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Economic Opportunities and Livelihood Pathways for Local Coastal Communities in the Blue Economy: A Systematic Literature Review

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Abstract

Over the years, the blue economy has benefitted the local communities by fostering economic development, generating employment and promoting sustainability in coastal regions. However, research found that in reality, the local communities are still experiencing unequal livelihood influenced by market accessibility, governance and institutional factors. Thus, this study synthesized streams of literature on economic and livelihood opportunities for local communities living in the coastal regions by conducting a Systematic Literature Review (SLR). A total of 53 peer-reviewed articles were obtained from Scopus-indexed journals which were then analysed using thematic analysis and the Theory-Context-Characteristics-Method (TCCM) framework according to PRISMA guideline. Seven categories of opportunities were identified: aquaculture and mariculture, post-harvest processing and value addition, market access and infrastructure, tourism and cultural economies, conservation-linked finance, collective enterprise models, and livelihood diversification. The result indicates that these seven opportunities do not just function merely as an independent entrepreneurial venture, but rather as combinations of livelihood strategies determined by market inclusion, governance and institutional support. Additionally, the analysis of the TCCM framework found strong empirical focus in the Global South with theoretical fragmentation and reliance on qualitative case studies. Building on these findings, the review frames the blue economy from a new perspective as a conditional economic framework and places greater emphasis on inclusive coastal livelihood research.

Keywords: Blue economy, Coastal livelihoods, Local coastal communities, Economic opportunities, Systematic literature review, Sustainable livelihoods, TCCM frameworks

1. Introduction

The increasing concern over the sustainability of ocean-based economic activities globally along with the emphasis to balance marine conservation and economic growth has given rise to the concept of blue economy. Pauli (2010) coined the term Blue Economy as an economic model that supports innovation, job creations and efficient use of resources by aligning it with natural ecosystems and waste minimization. The blue economy has long been embraced by international organisations such as the World Bank in 2016 and the United Nations in 2012 since its inception.

International organisations like the World Bank (2016) and the United Nations (2012) have embraced the blue economy since its inception, and it has greatly evolved since then. In a wider perspective, these organisations view the blue economy as using ocean and coastal resources sustainably as means to generate economic growth, improve livelihood and better employment opportunities. At the same time, they focus on maintaining a healthy marine ecosystem. As opposed to viewing the blue economy as a framework for just one sector, this

new perspective of blue economy sees it as a model for overall economic growth. It views the blue economy as more than just technological or industrial innovation but also includes governance, social inclusion and fair benefit-sharing.

Similarly, fisheries, aquaculture, tourism and marine businesses are ocean-based blue economy that promote job creation, economic development and environmental sustainability. In this context, the blue economy is increasingly reinforced as a strategy for development. The involvement of local coastal communities in the blue economy is crucial in manifesting its objective into inclusive development outcomes, as they are essential contributors (Raghu et al., 2025; Saarani et al., 2024; Evans et al., 2023). Evidence from past studies suggests that micro and small-scale activities embedded within local social and ecological systems are the primary means by which community-based entrepreneurs, small-scale producers, fishers and processors contribute to the blue economy (Hidayati & de Vries, 2025; Allegretti et al., 2025).

However, growing evidence revealed that blue economy development economic gains are unequally dispersed and that local coastal communities often face systemic hurdles to livelihood opportunities. Centralized governance, insufficient organizational backing, limited access to markets and unequal power dynamics are common barriers to local value capture as revealed in the aquaculture, tourism, fisheries and conservation-related studies (Keleman et al., 2025; Uimonen, 2025; Bodwitch et al., 2024; Song et al., 2021). Thus, in reality the local stakeholders may end up with unpredictable or uncertain livelihood results from blue economy projects despite the fact it is promoted as opportunities (Praptiwi et al., 2021; Govender et al., 2025).

