

Islam in Agricultural Islamic Boarding Schools to Promote Ecosophy (Ecological Philosophy) for Environmental Protection

Muhammad Ali^{1*}, Mahadi Bahtera²

¹Agriculture Faculty, Universitas Jabal Ghafur, Aceh, Indonesia

²Economic and Business Faculty, Universitas Jabal Ghafur, Aceh, Indonesia

Corresponding Email : muhammadali@unigha.ac.id

ARTICLE INFO

Article history:

25 March 2024

Received in revised form

01 April 2024

Accepted 1 May 2024

Available online 28 July 2024

Kata Kunci:

Pendidikan Islam, Agen Perubahan, Ecosophy

Keywords:

Islamic Education, Agent of Change, Ecosophy.

DOI

<https://doi.org/10.61579/mikhayla.v1i1.171>

ABSTRAK

Kerusakan lingkungan sudah sangat memprihatinkan dan setiap orang harus ikut menjaganya. Pesantren mendidik generasi muda untuk mendorong perubahan sosial menuju masyarakat yang sejahtera dan sadar lingkungan. Pendidikan Islam membina, mengajarkan, dan melindungi peserta didik agar mampu memahami dan mengamalkan ajaran Islam, menjadi manusia yang cerdas, berakhlak mulia, dan sadar lingkungan. Penanaman nilai-nilai kearifan lokal sangat penting untuk membangun filsafat lingkungan (ekologi filosofis: ekosofi) melalui pendidikan Islam sebagai fikih lingkungan bagi generasi mendatang sebagai amal saleh bagi alam semesta beserta isinya. Penelitian ini mengkaji bagaimana pendidikan Islam membangun ekosofi santri dan memberikan saran-saran untuk pendidikan Islam berbasis ekosofi. Analisis konstruktivis dan pengumpulan data penelitian AHP diterapkan. Ekosofi diajarkan di pesantren melalui fikih lingkungan, menurut analisis konstruktivis. AHP memberikan bobot tertinggi pada program-program prioritas alternatif untuk melaksanakan ekosofi melalui pendidikan Islam di pesantren, seperti budidaya pertanian bagi santri, penanaman nilai-nilai kearifan lokal, dan pembangunan karakter dan falsafah lingkungan.

ABSTRACT

Environmental destruction is alarming, and everyone must help protect it. Islamic boarding schools train young people to promote social change towards a wealthy, environmentally conscious society. Islamic education nurtures, teaches, and protects pupils so they may comprehend and practise Islamic teachings, become intelligent, noble, and environmentally conscious. Instilling local wisdom values is crucial to building environmental philosophy (philosophical ecology: ecosofi) through Islamic education as environmental jurisprudence for future generations as a pious deed for the universe and all its contents. The study examines how Islamic education builds santri ecosophy and makes suggestions for ecosophy-based Islamic education. Constructivist analysis and AHP research data collecting are applied. Ecosophy is taught at Islamic boarding schools via environmental jurisprudence, according to constructivist analysis. AHP gave the highest weight to alternative priority programs for implementing ecosophy through Islamic education in Islamic boarding schools, such as agricultural cultivation for students, instilling local wisdom values, and building environmental character and philosophy.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



1. INTRODUCTION

The duty and care for environmental concerns should be shared by all of humanity. The amount of environmental deterioration and destruction has reached a concerning threshold. The preservation of the environment requires the involvement of all parties and levels of society. The purpose of education in Islamic boarding schools is to cultivate students' moral values and

