasi Lingkungan Hidup	Institutional / local government	Pemkab Lumajang	n.d.	Provincial eco-pesantren pilot
12	Eco Pesantren (programme page)	Institutional / local government	DLH Kabupaten Banyuwangi	n.d.	Provincial eco-pesantren award scheme
13	Fatwa MUI No. 22/2011 and No. 47/2014 (as documented in Mangunjaya & Praharawati, 2019)	Religious-legal document (secondary)	Majelis Ulama Indonesia	2011 & 2014	Doctrinal-institutional baseline

Note. Full citation details and access information for all thirteen documents are provided in the reference list and in the accompanying Supplementary Data file.

Analytical Procedure

Analysis proceeded in four stages. First, following Bowen's (2009) protocol, each document was skimmed for provenance (authorship, institutional position, intended audience, date) before close reading, since institutional communications - unlike interview transcripts - are produced strategically for public consumption and must be read with attention to what they are designed to accomplish rather than treated as neutral transcripts of fact. Second, documents were coded using a directed content-analytic scheme (Krippendorff, 2018) with categories derived deductively from the Section 2 literature (doctrinal framing: *iman, ibadah, khalifah, barokah*; institutional actors and their stated roles; material practices reported; and explicit or implicit SDG references) and inductively expanded where the data suggested categories not anticipated by the literature - most importantly, the recurring pairing of sacred and infrastructural language around the same material objects, which became the empirical basis for the Barokah Infrastructure construct. Third, the coded corpus was triangulated across source types: institutional press releases were cross-checked against independent journalistic coverage and, where available, against the target institutions' own public-facing materials (e.g., Pesantren Ekologi Ath-Thaariq's institutional website), consistent with Kozinets's (2015) recommendation that netnographic analysis of institutional digital communication be corroborated across multiple platforms rather than read from a single source. Fourth, quantitative contextual data (EMIS pesantren and santri counts) were extracted verbatim from the cited government-sourced compilations without recalculation, and are reported with their original attribution and access date.

Trustworthiness

Following Lincoln and Guba's (1985) naturalistic-inquiry criteria, credibility was pursued through source triangulation (Section 3.3) and through investigator debriefing among the three co-authors, who independently coded a subset of the corpus and reconciled coding disagreements by returning to source text. Dependability and confirmability were supported by maintaining a documented audit trail (the corpus listing in Table 2, with full URLs and access dates) that allows any claim in Section 4 to be traced back to its source document. Transferability is necessarily limited: this is a qualitative, document-based account of a single national case at a specific moment, and the study makes no claim to statistical generalizability. We report this limitation, and others, explicitly in Section 5.4.

Ethical Considerations

All data are drawn from documents already in the public domain and produced by public institutions, government agencies, and news organizations for public consumption; no human subjects were recruited, interviewed, or observed, and no personally identifiable private information is reported. Named public officials and institutional leaders are quoted or paraphrased only in relation to statements they made in their official public capacity.

RESULTS

Scale of the Field: What "National" Means in the Pesantren Sector

Any claim that a policy intervention is "national" in the pesantren sector must be read against the sector's sheer scale. As of 4 October 2025, Kemenag's EMIS Pontren system recorded 42,391 registered pesantren nationwide, enrolling approximately 1.37 million santri (GoodStats, 2025a, 2025b). Table 3 disaggregates this total by the ten highest-ranked provinces on each metric. Pesantren density and santri enrollment do not track each other perfectly: West Java hosts the largest number of institutions (12,977) but East Java enrolls the largest number of santri (297,506) from fewer institutions (7,347), implying a substantially larger average enrollment per pesantren in East Java - a pattern consistent with the historical concentration of Indonesia's largest, most institutionally developed pesantren (including Zainul Hasan Genggong, discussed in Section 4.3) in that province. This distribution matters for interpreting the ecotheology movement's stated reach: mobilizing "millions of santri across 34 provinces" (Waspada.id, 2025) is numerically plausible only because the aggregate national santri population is itself in the low millions, meaning the movement's organizers were, in effect, claiming near-universal participation rather than a targeted pilot.