Local coastal communities of diverse stakeholders include many different types of people and organizations. They include small-scale fishers, aquaculture farmers, coastal youths, community-based tour operators and the local native organisations. Hybrid livelihood methods that incorporate processing, production, conservation efforts, commerce and service provision across many sectors are common among those who participate in the blue economy (Yue & Abdullah, 2025; Abbas et al., 2025; Matovu et al., 2024). One way of looking into the blue economy opportunities is as pathways to a living that are shaped by factors including gender dynamics, easy access to assets, sectoral characteristics, and enabling institutional frameworks (Matovu et al., 2025; Amanatin et al., 2025).

Additionally, the literature on community participation in the blue economy is still fragmented throughout various industries and academic fields, despite an increased interest in the topic. Specific industries like, aquaculture (Aura et al., 2024), fisheries value chains (Jayasinghe et al., 2024; Pattinaja et al., 2023), or marine tourism (Phelan et al., 2020; Ressurreição et al., 2022), and often prioritises governance, justice, or sustainability issues are among the many recent studies that becomes primary focus in this field. Consequently, economic and livelihood opportunities are not the major focus of most studies. As a result, there is a lack of synthesis concerning the types of economic opportunities discovered, the ways in which they generate money or jobs, and the circumstances that allow local coastal populations to live sustainably.

This paper fills a gap in the literature by reviewing the existing research on topics of coastal

communities' economic and livelihood possibilities in the context of global blue economy. The goals of this review are threefold: (i) to outline the many economic opportunity and livelihood pathways that have been discussed in the literature; (ii) to synthesize the theoretical frameworks, sector-specific analyses, and empirical investigations of these opportunities; and (iii) to highlight important research gaps that should be filled for future research.

Apart from that, several new findings add to the existing body of literature as a result of this study. Rather than relying on isolated assessments, it provides a holistic view of the blue economy potential to boost local coastal towns' economies and quality of life. Following the framework proposed by Paul and Rosado-Seranno (2019), the review assesses the development of academic knowledge in this area. Simultaneously, the review attempts to identify significant gaps in theory, context and methodology by combining theme synthesis with a Theory Context Characteristics Model (TCCM) framework.

2. Research Methodology

2.1 Review Design

The study used a Systematic Literature Review (SLR) to synthesize the latest findings on blue economy business opportunities for the grassroots communities. SLRs are ideal in settings where the existing body of knowledge is dispersed conceptually, multidisciplinary and rapidly growing in nature. This is because SLRs present a structure to rapidly identify and synthesize previous research. Additionally, using SLRs facilitates a systematic comparison of research compared to narrative reviews and they are more effective in reducing selection bias. Thus, this improves the development of cumulative knowledge (Brignardello-Peterson et al., 2025).

The standard SLR principles for systematic and transparent reviews are adhered to in this study. The established standards include creating a search plan, determining criteria for what to include and what to exclude, followed by systematic screening and lastly, synthesizing data and more. In the next step, the review is documented in detail according to the PRISMA standards (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) (Page et al., 2021). This step, as shown in Table 1, is necessary to ensure a more transparent approach in the methods used.

2.2 Data Source and Search Strategy

2.2.1 Database Selection

To conduct the review, the Scopus database was used. This database was chosen for its reputation for its extensive coverage of publications in the field of economics, social sciences, business management and environmental studies. Since blue economy research covers a multitude of sectors, this database was selected to offer a robust evidence-based evaluation. For this reason, a supplementary database was not used in order to keep up with the quality standards and maintain consistency.

2.2.2 Search String Development

In order to ensure transparency and replicability, a structured search strategy was performed using the three core concepts according to the research objectives: i) blue economy concepts, ii) economic and livelihood activities, and, iii) community-level actors.

Additionally, Boolean operators (AND, OR) were used to combine search terms. At the same time, truncation (*) was applied to capture variations of keywords. A concept-driven approach was adopted. This is to prevent the careless exclusion of relevant studies and to ensure comprehensive global coverage. The search was restricted to the TITLE-ABS-KEY fields in Scopus to ensure that only studies with a clear and direct focus on the research topic were retrieved. Thus, improving the relevance and precision of the results. The final search string was as follows:

("blue economy" OR "blue growth" OR "ocean economy" OR "marine economy" OR "coastal economy") AND (business OR entrepreneur* OR enterprise* OR livelihood* OR "economic opportunity*" OR "income generating") AND (community* OR "local community*" OR grassroots OR "small-scale" OR artisanal OR fisher*)

In terms of duration, the years were not filtered, ensuring comprehensive coverage. Therefore, the search included all publications indexed in the database up to December 2025. As the search was conducted in December 2025.

