

Developing Religious Moderation Perspectives and the Internalization of Ecotheology: Efforts to Build Religious and Ecological Awareness in the Border Region of Natuna Regency

Hariswati Rachmadani Putri

Office of Religious Affairs, West Bunguran District, Ministry of Religious Affairs of Natuna Regency, Ranai City, Natuna Regency, Riau Islands Province, Indonesia

*Corresponding author, e-mail: rachmadaniputri@gmail.com

Abstract

This study aims to analyze the development of religious moderation perspectives and the internalization of ecotheology as strategies for building religious and ecological awareness in the border region of Natuna Regency. As a strategic archipelagic area, Natuna faces various ecological pressures such as coral reef degradation, coastal abrasion, and marine pollution driven by both local and transboundary activities. On the other hand, the people of Natuna possess a strong religious character and are deeply connected to their coastal environment, making religious values a potential moral foundation for shaping ecological behavior. Using a qualitative-descriptive approach, this study examines the integration of religious moderation—grounded in principles of balance, tolerance, and cultural adaptation—with Islamic ecotheology, which emphasizes tauhid, khalifah, and amanah as spiritual foundations for environmental ethics. The findings indicate that the internalization of ecological values through religious channels is more readily accepted by the community, particularly through the roles of religious instructors, traditional leaders, and educational institutions. Programs such as Ecology-Oriented Religious Instructor Training, the Green Mosque Movement, and local wisdom-based preaching have proven relevant in strengthening environmental awareness among the Natuna community. This study highlights that integrating religious moderation and ecotheology can serve as a model for empowering coastal communities and as a strategy for socio-ecological resilience in border regions. The study recommends strengthening cross-sector collaboration, enhancing ecological literacy, and developing environmentally friendly curricula in schools and madrasahs.

Keywords:

Religious Moderation, Ecotheology, Religious Awareness, Ecological Preaching, Natuna.

INTRODUCTION

Natuna Regency, as one of Indonesia's strategic border regions located along an international maritime route, presents significant ecological and social potential. Due to its geographical position, Natuna is not only an important point in maritime sovereignty but also holds high marine biodiversity: coral reefs, seagrass beds, and mangroves are key ecosystem elements that support the livelihoods of coastal communities (Ilham, Kamal, & Susilo, 2009). However, behind these ecological advantages, Natuna faces a number of increasingly

complex environmental and social challenges.

In the last decade, ecological studies have shown that the marine area of Natuna has experienced ecosystem degradation. A study by Ilham, Kamal, & Susilo (2009) found that although a Regional Marine Conservation Area (KKLD) exists in Natuna, the percentage of live coral cover in several villages such as Sabang Mawang and Teluk Buton remains suboptimal (Ilham, Kamal, & Susilo, 2009). In addition, research by Dedy Damhudy, Kamal, & Ernawati (2009) in Pulau Tiga District showed that the abundance of herbivorous fish—an indicator of coral reef health—was relatively low, indicating ecological pressure on the reefs (Damhudy, Kamal, & Ernawati, 2009).

The dynamics of Natuna's marine ecosystem are influenced not only by local factors such as unsustainable fishing practices but also by cross-border factors. Marine debris from neighboring countries carried by seasonal currents has exacerbated coastal pollution (Ministry of Religious Affairs of the Republic of Indonesia, 2025). Coastal abrasion due to reef degradation and the loss of coastal vegetation has become a real threat to coastal settlements and the livelihoods of local fishers.

On the social side, religion plays an important role in the life of the Natuna community. Religious leaders and local religious structures heavily influence social norms and community ethics. In this context, religious moderation becomes a relevant framework: religious moderation emphasizes balance, tolerance, and social responsibility, and rejects extremism in interfaith relations and human–nature relations (Muhammad Barnansyah, 2025). These moderate values can serve as a normative foundation for building social awareness of environmental issues.

Meanwhile, ecotheology—a theological study that connects religion with ecology—offers a strong moral and spiritual framework for fostering ecological awareness. The Ministry of Religious Affairs (Kemenag) of the Republic of Indonesia has adopted ecotheology as part of its strategic policies; for example, the launch of the book *Ecotheology: Strengthening Faith, Caring for the Environment* reflects institutional commitment to synergizing religious values with environmental conservation (Kemenag, 2025). According to Minister Nasaruddin Umar, nature in religious tradition is seen as an *ayah*—a sign of God's greatness—thus caring for nature is part of spiritual responsibility (Kemenag, 2025).

