

## Model of Green Pedagogy Based on Qur'anic and Sunnah Ecotheology for Strengthening SDG 4.7 and SDG 13

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| ARTICLE INFO                                                                   | ABSTRACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <b>Keywords:</b><br>Green Pedagogy; Islamic<br>Ecotheology; SDG 4.7;<br>SDG 13 | Environmental education within Islamic Religious Education has increasingly attracted scholarly attention in response to the escalating global ecological crisis. However, previous studies have largely discussed Islamic ecotheological values normatively, without proposing an integrated pedagogical framework that systematically connects Qur'anic and Sunnah ecotheology with Education for Sustainable Development (ESD), particularly SDG 4.7 and SDG 13. This study addresses this gap by developing a conceptual Green Pedagogy model grounded in Islamic ecotheology. Employing qualitative library research with thematic content analysis, the study draws upon the conceptual framework of Islamic ecotheology, thematic Qur'anic exegesis (tafsīr mawḍūʿī), and Education for Sustainable Development (ESD) to analyze ecological teachings in selected Qur'anic verses and Prophetic traditions. The analysis identifies five core ecotheological values of khalifah, amānah, mīzān, prohibitions of destruction (fasād), and wastefulness (isrāf), which are subsequently transformed into four interconnected pedagogical components: ecological literacy, critical reflection, value internalization, and action-oriented learning. This study argues that Islamic ecotheology should be understood not merely as a theological discourse on environmental ethics but as a pedagogical foundation capable of fostering ecological responsibility and sustainability. The proposed model demonstrates strong conceptual alignment with SDG 4.7 and SDG 13, while offering a theoretical framework for integrating Islamic ecological values into Islamic Religious Education. Consequently, this study advances Islamic educational theory by bridging Qur'anic and Sunnah ecotheology with contemporary sustainability education through an integrative Green Pedagogy model. |

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## INTRODUCTION

The current global environmental crisis has reached an alarming point, demanding urgent responses from various parties, including the world of education. At present, the rise in the earth's average temperature by 1.1°C and unprecedented changes in climate systems now occurring in every region of the world range from sea level rise to increasingly extreme weather events and the rapid loss of sea ice.<sup>1</sup> Atmospheric carbon dioxide (CO<sub>2</sub>) concentrations have soared to the highest level ever recorded in 2024, due to continued emissions from human activities, spikes in wildfires, and the declining capacity of terrestrial and ocean ecosystems to absorb CO<sub>2</sub>. The Intergovernmental Panel on Climate Change (IPCC) report affirms that unless greenhouse gas emissions are immediately curbed, several impacts of climate change will be long-term or even irreversible, including the loss of ecosystems potentially fundamental to human survival.<sup>2</sup> This crisis is not merely technological or political in dimension; it is also a moral crisis that strikes at the core of the relationship between humans and nature. Climate change, biodiversity loss, and natural resource depletion are, at their heart, not just technical and political challenges, they are moral and spiritual crises that question the human relationship with the natural world and demand a fundamental paradigm shift in education<sup>3</sup>.

Education is widely recognized as a strategic instrument in responding to the global environmental crisis, particularly through the framework of Education for Sustainable Development (ESD). Education and lifelong learning are increasingly mobilized to address the global environmental crisis and its accompanying sustainability challenges by exploring various roles of education about and for sustainable development.<sup>4</sup> ESD for 2030 directly contributes to SDG 4 on quality and inclusive education, especially Target 4.7, as well as to all other SDGs, by providing relevant education that places responsibility for the future at its core<sup>5</sup>. ESD lays its foundations by integrating climate issues into the curriculum while fostering problem-solving, civic responsibility, and understanding of complex systems, thereby informing the direction of national policy and facilitating the achievement of SDG 4.7 (Education for Sustainable Development) and SDG 13 (Climate Action), particularly in regions focusing on environmental and social

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<sup>1</sup> Sophie Boehm dan Clea Schumer, *10 Big Findings from the 2023 IPCC Report on Climate Change*, 20 Maret 2023, <https://www.wri.org/insights/2023-ipcc-ar6-synthesis-report-climate-change-findings>.

<sup>2</sup> Philipp Dominic Siedler, "HIVEX: A High-Impact Environment Suite for Multi-Agent Research (Extended Version)," conf. paper presented pada ICLR, 21 Januari 2025, 4, <https://doi.org/10.48550/arXiv.2501.04180>.

<sup>3</sup> Mukhsin Mukhsin dan Ilzam Hubby Dzikrillah Alfani, "Integrating Islamic Eco-Theology into Religious Education: A New Paradigm for Curriculum Development," *Indonesian Journal of Islamic Religious Education* 3, no. 2 (2025): 183, <https://doi.org/10.63243/mpr1js26>.

<sup>4</sup> Arjen E. J. Wals dan Aaron Benavot, "Can We Meet the Sustainability Challenges? The Role of Education and Lifelong Learning," *European Journal of Education* 52, no. 4 (2017): 404–5, <https://doi.org/10.1111/ejed.12250>.

<sup>5</sup> UNESCO, *Education for Sustainable Development: A Roadmap* (UNESCO Publishing, 2020), 11, <https://doi.org/10.54675/YFRE1448>.

development objectives.<sup>6</sup> ESD as an educational approach is not only aimed at imparting knowledge, but also helps learners reflect on their own values and develop the capacity to participate in creating a better society through participatory and experiential learning.<sup>7</sup>

Although the ESD framework has gained global recognition, its implementation in the context of Islamic religious education remains far from adequate. In the field of Islamic education, the gap between ecological principles in the Qur'an and prophetic tradition (Sunnah) has yet to be systematically integrated into mainstream religious education curricula<sup>8</sup>. In fact, the Islamic perspective possesses major potential to address contemporary environmental issues, considering that environmental protection—as one of the main goals of the Sustainable Development Goals (SDGs)—is inherently embedded in Islamic teachings and has been practiced by Prophet Muhammad SAW centuries ago.<sup>9</sup> Systematic studies of the literature reveal that Islamic ecotheology is a dominant theme serving as a normative foundation for various environmental initiatives within Islamic educational institutions; however, integrative models connecting ecotheology with curriculum structure and pedagogical strategies remain extremely limited<sup>10</sup>. This situation indicates a real urgency to develop a green pedagogy model that conceptually bridges Islamic ecotheological values and global sustainability objectives within the SDG framework.

