

Implementation of Environmental Education in the Concept of Ecotawhid and Ecotheology in Students

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ABSTRACT

This study aims to explore and analyze the implementation of environmental education grounded in the concept of *ecotauhid* (Islamic ecotheology) among students at the Darul Hijrah Putera Martapura Islamic Boarding School. This research focuses on identifying how *ecotauhid values* are integrated into educational activities and how this approach contributes to shaping students' ecological awareness and character. The novelty of this research lies in its emphasis on *ecotauhid* as a holistic framework that unites beliefs, knowledge, and environmental responsibility within the pesantren context. This qualitative study uses observation, interviews, and documentation to examine forms of environmental education, which include: (1) Curricular, through Aqidah Akhlak, Fiqh, and Islamic Religious Education subjects that contain *values based on ecotauhid*; (2) Co-curricular, through enrichment activities such as fisheries, agriculture, and reforestation; and (3) Extracurricular, through the Adiwiyata program that promotes environmental protection and appreciation. The development of the Eco Pesantren and Agrosilvofishery programs shows the integration of religious practices with environmental sustainability. This study concludes that *ecotauhid-based* education increases students' ecological awareness while fostering a religious, independent, and competitive generation.

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INTRODUCTION

The increasingly visible changes in the earth's macro conditions have raised global concerns about environmental quality. Since the 1972 United Nations Conference in Stockholm and the 1992 Rio de Janeiro Summit, environmental degradation, climate change, and resource crises have become major global problems. In Indonesia, deforestation, forest fires, land conversion for mining and plantations, and low public awareness of environmental management have resulted in natural disasters and ecosystem disruptions (Cleary & DeVantier, 2019). Recent data show that in 2024 Indonesia lost 175,400 hectares of forest net—marking a 45% increase from 2023 and reversing a decade of declining trends—while independent monitoring recorded 261,575 hectares of total forest loss, 97% of which occurred legally within industrial concessions such as palm oil, pulpwood, nickel mining, and infrastructure development. Sumatra and Kalimantan experienced the most severe impacts, losing 91,248 ha and 129,896 ha respectively, with more than half affecting habitats of endangered species including orangutans, tigers, and elephants. These losses intensify biodiversity decline, contribute to cumulative carbon emissions that reached 23 Gt CO₂e between 2001–2024, and heighten risks of soil erosion, flooding, and ecological disruption for forest-dependent communities. Global warming is further intensifying these impacts, threatening the sustainability of flora, fauna, and human life (Almughyiri, 2025; Bronfenbrenner, 1979; Lutfi et al., 2025).

Islam as the majority religion in Indonesia offers a holistic and value-based perspective on addressing the environmental crisis through the concept of *Ecotauhid* or Islamic ecotheology (Amin et al., 2025; Mustofa et al., 2025). This concept emphasizes the unity and harmony between humans, nature, and the Creator, positioning concern for the environment as a form of belief in action (Hidayatulloh et al., 2024) (Annabil & Hanif, 2025; Masdar et al., 2024; Prismadianto et al., 2025; Takunas et al., 2024). In this framework, human beings are considered as Caliph (servants) entrusted by Allah SWT to maintain and prosper the earth responsibly. Integration of *Ecotauhid* into education is in line with the global discourse on environmental education that calls for an ethical, spiritual, and sustainable approach to learning. By instilling environmental moral values through religious education, *Ecotauhid*-based pedagogy not only nurtures ecological literacy but also encourages learners to view environmental conservation as an act of devotion and moral obligation, bridging spiritual awareness with global sustainability efforts (Nur et al., 2025).

Environmental education based on concepts *Ecotheology* emphasizing not only cognitive understanding but also the cultivation of real attitudes, values, and behaviors towards environmental conservation through integrated curricular, co-curricular, and extracurricular programs (Charry López et al., 2026; Karman et al., 2025; Taufikin, 2025; Triyono et al., 2023). This educational model encourages students to consider environmental care as part of their spiritual and moral responsibility, bridging knowledge with practical engagement (Kohlberg, 1984; Permadi et al., 2025; Salamah et al., 2025; Turrohma et al., 2025). A real example of its implementation can be found at the Darul Hijrah Putera Martapura Islamic Boarding School in South Kalimantan, which has long been affiliated with the Islamic Boarding School *Ecotauhid* into its teaching and student activities. Through programs such as *Eco-Friendly Islamic Boarding School*, *Agrosilvofisheries* (covering agriculture, forestry, and fisheries), and various reforestation and natural resource management initiatives, students are not only taught about sustainability but also actively involved in environmental management practices. This initiative fosters ecological awareness, responsibility, and independence, forming a generation capable of translating religious values into concrete environmental actions.