The integration of religious moderation and ecotheology within the Natuna context presents a transformative opportunity. Through this framework, environmental values are

not only morally justified but also internalized through religious institutions: sermons, religious education, and community religious activities can become effective channels for building ecological awareness. Since religious leaders hold strong legitimacy in coastal communities, they can act as agents of change in promoting sustainable practices such as waste management, coral conservation, and advocacy for environmentally friendly local policies.

Unfortunately, there is still limited research that empirically examines how religious moderation and ecotheology interact in shaping ecological awareness in border communities like Natuna. Many marine conservation studies in Natuna focus on technical ecological aspects (such as coral cover and fish health), but few explore religio-normative dimensions (Ilham, Kamal, & Susilo, 2009; Damhudy, Kamal, & Ernawati, 2009). Conversely, theoretical studies on religious moderation have also not been widely directed toward ecological issues. Therefore, this study is crucial to fill this gap. The main question is: How can religious moderation perspectives be internalized through an ecotheological framework to foster both religious and ecological awareness among Natuna's coastal communities? The study will explore theological values (such as *amanah*, justice, balance), local religious practices (such as sermons and religious gatherings), and social mechanisms in transforming environmental behavior.

The results of this study are expected to provide practical contributions (ecotheology-based religious education models, environmental preaching strategies) and policy implications (recommendations for local government and religious institutions) that can strengthen socio-ecological resilience in Natuna. Thus, the integration of religious and ecological norms can become a foundation for sustainable development in Indonesia's strategic border regions.

METHOD

This study employs a descriptive qualitative approach to explore in depth how perspectives on religious moderation and ecotheology are internalized in the lives of coastal communities in Natuna, using a case study design that enables researchers to understand phenomena holistically within their social, religious, and ecological contexts (Yin, 2018; Creswell, 2018). The research location is centered on several coastal villages such as Sedanau and Pulau Tiga, selected based on previous findings regarding marine ecosystem degradation and the social dynamics of coastal communities (Ilham, Kamal, & Susilo, 2009; Damhudy, Kamal, & Ernawati,

2009). Primary data were collected through in-depth interviews with authorities. Secondary data were obtained through an analysis of existing literature such as the Religious Moderation Roadmap 2025–2029 (Ministry of Religious Affairs, 2025), marine conservation reports, and academic publications related to ecotheology and religious moderation (Barnansyah, 2025). Data analysis utilized the stages of reduction, display, and conclusion drawing according to Miles, Huberman, & Saldaña (2014), combined with source and technique triangulation to ensure data validity, including member checking and peer debriefing. Ethical procedures were carried out through participant consent, protection of informant identities, and the use of data solely for academic purposes, with the awareness that research in border regions carries certain social sensitivities that must be respected.

RESULTS AND DISCUSSION

Religious Moderation: Concepts, Values, and Its Urgency

Religious moderation is a concept that emphasizes balance in practicing religion as well as the ability to respond constructively to social dynamics. The Ministry of Religious Affairs (2021) defines religious moderation as a perspective, attitude, and religious behavior that is fair, balanced, non-extremist, and upholds national values as the foundation of social harmony in a pluralistic society. In the Islamic perspective, the theological foundation of religious moderation refers to the concept of *ummatan wasathan* in the Qur'an (Q.S. Al-Baqarah [2]:143), which states that Muslims are positioned as a middle community that does not lean toward extremities on either side, but rather stands at a just, proportional point and is capable of serving as an example for other communities (Fahri & Zainuri, 2019).

The four indicators of religious moderation — national commitment, tolerance, anti-violence stance, and adaptability to local culture — were developed by the Ministry of Religious Affairs as instruments to assess and foster healthy religious character (Kemenag, 2021). In border regions such as Natuna, these indicators hold strategic value. First, national commitment is needed to strengthen national identity, especially in areas directly exposed to foreign vessel activities, regional geopolitics, and cross-border cultural interactions (Siregar, 2020). Second, tolerance becomes an important social asset for coastal communities composed of diverse ethnic groups and cultural traditions, including Malay, Bugis, and migrants from other parts of Indonesia. Third, an anti-violence attitude is highly relevant for preventing social conflict and resistance to government policies related to environmental and maritime management. Fourth, cultural adaptation functions to maintain harmony between

religious values and the local wisdom of coastal communities, such as seafood-based cultural practices, sea-offering traditions, and communal work routines embedded in everyday life (Huda, 2022).

