

Integration Of Islamic Ecoteological Values In School Management: A Strategy to Overcome the Waste Crisis in Pekalongan City

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Abstract

The waste crisis that occurred in Pekalongan City after the closure of the Degayu Landfill in March 2025 has created an ecological and social emergency, marked by increased illegal dumping, open burning, and low public awareness in waste management. This situation demonstrates that technical handling alone is insufficient, so a values-based and educational approach is necessary. This study aims to analyse how the integration of Islamic ecoteological values is applied in school management as a strategy to address the waste crisis, with a focus on a case study of SMA Negeri 3 Pekalongan. The research method employs a descriptive, qualitative approach through participatory observation, in-depth interviews, and document analysis, combined with triangulation techniques to ensure data validity. The research findings show that the values of monotheism, trustworthiness, and *ihsan* are internalised into school policies through four managerial stages: planning, socialisation, implementation, and evaluation. The policy of bringing personal containers, the ban on single-use plastics, the habit of taking trash home, and the example of teachers have succeeded in creating an ecological culture rooted in Islamic teachings. The study's results showed a significant increase in students' ecological awareness, a reduction in the volume of school waste, and the development of sustainable, environmentally friendly behaviours. The integration of Islamic ecoteology in school management is not only an effective educational strategy, but also has the potential to become a model for mitigating environmental crises that holistically integrates spiritual, moral, and ecological aspects.

Keywords: islamic ecoteology, school management, environmental education

Introduction

Waste management in Indonesia has become a growing concern due to population growth and rapid urbanisation. This has led to a significant increase in waste generation in various regions, particularly in urban areas, which are centres of economic activity and densely populated settlements (Lingga et al., 2024). According to data from the National Waste Management Information System (SIPSN), Indonesia's total waste generation reached 56.63 million tons in 2023. Of this amount, only around 39.01%, or 22.09 million tons, was managed correctly and in accordance with standards (Nugroho, 2025). Meanwhile, most of the waste still ends up in Final Disposal Sites (TPA) with an open dumping system, which has the potential to pollute the environment and does not meet the principles of environmentally friendly and sustainable waste management.

Of the total 550 landfills operating throughout Indonesia, 343 units are currently under supervision to stop open dumping practices. Most of them have also exceeded their capacity; one of these is in Central Java Province, specifically Pekalongan City. The situation reached a critical point when the Degayu Final Disposal Site (TPA), which had been the only primary disposal site, was officially closed by the Ministry of Environment and Forestry (KLHK) on March 20, 2025 (Tim Komunikasi Publik, 2025). The Mayor of Pekalongan officially declared a state of emergency in response to the environmental crisis caused by the lack of suitable and legal waste disposal sites.

After the closure of the Degayu landfill, many residents continue to litter, openly burn waste, and fail to separate organic and inorganic waste at home. This has resulted in piles of household waste in various corners of the city, causing unpleasant odours, visual pollution, and concerns about the spread of environmentally transmitted diseases (Hanafi, 2025). This condition not only reflects the weakness of the waste management system but also highlights fundamental problems related to people's behaviour in treating their environment. According to (Fauziah & Putri, 2025) the waste crisis in Pekalongan City has not only an impact on ecological aspects, but also socio-economic aspects, ranging from a decrease in the comfort of life to an increase in costs for managing city cleanliness. This situation demands a solution that is not only technical in nature but also addresses the aspects of ecological values and awareness among the Pekalongan community, which is generally still relatively low.

The world of education plays a strategic role as the vanguard in supporting the efforts of the Pekalongan City Government in overcoming the emergency waste situation that it is currently facing. Through the Waste Management School Movement initiative and the strengthening of participation-based environmental programs, such as Healthy Schools and Adiwiyata, the Pekalongan City Education Office actively encourages each educational unit to become an agent of change in shaping clean and environmentally friendly living behaviours (Tim Komunikasi Publik, 2025) This aims not only to respond to the waste management crisis, but also to serve as a preventive and educational measure to instil environmental values from an early age. Making schools a centre for environmental education and action is hoped to create an educational ecosystem that supports the achievement of sustainable development in the city of Pekalongan.

From an Islamic perspective, concern for the environment is not a new concept. Islam has long emphasised the importance of maintaining cleanliness and the balance of nature, as well as human responsibility as *khalifah fil ardh*, Allah representatives on earth, entrusted with managing and preserving the natural world. This teaching firmly rejects all forms of environmental destruction as stated in Q.S Al-A'raf 7:56

وَلَا تُفْسِدُوا فِي الْأَرْضِ بَعْدَ إِصْلَاحِهَا وَادْعُوهُ خَوْفًا وَطَمَعًا إِنَّ رَحْمَتَ اللَّهِ قَرِيبٌ مِّنَ الْمُحْسِنِينَ ﴿٥٦﴾

Meaning: Do not cause mischief on the earth after it has been properly arranged. Pray to Him with fear and hope. Indeed, the mercy of Allah is very close to those who do good.