The strengthening of environmental education in Islamic boarding schools has even received national recognition, symbolizing the success of the implementation of the concept of *ecotauhid* holistically not only as an academic effort but also as a socio-religious movement that empowers the

entire Islamic boarding school community. Rooted in Islamic teachings that embody the principle of *rahmatan lil 'alamin* (mercy to all creation), pesantren play an important role as agents of change in fostering collective awareness about environmental management (Ilham & Ramadani, 2024; Ratnah et al., 2024; Rosela et al., 2025; Wahyuni et al., 2024). Through systematic education, training, and everyday environmental practices, students internalize ecological values as part of their faith and identity. This approach is expected to produce a generation that excels not only in religious knowledge but also demonstrates independence, responsibility, and innovation in managing natural resources sustainably, aligning spiritual devotion with practical contributions to environmental conservation. This paper seeks to examine the extent to which the integration of Ecotauhid-based environmental education in Islamic boarding schools strengthens environmental awareness, nurtures sustainable practices, and cultivates a generation that embodies ecological responsibility as part of their religious identity.

The purpose of this study is to examine the form of environmental education in the concept of ecotauhid or ecotheology applied to students of the Darul Hijrah Putera Martapura Islamic Boarding School, South Kalimantan, identify the development of the faith-based environmental education movement in the Islamic boarding school, and analyze the solutions carried out to overcome the obstacles to the implementation and development of environmental education. This research is expected to contribute to the development of environmental education based on religious values and become a reference for other Islamic educational institutions in applying similar concepts.

METHOD

The research method used in this study is field research that focuses on actual conditions at the research site. The approach applied is qualitative descriptive, emphasizing in-depth data collection and analysis through deductive and inductive reasoning. This method allows researchers to explore the phenomenon of environmental education based on the concept of ecotauhid (ecotheology) among students of the Darul Hijrah Putera Martapura Islamic Boarding School in detail and contextually, highlighting new findings and theoretical insights relevant to environmental education in an Islamic environment.

Data were collected over a three-month observation period, using several qualitative techniques such as in-depth interviews, participatory observations, and documentation studies. This research involved 15 participants, consisting of 3 foundation administrators and *mudir* (policy makers), 5 teachers or *ustadz*, 5 students, and 2 education support staff. The interviews aimed to explore participants' perceptions, experiences, and interpretations of ecotauhid-based environmental education, while observations provided direct insight into learning and environmental management activities carried out in Islamic boarding schools.

To ensure the credibility and validity of the data, the researcher used triangulation of sources and methods—comparing the results of the interviews with observational notes and documentation findings. The (Miles et al., 2014) The model is used as a framework for data analysis, which includes three main stages: data reduction, data display, and conclusion-visualization/verification. Through this systematic process, researchers identify patterns, themes, and relationships in the data, integrating empirical findings with relevant theories about Islamic ecotheology and environmental education. This analytical approach provides a coherent understanding of how ecotauhid-based environmental education is conceptualized, implemented, and experienced in the context of pesantren.

FINDINGS AND DISCUSSION

The Form of Environmental Education According to the Concept of Ecotauhid (Ecotheology) Applied to Students of the Darul Hijrah Putera Martapura Islamic Boarding School

The form of environmental education according to the concept of ecotauhid (ecotheology) applied by the students of the Darul Hijrah Putera Martapura Islamic Boarding School includes the integration of Islamic values in every aspect of learning as well as real activities oriented to nature conservation. This education not only instills theoretical knowledge about the environment, but also builds spiritual awareness as a form of obedience to Allah SWT as the creator of the universe. Implementation is carried out through a holistic approach that includes cocurricular, co-curricular, and extracurricular so that it becomes an integral part of students' daily lives. The madrasah curriculum contains the subjects of aqidah, morals, and fiqh which includes learning about the relationship between humans and nature as a mandate from God. Co-curricular and extracurricular activities such as reforestation, agricultural management, fisheries, and plantations also provide space for students to practice the concept of ecotauhid practically.