2.3 Inclusion and Exclusion Criteria

To ensure the review was methodologically sound, transparent and replicable, clear inclusion and exclusion were established in advance. Articles in English language peer-reviewed journals and review papers within the Blue Economy business, business growth, livelihood initiatives, or income-generating opportunities were considered in this review. Additionally, both empirical and conceptual papers relating to grassroots, community-based, small-scale or artisanal players were included in the review.

On the other hand, the following types of research were not considered: editorials, conference proceedings, book chapters and grey literature. Research that omitted grassroots players in favour of national economic performance, policy, or governance at the macro-level was not included, as were studies that focused only on big businesses or industrial-scale operations. Additionally, studies that were purely technical, engineering, or marine biology and did not have any bearing on economics, commerce or livelihood-related aspects were excluded. In order to achieve the review's objective of evaluating the Blue Economy livelihood opportunities and grassroots entrepreneurial potential, the final corpus of papers has to adhere to these criteria, as shown in Table 1.

Table 1. Inclusion and Exclusion Criteria

Criteria Type	Inclusion Criteria	Exclusion Criteria
Publication Type	Peer-reviewed journal articles	Conference papers, book chapters, grey literature
Language	English	Non-English
Focus	Economic/livelihood opportunities in blue economy	Purely technical/marine biology without economic aspect
Target Group	Local/community-level actors	Large-scale industrial focus

2.4 Screening Process

As per the PRISMA guidelines, the screening process was carried out in three consecutive stages. A total of 300 records were yielded from the initial search. After identifying and removing duplicate items, all records were downloaded from the Scopus database. Following the established inclusion and exclusion criteria, the remaining records were screened based on their titles and abstracts. Articles that did not focus on the blue economy, did not correspond to economic or livelihood outcomes, and did not involve coastal or community-level stakeholders was not evaluated further. This led to the selection of 183 articles for further evaluation. Next step was a full-text screening of all the remaining documents. This was done to evaluate how well they aligned with the three study objectives. As a results of a careful review, 53 papers were chosen for synthesis, as shown in Table 2.

Table 2. Screening Process

Stage	Number of Documents
Initial search	300
After title and abstract screening	183
Final included studies	53

2.5 Data Extraction and Coding

The gathered information included authors, publication dates, journals, number of citations, and geographical information on the Blue Economy sector. Examples of these sectors include, but not limited to, fisheries, aquaculture, tourism, and conservation. The data also covered the type of economic opportunities, research design, theories, and target communities in coastal areas. The coastal communities include fishers, women, youth, and indigenous groups. The key results reflect economic and livelihood opportunities. Data extraction and coding were performed iteratively, with categories and themes refined as patterns emerged.

2.6 Synthesis Approach

A hybrid synthesis methodology was used to achieve the research objectives using thematic analysis and the TCCM framework (Theory, Context, Characteristics, Method) as introduced by Paul and Rosado-Serrano (2019). First, the process began with a review of themes to identify and classify recurring economic opportunities for grassroots communities in the Blue Economy. This inductive approach allows for the coverage of broader themes, including

major opportunity areas, and types of sectors within the blue economy.

Second, the TCCM framework was used to analyse the theoretical, contextual, and methodological aspects of the literature. This mixed-method approach provided a comprehensive understanding of the potential of entrepreneurship and helped assess the intellectual structure of the discipline. The thematic synthesis drew on empirical research, and the review contributed to forming a conceptual understanding and the identification of research gaps.

2.7 Quality and Rigour Considerations

The inclusion criteria were clearly defined to ensure consistency and comprehensive coverage. Hence, synthesis was also conducted systematically across the dataset, and the search strategy, screening, and analysis methods were clearly documented. Although the review is restricted to one database which is Scopus and English-language articles, the breadth of coverage in Scopus and internationally diverse content makes it a strong foundation for insightful analysis and synthesis.

