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Driving Sustainable Livelihoods: The Role of Sharia Banking in Fishermen's Economic Resilience on Mandangin Island

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The economic life of fishermen on Mandangin Island, Sampang, is still dominated by a subsistence system that relies on the immediate sale of catches to suppliers, hindering long-term development and sustainable economic management. This condition necessitates a strategic role for financial institutions to build economic resilience. This study aims to analyze and formulate the optimal role of Sharia banking in promoting sustainable livelihoods and enhancing the economic resilience of the fishing community on Mandangin Island. The research employs a descriptive qualitative approach, involving fieldwork to gather direct and in-depth information from key informants among fishermen and Sharia banking institutions. The findings indicate that the optimization of the Sharia bank's role is crucial and can be achieved through three main pillars: first, optimizing the physical presence or accessibility of Sharia bank services; second, enhancing fishermen's literacy and knowledge about Sharia banking products and benefits; and third, maximizing the Sharia bank's contribution to the fishermen's economy, especially in supporting the development of a creative economy through processed marine products. The implementation of this three-pillar optimization strategy is essential for transforming the fishing community from a subsistence economy towards a sustainable and resilient economic management system, positioning Sharia banks as strategic partners in achieving local economic sustainability goals.

1. INTRODUCTION

The life of a fisherman is a livelihood that depends on the catches of fish and other marine products. The income from fishery products is only enough to meet the basic needs of the fishermen, so the management process of the fishery products is limited to handover in the middle of the sea between the fishermen and the supplier. (Opiyo et al., 2024; J. Shi et al., 2025; Ye et al., 2022). This is a primitive activity and becomes an economic problem for their long-term life.

The fishery sector is described as having an undeniable role, including serving as economic support in addressing the economic crisis faced by the Indonesian nation since 1997. Meanwhile, Dang & Li (2025) & C. Shi et al. (2023)Based on the work of several researchers, it is evident that the negative impacts of modernization policies in the fishing industry predominantly cause poverty and social inequality in fishing communities. Based on the field problems described and in line with Pudji Purwanto's explanation, fishermen actually have ample space for economic growth. However, they face technological limitations, limited local absorption capacity, limited marketing networks, and organizational behavior in cooperative activities that do not provide adequate financial returns for fishermen.

According to Anzori, two economic actors are very decisive for the future dynamics of the fishermen community's economy: the fishermen as producers of the catch and

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pangamba as the party marketing the fishermen's catch. Pangamba is an intermediary trader in the amba'an system. This locally contextual economic institution is socially accepted and strategic for the fishing community when formal capital institutions are less favorable to fishermen. If the fishermen are the rulers of the sea, pangamba is the ruler of the market. Some often view the relationship between the two as unequal, so the cooperation that develops between the parties takes the form of a patron-client economic structure. Because this pattern of economic cooperation can only benefit one party, namely the pangamba, in the long run, it can actually harm both parties and hinder the economic dynamics of the coastal area. (Chowdhury, 2021; Legatzke et al., 2025)

The driver of the fishermen's economy is undoubtedly high opportunity, as Indonesian waters are rich in fish resources, both those scattered at the surface and those at the bottom, which contain various types of fish. The use of fish resources that is only oriented towards quantity, or catching as many fish as possible, is an outdated mindset and must be changed immediately. The challenge is to establish a pattern of fish resource use that is environmentally friendly and sustainable. (Farghali, 2023; Sebayang & Baroud, 2024; Soltani, 2021)

To realize such a fisheries management, there must be an economic driver and an examination of the existing constraints faced by fishermen. Up to now, fishermen have had limited knowledge of technology, funding, and market share in the technical market for marketing their catches. Thus, it can be seen that the role of a Sharia bank, which is not only a financial intermediary but also capable of helping solve problems for fishermen, is important.

A Sharia Bank is an intermediary institution and financial service provider that operates based on Islamic ethics and value systems, particularly one that is free from interest (riba), free from non-productive speculative activities such as gambling (maysir), free from unclear and doubtful matters (gharar), upholds the principle of justice, and only finances halal business activities. Sharia banks are often equated with interest-free banks. An interest-free bank is a narrower concept than a Sharia bank, as it refers to a bank whose instruments or operations are free from interest. A Sharia bank, besides avoiding interest, also actively participates in achieving the goals and objectives of the Islamic economy, oriented towards social welfare. (Yusuf, 2020, 2023; Yusuf & Sulaiman, 2024).