Religious moderation also has an instrumental dimension in strengthening socio-ecological development. Strengthening moderate values is often associated with increasing the religious literacy of communities so that they can avoid rigid religious views that may hinder social innovation, particularly in issues of natural resource management (Barnansyah, 2025). In many cases in Indonesia, religious leaders hold significant influence in disseminating ecological ethics through sermons, religious study groups, and social-religious activities, making the synergy between religious moderation and environmental issues a transformational approach to shaping community ecological awareness (Lamadike, 2025).

In addition, research on coastal and border regions shows that religious moderation also plays a role in strengthening community resilience to social, economic, and ecological change. Siregar (2020) states that border communities require social capital grounded in religious values to face external pressures such as marine resource exploitation, economic competition, and the penetration of foreign cultural values. In the context of Natuna, ecological pressures such as coral reef degradation, coastal abrasion, and transboundary marine pollution (Ilham et al., 2009; Damhudy et al., 2009) demand a social response that is not only technical but also includes the strengthening of collective ethical values. Religious moderation can serve as an ethical framework that encourages communities to be more concerned about environmental sustainability through the principles of balance (*tawazun*), justice (*'adl*), and moral responsibility (*amanah*).

Thus, religious moderation is not merely a concept that functions to maintain social harmony, but also possesses strong ecological relevance. When moderate values are integrated with ecotheology, the two can form a religious paradigm that not only glorifies God but also honors nature as His creation. This integration ultimately becomes the foundation for developing the religious and ecological awareness of the Natuna community.

Ecotheology: Concept, Spiritual-Ecological Foundations, and Its Relevance for Coastal Communities

Ecotheology has developed as a theological response to the increasingly evident and complex global environmental crisis, such as climate change, biodiversity loss, marine pollution, and the unsustainable exploitation of natural resources. In Islamic theological

studies, ecotheology is not merely a moral approach, but a spiritual paradigm that positions nature as an integral part of the web of existence that is subject to divine order (Nasr, 2013). This paradigm differs from the anthropocentric worldview that has long dominated patterns of development and natural resource use, because ecotheology asserts that humans are only one element of all creation, not absolute rulers with unlimited freedom over nature (Faruqi, 2020). Within the Islamic framework, three main principles — tauhid, khalifah, and amanah — serve as the foundation for understanding the relationship between humans and the environment.

The principle of tauhid emphasizes that all creation is a manifestation of God's oneness; therefore, harming nature means violating the cosmic order created by Allah SWT (Nasr, 2013). This perspective gives rise to the awareness that caring for nature is a form of worship because all elements of nature were created in balance (*mīzān*), as mentioned in Q.S. Ar-Rahman [55]:7–8. The principle of khalifah then positions humans as stewards of the earth, not rulers who can act arbitrarily. This responsibility carries ethical meaning that humans must act with knowledge, wisdom, and long-term consideration (*istidamah*) in utilizing natural resources (Faruqi, 2020). Meanwhile, the principle of amanah underscores the moral obligation of humans to protect the earth, as environmental destruction represents a betrayal of the trust given by God (Huda, 2022).

The textual foundation of ecotheology is strong in the Qur'an and hadith. The Qur'an repeatedly reminds humans not to commit destruction on earth (Q.S. Al-A'raf [7]:56), to maintain ecological balance (Q.S. Al-Mulk [67]:3–4), and forbids destructive actions that cause ecological injustice (*fasād*) (Rahman, 2019). In the hadith, Prophet Muhammad SAW provided many examples of environmental ethics: prohibiting the indiscriminate cutting of trees, encouraging tree planting even at the end of times, preserving water quality as a source of life, and establishing rules for wildlife protection even during warfare (Qardhawi, 2001). These ecological ethics demonstrate that Islam views the environment as a universal trust that must be preserved unconditionally.

The contemporary relevance of ecotheology continues to strengthen as the world faces environmental crises that threaten human survival. Indonesia, as the country with the second-longest coastline in the world, faces major challenges such as coastal abrasion, marine pollution from plastic waste, overfishing pressure, and coral reef degradation. The Geospatial Information Agency (2022) reports that coastal abrasion occurs at an average rate of 1–2

meters per year in many coastal areas of Indonesia. The Ministry of Marine Affairs and Fisheries (2023) also states that the condition of national coral reefs has declined, with 52% categorized as less healthy. In Natuna, coral reef degradation and ecological pressures from overfishing have been reported since 2009 and continue to this day (Damhudy et al., 2009; Ilham et al., 2009).

