



Empowering Santri in Addressing Environmental Preservation Issues through Essay Writing Based on *Pesantren's* Local Wisdom in Temanggung

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Abstract

Islamic boarding schools (*pondok pesantren*), as religious-based educational institutions, hold significant potential in promoting environmental conservation. In Temanggung, where a large santri community resides, this potential can play a vital role in driving conservation efforts. However, low environmental awareness among santri and limited supporting facilities remain major challenges to achieving this goal. This community service activity aimed to empower students (santri) through essay writing based on the local wisdom of their pesantren. The main goal of the activity was to increase the awareness, writing skills, and active involvement of the students in sustainable environmental conservation. This research involved 20 students from 10 Islamic boarding schools in Temanggung Regency, as well as pesantren administrators, local government officials, community organisations, and a nature lovers' community. The Asset-Based Community Development (ABCD) model was used in this study to analyze the potential of the students, develop strategies, and evaluate the results of the community service. The research findings showed that the students were a potential asset for the pesantren in formulating solutions for environmental problems that were based on local wisdom. This essay writing training program produced three main strategies for empowering santri: essay writing training, essay publication, and empowerment through contextual experiences based on environmental conservation. The implementation of these three strategies proved effective in increasing the students' understanding, awareness, and participation. Through the environmental awareness-based essay writing activities, the students were hoped to become the leading pioneers of environmental awareness, especially within the pesantren environment, in a sustainable way.

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INTRODUCTION

Currently, the world is facing complex environmental crises such as ecosystem destruction, climate change, pollution, and waste problems (Yang et al., 2023). In order to overcome environmental challenges, synergy between stakeholders is needed. In this context, Temanggung Regency has the highest number of Islamic boarding schools in Central Java. Temanggung has great potential to actively contribute to environmental conservation efforts through the role of Islamic boarding school. This potential is evidenced by several pesantren in Temanggung receiving the Clean and Healthy Pesantren (*Pesantren Bersih dan Sehat – PBS*) award from the Ministry of

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Religious Affairs in 2020. Two pesantren ranked among the top 15: Pondok Pesantren Nida Al-Qur'an, which secured the 7th position, and Pondok Pesantren Al-Falah Tejosari Parakan, which ranked 14th. These pesantren were recognized by the Central Java Provincial Government for successfully implementing COVID-19 health protocols (Jogo Santri) (Yoni, 2020).

Although the potential of pesantren in environmental preservation in Temanggung Regency is very large, the success of its implementation is not uniform across all boarding schools. The lack of awareness and knowledge among students regarding environmental issues leads to significant environmental challenges in Islamic boarding schools, necessitating a comprehensive approach to address them (Ma'arif & Mawardi, 2024; Masturin & Nadhirin, 2025). This is exacerbated by inadequate environmental education, the negative influence of social media, and the minimal participation of santri in conservation activities (Sagala, 2024). Limited facilities and infrastructure in pesantren, exemplified by inadequate waste management systems and a lack of green spaces (Milla et al., 2025). Inconsistent institutional support hinders efforts to promote environmental sustainability in Islamic boarding schools in Temanggung Regency. Lack of coordination and collaboration between students, boarding schools, and stakeholders complicates environmental conservation efforts. Lack of synergy results in ineffective and unstructured solutions. Additionally, certain social norms and cultural practices in Temanggung reflect a low level of environmental awareness. As a result, environmental issues are difficult to address collectively.

As a center for religious-based knowledge and character development, Islamic boarding schools have the potential to instill environmental awareness among students. The human resource potential of Islamic boarding schools can be managed through internal policies based on traditional values and environmental sustainability practices. Islamic boarding schools play an important role in environmental conservation, which can be realized through the leadership of Islamic boarding school figures. The role of Islamic boarding school figures can be carried out by setting a good example for students regarding the importance of human responsibility in protecting nature. Students can understand and uphold religious and cultural values that emphasize environmental management, as commanded by Allah SWT (Riyadi et al., 2025). The verse from the Quran, Ar-Rum: 30, emphasizes that Allah created the universe with perfect balance, and therefore, humanity is responsible for maintaining this balance for the sustainability of the environment. Based on this understanding, every individual, especially students, has a significant responsibility in managing their surrounding environment (Aprilia et al., 2021). Therefore, students function as valuable human resources in maintaining environmental sustainability (Muhardi et al., 2020), where the role of Islamic boarding schools in environmental conservation is based on Islamic values that emphasize the duty to protect nature.