Previous research has made important contributions to building the discourse on Islamic ecotheology, yet none have offered a green pedagogy model that systematically integrates thematic interpretation (at-tafsīr al-maudhū'ī) of ecological verses in the Qur'an and environmental hadiths within the frameworks of SDG 4.7 and SDG 13 simultaneously. A systematic review of Islamic religious education and SDGs literature identifies a significant gap between normative theological discourse and empirical implementation in the education context, signaling the need for studies that bridge both contextually.<sup>11</sup> Research on Islamic ecotheology in pesantren education has proposed conceptual models linking Islamic theological principles with green curriculum transformation, but these models remain contextual to a single institution and have yet to be

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<sup>6</sup> Joy Nneamaka Obi dan Emmanuel Ojo, "Mainstreaming Climate Change in School Curricula: Critical Review of Pedagogy, Policy and Global South Perspectives," *Cogent Education* 13, no. 1 (2026): 1, <https://doi.org/10.1080/2331186X.2026.2613489>.

<sup>7</sup> Hiroko Oe dkk., "A Qualitative Assessment of Community Learning Initiatives for Environmental Awareness and Behaviour Change: Applying UNESCO Education for Sustainable Development (ESD) Framework," *International Journal of Environmental Research and Public Health* 19, no. 6 (2022): 3528, <https://doi.org/10.3390/ijerph19063528>.

<sup>8</sup> Mukhsin dan Alfani, "Integrating Islamic Eco-Theology into Religious Education," 184.

<sup>9</sup> Labeeb Bsoul dkk., "Islam's Perspective on Environmental Sustainability: A Conceptual Analysis," *Social Sciences* 11, no. 6 (2022): 228, <https://doi.org/10.3390/socsci11060228>.

<sup>10</sup> Andi Hajar, "Transforming Islamic Education for Environmental and Social Sustainability," *Sinergi International Journal of Islamic Studies* 2, no. 2 (2024): 82, <https://doi.org/10.61194/ijis.v2i2.601>.

<sup>11</sup> Andi Taufik dan Ahmad Sukandar, "Islamic Religious Education and the Sustainable Development Goals: A Critical Analysis of the Theory-Practice Nexus," *Journal of Science and Education (JSE)* 6, no. 2.1 (2026): 1, <https://doi.org/10.58905/jse.v6i2.1.705>.

articulated in explicit relation to SDG targets.<sup>12</sup> Research on integrating Islamic ecotheology into the PAI curriculum recommends that Islamic ecotheology be systematically incorporated into the PAI curriculum in Indonesia so that environmental education values can be instilled more effectively through PAI learning.<sup>13</sup> Building on these gaps, this study aims to develop a structured green pedagogy model based on Qur'anic and Sunnah ecotheology, mapping the ecotheological values of Islam as a pedagogical foundation aligned with SDG 4.7 and SDG 13 targets, thereby making a theoretical contribution to the development of an Islamic Religious Education curriculum with a sustainability orientation.

## RESEARCH METHOD

This study uses a qualitative approach with a library research methodology, focusing on the development of a green pedagogy model based on Qur'anic and Sunnah ecotheology to support the achievement of the Sustainable Development Goals (SDGs), particularly SDG 4.7 and SDG 13. Library research is a research method that utilizes various written sources as primary data to gain an in-depth understanding of a particular concept, idea, or phenomenon. The qualitative approach is used to interpret meaning, identify relationships between concepts, and build a conceptual synthesis based on various relevant sources.<sup>14</sup> This study does not involve field data collection, but rather utilizes a range of literature related to Islamic ecotheology, sustainable education, green pedagogy, and Sustainable Development Goals (SDGs). Through this approach, it is expected that a conceptual model will be obtained that can bridge Islamic ecotheological values with principles of sustainability pedagogy in the context of Islamic Religious Education.

Data sources in this study consist of primary and secondary sources. Primary sources include verses of the Qur'an and Hadiths of Prophet Muhammad SAW that contain ecological principles as the main foundation of Islamic ecotheology. Meanwhile, secondary sources are obtained from scientific journal articles, academic books, conference proceedings, reports from international organizations, as well as previous research findings related to Islamic ecotheology, Education for Sustainable Development, green pedagogy, and Sustainable Development Goals (SDGs). Source selection is based on the level of relevance to the research focus, academic credibility, as well as publication currency. Thus, the data used in this study are expected to provide an adequate theoretical foundation to support the analysis process and the development of the conceptual

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<sup>12</sup> Ferdinan dkk., "Eco Islamic Education and Its Contribution to Sustainable Development Goals in Muhammadiyah Boarding Schools of South Sulawesi," *Discover Sustainability* 7, no. 1 (2026): 1, <https://doi.org/10.1007/s43621-026-02647-6>.

<sup>13</sup> Abdul Rohman dkk., "Religious Education For The Environment: Integrating Eco-Theology In The Curriculum of Islamic Religious And Character Education To Enhance Environmental Education In Indonesia," *Nadwa: Jurnal Pendidikan Islam* 18, no. 2 (2024): 201, <https://doi.org/10.21580/nw.2024.18.2.21094>.

<sup>14</sup> Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif dan R & D* (Alfabeta, 2013), 9–10.

model being offered.

The data collection technique is carried out through document studies of various literature sources relevant to the research focus. The data collected are then analyzed through four systematically structured stages of analysis, so that the transformation process from Islamic theological sources to the construction of the green pedagogy model can be explained systematically. The first stage is thematic analysis based on *at-tafsīr al-maudhū'ī* toward the ecological verses of the Qur'an and relevant Hadiths of Prophet Muhammad SAW, namely by identifying, collecting, and synthesizing environmental themes thematically across verses to obtain a holistic and coherent understanding of environmental ethics in Islam. The thematic analysis approach is a highly popular technique among qualitative researchers for analyzing descriptive data, with the ultimate goal of producing a conceptual model that systematically summarizes research findings.<sup>15</sup> The second stage is content analysis, which enables researchers to identify, categorize, and understand recurring patterns of meaning in written sources, so that Islamic ecotheological values scattered across various texts can be grouped into structured conceptual categories.<sup>16</sup> The third stage is conceptual analysis, which is the mapping of Islamic ecotheological values onto the principles of green pedagogy as well as their alignment with the indicators of SDG 4.7 and SDG 13. The fourth stage is the construction of the conceptual model, where the synthesis of concepts that have been mapped in the previous stage is integrated into a model framework. This process is iterative and includes multiple syntheses and re-syntheses until the researcher arrives at a coherent and meaningful theoretical framework.