Table 3. Pesantren and Santri Distribution across Indonesia's Ten Leading Provinces (EMIS Pontren, accessed 4 October 2025)

Province	Number of Pesantren	Rank (Pesantren)	Number of Santri	Rank (Santri)
Jawa Barat	12,977	1	248,689	2
Jawa Timur	7,347	2	297,506	1
Banten	6,776	3	38,447	8
Jawa Tengah	5,347	4	237,312	3
Aceh	1,923	5	119,384	4
Lampung	1,357	6	34,678	10
Nusa Tenggara Barat	958	7	— (outside national top 10)	—
Sumatera Selatan	669	8	— (outside national top 10)	—
Riau	543	9	36,794	9
Jambi	480	10	44,352	6
National total	42,391	—	≈ 1,370,000	—

Note. Santri counts for Sumatera Utara (46,506; national rank 5) and Kalimantan Selatan (43,372; national rank 7) also place among the ten highest-enrolling provinces but fall outside the ten provinces with the most pesantren, and are therefore not shown as separate rows. Source: GoodStats (2025a, 2025b), compiled from Kementerian Agama EMIS Pontren records.

The Policy Assemblage: From Fatwa to National Movement

The 2025 ecotheology movement did not emerge from a policy vacuum, though it was launched and celebrated alongside the wider Hari Santri Nasional 2025 commemoration (Kemenag RI, 2025). Table 4 reconstructs the fourteen-year

assemblage documented in the corpus, from the Majelis Ulama Indonesia's 2011 fatwa on environmentally sound mining and its 2014 fatwa on waste management (Mangunjaya & Praharawati, 2019) through provincial eco-pesantren award schemes in East Java, the 2018-2019 academic and international recognition of the Ath-Thaariq exemplar, the 2019 national SDGs roadmap (Kementerian PPN/Bappenas, 2019), and the first Scopus-indexed academic uptake of pesantren scholarship (Gazali & Budiana, 2023), before accelerating sharply in August-October 2025.

Table 4. Timeline of Indonesia's Pesantren-Environment Policy Assemblage, 2011-2025

Year	Event	Institutional Actor(s)	Source
2011	Fatwa No. 22/2011 on environmentally sound mining	Majelis Ulama Indonesia (MUI)	Mangunjaya & Praharawati (2019)
2014	Fatwa No. 47/2014 on waste management to prevent environmental damage	MUI	Mangunjaya & Praharawati (2019)
2015	Adoption of the 2030 Agenda for Sustainable Development	United Nations General Assembly	United Nations General Assembly (2015)
2010s	Provincial eco-pesantren award schemes established	Dinas Lingkungan Hidup, Banyuwangi and Lumajang (East Java)	Dinas Lingkungan Hidup Kabupaten Banyuwangi (n.d.); Pemerintah Kabupaten Lumajang (n.d.)
2018	Ethnographic documentation of Ath-Thaariq's agroecological-Islamic praxis	Universitas Gadjah Mada; Pesantren Ekologi Ath-Thaariq	Fahrurrazi (2018)
2019	National SDGs roadmap published; first systematic account of MUI environmental fatwas	Kementerian PPN/Bappenas; academic researchers	Kementerian PPN/Bappenas (2019); Mangunjaya & Praharawati (2019)
2023	First Scopus-indexed bibliometric mapping of pesantren scholarship (1994-2022)	Academic researchers	Gazali & Budiana (2023)
26 Aug 2025	Eco-Pesantren pillars formalized at Pesantren Immim, Maros	KLHK (PUSDAL LH SUMA); Kemenag	Pusat Pengendalian Lingkungan Hidup Sulawesi dan Maluku (2025)

30 Aug 2025	Green-campus prototype launched by university rectors	Forum Indonesia	Rektor Nahdlatul Ulama Online (2025)
22 Sep 2025	National launch of Gerakan Ekoteologi Satu Santri Satu Pohon	Kemenag Pondok Pesantren Tebuireng	RI, Waspada.id (2025); Kemenag RI (2025)
25 Oct 2025	Presidentially attended national culmination event	Kemenag Presidency of the Republic of Indonesia	RI; Waspada.id (2025)

Note. Table compiled by the authors from the document corpus in Table 2. See Figure 2 for a visual summary.

