

The Potential Application of the Eco-Pesantren Concept at Pondok Pesantren Mamba'ul Ma'arif Denanyar, Jombang, East Java

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Abstract

This research aims to explore the potential application of the Eco-Pesantren concept at Pondok Pesantren Mamba'ul Ma'arif Denanyar, Jombang, East Java. Using an ethnographic method, the study investigates cultural views and environmental practices at the pesantren. Primary data were collected through semi-structured interviews with pesantren administrators, teachers, and students, as well as direct observations of environmentally friendly facilities and waste management practices. In addition, secondary data were obtained from policy documentation and pesantren reports. Data analysis was conducted through the stages of data reduction, presentation, and mapping of potential based on internal strengths and external opportunities. The research findings show that Pondok Pesantren Mamba'ul Ma'arif Denanyar has significant potential to sustainably implement the Eco-Pesantren concept. The pesantren's main strengths include internal regulatory support, active stakeholder involvement, and the availability of human resources and supporting facilities. External opportunities, such as support from the government and international organizations, can also be leveraged to strengthen the implementation of this concept. The study concludes that this pesantren has the capacity to become a model for eco-friendly pesantren, contributing to environmental preservation and sustainable development.

Keywords: eco-pesantren, environment, Pesantren, Mamba'ul Ma'arif Denanyar.

Pesantren, or what is more commonly known as Islamic boarding schools, have long been an integral part of the educational landscape in Indonesia, playing a crucial role in transmitting religious knowledge and values to the community (Syukri et al., 2020). This traditional educational institution has evolved over time, adapting to the needs and demands of the modern era (Ahsanuddin, 2023). In recent years, the concept of eco-pesantren has gained attention as a way to integrate environmental sustainability and Islamic principles within the educational

framework of pesantren (Syarifuddin et al., 2023).

Pondok Pesantren Mamba'ul Ma'arif in Denanyar, Jombang, East Java, is one of the institutions with the potential to adopt and implement the Eco-Pesantren concept. This paper will explore the potential application of the ecological pesantren concept at Pondok Pesantren Mamba'ul Ma'arif, considering existing practices, strengths, and opportunities that may arise in implementing the Eco-Pesantren approach (Yusdiana & Harun, 2022).

In its implementation process, the environmentally friendly pesantren program carries out various community empowerment activities (Anjani & Badruddin, 2024).

Regulations regarding the establishment and operation of pesantren in Indonesia are outlined in the Regulation of the Minister of Religious Affairs No. 31 of 2020 on Pesantren Education (Jajuli et al., 2022). This regulation classifies pesantren, including those that provide education in the form of studying classical Islamic texts (*kitab kuning*), *Dirasah Islamiah* with the Muallimin educational model, or other forms of integrated general education (Prabowo et al., 2022). The concept of an ecological pesantren is a relatively new approach aimed at aligning environmental sustainability with Islamic teachings and values. In the context of Pondok Pesantren Mamba'ul Ma'arif, the potential for applying the ecological pesantren concept can be explored through an analysis of existing practices, strengths, and opportunities in the implementation of Eco-Pesantren.

To further explore the potential application of the Eco-Pesantren concept at Pondok Pesantren Mamba'ul Ma'arif, the researcher will use a qualitative approach, collecting data through interviews with key stakeholders, observations of practices at the pesantren, and a review of relevant literature (Efendy et al., 2023; Rusmanah et al., 2021). Pondok Pesantren Mamba'ul Ma'arif in Denanyar, Jombang, East Java, has a rich history and a reputation for its strong commitment to Islamic education and community development. The existing practices and potential for the Eco-Pesantren concept at Pondok Pesantren Mamba'ul Ma'arif will be analyzed in-depth, taking into account the pesantren's current approach to environmental sustainability, its integration with Islamic principles, as well as the challenges and opportunities that may arise in implementing the ecological pesantren concept (Maula et al., 2021).