The learning process of the curriculum at the pesantren includes teaching materials on the axis of aqidah and environmental fiqh which emphasizes the obligation to protect nature as part of worship. This is in line with the results of an interview by the head of the madrasah who said that: *"Students are not only taught theory but also given the opportunity to be directly involved in greening and environmental management activities as a form of implementation of Islamic teachings about nature."*



Figure 1. Learning in Nature

Routine activities of lessons and programs to strengthen the profile of Pancasila students and the profile of rahmatan lil'alam in strengthen the character of environmental concern among students. The cultivation of environmental moral values is the main foundation that continues to be developed through curriculum and integrative approaches that connect spiritual and ecological aspects.

In the co-curricular aspect, the pesantren organizes various strengthening activities such as the pondok area cleaning program (tanji pul'am) and the formation of a cleaning group that actively involves students. The existence of a special task for fifth grade students to coordinate junior students in maintaining the cleanliness of the Islamic boarding school shows the empowerment provided through active participation-based learning. The chairman of the foundation revealed: *"Practical experience in the field such as maintaining cleanliness and being responsible for planting plants provides real provisions for students to understand the meaning of trust as a caliph on earth."*

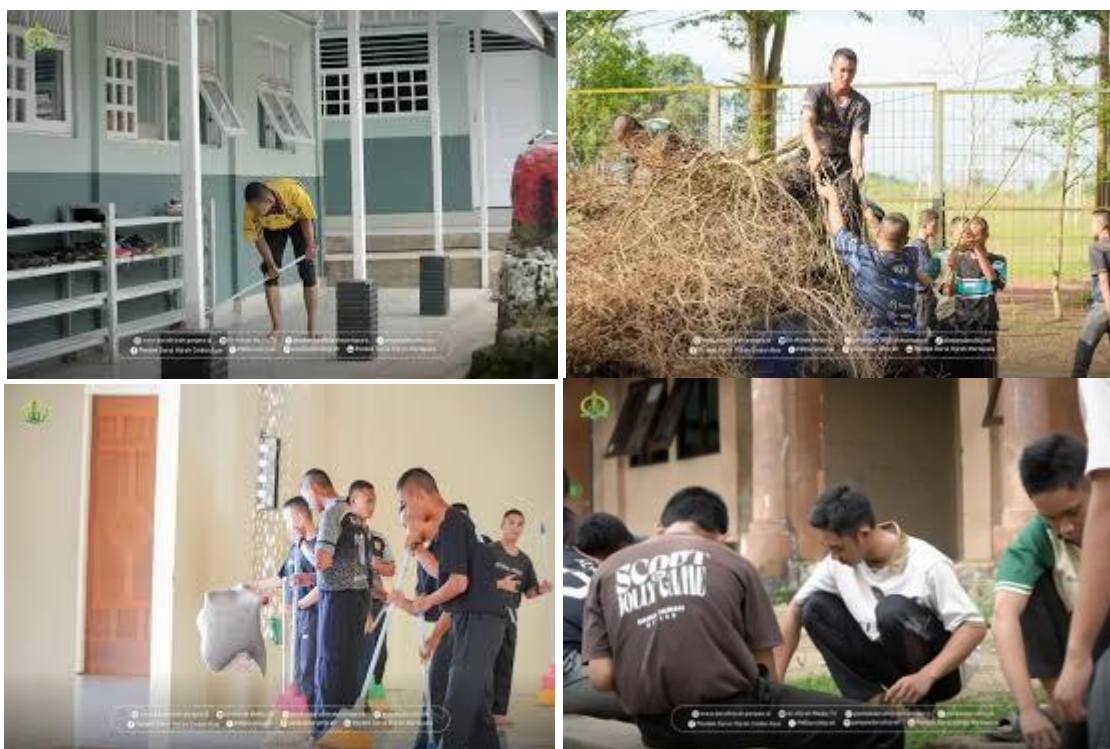


Figure 2. Maintaining Cleanliness

Agricultural, plantation, and fishery activities by students not only function as a means of learning but also as a form of concrete concern for the preservation of natural resources around the pesantren environment.

In extracurricular activities, the Darul Hijrah Islamic Boarding School held the Adiwiyata program as a forum for pond greening and giving awards to students who actively contribute to the environment. Ustadz Supervisor stated that: *"Through Adiwiyata's extracurriculars, students get more motivation in preserving the environment and are given recognition for their hard work and honesty in preserving the nature of the cottage."*

This award system in the form of certificates and verbal appreciation builds the spirit and continuous commitment of students in the management and preservation of a religion-based environment. The criteria of engagement focus on honesty, obedience, and perseverance, which affirms that education is not only about knowledge but also character building.