3. Descriptive Analysis of The Literature

3.1 Highly Cited Publications and Influential Journals

Table 3 shows that most studies on economic and livelihood opportunities for coastal communities in the Blue Economy are published in a few high-impact journals. The most-cited articles appear in the Journal of Sustainable Tourism, with nearly three times as many citations as the next leading study, highlighting a strong focus on tourism.

The disparity indicates that tourism is among the most widely practiced and readily available livelihoods for grassroots communities. Additionally, tourism has more direct and varied sources of income than other sectors of the ocean, particularly small-scale participants such as fishers, women, youth, and indigenous communities.

Besides the mentioned journals, such as Sustainability, Journal of Rural Studies, Ecological Economics, and PLOS Sustainability and Transformation, there is limited focus on addressing the macro-level performance of the firm, but they do address broader concerns such as livelihood resilience, equity, governance, and socio-ecological sustainability. These journals offer a significant interdisciplinary platform, emphasising community-based, and an inclusive perspective elaboration. Altogether, the literature suggests that tourism-related and community-oriented studies are the most pertinent platforms for strategies to support grassroots livelihoods in the Blue Economy.

Table 3. Highly cited publications (more than 10 citations)

	Authors	Year	Source title	Cited by
1	Phelan et al.	2020	Journal of Sustainable Tourism	149
2	Praptiwi et al.	2021	Sustainability	51
3	Song et al.	2021	Journal of Rural Studies	42
4	Spillias et al.	2023	PLOS Sustainability and Transformation	28
5	Booth et al.	2022	Ecological Economics	27
6	Stoll, J.S. et al.	2019	Marine Policy	27
7	Mantri et al.	2022	Sustainability (Switzerland)	24
8	Ressurreição et al.	2022	Ocean and Coastal Management	23
9	Ertör-Akyazi, P.	2020	Sustainability Science	23
10	Setiyowati et al.	2022	Sustainability (Switzerland)	22
11	Agius, K.; Briguglio, M.	2021	Maritime Studies	19
12	Arias Schreiber et al.	2020	Sustainability Science	18
13	Parappurathu et al.	2023	Frontiers in Sustainable Food Systems	14
14	Jones, A.; Navarro, C.	2018	International Journal of Event and Festival Management	13
15	Williams et al.	2020	Marine Policy	11

3.2 Geographical Coverage

The study revealed that a large number of studies have focused on the Global South, particularly in areas where coastal and marine resources are essential to the livelihoods of inhabitants. Southeast Asia emerges as the most represented region in the literature, with Indonesia accounting for the highest number of country-specific studies. This dominance can be attributed to Indonesia's extensive coastline, strategic commitment to Blue Economy initiatives, and its economic reliance on fisheries, aquaculture, and coastal tourism sectors.

This strengthens the regional focus by highlighting the significance of Asian countries in grassroots communities within Blue Economy research, such as India, Sri Lanka, the Philippines, Bangladesh, and Malaysia. The second-largest cluster is Africa, with research conducted in countries such as South Africa, The Gambia, Guinea-Bissau, Tanzania, Seychelles, and Kenya. Studies in this regard are generally focused on fisheries, aquaculture, mangroves, and conservation-related businesses, which are traditionally contextualized within the larger objectives of reducing poverty, addressing gender issues and building community resilience.

Conversely, in Latin America, countries such as Mexico, Chile, and Costa Rica have some of the best empirical evidence, despite the region's somewhat underrepresentation and the consequent focus on livelihood transitions and small-scale market involvement.

Compared to developed economies, the research is more limited and more focused on the problems that occur around the government, like sustainability trade-offs and the problem of scaling aspects, rather than the creation of the livelihood per se, as in the case of Norway, Sweden, Italy, Turkey, the United Kingdom, and the United States. In addition, some studies take a wider regional or global approach, though these were often not deeply empirical at the community level, suggesting a disconnect between the macro view of the level of analysis and the realities of grassroots communities.

