





Ecotheology in Minangkabau Community Education: Integration with the Leadership Management of Niniak Mamak

Eramli Jantan Abdullah*1, Febrino2, Zetty Nurzuliana Rashed3

Abstract

This study addresses environmental degradation and declining ecological awareness in modern religious and social life. Within the Minangkabau context, the integration of Islamic values and customary traditions continues to reflect a harmonious relationship between humans, nature, and God. This research analyzes how Islamic ecotheological values are embedded in the leadership of niniak mamak (traditional leaders) and the social practices of the Salingka Nagari community in Tilatang Kamang, Agam Regency, West Sumatra. Using a qualitative descriptive-analytical approach, data were collected through in-depth interviews, participatory observation, and documentation, with Tamsir Dt. Pado Batuah and Mutaqim Malin Pamuncak serving as key informants. The findings show that Islamic ecotheological values are practiced through an indigenous leadership system grounded in mizan (ecological balance), amanah (responsibility for God's creation), and ukhuwah kauniyyah (universal brotherhood among all beings). Ecological governance is reflected in the management of customary forests (Rimbo Manduang), collective farming (batanam basamo), and community deliberation, all rooted in the principle of adat basandi syarak, syarak basandi Kitabullah (custom founded upon Islamic law, and Islamic law founded upon the Qur'an). Non-formal educational spaces such as surau and lapau also function as channels for transmitting ecotheological values across generations. This study concludes that the leadership of niniak mamak in Tilatang Kamang embodies a living model of Islamic social ecology, integrating Islamic teachings, local wisdom, and ecological consciousness within a sustainable governance system. The findings contribute to developing a faith-based ecological leadership framework within Islamic education and sustainable development discourse.

Keywords: islamic ecotheology; indigenous leadership; islamic social ecology

History:

Received: 20 February 2025 Revised: 8 March 2025 Accepted: 13 June 2025 Published: 28 June 2025

¹UIN Sjech M. Djamil Djambek Bukittinggi, Indonesia ²IAIN Syaikh Abdurrahman Siddik Bangka Belitung, Indonesia ³Universiti Islam Selangor, Malaysia

*Author Correspondent: eramli6767@gmail.com

Publishers: LPM IAIN Syaikh Abdurrahman Siddik Bangka Belitung, Indonesia

Licensed: This work is licensed under

aCreative Commons Attribution 4.0 International License.



Introduction

Issues of environmental degradation and global climate change increasingly demand serious attention from various disciplines, including theology and Islamic education. Phenomena such as deforestation, the exploitation of natural resources, and the decline of ecosystem quality not only create ecological impacts but also disrupt the moral and spiritual balance of humans toward God's creation. In Islamic teaching, humans are positioned as khalifah fil ardh (God's vicegerents on earth) who bear the responsibility to safeguard and cultivate the environment, as emphasized in the Qur'an, Surah Al-A'raf [7]: 56, which commands humankind not to cause corruption after the earth has been set in order. This faith-driven ecological consciousness forms the core of the concept of Islamic ecotheology, a theological approach that places the relationship between humans, God, and nature within a unified ethical and spiritual framework (Aripin, 2025; Gueye & Mohamed, 2022).

Previous studies have explored the integration of ecotheological values within education and Muslim communities. For instance, Karman et al. (2023) highlight the importance of ecology-based education in fostering environmental awareness in modern pesantren(Karman et al., 2023), while Mulya and Salvi (2024) emphasize the role of religious scholars and community leaders in

instilling environmental ethics grounded in the concept of rahmatan lil 'alamin (Mulya & Salvi, 2024). However, most of these studies focus on theoretical dimensions and formal education, with limited attention given to the practical integration of ecotheology within traditional leadership systems and informal community-based education.

A research gap emerges regarding how Islamic ecotheological values are not only internalized normatively within religious teachings but also implemented practically within socio-environmental governance rooted in local customs. The Minangkabau community, particularly in the Salingka Nagari Tilatang Kamang area of Agam, presents an interesting case, as the community continues to uphold its traditional leadership system through the niniak mamak, harmonized with Islamic values under the principle adat basandi syarak, syarak basandi Kitabullah. This system integrates customary norms, Islamic spirituality, and ecological practices such as the management of Rimbo Manduang (customary forest), collective irrigation systems, and decision-making through the tungku tigo sajarangan (niniak mamak, religious scholars, and intellectuals).