Environmental education from the perspective of ecota-tauhid at the Darul Hijrah Putera Martapura Islamic Boarding School is an integrated approach between religious, academic, and practical aspects in the field. This concept shows the success of Islamic boarding schools in combining Islamic teachings with responsible and sustainable natural resource management. Students are not only prepared to become memorizers of religious science, but also to become agents of change who have ecological awareness and practical ability to manage the environment at the level of the pesantren community and more broadly. This approach is able to create a generation that has strong faith while caring and active in maintaining the environmental mandate as part of worship and social responsibility.

Development of the Ecotauhid Concept-Based Environmental Education Movement Carried out at Darul Hijrah Islamic Boarding School

The development of environmental education movements based on the concept of ecota-tauhid at the Darul Hijrah Islamic Boarding School includes various programs that unite religious aspects and real practices to preserve the environment. This pesantren applies an educational model that emphasizes not only on the theological understanding of man's relationship with God and nature, but

also on the active involvement of students in various ecological activities. Programs such as Eco Pesantren and agrosilvofishery are a form of synergy between religious education and sustainable natural resource management. These activities aim to build collective awareness and practical skills and form character as the preservation of God's mandate on earth.

The Eco Pesantren program is one of the main pillars in the development of environmental education carried out by Islamic boarding schools. This program places pesantren as a driving agent for environmental conservation through religion-based education. This is in line with the results of an interview by the head of the madrasah, who said that:

"We regularly hold special readings that discuss the environment and life motivation every Wednesday night, as well as religious activities such as istisqa prayers during the dry season, as a form of implementation of Islamic teachings that love nature."

This program equips students with the understanding that protecting and caring for the environment is part of their religious duty and worship to Allah SWT, as well as strengthening their spiritual awareness and social responsibility.

The agrosilvofishery program that integrates agriculture, forestry, and fisheries is another significant development. Students are directly involved in the breeding and planting of vegetables such as spinach, beans, eggplants, and tomatoes used for cottage consumption, as well as the management of gardens and protected trees in the pesantren area. Fisheries programs are also developed through the management of breeding ponds and the maintenance of goldfish, catfish, and tilapia that meet consumption needs and some of the results are marketed. This was reinforced by an interview with the supervisor, who stated: *"Students have the opportunity to learn to manage agriculture and fisheries firsthand, so they not only understand the theory but also be able to practice sustainable natural resource management."*

This program is also an independent learning medium that encourages student independence and skill development. Cooperation with various external parties also plays an important role in the development of environmental education movements in Islamic boarding schools. Collaboration with the Environment Office, Agriculture, Plantations, and Fisheries Service opens opportunities for students and ustadz to take part in training and get plant seed and fisheries assistance. The head of the foundation said: *"We continue to establish partnerships with various government agencies so that environmental education programs can be sustainable and students gain extensive experience and knowledge from the trainings held."* This strengthens the effectiveness of the program and expands the support network to maintain the sustainability of ecomonotheistic education.

The development of an ecotauhid-based environmental education movement at the Darul Hijrah Putera Martapura Islamic Boarding School has succeeded in realizing a balance between spiritual strengthening and natural resource management. This effort has formed a generation of students who not only master religious knowledge, but are also competent in managing the environment practically and responsibly. A systematic program involving various internal elements and external partners makes this cottage a pioneer of faith-based environmental education. This holistic approach makes the concept of ecotahid not only a theoretical teaching but a real movement in nature conservation as part of worship and belief.

Solutions Applied to Overcome Obstacles in the Implementation and Development of Environmental Education in the Concept of Ecotauhid in Islamic Boarding Schools

The solutions implemented to overcome obstacles in the implementation and development of environmental education based on the concept of ecotauhid at the Darul Hijrah Putera Martapura Islamic Boarding School involve an integrative and collaborative approach between curricular, co-curricular, extracurricular, and cooperation with various external parties. This approach is designed to ensure the sustainability and effectiveness of environmental programs that are not just learning materials, but real-life experiences that actively engage students. This effort aims to answer the

monotonous learning challenges and limited resources, while strengthening the role of pesantren as a center for character formation and environmental knowledge based on Islamic values.