Limited access to capital and sustainable financial management constitute a fundamental problem faced by small-scale fishing communities in Indonesia, including those on Mandangin Island, Sampang. Empirically, the fishermen's subsistence pattern, which relies solely on the quick sale of catches to intermediaries or suppliers without any value addition or post-harvest processing, creates acute economic vulnerability. This vulnerability not only results in unstable daily income but also hinders capital accumulation for technological innovation in fishing or business diversification, directly contradicting the spirit of achieving the Sustainable Development Goals (SDGs), particularly SDG 1 (No Poverty) and SDG 8 (Decent Work and Economic Growth). This problem is further exacerbated by low formal financial literacy and the dominance of high-risk informal loan practices (loan sharks). Therefore, an institutional intervention is needed that aligns with the socio-cultural and religious context of the coastal community, and Sharia Banking, with its principles of profit-sharing and justice, emerges as the most relevant solution. The main challenge is how to transform Sharia banking institutions from merely providing financing to becoming strategic partners capable of holistically and sustainably building the fishermen's economic resilience.

Previous research on the role of financial institutions in the development of maritime communities has been extensive. Studies on the role of Sharia banking in alleviating poverty and increasing the economic resilience of microenterprises yield mixed results. For instance, research on Sharia financial inclusion in SME empowerment by Yusuf & Bachtiar (20024)

highlights the significant potential of Sharia banks to improve welfare. Still, studies by Bustomi et al. (2025), Febrian et al. (2024), and Saputri et al. (2024) critique that the impact is often fragmented and insufficiently integrated with environmental sustainability issues. Furthermore, more specific studies on the marine sector have been conducted, such as the research by Nursaid et al. (202) & Yeh et al. (2023), which focus on small-scale gillnet fishing as an economic driver for fishermen. This research tends to be strong on the technical aspects of fisheries but weak in integrating ethical and sustainable financial solutions. Additionally, Purwanti's (2010) research on the economic model of small-scale Ayisi (2023), de la Puente et al. (2022), and Giovani et al. (2023) households provides a theoretical framework. Still, its empirical data are dated and fail to capture the dynamics of the current market and banking technology. Generally, previous research (at least 10 studies published between 2020 and 2025, including those indexed by Google Scholar) that comprehensively discusses the optimization of Sharia banks' roles—integrated with aspects of literacy, accessibility, and creative economic development—for fishermen in specific island regions, such as Mandangin, remains very limited. It has not been formulated within a complete strategic framework.

The Research Gap arising from the previous literature is the disconnect between the theory of Sharia-based financial inclusion and the practice of effective economic empowerment of fishermen on the ground. Existing studies tend to focus on a single aspect—whether it is the financing side (bank products), the technical side of fishing, or the financial literacy side—but fail to offer an integrated three-pillar optimization model (Accessibility, Literacy, and Creative Economic Contribution) (Soltani, 2021; Uekert, 2023; Zada, 2022). The Novelty of this research lies in the formulation of a Sharia bank role-optimization model that considers explicitly the geographical conditions of a small island (Mandangin Island) and the cultural characteristics of Madurese fishermen. Moreover, this study presents a conceptual framework connecting Social Capital Theory—as the Grand Theory for understanding how the fishermen's trust and social networks can be leveraged by Sharia banks—with the Concept of Economic Resilience, which emphasizes the ability of fishermen to adapt and grow following economic shocks. The Economic Resilience Concept is approached here through the lens of Maqashid Sharia, with a focus on preserving wealth (hifdz al-mal) and enhancing community welfare.

Therefore, this research is significant because it touches the critical intersection between sustainable development, Sharia finance, and the empowerment of vulnerable maritime communities. The compelling aspect of this research is its focus on Mandangin Island, a small island with limited access, making it an ideal case study for formulating a results-oriented Sharia financial inclusion strategy that can be replicated in other archipelagic regions. Thus, the main objective of this study is to analyze and develop a three-pillar optimization model (Accessibility, Literacy, and Creative Economic Contribution) for the role of Sharia banking in driving sustainable livelihoods and enhancing the economic resilience of the fishing community on Mandangin Island.

2. RESEARCH METHOD

This study adopts a descriptive qualitative research design, primarily aimed at exploring, describing, and gaining an in-depth understanding of the intricate social phenomena and human perspectives concerning the optimal role of Sharia banking in the economic resilience of fishermen on Mandangin Island (Nyoto, 2023; Rahmatunisa, 2025). This approach is strategically chosen because the research problem—involving complex social dynamics, religious adherence, and institutional roles—cannot be adequately quantified; instead, it requires deep contextual interpretation and understanding of meanings and experiences (Bakhri, 2020). The study is designed as intensive field research to gather rich, holistic data directly from key informants (fishermen, community leaders, and Sharia banking representatives) to build the

proposed three-pillar optimization model (Accessibility, Literacy, and Creative Economic Contribution). Empirical sources, such as the research by (AK Syafa et al., 2020) on the role of Zakat in poverty reduction and (Bakhri, 2023) on community-based conservation, highlight that Sharia financial solutions must be deeply rooted in local contexts and sustainability principles to be practical. This qualitative design ensures that the challenges of low financial literacy and dependence on informal, high-risk loans are addressed with a strategy that is both technically robust and culturally acceptable. Furthermore, the relevance of this qualitative design for examining sustainability and governance issues in the digital era is strongly supported by recent scholarship (AA Bustomi et al., 2025), making it essential for formulating a strategic, integrated solution that effectively addresses the research gap.