3.3 Methodological Characteristics

Principally, the research reviewed was based on the qualitative method, which included case studies, interviews, and ethnographic approaches. This accounts for the exploratory character of the study on the coastal livelihoods, where insight into the social relations and institutions of the organization held significance. However, the approaches tend to limit the ability to gauge economic performance, scalability, and sustainability in the long run.

The quantitative and mixed techniques are limited and do not provide in-depth coverage of the economic or entrepreneurial outcomes in comparison. Rather, they emphasise descriptive indicators, impacts on livelihoods, or assessment-based descriptions.

In addition, most studies used a cross-sectional design, with only a few employing longitudinal methods to monitor changes over time. This demonstrates a greater discrepancy in the methodological approaches for measuring the actual dynamic processes of value creation, which are highly vital to advancing theory and informing policy.

4. Types of Economic and Livelihood Opportunities

The literature presented a fast-emerging yet disintegrated research area. Although it is a valuable body of knowledge about the local coastal activities as economic drivers, there is still a significant difference in the way these can be defined and assessed through the potential of the economy. To address the data, the following section will go beyond descriptive analysis by introducing a thematic synthesis of the main categories of economic and livelihood opportunities in the context of the Blue Economy. The seven themes are summarised in Table 4.

4.1 Theme 1: Aquaculture and Mariculture as Direct Income-Generating Opportunities

Theme one recognises aquaculture and mariculture as significant sources of revenue for coastal communities, including seaweed, oyster, and cage-based fish farming. This can increase the possibilities for households to earn its income by producing and selling marine products. These activities may serve as a mandatory or a secondary source of income, particularly in regions where the capture of fish is dwindling.

This can be observed in Southeast Asia and East Africa, where there has been proactive encouragement to develop and improve aquaculture as a development strategy to augment food security and sustain livelihoods. Conversely, the approach adopted in Europe is more critical, highlighting sustainability issues and structural challenges. Therefore, the benefits are highly contingent on the elements such as market entry and institutional support. The export-oriented models do not necessarily ensure long-term livelihood sustainability in some cases, especially when the local communities have weak control over value chains and resources.

4.2 Theme 2: Post-Harvest Processing and Value Addition as Income Enhancement Pathways

Post-harvest processing and value addition are interestingly provide significant opportunities for women and home-based entrepreneurs to earn money. The previous literature has

identified fish processing, innovation in smoked fish, algae-based products, and mangrove-based crafts as micro and small-scale enterprise opportunities that can enhance income by shifting from raw resource extraction to the production of higher-value products (Gnansounou et al., 2025; Allegretti et al., 2025; Budiati et al., 2024). These opportunities are critical in Southeast Asia and West Africa, where women are key actors in the value chain due to the division of labour. This helps them to retain value within their communities and minimize the need for intermediaries (Amanatin et al., 2025; Nyiawung & Ayilu, 2025). According to the literature, value addition has the potential to enhance income margins, scalability, and profitability, but its opportunities are constrained by the absence of capital, infrastructure, and skills, and the ability to tap into formal markets.

4.3 Theme 3: Market Access and Infrastructure as Opportunity-Enabling Mechanisms

Market access and infrastructure are significant areas where subsistence-level coastal activities can be valuable economic and livelihood opportunities in the Blue Economy. There is a great requirement for significant improvements in port infrastructure, cold storage, logistics, and market platforms. Such improvements can assist small-scale fishers and processors in earning more money by reducing transaction costs, reducing post-harvest losses, and obtaining better prices (Rahayu et al., 2025; Yusuf et al., 2024). There is empirical evidence from Indonesia and South Asia that shows how investments in fisheries-related infrastructure can greatly improve net household incomes and generate employment opportunities in the fisheries and seafood value chain.

On the other hand, research conducted in Africa and South Asia indicates that developing infrastructure for the Blue Economy does not provide inclusive economic opportunities. This implies that without inclusive governance and institutional structures, developing infrastructure for the Blue Economy might, in fact, lead to the marginalization of local producers and consumers, while the benefits of economic activities are captured by larger economic players (Bodwitch et al., 2024; Govender et al., 2025).