## RESULT AND DISCUSSION

### Values of Eco-Theology in the Qur'an and Sunnah as the Foundation of Green Pedagogy

Thematic analysis of ecological verses from the Qur'an and the hadiths of Prophet Muhammad SAW shows that Islamic teachings possess a strong normative foundation for building ecological awareness. Through the *at-tafsīr al-maudhū'ī* approach and content analysis, this study identifies five main values that underpin Islamic eco-theology: *khalifah*, *amanah*, *mizan*, prohibits destruction (*fasād*), and wastefulness (*isrāf*). These five values do not stand alone, but rather form an ethical framework that governs the relationship between humans and Allah, fellow humans, and the natural environment. From the Islamic perspective, humans are positioned as part of the ecological system who bear moral responsibility for maintaining the sustainability of life. Therefore,

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<sup>15</sup> Muhammad Naeem dkk., "A Step-by-Step Process of Thematic Analysis to Develop a Conceptual Model in Qualitative Research," *International Journal of Qualitative Methods* 22 (Oktober 2023): 2, <https://doi.org/10.1177/16094069231205789>.

<sup>16</sup> Klaus Krippendorff, *Content Analysis: An Introduction to Its Methodology* (SAGE Publications, 2016), 25–27.

these eco-theological values can serve as a conceptual foundation for developing green pedagogy oriented towards sustainability.

## Normative Dimensions of Eco-Theology in the Qur'an

### Human Stewardship as the Basic Principle of Environmental Ethics

The concept of khalifah is one of the main foundations of Qur'anic eco-theology, affirming the position of humans as Allah's vicegerents on earth. This concept is asserted in QS. Al-Baqarah [2]:30:

﴿وَإِذْ قَالَ رَبُّكَ لِلْمَلٰٓئِكَةِ اِنِّىْ جَاعِلٌ فِى الْاَرْضِ خَلِیْفَةًۭۙۙۙ قَالُوْۤا اَتَجْعَلُ فِیْهَا مَنْ یُّفْسِدُ فِیْهَا وَیَسْفِكُ الدِّمَآءَ وَنَحْنُ نُسَبِّحُ بِحَمْدِكَ وَنُقَدِّسُ لَكَۙۙۙ قَالَ اِنِّىْۤ اَعْلَمُ مَا لَا تَعْلَمُوْنَ ۝ۚۙۙ (البقرة/2: 30)

Meaning: (Remember) when your Lord said to the angels, “I am going to appoint a khalifah<sup>13</sup> on earth.” They said, “Will You appoint someone who will cause corruption and shed blood there, while we glorify You with praises and sanctify Your name?” He said, “Indeed, I know what you do not know.”

The verse explains that humans are given the mandate to manage and prosper the earth responsibly. The position as khalifah indicates that humans do not have the right to exploit nature excessively, but are obligated to preserve the sustainability of the ecosystem (Ulya et al., 2024). This responsibility includes the wise utilization of natural resources as well as preventing various forms of environmental destruction. Thus, the value of khalifah contains an ecological meaning of responsibility and environmental leadership oriented toward sustainability.

This interpretation is consistent with recent scholarship in Islamic ecotheology, which argues that the concept of khalifah should be understood primarily as an ethical responsibility rather than as a theological justification for human domination over nature. Through an examination of classical interpretations by al-Ṭabarī, Ikhwān al-Ṣafā, Ibn Taymiyyah, Ibn 'Arabī, and Mullā Ṣadrā demonstrates that despite their diverse theological and philosophical perspectives, these scholars consistently associate khalifah with justice, moral responsibility, trusteeship, protection, and stewardship of creation. Although classical exegetes did not explicitly discuss contemporary environmental issues, the ethical values embedded in their interpretations provide a normative foundation that remains highly relevant for addressing today's ecological crisis.<sup>17</sup> Therefore, interpreting khalifah as ecological stewardship in the context of Green Pedagogy represents a contextual application of classical Islamic ethical principles rather than a departure from the original Qur'anic discourse.

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<sup>17</sup> Aulia Rakhmat, “Islamic Ecotheology: Understanding the Concept of Khalifah and the Ethical Responsibility of the Environment,” *Academic Journal of Islamic Principles and Philosophy* 3, no. 1 (2022): 22–23, <https://doi.org/10.22515/ajipp.v3i1.5104>.

## The Value of Amanah as Ecological Responsibility

The value of amanah is the ethical consequence of the mandate of stewardship given by Allah to humankind. Amanah places human beings as those entrusted to manage the earth according to the provisions and purposes of its creation. From the perspective of Islamic eco-theology, the environment is viewed as a trust that must be safeguarded and passed on to the next generation in good condition. This principle affirms that any act causing environmental degradation constitutes a betrayal of the amanah given by Allah.<sup>18</sup> Therefore, amanah becomes the moral foundation for developing responsible and sustainable environmental management attitudes.

## The Value of Mizan as Balance

The value of mizan, or balance, is an ecological principle emphasized in QS. Ar-Rahman [55]:7–9:

﴿ وَالسَّمَاءَ رَفَعَهَا وَوَضَعَ الْمِيزَانَ ۚ أَلَّا تَطْغَوْا فِي الْمِيزَانِ ۚ ۝ ۸ وَأَقِيمُوا الْوَزْنَ بِالْقِسْطِ وَلَا تُخْسِرُوا الْمِيزَانَ ۚ ۝ ۹ ﴾  
(الرحمن/55: 7-9)

Meaning: (7) He raised the heaven high and established the balance (of justice and equilibrium).

(8) So that you do not transgress in the balance. (9) Uphold the balance with justice and do not reduce the balance. (Ar-Rahman/55:7–9)

The verse explains that Allah created the universe based on specific measures and balance that must be preserved by humans. Ecological balance is a key requirement for the continuity of life because all components of nature are interconnected and influence one another. Damage to one element of the environment has the potential to disrupt the entire system of life (Jamal et al., 2025, p. 6). Therefore, the value of mizan teaches the importance of maintaining harmony between human needs and the carrying capacity of the environment.