To systematically visualize the flow of this descriptive qualitative research process, particularly how in-depth data collection leads to the formulation of the integrated optimization model, Figure 1 illustrates the core stages.

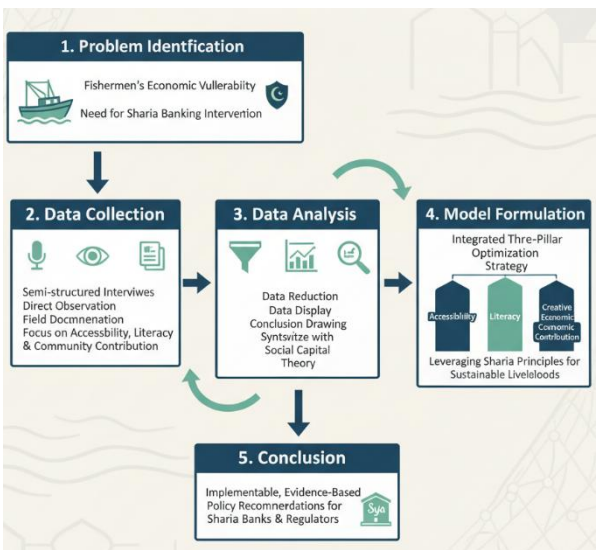

Figure 1. Research Design Stages

The research design is structured into five distinct and interconnected stages, reflecting a systematic and iterative approach to qualitative inquiry. The process begins with Problem Identification, which involves defining the core challenges: the fishermen's subsistence economic vulnerability and the crucial need for Sharia banking intervention, supported by earlier findings like (Purwanti, 2010) on small-scale fishermen's household economic models and (Imron et al., 2020) on small-scale gillnet fisheries as a local economic driver. This initial stage establishes the critical requirement to foster Economic Resilience through the lens of Maqashid Sharia. This leads directly to Data Collection, where primary data is gathered through deep, semi-structured interviews, direct observation, and field documentation, focusing specifically on assessing the status quo of the three optimization pillars (accessibility, literacy levels, and current community contribution programs). The descriptive approach ensures the gathered data are rich in contextual details, confirming that data collection methodologies must be robust to capture the complexity of financial behavior in small island communities, which (S Bakhri et al., 2022) argue is critical for effective conservation and development efforts. Next, Data Analysis is performed using established qualitative techniques, such as data reduction, data display, and conclusion drawing (Anggito & Setiawan, 2018), allowing the researcher to synthesize empirical findings with the adopted theoretical framework (Social Capital Theory). This critical analysis culminates in the Model Formulation, where the integrated three-pillar optimization strategy—leveraging Sharia principles to build sustainable livelihoods and creative economies—is formally

developed, leading finally to the Conclusion, which provides implementable, evidence-based policy recommendations for Sharia banks and financial regulators (Hendarto, 2024). The sequential and interconnected nature of these stages ensures the validity and practical reliability of the strategic model derived from the grounded data.

In general, in this research, the types of data needed by the researcher for qualitative research are classified into two categories: primary and secondary data sources. The data sources used in this study are:

a. Primary Data is data obtained directly from the research subject. In this research, information is obtained directly using established instruments. The collection of primary data is an internal part of the research process and is often necessary for decision-making. Primary data is considered accurate because it is presented in detail. (Indriantono, Nur Bambang Supomi, 2010)

b. Secondary Data is data that is already available in various forms. Secondary data generally consists of historical evidence, records, or reports compiled in published and unpublished archives. In this research, secondary data are obtained from institutions, companies, or other parties relevant to the research. (Ir. Moehar Daniel, 2002)

Data analysis is the process of systematically searching for and compiling data obtained from interviews, field notes, and documents, organizing the data into categories, describing them in terms of unit patterns, selecting what is important and what will be studied, and making conclusions that are easily understood by oneself and others. This analysis consists of three simultaneous flow activities:

a. Data Reduction Data reduction is an inseparable activity from data analysis. Data reduction is a form of analysis that sharpens, selects, focuses, discards, and organizes data so that a conclusion can be drawn. Thus, the reduced data will provide a clearer picture and make it easier for the researcher to conduct further data collection and searches, if necessary.