Pesantren not only instills these values in the students but also educates the surrounding community about the importance of environmental preservation. Some concrete steps that can be taken by pesantren include greening initiatives and nature conservation rooted in Sufi values, such as asceticism, gratitude, familial bonds, love and blessings, as well as contemplation (tafakkur) (Irawan, 2022). These values are the local wisdom of pesantren that are rich in promoting environmental sustainability. One effective strategy for empowering students to face environmental challenges is through essay writing based on local wisdom from pesantren. Training students in essay writing will enhance their understanding of local environmental values, develop their writing and critical thinking skills, and inspire them to take concrete action in environmental conservation. Developing learning through essay writing based on local wisdom is considered to influence students' character education (Arifah & Ifadah, 2025). In line with this, public participation has proven to be the strongest predictor of pro-environmental behaviour (Zhang et al., 2020), with significant contributions to waste reduction, energy conservation, environmental cleanliness, and participation in nature conservation programs.

This shows that education and environmental awareness in society are crucial for encouraging individual and collective behavioural changes. The internalization of local wisdom values, which is a blend of knowledge and traditions passed down from generation to generation, positively contributes to environmental conservation by affirming the rights and responsibilities of indigenous communities (Abas et al., 2022). Values such as respect for nature, sustainability, cooperation, and traditional knowledge have proven effective in promoting environmental conservation efforts. Written works, including essays, can serve as a powerful medium to raise

public awareness about environmental conservation efforts (Manugeran et al., 2023), functioning as educational tools that enhance knowledge, foster empathy, and increase public concern for environmental challenges, as well as inspire real actions through the power of written expression. Essay writing training for students at Islamic boarding schools is expected to be a community service activity that has an impact on preserving the environment.

Essays, as one of the written works, are expected to be a medium for students to channel ideas, thoughts or opinions about local wisdom in the Islamic boarding school environment. If the training is not conducted, there will be stagnation in the increase of students' awareness and knowledge regarding environmental issues. Without a structured medium, students will not have the means to internalize the values of local wisdom from the pesantren related to environmental preservation. This has implications for a shallow understanding of environmental responsibility taught in Islamic values, thus preventing the potential of students as agents of environmental change from being realized. In line with Djuaini & Arisandi (2023) research, essay writing training conducted at Islamic boarding schools has succeeded in increasing the motivation of students to write. Other community services are carried out by Rahmawati et al. (2024) by implementing local wisdom-based writing training in the form of poetry. This training is considered capable of increasing students' interest in writing about tourism and local wisdom located in Gowa, South Sulawesi. According to Rini et al. (2022), instilling local wisdom for students or the younger generation in Islamic boarding schools can be an example of an applicable Islamic education learning method. Instilling ecosophy through local wisdom can build character and environmental philosophy in students at Islamic boarding schools. This character can be the background for the formation of more honest, creative, and communicative student emotions.

Environmental sustainability efforts in Islamic boarding schools are severely hampered by limited facilities and infrastructure, such as inadequate waste management systems and a lack of green spaces. On the other hand, inconsistent institutional support from boarding school administrators also weakens existing initiatives. Previous studies have tended to focus on empowering santri in writing skills for da'wah or general publication. No research has specifically combined essay writing skills with issues of environmental conservation based on local wisdom from Islamic boarding schools. This gap presents an opportunity for further study, where this research will fill the void by using essay writing as a medium to foster awareness and concrete actions among students in environmental conservation.

The training was conducted so that the students could be more effective in conveying religious teachings and messages to the surrounding community. The community service initiative conducted in this research aims to analyse and identify the strengths of students in addressing environmental preservation issues. Unlike previous research that focused on empowering students in writing skills. In this research, an approach that supports environmental preservation issues among Islamic boarding schools is undertaken. The strategic issue of environmental preservation based on local wisdom can be an initiative finding in empowering students. This research aims to explain the process, effective strategies, and impacts for empowering students as part of the community in preserving the environment through the exploration of local wisdom.