In such circumstances, ecotheology becomes a promising approach because it integrates spiritual values into ecological action. Various studies show that religious approaches strongly influence the ecological behavior of communities, especially in coastal societies whose social relations are deeply shaped by religious leaders (Siregar, 2020; Lamadike, 2025). When ecological messages are linked to religious values, the level of community acceptance and internalization increases significantly. This is crucial in areas like Natuna, where religious practices, study circles, Friday sermons, and mosque-based social activities form a significant part of the social structure.

Ecotheology also serves as a bridge between religious teachings and the local wisdom of Natuna's coastal communities, such as traditions prohibiting the harvesting of marine resources during certain seasons, sea-offering rituals, and communal coastal maintenance. Such forms of local wisdom align with the principles of *tawazun* (balance), *'adl* (justice), and *maslahah* (the public good) in Islam, enabling ecotheology to provide a theological foundation for preserving ecological cultural practices that have long flourished in the community (Siregar, 2020). Thus, ecotheology is not only a theoretical concept but also a moral, spiritual, and cultural framework that can strengthen ecological resilience in coastal border regions such as Natuna.

Regulatory and Policy Foundations

The integration of religious moderation and ecological awareness in the Indonesian context does not stand in a vacuum but is grounded in strong regulatory foundations, both at the national policy level and within religious institutional guidelines. Structurally, the National Medium-Term Development Plan (RPJMN) 2020–2024 designates religious moderation as one of the national priority programs within the framework of strengthening national character, social stability, and national resilience, including in border regions (Bappenas, 2020). This policy indicates that religious moderation is considered strategic for preventing polarization, strengthening social cohesion, and ensuring sustainable development. In this document, the mainstreaming of religious moderation is directed to ensure that the values of

justice, balance, tolerance, and respect for diversity are embedded in societal life, while also serving as an ethical foundation for the wise management of natural resources.

Furthermore, the Ministry of Religious Affairs Regulation (PMA) No. 18 of 2020 serves as a technical guideline for the Ministry of Religious Affairs in implementing religious moderation across all units, from regional offices to local religious affairs offices (KUA) and religious instructors (Kemenag, 2020). This regulation stipulates that religious instructors are not only responsible for delivering religious teachings but also for mainstreaming the values of moderation through socio-religious programs, including environmental education. Consequently, religious instructors can play a role in conveying eco-theological messages such as the responsibility of stewardship (*khalifah*), the prohibition of environmental destruction, and ethical principles in natural resource management. This positions the Ministry of Religious Affairs not only as a religious institution but also as an important actor in promoting ecological education grounded in spiritual values (Barnansyah, 2025).

In the environmental sector, Law No. 32 of 2009 on Environmental Protection and Management (PPLH) serves as the primary legal basis for environmental governance in Indonesia. This law affirms that every individual has the right and obligation to protect the environment, while the government is responsible for ensuring the protection of biodiversity, the sustainability of natural resources, and the restoration of degraded areas (UU PPLH, 2009). The law also emphasizes the importance of public participation in environmental conservation, making eco-theology a potentially effective educational instrument for strengthening such participation, particularly in coastal and border areas like Natuna, which face high ecological vulnerability.

The religious dimension of environmental policy is further strengthened by the issuance of Indonesian Ulema Council (MUI) Fatwa No. 47 of 2014 on Waste Management. This fatwa asserts that waste management is a religious obligation, as poorly managed waste may lead to *mafsadah* (harm) for the environment and public health (MUI, 2014). The fatwa also encourages communities to sort waste, recycle, and reduce plastic use, in line with the principle of *la dharar wa la dhirar* (there should be neither harm nor reciprocating harm). This fatwa is particularly relevant to the Natuna context, which faces the problem of marine debris originating from neighboring countries due to regional currents. Thus, religious approaches can reinforce collective action in coastal clean-ups, community education, and community-based waste management.

Overall, these regulatory foundations demonstrate that the integration of religious moderation and ecological awareness is situated within a cohesive policy pathway. The state, through the RPJMN and environmental legislation, provides a macro framework, while the Ministry of Religious Affairs offers implementation strategies at the community level through religious instructors and local religious institutions. At the same time, the MUI provides religious legitimacy that strengthens the moral authority of environmental conservation efforts. With these mutually reinforcing regulations, collaboration among government, religious leaders, and communities can function more effectively, particularly in strategic border regions such as Natuna, which require cross-sectoral approaches to address ecological and social vulnerabilities.