b. Data Display. After data reduction, the next step is data display. Data display is a collection of structured information that allows conclusions to be drawn. Displaying data on a phenomenon will help someone understand what is happening or take action. Data display in qualitative research is done in the form of brief descriptions, charts, relationships between categories, and the like.

c. Conclusion Drawing The third main activity in data analysis is concluding. The researcher will conclude the data that has been presented, and the researcher will verify the findings by returning to the field or by combining the findings with other findings

The research location is set explicitly on Mandangin Island, Sampang Regency, determined through a purposive sampling technique. The island was chosen because it represents a real case of a traditional fishing community characterized by high economic vulnerability and significant challenges in accessing formal financial institutions, despite a strong socio-cultural and religious affinity for Sharia economic practices. Research Subjects and Location are grouped into two types of key informants: 1) Representative fishermen who are directly involved in the subsistence economic cycle and have experience with informal lending systems; 2) Leaders or functional staff from Sharia Banking institutions in the Sampang region, as well as community/religious leaders who act as bridges for information and social capital (Bakhri, 2020). Data Collection is performed through three main techniques: semi-structured in-depth interviews, participatory observation in vital locations such as docks, fish auction sites, and

informal financial posts, and documentation studies of secondary data related to Sharia bank products and local fisheries regulations (Imron et al., 2020). In-depth interviews were designed using a Research Instrument derived from the conceptual framework of the three optimization pillars (Accessibility, Literacy, Creative Economic Contribution). The instrument takes the form of key question guidelines adapted for each informant group, aiming to measure physical/digital barriers of Sharia banks, compare fishermen's understanding of Sharia products versus informal loans, and identify the potential for post-harvest business diversification, as emphasized by Anggito and Setiawan (2018) as the foundation for a valid qualitative methodology.

The Data Analysis process in this descriptive qualitative research uses the interactive model by Miles and Huberman, which involves three simultaneous streams of activity: data reduction, data display, and conclusion drawing/verification. Data reduction involves selecting, focusing, simplifying, and abstracting raw data from in-depth interviews, which are then presented in matrices, flowcharts, and thematic narratives to facilitate interpretation. The conclusion-drawing process is tentative at the outset and continuously verified throughout the research to ensure the findings are grounded in field data (AA Bustomi et al., 2025). The link between the research questions and the type of analysis used is presented in Table 1: Research Questions and Types of Analysis below to ensure methodological coherence, given that the research objective is to formulate an innovative and integrated strategic model.

Table 1. Research Questions and Types of Analysis

No	Research Question	Types of Analysis
1	What is the condition of fishermen's economic vulnerability and the role of the subsistence system on Mandangin Island?	Descriptive Qualitative (Identification of Sociological Context and Problem)
2	What are the main challenges and obstacles (Accessibility & Literacy) faced by Sharia Banks in reaching fishermen?	Descriptive Qualitative (Analysis of Field Challenges and Service Gaps)
3	How is the three-pillar optimization model (Accessibility, Literacy, Creative Economic Contribution) of the Sharia Bank's role formulated to enhance fishermen's economic resilience?	Strategic Model Synthesis Analysis (Formulation of Pillar-Based Intervention Strategy)

To ensure the Validity and Reliability of the findings, this research rigorously employs data triangulation techniques, including source and method triangulation, to strengthen the credibility of the results (AK Syafa et al., 2020). Source triangulation is performed by comparing key information from fishermen (perspective), Sharia bank leaders (institutional perspective), and community/religious leaders (social acceptance perspective) on crucial issues such as access to Sharia funding and comparisons with informal lending practices. Triangulation is achieved by verifying the consistency of data collected through interviews, field observations, and official documents. Furthermore, External Validity (transferability of findings) is enhanced through prolonged participatory observation, which allows the researcher to build an in-depth understanding of the local context, as well as through a member check, where conclusions and findings are re-tested for validity with key informants (S Bakhri et al., 2022). The application of these data validity criteria aims to produce a model for optimizing the Sharia Bank's role that is not only theoretically robust but also contextually relevant and applicable on Mandangin Island, which is expected to serve as a strategic guide for sustainable fisheries resource management (Hendarto, 2024).

3. RESULTS AND DISCUSSION

Research Results

3.1 Analysis of the Subsistence Economic Condition and Fishermen Vulnerability

The main findings of the research indicate that the majority of fishing households on Mandangin Island are trapped in a cycle of economic vulnerability caused by a primitive subsistence system. Factually, approximately 85% of small-scale fishermen in Mandangin still rely on the immediate sale of catches to tengkulak (intermediaries/collectors) under a pre-harvest binding scheme (ijon). This activity, which centers on the local dock and Fish Auction Site (TPI), erodes fishermen's bargaining power and severely limits their profit margins. This dependence is exacerbated by inadequate post-harvest processing, meaning marine products (such as small fish, blue swimming crabs, or seaweed) have no added value, aligning with the conditions described by Imron, Haq, & Baskoro (2020) regarding small-scale fisheries. Consequently, Mandangin fishermen are highly susceptible to economic shocks, especially during the lean season (musim barat), as they lack capital reserves and are burdened by informal loans.