## The Value of Prohibits Destruction (Fasād) as a Principle for Preventing Destruction

The value of prohibits destruction (Fasād) is derived from the prohibition against causing corruption on earth as emphasized in QS. Al-A'raf [7]:56 and QS. Ar-Rum [30]:41:

﴿ وَلَا تُفْسِدُوا فِي الْأَرْضِ بَعْدَ إِصْلَاحِهَا وَادْعُوهُ خَوْفًا وَطَمَعًا ۚ إِنَّ رَحْمَتَ اللَّهِ قَرِيبٌ مِّنَ الْمُحْسِنِينَ ۝ ۵۶ ﴾ (الاعراف/7: 56)

Meaning: Do not cause corruption on the earth after it has been set in order. Call on Him with fear and hope. Indeed, the mercy of Allah is near to those who do good. (Al-A'raf/7:56)

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<sup>18</sup> Muhajirin Ansori Situmorang, "Islamic Perspective And The Public Awareness In Protecting Of Environment," *International Journal Of Education, Social Studies, And Management (IJESSM)*, advance online publication, 7 Agustus 2024, 45, <https://doi.org/10.52121/ijessm.v4i2.383>.

﴿ظَهَرَ الْفَسَادُ فِي الْبَرِّ وَالْبَحْرِ بِمَا كَسَبَتْ أَيْدِي النَّاسِ لِيُذِيقَهُمْ بَعْضَ الَّذِي عَمِلُوا لَعَلَّهُمْ يَرْجِعُونَ ٤١﴾ (الرّوم/30:41)

Meaning: Corruption has appeared on land and sea because of what the hands of people have earned. (Through this) Allah makes them taste some of (the consequence) of their deeds, so that they may return (to the right path). (Ar-Rum/30:41)

The Qur'an explains that various forms of destruction occurring on land and at sea are the result of human actions that exceed boundaries. Environmental damage, in the Islamic perspective, is not only viewed as an ecological issue but also as a moral and spiritual one. Uncontrolled exploitation of natural resources, environmental pollution, and ecosystem destruction are forms of fasād that must be avoided. Thus, the value of prohibits destruction (fasād) embodies the principle of preventing destruction and ecological responsibility in all human activities.

### **The Value of Prohibits Wastefulness (Isrāf) as a Principle of Wisdom**

The value of prohibits wastefulness (isrāf) relates to the prohibition of excess in utilizing natural resources as described in QS. Al-A'raf [7]:31:

﴿يَا بَنِي آدَمَ خُذُوا زِينَتَكُمْ عِنْدَ كُلِّ مَسْجِدٍ وَكُلُوا وَاشْرَبُوا وَلَا تُسْرِفُوا إِنَّهُ لَا يُحِبُّ الْمُسْرِفِينَ ٣١﴾ (الاعراف/7:31)

Meaning: O children of Adam, wear your beautiful apparel when entering every mosque, eat and drink, but do not be excessive. Indeed, He does not like those who are excessive. (Al-A'raf/7:31)

Islam teaches that humans are allowed to benefit from the various provisions of nature, but are not permitted to go beyond reasonable needs. Consumptive behavior and extravagance are seen as actions that may disrupt environmental balance and diminish the rights of future generations. This principle shows that environmental sustainability is closely related to daily human consumption patterns. Therefore, the value of prohibits wastefulness (isrāf) is the basis for developing a culture of responsible and sustainable consumption.

Based on thematic analysis of the ecological verses of the Qur'an, this study identifies five core socio-theological values of Islam that are interconnected. The value of khalifah emphasizes human ecological responsibility as the steward of the earth, whereas amanah underscores the moral duty to protect the environment. The value of mizan teaches the importance of maintaining ecological balance, while prohibits destruction (fasād) serves as a principle for preventing environmental damage. prohibits wastefulness (isrāf) stresses the significance of wise and

sustainable consumption patterns. These five values form the normative foundation underpinning the development of an Islamic eco-theological model of green pedagogy.

### Practical Dimensions of Ecotheology in the Sunnah

The ecological values contained in the Qur'an receive practical reinforcement through various hadiths of the Prophet Muhammad SAW. The Sunnah not only explains normative principles regarding human relations with the environment but also provides concrete examples of their implementation in daily life. Numerous hadiths demonstrate that concern for the environment is an integral part of Islamic teachings that must be realized through concrete actions. Therefore, the Sunnah serves as a practical manifestation of the ecotheological values outlined in the Qur'an. The interconnection between the Qur'an and Sunnah forms a holistic and applicable framework for Islamic environmental ethics.

In a hadith narrated by Ibn Mājah (no. 425), the Prophet saw Sa'ad bin Abi Waqqāṣ using excessive water during wuḍū' (ablution), and he said:

"لَا تُسْرِفْ فِي الْمَاءِ"

"Do not be excessive in using water." Sa'ad then asked, "Is there israf (wastefulness) even when performing wuḍū', O Messenger of Allah?" Rasulullah replied:

"نَعَمْ، وَإِنْ كُنْتَ عَلَى نَهْرٍ جَارٍ"

"Yes, even if you are by a flowing river."

This message indicates that the principles of efficiency and resource conservation apply under all circumstances. The wise use of resources is part of a Muslim's moral responsibility toward the environment. Thus, this hadith strengthens the principle of sustainable consumption contained in the prohibits wastefulness (israf) value.

The hadith encouraging the planting of trees illustrates the implementation of the values of khalifah and amanah in the form of productive actions that benefit the environment.

حَدَّثَنَا يَحْيَى بْنُ يَحْيَى وَقُتَيْبَةُ بْنُ سَعِيدٍ وَمُحَمَّدُ بْنُ عَبْدِ الْعَبْرِيِّ وَالْفَظُّ لِيَحْيَى قَالَ يَحْيَى أَخْبَرَنَا وَ

قَالَ الْآخَرَانِ حَدَّثَنَا أَبُو عَوَانَةَ عَنْ قَتَادَةَ عَنْ أَنَسٍ قَالَ قَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ مَا

مِنْ مُسْلِمٍ يَغْرِسُ غَرْسًا أَوْ يَزْرَعُ زَرْعًا فَيَأْكُلُ مِنْهُ طَيْرٌ أَوْ إِنْسَانٌ أَوْ بَهِيمَةٌ إِلَّا كَانَ لَهُ بِهِ صَدَقَةٌ

Meaning: “Hadith from Anas r.a. who said: Rasulullah S.a.w. said: Whenever a Muslim plants a tree or sows seeds in the ground, and then a bird, human, or animal eats from it, whatever is eaten is considered charity for him. (HR Imam Bukhari)”

The Prophet Muhammad SAW explained that every tree planted and yielding benefit for humans or other living beings is regarded as charity. This teaching shows that environmental preservation has not only ecological value, but also spiritual and social dimensions. Planting trees is viewed as an act of active contribution to the sustainability of life. Therefore, this hadith reinforces human responsibility as a steward of the earth who must bring benefit to all creatures.

