IURIS NOTITIA: JURNAL ILMU HUKUM
Vol. 4, No. 2, October 2026, pp. 578–597
e-ISSN: 3025-4477

Open access

Recognizing Living Ecological Law: Islamic Environmental Ethics and Eco-Fishing Governance in Giligenting, Indonesia

Ahmad Sholikhin Ruslie [a], Rosalinda Elsina Latumahina [b], Anggit Wasesa Praja [c]*, Hendry Dapot Maringan H.M [d], Ahmad Firza Al Farizi [e]

[a,b,c,d,e] Faculty of Law, Universitas 17 Agustus 1945, Surabaya, Indonesia

*Corresponding Author: anggitwasesa@untag-sby.ac.id

ABSTRACT

This study aims to analyze ecological wisdom and Islamic ethics in the eco-fishing practices of the Giligenting community and their recognition through an environmentally oriented Village Regulation to strengthen the implementation of Minister of Marine Affairs and Fisheries Regulation No. 36 of 2023. The study focuses on fishing communities in the Giligenting Islands, Sumenep, where ecological norms are rooted in lived experience, intergenerational knowledge, social agreements, and religious values, yet face destructive fishing practices by some external actors. This study employs a qualitative socio-legal design. Data were collected through in-depth interviews with fishers, religious leaders, community leaders, former village officials, and community members, supplemented by participant observation and legal document analysis. The data were analyzed thematically and integrated with legal analysis and Islamic environmental ethics. The findings reveal that ecological wisdom, social control, and the Islamic values of trust (*amanah*), benefit and harm (*maslahah–mafsadah*), and the prohibition of environmental destruction (*fasad*) constitute a living ecological law that is effective within the community but has limited binding force over external actors. A Village Regulation is therefore needed not to create new ecological norms, but to recognize and connect existing community norms with formal law. This study proposes the concept of a recognition-based regulatory bridge as a framework for strengthening community-based sustainable fisheries governance.

Keywords: Eco-Fishing, Islamic Environmental Ethics; Ecological Wisdom, Living Ecological Law, Legal Recognition.

Article History: Received: August 30, 2026 | Accepted: October 20, 2026 | Published: October 30, 2026

How to Cite:

Ruslie, A. S., Latumahina, R. E., Praja, A. W., H.M, H. D. M., & Al Farizi, A. F. (2026). Recognizing Living Ecological Law: Islamic Environmental Ethics And Eco-Fishing Governance In Giligenting, Indonesia. *Iuris Notitia: Jurnal Ilmu Hukum*, 4(2), 578–597. DOI: https://doi.org/10.69916/iurisnotitia.v4i2.707

1. INTRODUCTION

Fisheries sustainability has become an important issue in coastal resource governance because it is directly linked to ecosystem sustainability, food security, and the livelihoods of fishing communities. Small-scale fisheries occupy a strategic position, accounting for approximately 40 percent of global catches and supporting around 90 percent of employment in the capture fisheries sector (FAO, 2024a). Their sustainability therefore requires not only state regulation of fishing gear, licensing, quotas, and supervision but also the involvement of communities whose ecological knowledge and practices have developed through their interaction with marine resources. Through the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries, the FAO emphasizes community participation and the recognition of traditional knowledge in fisheries governance (FAO, 2015).

Despite this recognition, a gap remains between ecological practices embedded in coastal communities and their incorporation into legally binding instruments. Studies on community-based fisheries management and co-management emphasize the importance of community participation and traditional knowledge in resource management, including their potential to produce locally appropriate rules and improve compliance (FAO, 2024b). However, these approaches do not necessarily ensure that local ecological values are incorporated into legal instruments at the village level. This gap between living law and formal fisheries regulation raises a fundamental question concerning how community-based ecological norms can acquire legal recognition and

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

complement state policies on sustainable fisheries.

This issue is particularly relevant to Indonesia, where substantial marine resources require governance that extends to the local level. Indonesia has an estimated fish resource potential of 12.01 million tonnes per year across eleven Fisheries Management Areas of the Republic of Indonesia (WPPNRI), with an allowable catch of 8.6 million tonnes per year (KKP, 2022). Regulation of the Minister of Marine Affairs and Fisheries No. 36 of 2023 provides a framework for the placement of fishing gear and fishing aids as part of fisheries resource management. Nevertheless, the implementation of national regulations must contend with diverse geographical conditions, social structures, legal cultures, and fishing practices across the Indonesian archipelago. The persistence of destructive fishing practices illustrates this implementation challenge. Luth et al. (2022), in their study of coastal communities in Lamongan, identify the continued use of destructive fishing methods, including trawls, cantrang, and explosives, despite government regulations. Their findings also highlight the potential role of Islamic legal approaches and religious authority in strengthening community-based prevention of destructive fishing (Luth et al., 2022). These findings indicate that regulatory effectiveness depends not only on the existence of formal rules but also on their relationship with community structures and religious values.

Giligenting District in Sumenep Regency, Madura, provides a relevant context for examining this relationship. Madurese social life is shaped partly by the philosophy of *bhuppa', bhâbhu', ghuru, rato*, which expresses a hierarchy of respect and obedience toward parents, teachers or *kiai*, and government leaders (Fathorrozy et al., 2026). These values function beyond the symbolic level by influencing social compliance and community behavior (Susylawati et al., 2024). Similarly, the *nyabis* tradition reflects the close relationship between Madurese communities and the authority of *kiai* and Islamic boarding schools (*pesantren*), encompassing respect, consultation, obedience, and the transmission of social and religious values (Mufrihah, Ilfiandra, & Budiman, 2025). Such characteristics suggest that compliance in Giligenting is shaped not only by state law but also by social and religious norms that influence everyday conduct.

Within fishing communities, these norms may intersect with ecological awareness, as reflected in the rejection of destructive fishing gear, the selection of more selective fishing methods, agreements among fishers, and respect for social and religious authorities. Such practices provide a basis for understanding the existence of living ecological law within coastal communities. They also correspond with Islamic environmental ethics, which frame human beings as trustees (*amanah*) in the use of nature, emphasize the consideration of benefits and harms (*maslahah-mafsadah*), and prohibit environmental destruction (*fasād*). Research on Indonesian Muslim coastal communities demonstrates that Islamic values can strengthen awareness of the prohibition against destructive fishing gear and reinforce responsibility for marine ecosystem sustainability (Dao, Yusnaldi, & Kusuma, 2025). Studies on marine resources likewise identify a relationship between Qur'anic principles of ecological responsibility and sustainable fisheries (Asma, 2026).

However, the effectiveness of these community-based norms has limitations when marine resources are also accessed by fishers from outside the community. Ecological norms that influence local fishers do not necessarily have the same binding force over external actors, particularly when fishing activities involving destructive gear enter local fishing grounds. The FAO identifies illegal and destructive fishing practices as threats to small-scale fisheries and emphasizes the importance of monitoring, control, and participatory management involving fishing communities (FAO, 2015). This situation exposes the legal problem addressed in this article: ecological wisdom and Islamic ethics may influence community behavior, but their capacity to support sustainable fisheries remains limited when they are not connected to legal instruments that can reinforce their recognition, implementation, and coordination with government policies.

Village Regulations offer a potential institutional mechanism for addressing this gap. Under the framework of village governance established by the Village Law, village-level regulation can provide a means of translating locally grounded values into rules that respond to the socio-ecological conditions of the community. In this article, the concept of a regulatory bridge refers to the function of an Environmentally Oriented Village Regulation in connecting living ecological law and Islamic environmental ethics with formal fisheries regulation. The concept does not position village norms as substitutes for national law. Rather, it examines how local values can be recognized and operationalized through village-level legal instruments in a manner consistent with applicable legislation, including Regulation of the Minister of Marine Affairs and Fisheries No. 36 of 2023. Such recognition requires attention to the legal authority of villages and the compatibility of proposed regulatory

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

provisions with higher-level legislation.

Although previous studies have examined sustainable fisheries, co-management, Madurese social values, and Islamic approaches to preventing destructive fishing, their contributions leave a specific research gap. Studies on fisheries governance emphasize community participation and traditional knowledge but do not specifically explain how ecological wisdom can be incorporated into village-level legal instruments. Research on Madurese culture examines *bhuppa', bhâbhu', ghuru, rato* as a structure of social compliance but has not sufficiently connected these values to ecological compliance in fisheries management. Meanwhile, studies on Islamic ethics and destructive fishing highlight the role of religious values and authority in preventing marine ecosystem degradation but do not specifically position Village Regulations as instruments for connecting ecological wisdom, Islamic ethics, and national fisheries policy.

This article addresses the gap by examining ecological wisdom and Islamic ethics in the eco-fishing practices of the Giligenting community and analyzing their potential recognition through an Environmentally Oriented Village Regulation. Its novelty lies in conceptualizing village-level regulation as a regulatory bridge that connects community-based ecological norms and Islamic environmental ethics with national fisheries policies. Accordingly, this study has two objectives: first, to analyze the forms and construction of ecological wisdom and Islamic ethics within the eco-fishing practices of the Giligenting community; and second, to analyze how these values may be recognized through an Environmentally Oriented Village Regulation to strengthen the implementation of Regulation of the Minister of Marine Affairs and Fisheries No. 36 of 2023. Through this approach, the article contributes to the discussion of living ecological law, Islamic ethics, and village law in the governance of sustainable fisheries in island communities.