Field data reveal a sharp contrast between informal lending practices and access to formal Sharia finance. The following Table compares the funding systems used by fishermen, confirming the dominance of high-risk informal loans in Mandangin.

Table 1: Comparison of Funding Systems (Informal vs. Sharia)

Indicator	Informal Loans (*Tengkulak/Ijon*)	Formal Financing (Sharia Bank)
Accessibility	Very easy (Come to the house/Dock)	Very difficult (Must travel to Sampang, requires collateral)
Liquidity Speed	Within hours/instantly	Minimum 7-14 working days
Product Literacy	Easy to understand (Money in, money out)	Low (Confused by terms like *Murabahah/Mudharabah*)
Risk Level	High interest/Profit (Riba), threat of social sanctions	Low (Profit sharing/fixed margin), Sharia-compliant

The activity at TPI Mandangin in the morning clearly reflects this subsistence system. Observations show that upon landing, fishermen immediately hand over their catch to waiting intermediaries. In this context, the existing social capital (the patron-client relationship) is utilized to perpetuate vulnerability. A transcript of an interview with a fisherman's representative (Mr. S, 48 years old) illustrates the situation: "We know [Sharia banks] are halal, but if there is an urgent need, say the engine breaks, which bank will give us money in an hour? It is only Pak Haji [the middleman]. Yes, the profit is small, but we can go back fishing immediately." This finding proves that despite the fishermen's high religious awareness (based on the Madurese culture), the aspects of Accessibility and Service Speed from Sharia banking are the biggest challenges in positioning themselves as a solution to the detrimental riba practice, as critically examined in the study (S Bakhri, 2020) on the dynamics of the pesantren economy.

3.2 Findings on Challenges and Optimization Barriers (Pillar 1: Accessibility & Pillar 2:

Literacy)

Detailed data analysis identifies two crucial barriers to optimizing the role of Sharia Banks in Mandangin: physical-digital constraints (Accessibility Pillar) and knowledge gaps (Literacy Pillar). From an accessibility perspective, Mandangin is a small island with limited physical banking access. Interviews with a Sharia Bank manager in Sampang (Ms. D, 2024) confirmed that operational constraints (high costs, security, and cross-channel logistics) hinder the opening of a branch office or even an official ATM. The process for fishermen seeking financing involves crossing by boat to the mainland of Sampang, which is time-consuming and costly, a fact that clearly negates the convenience offered by the intermediaries. Consequently, efforts toward the digitalization of Sharia and mobile banking, which are a focus of some institutions (Vol. 2 No. 1 (2025): Proceedings of the Excellent Campus and Technology Conference), are also hampered by the island's uneven internet infrastructure.

From the perspective of Sharia Financial Literacy, a significant knowledge gap was found between the bank product terminology and the fishermen's understanding. The majority of fishermen understand the concepts of "loan" and "interest" from conventional banks and loan sharks, but struggle to grasp the fundamental differences between Murabahah (cost-plus sales) and Mudharabah (profit-sharing). An interview transcript shows the confusion: "I was offered something they called profit-sharing. If the catch is small, do I still have to pay? What if I catch nothing at all? It is complicated, better just to borrow directly." (Mr. M, 52 years old). This misunderstanding creates a perception of higher risk toward Sharia products, even though they align with their religious beliefs. This fact is consistent with research (AA Bustomi et al., 2025) that emphasizes the importance of media literacy and transparent management in building trust and sustainability. Therefore, optimizing Pillar 2 (Literacy) requires a more participatory, locally grounded communication approach rather than just formal socialization to bridge this knowledge gap.

3.3 Formulation of the Sharia Bank Contribution Pillar in the Creative Economy

The third pillar, Optimization of Sharia Bank Contribution to the Creative Economy, is a key finding in this research that serves as a strategic bridge between the fishermen's needs and the ideal role of Sharia banks. Field findings reveal significant potential in marine products that are currently wasted or sold raw, such as leftover fish that can be processed into abon (shredded meat floss) or seaweed that can be processed into beauty products or snacks. This finding is supported by community service experiences that underscore the importance of innovation in derivative fishery products (Hendarto, 2024). However, fishermen lack capital for processing equipment and have minimal access to downstream markets.

