



Climate Change, Religion and Education: Exploring Influence of Faith-Based Leadership on Environmental Sustainability

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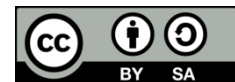
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Abstract

Objective: This study aims to examine the role of religious leaders in climate change education in Tasikmalaya through an Islamic approach, with a focus on the use of religious teachings to convey environmental messages and their effectiveness in increasing public awareness and participation. **Novelty:** This study combines religion with environmental education, making Islamic teachings the basis for environmentally friendly behavior, and highlighting unique practices such as metaphorical narratives and environmentally nuanced worship activities, such as "Green Prayer" and tree planting, which are rarely studied in local contexts such as Tasikmalaya. **Methods:** This study uses a qualitative approach with in-depth interviews with religious leaders in mosques and religious institutions to explore the views, communication strategies, and challenges faced in conveying climate change issues to congregations. **Results:** The results of the study show that religious leaders have a strategic role in conveying climate change issues persuasively by connecting religious messages about the importance of protecting nature, but face challenges such as institutional limitations, unequal access to information, and limited scientific understanding among some religious leaders. **Conclusion:** Religious leaders in Tasikmalaya play an important role in climate change education through Islamic values, but its sustainability and impact require strengthening religious educational institutions, increasing climate literacy, real support from various parties, and cross-sector collaboration.

Keywords: Faith-Based Leadership, Environmental Sustainability, Climate Change.

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INTRODUCTION

Climate change is an unprecedented global crisis that requires a holistic, multidimensional response across all sectors of society (Mardani, 2024). While scientific research has extensively documented the causes and impacts of climate change, achieving meaningful behavior change at the community level remains a major challenge. In recent years, religious leaders and faith-based organizations have been increasingly recognized as important actors in promoting environmental management and climate change education, given their influential role in shaping community values, norms and behaviors (United Nations Environment Programme [UNEP], 2022). Globally, more than 80% of the world's population identifies with a religious group, suggesting that religious leaders hold a strategic position in promoting environmental responsibility (Aripin & Mardani, 2024). Major international initiatives, such as the Interfaith Rainforest Initiative and the Laudato Si' Movement, have highlighted the potential for religious engagement in mobilizing collective action against environmental degradation (UNEP, 2022). Furthermore, empirical studies show that the integration of religious narratives with environmental messages significantly increases public acceptance of climate change information and encourages pro-environmental behavior (Smyer Yü, 2024).

However, there is still a critical gap in the systematic integration of religious leadership into climate change education frameworks, both formal and informal (Kurniawan, Ramdani, & Mardani, 2024). Existing educational strategies tend to prioritize secular scientific approaches, often neglecting the cultural, moral, and spiritual dimensions that religious leaders uniquely offer (Illahi & Mrdani, 2024). While studies from Western contexts, particularly North America and Europe, have explored faith-based climate initiatives, comprehensive research on the role of religious leaders in climate change education in the Global South, including Asia and Africa, is still very limited (Dwivedi et al., 2022). Most existing studies emphasize public policy advocacy by religious leaders, rather than examining their specific contributions to grassroots-level educational processes such as curriculum development, informal teaching practices, community workshops, or the transmission of environmental values across generations. Understanding of how different theological interpretations shape climate change narratives and educational methodologies in religious communities also remains limited (Nakayama et al., 2025).

This research aims to fill that gap by exploring the role of religious leaders not only as preachers, but also as active educators in building climate change awareness and environmental stewardship (Bolton & Kacperczyk, 2021). By focusing on how religious engagement can be systematically integrated into climate change education practices, this research offers a new perspective that bridges the domains of religious leadership and environmental pedagogy. The findings of this study are expected to contribute towards the development of culturally relevant, ethically grounded, and community-based climate education strategies (Islam, Khan, Ahmed, & Mahmood, 2020). The study of religious involvement in climate change issues has undergone significant development in the last decade. Various studies confirm that religion has great potential to shape values, behavior, and collective action towards the environment (Hearn, Huber, Koehrsen, & Buzzi, 2024). According to the United Nations Environment Programme (2022), the contribution of religious organizations and religious leaders to environmental issues is not only advocative, but also educative, which is able to reach grassroots communities with a value and morality approach. The term religious environmentalism is an important concept to understand