REVIEW OF LITERATURE

Definition and Terminology of Pesantren

Pesantren is one of the oldest Islamic educational institutions in Indonesia, playing a significant role in shaping a generation of Muslims who are knowledgeable in religious matters (*tafaqquh fi ad-din*) and possess noble character (Umayah & Junanah, 2021). The term pesantren is derived from two key words commonly used, *pondok* and *pesantren*. The term "pondok" refers to the simple dormitory where students (*santri*) reside. In Javanese culture, *pondok* is often made of bamboo, reflecting the modest lifestyle within the pesantren (Thahir, 2014). The word *pondok* could also originate from the Arabic word *funduq*, meaning a large dormitory or inn, indicating that pesantren provides accommodation for its students.

On the other hand, the term pesantren refers to an Islamic boarding school that offers education with a primary focus on Islamic religious studies and the teaching of classical Islamic texts. According to Zuhri (2002) and Das et al. (2016), pesantren is defined as an Islamic educational system aimed at deepening religious understanding (*tafaqquh fi ad-din*). This system is typically supported by various components, both hardware and software, that uphold the existence and continuity of the pesantren. These components include Yuli et al. (2023; Isbah, 2020):

1) Kiyai

The main leader and central authority in the pesantren. The *kiyai* is an Islamic scholar with deep religious knowledge and is responsible for teaching and educating the *santri*.

2) Santri

Students who study at the pesantren, live in the dormitories, and follow the strict discipline of the pesantren.

3) Pengajian

Teaching and learning activities are usually focused on the study of *kitab kuning* (classical Islamic texts).

4) Mosque

A place of worship and the center of educational activities in the pesantren.

5) Classrooms and dormitories

Facilities used for teaching and as living quarters for the santri.

Bawani (1993) identified several characteristics and distinctive features of Islamic boarding schools that set it apart from other educational institutions, particularly in terms of the philosophy and traditional educational system it follows. Some of these characteristics include Das et al. (2016):

a. Philosophy of Ahlu Sunnah Wal Jamaah

Most Islamic boarding schools in Indonesia are based on the teachings of Ahlu Sunnah Wal Jamaah, a moderate and balanced understanding of Islam in religious interpretation. This helps Islamic boarding schools maintain values that are deeply rooted in traditional Muslim communities in Indonesia.

b. Curriculum Based on Islamic Religious

Sciences Pesantren specializes in teaching Islamic religious sciences, particularly the study of the Koran, Hadith, Fiqh, Tawhid, and various other Islamic disciplines. Instruction at Islamic boarding schools is often based on classical texts written by previous scholars.

c. Teaching Methods

Classical pesantren (Islamic boarding schools) employ distinctive teaching methods, such as sorogan and bandongan. In the sorogan method, students (santri) individually study texts directly from the kiyai (Islamic scholars). Meanwhile, in the bandongan method, the kiyai reads and explains the kitab kuning (classical Islamic texts) in front of students collectively.

d. Simple Facilities

The physical environment of pesantren tends to be modest and not luxurious, often located in rural areas with limited facilities. This simplicity reflects a lifestyle close to nature and modest living, in line with Islamic teachings on meaning and zuhud (asceticism, or avoiding excess in worldly life).

e. Communal Life and the Kiyai-Santri Relationship

One important aspect of pesantren is the communal life governed by strict discipline. The relationship between the kiyai (Islamic scholar) and santri (students) often resembles that of a father and child. The kiyai is not only a teacher but also a spiritual and moral guide. The relationship formed creates strong intellectual and familial bonds, which, according to Bawani (1993), is referred to as "intellectual genealogy."

Along with the passage of time, pesantren have also undergone various changes in their educational systems and management. According to Arifin (2022), these changes are part of an effort to realize a more integral education system, which not only teaches religious knowledge but also imparts general skills and knowledge. This transformation aims to address the challenges of globalization and modernization, where students are expected to not only possess strong religious knowledge but also adapt to contemporary developments. In this context, modern pesantren have begun adopting more professional management approaches, such as managing pesantren through training activities and the development of santri capabilities, both academically and non-academically (Maimun et al., 2021). This development includes character education, life skills, as well as economic and social skills that are relevant to the needs of modern society, particularly in the context of eco-pesantren.