foster a philosophical outlook on life that prioritises environmental awareness, piety, noble character, and respectful relationships with both fellow humans and all of creation. To mitigate the risks posed by climate change and environmental degradation to human existence, it is crucial to get a comprehensive grasp of environmental philosophy, namely philosophical ecology (ecosofi), via Islamic education at Islamic boarding schools. These educational institutions, deeply connected to rural communities, may play a significant role in addressing these pressing issues. In order for students to see environmental conservation efforts as virtuous acts, they need to comprehend environmental law. The eco-friendly and sustainable Islamic boarding school education system has significant promise in promoting environmental conservation via Islamic teachings. Islamic education refers to a system that aims to cultivate, instruct, and care for students in order to help them comprehend and implement Islamic teachings as a fundamental aspect of their lives. The ultimate goal is to develop individuals who possess extensive knowledge, exhibit virtuous character, and are capable of upholding the principles of local wisdom and cultural traditions within their community. Islamic boarding schools with extensive agricultural property cultivate agriculture education as a supplementary skill set for pupils, fostering their future independence. The use of ecosophy to cultivate environmental philosophy in pupils is accomplished via instructional techniques. Ecosophy is cultivated by the incorporation of traditional values, cultural elements, and indigenous knowledge into the agricultural methods used in Islamic boarding schools. Human resource development may be facilitated by using Islamic boarding schools, which are educational institutions that focus on Islamic teachings and can cultivate religious and intellectual qualities. The exploration of strategies for the cautious and effective management of natural resources and the environment, particularly from an Islamic religious perspective, has great significance, especially within Islamic educational institutions such as Islamic boarding schools.

In their study, Brown et al. (2017) said that education may expedite the process of social transformation towards the betterment of the society, by diminishing poverty, promoting sustainability, and fostering a more promising future. Rosset et al. (2012) assert that the educational process is the mechanism via which social transformation occurs in rural places and societal uprisings. The aims of this study are twofold: firstly, to examine the implementation of Islamic education in developing santri ecosophy, and secondly, to provide suggestions for incorporating ecosophy into Islamic education curriculum. The adoption of sustainable agriculture in Islamic boarding schools is linked to the use of the Sunatullah agricultural philosophy, which is comprehended by the students via the study of environmental law. Islamic boarding schools serve as educational institutions, as well as social and religious broadcasters. Islamic boarding schools offer both formal education, such as madrasas, public schools, and universities, as well as religious education that focusses on Islamic jurisprudence, hadith, tafsir, monotheism, and Sufism scholars from the 7th to 13th centuries AD. The texts that are examined include several subjects such as monotheism, tafsir, hadith, fiqh, ulus fiqh, sufism, Arabic (nahu, nerve, balagah, and tajwid), ethics, and morality. The Islamic boarding school education system employs a comprehensive approach, whereby administrators believe that teaching and learning should be seamlessly incorporated into all aspects of behaviour and everyday life. The studying and teaching activities at Islamic boarding schools do not adhere to time calculations and specific aims to be accomplished. In Islamic boarding school instruction, fardlu ain knowledge is regarded as holy, whereas fardlu kifayah information is considered

non-sacred. Kyai hold the belief that the knowledge acquired by pupils is beneficial and would eventually become advantageous to the individuals involved, at the appropriate moment (Mastuhu 1994). Islamic boarding schools are distinctive and indigenous educational institutions in Indonesia, representing the cultural legacy of the country and poised for ongoing improvement and development. Islamic boarding schools play a vital role in the nation's existence. Several diverse Islamic boarding schools have been founded to cultivate an Islamic character, religion, and piety in pupils, while also offering other skills to foster independence. The Indonesian country has seen tremendous advancements in the social, political, economic, and cultural domains during the last four decades, with particular emphasis on the economic sector. Nevertheless, it is essential to prioritise and advocate for the well-being of rural communities, farmers, and agriculture. Islamic boarding school education aims to enhance its contribution to agricultural and rural development, both in terms of quality and quantity (Dhofier 2017). In order to ensure the continuity and resilience of natural resources and the environment, Sauv   et al. (2017) argue that three key components of science must be developed: the management of natural resources and the environment, sustainable development, and environmentally friendly economic activities. It is necessary to improve all three aspects simultaneously while preserving biodiversity. Islamic education refers to a system that aims to cultivate, instruct, and support students in comprehending and embodying Islamic teachings as a fundamental aspect of their lives. Its purpose is to foster intellectual growth, instill virtuous behaviour, and uphold the principles of wisdom. The local and cultural traditions in the surrounding society shape individuals into being fully developed human beings (Muzayyin, 2009). Environmental jurisprudence refers to a collection of regulations governing human actions about the environment. These regulations are developed by knowledgeable academics who provide well-reasoned arguments to achieve aims that promote the well-being of life with a focus on ecological considerations. The source of this information is Yaqub's publication in 2017.