2. RESEARCH METHOD

This study employed a qualitative design with a socio-legal approach to analyze the relationships among eco-fishing practices, ecological wisdom, Islamic ethics, and the operation of law within coastal communities. This approach was selected because sustainable fisheries governance is shaped not only by formal regulations but also by social norms, local knowledge, religious values, and practices that influence community compliance. Within the tradition of socio-legal research, law is understood not merely as a set of written norms but also as an institution that operates and interacts with the social structures in which it is implemented (Banakar, 2005). The study was conducted in Giligenting District, Sumenep Regency, East Java, focusing on fishing communities and fisheries resource governance at the local level.

Informants were selected purposively based on their involvement, experience, and knowledge of fishing practices, local norms, religious life, and fisheries governance. The study involved six informants: Mr. S1, a community leader and former Head of Bringsang Village; Kyai Y, Chair of the Giligenting Islands Branch Council of Nahdlatul Ulama (MWC NU); Kyai S, a religious and community leader; U, a fisher; and A and S2, community members who participated in the Focus Group Discussion (FGD). The selection of informants from different social positions was intended to capture diverse perspectives on local governance, Islamic ethics, fishing practices, social agreements, and the transmission of ecological knowledge. Mr. S1 provided insights into governance and the recognition of norms through Village Regulations; Kyai Y addressed Islamic ethics and religious authority; Kyai S contributed perspectives on tradition and the transmission of values; U provided empirical accounts of fishing practices and experiences concerning destructive fishing gear; A addressed social agreements and the intergenerational transmission of values; and S2 provided insights into unwritten norms (living law) and perceptions of their limitations in regulating external actors.

Data were collected through semi-structured in-depth interviews, participant observation, Focus Group Discussions (FGDs), and document analysis. The interview guide was developed and adapted by the researchers rather than adopted from a standardized instrument because the study was exploratory and oriented toward the contextual experiences and knowledge of the informants. The interview instrument was developed around four analytical domains: (1) the forms and changes in fishing practices and the use of fishing gear; (2) ecological wisdom and community compliance mechanisms, including traditions, agreements within fishing communities, social control, and the transmission of ecological knowledge; (3) Islamic ethical values shaping the community's relationship with the sea and fishery resources; and (4) informants' knowledge, experiences, and perceptions regarding the need to recognize ecological norms through Village Regulations and their relationship with Regu-

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

lation of the Minister of Marine Affairs and Fisheries No. 36 of 2023. Interviews were used to obtain individual experiences and interpretations, whereas FGDs were employed to explore agreements, differences of opinion, and collective community constructions concerning ecological norms. Participant observation was used to examine the relationship between informants' accounts and observable social practices and fishing activities. Document analysis of fisheries regulations, village government documents, and policy documents was conducted to examine the relationship between living law and formal law.

The data were analyzed using reflexive thematic analysis through the processes of data familiarization, coding, theme construction, theme review and refinement, and interpretation of findings, as developed by Braun and Clarke (Braun & Clarke, 2022). This framework was selected because it enables the analysis of patterns of meaning within informants' experiences without detaching those experiences from the social contexts in which the data were produced (Braun & Clarke, 2023). The analysis generated five main themes: ecological wisdom as living law, Islamic ethics in eco-fishing practices, the structure of social compliance within Madurese society, the perceived limitations of living law in relation to external actors, and recognition through Village Regulations. These empirical themes were subsequently examined through a socio-legal perspective to analyze the interaction between social norms and formal law and through Islamic environmental ethics to interpret the dimensions of trust (*amanah*), public benefit (*maslahah*), harm (*mafsadah*), and the prohibition of environmental destruction (*fasād*) within eco-fishing practices.

The trustworthiness of the data was strengthened through source and methodological triangulation by comparing information provided by the six informants occupying different social positions and cross-checking interview and FGD findings against observations and documents. Ethical safeguards were maintained by protecting the confidentiality of personal information and ensuring the voluntary participation of informants throughout data collection.

This study has limitations concerning informant representation and the scope of empirical evidence. Although the six informants provided perspectives from different social positions within the local community, the study did not include direct interviews with fishers from outside Giligenting or serving members of the Village Consultative Body (BPD) and village government. Consequently, the analysis of external actors' compliance with local ecological norms and the institutional feasibility of recognizing these norms through Village Regulations is based primarily on local informants' accounts, observations, and document analysis. It should therefore be understood as an account of local perceptions and an analysis of regulatory challenges rather than as a direct representation of external fishers' perspectives or a verified assessment of their compliance behavior. Similarly, the discussion of village-level legal recognition identifies a potential regulatory approach rather than claiming that the relevant institutional arrangements have been empirically validated by the active village authorities.

These limitations were addressed, within the available data, by including informants with different social and religious roles and by triangulating multiple data collection methods. The six informants were selected not to achieve statistical representativeness but to obtain in-depth information about the social structures and ecological practices of the Giligenting community. As this research constitutes a case study of a single island area, its findings are not intended to produce statistical generalizations about all coastal communities in Indonesia. Rather, the study seeks to generate analytical generalizations concerning the relationships among ecological wisdom, Islamic ethics, the limitations of informal norms, and local legal recognition within sustainable fisheries governance (Yin, 2018). Further research should incorporate external fishers, active village government officials, and BPD members to examine competing perspectives, institutional authority, and the practical applicability of this recognition framework across different socio-ecological configurations.

3. RESULT AND DISCUSSION

3.1. Ecological Wisdom and Islamic Ethics in the Eco-Fishing Practices of the Giligenting Community

The findings show that the eco-fishing practices of the Giligenting community did not emerge from a formally formulated set of conservation concepts. Rather, these practices developed from fishers' experiences of interacting with the sea, knowledge transmitted within families, customary fishing practices, social agreements, and religious values embedded in community life. Rather than perceiving sustainability as a technical concept introduced from outside the community, Giligenting fishers understand it through their experience of the direct

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

relationship between the condition of the sea and the continuity of their livelihoods. The sea is regarded not merely as a space for economic production but as a source of life on which the sustainability of fishing families depends. This perspective is reflected in Mr. S1's statement that island communities obtain food, funds for their children's education, and other household necessities from the sea; consequently, damage to the marine environment will ultimately harm the communities living around it. This perspective creates a moral boundary on resource exploitation. Fishers may seek to obtain as many fish as possible, but such actions are not considered appropriate when the methods employed undermine the sea's capacity to continue providing resources in the future.

U's experience as a fisher further reinforces this finding at the level of everyday practice. He explained that hook-and-line fishing remains one of the traditional methods used to catch fish and that fishing is not oriented toward extracting all available resources. The simple expression that fishers "will go fishing again tomorrow" reflects a temporal awareness in resource utilization. This way of thinking demonstrates that decisions about fishing are not based entirely on calculations of the day's catch. They also involve consideration of the future availability of fish and the sustainability of the sea as a source of livelihood. On the one hand, fish have economic value because they support household needs. On the other hand, the sustainability of fish stocks and their habitats determines the community's capacity to maintain its livelihood over time. This relationship means that fishing practices cannot be understood solely through the logic of profit maximization.

These findings closely correspond to the concepts of local ecological knowledge (LEK) and traditional ecological knowledge (TEK) in global fisheries scholarship. Silvano et al. explain that fishers' knowledge is multidimensional because it is formed through direct experience and may encompass knowledge of species, habitats, environmental changes, ecological interactions, and aquatic resource dynamics. Such knowledge can complement formal fisheries science because fishers interact continuously with ecosystems over extended periods (Silvano et al., 2023). Ullah et al. (2023) likewise found that the ecological knowledge of small-scale fishers can provide information on changes in catches and resource conditions that may not always be available through formal scientific data. Within this framework, the experiences of Giligenting fishers should not be regarded as informal knowledge inferior to scientific knowledge. Rather, such knowledge constitutes the product of repeated ecological observations accumulated through everyday interactions with the sea.

This becomes more evident in U's explanation of how fishers recognize changes in marine conditions. According to him, there is no specialized education through which such knowledge is formally taught. Fishers acquire it through experience, their parents, changes in fish abundance, fishing locations, seasonal patterns, and marine conditions observed on a daily basis. Ecological knowledge in this context is both empirical and intergenerational. Older fishers transmit not only fishing techniques but also ways of interpreting environmental conditions. Similar patterns have been identified in studies of traditional ecological knowledge among fishing communities in various regions. Research on fishers' ecological knowledge demonstrates that memory, experience, and intergenerational transmission are important elements in maintaining knowledge about natural resources and environmental conservation (De Sousa, Zacardi, & Vieira, 2022). A study of beach seine fisheries in Sri Lanka further demonstrated that fishers' knowledge accumulated across generations provides practical capacities for understanding the characteristics of fish resources and can serve as a basis for community-based fisheries management (Deepananda, Amarasinghe, & Jayasinghe-Mudalige, 2015).

Such knowledge extends beyond the ability to interpret marine conditions; it also shapes judgments about which fishing practices are acceptable and which are considered destructive. U distinguished local fishing practices from the use of fish bombs, potassium-based poisons, and nets that sweep the seabed. His rejection of these practices was not based on abstract knowledge of fishing gear regulations but on observable ecological consequences. Damage to coral reefs is understood to affect fish habitats, while changes in those habitats are ultimately experienced directly by fishers. Mr. S1 expressed a similar logic when explaining that community members consider not only how many fish can be caught today but also the condition of the sea several years into the future and the livelihoods of their children's generation.