Eco-Pesantren Concept

The concept of Eco-Pesantren is a combination of two words: "eco" and "pesantren." The word "eco" comes from ecology, which refers to the study of interactions between living organisms, including humans, and the natural environment. Meanwhile, a pesantren is an Islamic-based educational institution that studies classical texts, religious sciences, and other knowledge as part of formal education (Bahri, 2018; Pujiyanto et al., 2021). The term "environmentally friendly pesantren" was first introduced at a meeting titled "The

Seven-Year Muslim Action Plan on Climate Change," held in Istanbul, Turkey, in early June 2009. In that forum, the need for Muslims to actively participate in environmental preservation and climate change mitigation efforts was discussed. Pesantren, as Islamic educational institutions with a significant role in society, are seen as one of the spearheads in promoting environmental awareness among Muslims (Triyono et al., 2022).

Essentially, Eco-Pesantren is a pesantren model that not only focuses on religious education but also emphasizes environmental awareness and care for the natural surroundings. Eco-Pesantren integrates religious teachings with an understanding of environmental conservation, creating an environmentally friendly pesantren in various aspects of daily life (Herdiansyah et al., 2016). In Indonesia, the Eco-Pesantren program was officially designed in 2008 when the Ministry of Environment collaborated with the Ministry of Religious Affairs of the Republic of Indonesia to promote the concept of environmentally friendly pesantren (Aoki, 2015). This meeting was held on March 5-6, 2008, at the Asrama Haji Pondok Gede, Jakarta. The program aims to increase the participation of pesantren in environmental preservation through a religious-based approach (Subaidi et al., 2023).

The Eco-Pesantren program is designed to cultivate pesantren that are more mindful of environmental issues. The primary goal of the program is to raise ecological awareness among the students (*santri*) and the surrounding community, as well as to make pesantren a model of environmentally friendly Islamic educational institutions. According to Pujianto et al. (2021), some of the specific objectives of the Eco-Pesantren program are as follows:

- 1) Increasing public awareness of the importance of environmentally friendly behavior by organizing activities based on Islamic teachings.

- 2) Promoting environmental awareness in everyday life within the pesantren.

- 3) Implementing environmentally friendly conditions in the pesantren.

- 4) Empowering pesantren by improving the quality of religious education.

- 5) Expanding and enhancing activities related to ecology, economy, and social aspects.

- 6) Empowering the communities around the pesantren.

Since the introduction of the Eco-Pesantren concept, many pesantren in Indonesia have begun adopting environmentally friendly principles in their daily activities. Pesantren that successfully implement the Eco-Pesantren program often become models for other pesantren in terms of environmental conservation. Anjani & Badruddin (2024) note that Eco-Pesantren is not merely a program for protecting the environment but also a form of appreciation for pesantren that have actively contributed to preserving nature. Pesantren participating in this program will receive recognition as environmentally friendly pesantren, serving as examples for other Islamic educational institutions.

METHOD

This study employs an ethnographic method, which is a qualitative approach used to understand cultural aspects within a society. Ethnography was chosen because it aims to deeply explore the views and practices of the community at Pondok Pesantren Mamba'ul Ma'arif Denanyar, particularly concerning the implementation of the eco-pesantren concept. According to Malinowski, as cited in Spradley (1997), ethnography seeks to understand the perspective of the native community within the framework of their everyday life. This research not only aims to study the pesantren community but also to learn from them about how they understand and implement the eco-pesantren concept in their local context (Windiani & R.F. Nurul, 2016). Therefore, this method is relevant for exploring the potential implementation of environmentally friendly practices in relation to regulations, human resources, eco-religious

values, and the availability of facilities and infrastructure.

This study uses two types of data sources: first, primary data obtained through interviews and direct observations with individuals involved in the operational aspects of the pesantren. The main informants include pesantren administrators, teachers, and students, who were selected as key informants due to their in-depth knowledge of the practices and policies of the pesantren, particularly those related to the eco-pesantren. Second, secondary data serves as supplementary data, collected from written documents, archives, policies related to the pesantren's environmental practices, annual reports, and other relevant written sources to complement the primary data.