METHOD

This community service research was conducted in Temanggung Regency, involving 20 students from 10 Islamic boarding schools as the main participants. These participants were selected to participate in a training program aimed at enhancing their environmental awareness. Additionally, to gain a comprehensive understanding of environmental issues within Islamic boarding schools, this study involved several key informants, including Nyai Lilik (Director of Roudlotul Huda Kedu Islamic Boarding School), Ibu Anggita Ramadhani, S.Hut., and Ibu Adistia, S.Hut., from the Temanggung District Housing, Settlement, and Environmental Agency (DPRKPLH), as well as representatives from the NU Temanggung Environmental Protection Agency (LPBI NU Temanggung), the Sindoro Sumbing Nature Lovers Community, and boarding school administrators affiliated with the FKPPP. The involvement of various parties aims to ensure that the data and information collected is valid, rich, and come from various perspectives of relevant stakeholders, so that the resulting analysis is more holistic.

This community service initiative employs the *Asset-Based Community Development* (ABCD) model as shown in Figure 1. The asset-based community development approach emphasizes community growth driven by its assets, which serve as catalysts in the community's self-development (Qiaoyu et al., 2024).

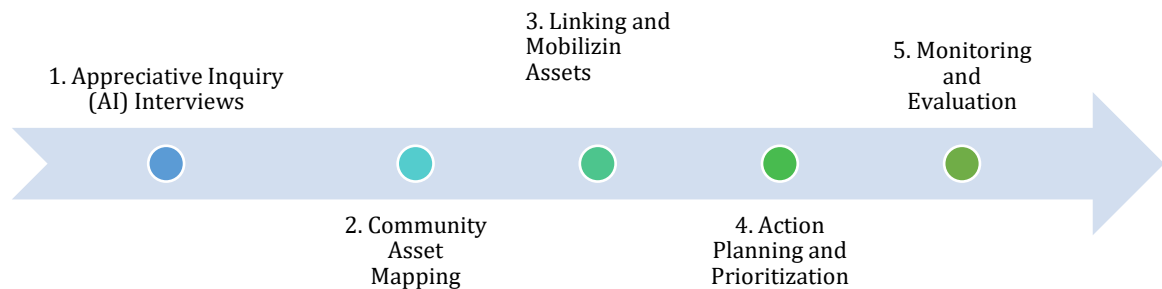


Figure 1. Flow of Community Service Methods

The steps of the approach are explained in the following explanation:

1. Appreciative Inquiry (AI) Interviews

The interviews aim to analyze the strengths of *santri* in contributing to environmental conservation efforts. These interviews are conducted with *pesantren* caretakers and students in Temanggung Regency. By conducting these interviews, the study identifies students' potential and tracks their competencies.

2. Community Asset Mapping

This stage involves mapping the potential of *santri* within the community. The asset-mapping analysis in this initiative focuses on identifying individual assets or human resources. Since *santri* possess various competencies, these competencies are systematically mapped to form the foundation for further development strategies.

3. Linking and Mobilizing Assets

This stage involves linking available assets to explore alternative approaches to environmental conservation (Tijani, 2025). Through focus group discussions (FGDs), the community service team and stakeholders determine appropriate training and development programs based on the assets possessed by the students.

4. Action Planning and Prioritization (Low-Hanging Fruits)

This stage involves the implementation of an environmental conservation essay writing training program. The training is conducted by inviting expert speakers with relevant academic backgrounds in the field. These speakers are invited from stakeholder partners. The essays written by the students are then compiled into an anthology focusing on the theme of environmental conservation.

5. Monitoring and Evaluation

The community service team and stakeholders conduct participatory monitoring and evaluation of the activities carried out. Monitoring and evaluation are conducted through focus group discussions (FGD) to assess the effectiveness and impact of the programs that have been implemented. Evaluation of community service activities is carried out using questionnaires distributed to participants. The questionnaire is designed to measure participants' responses to the benefits of the activities and their impact on local wealth-based environmental issues in the *pesantren* environment.

In this study, data analysis was conducted using the descriptive qualitative model of Miles and Huberman (Rosyada et al., 2025). The first stage is data reduction, through filtering raw data from interviews and focus group discussions (FGD) to identify key themes related to environmental issues, essay writing training, and student potential. Next, in the data presentation stage, the filtered information is presented in the form of narratives, tables, or diagrams to facilitate visual and systematic understanding. Finally, conclusions are drawn and verified by comparing findings from various data sources to ensure that the analysis is credible.