This study offers novelty by highlighting the leadership role of the niniak mamak as a model of "faith-based ecological governance"—an environmental governance framework grounded in faith, combining customary values with Islamic theology. This approach has rarely been examined in previous literature, which tends to focus on environmental management through formal policies or conventional Islamic educational institutions. The study also contributes original insights by positioning the Minangkabau social system as a form of contextual Islamic education transmitted culturally and intergenerationally outside formal institutions.

Theoretically, this research is grounded in the view that Islamic ecotheology encompasses three main principles: mizan (ecological balance), amanah (responsibility toward God's creation), and ukhuwah kauniyyah (solidarity with all living beings) (Wijsen & Anshori, 2023). These values are integrated within the Minangkabau customary system, which teaches that human life must be aligned with nature and divine will. The philosophical expression alam takambang jadi guru serves as an epistemological foundation that positions nature as a source of knowledge, morality, and spirituality. Accordingly, in the context of Tilatang Kamang, the niniak mamak function not only as social authorities but also as agents of ecotheological education who guide the community in maintaining ecological balance based on faith.

Previous works by Subaidi et al. on eco-pesantren (Subaidi et al., 2023) and by Gueye and Mohamed on Islamic social ecology (Gueye & Mohamed, 2022) demonstrate that faith-based institutions possess strong potential in cultivating ecological awareness. However, this study goes further by positioning the Minangkabau customary system as a form of non-formal faith-based ecological education (Fadri & Prayoga, 2025), which instills ecological values through social practices, agricultural systems, and communal deliberations. This perspective opens new spaces for the reinterpretation of Islamic education in a more contextual and locally rooted manner.

Thus, this research aims to analyze how Islamic ecotheological values are integrated within the leadership system of the niniak mamak and the social practices of the Minangkabau community in Tilatang Kamang. The study is expected to contribute theoretically to the development of the Islamic social ecology paradigm while offering an ecotheology-based Islamic education model relevant to contemporary society in addressing global environmental crises. Practically, the findings may enrich sustainable development strategies grounded in local culture and spirituality, particularly within indigenous communities that regard faith and nature as the two primary pillars of life.

Method

This study employs a qualitative approach using a descriptive-analytical method to gain an in-depth understanding of the integration of Islamic ecotheological values within the traditional leadership system of the Minangkabau community in Tilatang Kamang, Agam Regency, West

Sumatra. A qualitative approach was chosen because it is suitable for exploring meanings, values, and social practices that are contextual in nature and cannot be measured (Tarnoki & Puentes, 2019). The research was conducted in the customary area of Salingka Nagari Tilatang Kamang, which continues to practice traditional leadership and customary-based environmental governance. Research subjects were selected using purposive sampling, involving two key informants deemed to possess substantial knowledge and central roles within the customary community and Islamic education. These informants were Tamsir Dt. Pado Batuah, a niniak mamak from the Pili clan in Jorong Pandan who acts as a customary leader and social decision-maker, and Mutaqim Malin Pamuncak, a pesantren teacher responsible for transmitting spiritual and ecological values to the community.

Data were collected using three primary techniques: in-depth interviews, participatory observation, and documentation. In-depth interviews were conducted to explore informants' views and experiences regarding ecotheological practices, customary forest governance, and the role of the tungku tigo sajarangan in maintaining environmental balance. Observations were carried out on community activities such as gotong royong, batanam basamo (collective planting), and customary deliberations. Documentation included village archives, customary records, and relevant local literature. Data analysis was conducted thematically following the Miles, Huberman, and Saldaña model (Miles et al., 2014), consisting of three main stages: data reduction, data display, and conclusion drawing. This process was carried out cyclically to identify patterns and relationships between Islamic values, customary systems, and the community's socio-ecological practices. The researcher interpreted the interview and observational data through an interpretive approach by considering the sociocultural context of the Minangkabau community.

To ensure data validity, this study employed source and method triangulation(Carter et al., 2014), comparing information from the two key informants, field observations, and supporting documents. The validity of the findings was further strengthened through member checking, whereby data interpretations were reconfirmed with the informants to ensure accuracy. With this methodological design, the study aims to provide a comprehensive description of how Islamic ecotheological values are internalized and practiced within the leadership of the niniak mamak, and how the Minangkabau customary system functions as a living and contextual form of ecotheology-based Islamic education.