At this point, the eco-fishing practices of the Giligenting community demonstrate a relationship between ecological knowledge and self-restraint. Awareness of resource vulnerability creates boundaries concerning what may appropriately be done to the sea. This finding can be interpreted through the social-ecological systems (SES) framework, which conceptualizes resources, resource users, governance systems, and the interactions

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

among them as an integrated whole. Basurto, Gelcich, and Ostrom demonstrate that small-scale fisheries constitute social-ecological systems that cannot be understood by separating resource conditions from the actors and social rules governing their utilization (Basurto, Gelcich, & Ostrom, 2013). Research on small-scale fisheries in Zanzibar similarly shows that fisheries practices are simultaneously connected to food security, local culture, livelihoods, ecological conditions, and governance structures (Stiepani, Jiddawi, & Mtwana Nordlund, 2023). This perspective helps explain the Giligenting context: fishers' decisions regarding fishing gear do not stand in isolation but are shaped by economic dependence on the sea, ecological experience, social relationships, and values governing community behavior.

Another dimension emerging from the data is that ecological knowledge is not confined to the individual level. It develops into shared understanding through social interaction. A explained that there is a common understanding regarding certain practices that should not be undertaken because they can damage the sea, even though such agreements have not all been formally documented. These understandings develop because fishers live together, interact frequently, know one another's activities, and discuss problems when violations occur. This pattern demonstrates a transition from ecological knowledge to ecological norms. What initially emerges as experience concerning the consequences of marine degradation gradually develops into a social standard for determining acceptable behavior.

S2 reinforced this finding through his explanation of compliance mechanisms. According to him, community members do not require theoretical terminology to recognize actions considered beneficial or destructive. Long-standing customs have provided standards of behavior, while close social relationships allow community members to monitor one another's actions. Reprimands, feelings of discomfort when engaging in behavior considered inappropriate, and the presence of parents, community leaders, and religious leaders all constitute forms of social control. This finding demonstrates that ecological compliance in Giligenting does not depend solely on the threat of formal sanctions. Compliance is also shaped by social relationships and community judgments.

At the same time, the social structure of Madurese society provides a foundation for these mechanisms of control. Kyai Y explained that the pattern of respect embodied in *bhuppa', bhâbhu', ghuru, rato* continues to influence the community. Parents, teachers or *kyai*, and leaders remain figures whose advice is taken into consideration. This finding intersects with studies that identify *bhuppa', bhâbhu', ghuru, rato* as a referential standard of compliance in Madurese social life. This structure is not merely a symbolic hierarchy of respected figures but has been constructed through collective social life over an extended period (Khairul Anam, 2025). More recent research by Susylawati et al. (2024) also demonstrates that these four elements continue to operate as social forces that direct behavior and shape compliance within Madurese communities.

The findings from Giligenting extend this interpretation into the ecological sphere. *Ghuru* or *kyai*, for example, are not merely authorities in matters of religious ritual. They can also provide legitimacy concerning how the community should treat the environment. Kyai Y explained that messages about protecting the sea may be received differently when they are conveyed not only as government regulations but also as part of a religious responsibility. Ecological compliance therefore operates through several sources of normativity simultaneously: ecological experience, community agreements, social authority, and religious authority. From the perspective of legal pluralism, this situation demonstrates that community behavior is not always governed by a single system of rules. Legal pluralism in aquatic resource governance instead points to the coexistence of multiple normative and institutional orders that simultaneously influence the behavior of resource users (Bavinck & Gupta, 2014).

Religious values constitute another layer of eco-fishing practices in Giligenting. Kyai Y interprets the sea as an *amanah* (trust). The sea provides sustenance, but such provision does not grant humans unrestricted freedom to exploit it. In his view, obtaining a catch by destroying fish habitats cannot be regarded as an appropriate way of seeking sustenance. This statement demonstrates that the community's relationship with the sea is evaluated not only in terms of productivity but also through moral categories. Economic activity remains legitimate, but the means through which benefits are obtained must take environmental consequences into account.

This consideration becomes even more apparent in the use of the concept of *mafsadah*. Kyai Y stated that fishing gear that clearly causes environmental damage should be avoided and that short-term benefits cannot justify disregarding the resulting harm. He associated this view with the prohibition against causing destruction on earth and with an awareness that degradation on land and at sea can result from human actions. In this

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

context, Islamic ethics functions as an evaluative framework for fishing technologies. Fishing gear is assessed not only according to the quantity of fish it produces but also according to its consequences for habitats and resource sustainability.

This finding is consistent with Luth et al. (2022)'s study of destructive fishing among Muslim coastal communities in Lamongan. Their research found that Islamic scholars regarded the preservation of marine ecology as an obligation and destructive fishing methods as practices that should be prohibited. An Islamic legal approach therefore functions to reinforce government policies aimed at preventing ecosystem degradation through eco-fishing (Luth et al., 2022). Its relevance to Giligenting lies in the capacity of religious norms to provide moral legitimacy for restricting resource exploitation. The difference, however, is that the Giligenting data show that such legitimacy does not necessarily have to take the form of a fatwa or an institutionalized formulation of Islamic jurisprudence. Religious values may operate in more everyday forms through advice, customs, judgments concerning right and wrong, and the authority of religious leaders.

Kyai Y explicitly described this pattern. According to him, community members do not necessarily describe their behavior using terms such as *maqāṣid*, Islamic environmental jurisprudence, or other academic categories. Religious values may be embedded in customary practices; people understand that causing destruction is wrong even when they do not explain it using terminology derived from classical Islamic texts. This finding prevents an overly normative interpretation of Islamic ethics. Islamic ethics within Giligenting's eco-fishing practices is found primarily not in doctrinal formulations but in the internalization of values into everyday behavior.

Contemporary scholarship on marine resources from a Qur'anic perspective provides a normative foundation for this pattern. Asma demonstrates a relationship between Qur'anic teachings concerning human responsibility toward marine resources and the idea of sustainable fisheries. The Qur'anic framework does not separate resource utilization from the obligation to maintain its sustainability (Annur & Jannah, 2025). In the Giligenting context, this relationship takes an empirical form when *amanah*, the prohibition of environmental destruction, and considerations of *maslahah* and *mafsadah* intersect with fishers' ecological experience. Islamic ethics does not replace local ecological knowledge; rather, the two mutually reinforce each other. Experience provides information about the consequences of human actions on the sea, while religious values provide a moral language through which those actions are evaluated.

The connection between these elements is also evident in community traditions. Kyai S explained that Petik Laut is not understood merely as a cultural activity. The tradition embodies gratitude, social solidarity, hopes for safety, and recognition that community life depends on the sea. Fishers, boat owners, ferry workers, and coastal residents come together within the same social space, thereby fostering a collective sense of belonging toward the sea. This finding does not suggest that Petik Laut automatically constitutes a conservation instrument. Its importance instead lies in its social function of reproducing the community's collective relationship with the marine environment.

The reproduction of values also takes place through families and the involvement of younger generations. Kyai S explained that children learn by observing their parents' practices and participating in community activities. Values concerning the protection of the sea are not entirely taught through schools or written regulations. A viewed this issue from the perspective of generational change. According to him, technological developments and changing economic orientations may lead younger generations to focus primarily on outcomes without understanding why previous generations maintained particular fishing methods. The transmission of ecological values, therefore, does not necessarily require a return to all traditional fishing techniques; rather, what needs to be preserved is the underlying value of protecting the sea.

The distinction between preserving traditional techniques and maintaining ecological values is important. Ecological wisdom should not be frozen as a tradition belonging exclusively to the past. Berkes (2017) defines traditional ecological knowledge as a knowledge-practice-belief complex that develops adaptively through social processes and relationships between humans and their environment. This adaptive character explains why communities may accept technological change as long as the values of restrained exploitation and ecological responsibility are maintained. In Giligenting, ecological wisdom does not lie solely in the use of hook-and-line fishing or particular traditional fishing gear. Its more fundamental element is the principle that fishing technology should not damage habitats or deprive future generations of the ability to benefit from the sea.

At this point, the findings as a whole demonstrate a layered process. Fishing experience generates ecolog-

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

ical knowledge; continuously exchanged knowledge produces shared understanding; this shared understanding develops into social standards concerning acceptable practices; social control maintains internal compliance; and Islamic ethics provides moral legitimacy for limiting exploitation. These relationships make Giligenting's ecological wisdom more appropriately understood as a normative system rather than merely a collection of traditional fishing techniques.

The living law framework helps explain this characteristic. Norms may possess social force even when they have not been fully formulated in written regulations. S2 stated that community members understand which actions are appropriate and which are destructive through established customs, while Mr. S1 explained that reprimands arise when individuals engage in actions considered environmentally harmful. Norms acquire practical force because community members live together, know one another, and possess mechanisms of social monitoring. This finding parallels research on customary law-based environmental governance demonstrating that living law can operate as a dynamic normative system through local values, social structures, and community compliance mechanisms, even as its position continues to interact with state law (Hendral et al., 2026).

Recent scholarship on Sasi in Maluku provides another relevant comparison. Dewi et al. (2026) demonstrate that Sasi operates as living law regulating access to terrestrial and marine resources through community norms, although its authority becomes vulnerable when confronted with broader legal structures. Giligenting takes a different form because there is no single customary institution comparable to Sasi. Its ecological normativity is dispersed across fishers' experiences, customary practices, social agreements, the authority of *kyai*, traditions, and collective judgments regarding environmentally destructive behavior. This dispersed character demonstrates that living law does not necessarily require a formal customary institution in order to operate within social life.