RESULTS AND DISCUSSION

Appreciative Inquiry (AI) Interviews

The research interview conducted expresses its intention to determine the level of strength of students in facilitating environmental conservation through the opinions of key informants. Nyai Lilik, as the caretaker of Pondok Pesantren Roudlotul Huda Kedu, is one of the main informants who explains the potential of students, local wisdom of the pesantren, and its part in preservation of the environment. The interview was carried out on 28th October 2024 in the office of Pondok Pesantren Roudlotul Huda. The results indicated that the students, the resource of human capital, have a number of benefits. In Temanggung Regency, santri has a strategic role in conserving the environment, in which they have accommodated the religious doctrines that focus on sustainability of ecological balance as a doctrine imposed by God. Environmental responsibility, simplicity, and cooperation as the Islamic values in pesantren, can motivate students to participate in different environment conservation activities eagerly (Triyono & Mediawati, 2023). An illustration is that they engage in reforestation activities, green waste disposal and ecological enlightenment initiatives in their neighbouring society. By applying the religious values in form of real actions students become the advocates of the environment but also earn the title of a role model within the nearby society when it comes to the achievement of the harmonization of the spiritual faith and physical conservation.

Local wisdom embedded in the traditions of pesantren plays an important role in fostering environmental awareness. Various activities involving students have been carried out to maintain cleanliness and environmental sustainability. This includes daily communal cleaning activities (*roan harian*), large-scale cleaning initiatives (*roan akbar*), and cemetery cleaning (*roan makam*), all of which instil the importance of maintaining a clean and orderly environment. The concept of "roan" and the planting of ornamental plants in this narrative align well with Putri et al. (2022) study on the local wisdom of the Tengger Tribe. The study shows how traditional beliefs and practices (such as obedience, cooperation, and honesty) foster a strong commitment to environmental preservation. In the context of pesantren, the activity of "roan" reflects the values of cooperation and communal responsibility, which are at the core of local wisdom in maintaining cleanliness and preservation.

The only exception to the list of the activities explained earlier is related to the study of the water conservation to be used in the daily needs, which promotes resource management to be efficient. Preservation of the environment is also evidenced in the way ornamental plants are put up in the school and pesantren complex as a way of not only beautifying the environment but also making the students build the ecological concept. Moreover, the students happen to be environmental guardians and writers excel in writing, which is an effective tool of contribution to environmental literacy. The education institution of the pesantren is very active in training the students in terms of the writing skill by conducting training sessions, competition of writings, and mentoring of students by the teachers. The idea of these efforts is to give students power to communicate their ideas and thoughts regarding the environmental conservation in terms of the local wisdom of the pesantren and, thus, become the embodiment of the inspiration to wider participation of people in the environmental sustainability issue.

Community Asset Mapping

This community service activity of mapping the community assets was done through the interview method. The participant of the interview activity is the Head of the PD Pontren Division at the Ministry of Religious Affairs in Temanggung and was conducted on November 5, 2024. This interview addresses mapping the potency of pesantren, the capabilities of santri, the nature of local wisdom of pesantren, and concrete activities made by pesantren in Temanggung to conserve the environment. The principal goal of this interview is to find out the potential of students and local wisdom of pesantren in Temanggung Regency. Santri has a number of competencies that can be inherently developed and they form the basis of asset mapping framework considered in this community service development project. According to the works of Bandawaty (2024), as individuals, santri can emerge as the active agents of change in the economic and social development of the community.

Linking and Mobilizing Assets

The asset connection and mobilization activity was implemented on November 5, 2024, with the speakers Ms. Anggita Ramadhani, S. Hut., and Ms. Adistia, S. Hut., from DPRKPLH (Department of Housing, Settlement Areas, and Environmental Affairs) of Temanggung Regency. The intended outcome of this activity is to link available resources to identify alternative solutions used in conserving the environment. The interview is dedicated to the materials on environmental conservation and the realization of the Eco Pesantren program. An Eco Pesantren program refers to the program that will combine religious values and environmental concerns in the life of a pesantren. Some of these activities are involved in the given program; it is waste management of 3R principles (Reduce, Reuse, Recycle) of green initiatives to the pesantren and students engaged in environmental educational activities. Before the present study, [Khairani & Fauzi \(2023\)](#) had already implemented the Eco Pesantren Program in Al Irsyad Tenggara 7 Pesantren in Batu City, and its effects can be taken as one of the solutions to the environmental crisis in the short-, middle-, and long-term.