Results and Discussion

Social Context and Ecotheological Values in the Minangkabau Customary System

Social Context and Value Background

The Minangkabau people are known as one of the customary communities with the most complex social systems and cultural values in Indonesia. Among the most prominent philosophies is adat basandi syarak, syarak basandi Kitabullah, which affirms the integration of custom and Islamic teachings in every aspect of life (Darwis & Muslim, 2024). This principle serves not only as a moral guideline but also as a managerial and social foundation regulating human relations with God, with others, and with nature. In this context, the presence of niniak mamak as customary leaders plays a central role in ensuring social and ecological balance in the nagari.

Research conducted in Salingka Nagari Tilatang Kamang, Agam Regency, shows that customary leadership remains functionally alive. Despite ongoing modernization and social changes, the local community continues to adhere strongly to Islamic and customary principles in managing the environment and educating the younger generation. Tamsir Dt. Pado Batuah, a *niniak mamak* of the Pili clan, stated that preserving the environment is part of a mandate that must be accounted for not only socially but also spiritually. He emphasized, "Rimbo Manduang cannot be cut down arbitrarily. The customary council supervises it because it is the source of water for Lake Tirtasari. It must not be damaged, because the water is the lifeline of the villagers."

This statement illustrates the relationship between faith-based values and ecological responsibility. Such a perspective aligns with the Islamic concept of *mizan*, which emphasizes balance as

a fundamental principle of God's creation (Rasyid et al., 2025). Therefore, the social practices of the Minangkabau community, especially in Tilatang Kamang, can be understood as a form of Islamic ecotheology rooted in spiritual awareness and local tradition.

Ecotheological Values and Spiritual Awareness of the Environment

Ecotheological values within the Minangkabau community emerge through the interaction of religious texts, customary traditions, and ecological experience. From the perspective of Islamic education management, this reflects an ongoing cultural educational process in which nature becomes a learning environment and Islamic values serve as the curriculum. The philosophy *alam takambang jadi guru* reflects experiential learning principles, which in an Islamic context refer to contemplative learning (*tadabbur*) through observing God's creation(Marni & Eliza, 2020).

The people of Tilatang Kamang perceive nature not as an object of exploitation but as a spiritual partner with sacred value. Every social activity—clearing land, planting rice, or harvesting forest resources—is conducted with prayer and customary consideration. These spiritual values function as social control mechanisms against destructive behavior. In the context of education management, such practices represent a model of value-based education implemented informally and integrated into daily life.

Based on an interview with Mutaqim Malin Pamuncak, a pesantren teacher in Tilatang Kamang, the surau still functions as a place for instilling moral values and social responsibility toward nature. He stated, "In the surau, children are taught not only prayer or Qur'anic recitation, but also the responsibility to protect nature. Nature is God's sign that must be read and preserved." This view reinforces the argument that grassroots Islamic education has developed a community-based model of spiritual–ecological learning.

Integration of Customary and Theological Values in Social Management

In the Minangkabau social system, *niniak mamak* serve as leaders who combine managerial, educational, and spiritual functions. They regulate customary affairs while guiding the community in implementing Islamic teachings in social practice. This leadership model can be categorized as *integrative leadership*—a style that merges religious, cultural, and environmental values (Maulida et al., 2024). In natural resource management, strategic decisions are made through customary deliberation involving the *tungku tigo sajarangan*: *niniak mamak* (customary leaders), *alim ulama* (religious scholars), and *cadiak pandai* (intellectuals). This participatory governance reflects the Islamic principle of *syura*. It also aligns with Islamic management concepts that emphasize deliberation in policymaking(Maulida et al., 2024).

Field observations reveal that environmental conservation—including monitoring the Rimbo Manduang, managing water sources, and regulating irrigation—is carried out through collective agreements. No individual action is allowed without customary approval. This principle aligns with modern management concepts such as shared leadership and community-based management, but within the Tilatang Kamang context, it is uniquely shaped by Islamic ethics and spirituality.

Educational Dimensions within the Customary-Religious Value System

The values instilled in the Minangkabau community do not stand alone; they are structured within a social system that functions as an educational vehicle. This educational process occurs through three main arenas: the family, the *surau*, and the customary community. These three work synergistically to instill faith, knowledge, and righteous action in the younger generation. From the viewpoint of Islamic education management theory, this represents *integrated educational management*, combining formal, nonformal, and informal dimensions.

