

**PESANTREN ECOLOGY MODEL: INTEGRATION OF FIQH AL-BI'AH,
ECOOSOPHY, AND LOCAL WISDOM AT NURIS ISLAMIC BOARDING
SCHOOL JEMBER**

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Abstract: This study aims to reveal the philosophical foundations, environmental management practices, and the process of internalizing ecological values at the Nurul Islam Islamic Boarding School (Nuris) Jember in building an ecological model of pesantren based on fiqh al-bi'ah, ecosophism, and local wisdom. This research uses a qualitative approach with a case study type. Data was collected through observations, in-depth interviews with kiai, ustadz, pesantren administrators, and senior students, as well as documentation of pesantren environmental activities and policies. Data analysis uses an interactive analysis model that includes data reduction, data presentation, and conclusion drawn. The results of this study reveal three main findings. First, the philosophical foundation of the ecological movement at the Nuris Islamic Boarding School is rooted in the value of ecological monotheism, the mandate of the caliphate, and the prohibition of *isrāf* which is internalized through the teaching of the book, example, and habituation. Second, environmental management practices run through waste sorting, eco-enzyme programs, simple waste treatment, and student innovation through scientific activities. Third, the internalization of ecological awareness is formed through the local wisdom of pesantren in the form of communal discipline, a common living system, hygiene rules, and a culture of mutual cooperation that strengthens the ecological behavior of students. These findings show that the ecological model of pesantren can be built through the integration of Islamic values, ecosophism, and local culture in pesantren education

INTRODUCTION

Global ecological crises range from climate change, forest destruction, water and soil pollution, to waste emergencies. A number of recent studies confirm that one of the roots of environmental destruction is the anthropocentric and materialistic perspective of modern humans that places nature merely as an object of economic exploitation (Amiruddin et al., 2024). This destructive perspective is also intertwined with development patterns that ignore ecological sustainability and intergenerational justice. From an Islamic perspective, the relationship between humans and nature is based not on domination, but on *tawhid*, *amanah*, *khilafah*, and *mīzān* (balance). Islamic environmental ethics positions humans as *caliphs* tasked with maintaining—not damaging—the earth. Meanwhile, the principles of *maslahah* and *hifz al-bi'ah* situate environmental protection as part of the objectives of contemporary sharia (Derysmono & Kahfi, 2025; Gunawan & Alfarisi, 2023). The Qur'an and Hadith also provide a strong ecological ethical framework,

such as the concepts of khilafah, mīzān, amanah, isrāf, and tawazun .(Munawar & Rachman, n.d.; Pudjiastuti et al., 2021)

However, studies on Islamic environmental ethics and *fiqh al-bi'ah* tend to remain conceptual, and have not sufficiently demonstrated how these values are operationalized in institutional settings such as pesantren. Research on eco-pesantren generally presents descriptive environmental programs—such as planting trees or waste management—but few link explicitly between *fiqh al-bi'ah*, ecosophy (spiritual–intellectual–emotional ecology), and local pesantren wisdom within a specific locus (Gunawan & Alfarisi, 2023; A. Zuhdi et al., 2024).

The Nurul Islam Islamic Boarding School (Nuris) Jember emerges as a unique case because its environmental movement grows from internal traditions while being enriched by scientific and circular economy practices (Pudjiastuti et al., 2021) . Preliminary field findings indicate that its ecological movement is rooted in theological values (tawhid, khilafah, anti-isrāf) and strengthened through communal discipline, teacher modeling, and dormitory-based local wisdom.

Starting from this background, this study seeks to construct the “Pesantren Ecology Model” at Nuris Jember by examining how (1) theological values are articulated in discourse and practice, (2) ecological ecosophy is developed through spiritual, intellectual, and socio-emotional formation, and (3) local wisdom serves as a medium for ecological character building. This research also explores how pesantren respond to contemporary ecological challenges such as excessive consumption, waste emergencies, and urban pressures.