Integration and Implementation in the Natuna Border Region

The Natuna region, with its geographical characteristics as an archipelagic border area and its fishing communities that are highly dependent on the sea, serves as a strategic arena for the concrete application of ecotheology and religious moderation (Kemenag, 2025). In this context, the internalization of ecotheology in Natuna can be carried out through religious guidance—for instance, through Islamic religious counselors—who convey Islamic teachings on *amanah* and *khalifah fil ardh* as the moral basis for protecting the sea and coastal areas (Kemenag, 2025). These values can be reinforced through concrete messages such as prohibitions against littering into the sea, calls to maintain coastal cleanliness, and the wise and sustainable use of marine resources.

As part of the implementation of national policy, the Ministry of Religious Affairs (Kemenag) has designated mosques, Religious Affairs Offices (KUA), and religious institutions as drivers of the national ecotheology movement through the “Eco-Mosque” program (ANTARA, 2025). In this program, mosques function not only as places of worship but also as centers for environmental education through Friday sermons, study circles (*majelis taklim*), mosque greening initiatives, waste management, and tree planting (Kemenag, 2025). KUAs have also been transformed into Green KUA, where ecological guidance is incorporated into premarital counseling, religious instruction, and community outreach (Kemenag, 2025).

In Natuna, this strategy can be adapted by strengthening the role of local religious instructors. Training for Ecologically Oriented Religious Counselors is crucial so that instructors understand the framework of ecotheology and can convey environmental messages relevant to coastal life. The “Green Mosque Movement” can be initiated in

mosques across coastal districts in Natuna, transforming mosques into centers of environmental action: planting coastal vegetation, managing plastic waste, and educating communities through study circles and religious gatherings. Education on Moderation and Ecotheology in schools and madrasahs is also highly relevant: through dedicated curricula or special modules, students in Natuna can be equipped with the understanding that environmental stewardship is part of worship and a religious responsibility.

Local cultural approaches are particularly important in the Natuna context, where local values and coastal traditions remain strong. Therefore, a method of preaching based on “exemplary action (*bi al-hal*),” namely through concrete actions by religious leaders who participate directly in environmental initiatives, becomes highly effective. For example, religious leaders can lead beach clean-ups or mangrove planting with fishing communities; these actions are not merely symbolic but cultivate real practices that permeate the daily lives of coastal communities.

Institutionally, the Ministry of Religious Affairs, through the National Agency for Religious Moderation and Human Resource Development (BMBPSDM), promotes the strengthening of religious human resources to internalize ecotheological values and religious moderation in their duties (Kemenag, 2025). This means that religious counselors, mosque imams, and madrasah educators in Natuna may be involved in training and capacity-building programs so that they do not simply preach but also become agents of socio-ecological transformation.

Such an integration model in Natuna is not merely a religious program but part of a sustainable development strategy in border regions. By making religious values the foundation of environmental conservation efforts, the implementation of ecotheology-based religious moderation in Natuna can strengthen socio-ecological resilience, reduce marine debris, and foster the awareness that caring for nature is an act of worship and a shared responsibility.

CONCLUSION

The development of religious moderation literacy and the internalization of ecotheology is an urgent necessity in building a religious and ecologically conscious society, especially in border regions such as Natuna Regency, which possesses highly strategic geopolitical, ecological, and social characteristics. Religious moderation provides a framework for creating a tolerant, adaptive, and inclusive social life, thereby strengthening social

cohesion amid the dynamics of globalization, migration, and increasingly intense cross-cultural interactions. On the other hand, ecotheology offers a transcendental awareness that the relationship between humans and nature is not merely economic but also spiritual and moral. When the values of *tawhid*, *khalifah*, and *amanah* are deeply understood, society recognizes that protecting the environment is not simply a technical task but an act of worship and devotion to the Creator.

The integration of religious moderation and ecotheology in the Natuna context becomes increasingly important given the rising ecological pressures due to marine resource exploitation, coastal waste, plastic pollution, and climate change, which cause erosion and the decline of marine ecosystem quality. The YKAN (2025) report indicates that ecological vulnerability in Indonesia's coastal regions has increased significantly over the past decade, including in Natuna. Without value- and culture-based interventions, environmental degradation may persist and threaten the sustainability of community life. Therefore, religious counselors, teachers, and customary leaders hold strategic roles as agents of change who bridge religious values with local ecological needs.