The *surau* provides spiritual development; the family nurtures character; and the customary community reinforces social responsibility. Together, they create an ecotheology-based Islamic educational ecosystem that shapes humans to be morally grounded and ecologically aware stewards

(khalifah). As noted by Yusuf et al. (2019), the environmental crisis is essentially a spiritual crisis, and therefore education integrating faith and ecological awareness is essential for sustainable development (Yusuf et al., 2019). In Tilatang Kamang, values such as mutual cooperation, consensus, and environmental preservation are not only social ethics but part of a living curriculum passed down across generations. This value transmission demonstrates that the Minangkabau customary system functions as an effective nonformal Islamic educational institution.

Managerial Implications for Islamic Education

The findings show that the integration of customary and Islamic values in Tilatang Kamang has produced an effective and sustainable leadership system. *Niniak mamak* leadership is not power-oriented but focused on moral, spiritual, and social guidance. From an Islamic education management perspective, this demonstrates the application of *leadership by value*, in which authority arises from exemplary conduct and knowledge rather than structural position (Astuti, 2024). Furthermore, this social system shapes Islamic education rooted in local culture. The community has developed a form of *community-based Islamic education*, where learning extends beyond formal institutions and is embedded in daily life. This aligns with the paradigm of *Islamic Social Ecology*, which emphasizes that Islamic education must integrate social, spiritual, and ecological dimensions as a unified system of values (Idris et al., 2020). Thus, the social context and ecotheological values of the Minangkabau community in Tilatang Kamang show that Islam and custom are not separate entities but mutually reinforcing systems that produce contextual, living, and sustainable Islamic educational practices.

Leadership of Niniak Mamak and Managerial Dimensions in Islamic Education

Niniak Mamak Leadership as a Model of Islamic Leadership

Leadership in Islam is not merely an administrative decision-making process but a divine trust (amanah) carrying moral and spiritual responsibility. The concept of khalifah fil ardh describes humans as leaders tasked with maintaining balance, upholding justice, and preserving God's creation(Aprilia & Munifah, 2022). This principle is reflected in the niniak mamak leadership system in Tilatang Kamang, where leaders act as social regulators and moral educators. Tamsir Dt. Pado Batuah explained that the role of niniak mamak is not limited to managing ancestral land but includes guiding their clans morally and spiritually. He stated, "If a niniak mamak is skilled only in managing ancestral land but cannot guide the younger generation in religious matters, then he is not a true leader." This shows that customary leadership is understood within the framework of Islamic character education, requiring leaders to exemplify faith, morality, and social responsibility.

The leadership of the *niniak mamak* can be categorized as a form of spiritual leadership, namely a leadership style that integrates religious, ethical, and humanitarian values in the decision-making process (Faizah, 2021). In Islamic educational management, such spiritual leadership is considered effective in cultivating a value-oriented organizational culture (value-driven leadership). This aligns with the view that the success of Islamic education is not measured solely by cognitive achievement, but also by the extent to which divine values are internalized in social behavior (Latuconsina, 2023).

Leadership Structure and Managerial Mechanisms in Customary Governance

Structurally, the Minangkabau customary leadership system is collegial and participatory. Every important decision—whether related to *ulayat* land, social relations, or environmental management—must go through customary deliberation (*kerapatan adat*). This process involves the three key elements of the *tungku tigo sajarangan*: *niniak mamak*, *alim ulama*, and *cadiak pandai*. This model of leadership aligns with Islamic management principles that place *shūrā* as the mechanism for collective decision-making (Aniska et al., 2022).

Customary deliberation is not merely a local political forum, but also a space for social education. In these meetings, the younger generation learns values of communication, responsibility, and ethical rational thinking within the framework of faith. Mutaqim Malin Pamuncak explained, "When the young generation is invited to deliberations, they can observe how leaders make decisions. There, they learn morals, not only custom." This statement reinforces the view that customary leadership also functions as a value-based character education institution. From the perspective of Islamic educational management, this system represents participatory management—an approach grounded in participation and moral values. This model differs from modern hierarchical management, as customary leadership in Tilatang Kamang is horizontal and collective. The *niniak mamak* are not rulers but caretakers who maintain harmony between individuals, society, and nature.

Managerial Values within Customary Leadership Practice

Three main managerial values can be identified from the leadership practices of *niniak mamak* in Tilatang Kamang: (1) spiritual values, (2) social values, and (3) ecological values. The spiritual value is reflected in the awareness that every leadership action must aim at attaining Allah's pleasure (*mardhatillah*). The social value appears in the form of justice and togetherness in decision-making. Meanwhile, ecological value is manifested in the responsibility to preserve nature as part of social worship.