The Eco Pesantren program in Temanggung intertwines local knowledge, including the tradition of ro'an in pesantren, and inculcates religious knowledge that strengthens the necessity to conserve nature as a creation of God. The planning for this program is characterized by the development of pesantren gardens, conversion of organic waste to compost, and a program on training the students on environmental concerns. Eco Pesantren initiative not only seeks to create environmental awareness but also fosters self-reliance and responsibility of students in conserving their environment. DPRKPLH is relevant to the development of the Eco Pesantren program in Temanggung. They support it by giving training and workshops about how to manage the environment using pesantren, like separation of the organic and inorganic waste, greening programs, and waste recycling programs. Moreover, they can provide the pesantren with technical support, i.e., waste management paraphernalia, tree seedlings, and books that refer to green justice. The synergy also exists between DPRKPLH and pesantren in ensuring that such programs are successful. Moreover, they advertise the Eco Pesantren campaign via social media to create awareness among people in Temanggung.

Thus, the establishment of links and mobilization of resources should aim at intensifying cooperation between DPRKPLH, pesantren, and other bodies to make environmental protection programs sustainable. Also, there should be special educational courses that would work on the issues of waste management, reforestation, and the production of environmentally-friendly goods. Moreover, we also suggest that it is credible to create special modules on environmental preservation oriented with local wisdom and religious values that can be used as learning materials by the students in the Islamic boarding schools. Hopefully, this Eco Pesantren program will make major positive changes on the students, the pesantren, and also the society in general. This finding is consistent with a study conducted by [Gunawan & Alfarisi \(2023\)](#), who affirm that partnership with the government will make the eco pesantren program more systematic.

Action Plan Development and Activity Prioritization

The essay writing training depicted in Figure 2 aims to empower santri in environmental conservation through a structured essay writing workshop, conducted over two days, on 21-22 November 2024. The total training duration is 16 lesson hours, divided into the following sessions: Pesantren Legislation and Environmental Awareness in Pesantren (2 lesson hours), Environmental Conservation Strategies (4 lesson hours), Local Wisdom Supporting Environmental Conservation (4 lesson hours), Essay Writing Techniques and Practical Training (6 lesson hours). This training program involves 20 santri as participants, who will be guided through a series of interactive sessions aimed at enhancing their writing skills while fostering environmental awareness. The *santri's* written essays are then compiled into an anthology centered on the theme of environmental conservation.



Figure 2. Essay Writing Training on Environmental Conservation

Monitoring and Evaluation

Monitoring and evaluation were conducted on December 12, 2024, through the dissemination event of the essay writing results shown in Figure 3. This dissemination and evaluation event was attended by: 1. PD Pontren, Ministry of Religious Affairs, Temanggung Regency, 2. DPRKPLH (Department of Public Housing, Settlement Areas, and Environmental Affairs), KSS3G (Three Mountains Literary Studies Community), 3. LPBI NU Temanggung, 4. Sindoro Sumbing Nature Enthusiasts Community (Kompas), 5. Pesantren Administrators/FKPPP, 6. LPKBKP INISNU Temanggung, 7. 20 santri from 10 pesantren in Temanggung.



Figure 3. Dissemination, Monitoring, and Evaluation

Monitoring and evaluation activities included the presentation of students' essay works and the evaluation of the community service program. The dissemination activities comprised: the reading of students' essays, the reading of poetry inspired by students' essays, the representation of students' essays through musical performances, and the exhibition of paintings with the theme "*Students Preserving the Environment*" (the paintings were created with the assistance of AI). All participants involved were asked to complete a Google Form for evaluation purposes. A total of 26 respondents provided feedback, including training participants, speakers, expert judges, and relevant stakeholders. The key evaluation results are as follows: 100% of respondents stated that the primary goal of this community service program was to equip students with essay writing skills based on the local wisdom of pesantren. 96% of respondents indicated that essay writing encouraged students to develop their ability to express ideas and propose solutions. 92% of respondents affirmed that essay writing was chosen as a method for student empowerment. 80.8% of respondents recognized that the contribution of pesantren's local wisdom to environmental conservation lies in fostering an environmentally friendly lifestyle rooted in religious values. 100% of respondents stated that the main focus of essay writing based on pesantren's local wisdom was generating creative ideas inspired by pesantren values to support environmental preservation. 73.1% of respondents identified that one of the benefits of greening activities in pesantren was enhancing the aesthetic appeal of the pesantren while reducing heat. 100% of respondents acknowledged that one of the primary challenges students faced in environmental preservation was the lack of environmental awareness in the pesantren community. 84.6% of respondents

stated that after attending the environmental essay writing training, they were motivated to write articles for publication in pesantren media. 96.2% of respondents expressed that pesantren could sustain environmental preservation efforts by initiating environmental programs that actively involve students. 92.3% of respondents considered that one of the key success indicators of this community service program was that students' essays contained innovative solutions based on pesantren values.