This verse reminds us that maintaining cleanliness, managing waste wisely, and creating a sustainable environment are part of *islāḥ*, namely, efforts to improve the earth as a form of obedience to Allah. By implementing Islamic ecotheological values in waste management in Pekalongan, it is an important step towards restoring harmony between humans and nature, while also bringing God's grace to those who do good to others and the environment. In (Omar et al., 2016) it is emphasised that the concept of Islamic ecotheology is not only based on moral aspects but also on spiritual ones, viewing nature as a sign of God's greatness that must be preserved and protected. This view regards cleanliness and environmental concern as integral to faith and good deeds.

The integration of Islamic ecotheological values in education is becoming increasingly relevant amidst the ecological crisis experienced by Pekalongan City. By incorporating Islamic theological principles into school policies, planning, and management practices, education can serve as a means of fostering sustainable ecological awareness. This approach not only teaches how to manage waste but also adequately instils a spiritual understanding that protecting the environment is a form of service to Allah SWT (Nursyaidah et al., 2025). Through the integration of Islamic ecotheological values, school management can be developed into a more holistic and sustainable system. Schools no longer focus solely on academic achievement, but also on forming the ecological and spiritual character of students. Thus, Islamic education has the potential to be a strategic solution in addressing the waste crisis in Pekalongan City, as it offers an approach that integrates spiritual, moral, and ecological aspects within a sustainable educational management framework.

Methods

This research uses a descriptive qualitative approach with a case study method, focusing on the emergency waste response in Pekalongan City and the response of State Senior High School 3 Pekalongan in integrating Islamic ecotheological values into school management. This approach was chosen to gain an in-depth understanding of the practices, experiences, and religious-ecological meanings underlying school policies in addressing the waste crisis following the

closure of the Degayu Landfill. Through the case study, researchers explore how school policies are formulated, how Islamic values such as tawhid (the principle of unity), amanah (trustworthiness), mizan (the principle of justice), and ihsan (the principle of justice) are internalised, and how the entire school community participates in ecological cultural change. State Senior High School 3 Pekalongan was purposively selected due to its innovative and values-based managerial response to the waste emergency, making it a relevant case for in-depth study as a representative of ecological education practices based on Islamic spirituality.

Data collection was conducted through participant observation, in-depth interviews, and documentation analysis. Observations were conducted to directly observe the implementation of environmentally friendly policies, the behaviour of school members, and the internalisation of Islamic values in daily activities related to waste management. Interviews were conducted with the principal, Islamic Religious Education teachers, students, and relevant stakeholders to explore their perceptions, experiences, and religious motivations underlying their involvement in the school's environmental program. Documentation was also used to review school policies, curricula, management meeting minutes, and program evidence such as educational posters, activity photos, and school reports. Through the triangulation of these three techniques, researchers obtained a comprehensive picture of the strategies and mechanisms for integrating Islamic ecotheological values in addressing the waste crisis, resulting in valid, in-depth, and contextual research findings.

Results and Discussion

The Concept of Islamic Ecotheology

Facing this ecological crisis requires collective awareness and responsibility from all levels of society to prevent further environmental damage (Anwar & Susminingsih, 2024). In this context, Islamic ecotheology offers a moral and spiritual foundation for environmental management. Islamic ecotheology emphasises that the concept of tawhid occupies a fundamental position as a primary principle that affirms the oneness of God and guides humans to maintain balance between themselves, nature, and the Creator. A holistic understanding of tawhid fosters awareness that preserving the environment is part of worship and a form of obedience to God (Alfadhli et al., 2025). Thus, the values of tawhid encourage Muslims to play an active role in environmental conservation and to use resources wisely, as every human action has spiritual and moral consequences before God.

According to (Saproni, 2015), environmental ethics encompasses attitudes and behaviours toward everything around humans, including animals, plants, and inanimate objects. Preserving the environment is a form of human responsibility as God's caliph in managing nature (Gade, 2019). Because the entire universe belongs

to God and humans are highly dependent on the environment, humans are given the freedom to enjoy it, provided they maintain its balance. As Allah says in Q.S. Al-Baqarah 2:30

وَإِذْ قَالَ رَبُّكَ لِلْمَلٰٓئِكَةِ اِنِّيْ جَاعِلٌ فِى الْاَرْضِ خَلِيْفَةًۭ قَالُوْۤا اَتَجْعَلُ فِيْهَا مَنْ يُفْسِدُ فِيْهَا وَيَسْفِكُ
الدِّمَآءَ وَنَحْنُ نُسَبِّحُ بِحَمْدِكَ وَنُقَدِّسُ لَكَۗ قَالَ اِنِّيْۤ اَعْلَمُ مَا لَا تَعْلَمُوْنَ ﴿۳۰﴾

Meaning: (Remember) when your Lord said to the angels, "I will make a caliph on earth." They said, "Are You going to place someone there who will cause corruption and shed blood, while we praise You and sanctify Your name?" He said, "Indeed I know what you do not know."