Data collection in this research was carried out through several techniques: a) The interviews conducted were semi-structured, where the researcher had a set of guiding questions but remained flexible to explore deeper information from the informants. These interviews aimed to gain in-depth insights into the eco-pesantren concept from the perspective of the administrators, teachers, and students. b) This technique was used to directly observe the practices and environmental conditions of the pesantren. The observation was conducted independently and objectively to gather field data that accurately reflected the real conditions at the pesantren. The aspects observed included the use of environmentally friendly facilities, waste management practices, energy conservation, and other environment-related activities. c) Secondary data was obtained through documentation, such as official pesantren reports, internal policies, and other relevant written sources. This documentation complemented the primary data obtained from interviews and observations.

In qualitative research, data analysis is a crucial process for interpreting the collected

data. The stages of analysis in this study are as follows:

1) The data collected through interviews, observations, and documentation will be distilled into a more easily understandable form. This process of data reduction aims to select and focus on information relevant to the research focus.

2) After the reduction, the data will be presented in a structured narrative form. This presentation will include grouping the results of interviews, observations, and documentation based on specific themes or topics, such as eco-pesantren regulations, human resources, and eco-religious values, as well as facilities and infrastructure.

After the data presentation, an analysis will be conducted to map the potential of the eco-pesantren at Pondok Pesantren Mamba'ul Ma'arif based on its internal strengths and external opportunities. This analysis will help in understanding how the pesantren can leverage its existing potential to effectively implement the eco-pesantren concept.

RESULTS AND DISCUSSION

Profile of Dormitory and Educational Units at Mamba'ul Ma'arif Foundation

Mamba'ul Ma'arif Foundation is one of the leading Islamic educational foundations in Jombang, East Java. The foundation oversees various dormitory units and educational institutions spread across Denanyar and its surrounding areas. Pondok Pesantren Mamba'ul Ma'arif has long been recognized as a center of Islamic education that has produced many scholars and influential figures in Indonesia. To facilitate education and teaching activities, the foundation operates dormitory units where students (*santri*) reside during their studies at the pesantren. These dormitories are led by experienced *kyai* and *nyai*, who possess profound knowledge in religious matters.

Table 1: List of Dormitory Units at Mamba'ul Ma'arif Foundation

No.	Dormitory Name	Caretaker
1	Asrama Mamba'ul Ma'arif	KH. ABDUSSALAM SHOHIB
2	Nur Khodijah I	Nyai Hj. NAILI ZAKIYAH
3	Nur Khodijah II	Nyai Hj. NOOR MUCHIBBAH
4	Nur Khodijah III	Nyai Hj. MUHASSONAH HASBULLAH
5	Sunan Ampel Putra	KH. IMAMHAROMAIN ASY'ARI
6	Sunan Ampel Putri I	KH.ACH. WAZIR ALI
7	Sunan Ampel Putri II	AGUS MUHSIN
8	An Najah	KH. ALI KHIDZIR
9	Al Bishri	KH. SHOLAHUDDIN FATHURRAHMAN
10	Al Risalah	KH. ABD. WAHAB KHOLIL
11	Az Ziyadah	AGUS ZIDNI NUURO
12	Al Hikam	Nyai Hj. UMI SALAMAH AZIZ
13	Al Iskandariyah	AGUS MUHAIMIN FAHMA
14	Tahfidz	AGUS H. M.JAUHARUL AFIF
15	Sunan Bonang	TAHFIDZ TAH SIN NK III
16	Pengasuh	HASBULLAH SA'ID
17	Maha Santri NK III	MAHA SANTRI NK III
18	Mambaul Qur'an	AGUSUMAR ZAINAL

Source: Primary Interview Data and Documents (2024)

In addition, the Mamba'ul Ma'arif Foundation also oversees various educational units, ranging from early childhood education to higher education. These educational units include PAUD (early childhood education), TK (kindergarten), MI (Islamic elementary school), MTs (Islamic middle school), SMP (junior high school), MA (Islamic high school), SMK

(vocational high school), and Ma'had Aly (Islamic higher education). Each educational unit is led by a principal who is responsible for organizing the teaching and learning activities within their respective unit. Below is the complete list of dormitory and educational units at the Mamba'ul Ma'arif Foundation:

Table 2: List of Educational Units at Mamba'ul Ma'arif Foundation

No.	Educational Unit Name	Principal
1	PAUD AL IHSAN	Hj. LILIK UMI NASHRIYAH, M.Pd.
2	TK MUSLIMAT	NUR SHOLIHAH, S.Psi.
3	MI MM	SITI FATIMAH SURIYAH, S.Pd.I.
4	MTs MM	M. CHULUQIL AMIN, S.HI
5	MTs N	SULTHON SULAIMAN, M.Pd.
6	SMP MAMBA'UL MA'ARIF	SYAMSUDIN, M.Si.
7	MAMM	KH. ZAINAL AREFIN ABU BAKAR
8	SMK BISHRI SYANSURI	HJ. MIRFA'UN NU'MA, S.S.
9	MAN	MOH. ILYAS, Lc., M.Pd.
10	DINIYAH	AGUS A. HUBBUNNAJAH
11	LBAI	M. SYIFA'US SURUR, S.Pd.I
12	MA'HAD ALY	ABDUR ROSYID, S.Pd. MTsol

Source: Primary Interview Data and Documents (2024)

Pondok Pesantren Mamba'ul Ma'arif Denanyar has a significant number of students enrolled in formal education. There are 2,073 female students and 2,341 male students, bringing the total number of students in formal education to 4,414. This number reflects the

strong enthusiasm of the community in sending their children to formal institutions under the pesantren. In addition, the non-formal institutions at Pondok Pesantren Mamba'ul Ma'arif Denanyar also have a substantial number of students. There are 1,162 female students and

1,340 male students participating in non-formal education programs. The total number of students in these non-formal institutions reaches 2,502, indicating a high level of interest in non-formal education as part of personal development and religious knowledge outside of formal education.

Strengths and Opportunities for Implementing the Eco-Pesantren Concept at Pondok Pesantren Mamba'ul Ma'arif Denanyar

Based on the above description, the potential for implementing the eco-pesantren concept can be mapped into two categories: strengths and opportunities. Below is a table outlining the potential for implementing the eco-pesantren concept at Pondok Pesantren Mamba'ul Ma'arif Denanyar, Jombang, East Java:

Table 3: Potential for Implementing the Eco-Pesantren Concept at Pondok Pesantren Mamba'ul Ma'arif Denanyar

Potential	Strengths	Opportunities
Regulations on Eco-Pesantren	<ul style="list-style-type: none">A vision and mission that support environmental sustainability and ecological understanding.Support from external stakeholders in designing policies and strategies for the implementation of eco-pesantren.Specific internal policies for waste management, energy conservation, and the use of natural resources.	<ul style="list-style-type: none">The potential to gain support from government agencies, NGOs, and international organizations.The active role of stakeholders in providing advice and perspectives, as well as facilitating communication and coordination.The potential to attract more external resources through proposals and collaborations.
Availability of Human Resources and Ethical Values	<ul style="list-style-type: none">Support from local figures, students' guardians, and students who are aware of environmental issues.A high level of awareness of environmental conservation in Islamic teachings.Active involvement of teachers in guiding and developing environment-based education.	<ul style="list-style-type: none">The potential to create a generation that is environmentally conscious and responsible.The potential to develop comprehensive environmental education programs through collaboration with universities, NGOs, and the private sector.
Availability of Facilities and Infrastructure	<ul style="list-style-type: none">Availability of extensive land for the development of organic farming and tree planting.An efficient irrigation system that utilizes eco-friendly technology.	<ul style="list-style-type: none">The potential to develop land into a large-scale organic farming project with the support of environmentally friendly technology.The potential to increase agricultural productivity through the adoption of eco-friendly technology.The potential to manage the environment sustainably and support the concept of eco-pesantren through existing facilities.The potential to improve the quality of infrastructure through collaboration with other external parties.

Source: Primary Interview Data and Documents (2024)

The strengths possessed by Pondok Pesantren Mamba'ul Ma'arif Denanyar in implementing the eco-pesantren concept, as well as the opportunities that can be leveraged to support this implementation. By mapping these strengths and opportunities, Pondok Pesantren Mamba'ul Ma'arif Denanyar can identify and utilize its existing potential to effectively implement the eco-pesantren concept.