These three values form a model of value-based leadership oriented toward the balance of faith, knowledge, and action. In the context of Islamic education, this model can serve as a reference for managing educational institutions in a way that integrates spiritual dimensions into school or *madrasah* governance systems. Value-oriented Islamic educational management will foster an organizational culture that is characterized, adaptive, and sustainable (Irsyadiyah, 2020). Thus, the leadership of *niniak mamak* can be regarded as a prototype of Islamic ecological leadership relevant for developing contextual Islamic education.

Nonformal Education Based on Ecotheology: Surau, Lapau, and the System of Value Transmission Surau as a Center for Spiritual and Ecological Education

The surau is a socio-religious institution of great significance within the Minangkabau educational system. Historically, it served as a place of worship, Qur'anic learning, and moral formation for the younger generation. However, in the context of Tilatang Kamang, the surau has developed into a center of spiritual-ecological education. Through religious activities and traditional learning, values concerning environmental responsibility are transmitted across generations. Mutaqim Malin Pamuncak explained that, "The surau is where children learn about their relationship with Allah and with nature. Nature is not to be destroyed but preserved, because within it lie signs of God's greatness." Such educational practices align with the principles of ecological education in Islam, where humans are taught to read the two books of God: the qauliyah (revelation) and the kauniyah (the natural universe) (Yusuf et al., 2019).

From the standpoint of Islamic educational management, the *surau* can be categorized as a nonformal institution that performs the functions of value internalization and character formation. It operates not through written curricula, but through exemplification and direct experience. Thus, the *surau* acts as an informal leadership institution that cultivates ecological consciousness grounded in faith.

Lapau as a Space for Social and Moral Learning

In addition to the *surau*, the *lapau* (traditional coffee shop) holds significant social functions. It is a place where people discuss life, tradition, and environmental issues. Although informal, the *lapau* serves as a medium of social communication and public education. Observations show that discussions in the *lapau* often stimulate collective awareness of ecological issues such as deforestation, irrigation, and environmental cleanliness. In the framework of Islamic educational theory, the

lapau can be considered a learning community—a space where values and social experiences are constructed through interaction. This function demonstrates that Islamic education in Minangkabau society occurs within a social system integrated with everyday cultural activities. It supports the view that Islamic education is not confined to classrooms but encompasses all life settings where Islamic values can be internalized (Fadri & Prayoga, 2025).

Value Transmission through Intergenerational Education

The transmission of ecotheological values in Tilatang Kamang is not conducted through doctrinal teaching but through habituation and role-modeling. The *niniak mamak*, religious scholars, and parents serve as educational agents who instill social and ecological responsibility through lived practices. Activities such as communal work (*gotong royong*) to clean waterways, conserving customary forests, and *batanam basamo* (collective planting) become forms of tangible learning for the younger generation. In Islamic educational management, such a value transmission system reflects the principle of experiential learning—learning through direct experience. According to Immaniar (2019), this approach is highly effective in cultivating ecological character, as learners directly experience the relationship between behavior and its environmental impact (Immaniar et al., 2019).

Furthermore, this intergenerational educational system reinforces the theory of Islamic social ecology, which posits that Islamic education cannot be separated from the social structures within which Islamic values are practiced (Romlah et al., 2024). Thus, nonformal education in Tilatang Kamang functions not only as a means of character formation but also as a managerial strategy for sustaining Islamic values amidst social change.

Collaboration within the Tungku Tigo Sajarangan as a Model of Sustainable Islamic Educational Management

Collaborative Structure in the Socio-Religious System

One of the defining characteristics of Minangkabau society is the principle of tungku tigo sajarangan, a collaborative system involving three essential elements: niniak mamak, alim ulama, and cadiak pandai. These three groups serve as social leaders who complement one another in maintaining social, moral, and ecological harmony. In Tilatang Kamang, this collaboration is not merely symbolic but functions as an effective managerial system in regulating social and educational order. During an interview, Tamsir Dt. Pado Batuah stated, "If there is an environmental or customary problem, it cannot be decided by the niniak mamak alone. It must be discussed with the ulama and the cadiak pandai so that the outcome is blessed and impartial." This indicates that collective and participatory decision-making is deeply embedded in the social organizational culture of Minangkabau society.

From the perspective of Islamic educational management, this system represents a form of collaborative governance that places deliberation (*musyawarah*) as the core mechanism for decision-making(Fadri & Prayoga, 2025). Collaboration among customary leaders, religious scholars, and intellectuals creates a balance between normative (religious), cultural (customary), and rational (intellectual) dimensions.