(Veldman, 2024), Religious environmentalism refers to efforts to link religious principles with environmental sustainability practices, where spiritual values, religious doctrines, and moral teachings are used to build ecological awareness (Ahmad & Wu, 2022), Various world religions, including Islam, Christianity, Hinduism, and Buddhism, have textual traditions and ritual practices that emphasize the importance of harmonious relationships between humans and nature (Clayton, 2020),

Moreover, in the field of education, transformative education theory offers an important theoretical foundation for this research (Paul & Quiggin, 2020), (Mezirow, 2000), states that transformative education aims to change an individual's perspective through critical reflection, which in the context of climate change means cultivating a new ecological awareness based on personal values and beliefs. The integration of religious teachings in climate change education has the potential to strengthen this reflective dimension, by placing environmental issues as part of individuals' moral and spiritual responsibilities. On the other hand, environmental stewardship theory is also relevant to frame this research. This concept emphasizes the importance of the human role as steward of the earth, a role that is inherently aligned with many religious teachings (Banla, 2024), Faith-based stewardship is not just about managing natural resources, but also viewing it as a form of worship and respect for God's creation.

This literature review shows that despite the recognition of the important role of religion in environmental issues, research specifically exploring how religious leaders function as climate change educators, particularly in the context of local cultures and developing countries, is limited. This reinforces the urgency of this research to fill the void. The theological doctrines that influence attitudes towards the environment vary according to religious tradition. In Christianity, teachings about creation and human responsibility as stewards of the earth are the basis for encouraging environmental conservation. In Islam, the concept of khalifah and trust from God requires people to maintain the balance and sustainability of nature. Hinduism emphasizes dharma and ahimsa (non-violence), which encourage respectful treatment of living beings and nature. Meanwhile, the Buddhist tradition emphasizes awareness and harmony with nature as part of the path to enlightenment, which indirectly supports an environmentally friendly attitude.

METHODS

This research used a qualitative approach with a case study method. The qualitative approach was chosen because this research aims to deeply understand the meaning, roles and experiences of religious leaders in integrating climate change education into religious and social activities in local communities (Creswell & Poth, 2018). The case study method was used to intensively explore the practices, strategies and dynamics of climate change education initiated by religious leaders in a specific context, thus enabling in-depth analysis of complex and contextual phenomena. The research sites were purposively selected, namely religious communities in areas that have experienced significant climate change impacts, such as droughts or floods, so that the educational interventions carried out by religious leaders can be observed more clearly. The main informants in this study were religious leaders (imams, priests, monks, or other religious leaders), community educators, and community members

who were targeted by climate change education programs. Data collection techniques were conducted through in-depth interviews, participatory observation, and documentation studies of educational materials or sermons related to environmental issues.

RESULTS AND DISCUSSION

This research reveals that Islamic religious leaders in urban Tasikmalaya have a significant role in building public awareness of climate change issues. Based on the results of in-depth interviews, it was found that the majority of religious leaders view environmental conservation as an integral part of Islamic teachings that must be internalized in the daily lives of the people. One informant, a kyai from a large mosque in Tasikmalaya, stated:

"We always remind the congregation that protecting nature is a mandate from Allah. If the environment is damaged, it not only affects the world, but also shows negligence in practicing religion". (Informant 3, Interview, 2025),

This finding reinforces the concept of religious environmentalism, where religious principles serve as a normative foundation in environmental conservation practices (Ahmed & Turchini, 2021). In this context, religion not only functions as a spiritual belief system, but also as an agent of social change that encourages concrete actions in addressing climate change. Furthermore, the analysis shows that religious leaders in Tasikmalaya not only integrate environmental messages in lectures or Friday sermons, but also in social religious programs such as mosque-based waste management, greening campaigns, and community-based education. For example, one of the ustadz interviewed revealed:

"We organized a green mosque movement. Every congregation is invited to bring garbage to be donated, not bringing money, after Friday prayers. This is our way of connecting worship with concrete actions to save the earth" (Informant 5, Interview, 2025).