The term *khalifah* in this verse refers to humans' position as successors to previous generations, mandated to preserve, manage, and develop nature responsibly. Humans do not have absolute power to exploit natural resources freely; instead, they act as trustees of the Natural World, tasked with managing it responsibly, consciously, and carefully. This mandate requires environmental management based on the principles of balance and sustainability, ensuring that nature continues to provide sustainable benefits without being harmed (Rahmat et al., 2025). Greedy behaviour and excessive exploitation clearly contradict Islamic values, which uphold justice, balance, and the sustainability of life on earth.

Internalising Islamic Ecotheology in School Management

Based on these principles, the process of internalising Islamic ecotheological values in school management at SMA Negeri 3 Pekalongan was systematically designed to foster an environmentally conscious school culture grounded in Islamic spirituality. This internalisation is aimed at developing the ecological character of all school members, fostering moral, spiritual, and social awareness in environmental protection. This process involves four main stages:

The initial stages began with a planning process conducted through a school management team meeting. This meeting was held to follow up on the Pekalongan City Government's appeal regarding the importance of environmental conservation and addressing the waste crisis. The school views environmental conservation as not merely an administrative obligation, but also a moral imperative that must be implemented through concrete policies and actions. The meeting agreed on several important policies that are educational and foster students' ecological responsibility, including: each student is required to bring their own drinking bottle and food container, the use of disposable containers is prohibited, and trash cans are not provided on school grounds. Thus, each student is responsible for managing their own waste by taking it home.

By requiring students to bring their own containers and eliminating the use of disposable packaging, the school instils the values of self-management and environmental stewardship. The ban on the use of disposable containers demonstrates the application of the principle of *ihsan*, which involves making concrete efforts to reduce pollution risk and maintain environmental sustainability. Meanwhile, the habit of taking one's own trash home reflects the concrete practice of the Islamic prohibition against causing harm and destruction to the earth. Through this policy, schools directly internalise Islamic ecotheological teachings into school culture.

Once the policy is established, the next step is to disseminate it to the entire school community, including teachers, staff, students, and parents/guardians. This dissemination is conducted openly so that all parties understand the policy's intent and objectives, how it will be implemented, and the Islamic values behind it. Furthermore, the school invited the Pekalongan City Environmental Agency (DLH) to provide outreach and training on waste sorting and recycling management. This activity aims to instil both technical knowledge and ecological values in students and teachers, so that they understand the importance of separating organic and inorganic waste and managing waste wisely. This collaboration embodies the principle of mutual respect taught in Islam, where schools and the government collaborate to create a clean and sustainable environment. In addition to enhancing the capacity of the school community, the joint activities with the DLH also serve as an educational tool that connects the theory and practice of Islamic ecotheology. Students are not only taught that preserving nature is a moral obligation, but they are also provided with practical skills to creatively process and reduce waste. Thus, this initial stage lays a crucial foundation for establishing an ecologically imbued school culture.

The implementation phase is a crucial moment in the process of internalizing Islamic ecotheological values. In this phase, teachers play a primary role as role models (*Uswah Hasanah*) for students. Teachers not only deliver instructions but also serve as concrete examples in their daily behaviour. Teachers demonstrate a strong commitment by bringing their own drinking bottles and food containers and managing their own waste in accordance with the policy. By serving as concrete examples, teachers are expected to foster reflective and sustainable ecological values in students. Through the process of habituation, supervision, and role modelling, Islamic ecotheological values become not merely moral slogans but are implemented in a school culture that consistently maintains cleanliness, reduces waste, and respects God's creation as a whole.

Furthermore, the teacher's role also encompasses educational and spiritual aspects (Rosyidah & Rosidah, 2025). Teachers strive to instil in students the understanding that maintaining cleanliness and managing waste responsibly is part

of worship and a form of obedience to Allah, the Creator of the universe. As illustrated in the following hadiths:

النَّظَافَةُ مِنَ الْإِيمَانِ

Mean: Hygiene is part of faith (HR. Ahmad)

Teachers link the practice of maintaining cleanliness to the hadith, as the learning process no longer stops at a technical understanding of how to care for the environment, but instead enters a more meaningful spiritual realm. Students are guided to understand that cleanliness is not merely a matter of hygiene or aesthetics, but rather an integral part of a Muslim's faith identity. With this explanation, every simple act, such as disposing of trash properly, reducing the use of single-use plastics, or maintaining school facilities, is seen as a form of devotion to God. Students begin to see that preserving the environment is not merely a social activity. However, a form of worship that is rewarded encourages them to behave more discipline and responsibly without feeling forced.