The integration of curricular learning and field practice is one of the main solutions carried out. This is in line with the results of an interview by the head of the madrasah who said:

"Theoretical learning in our class is combined with hands-on practice in the pesantren environment, such as tree planting and fish pond management, so that students do not get bored quickly and better understand the meaning of nature conservation as part of worship."

This integration also collaborates with extracurricular and co-curricular activities so that students get hands-on experience in maintaining the cleanliness of the environment and being responsible for the preservation of natural resources around the cottage. This approach encourages active engagement and appreciation of environmental moral values in daily life.

The development of the sustainability of the Eco Pesantren and agrosilvofishery programs is strengthened through cooperation with government agencies and related institutions. The supervisor explained:

"We are working with the Environment Service and the agriculture and fisheries service to get plant seeds and training for students and teachers. This is very helpful in maintaining the continuity of the program and providing better technical insights."

The collaboration facilitates the provision of practical resources and capacity building, so that pesantren are able to run environmental programs independently and adaptively to needs and challenges in the field.

The role of pesantren academics and the involvement of ustadz and students in various trainings are an inseparable part of environmental education development solutions. The head of the foundation revealed:

"Capacity building through routine training is very vital so that we are able to support students not only in the aspect of religious science, but also expertise in agriculture, fisheries, and plantations. This activity also prepares them to become an independent generation that is ready to compete."

This participation also strengthens the network and opens up learning opportunities from experiences and innovations outside the pesantren, thus supporting the development of sustainable environmental education programs.

This solution shows a comprehensive approach that combines strengthening learning materials, applicable experience, collaboration with external parties, and human resource capacity building at the Darul Hijrah Islamic Boarding School. This approach has succeeded in creating collective awareness and practical capabilities to realize ecota-based environmental education effectively and sustainably. The combination of spiritual values and concrete actions makes this pesantren an example of an educational institution that is able to face and overcome obstacles in instilling environmental education conceptually and applicatively.

When compared to others *Eco-pesantren* or *Ecotheological* in various regions, the solutions implemented at the Darul Hijrah Putera Martapura Islamic Boarding School show a similar integrative direction, but with distinctive contextual strengths. For example, the research conducted by Cut Nursaniah et al. (2025) at the Inshafuddin Modern Islamic Boarding School (PMI), Banda Aceh, emphasizing the development of environmentally friendly infrastructure through a green building approach. Their strategies include improving water management systems, creating waste banks, and leveraging renewable energy sources to support *Eco-pesantren* concept. Unlike Darul Hijrah, which focuses more on agriculture, forestry, and fisheries-based environmental education, PMI's initiative is centered on architectural sustainability and optimization of green facilities, showing how *Eco-pesantren* The framework can be adjusted according to local conditions and institutional strengths.

Meanwhile, a study by (Kejora et al., 2025) at Al-Ashriyyah Nurul Iman Ecopesantren in Bogor expands the scope of environmental education towards the achievement of various Sustainable Development Goals (SDGs). Their approach is integrated *Islamic spiritual values*, technological innovations (such as biogas, solar panels, and water purification systems), and community

empowerment, especially through gender-inclusive environmental leadership. This model highlights the global relevance of *pesantren* in contributing to SDGs such as clean energy, sanitation, and climate action.

Comparatively, Darul Hijrah *Ecotauhid*-based models focus on religious-spiritual formation combined with practical environmental management—an approach that is firmly rooted in the moral and theological dimensions of Islamic education. While PMI strengthens environmental awareness through green architecture and Al-Ashriyyah Nurul Iman emphasizes technological and socio-cultural transformation, Darul Hijrah offers an example of ecological education that is based on faith and daily practice, particularly through *Eco-Friendly Islamic Boarding School* and *Agrosilvofisheries Program* (Bintang Kejora et al., 2025). This comparative insight shows that *Eco-pesantren* initiatives across Indonesia collectively contribute to the broader national and global sustainability education movement, each highlighting a unique path that integrates beliefs, the environment, and innovation to achieve a balanced and ethical relationship with nature.