Mujiono (2005) defines a set of principles of behaviour as the stated principles that govern the link between human behaviour and nature. According to Yaqub (2017), enhancing Islamic principles via Islamic education would bolster the advancement of social movement and change, therefore fortifying different areas of society, including social, ecological, economic, and institutional dimensions. This heightened mental state will then manifest in individual conduct and influence environmental conservation. Islam emphasises the significant responsibility of mankind in conserving the natural world. Social transformation is a dynamic process that involves moving towards growth and prosperity. Islam considers the environment to be an essential component of a person's belief in Allah subhanahu wata'ala. This belief is shown via human actions, since individuals are seen as stewards responsible for the well-being of the environment. Islam has a comprehensive understanding of the care and conservation of the natural world. Social transformation is a dynamic process that involves advancing towards development and wealth (Amongjati et al., 2019)

2. METHOD

The study was carried out at the Jeumala Amal Islamic boarding school. The collection of primary data included conducting in-depth interviews with four key groups: (1) leaders of Islamic boarding schools, (2) administrators of Islamic boarding schools, (3) ustadz/teachers at Islamic boarding schools, and (4) community figures. The data gathering period in the field

included two months, namely from January to February 2024, throughout Islamic boarding schools. The research was done utilising organised in-depth interviews and expert judgement. The secondary data include agricultural statistics, horticulture crops, and agricultural labour obtained from the Central Bureau of Statistics (BPS). The study utilises both primary and secondary data. This research utilised an expert system to gather primary data through interviews, discussions, and questionnaires administered to experts. The experts involved in the study included kyai/Islamic boarding school leaders, Islamic boarding school administrators, and Islamic boarding school ustadz/teachers (Marimin 2009).

Data collection methodology

Gathering secondary data and conducting a literature review involves procuring published papers from relevant authorities. Additionally, primary data will be obtained via expert interviews focussing on agricultural activities and agroecosystem management in Islamic boarding schools. The primary data collection was carried out through the utilisation of various methods including Focus Group Discussions (FGDs), field observations, in-depth interviews, and structured interviews. These methods were employed to gather information pertaining to the institutional aspects, socio-economic conditions, and ecological conditions of Islamic boarding schools.

Method of Constructivist Analysis.

In social science research, the researcher must use observations and methodologies to identify functional links, which is a qualitative research technique. Constructivist analysis is one of the methods used in social research. The societal significance of constructivism lies in its ability to enhance objectives, elucidate meaning, and adjust underlying foundations. Agusta (2014) asserts that the constructivism paradigm emphasises the need of researchers comprehending the informant's perspective in order to acquire information. The experience is mutually shared between the informant and the researcher, enabling the researcher to comprehend the informant's interpretation of an activity. The informant has a vague understanding of a certain notion, although lacks the ability to precisely pinpoint that notion. The researcher reiterates the data provided by the informants by recounting it using their own terminology. By using a constructivist paradigm for data and information mining, the aim is to successfully identify the implementation of ecological philosophy within the Islamic boarding school traditions and local knowledge that are present in the Islamic boarding school system. Therefore, it will align with the ecosophy approach in terms of intellectual, spiritual, and emotional aspects.

The Analytical Hierarchy Process (AHP) is a method used for analysis.