Figure 2. Timeline of Indonesia's Pesantren-Environment Policy Assemblage, 2011-2025

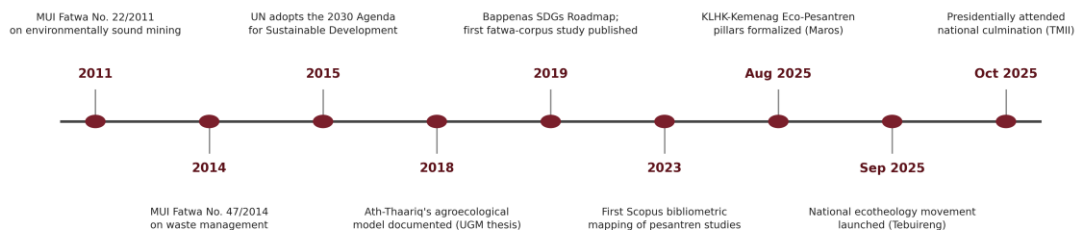


Figure 2. Timeline of Indonesia's pesantren-environment policy assemblage, 2011-2025, synthesizing the document corpus in Table 2. Source: compiled by the authors; see Table 4 for full sourcing detail.

Three features of this timeline are analytically significant. First, the assemblage is multi-scalar from the outset: national religious authority (MUI fatwas), provincial administration (East Java's Banyuwangi and Lumajang environmental agencies), grassroots pedagogical innovation (Ath-Thaariq), and international recognition (United Nations attention to Ath-Thaariq) were operating in parallel for over a decade before any single national programme attempted to integrate them. Second, the August-September 2025 acceleration is itself multi-agency: the 26 August Maros event was a KLHK-Kemenag collaboration establishing technical environmental pillars, while the 22 September Tebuireng launch was a Kemenag-led event establishing theological framing; the two were sequenced only four weeks apart, suggesting a coordinated rather than coincidental escalation. Third, the movement was explicitly bundled with adjacent state priorities at its national culmination - the 25 October 2025 event at Taman Mini Indonesia Indah combined the tree-planting movement with a national free health-check and nutrition programme (Waspada.id, 2025) - indicating that ecotheology was positioned within a broader santri-welfare policy package rather than promoted as a stand-alone environmental campaign.

The Flagship Cohort and the Ath-Thaariq Exemplar

Kemenag's national rollout designated seven pesantren as flagship implementers of the movement's core practices: Mahasina (Bekasi, West Java), Al-Kenaniyah (Jakarta), Al-Hamid Cilangkap (East Jakarta), Al-Hamidiyah (Depok, West Java), Al-Mubarak (Mranggen, Demak, Central Java), Zainul Hasan Genggong (Probolinggo, East Java), and Malnu Menes (Pandeglang, Banten) (NU Online, 2025) (Table 5). Collectively, this cohort was reported to be implementing four practice categories - the 3R principle (reduce, reuse, recycle), organic farming, structured waste management, and renewable-energy adoption - alongside curricular integration of environmental content (NU Online, 2025). The source material does not disaggregate which specific practice was implemented at which specific institution, and this study does not manufacture a false precision the data do not support; what the cohort demonstrates, rather, is Kemenag's selection of institutions across five provinces and both major Islamic mass-organizational traditions (Nahdlatul Ulama- and non-affiliated pesantren) as a deliberate signal of national, cross-regional legitimacy.

Table 5. Seven Flagship Pesantren in the 2025 National Ecotheology Pilot Cohort

No.	Pesantren	Location	Province
1	Mahasina	Bekasi	West Java
2	Al-Kenaniyah	Jakarta	DKI Jakarta
3	Al-Hamid Cilangkap	East Jakarta	DKI Jakarta
4	Al-Hamidiyah	Depok	West Java
5	Al-Mubarak	Mranggen, Demak	Central Java
6	Zainul Hasan Genggong	Probolinggo	East Java
7	Malnu Menes	Pandeglang	Banten

Note. The cohort is reported collectively (not individually disaggregated) as piloting the movement's four core practice categories – the 3R principle (reduce, reuse, recycle), organic farming, structured waste management, and renewable-energy adoption – alongside curricular integration of environmental content. Source: Nahdlatul Ulama Online (2025).