Table 1. Key Findings of Ecotauhid-Based Environmental Education at Darul Hijrah Islamic Boarding School

Dimension	Empirical Evidence	Interpretative Findings
Curricular Integration	Environmental values are embedded in <i>aqidah</i> , <i>fiqh al-bi'ah</i> , and moral education subjects.	Ecotauhid frames environmental preservation as a theological obligation and an act of worship.
Co-curricular Practices	Routine cleanliness programs, greening activities, and peer-led environmental coordination.	Experiential learning strengthens students' ecological responsibility and leadership capacity.
Extracurricular Engagement	Adiwiyata program supported by reward and recognition mechanisms.	Institutional appreciation reinforces pro-environmental behavior and moral commitment.
Eco Pesantren Movement	Religious rituals and thematic Islamic studies emphasize care for nature.	Ecological awareness is internalized through faith-based spiritual formation.
Agrosilvofishery Program	Direct involvement in agriculture, forestry, and fisheries management.	Practical sustainability skills are developed through hands-on ecological stewardship.
External Partnerships	Collaboration with environmental, agricultural, and fisheries agencies.	Cross-sector cooperation enhances program sustainability and technical competence.
Student Character Outcomes	Internalization of environmental ethics as moral and spiritual responsibility.	Students emerge as faith-driven ecological stewards with sustainable life skills.

Discussion

The educational practices applied at the Darul Hijrah Putera Martapura Islamic Boarding School go beyond the cognitive realm to include affective and psychomotor dimensions. Integration of Islamic values into the curriculum emphasis *Aqidah*, morals, and the environment *Fiqh* reflects a deliberate attempt to internalize the principle that protecting nature is a form of worship (Anggraini et al., 2022; Bronfenbrenner, 1979; Kohlberg, 1984). Through environmental studies *Fiqh*, students gain a strong theological foundation that frames environmental preservation as a divine command (Falah et al., 2025;

Nurazizah et al., 2024; Sulthon et al., 2024). This integration of theoretical and spiritual aspects distinguishes *Ecotauhid* model of secular environmental education, because it places human beings as *Caliph* (servants) are entrusted with a double responsibility to the Creator and to the created world (Affandi et al., 2022). These findings are consistent with the work of Bintang Kejora et al., who argue that Islamic ecological education instills sustainability in moral and metaphysical frameworks rather than viewing them as technocratic or driven by pure policy.

In addition, the integrative approach of *pesantren*—linking curricular, co-curricular, and extracurricular learning—shows how ecological education can be translated into experiential practice. Activities such as reforestation, agricultural management, and fish farming provide students with hands-on experience in implementing *Ecotauhid* Principle (Annur et al., 2022). This is in line with the findings of Maulida et al. (2024) at the Inshafuddin Modern Islamic Boarding School, which highlight that active participation in green practices fosters deeper ecological awareness. The case of Darul Hijrah enriches this discourse by showing how *Ecotauhid* transforming environmental engagement into a moral-spiritual exercise rather than just ecological behavior. The *Tanji Pul'am* (hygiene programs) and peer mentorship systems, for example, operationalize ecological responsibility and leadership, fostering collective accountability and social ethics based on Islamic teachings (Azis & Rizal, 2024).

Adiwiyata's extracurricular program strengthens the formation of this holistic character by instituting a system of recognition and rewards for environmental management (Fua et al., 2018); (Khoir & Rusik, 2024). The appreciation mechanism contributes to internalizing environmental values and maintaining behavioral motivation, echoing Taufik Bintang Kejora et al. (2024), who emphasized that environmental leadership in *Eco-pesantren* promote the Sustainable Development Goals (SDGs) through value-based education. In Darul Hijrah, the relationship between religious-based motivation and institutional appreciation contributes to long-term character transformation, advancing the theoretical understanding of moral ecology in Islamic pedagogy.

The flagship programs—Eco Pesantren and Agrosilvofishery—illustrate the implementation of *Ecotauhid* through integrative environmental management that combines theology, science, and practical skills (Lutfauziah et al., 2022). Compared to the Al-Ashriyyah Nurul Iman Ecopesantren in Bogor, which integrates technology and local wisdom to achieve the dual SDGs (Bintang Kejora et al., 2024), Darul Hijrah emphasizes community-scale sustainability based on agricultural and ecological independence. It shows a contextual adaptation of the *Eco-pesantren* theory, showing that *EcotauhidModels* based can develop according to local resources and cultural strengths (Ferdiansyah et al., 2025; Khoirurrijal et al., 2025; Wijaya Mulya & Salvi, 2025).

The efforts of the *pesantren* in building cooperation with various external agencies, such as the Environment Service, the Agriculture, Plantations, and Fisheries Service, show a collaborative strategy to strengthen the sustainability of the program (Lutfi et al., 2025). This collaboration provides real benefits in the form of assistance with plant seeds, fish seeds, and technical training for students and ustadz. This collaboration broadens students' knowledge horizons and opens access to best practices in environmental management (Gull et al., 2025; Masturin et al., 2022). The involvement of external parties shows that *pesantren* does not stand alone in developing environmental education, but builds a strong network to support the sustainability of the program. This is also an example to students about the importance of synergy between educational institutions, the community, and the government in preserving nature (Laksono, 2022).