On this basis, the findings of this study can be conceptualized as the existence of a living ecological law within the Giligenting community. The term refers to ecological norms that derive their operative force from the relationship among local ecological knowledge, intergenerational experience, self-restraint in resource utilization, social control, the structure of compliance within Madurese society, and the legitimacy provided by Islamic ethics. These norms are not entirely written and are not always recognized by community members using legal or conservation terminology. Nevertheless, their existence can be observed through standards distinguishing appropriate from destructive behavior, accepted fishing practices, reprimands for violations, the transmission of knowledge, and religious legitimation of the obligation to protect the sea.

An interpretation based on social-ecological systems further demonstrates that eco-fishing practices in Giligenting cannot be reduced to the selection of fishing gear. Marine resource systems, resource users, local knowledge, social structures, and religious norms are interconnected in shaping behavior. On the one hand, dependence on the sea creates an economic need to catch fish. On the other hand, that same dependence generates awareness that resource degradation will ultimately impose losses on the community itself. Ecological knowledge and Islamic ethics operate between these two interests as mechanisms of restraint.

This interpretation also highlights the distinction between eco-fishing as a regulatory program and eco-fishing as a living social practice. In the Giligenting community, ecological behavior does not originate from a formal understanding of concepts such as sustainable fisheries, ecosystem-based management, or Islamic environmental jurisprudence. Rather, it emerges from the experience that the sea must continue to provide fish tomorrow; from the knowledge that damaged coral reefs will reduce fish habitats; from community reprimands against destructive practices; from respect for social and religious leaders; and from the belief that sustenance obtained from the sea is an *amanah* that should not be pursued through environmental destruction. It is here that local ecological knowledge, social-ecological systems, living law, and Islamic ethics converge within a single social practice.

These findings also provide the basis for examining the issue addressed in the following section. The strength of Giligenting's living ecological law derives from close social relationships, shared ecological experiences, and internal structures of compliance. Yet these same foundations reveal their limits when confronted with actors who operate outside those social networks. Norms that are effective because community members know one another do not necessarily exert the same influence over fishers arriving from outside the area, who are not bound by local authorities and are not subject to the community's social pressures. The next issue, therefore, is no longer whether the Giligenting community possesses ecological wisdom, but the extent to which its living ecological law can protect the marine ecosystem when maritime spaces are utilized by actors operating outside

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

the local community's normative structure.

3.2. The Limited Binding Force of Living Law in Addressing External Ecological Threats

The findings indicate that the ecological challenges in Giligenting do not stem from the absence of norms governing the community's relationship with the sea. Such norms already operate through customary practices, ecological knowledge, agreements among fishers, social control, and religious legitimacy, as discussed in the previous section. Rather than facing a normative vacuum at the community level, the community confronts the social limits of these norms' operative force. Ecological norms are relatively effective in regulating the behavior of community members because they are embedded in social networks characterized by mutual familiarity and monitoring. The situation changes when the same marine space is accessed by fishers from outside Giligenting who are not part of these social networks. Under such circumstances, reprimands, social deference, the authority of community leaders, and the advice of religious figures do not necessarily exert the same influence. This finding demonstrates that the effectiveness of living law depends substantially on the extent to which actors are socially embedded within the community from which the norms derive their legitimacy.

Mr. S1 described this limitation by distinguishing between the compliance of local community members and that of external fishers. According to him, unwritten norms remain relatively strong among the people of Giligenting because they live together and know one another. When an individual engages in conduct regarded as environmentally destructive, other community members can issue a reprimand. The same mechanism, however, becomes more difficult to apply to fishers from outside the community. They do not live within Giligenting's social environment and may not consider themselves bound by the customs prevailing within the community. Mr. S1 emphasized that local people may communicate prohibitions against the use of certain fishing gear, yet external fishers may not necessarily comply because they are not members of the local community. This finding demonstrates that the social validity of a norm is not identical to its territorial applicability. A norm may be strong among those who recognize it but lose part of its operative force when confronted with actors who have no social relationship with those who create and maintain it.

This condition takes a more concrete form in U's experience as a fisher. He identified the presence of some external fishers as a source of concern because of the use of fishing gear or methods regarded as destructive, including fish bombs, potassium-based poisons, and nets that sweep the seabed. For local fishers, the problem is not merely a difference in fishing technology. Damage to coral reefs and the seabed is understood to affect fish habitats on which the community depends for its livelihood. Ecological experience enables local fishers to associate particular fishing methods with changes in habitat conditions and fish availability. On the one hand, external fishers may derive economic benefits from catches obtained in Giligenting's marine space. On the other hand, the long-term ecological consequences of habitat degradation are borne primarily by the communities that remain in the area and continue to depend on these waters.

This difference in position explains why Mr. S1 distinguished the orientation of island communities from that of some fishers arriving from outside. He did not generalize all external fishers as perpetrators of destructive fishing but instead emphasized differences in the ecological consequences borne by different actors. Local fishers remain in the same area when coral reefs are damaged and fish stocks decline, whereas fishers arriving from elsewhere may move to other fishing grounds after completing their fishing activities. This situation creates an imbalance between those who benefit from resource exploitation and those who bear its ecological consequences. The issue therefore cannot adequately be explained as a conflict between "local fishers" and "external fishers." The more fundamental problem lies in differences in actors' attachment to the ecosystem and to the local normative structure.

This finding can be interpreted through the social-ecological systems framework. In the governance of common-pool resources, relationships among users, resources, rules, and monitoring capacity constitute important elements of successful collective management. Ostrom (2015) demonstrates that institutions governing common resources generally require identifiable boundaries concerning who has the right to use resources, monitoring mechanisms, and rules adapted to local conditions. In fisheries, however, boundary issues become more complex because both fish and resource users are mobile. Fishing grounds do not always correspond to the administrative boundaries of a community, while actors exploiting the resources may come from different areas. Giligenting illustrates this problem: the community possesses norms and mechanisms of social monitoring, but the resources it seeks to protect exist within a space that is not completely closed to external users.

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

It is this characteristic of fisheries resources that distinguishes ecological living law from social norms regulating internal community relations. Norms concerning family life or social relations can operate among actors who are relatively easy to identify. Marine resources possess a different character because the mobility of both users and resources makes community boundaries more fluid. Jentoft and Bavinck explain that small-scale fisheries governance operates amid diverse rights, interests, values, and normative systems derived from both customary and state law. The interaction among these systems raises questions concerning how norms that have historically acquired local legitimacy interact with actors and broader legal orders (Jentoft & Bavinck, 2019). In Giligenting, this tension does not arise because local norms and state law directly contradict one another, but because the social reach of local norms is narrower than the ecological space in which resources are utilized.

S2 provided an explanation that reinforces this interpretation. He stated that local community members comply with unwritten rules because they live together, know one another, and are aware of each other's behavior. There is also a sense of discomfort when someone engages in conduct considered inappropriate by the community. Parents, community leaders, and religious figures serve as sources of social control. This structure creates a compliance mechanism that does not require continuous formal surveillance. Norms operate because actors know that their conduct can be observed, evaluated, and reprimanded by others with whom they maintain social relationships.

At the same time, S2 clearly identified the limits of this mechanism. According to him, external fishers "do not live here" and "do not know the community leaders." Reprimands therefore do not necessarily resolve the problem because the actors may return on another occasion. This account demonstrates that the strength of social control is closely related to what may be described as social embeddedness. A community member considers reputation, relationships with neighbors, respect for community figures, and the long-term social consequences of his or her actions. External actors do not necessarily confront the same structure of consequences. When social relationships are temporary, the social costs associated with violating local norms become considerably lower.

Studies of compliance in small-scale fisheries support this interpretation. Sierra Castillo et al. demonstrate that enforcement in small-scale fisheries does not operate solely through formal legal sanctions. Social norms, traditions, beliefs, and informal mechanisms can shape compliance and prevent violations and, under certain conditions, exert a strong influence on resource users' behavior (Sierra Castillo et al., 2024). The effectiveness of such mechanisms, however, depends heavily on the social structures within which they operate. The Giligenting findings reveal another dimension of this argument. Informal mechanisms are relatively strong when actors are embedded in the community's social networks, but their influence diminishes when those actors do not maintain sustained social ties with the community.

This problem also challenges the assumption that fisheries compliance can be explained solely through the direct relationship between the state and fishers. Rather than being a simple outcome of the presence or absence of government sanctions, compliance is produced through a more complex relationship among formal norms, economic interests, social relations, and actors influencing fishing practices. Elsler et al., in their study of small-scale fisheries in Spermonde, Indonesia, demonstrate that compliance cannot be understood by examining fishers in isolation. Socio-economic relationships between fishers and traders also shape fishing practices, while informal norms may support or interact with formal policies (Elsler et al., 2023). This finding is relevant to Giligenting because it demonstrates that fishing behavior results from configurations of social relationships rather than merely from individual choices.

The control mechanisms identified in Giligenting primarily take the form of reprimands and expulsion from fishing grounds when the community encounters practices regarded as destructive. U explained that community members usually reprimand the perpetrators and ask them to leave the area. Such mechanisms may sometimes be effective, but they do not always prevent the practices from recurring because external fishers can return. This pattern demonstrates the difference between stopping an action at the moment a violation occurs and creating sustained compliance. A reprimand may provide an immediate intervention, but it does not necessarily generate a long-term effect on actors who have no social obligation to maintain good relationships with the community.