In addition, the hadith regarding reviving dead land highlights the importance of restoration and environmental rehabilitation efforts.

حَدَّثَنَا مُحَمَّدُ بْنُ بَشَّارٍ حَدَّثَنَا عَبْدُ الْوَهَّابِ حَدَّثَنَا أَيُّوبُ عَنْ هِشَامِ بْنِ عُرْوَةَ عَنْ وَهْبِ بْنِ كَيْسَانَ عَنْ جَابِرِ بْنِ عَبْدِ اللَّهِ عَنْ النَّبِيِّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ قَالَ مَنْ أَحْيَى أَرْضًا مَيِّتَةً فَهِيَ لَهُ  
قَالَ أَبُو عِيسَى هَذَا حَدِيثٌ حَسَنٌ صَحِيحٌ

Meaning: [Muhammad bin Bashshar] narrated to us, [Abdul Wahhab] narrated to us, [Ayyub] narrated to us from [Hisyam bin Urwah] from [Wahb bin Kaisan] from [Jabir bin Abdullah] from the Prophet shallallahu 'alaihi wa sallam, who said: "Whoever revives dead land (opens new land), then the land becomes his." Abu Isa said: This hadith is hasan sahih.

The Prophet Muhammad SAW gives appreciation to individuals able to utilize and manage land that had previously been unproductive. This principle reflects Islam's orientation towards the productive and sustainable use of natural resources. Environmental restoration is seen as a positive act that can enhance human welfare while safeguarding ecosystem sustainability. Thus, this hadith expands the meaning of ecological responsibility from merely preserving to also restoring damaged environments and reinforces the principle of environmental stewardship, placing humans as guardians of life in all its dimensions.<sup>19</sup>

### **Development of a Green Pedagogy Model Based on Qur'anic and Sunnah Ecotheology**

The analysis of Qur'anic and Sunnah ecotheological values shows that Islamic teachings not only provide a normative foundation for environmental ethics but also offer principles that can be transformed into educational practice. In the context of sustainable education, these values must

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<sup>19</sup> Situmorang, "Islamic Perspective And The Public Awareness In Protecting Of Environment," 773.

be translated into a pedagogical framework that can shape ecological knowledge, attitudes, and behaviors in students. Such transformation is important because the aim of environmental education is not merely to increase ecological literacy but also to develop character and actions that are responsible towards the environment. Based on the results of conceptual analysis, this study develops a Green Pedagogy model based on Qur’anic and Sunnah ecotheology, which integrates Islamic ecological values with the principles of Education for Sustainable Development (ESD). This model is designed as a conceptual framework to support the strengthening of SDG 4.7 and SDG 13 through the teaching of Islamic Religious Education.

**Table 1.** Transformation of Ecotheological Values into Green Pedagogy Components

| <b>Ecotheological Value</b>           | <b>Ecological Meaning</b> | <b>Komponen Green Pedagogy</b>   |
|---------------------------------------|---------------------------|----------------------------------|
| <i>Khalifah</i>                       | Ecological responsibility | <i>Ecological Responsibility</i> |
| <i>Amanah</i>                         | Environmental management  | <i>Environmental Stewardship</i> |
| <i>Mizān</i>                          | Ecological balance        | <i>Sustainable Thinking</i>      |
| <i>Prohibits Destruction (Fasād)</i>  | Prevention of damage      | <i>Environmental Ethics</i>      |
| <i>Prohibits Wastefulness (Isrāf)</i> | Sustainable consumption   | <i>Sustainable Lifestyle</i>     |

This mapping shows that each Islamic ecotheological value has strong relevance to the goals of sustainable education. The value of khalifah is translated into the concept of ecological responsibility, which emphasizes students’ awareness of their role as guardians and managers of the environment. The value of amanah is oriented towards environmental stewardship, encouraging students to manage the environment responsibly in accordance with the purposes and objectives of creation. The value of mizan is developed into sustainable thinking, teaching the importance of balancing human needs and ecosystem carrying capacity.<sup>20</sup> Meanwhile, the values of prohibits destruction (fasād) and wastefulness (isrāf) are directed towards building environmental ethics and a sustainable lifestyle, which are essential prerequisites for facing the challenges of contemporary ecological crises.

<sup>20</sup> Khairunnas Jamal dkk., “Theology of Marine Ecosystems from the Perspective of the Al-Qur’an and Its Relevance to Indonesia for Marine Areas Strengthening Pursuant to Law No. 32 of 2014,” *Pharos Journal of Theology* 106, no. 3 (2025): 6, <https://doi.org/10.46222/pharosjot.106.3015>.

**Table 2.** Components of the Green Pedagogy Model Based on Islamic Ecotheology

| Component                       | Pedagogical Function                                                |
|---------------------------------|---------------------------------------------------------------------|
| <i>Ecological Literacy</i>      | Understanding environmental issues from an Islamic perspective      |
| <i>Critical Reflection</i>      | Reflecting on the moral impacts of human actions on the environment |
| <i>Value Internalization</i>    | Instilling Islamic ecotheological values                            |
| <i>Action-Oriented Learning</i> | Encouraging concrete actions for environmental preservation         |