Pesantren Ekologi Ath-Thaariq in Garut, West Java, was not among the seven flagship institutions, yet it recurs throughout the corpus as the movement's most frequently cited grassroots antecedent. Founded and led by Nissa Wargadipura and KH Zezen Zainal Abidin, Ath-Thaariq developed an agroecological curriculum - organic farming integrated with classical religious instruction - years before any state ecotheology programme existed, and was subsequently recognized by United Nations bodies for this model (Detik.com, 2022; Kementerian Koordinator Bidang Pembangunan Manusia dan Kebudayaan [Kemenko PMK], n.d.; Pesantren Ekologi Ath-Thaariq, n.d.). Fahrurrazi's (2018) ethnographic thesis on the pesantren identifies three interlocking ecological ethics articulated by its community: "being ecological is being pious," "being ecological is being generous," and "being ecological is being pluralist" - a formulation that fuses environmental practice directly with core Islamic virtues rather than treating it as an ancillary social-responsibility add-on.

Read against the Triadic Vernacularization Model, Ath-Thaariq exemplifies bottom-up vernacularization: doctrinal and pedagogical innovation preceded, and arguably supplied, the vocabulary later adopted by the top-down 2025 institutional-policy node, even though no document in the corpus explicitly credits Ath-Thaariq as a direct policy input. This is a pattern - grassroots practice anticipating and outpacing formal state recognition - that recurs across the eco-pesantren literature (cf. Sulaeman et al., 2026; Muzakki et al., 2025) and suggests that the 2025 movement's institutional architects were formalizing an already-legitimated practice repertoire rather than inventing one.

Discursive Framing: Environmental Action as Iman

Coding of official statements across the corpus reveals a consistent discursive strategy: environmental action is framed not as an environmentally responsible civic behavior that happens to be compatible with Islam, but as an act of *iman* (faith) in its own right. The Minister of Religious Affairs, Nasaruddin Umar, is reported insisting that "*ekoteologi bukan sekadar wacana, melainkan praktik nyata*" [ecotheology is not mere discourse, but real practice] (NU Online, 2025), a formulation that pre-empts the critique - substantiated elsewhere in the literature by Fernando et al. (2025) - that religious environmental rhetoric routinely outpaces ritual practice. The Director General of Islamic Education, reported in the corpus under the title Dirjen Pendidikan Islam, is quoted stating that "*menjaga alam adalah bagian dari iman. Santri ingin menegaskan komitmen itu melalui aksi nyata*" [safeguarding nature is part of faith; santri want to affirm that commitment through real action] (Waspada.id, 2025), explicitly subordinating environmental stewardship to the theological category of faith rather than the secular category of citizenship. Nahdlatul Ulama's Da'wah Institute chair, KH Abdullah Syamsul Arifin, extends the same logic to the mosque, calling for *kesalehan ekologis* [ecological piety] alongside spiritual and social welfare as co-equal markers of religious virtue (NU Online, 2025), while the head of Kemenag's human resources development body, Prof. Ali Ramdhani, situated ecotheology as one of three co-equal strategic programmes alongside moderate religiosity and a "love-based" curriculum (NU Online, 2025) - placing environmental stewardship at the same institutional priority tier as counter-radicalization and character education, historically Kemenag's signature policy domains.

This framing performs specific institutional work. By coding tree-planting and waste management as *iman*, officials render participation obligatory in the register of religious duty rather than optional in the register of policy compliance, a move that plausibly explains how a programme announced in September could credibly claim millions of participants by October. It also reframes SDG achievement - typically reported by international agencies in the technocratic register of indicators and targets - into the register of collective religious obligation (*fard kifayah*-adjacent, though no source in the corpus uses this specific juridical term), a translation that is precisely what the Triadic Vernacularization Model in Section 2.4 predicts should occur at the interface of the doctrinal and institutional nodes.

