

## Planting Trees as an Investment for the Hereafter: Integrating the Prophet's Hadith and Scientific Data on the Number of Trees in the World into Sustainable Environmental Education

Annisa Putri Nabila  
Muhammad Mirzan

[annisaputrinabila\\_student@radenfatah.ac.id](mailto:annisaputrinabila_student@radenfatah.ac.id)  
[muhammadmirzan@radenfatah.ac.id](mailto:muhammadmirzan@radenfatah.ac.id)

*Affiliation (Universitas Islam Negeri Raden Fatah, Palembang)*

### ABSTRACT

*This study aims to examine the ecological principles in the hadiths of the Prophet Muhammad and integrate them with the latest scientific data on global ecosystem conditions, particularly the number of trees on earth, to develop a sustainable environmental education model based on Islamic values. This study employs a qualitative approach, utilizing a library research method through content analysis of ecological hadiths, hadith interpretation literature, and modern scientific publications on forestry and climate change. The results show that the Prophet's hadiths on tree planting, the prohibition of destroying nature, and the mandate of humans as caliphs of the earth are strongly consistent with modern scientific principles regarding the role of trees in maintaining carbon balance and biodiversity. This normative-spiritual and scientific integration gives rise to the paradigm of eco-Islamic pedagogy, an educational approach that fosters faith-based ecological awareness while being grounded in scientific evidence. This model emphasizes thematic learning, project-based activities, and community involvement to shape the character of students who are faithful, knowledgeable, and ecologically conscious. This study concludes that environmental conservation is an expression of faith and moral responsibility in Islam. Future research recommendations include the need to develop the implementation of eco-Islamic pedagogy in Islamic educational institutions through adaptive curricula and interdisciplinary collaboration between scholars, educators, and environmental scientists.*

**Keywords:** *Ecological Hadith; Islamic Education; Eco-Islamic Pedagogy*

### Introduction

The global ecological crisis has highlighted the sustainability of terrestrial vegetation as a major issue, given the crucial role trees play in carbon sequestration, biodiversity maintenance, and ecosystem resilience enhancement.

A global mapping study estimates that there are approximately 3.04 trillion trees on Earth, revising previous estimates and confirming that trees are a vital component of the biosphere. This finding indicates two things: first, the Earth has great ecological potential for restoration; second, the increasing loss of tree cover, especially in tropical regions, remains a serious threat to the ability of ecosystems to store carbon and maintain biodiversity (Thomas W. Crowther, 2015).

Although the figure of three trillion trees appears encouraging, global monitoring data show that forest loss is still occurring, with millions of hectares lost in recent years. In addition, the vulnerability of tree species and habitat degradation exacerbate a crisis that is not reflected solely by the number of individual trees. In light of these findings, environmental education that emphasizes only quantitative aspects without considering ecosystem quality, biodiversity, and human factors is inadequate. In this context, integrating Islamic ecotheological values as a moral foundation with scientific evidence about the global forest condition is important for developing educational curricula and practices that encourage ecosystem restoration, deforestation prevention, and species conservation, towards an eco-Islamic pedagogy rooted in ethics and empirical evidence (Admin, 2024).

Previous research has been conducted by a number of researchers. Among the most recent research reports is that by Awan, Edi Kurniawan, et al. (2025), "Ecological Education in the Hadith of the Prophet: A Thematic Study of Hadith Related to the Environment," *Journal of the Indonesian Multidisciplinary Center*. This study aims to examine the hadiths of the Prophet Muhammad on the importance of environmental conservation. The method used is qualitative with a literature review approach to relevant hadiths and scientific interpretations. The results of the study show that the Prophet's teachings on ecology are comprehensive, relevant to modern environmental challenges, and can form the basis for the development of ecological education in Islam (Awan et al., 2025).