These practices show a concrete form of transformative education, which is an educational process that not only provides knowledge, but also encourages changes in attitudes and behavior (Iqbal, Ahmad, Nasim, & Khan, 2020). Different from the conventional top-down and cognitive approach to education, the religious leaders' approach is based on consciousness-raising and community participation. However, this study also found structural challenges in religious leaders' efforts to educate on climate change. Several informants stated that the level of environmental literacy among worshipers is still low, requiring creative and sustainable approaches. One informant mentioned:

"Sometimes pilgrims don't feel climate change is an important issue. They are more focused on their daily economic affairs. So, we try to relate it: if the climate is damaged, fortune will also be disrupted" (Informant 7, Interview, 2025).

This finding indicates a gap between the ecological awareness built through religious teachings and the socio-economic realities faced by urban communities. This gap confirms the results of previous studies which show that economic factors are often the main obstacle in the acceptance of climate change messages (Charlson et al., 2021). However, the uniqueness of this study lies in how religious leaders in Tasikmalaya managed to make narrative adaptations, namely linking environmental issues with daily values such as sustenance, family health, and economic sustainability.

Theoretically, this study contributes to the development of the concept of environmental stewardship in the context of urban Islam in developing countries. If previous studies focused more on rural communities or custom-based conservation (Tabroni, Erawati, Maspiah, & Sa'adatunnisa, 2022), this research shows that urban Muslim communities can also become agents of ecological change through adaptive and contextual religious pathways. This is the main novelty of this research: showing how religious teachings are translated in a modern urban context to address climate change, something that is still rarely explored in depth in the global literature. In its implementation, religious leaders in Tasikmalaya use various educative approaches that are not only verbal, but also action-based. One of the most dominant approaches is the use of religious metaphors in conveying the importance of protecting the environment (Mardani, n.d.), Metaphors such as "Earth is God's trust" or "Destroying nature is a form of damage to faith" become narratives that are internalized in every religious interaction. A religious figure said:

"We teach that whoever cuts down a tree carelessly is removing God's mercy on earth. It's not just a small sin, it's a social sin" (Informant 2, Interview, 2025).

This method of delivery is consistent with the findings of (Zhang, Ruiz- Menjivar, Luo, Liang, & Swisher, 2020), that a spiritual value-based narrative approach is more effective in changing people's ecological behavior than a purely scientific approach. This also suggests that climate change education through religion in urban communities requires internalization of values before behavior change can occur. The research revealed that most religious leaders are trying to build environmental value-based communities around mosques. Activities such as the "Green Mosque" - a congregational prayer followed by mosque cleaning, tree nurturing and tree planting - are educational innovations that can attract the participation of citizens, including young people who have been considered less concerned about environmental issues. One informant mentioned:

"Young people are usually less interested if it's just a lecture. But if they are invited to pray and then plant trees together, they feel more involved" (Informant 8, Interview, 2025).

This finding reinforces the importance of the experiential learning approach in environmental education. According to (Clayton & Karazsia, 2020), direct experience is the most effective medium in promoting attitude and behavior change. By integrating spiritual experience and ecological action, religious leaders have succeeded in creating a transformative education model based on active participation. A major challenge faced is the issue of unsustainability. Many mosque-based environmental programs are incidental and lack a long-term monitoring system. A senior cleric said:

"We are often excited at the beginning, but after a few months, these green programs start to fade. Because there is no one to supervise and mobilize" (Informant 1, Interview, 2025)