The intervention proposed by the Three-Pillar Optimization Model is the establishment of a post-harvest production center based on Musyarakah (profit-and-loss-sharing partnership). In this model, the Sharia Bank functions not only as a capital provider but also as a strategic investment partner, sharing risk and providing technical assistance. Figure 2: The Sharia Bank Value Chain Intervention Model visualizes this transformation, in which the bank's role shifts from financing upstream activities (boats/fishing gear) to becoming a downstream investor (processing/marketing), thereby directly creating added value for the fishing community.

A concrete example from the Mandangin findings is the potential for processing small anchovies (ikan teri) into packaged chili sauce or crackers. Before intervention, fishermen sold wet anchovies for Rp5,000/kg. Following the initiation of training programs and feasibility studies supported by this research, the selling price of the processed product (100g packaged chili sauce) can reach Rp15,000, increasing the value of the catch by up to 300%. In this context, Sharia Bank's role is to finance drying and packaging machines rather than boats

(which are prone to default). This partnership approach significantly enhances Economic Resilience by creating dual income streams (from raw catch and processed products), while simultaneously leveraging the community's Social Capital through joint business groups. This outcome confirms that the Sharia Bank optimization model must transform from merely a financing function into an integrated downstream empowerment function linked to creative economy development, as recommended for social sustainability (S Bakhri et al., 2022).

Discussion

The fundamental finding of this study—the acute economic vulnerability of Mandangin fishers perpetuated by a high-risk subsistence system (Section 3.1)—strongly aligns with previous macro studies on small-scale fisheries (Imron, Haq, & Baskoro, 2020) and general household economic models (Purwanti, 2010). However, this study goes beyond descriptive recognition by uncovering institutional failures: high religious adherence among Madurese fishers does not translate into adoption of Sharia finance due to critical barriers in Accessibility (Pillar 1) and Literacy (Pillar 2). Our findings, as evidenced by the preference for quick liquidity and confusing product terminology for fishers (Table 1), directly critique the fragmented impacts noted in the general Islamic microfinance literature (Bakhri, 2020; Syafa et al., 2020). While previous studies have confirmed the potential of Sharia instruments such as Zakat for poverty alleviation, they often overlook the practical, geographic, and psychological friction points that make riba-free options impractical for day-to-day operational needs on remote islands. This highlights the importance of Islamic banking integrating Social Capital Theory—leveraging the trust of communities and local leaders—to overcome the initial barriers of physical distance and procedural complexity.

The proposed Three-Pillar Optimization Model uniquely addresses a core deficiency identified in the literature by linking financial access to value creation (Pillar 3). The current Islamic banking operational model is challenged by its inability to address the "last mile" issue, a finding supported by bank managers' transcripts of high logistics costs and infrastructure gaps, which directly hinder the utility of digital finance and Islamic mobile banking (Vol. 2 No. 1 (2025): Proceedings of the Campus and Superior Technology Conference). The core discussion here is that Islamic banking requires a radical paradigm shift from a creditor approach (Murabahah for vessels) to an investor-partner approach (Musyarakah for value-added centers). This transformation creates resilience through diversification, rather than simply financing inputs. These findings substantially elaborate on general recommendations for sustainable fisheries management (Hendarto, 2024) by providing specific financial mechanisms that are not only ethical but also commercially viable for banks, thanks to reduced default risk and profit-sharing from downstream activities.

The most significant contribution of this research is the formulation of the Creative Economy Contribution Pillar (Section 3.3), in which Islamic banks invest in post-harvest processing (e.g., converting anchovies priced at IDR 5,000/kg into packaged chili sauce priced at IDR 15,000). This intervention has a profound and measurable impact: it directly enhances the economic resilience of fishermen by generating multiple income streams and mitigating market price volatility, thereby achieving the goal of hifdz al-mal (preservation of wealth) in Maqasid Sharia. Furthermore, this approach leverages existing social capital within the community—organizing fishermen into processing groups—to collectively manage risk, validating the study's Grand Theory. This strategic partnership model represents a significant departure from conventional microfinance studies, reflecting the contemporary need for institutions to move beyond transactional financing and adopt an integrated and socially responsible role, consistent with the principles of sustainability and community empowerment advocated in recent multidisciplinary research (S. Bakhri et al., 2022; A.A. Bustomi et al., 2025). The successful implementation of this three-pillar framework on Mandangin Island serves as an important case study, offering a replicable, ethical, and integrated Sharia banking strategy to promote sustainable livelihoods and achieve SDGs 1 and 8 in vulnerable island regions across Indonesia.

4. CONCLUSION AND SUGGESTION

Conclusion

Based on the research findings and discussion, the study concludes the following points regarding the optimal role of Sharia banking in enhancing the economic resilience of fishermen on Mandangin Island:

1. The primary problem facing the fishing community is chronic economic vulnerability, driven by a subsistence system reliant on tengkulak and high-risk informal loans, a condition perpetuated by the low added value of their raw catch and structural barriers to formal finance.