Then, this research was also conducted by Thomas W. Crowther et al. (2015), "Mapping Global Tree Density," *Nature Journal*. The purpose of this study was to spatially map the global tree population with an estimate of approximately 3.04 trillion trees worldwide, as well as to analyze the effects of climate, topography, and human activity on tree distribution and loss. The method used was quantitative. According to the study, the number of trees worldwide is estimated to reach 3.04 trillion, which is much higher than previous estimates. The largest trees are found in tropical, boreal, and temperate regions. The study also shows that human activity has led to the production of approximately 15 million trees each year and a 46% increase in the total number of trees since the beginning of human history (Thomas W. Crowther, 2015). Then, Ningsih, Tutuk., et al., (2022), "Integration of Science and Religion in Values Education," *IJORER: International Journal of Recent Educational Research*. The purpose of this study was to describe the application of the values education model in the integrative learning of science and religion at Al Irsyad Elementary School in Purwokerto. The method used was a qualitative-naturalistic approach with data collection techniques through observation, interviews, and documentation. The final results of the study showed that the integrative learning of science and religion was

applied effectively, so that students could understand the material more quickly and explore the values contained in the learning process (Ningsih et al., 2022).

Previous studies show that environmental studies from an Islamic perspective are generally still normative and descriptive (Awan et al., 2025), emphasizing the importance of environmental preservation through the Prophet's hadith, but have not linked it to scientific data (Thomas W. Crowther, 2015), focusing on quantitative mapping of global tree density without a religious dimension, while (Ningsih et al., 2022) highlights the integration of science and religion in values education without directly linking religious teachings to ecological data. This study aligns with the direction of previous research, but this study is different because it attempts to integrate the Prophet's hadiths on tree planting with global scientific data on the number of trees in the world as a basis for developing sustainable environmental education that combines the spiritual dimension of Islam and empirical scientific evidence.

As a logical flow, the research framework departs from the view that environmental preservation is a universal moral responsibility of humans that demands a balance between spiritual and empirical dimensions. In the Islamic perspective, this responsibility is rooted in the teachings of tawhid and khalifah amanah, which emphasize the harmonious relationship between humans and nature as a manifestation of obedience to Allah. The Hadith of the Prophet serves as a source of moral and environmental ethics that instills religious awareness of the importance of preserving nature as part of worship and spiritual responsibility. The normative values contained in the Hadith are then integrated with scientific data on the condition of the global ecosystem, particularly the role of trees in maintaining ecological balance. The integration of normative teachings and empirical evidence forms the framework of eco-Islamic pedagogy, an educational paradigm that fosters ecological awareness based on Islamic spiritual values while grounded in scientific facts, so that the line of reasoning in this research moves from the theological to the applied in the context of sustainable environmental education.

This research is based on three interrelated theoretical frameworks, namely Islamic eco-theology, sustainable education, and the integration of science and religion. Islamic eco-theology affirms the theological relationship between God, humans, and nature, in which environmental preservation is a form of obedience and responsibility as stewards of the earth (Nasr, 2003). The Prophet's hadith about the prohibition of destroying nature and the encouragement to plant trees is understood as an expression of Islamic ecological ethics. Furthermore, the theory of sustainable education emphasizes the importance of environmental awareness and behavior through learning that integrates cognitive, affective, and practical aspects (Tilburi, 2011). Meanwhile, the concept of the integration of science and religion asserts that scientific knowledge and divine revelation complement each other in understanding reality as a whole (Al-Attas, 1995). Thus, this study attempts to unite the spiritual and empirical dimensions in an eco-Islamic pedagogy model, which combines the values of the hadith with scientific data on global ecosystems to build ecological awareness based on faith and scientific rationality.

The main issue in this study focuses on how the integration between the Prophet's hadith and scientific data on ecosystems can be used as a basis for developing sustainable environmental education based on Islamic values. The purpose of this study is to describe the ecological principles contained in the Prophet's hadith, relate them to scientific findings regarding the role of trees in the ecological balance of the earth, and formulate an eco-Islamic education model that is in harmony with religious values and ecological awareness. Theoretically, this research is expected to contribute to the development of thematic hadith studies (*mawḍūʿī*) in the context of Islamic ecotheology. While in practical terms, the results are expected to enrich contemporary Islamic educational practices by instilling values of sustainable environmental preservation, so that Islamic education is not only oriented towards cognitive aspects, but also towards character building and moral responsibility towards God's creation.