From a governance perspective, this situation demonstrates a gap between social enforcement and legal enforceability. Social enforcement operates through reputation, shame, reprimands, respect for community

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

figures, and community pressure. Legal enforceability requires a basis of authority, a definition of prohibited conduct, identification of the subjects bound by the rules, and institutional mechanisms for responding to violations. These mechanisms should not necessarily be positioned in opposition to one another. The problem arises when resource protection depends predominantly on the former while resource users include groups that are not entirely subject to the community's social structure.

The framework of legal pluralism helps explain this situation. Bavinck, Gupta, Jentoft, and colleagues demonstrate that legal pluralism is a common characteristic of aquatic resource governance because several systems of rules may simultaneously apply, or claim applicability, to the same resources. Relationships among these systems may take the form of indifference, competition, accommodation, or mutual support (Bavinck et al., 2017). In small-scale fisheries, state law frequently operates alongside community institutions, customs, informal norms, and arrangements governing access to resources. Wickramasinghe & Bavinck (2015) found a similar situation in southern Sri Lanka, where state and community institutions exert parallel influences, sometimes supporting one another but in other circumstances generating inconsistencies in fisheries practices, livelihoods, and conservation.

Giligenting represents a somewhat different form of pluralism. Community norms and state policies essentially pursue ecological objectives that can converge, particularly in preventing the use of destructive fishing gear. The problem lies in the space between these systems. Community norms possess social legitimacy but have limited external reach; state law possesses broader formal jurisdiction, yet its enforcement is not necessarily present in every interaction occurring within fishing grounds. At this point, a governance gap emerges—not because either system is entirely absent, but because the relationship between the local normative system and the formal legal system has not fully closed the space in which violations by mobile actors may occur.

Bavinck and Kooiman remind us that legal pluralism in fisheries can generate both opportunities and challenges for governance. Uniform solutions are difficult to apply because normative systems, resource users, and institutional capacities differ among communities (Jentoft & Bavinck, 2019). This interpretation is relevant to Giligenting. Reliance on formal law without understanding local norms risks overlooking compliance mechanisms that are already functioning. Conversely, reliance solely on community norms creates difficulties when resources are utilized by actors beyond the social reach of the local community.

The findings also demonstrate that the limits of living law are not merely spatial but relational. A fisher from another village does not automatically violate local norms simply because he or she originates from outside Giligenting. Mr. S1 himself was careful to emphasize that not all external fishers behave in the same way. What matters is whether their fishing practices are consistent with sustainability norms and whether they recognize the restrictions operating within the space they use. Accordingly, the category "external" in this study is not intended to assign a negative judgment based on fishers' geographical origins. Rather, it describes the position of actors outside Giligenting's structure of social control, for whom reprimands, reputation, respect for community leaders, and community agreements do not exert the same influence.

This distinction is important to prevent the ecological problem from being reduced to a simplistic dichotomy between environmentally responsible local communities and invariably destructive external fishers. The research data do not support such a generalization. The findings indicate the existence of certain external practices that informants regarded as destructive, while Mr. S1 explicitly rejected generalizing all external fishers. The research problem therefore concerns the governance structure: how ecological norms that enjoy strong legitimacy within a community can operate when resource users move across community boundaries.

At this point, common-pool resources theory becomes relevant again. One of the fundamental challenges in managing shared resources is the mismatch between the boundaries of user communities and the boundaries of the resources themselves. When those who bear the costs of conservation differ from those who can enjoy the benefits of the resources, incentives to maintain collective rules become more difficult to sustain (Khania, Satria, & Purwandari, 2022). Giligenting demonstrates a similar condition empirically. Local communities bear the long-term consequences of habitat degradation because their livelihoods continue to depend on the waters surrounding the island. Mobile actors, meanwhile, may obtain benefits from catches without facing equivalent long-term social and ecological consequences.

This problem cannot be addressed merely by intensifying social pressure. The authority of *kyai* provides a clear illustration of this limitation. Kyai Y explained that religious leaders can cultivate community awareness

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

by explaining that protecting the sea forms part of a religious *amanah*. Religious advice carries influence because community members continue to listen to *kyai*. Nevertheless, he also acknowledged that religious sermons and appeals are not always sufficient when dealing with outsiders who do not attend local religious gatherings or are not part of the local structure of religious authority. This account is particularly important because it comes from an actor who possesses strong normative authority within the community. He himself recognizes that moral legitimacy has limits to its reach.

Here, a distinction emerges between normative authority and jurisdictional authority. A *kyai* possesses normative authority because his advice is respected by the community, but he does not possess jurisdictional authority to compel all users of marine space to comply with particular prohibitions. Community leaders may issue reprimands, but such reprimands are not equivalent to legal measures carrying formal consequences. Communities may establish agreements, yet such agreements do not automatically bind every individual entering the fishing grounds. This distinction explains why ecological norms that are internally strong do not automatically produce effective ecological protection in relatively open marine spaces.

Jentoft and Bavinck offer the concept of interlegality to understand the need to connect different normative systems in small-scale fisheries governance. In their view, the relationship between customary law and broader legal frameworks does not necessarily require one system to replace the other. Co-management can provide a space for constructing hybrid legal configurations that connect local legitimacy with formal legal structures (Jentoft & Bavinck, 2019). This idea is relevant to the Giligenting findings because the problem identified does not concern the need to eliminate living law. Local norms instead perform tangible ecological and social functions. The issue concerns how these norms can be connected to legal structures capable of extending their protective reach.

Experiences from other countries demonstrate the importance of such bridging structures. Studies by Govan et al. on coastal fisheries governance in Fiji and the Solomon Islands show that legal pluralism is a central characteristic of coastal governance. Customary marine governance systems and national regulations interact in various ways, ranging from indifference to accommodation and mutual support. These studies emphasize the importance of institutional structures capable of connecting different levels and systems of governance (Rohe et al., 2019). Their relevance to Giligenting lies in the need to avoid two extremes: leaving local norms to operate independently without formal support or replacing them entirely with state rules detached from the community's social structures.

Research on illegal, unreported and unregulated fishing also cautions that a state-dominated perspective may overlook the plurality of rules that already govern small-scale fisheries. Song et al. demonstrate that categorizing fishing practices exclusively through the lens of state legality may disregard local rule systems that have long regulated fishing effort and access to resources (Song et al., 2020). This finding offers an important lesson for Giligenting. The limitations of living law do not imply that local norms should be regarded as ineffective and replaced by formal law. Instead, local norms should be understood as part of an existing governance architecture, while their principal limitation lies in their capacity to reach actors beyond the community.

This distinction also separates normative weakness from limitations in normative reach. If the community lacked agreements, did not recognize prohibitions against destructive practices, or possessed no mechanism of social control, the problem could be characterized as a weakness in the substance of local norms. The Giligenting data demonstrate a different condition. Norms exist, their ecological rationale is understood, social control is exercised, and community and religious leaders contribute to maintaining compliance. The limitation emerges when the subjects to be regulated are not bound by these social mechanisms. Therefore, the central problem lies not in the substance of living ecological law but in its scope of enforceability.

This condition can also be interpreted through the concept of legal insecurity in small-scale fisheries. Rosello and Yidana, in a recent study of small-scale fisheries in Ghana, demonstrate that legal uncertainty and insecurity can emerge from regulatory complexity and differences in understanding how rules apply within fishing communities. They emphasize the importance of cross-community consultation to strengthen legal effectiveness and reduce risks arising from regulatory ambiguity (Rosello & Yidana, 2026). Although the configuration in Giligenting differs, this concept helps explain the risks that arise when ecological norms are well understood by the local community but do not possess equivalent reach over resource users from outside that community.

The issue becomes increasingly relevant because marine waters are not social spaces that can be completely

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

enclosed by a single community. Fishers' mobility, the characteristics of fish resources, developments in fishing technology, and economic relationships make cross-regional interactions difficult to avoid. Giligenting's ecological norms therefore operate within an environment broader than the social setting in which they originated. On the one hand, such openness facilitates economic interaction and cross-regional resource utilization. On the other hand, it creates opportunities for practices that are not subject to the local community's social-ecological restrictions.

Taken together, the data reveal a relationship that can be summarized through four layers. First, living ecological law derives internal legitimacy from ecological experience, customary practices, community agreements, structures of compliance, and Islamic ethics. Second, this legitimacy generates mechanisms of control through reprimands, social monitoring, and moral pressure. Third, these mechanisms operate relatively strongly when their subjects are community members with continuing social relationships. Fourth, their effectiveness declines when they confront external actors who are not bound by reputation, local authorities, community agreements, or the social consequences imposed by the community.

This pattern demonstrates that living law possesses its own social geography. Its operative force is determined not merely by the physical location in which an action occurs but also by the relationship between the subject and the normative community. An individual may be physically present in the waters surrounding Giligenting without being socially situated within the normative structure of the Giligenting community. Under such circumstances, the existence of local norms does not necessarily produce compliance. This interpretation is consistent with the perspective of legal pluralism, which rejects the assumption that a single space is governed by only one legal system. In practice, actors occupying the same space may refer to different rules, authorities, and interests.

These findings further demonstrate that fisheries sustainability cannot be addressed merely by increasing the intensity of external law enforcement. Hauck cautions that theories of fisheries compliance need to move beyond the assumption that compliance can be achieved solely through law enforcement. Law-making processes, the legitimacy of rules, and power relations affecting fishers' behavior must also be taken into account (Cepić, Puzek, & Ballesteros, 2026). Giligenting demonstrates the relevance of this argument from the opposite direction: social pressure without the support of legal structures also has its limits. Governance that relies exclusively on either state enforcement or community control risks overlooking an important component of compliance mechanisms.