Grassroots programs of the Ministry of Religious Affairs need to be directed toward integrating these two values through education, counselling, and participatory preaching. The exemplary actions of religious counselors (*dakwah bi al-hal*), habituation within religious institutions such as mosques and madrasahs, and cross-sector collaboration become key factors for success. This integration also requires regulatory support and technical policies, including strengthened inter-agency coordination and enhanced capacity of human resources in religious and environmental fields.

Based on the findings and discussion of this study, it is recommended that the strengthening of religious moderation and ecotheology in Natuna Regency be carried out through capacity building for religious counselors and teachers on environmental issues, the integration of ecology-oriented religious moderation education into school and madrasah curricula, and the development of community-based programs such as Green Mosques and Environmentally Friendly Pesantrens that can serve as centers for sustainability practices. In addition, cross-sector collaboration among the Ministry of Religious Affairs, the Environmental Agency, customary leaders, academics, and coastal communities needs to be strengthened to ensure the formulation of comprehensive programs aligned with local needs, while the use of digital media for ecological preaching may serve as an effective strategy for

reaching the younger generation. Local wisdom in Natuna's coastal communities—such as traditions of protecting the sea and collective mutual cooperation—should be empowered as an entry point for internalizing ecotheological values, and further research on community ecological behavior and the effectiveness of environment-based preaching should be encouraged to provide more accurate data for future policy formulation.

With the increasing complexity of ecological challenges in border regions, value-based religious approaches offer a holistic perspective capable of embracing spiritual, social, and ecological dimensions simultaneously. Through inclusive religious moderation and applicable ecotheology, the people of Natuna can develop a new paradigm in understanding human–nature relations—one that is just, sustainable, and aligned with the principle of *rahmatan lil 'alamin*. The combination of the two not only strengthens community character but also reinforces national resilience in border areas.

REFERENCE

- Afriansyah, A., & Sukmayadi, T. (2022). Nilai kearifan lokal tradisi sedekah laut dalam meningkatkan semangat gotong royong masyarakat pesisir Pantai Pelabuhan Ratu. *Jurnal Penelitian Ilmu-Ilmu Sosial*, 3(1), 33–46. <https://doi.org/10.23917/sosial.v3i1.549>
- Badan Informasi Geospasial. (2022). *Laporan abrasi pesisir Indonesia*. <https://big.go.id/>
- Barnansyah, R. M. (2025). Pengembangan ekosistem nilai-nilai moderasi beragama di Majelis Ulama Indonesia. *Satwika: Jurnal Pengabdian Kepada Masyarakat*, 5(1), 58–68. <https://doi.org/10.21009/satwika.050107>
- Creswell, J. W. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Damhudy, D., Kamal, M. M., & Ernawati, Y. (2009). Kondisi kesehatan terumbu karang berdasarkan kelimpahan ikan herbivora di Kecamatan Pulau Tiga, Kabupaten Natuna. *Media Neliti*.
- Fahri, M., & Zainuri, A. (2019). Moderasi beragama di Indonesia: Telaah konsep dan implementasinya. *Jurnal Penelitian Agama*, 30(2), 145–163. <https://doi.org/10.32729/edukasi.v30i2.1234>
- Faruqi, Y. (2020). Ecological ethics in Islamic theology. *Journal of Islamic Environmental Studies*, 12(2), 89–110.
- Hidayatulloh, M. F. (2025). Moderasi Beragama sebagai jawaban atas krisis lingkungan global: perspektif Teologi Ekologis. *Jurnal Oplas*, 2(1), 45–60.
- Huda, N. (2022). *Sosiologi masyarakat pesisir: Tradisi, budaya, dan perubahan sosial*. Penerbit Ombak.
- Ilham, I., Kamal, M. M., & Susilo, S. B. (2009). Dampak Kawasan Konservasi Laut Daerah terhadap kondisi ekologi terumbu karang di Kabupaten Natuna. *Jurnal Perikanan dan Kelautan*, 4(2), 112–120.
- Kementerian Agama Republik Indonesia. (2025, 14 November). *Kementerian Agama rilis Buku Ekoteologi, Trilogi Kerukunan, dan Peta Jalan Moderasi Beragama 2025–2029*.