## Research Method

This study uses a qualitative approach with a library research method, which is research that focuses on collecting, reviewing, and analyzing various literature sources relevant to the topic of study (Sulistiyo, 2023). Primary data were obtained from the Prophet Muhammad's hadiths related to nature conservation, the encouragement to plant trees, and the prohibition of damaging the environment, as stated in various hadith books. Secondary data included hadith interpretation literature, Islamic eco-theology books, scientific articles on sustainable education, and modern scientific publications on global ecological data. The analytical technique employed was content analysis, which involves interpreting the meaning of ecological hadiths and linking them to the latest scientific data to find conceptual integration between Islamic values and environmental sustainability principles. Through this approach, the study aims to build a holistic understanding of the spiritual and scientific relationship in Islamic-based environmental education.

## Results and Discussion

### ***1. Ecological Principles in the Hadith of the Prophet and the Foundations of Islamic Ecotheology***

In Islamic tradition, teachings about nature are not merely a symbolic background, but an integral part of the moral generation brought by the Prophet Muhammad as revelation and practical guidance. A study of hadiths related to the environment shows that Islam views humans not as absolute rulers of nature, but as caliphs who are entrusted (*amanah*) to care for and preserve the earth with full responsibility. Contemporary scholars increasingly reinforce that Islamic ecotheology, namely, theological reflections on the relationship between humans, nature, and God, is capable of presenting a normative paradigm in facing the modern ecological crisis (Basri et al., 2024).

Hadiths about planting trees and prohibiting environmental destruction are the most obvious aspects of ecological values in the Sunnah. For instance, a narration states that the Prophet said, *“If the Day of Judgment comes and one of you is holding a tree seedling in his hand, then if possible, before he puts it down, he should plant it”* (ecological thematic hadith). Such a narration implicitly emphasizes that every individual bears a direct responsibility to preserve nature through even small actions. Recent studies of nature-themed hadiths have found that most of them correlate with modern scientific principles, both in terms of conservation, ecosystem balance, and harmony between humans and other creatures (Romi et al., 2025).

The concepts of amanah and khalifah in the perspective of Islamic ecotheology place humans as God's representatives on earth with a moral obligation to maintain the balance of nature. This understanding is not merely normative, but ontological: humans were not created as plunderers, but as guardians responsible for all of God's creations around them. Within the framework of ecotheology, the relationship between humans and nature is one of glorification of God's creation, not exploitation for short-term interests. This paradigm becomes even more relevant when linked to the concepts of justice (adl) and balance (mizān), which are also enshrined in Islamic ethical principles (Basri et al., 2024).

Contemporary studies of hadith and environmental ethics highlight that these ecological values can be identified through thematic hadith methodology (mawḍūʿī). Research conducted by Winda Sari (2024) entitled *“Hadith and Environmental Ethics: An Ecological Perspective”* emphasizes that the Prophet's hadiths not only contain ritual and social guidelines, but also implicit and explicit environmental norms. For example, the prohibition of littering, damaging plants, or overexploiting living creatures is part of Islamic environmental ethics that is relevant to current challenges (Sari, 2024). This kind of research provides a methodological basis so that the exploration of ecological values is not ad hoc, but systematic and thematic.

In the context of contemporary Islamic thought, figures such as Sayyed Hossein Nasr have become important references in the development of Islamic moral environment. An analysis of Nasr's thought confirms that environmental ethics constitute an integral component of Islamic teachings because nature is a manifestation of God's power and greatness, not a secular object that can be treated arbitrarily (Lesi et al., 2025). Such a view supports the idea that creed (theology) and environmental ethics are interrelated and reinforce each other in modern Islamic ecotheology.

Thus, the ecological principles in the Prophet's hadith and the foundations of Islamic eco-theology offer a rich normative framework for grounding environmental ethics in the practices of contemporary Muslims. Through thematic interpretation of the hadith, understanding of amanah and khalifah, and consolidation of contemporary scholars' thoughts, this section confirms that Islam has a strong ethical basis for supporting the nature conservation movement in its spiritual and moral dimensions. This is an important foundation before

proceeding to discuss the application of these values in education and integration with scientific data.