Potential for Implementing Eco-Pesantren at Pondok Pesantren Mamba'ul Ma'arif Denanyar
Pondok Pesantren Mamba'ul Ma'arif Denanyar in Jombang, East Java, has great potential to implement the eco-pesantren concept holistically and sustainably. This potential is supported by several factors, including regulatory support and the pesantren's commitment, human resources, ecological

values, and the availability of facilities and infrastructure. This aligns with the research by Mandra & Ismail (2022) and Moh Ahsan & Rusli (2021), which states that government policies, commitment to environmental management efforts, adherence to Islamic values, and supporting facilities and infrastructure are key factors in the implementation of the eco-pesantren concept.

Moreover, the Eco-Pesantren Movement (GEP) is currently collaborating with renowned institutions such as the Ministry of Religious Affairs, ICRS (Indonesia Consortium for Religious Studies), John Templeton Foundation, The Rufford Foundation, and KEHATI (Indonesian Biodiversity Foundation) (Subaidi et al., 2023). Through synergy with various parties, Pondok Pesantren Mamba'ul Ma'arif Denanyar can strengthen the implementation of eco-pesantren, enhance environmental awareness among the students (santri), and make significant contributions to environmental preservation and sustainable development in Indonesia.

Specifically, this potential can be observed through the vision and mission that support environmental sustainability, internal policies regulating waste management and energy conservation, as well as support from external stakeholders. The pesantren has a strong foundation to become an eco-pesantren. Support from local figures, the guardians of students, and environmentally aware santri, along with the active involvement of teachers in environment-based education, indicates that the human resources at this pesantren possess a high level of awareness regarding environmental preservation. Additionally, the availability of extensive land for organic farming development, efficient irrigation systems, and other facilities such as waste bins and waste banks support sustainability practices at this pesantren.

To better understand the potential for implementing the eco-pesantren concept at Pondok Pesantren Mamba'ul Ma'arif Denanyar, it is important to identify several significant

supporting factors. Below are some key factors that support the successful implementation of eco-pesantren at this pesantren:

1. Regulatory support and Pesantren commitment

Regulatory support and the commitment of Islamic boarding schools (pesantren) are key factors that support the implementation of the ecopesantren concept at Pondok Pesantren Mamba'ul Ma'arif Denanyar. Law No. 18 of 2019 on Pesantren is evidence of the government's seriousness in supporting Pesantren education. This law demonstrates that pesantren education, which carries the significant responsibility of shaping individuals with a deep understanding of religious values and morals, requires strong regulatory support from the government (Wiranata, 2019; Dardiri & Miftahuddin, 2021).

With clear regulations and a strong commitment from the pesantren, Pondok Pesantren Mamba'ul Ma'arif Denanyar can implement the ecopesantren concept more effectively and sustainably. Here are some key points related to this:

- a. The vision and mission of the pesantren that support environmental sustainability and ecological understanding.
- b. Internal policies that regulate waste management, energy conservation, and the sustainable use of natural resources.
- c. Support from external stakeholders in designing policies and strategies for the implementation of the ecopesantren.

With this support, Pondok Pesantren Mamba'ul Ma'arif Denanyar can more effectively implement the principles of ecopesantren and inspire other pesantren to do the same. As a result, environmental preservation becomes more relevant, where ecopesantren can guide the community in understanding environmental conservation through their activities.

2. Human Resources and Ecological Values

In addition to regulatory support and the commitment of the pesantren, another equally important factor is the human resources and ecological values possessed by Pondok Pesantren Mamba'ul Ma'arif Denanyar. According to Pujianto et al. (2021), ecological values make the pesantren a pioneer in implementing an environmentally-based pesantren concept, encompassing not only the physical environment but also human interactions within it. Furthermore, Safei and Himayaturohmah (2023) emphasize that Islamic values can play a significant role in raising students' awareness to practice Islamic teachings related to environmental preservation.

Therefore, support from local leaders, the students' parents, and environmentally-conscious students, along with the active involvement of teachers in guiding and developing environment-based education, are crucial aspects in realizing an eco-friendly pesantren. Additionally, a specialized curriculum that includes learning materials on ecology, organic farming practices, waste management, and renewable energy further supports these efforts.