Deliberation as a Managerial and Educational Mechanism

Deliberation, the core of the tungku tigo sajarangan system, functions not only as a managerial process but also as an important educational mechanism. Through deliberation, the community learns principles of transparency, justice, and collective responsibility. In Islamic education, this aligns with the concept of ta'lim wa tarbiyah, which emphasizes the importance of value-based learning through social interaction (Momen, 2024). Deliberation also serves as a medium for intergenerational value transfer. Young people are often included as observers to understand the logic of decision-making based on wisdom. This process aligns with Senge's (2006) concept of a learning

organization—where effective organizations continually learn through interaction and collective reflection.

Collaboration as an Implementation of Sustainable Educational Management

The tungku tigo sajarangan model can be understood as a form of sustainable Islamic educational management. All three leadership elements share the vision of maintaining balance between faith, knowledge, and action. This aligns with the concept of Islamic social ecology, which requires education and development to incorporate spiritual, social, and environmental dimensions(Azzahra & Maysithoh, 2024). This system proves resilient amidst modernization: despite economic and technological changes, Islamic and customary values continue to guide social decisions. This shows that value-based management is more enduring than technically efficient but value-neutral managerial models. In Islamic educational management, the principle of distributed leadership is also reflected, with leadership responsibilities shared across actors according to their expertise.

Theoretical Synthesis and Conceptual Implications for Islamic Educational Management

Theoretical Synthesis: Ecotheology as a Paradigm of Islamic Educational Management

The findings confirm that the social practices of Minangkabau society in Tilatang Kamang represent a concrete form of ecotheology-based Islamic educational management. Islamic and customary values merge to create a social system in which nature is part of moral and spiritual education. In Islamic educational management theory, this aligns with the pillars of Islamic management: $tawh\bar{i}d$, $khil\bar{a}fah$, and $am\bar{a}nah$ (Khaeron, 2019). These principles are embodied in practice: the niniak mamak perform leadership reflecting khalifah responsibilities; the ulama safeguard spiritual-moral dimensions; and the cadiak pandai ensure innovation remains aligned with Islamic values.

Conceptual Implications for the Development of Islamic Educational Management

The research presents several key implications: 1) Islamic education should integrate ecological dimensions into its curriculum—not merely as scientific content but as a means of spiritual and moral formation. 2) Islamic educational institutions should adopt collaborative leadership models like the tungku tigo sajarangan. 3) Nonformal education—such as surau, lapau, and community activities—should be recognized and empowered as part of the Islamic educational ecosystem. 4)The concept of Islamic ecological leadership can be expanded as a new theoretical framework combining Islamic leadership principles with ecological consciousness.

Reflection on Sustainable Development and Islamic Education

In today's global context, Islamic education must produce individuals who are intellectually capable and spiritually conscious of sustainability. Tilatang Kamang offers a concrete example of how spirituality and local wisdom can function as social engineering tools for ecological balance (Pandikar et al., 2024). Thus, the future paradigm of Islamic educational management must transition toward value-driven sustainability—an educational system centered on values, morals, and ecological consciousness.

Conclusion

This study demonstrates that the Minangkabau community of Tilatang Kamang embodies a living model of Islamic ecotheology through the integration of Islamic values, customary norms, and ecological practices within its indigenous leadership system. The leadership of the niniak mamak—rooted in the philosophical foundation of adat basandi syarak, syarak basandi Kitabullah—functions not only as a socio-cultural authority but also as an agent of ecological stewardship and spiritual education. Their leadership reflects the principles of mizan (balance), amanah (divine trust), and ukhuwah kauniyyah (universal brotherhood), which guide the community in managing

natural resources, preserving customary forests, and maintaining social harmony. The findings reveal that ecological governance in Tilatang Kamang—such as the protection of Rimbo Manduang, collective farming (batanam basamo), and deliberative decision-making through the tungku tigo sajarangan—is firmly grounded in Islamic ethical frameworks and reinforced through customary structures. These practices constitute a form of faith-based ecological management that demonstrates how Islamic teachings can be applied in practical environmental stewardship.