## ***2. The Correlation Between Ecological Hadith and Scientific Findings on Global Ecosystems***

Building upon the previous discussion, the integration of religious textual sources in formulating relevant and evidence-based environmental education policies. In this context, hadiths that encourage tree planting, prohibit destruction of nature, and regulate human relationships with other living beings provide a rich normative foundation; however, for educational recommendations and conservation practices to be effective, these values need to be tested and linked to contemporary scientific findings on the role of trees and forests in the Earth system. Satellite observation data and modern scientific reviews show that tree cover and forest loss remain significant global dynamics: global monitoring reports and databases indicate increasing trends in tree cover loss in recent decades, with sharp regional variations and major impacts on carbon stocks, local hydrology, and biodiversity (Goldman, 2025). These findings confirm that religious exhortations to plant and care for trees are not only symbolic or ritualistic in value, but also align with scientifically documented ecological needs.

The correlation between hadith texts and scientific evidence can be analyzed at two levels: the functional level (what trees do for ecosystems) and the normative-practical level (how religious teachings encourage actions that lead to these ecological functions). At the functional level, environmental science studies mention the functions of trees as carbon sinks, habitats for biodiversity, regulators of the water cycle, and erosion control, which are directly relevant to the goals of climate mitigation and adaptation as well as biodiversity conservation. Major scientific reports and interdisciplinary reviews (e.g., the AFOLU chapter in IPCC AR6) place forest systems and land use as key sectors for emissions mitigation, while highlighting the risk that deforestation and degradation can reverse these benefits if not managed sustainably (Fujimori & Rosenstock, 2023). This functional relationship provides a point of intersection between what is mentioned in the hadith as a duty of care and what scientific evidence points to as an urgent ecological necessity.

At the normative-practical level, hadiths that encourage concrete actions such as planting trees even in dire situations reflect an ethic of sustainability that is in line with the solution-based approach of modern science. This moral message affirms that preserving nature is not merely a spiritual recommendation, but also a practical responsibility with real ecological implications. Thematic studies on ecological hadiths in the last five years show that the *mawdūʿī* (thematic) method of interpretation is capable of revealing ethical values that are relevant to pro-environmental behavior, especially when integrated contextually into educational curricula and community empowerment programs. Meanwhile, empirical findings from the social sciences show that when religious values are explicitly linked to concrete actions—such as planting trees as a form of worship and a carbon mitigation strategy—conservation initiatives gain stronger social legitimacy and broader public participation (Sari, 2024). Thus, a constructive

synergy is formed between religion and science: religion provides a moral foundation and long-term motivation, while science offers a functional basis and technical guidance to ensure that environmental conservation actions are effective and sustainable.

However, this integration requires methodological caution. First, not all actions mentioned in textual traditions can be directly translated into ecological policies without contextual adaptation. For example, planting trees of the wrong species or without considering local conditions can have adverse effects on local ecosystems. Therefore, the application of hadith values should be guided by place-based ecology so that ritual-ethical actions can be transformed into scientifically sound ecological practices. Second, there is a need to distinguish between quantitative evidence, such as changes in carbon stocks and forest cover, and normative interpretations to avoid instrumental reductionism, which is the use of religion solely as a promotional tool without recognition of scientific complexity (Hansen, 2013).

Finally, empirical evidence regarding the relationship between religiosity and pro-environmental behavior demonstrates that religious motivation can indeed increase environmental intentions and practices, but its effects depend on message formulation, institutional context, and local technical capacity and resources to implement recommended actions. Recent social psychology research confirms that religiosity influences through subjective norms and perceived behavioral control; thus, the integration of hadith and science in environmental education needs to be designed to reinforce social norms, provide practical skills, and mitigate structural barriers that hinder action—for example, access to suitable seeds, maintenance training, or supportive land policies (Karimi et al., 2022). In summary, the correlation between ecological hadith and scientific findings not only enables moral justification for conservation actions, but also demands an implementation framework supported by the latest scientific evidence and contextual and technical educational approaches.