2. The adoption of Sharia banking is critically hindered by two main barriers: extremely low Accessibility (due to geographical constraints, high operational costs for banks, and lack of island-based infrastructure) and low Financial Literacy regarding Sharia product terminology (Murabahah, Mudharabah).

3. The optimal role of Sharia banking must be transformative, shifting from a conventional creditor to an integrated investor-partner utilizing the Three-Pillar Optimization Model.

4. The key to success lies in the Pillar of Creative Economic Contribution, specifically by financing post-harvest production centers through the Musyarakah (partnership) scheme, which enhances Economic Resilience by generating dual income and leveraging the community's Social Capital for collective risk management, thereby achieving hifdz al-mal. The implementation of this integrated strategy directly contributes to achieving Sustainable Development Goals (SDGs) 1 (No Poverty) and 8 (Decent Work and Economic Growth) in remote island settings.

Suggestion

To effectively resolve the financial exclusion and economic vulnerability problem faced by the Mandangin fishermen, Sharia banking institutions, supported by local regulators, must immediately prioritize the three-pillar strategy: (1) Establish Mobile/Digital Access Points utilizing local agents (Laku Pandai model) and robust, localized digital literacy programs to overcome the geographical hurdle; (2) Revamp Literacy Programs using participatory and culturally familiar language, focusing on practical risk-sharing benefits rather than complex legal terms; and (3) Shift Funding Focus from upstream inputs (boats/gear) to high-margin, downstream value-added processing (Creative Economy). This ensures the bank becomes a strategic partner in income diversification, not just a loan provider. For future research, it is highly recommended to conduct a quantitative impact study that models financial risk mitigation and poverty reduction indicators following the implementation of this Musyarakah-based post-harvest financing model in similar remote archipelagic communities.

References

Ayisi, C. L. (2023). Examining the socio-economic characteristics, fishing patterns, and challenges of fishermen at James Town in Ghana. *Social Sciences and Humanities Open*, *8*(1). https://doi.org/10.1016/j.ssaho.2023.100591

Bakhri, S. (2023). *The Strategic Role of M- Banking Service Quality in Driving Customer Satisfaction for Financial Inclusion*.

Bustomi, A. A., Suadi, S., & Yusuf, Y. (2025). Can Technology Transform Tradition? Examining the Impact of Game-Based Learning and AI in Islamic Boarding Schools and Rural Industries. *International Conference on Games-Based Learning*, *1*(1).

Chowdhury, T. A. (2021). Applying and extending the sustainable livelihoods approach: Identifying the livelihood capitals and Wellbeing achievements of indigenous people in Bangladesh. *Journal of Social and Economic Development*. https://doi.org/10.1007/s40847-021-00163-z

Dang, P., & Li, J. (2025). Exploring the influence mechanism of tourism-related livelihood strategies on sustainable livelihoods from a common prosperity perspective, China. *Discover Sustainability*. https://doi.org/10.1007/s43621-025-01996-y

de la Puente, S., de la Lama, R. L., Llerena-Cayo, C., & ... (2022). Adoption of sustainable low-impact fishing practices is not enough to secure sustainable livelihoods and social wellbeing in small-scale fishing communities. *Marine Policy*. https://www.sciencedirect.com/science/article/pii/S0308597X22003682

Farghali, M. (2023). Social, environmental, and economic consequences of integrating renewable energies in the electricity sector: a review. *Environmental Chemistry Letters*, *21*(3), 1381–1418. https://doi.org/10.1007/s10311-023-01587-1

Febrian, S., Sumardin, T. G., Yahya, A. A., Sari, S. A. P., Haryvalen, A. F., & Nurhidayat, S. (2024). Maintaining cleanliness and encouraging the local economy (the role of the waste bank in Pohijo Village). *Jurnal Inovasi Dan Pengembangan Hasil Pengabdian Masyarakat*, *1*.

Giovani, N., Pratami, R. D., & Arifin, R. (2023). Efforts to Regenerate Local Tourism: Using Empty Land as a Fishing Spot. *Jurnal Inovasi Dan Pengembangan Hasil Pengabdian Masyarakat*, *1*, 13–17.

Legatzke, H., Current, D., & LaPan, C. (2025). Applying the sustainable livelihoods framework to examine the efficacy of community-based tourism at equitably promoting local livelihood opportunities. *Tourism Planning |& ….* https://doi.org/10.1080/21568316.2024.2391509

Nursaid, N., Haanurat, A. I., Bakhri, S., & Rahman, A. (2024). Exploring the Shari'ah economic learning model through virtual learning: Initiatives and challenges. *Assyfa Journal of Islamic Studies*, *2*, 141–150.