Moreover, the educational processes embedded within the family, the *surau*, and the customary community illustrate that Islamic ecotheological values are transmitted through nonformal and culturally rooted learning systems. This reinforces the argument that the Minangkabau social order operates as an ecotheology-based Islamic educational ecosystem, shaping individuals to become morally grounded and ecologically conscious *khalifah* on earth. Theoretically, this research contributes to the development of an Islamic social ecology paradigm by showing that indigenous leadership can serve as a model for sustainability rooted in spirituality and cultural wisdom. Practically, the integration of customary governance and Islamic ecological ethics offers an alternative framework for sustainable development in Muslim communities, demonstrating that environmental preservation can be effectively achieved through faith-driven cultural institutions. Thus, the leadership of the niniak mamak provides valuable insight into how indigenous Islamic communities can address contemporary environmental challenges while maintaining cultural identity and spiritual integrity.

Reference

- Aniska, R., Murni, T., & Gistituati, N. (2022). Effectiveness of Leadership Tungku Tigo Sajarangan in The Development of Nagari Nyiur Lambai Pelangai. *Bisma The Journal of Counseling*, 6(2), 238–241. https://doi.org/10.23887/bisma.v6i2.48586
- Aprilia, T. H., & Munifah, M. (2022). Manifestation Of Prophetic Leadership Values In Islamic Education. TADBIR Jurnal Studi Manajemen Pendidikan, 6(2), 273. https://doi.org/10.29240/jsmp.v6i2.4896
- Aripin, I. T. (2025). AYAT-AYAT AL-QURAN TENTANG PEMELIHARAAN LINGKUNGAN. *Ahwaluna*., 6(1), 149–164. https://doi.org/10.70143/ahwalunajurnalhukumkeluargaislam.v6i1.459
- Astuti, A. (2024). Value-based Islamic education management: developing leadership and commitment in contemporary Islamic school environments. *Edelweiss Applied Science and Technology*, 8(5). https://doi.org/10.55214/25768484.v8i5.1709
- Azzahra, S., & Maysithoh, S. (2024). PERAN MUSLIM DALAM DALAM PELESTARIAN LINGKUNGAN: AJARAN DAN PRAKTIK. At-Thullab Jurnal Mahasiswa Studi Islam, 6(1), 1568–1579. https://doi.org/10.20885/tullab.vol6.iss1.art8
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The Use of Triangulation in Qualitative Research. *Oncology Nursing Forum*, 41(5), 545–547. https://doi.org/10.1188/14.onf.545-547
- Darwis, D. A., & Muslim, N. (2024). Minangkabau Cultural Identity: History And Development. *International Journal of Religion*, 5(10), 794–805. https://doi.org/10.61707/fbvrmv21
- Fadri, Z., & Prayoga, A. G. (2025). The Surau's Ethnopedagogy: Weaving Faith and Culture in Minangkabau. IBDA Jurnal Kajian Islam Dan Budaya, 23(2), 189–204. https://doi.org/10.24090/ibda.v23i2.14005
- Faizah, K. (2021). SPIRITUALITAS DAN LANDASAN SPIRITUAL (MODERN AND ISLAMIC VALUES); DEFINISI DAN RELASINYA DENGAN KEPEMIMPINAN PENDIDIKAN. Ar-Risalah Media Keislaman Pendidikan Dan Hukum Islam, 19(1), 68. https://doi.org/10.29062/arrisalah.v19i1.571
- Gueye, M. K., & Mohamed, N. (2022). An Islamic Perspective on Ecology and Sustainability. In *IntechOpen eBooks*. IntechOpen. https://doi.org/10.5772/intechopen.105032
- Idris, M., Mokodenseho, S., Willya, E., & Otta, Y. A. (2020). Integrasi Pendidikan Berbasis Lingkungan dengan Nilai-nilai Islam: Upaya Meningkatkan Etika dan Literasi lingkungan. https://doi.org/10.31219/osf.io/3v248