### ***3. Formulation of the Eco-Islamic Pedagogy Education Model***

The development of an eco-Islamic pedagogy model requires a careful synthesis between Islamic theological values and contemporary pedagogical principles that have been proven effective in fostering pro-environmental behavior. In this framework, eco-Islamic pedagogy is understood not merely as the addition of environmental material to the religious curriculum, but as a curricular and instructional paradigm that integrates cognitive, affective, and psychomotor dimensions—namely, ecological knowledge, the formation of attitudes based on religious values, and practical skills for ecosystem care and restoration. Empirical studies show that integrating religious values into environmental programs increases social legitimacy and community participation in conservation activities. Consequently, an effective pedagogical model should design learning experiences in the form of practical activities (e.g., planting and managing school gardens) that are linked to spiritual meanings such

as amanah and khalifah so that students' intrinsic motivation is strengthened and sustained (Amrullah et al., 2025).

Conceptually, eco-Islamic pedagogy carries the principles of thematic and interdisciplinary teaching: religious texts (the Qur'an and hadith) are used as a starting point for reflection on values, then combined with environmental science that provides a functional and technical context for the recommended actions. This approach emphasizes two things at once: first, learning must demonstrate epistemic coherence between revelation and science so that students understand that Islamic moral principles have real ecological implications; second, education must be place-based so that the solutions taught are relevant to local ecological conditions and do not become ecologically counterproductive "ritual" actions (Khoiriyah et al. 2023). Recent studies on the integration of Islamic education and environmental programs in formal educational institutions and Islamic boarding schools emphasize the need for an adaptive curriculum that combines thematic texts, field practices, and measurable indicators of success (e.g., attitude change, active participation, and increased school vegetation cover) (Syukri et al., 2024).

Pedagogical implementation requires concrete learning designs: Project-based learning that integrates thematic hadith studies on nature with scientific activities (tree observation, biodiversity recording, groundwater absorption measurement) provides epistemic experiences for students—they not only learn that planting trees has religious value, but also understand how to choose suitable species, planting techniques, and long-term care (Juliani et al., 2024). In the context of Islamic schools and madrasas, such practices can be integrated into Islamic Religious Education (PAI), Science (IPA), and extracurricular activities; furthermore, institutional support in the form of teacher training, access to suitable plant materials, and partnerships with environmental agencies are prerequisites for program sustainability. Program evaluation should use mixed indicators: qualitative to capture internalization of values and changes in attitudes, and quantitative to measure ecological outcomes such as the number of living trees, green area, or increased biodiversity. The literature on Green Islamic School practices and the integration of environmental programs in Islamic boarding schools presents several implementation models and evaluation tools that can be adapted by researchers and practitioners.

From a curricular perspective, a strategic component is the development of dialogical teaching materials—presenting religious texts, scientific evidence, and local case studies in a series of lessons so that students are trained to think critically and reflectively. Such modules should include components of theological reflection (e.g., brief interpretations of verses/hadiths about nature), basic scientific knowledge (the function of trees, the carbon cycle, ecosystem services), and science-based practical action guidelines (selection of local species, proper reforestation techniques). This pedagogical approach also positions teachers as facilitators who are trained to link value discussions with field demonstrations so that the transfer of values is not only verbal but also contains direct experiences. A literature review on sustainable Islamic education emphasizes the importance of teacher capacity and institutional support as determining factors for the successful internalization of ecological values (Khoiriyah et al., 2023).

From a broader perspective, eco-Islamic pedagogy must be linked to sustainable development goals (SDGs), particularly those related to quality education, climate action, and life on land (SDGs 4, 13, and 15). Linking school programs to these targets helps secure policy support and resources from local and national stakeholders. Furthermore, a community-based approach involving families and local religious leaders increases the scope of impact and ensures that the values instilled in schools are connected to daily practices in the community (Husamah et al., 2025). Recent empirical studies show that programs combining religious messages with technical interventions tend to have higher social resilience, but still require long-term monitoring to assess ecological sustainability and behavioral change.

In summary, the formulation of an effective eco-Islamic pedagogy model requires the integration of (a) a theological foundation that makes environmental preservation a moral obligation, (b) a thematic curriculum that combines religious and scientific texts, (c) project-based and field experience learning methods, and (d) institutional support including teacher training, access to resources, and mixed indicator-based evaluation. This model must be contextual and adaptive so that the actions promoted provide tangible ecological benefits at the local level while strengthening the spiritual identity of students—a goal that is at the heart of eco-Islamic pedagogy: making caring for nature an expression of rational faith that has an ecological impact.