The results of this activity have been published in the TIMES Indonesia e-newspaper under the title: *Wujudkan Pesantren Ramah Lingkungan, Dosen INISNU Gelar Diseminasi PKM Diktis Kemenag RI*. Figure 4 shows the publication results on the newspaper portal that the community service activities carried out in the Islamic boarding schools have a unique impact on environmental awareness.



Figure 4. Community Service Activity Publication <https://timesindonesia.co.id/s/7eMBGsnbB>

Santri Empowerment Process in Realizing an Environmentally Friendly Pesantren

Santri play a strategic role as human resource assets in environmental preservation efforts. With an educational background rooted in religious values and local wisdom of the pesantren, students are able to integrate environmental knowledge with spiritual ethics. One of the notable contributions is through essay writing, which highlights the theme of environmental preservation based on the local wisdom of pesantren in Temanggung. This essay not only serves as an educational medium but also as a tool to spread environmental awareness to a wider community. The potential of students to inspire behavioral change and support environmental sustainability is a significant strength in the success of this program. According to research Juwita (2021), this activity aligns with the concept of empowerment, which is closely related to the idea of power. The concept of power is often associated with an individual's ability to influence others to act according to their wishes, even if it contradicts their interests or preferences (Ienca, 2023). Santri have a distinctive advantage in writing, serving as one of their main potentials to convey ideas and thoughts in a structured manner. The skills of santri are acquired through Indonesian language education in schools, where they are taught basic writing techniques, such as paragraph structuring, essay composition, and academic writing. In addition, the students often practice writing in various contexts, including composing articles, short stories, and religious reflection notes, which further enhance their literacy skills.

The empowerment process through writing training not only sharpens their technical skills but also encourages critical, analytical, and creative thinking. With proper guidance, the writing skills of the students can be effectively utilized to support programs based on local wisdom,

including environmental conservation campaigns through written media. Santri, as individuals, have a unique ability to transform their imagination and dreams into written form. In line with research [Ayu \(2022\)](#), the ability to write can be a manifestation of a person's imaginative development. Through words, they can share their aspirations and fantasies with the world, creating works that inspire and captivate. Writing allows students to express their deepest thoughts, bring colorful stories to life, and build worlds that exist only in their imagination. These writings serve as a bridge connecting them with readers, allowing for interaction and the growth of ideas. In the end, through writing, their dreams and visions are immortalized and can be accessed by a wider audience ([Krüger, 2021](#)).

Santri hold the potential to make a great contribution to the environment protection by engaging in literary works through their writing abilities. The important contribution is their translation of the thoughts on environmental conservation to essays on the local wisdom of pesantren. Besides posing as a platform to air ideas, these essays also play the role of sharing important information on environmental awareness with the rest of the community ([Arifah & Ifadah, 2025](#)). Santri are able to assert local value through their writing by mentioning things like communal cooperation, sensible use of the resources of nature and principles of simple living that pesantren teach. Moreover, the writing of essays based on the local wisdom of pesantren contributes to the maintenance of cultural heritage as one of the environmental concerns solutions. Santri are capable of writing inspiring pieces and teaching texts through the incorporation of environmental knowledge and life experience as well as values that he or she picks up within the pesantren. It is assumed that these works will create a communal consciousness and ultimately lead to more citizens caring about the environmental sustainability.

Sufi-based pesantren environmental conservation is managed with the use of ecological approaches such as, environmental education, plant seed production, and recycling wastes in a form of organic compost. These are some of the important measures that pesantren can apply to contribute to reforestation and environmental conservation and survive rooted in Sufi beliefs and principles, namely due to the concepts of asceticism (*zuhud*) and gratitude, kinship and mutual support, love and blessings, and contemplation (*tafakkur*) ([Irawan, 2022](#)). The education of santri in peers provides more than religious education to the students as it also involves practical approaches to religious values in nature ventilation. They are socialized to believe that keeping the environment is part of worship and they are made to feel responsible on ecological sustainability and also prompted to play active roles towards implementing a balance of the ecosystem. It has been demonstrated that the integration of learning materials with local wisdom can influence the critical thinking capabilities of the students positively ([Mulatsih et al., 2023](#)). Students of pesantren (santri) are the main transmitters of traditions of local wisdom based on pesantren. They readily practice worthy ethics of cooperation (*gotong-royong*), clean and ascetic lifestyle. Consequently, santri are instrumental in the protection and conservation of the cultural settings and values of the pesantren to the future generations.