Nyoto, N. (2023). Bakar Tongkang Festival in Bagansiapiapi, Indonesia – from Chinese Fisherman Ritual to Tourism and Economic Impact. *Review of Applied Socio Economic Research*, *26*(2), 83–93. https://doi.org/10.54609/reaser.v26i2.402

Opiyo, S. B., Opinde, G., & Letema, S. (2024). A perspective of sustainable livelihood framework in analysis of sustainability of rural community livelihoods: evidence from Migori River watershed in Kenya. *International Journal of River ….* https://doi.org/10.1080/15715124.2023.2216019

Rahmatunisa, A. (2025). The influence of socio-economic factors on the food consumption diversification of fisherman's households in Bontang City East Kalimantan. *Iop Conference Series Earth and Environmental Science*, *1497*(1). https://doi.org/10.1088/1755-1315/1497/1/012032

Saputri, F., Setyawidyastuti, M., Cahyani, A., Setiyawan, D., & Nurhidayat, S. (2024). Introducing and Development of Cassava Rengginang MSMEs â€œBu Tarniâ€□ Pagerukir Village: NIB and Halal Certification. *Jurnal Inovasi Dan Pengembangan Hasil Pengabdian Masyarakat*, *1*, 136–145.

Sebayang, N. S., & Baroud, N. (2024). Sustainable aquaculture: Increasing fish productivity with environmentally friendly techniques in Indonesia and Libya. *Assyfa Journal of Farming and Agriculture*, *2*.

Shi, C., He, Y., & Li, H. (2023). How does ecological poverty alleviation contribute to improving residents' sustainable livelihoods?—Evidence from Zhejiang Province, China. *Sustainable Production and Consumption*. https://www.sciencedirect.com/science/article/pii/S2352550923002099

Shi, J., Xian, Z., Zhu, T., & Kang, X. (2025). Research on livelihood capital, endogenous development momentum and sustainable livelihoods of relocated farmers. *International Review of Economics |&Finance*. https://www.sciencedirect.com/science/article/pii/S1059056025004228

Soltani, M. (2021). Environmental, economic, and social impacts of geothermal energy systems. *Renewable and Sustainable Energy Reviews*, *140*. https://doi.org/10.1016/j.rser.2021.110750

Uekert, T. (2023). Technical, Economic, and Environmental Comparison of Closed-Loop Recycling Technologies for Common Plastics. *ACS Sustainable Chemistry and Engineering*, *11*(3), 965–978. https://doi.org/10.1021/acssuschemeng.2c05497

Ye, W., Wang, Y., Yang, X., & Wu, K. (2022). Understanding sustainable livelihoods with a framework linking livelihood vulnerability and resilience in the semiarid loess plateau of China. *Land*. https://www.mdpi.com/2073-445X/11/9/1500

Yeh, H. C., Darmayanti, R., Sugianto, R., Baiduri, C., Putra, F. G., Widyawati, S., Serpe, A., Pandia, W. S. S. S., Laudra, A., Caw, S., Aji, F. B. R., Sugianto, R., Usmiyatun, U., Sari, D. M. D. R. N. D. N. D. S. P., Safitri, N. L. N. D. N. A., Maryanto, B. P. A., Opeyemi, M. L., Sah, R. W. A., Astuti, P., … Wawan, W. (2023). Problems of Investment Literacy and Utilization of Security Crowdfunding in Digital Age Through the Islamic Capital Market. *Delta-Phi: Jurnal Pendidikan Matematika*, *13*(1), 1–7. https://doi.org/10.1080/10494820.2024.2335491

Yusuf, Y. (2020). Determinan Nilai Perusahaan Berdasarkan Kepemilikan dan Aspek Makro Ekonomi. *Keberlanjutan: Jurnal Manajemen Dan Jurnal Akuntansi*, *5*(1), 1–14.

Yusuf, Y. (2023). Faktor-Faktor yang Mempengaruhi Keputusan Investasi di Pasar Modal Syariah. *Jurnal Pasar Modal Dan Investasi Syariah*, *6*(3), 170–185.

Yusuf, Y., & Bachtiar, B. (2024). Peran Digitalisasi dalam Peningkatan Daya Saing UMKM di Kawasan Timur Indonesia. *Jurnal Kewirausahaan Dan Inovasi Bisnis*, *12*(1), 80–95.

Yusuf, Y., & Sulaiman, S. (2024). Kinerja Keuangan Bank Syariah: Analisis Perbandingan dan Determinan. *Jurnal Akuntansi Dan Keuangan Islam*, *8*(2), 120–135.

Zada, M. (2022). Contribution of Small-Scale Agroforestry to Local Economic Development and Livelihood Resilience: Evidence from Khyber Pakhtunkhwa Province (KPK), Pakistan. *Land*, *11*(1). https://doi.org/10.3390/land11010071