This study used the Analytic Hierarchy Process (AHP) to ascertain the order of importance and preferences for various programs. The Analytic Hierarchy Process (AHP) was created to structure data and expert judgement in order to choose the most desirable option (Saaty, 2008). Utilising the Analytic Hierarchy Process (AHP) enables the resolution of an issue within an efficient decision-making framework. This approach simplifies complicated problems via the decision-making process. The underlying mechanism of the Analytic Hierarchy Process (AHP) involves breaking down a complicated, unorganised, strategic, and ever-changing issue into smaller components and organising them in a hierarchical framework. According to

Marimin (2009), the Analytic Hierarchy Process (AHP) is used to identify alternative programs with high priority and the greatest weight value, indicating their relevance as programs that should be prioritised for development. Explicit logical analysis involves three key principles: constructing hierarchies, defining priorities, and ensuring logical consistency. The hierarchical organisation is achieved by recognising the knowledge or information being observed. The arrangement described in (Eriyatno, Sofyar F. 2007. Policy Research: Research Methods for Postgraduates. Bogor (ID): IPB Press., nd) begins with a complicated issue that is then divided into its primary components. These primary components are then subdivided into their respective portions, creating a hierarchical structure. Priority determination is conducted by pairwise comparison to establish priorities. Logical consistency is achieved by systematically organising and prioritising all components based on a logical criteria

3. RESULT AND DISCUSSION

According to the AHP method analysis, the use of an ecosophy viewpoint in learning techniques at Islamic boarding schools (Cavalcante et al. 2020) aims to achieve three criteria: intellectual dimension, spiritual dimension, and emotional dimension. The individuals and organisations participating in Islamic boarding schools include kyai (Islamic scholars), ustadz (religious teachers), Islamic boarding school cooperatives, farmer groups, administrators, taklim councils (religious study groups), government agencies, traditional and contemporary markets, super markets, researchers, and partner corporations. The suggested alternatives include implementing agroecological principles, practicing sustainable agriculture, preserving traditional knowledge through ancestral oral traditions, fostering character development and environmental philosophy, engaging in apprenticeships with accomplished farmers, and cultivating leadership skills through the guidance of role models. The key informants consist of the leaders and administrators of the three Islamic boarding schools who possess expert judgement. Their role is to provide accurate and contextually relevant information on the circumstances, barriers, and challenges faced by the Islamic boarding schools. Marimin (2011) suggests that complex systems may be comprehended more simply by analysing them as a hierarchy of several parts. There are two distinct forms of hierarchy, namely structural and functional. The components in the structural hierarchy are organised in a declining order based on their structural qualities. Eriyatno (2007) defines functional hierarchy as the process of breaking down a complicated system into its fundamental components based on their important interconnections. Thus, it is possible to generate a hierarchical diagram, as seen in Figure 2.

Figure 2 displays a graphic illustrating several decision-making choices for incorporating an ecosophy viewpoint into learning techniques at Islamic boarding schools. The calculated weightings for the following factors, which form an ecosophy viewpoint, are based on three criteria. The user's text consists of three dimensions: the intellectual dimension (0.15), the spiritual dimension (0.65), and the emotional dimension (0.19). The spiritual component has the most significance and is thus regarded as the most important among the other three views of ecosophy. The allocation of weights for actors is as follows: (1) Kyai (0.37) refers to Islamic religious leaders in Indonesia. (2) Ustadz (0.04) is another term for Islamic religious teachers. (3) Islamic boarding school cooperatives (0.09) are organisations that operate cooperatively within Islamic boarding schools. (4) Farmer group (0.1) refers to a collective of farmers who work