THEORETICAL STUDY

2.1 Islamic Environmental Ethics

Islamic environmental ethics is built upon foundational concepts such as tawhid, amanah, khilafah, mīzān, isrāf, and tawazun, which together frame the moral relationship between humans and nature. Humans are positioned as *caliphs* (stewards) responsible for protecting the earth, while excessive consumption (isrāf and tabdzīr) is explicitly prohibited in the sharia. The principles of *maslahah* and *hifz al-bi'ah* embed ecological protection into the goals of contemporary Islamic law (Derysmono & Kahfi, 2025; Gunawan & Alfarisi, 2023) . Recent literature affirms that the Qur'an and Hadith contain a strong normative ecological framework (Munawar & Rachman, n.d.; Pudjiastuti et al., 2021).

2.2 Fiqh al-Bi'ah

Fiqh al-bi'ah is a discipline of Islamic jurisprudence that formulates ecological rules, ethics, and legal norms within the maqāṣid al-shari'ah paradigm. It is positioned as a response to the environmental crisis and a reconstruction of Islamic legal reasoning to support ecological sustainability (A. Zuhdi et al., 2024; M. H. Zuhdi, 2015) Some scholars argue for shifting fiqh orientation from a narrow focus on ritual worship toward socio-ecological dimensions, where protecting the environment becomes an act of worship and gratitude (M. H. Zuhdi, 2015).

2.3 Eco-Pesantren in Islamic Education

Eco-pesantren is a model of Islamic boarding school that integrates Islamic values with ecological awareness through greening programs, waste management, water conservation, and environmental education (A. Zuhdi et al., 2024). Pesantren are seen as strategic agents of ecological transformation due to their strong moral authority, knowledge traditions, and community influence. Research shows that integrating religious values with environmental practices enhances students' ecological awareness and positions pesantren as community environmental learning centers (Gunawan & Alfarisi, 2023; Pudjiastuti et al., 2021).

2.4 Green Islam and Environmental Movements in Muslim Societies

In Indonesia, the discourse on “Green Islam” highlights initiatives where mosques, pesantren, and religious organizations integrate environmental concerns into sermons, curricula, and environmentally friendly architecture (Rahmat, 2025). This movement demonstrates Islam’s relevance not only to ritual worship but also to contemporary ecological challenges.

2.5 Local Wisdom and Ecological Praxis in Pesantren

Studies that examine pesantren as a locus of environmental movements based on internal traditions and local wisdom remain limited. Many pesantren develop ecological practices that grow organically from communal culture—cleanliness, discipline, mutual cooperation—before being strengthened by external programs (Gunawan & Alfarisi, 2023). Local wisdom such as collective discipline, picket systems, and sanction mechanisms constitute an internal ecology that supports sustainability.

RESEARCH METHODS

This research uses a qualitative approach with a type of case study that aims to understand in depth the ecological model of the Nurul Islam Islamic Boarding School (Nuris) Jember in the context of the development of *fiqh al-bi'ah*, *ecophy*, and local wisdom. The research data was obtained through in-depth interviews with *kiai*, *ustadz*, pesantren administrators, and senior students, participatory observation of cleaning activities, waste sorting, eco-enzyme programs, and ecological behavior of students, and documentation of activity photos, picket schedules, and internal archives of Islamic boarding schools. The data analysis technique uses an interactive analysis model which includes data reduction, data presentation, and conclusion drawn. The validity of the data is maintained through triangulation of sources and techniques, as well as confirmation of findings to informants. This approach allows researchers to comprehensively capture the integration of religious values, pesantren culture, and environmental practices in the lives of students.