Thus, the human resources and ecological values at Pondok Pesantren Mamba'ul Ma'arif Denanyar play an important role in supporting environmental sustainability and the development of the ecopesantren. Here are some key points related to this:

- a. Support from local leaders, parents, and students who are aware of environmental issues.
- b. High awareness of environmental preservation in Islamic teachings.
- c. Active involvement of teachers in guiding and developing environment-based education.
- d. Islamic values taught in the pesantren align with the principles of sustainability and environmental preservation.
- e. A specialized curriculum that includes learning materials on ecology, organic farming practices, waste management, and renewable energy.

The support from local figures, guardians of students, and environmentally conscious Santri, along with a strong awareness of environmental preservation in Islamic teachings, enables Pondok Pesantren Mamba'ul Ma'arif Denanyar to create an environmentally friendly learning environment. The active involvement of teachers in guiding and developing environment-based education, combined with the Islamic values taught at the pesantren that align with sustainability principles, further strengthens the pesantren's commitment to environmental stewardship. Additionally, a specialized curriculum that includes learning materials on ecology, organic farming practices, waste management, and renewable energy ensures that the students receive a comprehensive education on the importance of environmental preservation. All of this contributes to shaping Santri, who are not only knowledgeable but also caring and responsible towards their surrounding environment.

3. Availability of Facilities and Infrastructure

In addition to regulatory support, the commitment of the pesantren, human resources, and ecological values, the availability of facilities and infrastructure is also an important factor in implementing the eco-pesantren concept at Pondok Pesantren Mamba'ul Ma'arif Denanyar. According to Wardana & Usman (2023), there are at least two main factors that support the success of the pesantren in becoming a model for environmentally friendly pesantren in Central Java: capability and planning in the field of infrastructure with well-developed construction. Maulida & Ali (2023) also indicate that environmentally friendly pesantren programs align with the availability of worship facilities, business places, and other amenities, which are key factors in assessing the potential of the pesantren to implement the eco-pesantren concept.

In the effort to implement the eco-pesantren concept at Pondok Pesantren Mamba'ul Ma'arif Denanyar, the availability of facilities and

infrastructure plays a very important role. Several points highlighting the significance of this aspect include:

a. Availability of extensive land for the development of organic farming and tree planting.

b. Efficient irrigation systems that utilize environmentally friendly technology.

c. Other facilities and infrastructure such as waste bins, waste banks, support for organic farming, renewable energy (solar power), and water irrigation.

The availability of adequate facilities and infrastructure serves as a strong foundation in supporting the implementation of eco-pesantren at Pondok Pesantren Mamba'ul Ma'arif Denanyar. With supportive amenities such as land for organic farming, efficient irrigation systems, and other supporting infrastructure, this pesantren can not only effectively implement sustainability programs but also serve as a model for other pesantren in efforts toward environmental preservation.

By combining existing strengths and opportunities, Pondok Pesantren Mamba'ul Ma'arif Denanyar can realize its vision as an environmentally friendly pesantren, enhance the awareness of the santri and the surrounding community regarding the importance of environmental preservation, cultivate a generation that is caring and responsible towards the environment, and serve as a model for other pesantren in implementing eco-pesantren. The development of eco-pesantren at Pondok Pesantren Mamba'ul Ma'arif Denanyar is expected to make a positive contribution to efforts in environmental preservation and sustainable development.

CONCLUSION

Pondok Pesantren Mamba'ul Ma'arif Denanyar has significant potential to become a model for environmentally friendly pesantren in

Indonesia. With a combination of supportive regulations, the pesantren's commitment, the availability of competent human resources, and adequate facilities and infrastructure, this pesantren can leverage existing opportunities to implement the eco-pesantren concept sustainably. The successful implementation of this concept will not only enhance environmental awareness among the students (santri) but also make a significant contribution to environmental preservation and sustainable development in Indonesia.

The implications of this research indicate that Pondok Pesantren Mamba'ul Ma'arif Denanyar has great potential to serve as a model eco-pesantren that can be adopted by other pesantren in Indonesia. With regulatory support, internal commitment, strong environmental awareness, and supportive facilities, this pesantren can play a vital role in raising environmental consciousness among students and the surrounding community. The implementation of the eco-pesantren concept in this pesantren not only contributes to environmental preservation but also supports sustainable development through ecology-based education integrated with Islamic teachings.

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