The Green Pedagogy model developed in this study consists of four main components: ecological literacy, critical reflection, value internalization, and action-oriented learning. Ecological literacy functions to build students' understanding of environmental issues based on scientific perspectives and Islamic values, defined as the capacity to understand how humans and societies relate to each other and to natural systems sustainably.<sup>21</sup> Critical reflection encourages students to critically examine the relationship between human behavior and various ongoing ecological problems, in line with a transformative learning approach that positions critical reflection as an essential strategy for achieving ESD goals.<sup>22</sup> Value internalization serves to instill the values of khalifah, amanah, mizan, prohibits destruction (fasād), and wastefulness (isrāf) as moral foundations for interacting with the environment through a process of cognitive, affective, and psychomotor transformation that occurs continuously.<sup>23</sup> Action-oriented learning is directed at creating learning experiences that motivate students to develop competencies for concrete actions in protecting and restoring the environment, as a core realization of ESD that positions learners as active agents of change.<sup>24</sup>

### Conceptual Model of Green Pedagogy Based on Qur'anic and Sunnah Ecotheology

Based on the conceptual synthesis conducted (figure 1), this study produces a Green Pedagogy model based on Qur'anic and Sunnah-based ecotheology, which positions the values

<sup>21</sup> Molly D. Anderson, "Ecological Literacy. Education and the Transition to a Postmodern World," *American Journal of Alternative Agriculture* 7, no. 1–2 (1992): 3, <https://doi.org/10.1017/S0889189300004537>.

<sup>22</sup> Anne Fox dan Christine Wogowitsch, "Green Pedagogy: Using Confrontation and Provocation to Promote Sustainability Skills," dalam *Teacher Education in the 21st Century - Emerging Skills for a Changing World*, ed. oleh Maria Jose Hernández-Serrano (IntechOpen, 2021), <https://doi.org/10.5772/intechopen.96432>.

<sup>23</sup> Eko Nursalim dkk., "Model of Internalization Religious Character Values to Strengthen Moral Student," *TARBIYA: Journal of Education in Muslim Society* 10, no. 2 (2024): 163, <https://doi.org/10.15408/tjems.v10i2.37575>.

<sup>24</sup> Bjarne Bruun Jensen dan Karsten Schnack, "The Action Competence Approach in Environmental Education," *Environmental Education Research* 3, no. 2 (1997): 474–75, <https://doi.org/10.1080/1350462970030205>.

of Islamic ecotheology as the primary foundation of the educational process. These values are integrated into four interrelated pedagogical components: ecological literacy, critical reflection, value internalization, and action-oriented learning, thereby shaping a holistic and transformative learning process. The learning process developed through these four components is expected to cultivate ecological character, as marked by increased environmental awareness, ecological responsibility, and sustainable living behavior. This ecological character subsequently contributes to achieving the goals of education for sustainability and climate action as formulated in SDG 4.7 and SDG 13, which mandate the realization of sustainability competencies in cognitive, affective, and behavioral domains in an integrated manner. Thus, the developed model not only possesses a strong theological foundation but is also relevant to the global sustainable development agenda and holds potential as a reference framework for developing an Islamic Religious Education curriculum oriented towards sustainability.