Santri play an important role in environmental preservation, and one of the most effective ways to express their ideas is through writing essays based on the local wisdom of the pesantren. These essays allow the santri to explore various methods for preserving nature, ranging from simple daily practices to larger environmental programs, all rooted in the values and traditions of the pesantren. In line with [Hastuti et al. \(2023\)](#) research, the essay writing training for students at SMP PMT Prof Dr. Hamka II Padang has yielded positive outcomes such as the launch of Intellectual Property (HKI) products, student participation in history essay writing competitions, publication of service results in print media, and the creation of video narratives on a YouTube channel. Essay writing not only allows students to convey the message about the importance of maintaining ecological balance, but also encourages community participation in conservation efforts. [Pandean et al. \(2025\)](#) wrote that with training and mentoring in essay writing themed on local culture for high school/vocational school students in South Minahasa Regency, students' skills can be improved by 61%.

From previous research and the essay writing training activities that have been conducted, the presence of these activities can develop the critical thinking and writing skills of students, particularly in the local culture and environmental preservation. Their written works have the potential to inspire others to participate in environmental preservation initiatives. In addition to

human resources, other assets support the implementation of this empowerment program. Natural assets include the wealth of the pesantren environment, such as green open spaces, agricultural land, water sources, and biodiversity (Wahdi & Affandi, 2024), which serve as inspiration in essay writing. Infrastructure assets encompass pesantren facilities such as classrooms, libraries, and pesantren gardens, which provide important support for program implementation. Institutional social assets are reflected in the strong collaboration between the pesantren, local communities, the government, and environmental institutions.

Santri Empowerment Strategies in Realizing an Environmentally Friendly Pesantren

Three main strategies are designed to develop essay writing based on the local wisdom of pesantren in order to empower students to address environmental conservation issues in Temanggung. The first strategy is training in writing environment-themed essays that integrate pesantren wisdom, aimed at equipping students with creative writing skills while fostering environmental conservation awareness. This program teaches students to incorporate pesantren values such as cooperation, simplicity, and environmental management into their writing, thereby producing educational and inspiring essays, and raising environmental awareness both within the pesantren community and the wider society. Education and training programs (diklat) themselves are a national policy to achieve Sustainable Development Goals (Tri et al., 2022).

The second strategy focuses on publishing environmental-themed essays by students rooted in the local wisdom of the pesantren. This publication aims to expand the reach of the students' positive ideas about environmental conservation, extending beyond the pesantren community to a wider audience. These essays contain local wisdom values such as respect for nature, cooperation, and wise resource management, which can inspire readers to engage in environmental awareness initiatives. The publication of these student essays also contributes to the expansion of environmental conservation knowledge, serving as exploratory reading that captures the local wisdom ideas of the pesantren, and reaffirms the value of essays in advancing knowledge and influencing practices and policies (Lindebaum, 2022).

The third approach is the empowerment of students using the contextual experience in environmental conservation welfare programs of the pesantren, one of which is through tree planting programs in the pesantren environment. The program gives the students first-hand experiences in environmental protection using their experience in practice, making a generation of character education that involves values of being responsible, solidary or environmental conscious. Planting of trees does not only give an ecological advantage, this kind of action is introduced by pesantren as a symbolic pledge to environmental protection, that will create awareness and dedication to sustainable environmental conservation. Empowerment based on this contextual environmental conservation experience entails the involvement of identification of local wisdom, planning, organizing, implementation and dissemination of results through incorporation of spiritual values in order to transform these practices on to sustainable actions and foster community cohesion and environmental conservation practices (Pratama et al., 2024).

The successful implementation of these three strategies requires comprehensive support from various stakeholders. Support from the pesantren is essential, including the provision of learning facilities, guidance from caretakers, and opportunities for students to develop writing skills. Government institutions such as the Ministry of Religious Affairs and the Environmental Agency also play a crucial role in providing technical assistance, training, and resources such as tree seedlings or publication access for the students' works. Collaboration with local communities also serves as a key supporting factor, whether through active participation in environmental conservation activities or the acceptance of ideas from students conveyed through essays. This collective synergy facilitates the implementation of effective and sustainable strategies (Ispiryan et al., 2024), ensuring the achievement of the goal of empowering students in environmental conservation.