together. (5) Administrator (0.07) denotes someone who manages and oversees the operations of an organisation or institution. (6) Taklim assembly (0.13) refers to gatherings where religious teachings and discussions take place. (7) Government agencies (0.04) are organisations that are part of the government and responsible for specific functions. (8) Traditional and modern markets (0.08) encompass both traditional marketplaces and modern retail establishments. (9) Supermarkets (0.07) are large retail stores that offer a wide range of products. (10) Researchers and academics (0.06) are individuals who engage in scholarly and scientific pursuits. (11) Partner company (11) refers to a company that collaborates or works together with another company. Kyai is an actor who plays a significant part in the ecosophy viewpoint, carrying a weight of 0.37. This demonstrates the significance of kyai as crucial participants in effectively executing the ecosophy approach. The weightings acquired are used to identify alternate applications of learning techniques. (1) The promotion of the concept of agroecology (0.06); (2) Implementing agricultural cultivation techniques on land (0.36); (3) Transmitting traditional wisdom through ancestral language (0.21); (4) Establishing environmental values and philosophy (0.15); (5) Effective farmer training (0.06); (6) Fostering leadership skills through exemplary individuals (0.13). According to the given weight values, alternative agricultural production techniques on land with a weight of 0.36 have the most value compared to the others. The agricultural cultivation methods conducted by students on the land play a crucial role in fostering environmental consciousness and promoting sustainable agricultural principles in Islamic boarding schools.

Figure 3 outlines the suggested strategies for incorporating an ecosophy approach into agricultural boarding school instructional techniques. There are three suggested strategies for learning: Recommendation 1 is executed by including the intellectual component of ecosophy, which includes: (1) integrating ecosophy principles into the curriculum of Islamic boarding schools, (2) providing agricultural instruction on actual land, and (3) facilitating learning experiences with farmer organisations. Recommendation 2 is executed by including the spiritual component of ecosophy, which includes: (1) students acquiring knowledge and applying ancestral traditions and sayings, and (2) students comprehending sunatullah agriculture. Recommendation 3 is put into effect by using the emotional component of ecosophy, specifically: (1) Student Santri, who are entrusted with the task of overseeing agricultural land, are trained to become catalysts for transformation and the next generation of farmers.

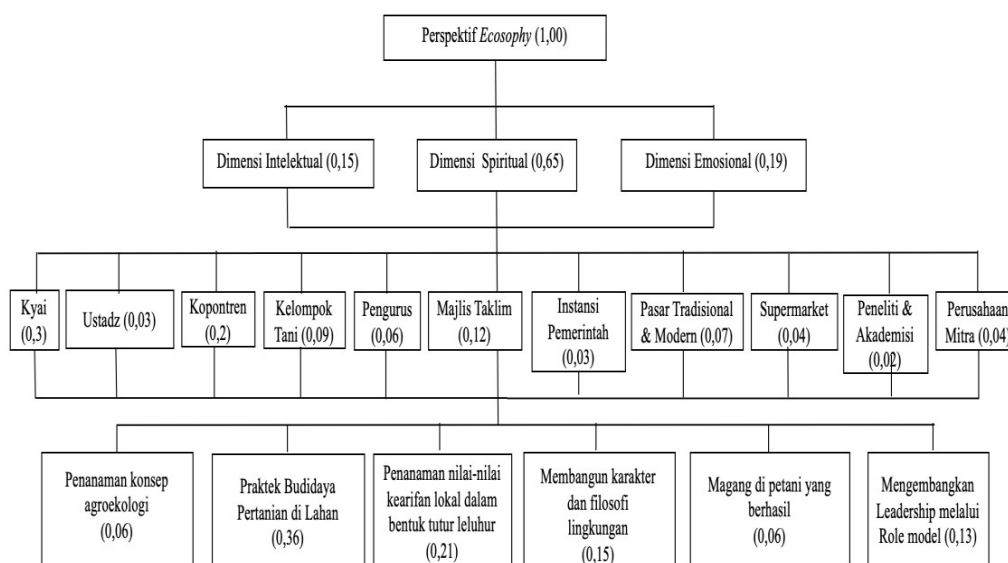


Figure 2 depicts the use of the Analytical Hierarchy Process (AHP) to include ecosophy in Islamic boarding schools.