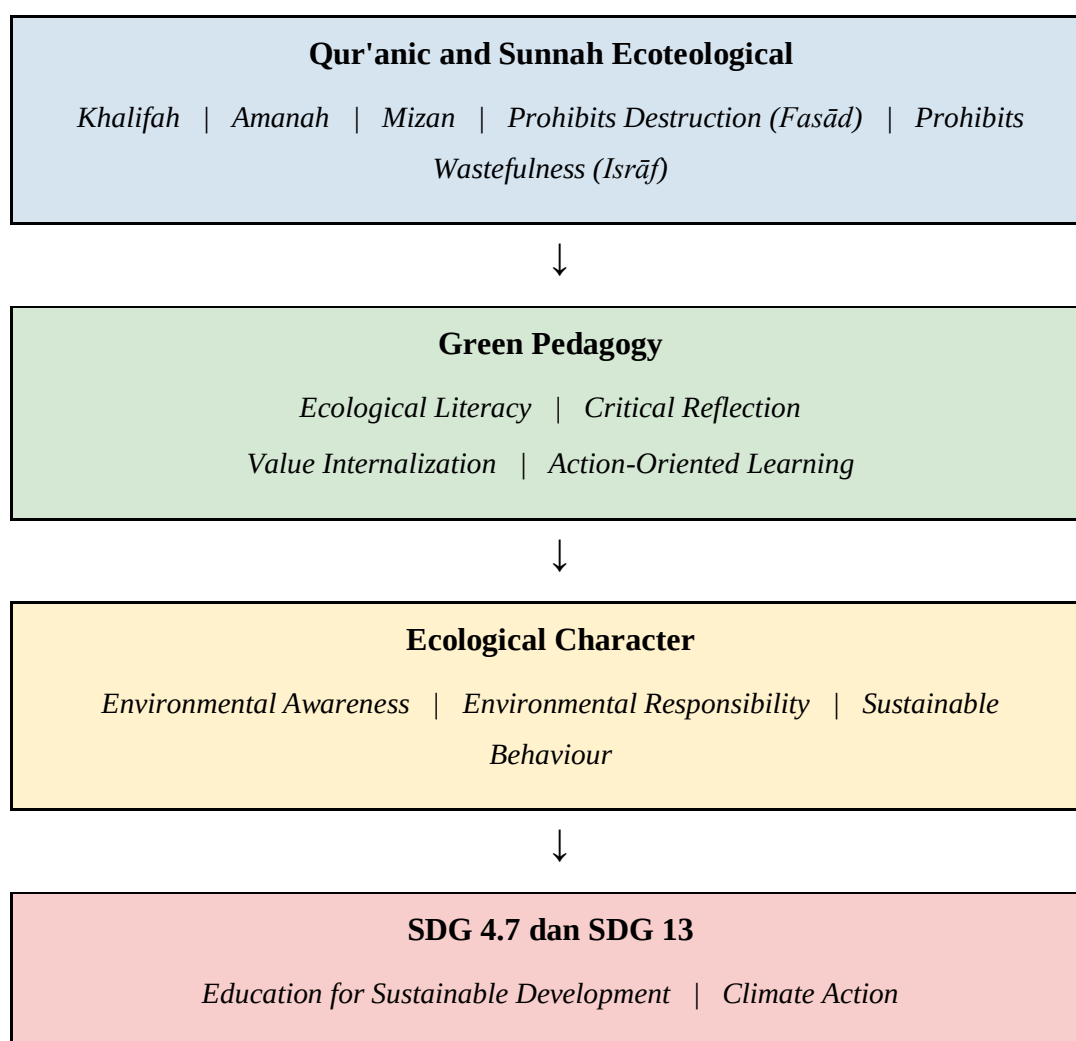


**Figure 1.** Conceptual Model of Green Pedagogy Based on Qur'anic and Sunnah Ecotheology

## Contribution of the Green Pedagogy Model to Strengthening SDG 4.7 and SDG 13

The Green Pedagogy model based on Qur'anic and Sunnah ecotheology developed in this study is closely linked to the global sustainable development agenda. This connection is especially evident in its contribution to achieving SDG 4.7, which focuses on Education for Sustainable Development, and SDG 13, which emphasizes the importance of climate action.<sup>25</sup> Both targets position education as a strategic instrument in building awareness, knowledge, values, and behaviors that support sustainability.<sup>2627282930</sup> In this context, Green Pedagogy functions not only as a learning approach but also as a means of social and ecological transformation. Therefore, analysis of the model's relevance to the SDGs becomes important to demonstrate the conceptual and practical significance of the developed model.

### Contribution to SDG 4.7

SDG 4.7 targets emphasize the importance of ensuring that all learners acquire the knowledge and skills needed to support sustainable development through education (UNESCO, 2020, p. 11). The ecological literacy component in the Green Pedagogy model directly contributes to this goal by building learners' understanding of environmental issues from both scientific and religious perspectives, in alignment with the basic conception of ecological literacy as the capacity to understand the relationship between humans and natural systems sustainably. In addition, the critical reflection component encourages learners to develop critical thinking skills regarding various ecological issues faced by contemporary society, a competence deemed essential in transformative Green Pedagogy approaches (Fox & Wogowitsch, 2021). The process of internalizing the values of khalifah, amanah, mizan, prohibits destruction (fasād) and wastefulness (isrāf) also reinforces the affective dimension of sustainability education, which is a key aspect in achieving SDG 4.7, considering that value and motivation formation are acknowledged as part of the learning domains for sustainability recognized by UNESCO (UNESCO, 2017, p. 7). Thus, the developed model not only enhances environmental knowledge but also shapes values and character that support sustainability (Rohman et al., 2024, p. 201).

### Contribution to SDG 13

Besides supporting SDG 4.7, the Green Pedagogy model based on Qur'anic and Sunnah ecotheology is also highly relevant to SDG 13 concerning Climate Action. Target 13.3 of SDG 13

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<sup>25</sup> Obi dan Ojo, "Mainstreaming Climate Change in School Curricula," 1.

<sup>26</sup> Wals dan Benavot, "Can We Meet the Sustainability Challenges?," 404–5.

<sup>27</sup> Anderson, "Ecological Literacy. Education and the Transition to a Postmodern World," 3.

<sup>28</sup> Matthew B. Miles dan A. Michael Huberman, *Qualitative Data Analysis: An Expanded Sourcebook* (SAGE, 1994), 434.

<sup>29</sup> Mestika Zed, *Metode Penelitian Kepustakaan* (Yayasan Pustaka Obor Indonesia, 2014), 4–5.

<sup>30</sup> United Nations, "Climate Reports," United Nations, United Nations, 2025, <https://www.un.org/en/climatechange/reports>.

explicitly emphasizes the importance of improving education, awareness, and human and institutional capacity to address mitigation, adaptation, and reduction of climate change impacts (United Nations, 2015). Within the developed model, the action-oriented learning component provides space for learners to translate ecological knowledge and values into concrete actions that support environmental conservation, in line with the action competence approach that is central to effective ESD (Jensen & Schnack, 2006, pp. 474-475). Activities such as resource conservation, tree planting, waste management, and environmental campaigns can serve as concrete forms of action-oriented learning implementation (Mukhsin & Alfani, 2025, p. 183). Therefore, this model holds the potential to foster pro-environmental behaviors aligned with the global climate action agenda as stipulated by SDG 13.

### Synthesis of Model Contribution to the SDGs

**Table 1.** Synthesis of Model Contribution to the SDGs

| Model Component                 | SDG 4.7                                    | SDG 13                                                 |
|---------------------------------|--------------------------------------------|--------------------------------------------------------|
| <i>Ecological Literacy</i>      | Education for sustainable development      | Increased climate awareness                            |
| <i>Critical Reflection</i>      | Strengthening critical thinking competence | Analysis of climate change impacts                     |
| <i>Value Internalization</i>    | Formation of sustainability values         | Enhancement of environmental ethics                    |
| <i>Action-Oriented Learning</i> | Participation in sustainable development   | Concrete actions for climate mitigation and adaptation |

The mapping results show that each component within the Green Pedagogy model has a complementary relationship with the targets of SDG 4.7 and SDG 13. Ecological literacy and critical reflection contribute to reinforcing the cognitive dimension by enhancing students' knowledge and critical thinking skills (Fox & Wogowitsch, 2021). Meanwhile, value internalization strengthens the affective dimension by instilling sustainability values derived from Islamic teachings (Nursalim et al., 2023). The action-oriented learning component complements these two dimensions through the development of behaviors and concrete actions that support environmental conservation and climate action (Jensen & Schnack, 2006, pp. 474-475). The integration of knowledge, values, and actions demonstrates that the developed Green Pedagogy model is strongly aligned with the objectives of global education for sustainability as formulated in the three learning domains of ESD as established by UNESCO (UNESCO, 2017, p. 7).

Overall, the Green Pedagogy model based on Al-Qur'an and Sunnah ecotheology demonstrates significant potential in supporting the achievement of SDG 4.7 and SDG 13. This model integrates the cognitive, affective, and behavioral dimensions into a single pedagogical framework grounded in Islamic values, in harmony with the three sustainability learning domains formulated by UNESCO (UNESCO, 2017, p. 7). Such integration enables environmental education to focus not only on knowledge transfer, but also on the development of character and concrete actions by learners (Rohman et al., 2024, p. 201). In the context of Islamic Religious Education, this model offers an alternative learning approach that is more responsive to the challenges of the global environmental crisis. These findings also affirm that Islamic ecotheology holds strong relevance in supporting the 21st-century sustainable development agenda.