- Immaniar, B. D., Sumarmi, S., & Astina, I. K. (2019). Pembelajaran Lingkungan Berbasis Kearifan Lokal dengan Model Experiential Learning. *Jurnal Pendidikan Teori Penelitian Dan Pengembangan*, 4(5), 648. https://doi.org/10.17977/jptpp.v4i5.12431
- Irsyadiyah, A. (2020). MANAJEMEN MUTU PENDIDIKAN PERPSEKTIF PENDIDIKAN ISLAM. Rausyan Fikr Jurnal Pemikiran Dan Pencerahan, 16(1). https://doi.org/10.31000/rf.v16i1.2459
- Karman, K., Anwar, R., & Hakim, L. (2023). The Qur'anic Learning Based on Islamic Eco-Theology at Pesantren. *Deleted Journal*, 9(2), 169–186. https://doi.org/10.15575/jpi.v9i2.24933
- Khaeron, M. (2019). FILSAFAT ILMU MANAJEMEN PENDIDIKAN ISLAM REKONTRUKSI KRITIS ISLAMISASI MANAJEMEN PENDIDIKAN ISLAM DALAM KONTEKS KEKINIAN. JIEM (Journal of Islamic Education Management), 3(1), 64. https://doi.org/10.24235/jiem.v3i1.5430
- Latuconsina, A. (2023). Learning Outcomes of Islamic Religious Education in Various Studies in Indonesia: Correlation Meta-Analysis and Systematic Literature Review. *International Journal of Instruction*, 16(4), 329–348. https://doi.org/10.29333/iji.2023.16420a
- Marni, S., & Eliza, D. (2020). Introduction to Nature of Minangkabau Culture With the Philosophy of Learning from the Nature Through Scientific Approach. https://doi.org/10.2991/assehr.k.200819.069
- Maulida, R., Aziz, A., & Efendi, N. (2024). MEMBANGUN PEMIMPIN MASA DEPAN: STRATEGI PENGEMBANGAN KEPEMIMPINAN DALAM PENDIDIKAN ISLAM. Jurnal Tarbiyatuna Jurnal Kajian Pendidikan Pemikiran Dan Pengembangan Pendidikan Islam, 5(2), 75–90. https://doi.org/10.30739/tarbiyatuna.v5i2.3542
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis a methods sourcebook*. http://bvbr.bib-bvb.de:8991/F?func=service%5C&doc%5C_library=BVB01%5C&local%5C_base=BVB01%5C&doc%5C_number=025765516%5C&sequence=00001%5C&line%5C_number=0001%5C&func%5C_code=DB%5C_RECORDS%5C&service%5C_type=MEDIA
- Momen, A. (2024). Education in Islam: Comprehensive Insights into Concepts, Nature, Goals, and Principles. International Journal of Research and Innovation in Social Science, 3710–3723. https://doi.org/10.47772/ijriss.2024.803268s
- Mulya, T. W., & Salvi, F. (2024). 'Grass, rice, and aubergine': a case study of an Islamic eco-pesantren in Indonesia. *Pedagogy Culture and Society*, 1–19. https://doi.org/10.1080/14681366.2024.2385049
- Pandikar, E., Affandi, I., Disman, D., & Sundawa, D. (2024). Harmonizing Economic Principles, Islamic Values, and Entrepreneurial Attitudes for a Sustainable Environment. *Yupa Historical Studies Journal*, 6(2), 188–197. https://doi.org/10.30872/yupa.v6i2.3739
- Rasyid, A., Bakir, M., & Munawir, M. (2025). Prinsip Mizan dalam Pemeliharaan Lingkungan: Telaah Tafsir Al-Azhar Pada Q.S. Ar-Rahman Ayat 7-9. Al-Fahmu Jurnal Ilmu Al-Qur an Dan Tafsir, 4(2), 543–560. https://doi.org/10.58363/alfahmu.v4i2.533
- Romlah, L. S., Purnama, R., Ambarwati, R., Hijriyah, U., Amriyah, C., & Z, W. J. (2024). Environmental-based Learning Management in Islamic Education Institutions. *E3S Web of Conferences*, 482, 4019. https://doi.org/10.1051/e3sconf/202448204019
- Subaidi, S., Tantowi, A., Cholid, N., Junaedi, M., Waluyo, & Nursikin, M. (2023). Eco-pesantren: Islamic Education in Forest Conservation Landscapes. *Fudan Journal of the Humanities and Social Sciences*, 16(4), 541–567. https://doi.org/10.1007/s40647-023-00386-w
- Tarnoki, C., & Puentes, K. (2019). Something for Everyone: A Review of Qualitative Inquiry and Research Design: Choosing among Five Approaches. In *The Qualitative Report*. Nova Southeastern University. https://doi.org/10.46743/2160-3715/2019.4294
- Wijsen, F. J. S., & Anshori, A. A. (2023). Eco-Theology in Indonesian Islam: Ideas on Stewardship among Muhammadiyah Members. *Journal of Government and Civil Society*, 7(1), 109. https://doi.org/10.31000/jgcs.v7i1.7303

Yusuf, M., Mardan, M., & Nahdiyah, N. (2019). Natural Environment Character Education Based on Islam. International Journal on Advanced Science Education and Religion, 2(3), 1–12. https://doi.org/10.33648/ijoaser.v2i3.35