The solutions applied in overcoming various obstacles to the implementation of environmental education programs in Islamic boarding schools show a comprehensive strategy that includes curriculum integration, field practices, and human resource capacity building (Maulida et al., 2024). The combination of theoretical and hands-on learning prevents student boredom and strengthens their

understanding of the value of worship in preserving the environment. Regular training for students and ustadz, as well as ongoing cooperation with external institutions, ensures that the program remains adaptive to changing times and field needs (Stuart & Jura, 2023). This integrative approach has succeeded in shaping students' collective awareness and practical abilities in managing the environment. The Darul Hijrah Putera Martapura Islamic Boarding School can finally become a real example of an educational institution that is able to unite spiritual values, academic knowledge, and practical skills in shaping religious and ecological generations (Aulia et al., 2024; Subaidi et al., 2023). These findings contribute theoretically by positioning ecotauhid as a model of Islamic environmental pedagogy, expanding the framework of eco-theological education beyond moral consciousness towards a proxy-based ecological ethics (Hefner, 2023; Syukur et al., 2025). This model aligns with and expands on previous studies by showing that eco-pesantren can serve as sustainability laboratories that combine local wisdom, spiritual awareness, and global ecological imperatives (Fatah et al., 2025; Helmy et al., 2021; Iskamar et al., 2025). As a result, the Darul Hijrah case provides a theoretical and practical reference for future research on religion-driven sustainability education, highlighting pesantren as dynamic agents in the global movement towards ethical environmental transformation.

Future research may explore comparative analyses across diverse types of pesantren to identify variations in Ecotauhid implementation based on socio-cultural settings, resource availability, or institutional governance models. Longitudinal studies may also be conducted to measure the long-term impact of eco-pesantren programs on students' ecological behavior after graduation, particularly in their communities. In addition, interdisciplinary approaches involving environmental science, sociology, and religious education could further deepen the understanding of how spiritual-ecological values shape collective environmental action. Expanding this line of inquiry will help strengthen the conceptual foundations of Islamic environmental pedagogy and guide policymakers, educators, and faith-based institutions in developing sustainable, value-driven ecological education models.

CONCLUSION

In conclusion, the implementation of ecotauhid-based environmental education at the Darul Hijrah Putera Martapura Islamic Boarding School demonstrates how religious and ecological values can be harmoniously integrated into educational practices. Rather than functioning merely as a set of isolated programs, this model represents a holistic system that unites curriculum design, daily routines, and community engagement in cultivating an environmental ethic grounded in Islamic theology. The integration of moral teachings, fiqh, and Islamic religious education with practical activities—such as agriculture, fisheries, and reforestation—creates a coherent balance between theoretical understanding and experiential learning. Initiatives such as the Eco Pesantren and Agrosilvofishery programs further illustrate the institution's capacity to transform environmental education into a sustainable socio-religious movement that empowers students to act as faith-driven ecological stewards.

This study also sheds light on the broader scholarly discourse by confirming and extending previous findings on Islamic ecological education. It supports earlier research emphasizing the role of spirituality in strengthening environmental awareness, while also offering new perspectives on how ecotauhid can be operationalized as an integrated pedagogical model. Specifically, this study contributes a more detailed conceptualization of how theological values, institutional structure, and experiential practices interact to form a unique eco-pedagogical framework. In doing so, it enriches existing literature by presenting additional variables—such as institutional collaboration, reward systems, and peer-based environmental leadership—that have not been extensively explored in prior studies.

However, the study has several limitations. The scope is constrained by a relatively small sample size, limited case focus (restricted to a single institution), and a lack of variation in demographic factors such as gender, age, or geographic diversity. Methodological constraints also limit the depth of generalization, as the study does not examine multiple pesantren or compare different models of environmental integration. Therefore, future research should involve broader samples, multi-site case studies, and more diverse methodological approaches—including mixed-methods or longitudinal designs—to achieve a more comprehensive and nuanced understanding. With richer, more extensive findings, scholars and policymakers will be better equipped to formulate effective and context-sensitive strategies for advancing ecologically grounded religious education.

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