Barokah Infrastructure: The Material Hinge

Across both the flagship-cohort documents and the Ath-Thaariq case, three material practices recur with a distinctive dual coding: they are described simultaneously in the vocabulary of sacred blessing and in the vocabulary of measurable infrastructure. The planted tree is the clearest instance: named literally in the movement's title (*Satu Santri Satu Pohon*, "one santri, one tree"), it is simultaneously an act generating *barokah* for the planter within pesantren cosmology and a countable unit of the KLHK-Kemenag greening pillar reportable against SDG 13 (climate action) and SDG 15 (life on land). Ablution (*wudu*) water reuse and greywater management, cited among the six formal Eco-Pesantren pillars (PUSDAL LH SUMA, 2025), similarly carries dual valence: *wudu* is itself a ritual purification act, and its water's reuse for irrigation or sanitation converts a religiously mandated practice into a literal water-conservation intervention reportable against SDG 6 (clean water and sanitation). Organic waste composting and the pesantren-based "waste bank" (*bank sampah*) model, documented across the flagship cohort and grounded doctrinally in the *fasad* (corruption/degradation) and *israf* (wasteful excess) concepts identified by Ardiansyah et al. (2026), likewise function simultaneously as a means of avoiding sinful wastefulness and as a countable diversion of waste from landfill, reportable against SDG 12 (responsible consumption) targets that no document in the corpus explicitly names but which the practices self-evidently serve.

This dual coding is the empirical basis for the Barokah Infrastructure construct proposed in Section 2.4. Unlike a purely secular green-infrastructure intervention, these objects do not require translation to be legible to two audiences simultaneously; the *same* act of planting a tree is reportable to a Kemenag monitoring system and intelligible to a santri as worship, without either framing needing to be suppressed in favor of the other. This is, we argue, the mechanism that allows the Triadic Vernacularization Model's three nodes to converge rather than merely coexist: Barokah Infrastructure is not a metaphor bridging doctrine and policy but a set of concrete, shared material referents that both registers can claim without contradiction.

DISCUSSION

Theoretical Contribution

This study extends Merry's (2006) vernacularization framework, developed for transnational human-rights norms, into the domain of faith-based sustainability governance, and in doing so identifies a mechanism - Barokah Infrastructure - that the human-rights vernacularization literature does not require, because rights claims do not typically converge on shared physical objects in the way that trees, water, and compost do. This suggests a broader proposition for future comparative work: religious-environmental vernacularization may be distinctively "thing-centered" in ways that other domains of norm diffusion are not, because world religions possess long-standing doctrinal vocabularies for the moral status of material objects (purity, waste, blessing, trust) that map unusually well onto the countable units of environmental policy (trees, liters, kilograms). This proposition is consistent with, and extends, Ardiansyah et al.'s (2026) caution that

doctrinal-contemporary continuity is a constructed accomplishment: our findings suggest that the specific accomplishment being constructed in the Indonesian case is not merely rhetorical alignment but the deliberate selection of practices whose material form is already doctrinally freighted.

Relation to Existing Eco-Pesantren Scholarship

The findings both corroborate and complicate the existing literature. They corroborate Subaidi et al.'s (2023) emphasis on leadership as a driver of institutional environmental action: the 2025 movement's flagship cohort was assembled through Kemenag's direct institutional selection rather than bottom-up application, mirroring the kyai-centered authority structure Subaidi et al. describe at the single-institution level, now reproduced at the level of state selection of exemplary institutions. They corroborate Maghfiroh et al.'s (2024) account of Nahdlatul Ulama's organizational infrastructure as a delivery mechanism, visible here in NU's mobilization of LAZISNU, LPBINU, and RMINU alongside the state programme. They complicate Ferdinan et al.'s (2026) quantitatively optimistic findings on SDG alignment by showing, through the discursive analysis in Section 4.4, that alignment with SDG language is sometimes asserted by officials without the specific indicator-level correspondence that Ferdinan et al.'s assessment framework requires - the practices we document map plausibly onto SDGs 4, 6, 12, 13, and 15, but no document in our corpus reports the kind of disaggregated, institution-level monitoring data Ferdinan et al. collected primary data to obtain. Most directly, our findings substantiate Fernando et al.'s (2025) warning about a "green theology commitment crisis": the very fact that the national movement felt it necessary to insist ecotheology is "not mere discourse" (NU Online, 2025) is itself evidence that the gap between theological rhetoric and consistent practice, which Fernando et al. document in ritual settings, was recognized as a risk by the movement's own architects.