Santri Empowerment Impact in Realizing an Environmentally Friendly Pesantren

The purpose of the program is to empower the students by writing essays on the local wisdom of pesantren in Temanggung is expected to deliver three major results. On the one hand, there is a higher knowledge of environmental preservation among students on the basis of local

wisdom of the pesantren. Students can better comprehend the concept of conservation by means of training them in writing and discussing, thus incorporating and applying values like cooperation, wise usage of resources, and religious ideas about conservation etc. This is not just a theoretical knowledge but also a practical one as they are motivated to detect environmental problems surrounding the pesantren and provide solutions to them by writing, which is the way to create awareness and critical thinking. As in the research conducted by [Ilmi et al. \(2025\)](#), essay training can foster the ability to articulate ideas in a structured manner.

Second, this program managed to create awareness and empowerment of students as agents of change in dealing with issues of environmental conservation through essay writing. The students did not just learn but were also trained to develop tangible solutions as essays which make use of the local wisdom of the pesantren. The message of keeping nature intact by following a methodology that supports cultural values and traditions of the pesantren, is thoroughly reflected in these essays. Therefore, the students are more active in influencing the surrounding community to participate in conservation activities. Training in essay writing can demonstrate that their potential as agents of change in the field has wide environmental awareness and a power to exploit local potential in the sustainability of solutions ([Qalsum et al., 2025](#)).

Third, this course enhances the skill of the students in expressing and publishing their thoughts without further research on environmental conservation via essays. The students have the freedom to try and discover their critical and creative thinking abilities in developing solutions to environmental issues that suits the local wisdom of the pesantren. The essays they managed to come up with does not only reflect their knowledge about the environmental problems but also includes the tradition and cultural values of the pesantren as a part of the solution. This is not only a process of honing writing skills that the students handle but also instilling in them awareness of the need to preserve nature. Through publication, the students will be able to disseminate positive conservation messages to more people and thus make contributions towards local wisdom-based conservation efforts actively ([Saputri et al., 2024](#)).

LIMITATION

The study has a number of limitations that should be discussed in order to present a more complete picture of the framework and outcomes of the study. The primary constraints are the low sensitisation levels of the santri on the issue of the importance of environmental conservation matters, which might influence the degree of participation and understanding levels of the implemented program. Besides, the inadequate supporting infrastructure in the pesantren setting of the environmental conservation activities forms an actual barrier to the actualisation of the initiative. Lastly, the issue of weak coordination between the pesantren and the other interested parties is a major problem that could impede the magnitude and sustainability of environmental conservation in general. The combination of these restrictions sets the background of the implementation of this community service intervention and defines the chances that it may have a long-lasting effect.

CONCLUSION

This paper has shown that santri could play a major role of environmental guardians in their pesantren as agents of environmental protection. This potential was justified by two prominent benefits, such as their strategic value as a rich human resource and their competency in writing which could be maximized. With the use of the Asset-Based Community Development (ABCD) model, this study developed three empowerment strategies, which are complementary. The initial approach was the actual training on writing essays on environmental topics based on the local wisdom of the pesantren that was meant to enhance awareness and critical thinking. The second strategy was the publishing of essays of the santri as a vehicle to spread their ideas and offer motivation into a larger involvement. The third intervention measures to be adopted were direct environmental intervention like planting trees so that these mentalities could be put into practice.

The outcomes of this program indicated that there was a tremendous positive effect. The santri did not only focus more on the growth of their knowledge on environmental conservation

through a local wisdom perspective but also showed more awareness and active engagement. Moreover, they could represent their concepts of sustainability in their essays which could then be published which showed that this strategy could work in developing a generation of santri that cared about the environment but could also do something in a constructive manner. In this way, the empowerment via essay writing that was anchored in the local wisdom of the pesantren turned out to be an effective tool of achieving the sustainable environmental stewardship.

AUTHOR CONTRIBUTION

A, Z designed the research idea, organised the fieldwork, interpreted the data, developed the initial draft, and the final draft. I, L responsible for community service, data analysis, and manuscript preparation. Research and data collection activities were carried out by A, R and S, DP.

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