This problem reflects the weakness of community-based environmental institutions in urban areas. Unlike rural communities that have stronger social ties, urban communities tend to be more individualistic, so collective awareness to maintain program continuity is more vulnerable (Nakayama et al., 2025), This indicates that faith-based climate change education in urban areas requires stronger institutional support, rather than simply being based on the motivation of individual religious leaders. A deeper analysis shows that the success or failure of faith-based environmental programs in Tasikmalaya is influenced by three main factors:

The capacity of religious leaders to articulate religious values into actual issues such as climate change, community support formed from the active participation of worshipers, program sustainability which depends on the existence of a clear and systematic management structure. These three factors are interrelated. Religious leaders who are able to link climate change issues with relevant religious teachings will find it easier to build a value-based community, which in turn increases the chances of program sustainability. Conversely, incompetence in any one factor can derail the entire climate change education effort.

In international literature, this model is in line with the concept of Faith-Based Environmental Stewardship developed by (Kopnina, 2020), which states that the success of faith-based environmental programs depends on the ability of religious leaders to combine religious narratives with sustainable social action. One of the most interesting aspects of this research is how religious leaders are trying to strengthen the institutionalization of faith-based environmental education. It was found that although many mosques in Tasikmalaya have started to realize the importance of climate change education, most of the existing programs are sporadic and without strong organizational support. Some informants revealed that without coordination between religious institutions, many environmental programs begin to stall after a period of time.

Analysis of these interviews shows that there is limited capacity within religious organizations to manage environmental issues in a sustainable manner. In fact, the sustainability of faith-based education is strongly influenced by the existence of supporting institutional structures, such as religious study centers that focus on the environment or special divisions within religious organizations that take care of climate change issues (Beyers & Muza, 2022). According to the organizational learning theory proposed by (Ahmad & Wu, 2022), successful organizational change can only be achieved if there is a feedback system that allows for continuous evaluation and improvement. In this context, mosques and religious institutions in Tasikmalaya need institutional capacity building to be able to face the challenges of climate change more systematically and sustainably.

One important step in strengthening institutions is to build partnerships with external institutions, such as local government, non-governmental organizations and educational institutions. For example, some religious leaders in Tasikmalaya have started to cooperate with the Tasikmalaya City Land and Spatial Planning Office, a government organization engaged in environmental conservation. This cooperation has resulted in programs such as training in organic waste utilization, which directly involves the local community in waste management. This inter-institutional cooperation is in line with the concept of pentahelix collaboration, which is widely discussed in studies on sustainable development (Ye, Kueh, Hou, Liu, & Yu, 2020). Pentahelix collaboration emphasizes the importance of involving five main elements: government, community, academia, business sector, and media in climate change mitigation efforts. In Tasikmalaya, although the government and business sector are not yet fully engaged, the synergy between mosques and civil society organizations could be an important first step.

This problem indicates that faith-based climate change education needs to be supported more by a transdisciplinary approach, where religious leaders are equipped with basic scientific knowledge about climate change that they can adapt to a religious perspective. According to some experts, an integrative approach between science and religion can

increase the effectiveness of climate change education (Sutherland, 2023). Therefore, the development of a faith-based education module that combines scientific knowledge with religious values is an urgent need. There is also a broader challenge related to unequal access to information in urban communities. Not all levels of urban society have equal access to climate change education or information. For example, in an interview with an ustadz who is also active in proselytizing in suburban areas, he stated:

"In peripheral areas, it is more difficult for them to understand climate change issues due to limited facilities and knowledge. Many of them are more focused on daily economic issues, such as earning a living" (Informant 9, Interview, 2025).

This difficulty reveals that social inequality has a major influence on the effectiveness of climate change education. In this context, faith-based education can be an effective means of empowerment to reach wider layers of society, but there must be an adjustment of strategies that are more appropriate to their economic and social conditions. A more inclusive bottom-up approach, for example through community-based programs led by local religious leaders, could be a solution to this challenge. Religious leaders need to be given more in-depth training on climate change issues and how to relate them to religious teachings. This training should include a basic understanding of climate change, as well as skills in presenting scientific material in a simple and easy-to-understand manner to the congregation.