### **Implications of the Model for Sustainability-Oriented Islamic Religious Education**

The Green Pedagogy model based on Qur'anic and Sunnah-based ecotheology developed in this study has significant implications for the development of Islamic Religious Education (PAI) oriented towards sustainability. Thus far, PAI learning has often focused more on mastery of cognitive aspects and normative understanding of religious teachings, whereas the implementation of PAI in public schools tends to emphasize cognitive aspects while paying insufficient attention to affective and psychomotor aspects, which are, in fact, crucial for shaping students' ecological behavior.<sup>31</sup> The challenges of the global environmental crisis demand that religious education also contributes to shaping students' ecological awareness and responsibility in a more comprehensive manner. By integrating the values of *khalifah*, *amanah*, *mizān*, *prohibits destruction (fasād)* and *wastefulness (isrāf)*, PAI can serve as a means of developing ecological character grounded in Islamic teachings, as research shows that integrating environmental literacy into PAI has proven effective in increasing ecological understanding, strengthening religious values, and fostering students' environmental responsibility.<sup>32</sup> Thus, religious education is oriented not only towards individual piety but also towards social and ecological piety.

The implications of this model are also evident in the development of curriculum and learning processes in PAI. Islamic ecotheological values can be integrated into teaching materials, learning activities, as well as contextually relevant environment-based projects, as it has been asserted that integrating the PAI curriculum with an environment-conscious school culture is proven effective in building students' ecological awareness through thematic curriculum

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<sup>31</sup> Aziza Aryati dkk., "Model Development of Rejang Culture-Cased Islamic Religious Education Textbook to Improve Hard Work Character," *Jurnal Konseling Dan Pendidikan* 10, no. 3 (2022): 425, <https://doi.org/10.29210/184900>.

<sup>32</sup> Enik Ruchana dkk., "Development of Religion-Based Digital Comic Media to Improve Environmental Literacy in Primary School Students," *Journal of Innovation and Research in Primary Education* 4, no. 3 (2025): 987, <https://doi.org/10.56916/jirpe.v4i3.1511>.

approaches, habituation, and educator collaboration.<sup>33</sup> A learning approach that emphasizes ecological literacy, critical reflection, value internalization, and action-oriented learning allows students to understand environmental issues more comprehensively, considering that systematic reviews of environmental education literature emphasize that ecological literacy functions as a bridge between the transformative goals of environmental education and students' capacity to participate in sustainability-oriented systemic change.<sup>34</sup> In addition to gaining knowledge, students are also encouraged to develop attitudes and behaviors that support environmental sustainability. Therefore, this model can serve as one of the alternative pedagogical innovations in PAI learning in the era of sustainable development.

Furthermore, implementation of the Green Pedagogy model has the potential to support the realization of an environmentally friendly and sustainability-oriented school culture. Islamic Religious Education can function as a driver for the internalization of ecological values through various academic and non-academic activities, since studies on character-based environmental education literature affirm that schools play a significant role in building ecological awareness through a curriculum that integrates sustainability, green school programs, project-based environmental learning, teacher role models, environmentally-oriented school culture, and community engagement.<sup>35</sup> The integration of Islamic teachings and environmental education can also strengthen the contribution of educational institutions in supporting the achievement of SDG 4.7 and SDG 13, as the integration of Islamic-based environmental education in Islamic educational institutions, including through eco-pesantren practices and green madrasa programs, is confirmed to have significant potential in instilling sustainability values aligned with SDG 4 and SDG 13 targets.<sup>36</sup> In this context, schools are not merely places for knowledge transfer, but also spaces for fostering habits and actions that are responsible toward the environment. Accordingly, the model developed has theoretical and practical relevance in strengthening the role of Islamic Religious Education as an agent of transformation toward a more sustainable society.

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<sup>33</sup> Farisatun Nabila dan Adri Efferi, "Integrasi Pembelajaran PAI Dengan Budaya Sekolah Peduli Lingkungan Dalam Membangun Kepedulian Lingkungan Di Sekolah Alam Islam Aisyah Radhiyallahu'Anha," *Panthera: Jurnal Ilmiah Pendidikan Sains Dan Terapan* 5, no. 4 (2025): 1153, <https://doi.org/10.36312/panthera.v5i4.685>.

<sup>34</sup> Rosemarie Desmarais, "Ecological Literacy: Definition, Early Articulations, Frameworks and Empirical Research," *The Journal of Sustainability Education* 29 (2024), <https://www.susted.com/wordpress/wp-content/uploads/2024/04/Desmarais-JSE-March-2024-General-Issue-PDF.pdf>.

<sup>35</sup> Ardiyanto Saleh Modjo, "The Role of Schools in Promoting Environmental Awareness and Green Living," *MSJ: Majority Science Journal* 3, no. 4 (2025): 150, <https://doi.org/10.61942/msj.v3i4.461>.

<sup>36</sup> Iin Indra Nuraeni dkk., "Green Islamic Education: Integrating Eco-Theological Values into Islamic Curriculum to Address the Global Environmental Crisis," *At Turots: Jurnal Pendidikan Islam* 7, no. 2 (2025): 1335, <https://doi.org/10.51468/jpi.v7i2.1166>.

## CONCLUSION

This study concludes that Islamic ecotheology provides a strong theological and ethical foundation for developing a sustainability-oriented green-pedagogy model. Through thematic analysis of ecological verses in the Qur'an and relevant Sunnah traditions, five core ecotheological values were identified: *khalīfah*, *amanah*, *mīzān*, *prohibits destruction (fasād)* and *wastefulness (isrāf)*. These values were subsequently transformed into a conceptual green pedagogy framework consisting of ecological literacy, critical reflection, value internalization, and action-oriented learning. The model offers an integrative approach that connects Islamic teachings with contemporary environmental education. This strengthens the role of Islamic Religious Education in fostering ecological awareness, responsibility, and sustainable behavior among learners.

Furthermore, the proposed model demonstrates strong conceptual alignment with the objectives of SDG 4.7 and SDG 13 by integrating the cognitive, affective, and behavioral dimensions of sustainability learning. The model positions Islamic Religious Education not only as a medium for transmitting religious knowledge but also as a transformative instrument for addressing contemporary environmental challenges. Its integration into curriculum design and learning practices has the potential to support the development of environmentally responsible school cultures and sustainability-oriented educational programs in the future. Nevertheless, this study is limited to conceptual and library-based inquiries without empirical implementation in educational settings. Therefore, future research should test the effectiveness and applicability of the model in schools, madrasahs, and other Islamic educational institutions.

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