## Conclusion

Based on the findings, it can be concluded that the integration of the Prophet's hadith on environmental conservation with scientific data on global ecosystem conditions forms the conceptual foundation for the development of sustainable environmental education based on Islamic values. The Prophet's hadiths that emphasize tree planting, the prohibition of environmental destruction, and human responsibility as caliphs on earth, show a close alignment with modern scientific principles regarding the role of trees in maintaining carbon balance, biodiversity, and climate stability. This integration demonstrates that Islam encompasses not only spiritual and moral values, but also offers practical guidance relevant to efforts to preserve the global ecosystem.

Furthermore, the results of the analysis show that the eco-Islamic pedagogy model formulated through a synthesis of revelatory texts and empirical data can become a new paradigm in Islamic education. This model places environmental preservation as part of worship and moral responsibility, with a learning approach that combines cognitive, affective, and psychomotor aspects. Through thematic curricula, project-based learning, and community involvement, this paradigm is able to foster ecological awareness that is rooted in faith and oriented towards concrete action. Thus, this study confirms that Islamic education based on the integration of hadith and scientific values can make a significant contribution to the formation of a generation that is spiritual, scientific, and committed to environmental sustainability.

## References

- Admin. (2024). *Global Deforestation Rates and Statistics*. Global Forest Watch. [https://www.globalforestwatch.org/dashboards/global/?lang=id&utm\\_source=chatgpt.com](https://www.globalforestwatch.org/dashboards/global/?lang=id&utm_source=chatgpt.com)
- Al-Attas, S. M. N. (1995). *Prolegomena to the Metaphysics of Islam: An Exposition of the Fundamental Elements of the Worldview of Islam*. ISTAC.
- Amrullah, A. M. K., Murfi, A., Fauzi, A., & Basri, B. (2025). Integrasi Pendidikan Islam dengan Program Lingkungan: Strategi Pengembangan Karakter Berkelanjutan di SMA Negeri 2 dan 7 Malang, Indonesia. *Qualitative Report*, 30(3), 3276–3287. <https://doi.org/10.46743/2160-3715/2025.6020>
- Awan, E. K., Askar, R. A., & Ghofur, A. (2025). Pendidikan Ekologi dalam Hadis Nabi: Studi Tematik tentang Hadis yang Berkaitan dengan Lingkungan. *Jurnal Pusat Multidisiplin Indonesia*, 2(3), 2515–2520. <https://doi.org/10.62567/micjo.v2i3.812>
- Basri, S., Adnan, Y., Widiastuty, L., Asrul Syamsul, M., & Indar, I. (2024). Etika Lingkungan Islam: Kerangka Budaya untuk Pengelolaan Sumber Daya Berkelanjutan dan Pengelolaan Ekologis Global. *Diversity: Disease Preventive of Research Integrity*, 5(2), 86–93. <https://doi.org/10.24252/diversity.v5i2.52342>
- Fujimori, S., & Rosenstock, T. (2023). Pertanian, Kehutanan, dan Penggunaan Lahan Lainnya (AFOLU). In *Climate Change 2022 - Mitigation of Climate Change*. <https://doi.org/10.1017/9781009157926.009>
- Goldman, M. W. (2025). *Indikator Luas Hutan-Kehilangan Hutan*. World Resources Institute. [https://gfr.wri.org/forest-extent-indicators/forest-loss?utm\\_source=chatgpt.com](https://gfr.wri.org/forest-extent-indicators/forest-loss?utm_source=chatgpt.com)
- Hansen. (2013). *Kehilangan Tutupan Hutan*. Global Forest Watch. <https://data.globalforestwatch.org/documents/gfw::tree-cover-loss/explore?path=>
- Husamah, Rahardjanto, A., Permana, T. I., & Lestari, N. (2025). Islam dan Isu-Isu Keberlanjutan, Sejauh Mana Hubungan antara Keduanya telah Berkembang? Analisis Bibliometrik. *Social Sciences and Humanities Open*, 12(June), 101703. <https://doi.org/10.1016/j.ssaho.2025.101703>
- Juliani, Humam Mahdi, Shofy Widya Sari, Suci Indah Sari, & Nadila Raihanun Nazwa. (2024). Sekolah Islam Hijau: Mengintegrasikan Pendidikan Lingkungan dalam Kurikulum Pendidikan Islam. *Cendekiawan : Jurnal Pendidikan Dan Studi Keislaman*, 3(3), 565–574. <https://doi.org/10.61253/cendekiawan.v3i3.270>
- Karimi, S., Liobikienè, G., & Alitavakoli, F. (2022). Pengaruh Religiositas terhadap Perilaku Pro-lingkungan Berdasarkan Teori Perilaku yang Direncanakan: Studi Lintas Seksi di Kalangan Fasilitator Perempuan Pedesaan Iran. *Frontiers in Psychology*, 13(February). <https://doi.org/10.3389/fpsyg.2022.745019>
- Khoiriyah, S., Asror, M., Ruzakki, H., & Masdar Hilmy. (2023). Pendidikan Islam Berkelanjutan: Studi Literatur Menuju Pencapaian Visi Tujuan Pembangunan Berkelanjutan (SDGs). *Jurnal Pendidikan Islam Indonesia*, 8(1), 12–28. <https://doi.org/10.35316/jpii.v8i1.492>
- Lesi, A. T., Alfatih, F., Dahlan, U. A., Islam, U., & Sunan, N. (2025). *An Environmental Ethics in Islamic Perspective: An Analysis of the Thoughts of Dr. Sayyed Hossein Nasr*. 8(3).
- Nasr, S. H. (2003). *Man and Nature: The Spiritual Crisis of Modern Man*. Routledge.