4.4 Theme 4: Tourism, Ecotourism, and Cultural Economy as Alternative Livelihood Opportunities

Tourism-related activities have become a significant alternative for many local coastal communities, providing an additional source of income through employment, service delivery, and microenterprises. Community-based ecotourism, marine recreation, cultural tourism and event-led tourism have been reported to generate or "monetise" natural and cultural coastal assets in Southeast-Asia, southern Europe and island contexts (Abbas et al. 2025; Phelan et al. 2020; Ressurreição et al. 2022). In addition to the previously mentioned commercial tourism acts as an income provider for the majority of local communities through their supply of seasonal jobs during peak tourist periods, whilst also supplementing the traditional means of livelihood, such as fishing (Yue & Abdullah, 2025). With the literature highlighting the issues of differing benefit distribution, reliance on skill and difficulties associated with governance as critical problems for the developing Southeast Asian Island tourism communities, the findings demonstrate a better level of operation of tourism as part of a hybrid livelihoods strategy in contrast to being considered independently (Praptiwi et al. 2021).

4.5 Theme 5: Conservation-Linked Finance and Incentive-Based Livelihood Support

Additionally, the Blue Economy literature highlights the role of finance and conservation-linked incentives that potentially support livelihoods. Conservation-linked finance mechanisms have, in various studies, been termed indirect economic opportunities that stabilize or promote livelihoods rather than create firms per se. Such mechanisms represent a way of providing income streams for communities involved in conservation work or contributions for investment in community development, in particular in Small Island Developing States and certain regions of Southeast Asia, through instruments such as blue bonds, tourism taxes, and conservation incentives (Oche, 2024; Booth et al., 2022). Essentially, such measures contribute positively to the economy by enhancing the resilience of people's livelihoods in the face of conservation challenges and easing access constraints associated with such practices. Political-economy assessments yield caution that the effects of inadequate tenure security, participatory planning, and benefits-sharing will keep local communities out of access to conservation finance that would catalyze anticipated livelihoods improvement, as documented in the cases of mangroves and blue carbon in Southeast Asia (Song et al., 2021).

4.6 Theme 6: Collective, Cooperative, and Social Enterprise Models as Economic Organising Structures

Another possibility of the Blue Ocean economy is by providing collective, cooperative, and social enterprise models that serve as economic organisational frameworks where it can facilitate local coastal communities. Importantly, these types of cooperatives, women's-led social enterprises, and community-based organizations enhance stability of income through pooling resources, sharing of risk, and strengthening their bargaining power in markets (Jayasinghe et al., 2024; Nyiawung & Ayilu, 2025; Antonova et al., 2025). Interestingly, these models are prevalent in South Asia and West Africa, where they facilitate fisheries the processing of fish products, and trade of fish, with European examples being alternative economies and ways to live within community rather than obtaining as much income as possible. Thus, collective models provide economic resilience and access to opportunities, their success will be contingent upon effective governance, inclusiveness, and ongoing institutional support.

4.7 Theme 7: Livelihood Diversification and Transition under Structural Constraints

It was found in previous studies that, in the Blue Economy, environmental change, dwindling fish stocks, and regulatory exclusion are the drivers for local communities to diversify or change their occupations. As an adoptive strategy, the coastal communities are increasingly involved in diverse sectors such as aquaculture, tourism, processing, and small-scale trading to stabilize or replace their primary incomes (Manlosa et al., 2021; Campos & Latorre, 2024). These diversification of income streams stabilize their economy and reduces vulnerability to environmental and economic shocks, as evidenced in Southeast Asia (Hoe & Abdullah, 2025; Manlosa et al., 2021), Latin America (Campos & Latorre, 2024), and Africa (Nyiawung & Ayilu, 2025; Aura et al., 2024; Keleman et al., 2025). However, realised economic outcomes remain highly uneven and contingent upon structural conditions (Uimonen, 2025; Song et al.,

2021; Praptiwi et al., 2021; Govender et al., 2025). Structural conditions play a decisive role in whether diversification pathways lead to meaningful and lasting economic gains. Thus, access to resources, relevant skills, financial capital, and supportive institutional frameworks must be in place to ensure sustained economic improvement.