On this basis, the limitations of Giligenting's living ecological law should not be interpreted as a failure of local ecological wisdom. The findings instead demonstrate that these norms are capable of shaping behavior as long as actors remain embedded within the social networks that sustain them. Their limits emerge because the marine ecosystem extends beyond the social boundaries of the community. Rather than demonstrating that local norms are no longer relevant, the presence of external actors reveals the need for a mechanism capable of connecting local social legitimacy with legal capacity that possesses a broader reach.

This interpretation provides the transition toward the discussion of legal recognition. The question that needs to be addressed is not whether formal law should replace living law, but how the two can be connected without eliminating the social foundations of the ecological norms already operating within the community. On the one hand, formalization that is too detached from the community risks producing rules that lack social legitimacy. On the other hand, maintaining norms entirely in informal form leaves unresolved the problem of their binding force over external actors. It is precisely within the space between these two conditions that the need for recognition through a Village Regulation emerges, not as an instrument for creating ecological norms from the outset, but as a mechanism for connecting the Giligenting community's living ecological law with formal legal structures and fisheries policies that possess a broader regulatory reach.

3.3. Recognition of Ecological Wisdom and Islamic Ethics through an Environmentally Friendly Village Regulation

The findings indicate that the need for an Environmentally Friendly Village Regulation in Giligenting does not arise from the absence of ecological norms. The community already possesses knowledge concerning appropriate fishing methods, limits on environmentally destructive practices, mechanisms of social reprimand, and religious values that shape its relationship with the sea. The central issue lies in the fact that these norms continue to operate predominantly as social agreements. Mr. S1 stated that a Village Regulation should not create

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

new norms from the top down but should first identify practices already embedded in community life and subsequently strengthen them. S2 expressed a similar view: a Village Regulation should not merely prohibit destructive fishing gear but should also recognize the practices through which the community has long protected the sea. These findings shift the function of a Village Regulation from mere regulation toward legal recognition.

Recognition in this context differs from ordinary formalization. Formalization tends to transfer social norms into legal texts, whereas recognition begins by acknowledging that such norms already possess legitimacy before acquiring formal legal status. A Village Regulation should therefore not replace the living ecological law that already operates through fishers' experiences, community agreements, and socio-religious authority. Its role is to provide an institutional space through which these values can be incorporated into village governance. This perspective is closely related to the idea of responsive law, in which law does not isolate itself from social needs but instead treats social realities as one of the foundations for the formation and operation of law. Studies on the recognition of local norms within the framework of Indonesia's Village Law similarly demonstrate that legal recognition can provide a pathway for incorporating community-based values into formal legal structures, provided that the process remains attentive to the social characteristics of the community (Febrianty, Sriwidodo, & Priyaldi, 2023).

The field data reveal at least two dimensions of such recognition. The first is substantive recognition, which refers to acknowledging the content of ecological wisdom: the use of non-destructive fishing methods, protection of fish habitats, restrictions on excessive exploitation, knowledge of seasons and marine conditions, and prohibitions against destructive practices. The second is procedural recognition, which concerns the participation of community members who possess and practice such knowledge in the rule-making process. Kyai S emphasized that the village government should not formulate regulations independently; fishers, community leaders, and religious leaders should be involved because they are the actors who will ultimately implement the rules.

This procedural dimension is essential to the legitimacy of a Village Regulation. Recent studies on the formation of local legal instruments in Indonesia distinguish between administrative-formalistic policies and policies developed through participatory processes that are sensitive to local cultural values. The latter have greater potential to connect formal authority with community needs (Mohi, Lahaling, & Djafar, 2025). Similar findings emerge from research on the integration of the local wisdom of Bau Lolon into the formulation of Village Regulations in East Flores. When local values are not merely incorporated symbolically but are actively used in policymaking processes, Village Regulations gain stronger social support and become more closely aligned with community needs (Tokan et al., 2025). This position is relevant to Giligenting because the effectiveness of a Village Regulation is determined not only by the existence of legal provisions but also by the extent to which community members recognize their own values within those provisions.

Within this framework, Islamic ethics functions as a foundation of values rather than as a substitute for technical fisheries regulations. Kyai Y's account demonstrates that community members do not need to be familiar with academic concepts such as Islamic environmental jurisprudence in order to practice the values of *amanah*, avoidance of *mafsadah*, and rejection of environmental destruction. These values can be translated into the objectives and principles of a Village Regulation without transforming every provision into a formulation of Islamic jurisprudence. *Amanah* can be translated into responsibility for preserving marine resources; the prohibition of *fasād* can provide an ethical foundation for preventing activities that damage habitats; while the consideration of *maslahah* and *mafsadah* can orient fishing activities so that economic benefits are not pursued at the expense of ecosystem sustainability. Research on destructive fishing in Muslim coastal communities in Indonesia likewise demonstrates that Islamic norms can strengthen social acceptance of policies aimed at preventing marine degradation when religious teachings are directly connected to community practices (Amiruddin et al., 2025).

Such recognition does not imply that every longstanding custom should be incorporated into the Village Regulation. A cautioned that preserving local wisdom does not mean returning fishers to all technologies used in the past. Technology may change, while the underlying value of protecting the sea should be maintained. This statement establishes an important limit against the romanticization of local wisdom. Community practices must still be assessed according to their ecological impacts, relevance to contemporary conditions, and compatibility with higher-level regulations. A Village Regulation may therefore recognize the ecological principles underlying particular practices rather than freezing every form of tradition into a legal norm.

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

This approach becomes particularly important when local recognition intersects with the national legal system. Recent research on the legal recognition of community-based coastal resource management in Indonesia demonstrates that recognition can strengthen conservation and provide greater certainty regarding the position of local communities. Nevertheless, such processes often encounter fragmented authority, inadequate documentation, and a tendency toward merely administrative recognition (Ananingsih et al., 2026). Similar risks need to be avoided in Giligenting. A Village Regulation should not simply refer to "local wisdom" in its preamble while failing to incorporate community knowledge into its substantive provisions and implementation mechanisms.

At the juridical level, the village's regulatory authority is not unlimited. The Village Law provides a legal basis for villages to regulate matters falling within their authority, while the formulation of Village Regulations must remain consistent with the broader framework of laws and regulations (Indonesia, 2014). Accordingly, an Environmentally Friendly Village Regulation cannot be positioned as an instrument that takes over the authority of the central or regional governments in fisheries governance. Moreover, the existence of a Village Regulation does not automatically grant the village government jurisdiction to take enforcement action against all external fishers operating in the waters surrounding Giligenting. This limitation is important to ensure that recognition of ecological wisdom is not constructed through an expansion of village authority without a valid legal basis.

It is precisely within these jurisdictional limits that the function of a Village Regulation becomes more specific. It can be used to recognize community ecological practices, establish local standards of conduct, develop environmental education, organize fisher participation, provide reporting mechanisms, and facilitate coordination when practices suspected of violating fisheries regulations are identified. Where enforcement measures fall outside village authority, further action must remain within the competence of institutions mandated by applicable laws and regulations. This arrangement prevents the Village Regulation from making excessive claims of authority while ensuring that it does not remain merely a symbolic legal document.

This relationship becomes clearer when the Village Regulation is situated alongside Regulation of the Minister of Marine Affairs and Fisheries No. 36 of 2023. The regulation governs the placement of fishing gear and fishing auxiliary equipment within measured fishing zones and fisheries management areas falling within its scope (Indonesia, 2023). Within the analytical construction of this study, a Village Regulation is not required to reproduce the technical classifications of fishing gear already established by the central government. Such repetition would instead reduce the function of village law to the mere reproduction of national regulations.

A's account offers a more substantive relationship between these regulatory levels. According to him, government regulations and community practices can be connected when both share the objective of protecting the sea. Problems arise when regulations are formulated far from the community, leaving people unfamiliar with their contents even though their existing practices may already be consistent with the objectives of those regulations. It is here that a Village Regulation can operate as an instrument of legal translation. Translation does not mean reproducing Regulation of the Minister of Marine Affairs and Fisheries No. 36 of 2023 word for word in village-level rules. Rather, it involves connecting national standards with ecological experiences that are recognizable and meaningful to the local community.

For example, Regulation of the Minister of Marine Affairs and Fisheries No. 36 of 2023 provides formal standards concerning fishing gear and its placement. The Giligenting community possesses empirical knowledge concerning the consequences of particular fishing methods for coral reefs, fish habitats, and the sustainability of catches. A Village Regulation can connect these two forms of knowledge through environmental education, participatory monitoring, documentation of local practices, reporting mechanisms, and institutional coordination. On the one hand, national regulations provide legal standards; on the other hand, the community possesses social knowledge that determines how those standards are understood and implemented in everyday life.

This position distinguishes a Village Regulation from a legal instrument that merely contains prohibitions. S2 emphasized that good practices already maintained by the community should also receive recognition. A considered such recognition important for future generations because values concerning marine protection could be documented and identified as matters regarded as important by the community. In this sense, a Village Regulation can simultaneously function as an institutional memory. Knowledge previously transmitted predominantly through oral traditions can acquire legal documentation without eliminating the social mechanisms through which it has historically been maintained.