Policy Implications

Three implications follow for Kemenag, KLHK, and allied organizations. First, the absence of publicly reported, institution-level monitoring data - in contrast to Ferdinan et al.'s (2026) purpose-built assessment framework - is the single largest risk to the movement's durability; without a mechanism to verify tree survival, waste diversion volumes, or water reuse rates at the level of individual pesantren, the programme risks the "symbolically rich but administratively shallow" outcome anticipated in Section 1. Adopting an EIEAF-style assessment instrument (Ferdinan et al., 2026) across the flagship cohort, and eventually across the wider EMIS-registered pesantren population, would convert the movement's Barokah Infrastructure from a rhetorically powerful but empirically unverified claim into an auditable contribution to Indonesia's SDG reporting. Second, the deliberate multi-organizational sequencing observed in Section 4.2 - MUI doctrinal authority, Kemenag educational bureaucracy, KLHK technical standards, NU organizational delivery - is a genuine institutional achievement that other Muslim-majority states seeking to mobilize faith-based education for climate action could study directly, provided they possess an analogous density of overlapping religious-bureaucratic institutions. Third,

policymakers should resist treating Ath-Thaariq-style grassroots exemplars merely as inspirational case studies to be cited in launch events; our findings suggest these institutions function as genuine sites of doctrinal-pedagogical innovation whose vocabulary migrates upward into policy, and they merit direct institutional partnership - technical assistance, curriculum co-design - rather than symbolic acknowledgment alone.

CONCLUSIONS AND RECOMMENDATIONS

This study examined Indonesia's 2025 national pesantren ecotheology movement as a case of state-religious vernacularization of the Sustainable Development Goals. Through qualitative document and media-content analysis of a verified corpus of institutional, journalistic, and academic sources, triangulated with official EMIS statistics and the internationally recognized Pesantren Ekologi Ath-Thaariq exemplar, the study traced a fourteen-year policy assemblage - from Majelis Ulama Indonesia fatwas through provincial pilots to a national programme mobilizing a flagship cohort of seven pesantren and, by official account, millions of santri. The analysis contributes a Triadic Vernacularization Model linking doctrinal, institutional, and pedagogical levels of analysis, and the construct of Barokah Infrastructure to describe the material practices - tree planting, ablution-water reuse, composting - through which this vernacularization is accomplished. These contributions extend Merry's (2006) vernacularization framework into faith-based sustainability governance and offer Indonesian policymakers a concrete basis for strengthening monitoring and evaluation as the movement matures. Pesantren educate a santri population in the low millions and operate under a religious authority structure with few secular parallels; if Barokah Infrastructure proves durable rather than merely rhetorically powerful, Indonesia's pesantren sector could constitute one of the more consequential, if least externally visible, contributors to national SDG localization in the world's largest Muslim-majority country. Verifying that durability is the task this study leaves to the longitudinal and comparative research agenda outlined in Section 5.5.

FURTHER STUDY

Three lines of inquiry follow directly. A longitudinal follow-up, ideally combining institutional records with interviews and site visits once access becomes feasible, could test whether the movement's flagship cohort sustains its practices beyond the launch cycle and whether Barokah Infrastructure's dual legibility persists or erodes under monitoring pressure. A comparative study extending the Triadic Vernacularization Model to other faith-based education systems - Catholic school networks' Laudato Si'-inspired environmental programmes, or Buddhist monastic conservation movements in Southeast Asia, for example - would test the model's portability beyond the Islamic and Indonesian context.

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