Table 4. Thematic Findings on Types of Economic and Livelihood Opportunities in the Blue Economy

Theme	Opportunity Type	Description	Key Benefits	Key Constraints	Region Evidence
Theme 1	Aquaculture and Mariculture	Seaweed farming, cage aquaculture	Direct income generation	Market access, institutional support	Southeast Asia, Africa
Theme 2	Post-harvest Processing	Fish processing, value addition	Higher income margins	Lack of capital, skills	Southeast Asia, West Africa
Theme 3	Market Access and Infrastructure	Cold storage, logistics	Increased income efficiency	Exclusion risk	South Asia, Africa
Theme 4	Tourism	Ecotourism, cultural tourism	Alternative income	Unequal benefits	Europe, Southeast Asia
Theme 5	Conservation Finance	Blue bonds, incentives	Livelihood stability	Governance issues	SIDS, Southeast Asia
Theme 6	Collective Models	Cooperatives	Risk sharing, bargaining power	Governance dependency	South Asia, Africa
Theme 7	Livelihood Diversification	Multi-sector activities	Resilience	Structural constraints	Global South

5. Results and Discussion

Guided by the review objectives, this discussion interprets the findings of the thematic synthesis by (i) clarifying the types of economic opportunities and livelihood pathways identified for local coastal communities, (ii) examining how these opportunities have been conceptualised and empirically studied across sectors and geographic contexts, and (iii) highlighting systematic gaps that inform future research directions.

5.1 Types of Economic Opportunities and Livelihood Pathways

Aligning with Research Objective (i), the research shows that rather than a broad range of entrepreneurial models, prospects within the blue economy for local coastal communities are concentrated on a limited number of recurring livelihood pathways. The research also highlights that primary production and resource extraction are one of the predominant economic activities for coastal communities. This includes small-scale fisheries and aquaculture sectors such as seaweed farming, cage aquaculture, and mariculture (Hidayati & de Vries, 2025; Mulanda Aura et al., 2024; Sutrisno et al., 2024; Admodisastro et al., 2022). These activities typically function as income-generating activities that integrated within existing social-ecological systems.

Secondly, post-harvest processing and value-added micro-enterprises are one of the major

categories that comprises of fish processing, products derived from seaweed, artisanal crafts, and small-scale food innovations (Setiyowati et al., 2025; Gnansounou et al., 2025; Budiati et al., 2024; Mantri et al., 2022). Although these initiatives boost household income by retaining more economic value within the community, their development is often hindered by gaps in technology, limited market access, and a lack of institutional support.

Another category of the opportunities is focusing on the community-based ecotourism, marine recreational activities, and cultural tourism (Phelan et al., 2020; Abbas et al., 2025; Hoe & Abdullah, 2025; Ressurreição et al., 2022). Despite being promoted as a sustainable alternative to resource depletion, the empirical findings also indicate that the outcomes can vary. The existing literature highlights the need for a complex combination of effective governance, expert knowledge, and strategic market participation in order to transform natural resources into real benefits for the community necessitates (Praptiwi et al., 2021; Agius & Briguglio, 2021).

Lastly, the literature highlights the mechanism that influence market and resource access were from the indirect economic including conservation finance, blue bonds, infrastructure enhancement, cooperative organizations, and governance restructurings (Oche, 2024; Yusuf et al., 2024; Jayasinghe et al., 2024; Bodwitch et al., 2024).

5.2 Conceptualisation and Theoretical Framing of Opportunities

Aligning with the Research Objective (ii), the research suggests that opportunities within the Blue Economy are mainly viewed through the perspective of community enhancement and securing livelihoods, instead of through established business or entrepreneurial frameworks. To examine how community adapts to environmental and governance changes, most of the research applies framework such as sustainable livelihoods, socio-ecological systems, and political ecology (Sierra Castillo et al., 2025; Manlosa et al., 2021; Song et al., 2021; Arias-Schreiber et al., 2020). Despite of these perspectives offer significant understanding, regarding resilience and social equity, they often overlook key commercial factors such as such as market conditions, profitability, and business performance.