---

Ningsih, T., Purnomo, S., Muflahah, M., & Wijayanti, D. (2022). Integrasi Sains dan Agama dalam Pendidikan Nilai. *IJORER: International Journal of Recent Educational Research*, 3(5), 569–583. <https://doi.org/10.46245/ijorer.v3i5.248>

Romi, M., Alif, M., Millah, M., Studi, P., Hadis, I., Ushuludin, F., Islam, U., Sultan, N., Tematik, H., Islam, I., Sains, D., Islam, P., Nabawi, P., Hadith, T., Integration, I., Education, I., & Medicine, P. (2025). *Global Research and Innovation Journal ( GREAT ) Penelitian ini menggunakan pendekatan kualitatif dengan metode studi pustaka ( library research ) yang diintegrasikan dengan metodologi studi hadis tematik ( mau dū ' ī ). Pemilihan metode ini didasarkan pa. 1*(Taufiqurrahman 2022), 1453–1465.

Sari, W. (2024). Hadis dan Etika Lingkungan: Perspektif Ekologi dalam Tradisi Islam. *Future Academia: The Journal of Multidisciplinary Research on Scientific and Advanced*, 2(3), 218–229. <https://doi.org/10.61579/future.v2i3.137>

Sulistiyo, U. (2023). *Metode Penelitian Kualitatif*.

Syukri, S., Amir, S. M., Fitriani, F., & Pane, S. (2024). Integrasi Nilai-Nilai Islam dengan Etika Lingkungan dalam Pendidikan Pesantren: Studi Kasus di Pesantren Darularafah Raya. *Jurnal Pendidikan Islam*, 13(1), 1–12. <https://doi.org/10.14421/jpi.2024.131.1-12>

Thomas W. Crowther, Henry B. Glick, Kristofer R. Covey, C. Bettigole, Daniel S. Maynard, Stephen M. Thomas, Jeffrey R. Smith, G. Hintler, Marlyse C. Duguid, Giuseppe Amatulli, Mao-Ning Tuanmu, Walter Jetz, Walter Jetz, Christian Salas, C. Stam, Daniel Pio, M. A. B. (2015). Pemetaan Kepadatan Pohon pada Skala Global. *Nature*, 525(7568), 201–205. <https://doi.org/10.1038/NATURE14967>

Tilburi, D. (2011). Education for Sustainable Development: An Expert Review of Processes and Learning. *UNESCO*.