DISCUSSION AND RESEARCH RESULTS

Philosophical Foundations of Ecology at the Nuris Jember Islamic Boarding School

The results of the study show that the ecological movement at the Nurul Islam Islamic Boarding School (Nuris) Jember rests on a strong theological foundation, especially the concepts of ecological monotheism, caliphate, and *mīzān*. In the interview, the *kiai* emphasized that protecting the environment is understood as a manifestation of faith, because nature is God's creation that must be treated with respect. This interpretation is in line with the view of *fiqh al-bi'ah* which places humans as caliphs and guardians of ecological balance. (Amiruddin et al., 2024)

These theological values are internalized through the study of classical books that are full of the teachings of manners and ethics of life. For example, the *ustadz* explained that students are taught to avoid *isrāf* and *tabdzīr* behaviors, because these behaviors are contrary to noble morals. This confirms the idea. (A. Zuhdi et al., 2024) That the paradigm of *fiqh al-bi'ah* must be born from the strengthening of manners and spirituality, not just rational-legalistic concepts. Field observations show that the theological orientation is not just a conceptual insight, but is reflected in the daily actions of the students. Senior students maintain the cleanliness of the dormitory, supervise the public spaces of the Islamic boarding school, and reprimand hygiene violations as part of their religious responsibilities. Thus, the philosophical foundation in the Nuris Islamic Boarding School has formed a stable ecological habitus.

This model is aligned with research (Gunawan & Alfarisi, 2023) Regarding eco-sufism in Islamic boarding schools, which shows that the internalization of ecological values becomes strong when it is associated with monotheism and spiritual awareness. Thus, the

theological foundation of pesantren is the main element that bridges Islamic values with daily ecological practices.

Local Wisdom of Islamic Boarding Schools as Social Capital in the Formation of Ecological Behavior

The results of the study revealed that the local wisdom of pesantren is an important pillar that supports the success of environmental education in Nuris Islamic Boarding School. The pesantren management stated that strictly regulated communal life forms a culture of discipline, independence, and collective responsibility. A structured picket system, the division of cleaning tasks, and supervision by senior students create a social ecosystem that encourages consistent clean living practices. This local wisdom does not stand alone, but is intertwined with religious values. For students, maintaining cleanliness is not only an administrative routine, but part of the character of the pesantren and moral identity. This reinforces the concept that local wisdom can be the basis for effective ecopedagogy in Islamic education.

These findings are in line with research (Pudjiastuti et al., 2021), which states that pesantren have social capital in the form of discipline, mutual cooperation, and an ethos of togetherness that strongly supports the implementation of eco-pesantren. This shared culture creates a standard of ecological behavior that does not require strict oversight from the outside, but grows as a collective consciousness.

In addition, the Nuris Islamic boarding school also practices local values such as *ngemong* (caring) and *tepo seliro* (empathy), which strengthen the awareness that the environment is a shared living space that must be maintained. Thus, local wisdom in the Nuris Islamic Boarding School functions as cultural capital that strengthens the formation of students' ecological behavior gradually and sustainably

Environmental Management Practices at Nuris Jember Islamic Boarding School

The results of the observation show that the Nuris Islamic Boarding School has developed a fairly comprehensive environmental management practice. Facilities such as sorted waste bins, kitchen waste treatment rooms, and eco-enzyme programs are the main components in waste management. The eco-enzyme program involves more than 70 students from PMR and KIR, and is carried out regularly as part of the pesantren environment project. Interviews with the supervisor showed that the activity was not only intended as a form of waste management, but also as a medium for scientific and spiritual learning. Students learn about the fermentation process, the benefits of enzymes for plants, and the value of worship in protecting the environment. This is in line with the findings (Munawar & Rachman, n.d.) bahwa integrasi ilmu agama dan sains modern dapat memperkuat kesadaran ekologis that the integration of religious science and modern science can strengthen the ecological awareness and creativity of students. In addition, the innovation of KIR students in the form of a prototype of a mangrove educational game is proof that the pesantren is able to encourage ecological literacy through a creative and technology-based approach. Models like this support the view (Gunawan & Alfarisi, 2023) That the ideal eco-pesantren not only teaches environmental theory, but also involves students in real action and innovation.

These findings confirm the results of P3M (2025) research which states that pesantren can become the center of community-based environmental movements when they combine pesantren traditions with relevant environmental programs. Thus, the process of environmental management practice at the Nuris Islamic Boarding School shows that there is an integration between Islamic values, local wisdom, and scientific innovation.