- <https://bimashindu.kemenag.go.id/berita-pusat/kementerian-agama-rilis-buku-ekoteologi-trilogi-kerukunan-dan-peta-jalan-moderasi-beragama-2025-2029-ttIug>
- Kementerian Agama Republik Indonesia. (2025, 14 November). *Kemenag luncurkan Buku Ekoteologi dan Peta Jalan Moderasi Beragama*. <https://kemenag.go.id/nasional/kemenag-luncurkan-buku-ekoteologi-trilogi-kerukunan-dan-peta-jalan-penguatan-moderasi-beragama-2025-2029-z8Jza>
- Kementerian Agama Republik Indonesia. (2025, 24 Maret). *Ekoteologi dan Gerakan Bersama ASN Kementerian Agama*. <https://kemenag.go.id/kolom/ekoteologi-dan-gerakan-bersama>
- Kementerian Kelautan dan Perikanan. (2023). *Status Terumbu Karang Indonesia 2023*. <https://kkp.go.id/>
- Mag. Taufiq, T. T. (2017). Kearifan lingkungan berbasis agama: studi etnoekologi komunitas nelayan di pesisir Banyutowo Dukuhseti Pati. *Jurnal Sosiologi Agama*. <https://doi.org/10.14421/jsa.2017.112-07>
- Maknun, M. L. (Ed.). (2023). *Moderasi Beragama: Akar Teologi, Nalar Kebudayaan, dan Kontestasi di Ruang Digital*. Badan Riset dan Inovasi Nasional.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.
- Narullah, M., Adijaya, M., & Kurniadi, B. (2023). Struktur komunitas ikan di ekosistem terumbu karang Desa Sededap Kecamatan Pulau Tiga Kabupaten Natuna. *ACROPORA: Jurnal Ilmu Kelautan dan Perikanan Papua*, 7(2). <https://doi.org/10.31957/acr.v7i2.3981>
- Nasr, S. H. (2013). *Man and Nature: The Spiritual Crisis in Modern Man*. Kazi Publications.
- Nurlaili, N., Fitriana, F., Millah, C. U., & Nasution, E. M. (2024). Moderasi Beragama di Indonesia: konsep dasar dan pengaruhnya. *Moderation: Journal of Religious Harmony*, 1(1), 1–12.
- Prianto, E., Jhonnerie, R., Oktorini, Y., & Fauzi, M. (2024). Kearifan lokal masyarakat adat dalam mengelola sumber daya perikanan berbasis ekosistem di Sungai Kampar. *Jurnal Kebijakan Perikanan Indonesia*. <https://doi.org/10.15578/jkpi.0.0.0>
- Qardhawi, Y. (2001). *Ri'ayah Al-Bi'ah fi Al-Syari'ah Al-Islamiyah*. Maktabah Wahbah.
- Rahman, F. (2019). Quranic ecological ethics: A theological analysis. *Journal of Qur'anic Studies*, 21(1), 77–95.
- Rosana, N., Amin, B., & Nurhayati, A. (2013). Kualitas perairan Natuna pada musim transisi. *Jurnal Ilmu Kelautan*, 18(1), 33–42.
- Siregar, R. (2020). Moderasi beragama dan ketahanan sosial masyarakat perbatasan. *Jurnal Sosiologi Agama*, 14(1), 55–70. <https://doi.org/10.14421/jsa.v14i1.2219>
- Suselo, D. S., Prisma, T., Ananda, D. V., & Afifaturofiah. (2025). Penguatan literasi lingkungan dalam meningkatkan kesadaran masyarakat terhadap ekosistem pesisir pantai Dodo. *Khidmah Nusantara*, 2(1). <https://doi.org/10.69533/z4mj2027>
- Tamrin, M., & Yusriadi, A. (2023). Kondisi terumbu karang di perairan Pulau Batu Bilis Natuna. *Jurnal Ekologi Laut Tropis*, 12(4), 225–240.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.
- Nurul Hidayat, & Joko Utomo Hadibroto. (2025). Tradisi Tiatiki dan Pemimpin Opini: Analisis Media Vernakular dalam Komunikasi, Pelestarian Lingkungan, dan Politik Lokal Papua. *Jurnal Riset Rumpun Ilmu Sosial, Politik Dan Humaniora*, 4(3), 967–979. <https://doi.org/10.55606/jurish.v4i3.6083>.