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

The importance of preserving the substantive dimension of recognition can also be understood from the experience of Sasi in Maluku. Recognition of living law may become fragile when the state acknowledges its existence only symbolically while broader legal structures continue to constrain the community's substantive authority (Chignola, 2024). This experience provides an important lesson for Giligenting. Recognition through a Village Regulation should not stop at inserting the term "local wisdom" into a legal document. Recognition must have consequences for how the village government formulates policy, involves community members, documents ecological knowledge, and connects local mechanisms with institutions possessing the relevant legal authority.

Based on these findings, recognition of Giligenting's ecological wisdom can be formulated through four functions of a Village Regulation. First, a recognition function, which provides formal standing to ecological knowledge and eco-fishing practices already embedded in community life. Second, a protection function, aimed at preventing practices inconsistent with environmental sustainability within the limits of village authority. Third, a transmission function, which ensures that ecological values can be passed on through education, documentation, and the involvement of younger generations. Fourth, a bridging function, which connects community practices with national fisheries policies and institutions possessing broader authority.

These four functions establish a relationship that differs from the conventional formalization of local wisdom. Ecological wisdom and Islamic ethics provide the substantive values; the Village Regulation provides an institutional space; and Regulation of the Minister of Marine Affairs and Fisheries No. 36 of 2023 provides fisheries legal standards at the national level. None replaces the others. Local norms continue to derive their strength from the community, the Village Regulation operates within the institutional capacity of village government, and national regulation retains its technical and jurisdictional functions.

It is at this point that the analytical contribution of this study can be situated. An Environmentally Friendly Village Regulation is more appropriately understood as a recognition-based regulatory bridge: an instrument that recognizes existing ecological norms, selectively translates them into village-level policy, and connects them with the broader fisheries legal system. This construction differs both from an approach that treats Village Regulations as creators of entirely new ecological norms and from one that reduces them to reproductions of central government regulations.

Taken together, the findings reveal a coherent sequence. Ecological wisdom and Islamic ethics constitute a living ecological law; these norms are effective primarily because they are sustained by the community's social relations; their limitations become apparent when they encounter actors operating outside the local social structure; and the Village Regulation provides a space for recognition through which those norms can enter an institutional framework without losing their source of social legitimacy. Regulation of the Minister of Marine Affairs and Fisheries No. 36 of 2023 subsequently provides the normative framework connecting local arrangements with national fisheries governance. Recognition, in this sense, does not merely transform local wisdom into written rules. Rather, it establishes a working relationship among community knowledge, religious ethics, village governance, and state law in the protection of Giligenting's marine resources.

4. CONCLUSION

This study aimed to analyze ecological wisdom and Islamic ethics in the eco-fishing practices of the Giligenting community and to explain how these values can be legally recognized through an Environmentally Friendly Village Regulation to strengthen the implementation of Regulation of the Minister of Marine Affairs and Fisheries No. 36 of 2023. Drawing on in-depth interviews with fishers, community leaders, religious leaders, and community members, complemented by observations and legal document analysis, the study reveals three main findings. First, eco-fishing practices are not based solely on technical knowledge of fishing but are shaped by intergenerational ecological experience, restrictions on destructive practices, social control, and Islamic ethical principles concerning *amanah*, *maslahah-mafsadah*, and the prohibition of environmental destruction. Their interaction constitutes a living ecological law whose effectiveness derives from community acceptance and compliance. Second, the binding force of these norms is relatively strong within the community but weakens when confronted with external actors who are not embedded in Giligenting's social control structures.

Third, recognition through a Village Regulation is required not to create new ecological norms or to take over fisheries management authority, but to recognize, protect, and connect existing norms with the formal legal framework. Most importantly, this study demonstrates that the central problem of eco-fishing governance lies

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

not in the absence of local norms but in the gap between the social legitimacy of ecological norms and the legal reach required to protect them. An Environmentally Friendly Village Regulation can therefore be positioned as a recognition-based regulatory bridge that connects ecological knowledge, Islamic ethics, village institutions, and Regulation of the Minister of Marine Affairs and Fisheries No. 36 of 2023 without eliminating the social character of the norms being recognized.

The contribution of this study lies in shifting the understanding of ecological wisdom from merely a traditional practice toward a source of normativity capable of interacting with formal law in sustainable fisheries governance. Rather than replacing living ecological law with state regulation, legal recognition enables the two to perform distinct yet mutually reinforcing functions. This implies that village governments in Giligenting can orient an Environmentally Friendly Village Regulation toward four functions: recognizing community ecological practices, providing protection within the scope of village authority, facilitating the intergenerational transmission of ecological values, and bridging local mechanisms with competent fisheries institutions. The model may also provide a point of reference for other coastal communities possessing local ecological norms, provided that its application is adapted to their respective social structures and legal authority. Nevertheless, this study is limited to the socio-ecological context of Giligenting and relies primarily on the perspectives of local actors; it therefore does not examine the perspectives of external fishers or the effectiveness of a Village Regulation after its implementation. Future research should test the recognition-based regulatory bridge through comparative studies across different coastal communities and longitudinally evaluate changes in compliance, fishing practices, institutional coordination, and ecological conditions before and after the implementation of legal recognition instruments.

ACKNOWLEDGMENTS

The authors gratefully acknowledge Universitas 17 Agustus 1945 Surabaya (UNTAG Surabaya) for funding this research through the Higher Education Research Grant (Hibah Perguruan Tinggi). The authors also express their appreciation to the Giligenting community, particularly the fishers, religious leaders, community leaders, and local community members who participated in and supported the data collection process for this study.

DECLARATION

Funding

The authors received no financial support of any kind for the conduct of the research, the drafting, and/or the publication of this article.

Conflicts of Interest

The authors declare no financial conflicts of interest or personal relationships that could influence, or appear to influence, the analysis results and legal arguments presented in this article.

Availability of Data and Legal Materials

All legal materials, court rulings, or supporting data analyzed in this research are fully included in this manuscript.

AI Use Statement

The authors declare that no artificial intelligence (AI) tools were used in the drafting, writing, or editing of this article.

REFERENCES

Amiruddin, M. M., Haris, A., Pikahulan, R. M., Haq, I., Suleman, B., Yusuf, A., & Nusair, A. (2025). Empowering Indigenous Coastal Conservation: Eco-Muamalat as a Model for Sustainable Marine Practices. *Cosmopolitan Civil Societies: An Interdisciplinary Journal*, 17(3), 72–93. https://doi.org/10.5130/ccs.v17.i3.9380

Ananingsih, S. W., Adhim, N., & Siradj, A. M. (2026). FROM CUSTOMARY GOVERNANCE TO BIODIVERSITY CONSERVATION: LEGAL PROSPECTS FOR COMMUNITY-BASED COASTAL RESOURCE MANAGEMENT AS OECMs IN INDONESIA. *Masalah-Masalah Hukum*, 55(1), 17–46. https://doi.org/10.14710/mmh.55.1.2026.17-46

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

Annur, A. S., & Jannah, M. (2025). EKO-TEOLOGI PROFETIK: KRITIK SANAD DAN MATAN HADITS-HADITS PELESTARIAN DALAM PERSPEKTIF MAQASID SYARIAH. *Jalalain: Journal of Qur'an and Hadith*, 2(1), 1–7. https://doi.org/10.65802/jalalain.v2i1.122

Asma, C. (2026). From Verses to Sustainable Fishing: Quranic Foundations for Marine Natural Capital Conservation. *ADDIN : Media Dialektika Ilmu Islam*, 20(1), 247–228. https://doi.org/10.21043/addin.v20i1.32492

Banakar, R. (with Travers, M.). (2005). *Theory and Method in Socio-Legal Research*. Bloomsbury Publishing Plc.

Basurto, X., Gelcich, S., & Ostrom, E. (2013). The social–ecological system framework as a knowledge classificatory system for benthic small-scale fisheries. *Global Environmental Change*, 23(6), 1366–1380. https://doi.org/10.1016/j.gloenvcha.2013.08.001

Bavinck, M., Berkes, F., Charles, A., Dias, A. C. E., Doubleday, N., Nayak, P., & Sowman, M. (2017). The impact of coastal grabbing on community conservation – a global reconnaissance. *Maritime Studies*, 16(1), 8. https://doi.org/10.1186/s40152-017-0062-8

Bavinck, M., & Gupta, J. (2014). Legal pluralism in aquatic regimes: A challenge for governance. *Current Opinion in Environmental Sustainability*, 11, 78–85. https://doi.org/10.1016/j.cosust.2014.10.003

Berkes, F. (2017). *Sacred Ecology* (4th ed.). Routledge. https://doi.org/10.4324/9781315114644

Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. Sage.