The Process of Internalizing Students' Ecological Awareness

The process of forming students' ecological awareness takes place through a holistic approach, which combines examples, habits, rules, and direct experience. Interviews with kiai and ustadz show that students cannot be forced to care about the environment; Such awareness must be formed through the repetition of behavior, a supportive social environment, and real examples from teachers. This process can be understood through Pierre Bourdieu's concept of habitus, which is a pattern of disposition formed through repetitive practice in a given social environment (Bourdieu, 1980). In the context of Islamic boarding schools, the habit of maintaining cleanliness, obedience to rules, and communal discipline forms an ecological habitus that is deeply embedded in students. This habitus then serves as an internal framework that directs their actions towards the environment automatically and consistently.

Senior students explained that the habit of clean living has started since the first day of their arrival, so ecological practices have become part of their daily routine. Hygiene rules and disciplinary sanctions function as a tool for character education, not as a form of punishment. This is in line with eco-theory which emphasizes that ecological awareness grows through emotional, spiritual, and practical connection with the environment (Gunawan & Alfarisi, 2023).

These findings also confirm the study (Pudjiastuti et al., 2021), which states that eco-pesantren are effective when ecological education is combined with a strong pesantren culture. Thus, the process of internalizing ecological values in the Nuris Islamic Boarding School is the result of a complex interaction between religious values, pesantren culture, and concrete ecological experiences.

CONCLUSION

On a theological foundation that emphasizes ecological monotheism, the caliphate, mīzān, and the prohibition of isrāf. This is the moral and spiritual foundation for the ecological behavior of students. These values are not only taught theoretically, but are internalized through the recitation of the book of adab, the example of kiai and ustadz, as well as the habit of living a clean life in the daily life of students. The ecology of the pesantren in Nuris is reflected in three dimensions: spiritual (the value of faith and manners towards nature), intellectual (environmental education, eco-enzyme programs, scientific innovation), and social-emotional (community service, culture of shame in throwing garbage, ecological solidarity). All three form a comprehensive and sustainable ecological awareness. In the local wisdom of Islamic boarding schools, it includes communal discipline, picket system, mutual cooperation, and sanction mechanisms. This is a cultural capital that strengthens environmental education. These values are typical of pesantren and make them more adaptive in instilling ecological behavior than formal educational institutions. In ecological practices such as waste sorting, simple waste treatment, eco-enzymes, and student innovation, it is proof that the Nuris Islamic Boarding School has developed an integrative eco-pesantren model, not just following external programs.

SUGGESTION

There are several recommendations that can be submitted for strengthening the ecology of Islamic boarding schools.

First, it is necessary to develop a more systematic theological-ecological curriculum by integrating the concepts of ecological tawhid, caliphate, mīzān, and the prohibition of isrāf into formal and non-formal learning, so that these values are not only understood conceptually but also internalized in the behavior of students.

Second, strengthening the spiritual, intellectual, and social-emotional dimensions in the formation of ecological character needs to be formulated in a structured coaching

framework so that the ecological practice of pesantren runs continuously and is not sporadic.

Third, local wisdom of pesantren such as communal discipline, picket system, mutual cooperation culture, and sanction mechanisms need to be documented and standardized as cultural capital that supports the sustainability of environmental education and allows replication in similar institutions.

Fourth, pesantren are advised to develop ecological laboratories based on student innovation, such as compost management, eco-enzymes, and simple waste processing technology, so that the intellectual-ecological dimension obtains a stronger implementation space.

Fifth, collaboration between Islamic boarding schools, local governments, universities, and environmental institutions needs to be expanded to strengthen institutional capacity and enrich ecological education programs.

Sixth, the integrative eco-pesantren model that develops in Nuris can be used as a reference for the development of Green Islamic Boarding School policies at the national level.

Seventh, further research needs to be directed at longitudinal evaluation of changes in the ecological behavior of post-graduation students, comparisons between Islamic boarding schools with different cultural bases, and the development of ecological awareness measurement instruments based on maqāṣid al-sharī'ah.

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