The final stage in the process of internalising Islamic ecotheological values is an evaluation of the policy's implementation. After some time, the school reflects on practical aspects and those that still need improvement, so that the ecological development process does not stop at momentary behavioural changes but develops into a sustainable culture. The evaluation results indicate a behavioural transformation aligned with Islamic ecotheological values. The majority of students are beginning to display the character of responsible caliphs, characterised by the habit of bringing their own supplies and managing their own waste. This practice reflects a growing awareness that protecting the environment is part of God's mandate that must be carried out with complete sincerity. However, a small number of students still require further guidance to develop their discipline and ecological awareness further. This finding aligns with environmental education studies that emphasise that sustainable behavioural change requires a long process, consistent reinforcement, and support from a supportive social environment (Muin et al., 2025). Amid these challenges, the integration of Islamic ecotheology remains a promising long-term strategy for fostering an ecological culture rooted in spirituality. If reinforced by school policies, teacher role models, family support, and cross-institutional collaboration, this approach can become an effective model for environmental education in addressing the waste crisis and fostering a more ecologically sustainable society.

Islamic Ecotheology in Addressing the Waste Crisis

The integration of Islamic ecotheological values into school ecological management has had several significant impacts on social change within the

educational environment. One of the most tangible impacts is increased ecological awareness among school residents. This awareness fosters stronger and more consistent internal motivation to adopt environmentally friendly behaviours, enabling waste reduction, sorting, and environmental preservation activities to be carried out more consciously and responsibly. This aligns with findings (Taufikin, 2025), which show that ecotheology-based Islamic education increases students' ecological awareness by teaching them Quranic values about the moral relationship between Islamic teachings and environmental responsibility.

The integration of Islamic ecotheology has also contributed to the transformation of school environmental culture. Policies such as bringing personal food containers and water bottles, eliminating single-use plastics, and requiring students to take their own trash home have created new, more sustainable behavioural patterns. These changes not only occur at the individual level but also develop into a collective culture evident in daily routines, ways of interacting with the environment, and a shared commitment to maintaining school cleanliness. This transformation is reinforced through a pedagogical approach that combines religious education with environmental activities, similar to findings (Julian et al., 2024) that demonstrate the success of the "Green Islamic School" program in conveying Islamic teachings related to environmental conservation. This program instils ecological awareness in students through relevant learning experiences, both in the classroom and during outdoor activities. This cultural transformation demonstrates that systematically internalised religious values can profoundly and sustainably influence ecological behaviour.

The contribution of integrating Islamic ecotheology to waste reduction is also concretely evident. By reducing the use of single-use products and promoting the habit of using reusable containers, the school has significantly reduced its daily waste generation. The school environment becomes cleaner, more comfortable, and less visually polluted. This value-based approach has proven effective, especially in the context of limited municipal waste management facilities, as research shows that integrating Islamic values into ecology increases students' ecological responsibility and the effectiveness of school waste management (Putri et al., 2022). This demonstrates that a value-based approach, if applied consistently, can be an effective strategy in addressing the waste crisis, particularly when city waste management facilities are experiencing limitations, as is the case in Pekalongan City.

Conclusion

The waste crisis in Pekalongan City reflects weak urban environmental management, characterised by increasing waste volume, limited management facilities, and widespread waste disposal following the closure of the Degayu

Landfill. This situation not only causes air pollution and health problems but also indicates a low level of public ecological awareness. In this context, Islamic ecotheology provides an ethical and spiritual framework that can strengthen collective consciousness, serving as a foundation for more responsible environmental management. The concepts of tawhid (monotheism), amanah (trust), khalifah (vicegerent), and the principle of balance provide moral legitimacy that preserving the environment is an integral part of worship and obedience to God.

The internalisation of Islamic ecotheological values implemented at Pekalongan State Senior High School 3 demonstrates that the integration of religious values into school management can systematically shape students' ecological character through the planning, socialisation, implementation, and evaluation stages. The policy of bringing personal containers, the ban on single-use plastics, and the habit of independent waste management have been proven to foster sustainable ecological behaviour. Findings indicate increased awareness, changes in the school environment, and a significant reduction in waste volume. This confirms that a values-based approach rooted in religion can be an effective strategy in responding to the waste crisis, especially when city facilities are limited. Through collaboration between institutions, teacher role models, and family support, Islamic ecotheology has the potential to become a relevant model for environmental education in building an ecologically civilised society.

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