Figure 3 presents some strategies for incorporating an ecosophy approach into the learning techniques of an agricultural boarding school.

4. CONCLUSION

Through the lens of the constructivist paradigm, the implementation of Islamic education at Islamic boarding schools aims to cultivate an environmental philosophy (ecosophy) among students. This is achieved by using more practical and relevant techniques of Islamic teaching. Ecosophy is cultivated by the incorporation of local wisdom values, local wisdom technologies, and environmental jurisprudence into the agricultural operations of Islamic boarding schools. Islamic boarding schools, as Islamic educational institutions within society, can foster the growth of religious and scientific spiritual values, hence facilitating human resource development. The AHP analysis yielded priority alternatives for implementing ecosophy in agricultural Islamic boarding schools as an application of Islamic education. The highest weight scores were assigned to the practice of agricultural cultivation on land for students (0.36), the cultivation of local wisdom values through ancestral speech (0.21), and the development of

environmental character and philosophy (0.13). These three programs are implemented as suggested strategies for learning. In addition, it was determined that the spiritual component has the most significance in comparison to the intellectual and emotional aspects, with a weight of 0.65, which is implemented via Islamic education

5. ACKNOWLEDGE

Thank you to Dayah Jeumala Amal Lueng Putu Pidie Jaya for permission and time in carrying out this research, and to the Faculty of Agriculture and the Faculty of Economics and Business, Jabal Ghafur University.

6. REFERENCES

- Rini, D. K., Adiwibowo, S., Alikodra, H. S., Hariyadi, H., & Asnawi, Y. H. (2023). Sustainability Indicators of Ecological Philosophy. *The International Journal of Interdisciplinary Educational Studies*, 18(1), 13. <https://doi.org/10.18848/2327-011X/CGP/v18i01/13-34>
- Al Walidah, I., & Husaini, I. (2023). REINTERPRETATION OF ECOLOGICAL VERSES TO IMPLEMENT ECO-ETHICS IN ISLAMIC EDUCATION. *Jurnal Tatsqif*, 21(1), 67-81. <https://doi.org/10.20414/jtq.v21i1.7401>
- Subaidi, Tantowi, A., Cholid, N., Junaedi, M., Waluyo, & Nursikin, M. (2023). Eco-pesantren: Islamic Education in Forest Conservation Landscapes. *Fudan Journal of the Humanities and Social Sciences*, 16(4), 541-567. [10.1007/s40647-023-00386-w](https://doi.org/10.1007/s40647-023-00386-w)
- Bratton, S. P. (2018). Eco-dimensionality as a religious foundation for sustainability. *Sustainability*, 10(4), 1021. <https://doi.org/10.3390/su10041021>
- Daffa, M., & Purnamasari, D. (2024). The wisdom of ecofeminism in Arjasari as a link between Hadith and community practice. *Gender Equality: International Journal of Child and Gender Studies*, 10(1), 13-26. <http://dx.doi.org/10.22373/equality.v10i1.19835>
- Ninin, R. H., & Rachman, N. F. (2022). Religious Self and Sustainability Ideation: Islamic Perspective and Indonesian Context. In *Ecotheology-Sustainability and Religions of the World*. IntechOpen. <https://doi.org/10.5772/intechopen.105127>
- Jenkins, W., Tucker, M. E., & Grim, J. (Eds.). (2016). *Routledge handbook of religion and ecology*. New York: Routledge.
- Vincenti, D. (2016). *"Green" Islam and social movements for sustainability* (Doctoral dissertation, Leiden University, The Netherlands).
- Ahmad, M. (2019). Three sufi communities guarding the earth: A case study of mitigation and adaptation to climate change in Indonesia. *Al-Jami'ah: Journal of Islamic Studies*, 57(2), 359-396. <https://doi.org/10.14421/ajis.2019.572.359-396>