Mosques and religious institutions should have a clear structure to manage environmental education programs in a sustainable manner. The establishment of a special division dealing with environmental issues within religious institutions, or even the establishment of a center for religious and environmental studies, can be a strategic step in ensuring program sustainability. It is important for religious institutions to strengthen partnerships with the government, non-governmental organizations and the business sector in order to create broader and more coordinated climate change education programs. These partnerships can help provide resources and technical support for successful faith-based programs.

The approach used in climate change education should be tailored to the socio-economic conditions of the local community. For this reason, it is important to develop community-based programs that take into account the needs and limitations of urban communities, such as training programs that combine religious teachings and concrete practices that can be directly benefited. This research is limited to the context of Tasikmalaya city, so the findings may not be fully generalizable to other areas with different social and cultural characteristics. Therefore, some suggestions for future research are that similar research should be conducted in other areas with different social and cultural contexts, such as in rural areas or other large cities, to compare the effectiveness of faith-based education approaches in addressing climate change. Future research could examine the long-term impact of faith-based climate change education programs on community behavior. The use of longitudinal research methods can provide a clearer picture of the sustainability of the behavioral changes targeted by the program. Further, a more in-depth study of transdisciplinary education models that combine science and religion would be useful. Studies on how religious leaders can collaborate with environmental scientists in conveying climate change messages to congregants can open up new spaces in faith-based education approaches.

CONCLUSION

This study concludes that religious leaders in Tasikmalaya have great potential in educating the public about climate change through an approach based on religious values. Methods such as metaphorical narratives, activities in mosques, and real actions such as "Green Prayer" and tree planting have proven effective in increasing public awareness and participation. However, this program still faces challenges such as institutional limitations, gaps in access to information, minimal support from the government and private sector, and low scientific understanding of some religious leaders regarding climate change issues.

BIBLIOGRAPHY

- Ahmad, M., & Wu, Y. (2022). Combined role of green productivity growth, economic globalization, and eco-innovation in achieving ecological sustainability for OECD economies. *Journal of Environmental Management*,302.
- Ahmed, N., & Turchini, G. M. (2021). Recirculating aquaculture systems (RAS): Environmental solution and climate change adaptation. *Journal of Cleaner Production*.
- Aripin, I. T., & Mardani, D. A. (2024). Islam, Ethics and Ecology: An Examination of Quranic Verses on the Obligation to Care for the Environment. No. July. [researchgate.net](https://www.researchgate.net).
- Banla, N. K. (2024). Nso' traditional religion and climate forecasting: a critical photographic analysis. *Journal of the British Academy*,12 (1-2). <https://doi.org/10.5871/jba/012.a19>
- Beyers, J., & Muza, K. (2022). Christianity and Shona Religion and Ecology An Ethical-Practical Perspective. *Journal of Religion in Africa*,15 (45), 1-19.
- Bolton, P., & Kacperczyk, M. (2021). Do investors care about carbon risk? *Journal of Financial Economics*,142 (2), 517-549.
- Charlson, F., Ali, S., Benmarhnia, T., Pearl, M., Massazza, A., Augustinavicius, J., & Scott, J. G. (2021). Climate change and mental health: A scoping review. *International Journal of Environmental Research and Public Health*,18 (9).
- Clayton, S. (2020). Climate anxiety: Psychological responses to climate change. *Journal of Anxiety Disorders*,74.
- Clayton, S., & Karazsia, B. T. (2020). Development and validation of a measure of climate change anxiety. *Journal of Environmental Psychology*,69
- Dwivedi, Y. K., Hughes, L., Kar, A. K., Baabdullah, A. M., Grover, P., Abbas, R... Wade, M. (2022). Climate change and COP26: Are digital technologies and information management part of the problem or the solution? An editorial reflection and call to action. *International Journal of Information Management*,63 102456.
- Hearn, A. X., Huber, F., Koehrsen, J., & Buzzi, A. L. (2024). The perceived potential of religion in mitigating climate change and how this is being realized in Germany and Switzerland. *Journal of Environmental Studies and Sciences*,14 (2), 342-357.
- Illahi, S., & Mrdani, D. A. (2024). Principal Leadership in Improving Performance of Educators (Teachers), at SMPN 2 Selaawi, Garut Regency. *Al-Afkar, Journal for Islamic Studies*.
- Iqbal, Q., Ahmad, N. H., Nasim, A., & Khan, S. A. R. (2020). A moderated-mediation