Braun, V., & Clarke, V. (2023). Toward good practice in thematic analysis: Avoiding common problems and becoming a knowing researcher. *International Journal of Transgender Health*, 24(1), 1–6. https://doi.org/10.1080/26895269.2022.2129597

Cepić, D., Puzek, I., & Ballesteros, H. M. (2026). What affects legitimacy in capture fisheries? Analysis of socio-structural factors. *Marine Policy*, 186, 107022. https://doi.org/10.1016/j.marpol.2025.107022

Chignola, S. (2024). *LIVING LAW: Politics and legality beyond the state* (D. Broder, Trans.). Routledge. https://doi.org/10.4324/9781003381433

Dao, Y., Yusnaldi, Y., & Kusuma, K. (2025). Penanggulangan Praktik Destructive Fishing Melalui Optimalisasi Pengawasan Berbasis Masyarakat: Sebuah Upaya Menjaga Keamanan Maritim. *Buletin Ilmiah Marina Sosial Ekonomi Kelautan dan Perikanan*, 10(2), 163. https://doi.org/10.15578/marina.v10i2.14106

De Sousa, W. L., Zacardi, D. M., & Vieira, T. A. (2022). Traditional Ecological Knowledge of Fishermen: People Contributing towards Environmental Preservation. *Sustainability*, 14(9), 4899. https://doi.org/10.3390/su14094899

Deepananda, K. H. M. A., Amarasinghe, U. S., & Jayasinghe-Mudalige, U. K. (2015). Indigenous knowledge in the beach seine fisheries in Sri Lanka: An indispensable factor in community-based fisheries management. *Marine Policy*, 57, 69–77. https://doi.org/10.1016/j.marpol.2015.03.028

Dewi, Y. T. N., Samsura, D. A., Pandiangan, A., Kwik, J., & Simarmata, H. T. (2026). Discriminatory legal pluralism: The fragile authority of Sasi as living law in Maluku. *International Journal of Discrimination and the Law*, 13582291261441349. https://doi.org/10.1177/13582291261441349

Elsler, L. G., Neil, M., Ferse, S., Navarrete Forero, G., Glaser, M., & Schlüter, M. (2023). Compliance in small-scale fisheries is linked to fisher-trader relations: Not fishers alone (Southeast Asian case study). *Reviews in Fish Biology and Fisheries*, 33(3), 751–766. https://doi.org/10.1007/s11160-023-09783-6

FAO (Ed.). (2015). *Voluntary guidelines for securing sustainable small-scale fisheries in the context of food security and poverty eradication*.

FAO. (2024). *The State of World Fisheries and Aquaculture 2024*. https://doi.org/10.4060/cd0683en

FAO. (2024). *Small-scale fisheries governance*. https://doi.org/10.4060/cc9784en

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

Fathorrozy, Mahdi, A., Sa'adah, N., & Qomariyah, N. (2026). Nilai-Nilai Budaya Madura Yang Berpotensi Mendukung Education For Sustainable Development (ESD) Dalam Meperkuat Ketahanan Sosial Masyarakat. *Entita: Jurnal Pendidikan Ilmu Pengetahuan Sosial dan Ilmu-Ilmu Sosial*, 179–190. https://doi.org/10.19105/ejpis.v2i.24475

Febrianty, Y., Sriwidodo, J., & Priyaldi, P. (2023). Establishing Regional Regulations for the Protection of Local Wisdom. *Fiat Justisia: Jurnal Ilmu Hukum*, 17(3), 193–220. https://doi.org/10.25041/fiatjustisia.v17no3.2708

R. Hendral, R. H., Anis Mashdurohatun, Permana Adi Kusumah, Fahmi Amrullah, & Mahmoud Ismail. (2026). Regulatory Reform of Evidence Confiscation in Forestry Crimes for Sustainable Environmental Governance. *Journal of Sustainable Development and Regulatory Issues (JSDERI)*, 4(2), 833–876. https://doi.org/10.53955/jsderi.v4i2.397

Republik Indonesia. (2014). *Undang-Undang Nomor 6 Tahun 2014 tentang Desa* (termasuk perubahannya dalam UU No. 3 Tahun 2024) dan *Peraturan Menteri Dalam Negeri Nomor 111 Tahun 2014*.

Republik Indonesia. (2023). *Peraturan Menteri Kelautan dan Perikanan Nomor 36 Tahun 2023 tentang Penempatan Alat Penangkapan Ikan dan Alat Bantu Penangkapan Ikan...* Berita Negara Republik Indonesia Tahun 2023 Nomor 902.

Jentoft, S., & Bavinck, M. (2019). Reconciling human rights and customary law: Legal pluralism in the governance of small-scale fisheries*. *The Journal of Legal Pluralism and Unofficial Law*, 51(3), 271–291. https://doi.org/10.1080/07329113.2019.1674105

Khairul Anam, R. (2025). The Meaning of The Madura Proverb "Bhuppa'-Bhâbhu'-Ghuru-Rato" in Hasan Hanafi's Social Theology Perspective and Its Relevance to Community Development. https://doi.org/10.2139/ssrn.5151625

Khania, A. R., Satria, A., & Purwandari, H. (2022). Stakeholder dan Pengaruh Insentif dalam Pengelolaan Kolaboratif Kawasan Konservasi Perairan: (Kasus: Desa Pangumbahan, Kecamatan Ciracap, Kabupaten Sukabumi, Jawa Barat). *Jurnal Sains Komunikasi dan Pengembangan Masyarakat [JSKPM]*, 6(3), 346–362. https://doi.org/10.29244/jskpm.v6i3.994

Kementerian Kelautan dan Perikanan Republik Indonesia. (2022). *KKP Perbarui Data Estimasi Potensi Ikan, Totalnya 12,01 Juta Ton per Tahun* (SIARAN PERS KKP SP.246/SJ.5/IV/2022). https://kkp.go.id/news/news-detail/kkp-perbarui-data-estimasi-potensi-ikan-totalnya-1201-juta-ton-per-tahun65c1b1dfcd9b1.html

Luth, T., Rohmah, S., Chanifah, N., Kholish, M. A., & Ganindha, R. (2022). Coastal Ulama Ijtihād and Destructive Fishing Prevention in Indonesia. *AHKAM : Jurnal Ilmu Syariah*, 22(2). https://doi.org/10.15408/ajis.v22i2.28077

Mohi, F., Lahaling, H., & Djafar, M. (2025). Local Legal Instruments and the Challenge of Implementing Village Authority in Decentralized Indonesia. *Constitutional Law Review*, 4(1), 1–14. https://doi.org/10.30863/clr.v4i1.5814

Mufrihah, A., Ilfiandra, I., & Budiman, N. (2025). Nyabis tradition in Madura: A meta-ethnographic study. *Satwika : Kajian Ilmu Budaya dan Perubahan Sosial*, 9(1), 29–41. https://doi.org/10.22219/satwika.v9i1.36966

Ostrom, E. (2015). *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press.

Rohe, J. R., Govan, H., Schlüter, A., & Ferse, S. C. A. (2019). A legal pluralism perspective on coastal fisheries governance in two Pacific Island countries. *Marine Policy*, 100, 90–97. https://doi.org/10.1016/j.marpol.2018.11.020

Rosello, M., & Yidana, N. (2026). Exploring legal insecurity in Ghanaian small-scale fisheries. *Marine Policy*, 193, 107227. https://doi.org/10.1016/j.marpol.2026.107227

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.

Sierra Castillo, L., Wilson, J., Aceves-Bueno, E., Quintana, A., & Gaines, S. (2024). Enforcement, deterrence, and compliance in co-managed small-scale fisheries. *Ecology and Society*, 29(4), art10. https://doi.org/10.5751/ES-15362-290410

Silvano, R. A. M., Baird, I. G., Begossi, A., Hallwass, G., Huntington, H. P., Lopes, P. F. M., Parlee, B., & Berkes, F. (2023). Fishers' multidimensional knowledge advances fisheries and aquatic science. *Trends in Ecology & Evolution*, 38(1), 8–12. https://doi.org/10.1016/j.tree.2022.10.002

Song, A. M., Scholtens, J., Barclay, K., Bush, S. R., Fabinyi, M., Adhuri, D. S., & Haughton, M. (2020). Collateral damage? Small-scale fisheries in the global fight against IUU fishing. *Fish and Fisheries*, 21(4), 831–843. https://doi.org/10.1111/faf.12462

Stiepani, J., Jiddawi, N., & Mtwana Nordlund, L. (2023). Social-ecological system analysis of an invertebrate gleaning fishery on the island of Unguja, Zanzibar. *Ambio*, 52(1), 140–154. https://doi.org/10.1007/s13280-022-01769-1

Susylawati, E., Hariyanto, E., Hosen, H., & Hamzah, M. (2024). Socio-Cultural Strength: Optimization of Bhuppa', Bhâbhu', Ghuru, and Rato in Establishing Compliance in Madurese Familial Conduct. *Samarah: Jurnal Hukum Keluarga dan Hukum Islam*, 8(3), 1974. https://doi.org/10.22373/sjhk.v8i3.20299

Tokan, F. B., Lamawuran, Y. D., Bidi, M. A., Susu, M. T., & Kosat, E. (2025). Local Wisdom: The Bau Lolon Rite as A Policy Model for Making Village Regulations in Witihama District, East Flores Regency. *Jurnal Public Policy*, 11(3), 347. https://doi.org/10.35308/jpp.v11i3.12869

Ullah, H., Wahab, M. A., Rahman, M. J., Al Mamun, S. N., Kumar, U., Rahman, M. A., Souhardya, S. M., Kabir, I. E., Hussain, M., Rahman, M. B., & Chishty, S. M. S. U. H. (2023). Local ecological knowledge can support improved management of small-scale fisheries in the Bay of Bengal. *Frontiers in Marine Science*, 10, 974591. https://doi.org/10.3389/fmars.2023.974591

Wickramasinghe, W. A. R., & Bavinck, M. (2015). Institutional landscapes affecting small-scale fishing in Southern Sri Lanka—Legal pluralism and its socio-economic effects. *Maritime Studies*, 14(1), 18. https://doi.org/10.1186/s40152-015-0036-7

Yin, R. K. (2018). *Case study research and applications: Design and methods* (Sixth edition). SAGE.

Copyright © 2026 by Authors. Distributed under CC BY 4.0 International License.