- analysis of psychological empowerment: Sustainable leadership and sustainable performance. *Journal of Cleaner Production*, 262
- Islam, T., Khan, M. M., Ahmed, I., & Mahmood, K. (2020). Promoting in-role and extra-role green behavior through ethical leadership: mediating role of green HRM and moderating role of individual green values. *International Journal of Manpower*, 42 (6), 1102-1123.
- Kopnina, H. (2020). Education for the future? Critical evaluation of education for sustainable development goals. *Journal of Environmental Education*, 51 (4), 280-291.
- Kurniawan, A., Ramdani, H., & Mardani, D. A. (2024). The Role of Principal Leadership in Improving Teacher Work Ethic at SDN Mancogeh. *Al-Afkar, Journal For Islamic*.
- Mardani, D. A. (n.d.). The Coexistence of Sakai Religion and the Hegemony of Industrialization.
- Mardani, D. A. (2024). Ecotourism, Religious-Spiritual Tourism: As a Way to Realize Sustainable Tourism. *La Zhulma | Journal of Economics and Islamic Business*.
- Mardani, D. A., Masuroh, I. S., Pursita, W., & Kustana, K. (2023). Religion and Ecology: Environmental Ethics in Maintaining the Food and Energy. *TEMALI: Journal of Social Development*. researchgate.net. <https://doi.org/10.15575/jt.v6i1.25284>
- Nakayama, M., Sasaki, D., Uakeia, T., Seru, J., Vila, C., Bilimon, M., & McKay, Y. (2025). Influence of Religion, Culture, and Education on Perception of Climate Change and its Implications: Applying Causal Inference in Statistics. *Journal of Disaster Research*, 20 (1), 37-43. <https://doi.org/10.20965/jdr.2025.p0037>
- Paul, L. A., & Quiggin, J. (2020). Transformative Education. *Educational Theory*, 70 (5), 561-579. <https://doi.org/10.1111/edth.12444>
- Smyer Yü, D. (2024). A Public Theology of the Anthropocene: The Earth's Deep Freedom. *Religion and Development*, 2 (3), 353-380.
- Sutherland, C. (2023). Cop26 and opening to postcapitalist climate politics, religion, and desire. *Scottish Geographical Journal*, 139 (1-2), 73-90.
<https://doi.org/10.1080/14702541.2023.2176540>
- Tabroni, I., Erawati, D., Maspiah, I., & Sa'adatunnisa, H. (2022). Islamic Religious Education in the Guidance of the Prophet's Shari'at. *Journal of Education and Culture*, 2 (1), 53-56. <https://doi.org/10.58707/jec.v2i1.141>
- Veldman, R. G. (2024). The New Civil Religion: How Conservative Broadcasters' Religious Discourse Erodes Support for Climate Action. *Journal for the Study of Religion, Nature and Culture*, 18 (3), 345-375.
- Ye, N., Kueh, T. B., Hou, L., Liu, Y., & Yu, H. (2020). A bibliometric analysis of corporate social responsibility in sustainable development. *Journal of Cleaner Production*, 272 <https://doi.org/10.1016/j.jclepro.2020.122679>
- Zhang, L., Ruiz-Menjivar, J., Luo, B., Liang, Z., & Swisher, M. E. (2020). Predicting climate change mitigation and adaptation behaviors in agricultural production: A comparison of the theory of planned behavior and the Value-Belief-Norm Theory. *Journal of Environmental Psychology*, 68. <https://doi.org/10.1016/j.jenvp.2020.101408>.