In contrast, some researchers embrace the viewpoint of entrepreneurship, value chain, social enterprise, or innovation-oriented perspectives, explicitly engaging with business models, upgrading strategies, and mechanisms for value generation (Raghu et al., 2025; Allegretti et al., 2025; Setiyowati et al., 2025; Saarani et al., 2024). However, this industry-focused research often lacks deeper analysis of broader systematic and structural limitations. These investigations tend to overlook the institutional challenges, power dynamics, and ecological limits that shape the inclusiveness and scalable blue economy initiatives can be. As a result, the literature is fragmented, with livelihood-focused and business-focused approaches developing separately. This fragmentation limits cumulative knowledge and constrains the ability to explain why similar opportunities produce varying economic results in different contexts.

6. Future Research Directions: A TCCM-Based Agenda

Addressing the systematic gaps identified in this review, this section develops a future

research agenda structured using the Theory Context Characteristics Method (TCCM) framework. The use of TCCM is essential because it provides a structured, holistic approach to diagnosing gaps in the existing literature and to systematically position future research. Specifically, TCCM allows scholars to clarify theoretical limitations, identify contextual blind spots, specify underexplored actors and variables, and propose rigorous methodological improvements. This agenda responds directly to Research Objective (iii) by outlining priority directions for advancing understanding of economic and livelihood opportunities for local coastal communities within the blue economy. A summary of the TCCM framework is presented in Table 5.

6.1 Theoretical Directions (T)

The main concern found in the literature is theoretical fragmentation. Previous literature mainly focuses on sustainable livelihoods, political ecology, and social-ecological systems. The findings offer valuable insights into explaining the vulnerability, adaptation, and exclusion. However, the explanation of this perspective is limited to how economic opportunities emerge, grow, and generate sustained value. Besides, the literature grounded in entrepreneurship, value chain, and social enterprise theories mainly discusses income generation and market involvement. The discussion often fails to address the issues and barriers in governance, power relations, and environmental constraints. In future research, the theories of livelihood, entrepreneurship, and institutional theories should be incorporated into a more holistic perspective on the blue economy. This approach explains how communities adjust to pressure and also navigate governance structure to produce and reassign economic value. This is an important step to ensure robust explanatory models are developed to enhance grassroots involvement.

6.2 Contextual Directions (C)

Based on the review, it is suggested that there is a strong geographic concentration of empirical research on the Global South, especially in Southeast Asia and Africa. The context of blue economy initiatives is mostly related to the development, poverty reduction, and employment goals. Thus, this focus is empirically justified, and it also creates important contextual blind spots. Research done in Europe and other high-income regions, focusing on the governance tensions, legitimacy concerns, and scale conflicts, often frames economic opportunities. Therefore, future research should expand cross-contextual analyses and conduct comparative studies that examine similar opportunity models across diverse institutional, regulatory, and market settings. Additionally, there is a need for attention to intra-community differentiation. The differentiation focuses on gender, class, tenure status, and access to capital. Addressing these contextual gaps will improve the generalisability of findings and also strengthen the policy that is relevant to the blue economy context.

6.3 Opportunity Characteristics Directions (C)

Although there is a wide range of economic and livelihood opportunities identified in the existing literature, there is still a lack of conceptual clarity. This constitutes an economic opportunity within the blue economy. Many studies have mixed subsistence activities,

income support and entrepreneurship. Meanwhile, others study discusses the opportunities primarily as adaptive responses to environmental change or regulatory pressure. Future research should focus on the different types of livelihoods, which include the enterprise income-generating, stabilising income mechanisms, and transformative economic transitions. In addition, the study should analyse beyond identifying opportunities such as profitability, income stability, risk exposure, and long-term livelihood trajectories to evaluate economic outcomes. By making these aspects clear, research can examine whether the blue economy initiative only supports operation and just about management or beneficial to sustainable economic for coastal communities.

6.4 Methodological Directions (M)

As for the methodology, previous research is more evidence-based, mainly qualitative research. A case study and review-based analyses are the most commonly used due to their rich contextual insight. However, this method cannot show a clear causal inference and has limited generalisability. Quantitative and mixed-methods studies are limited and mostly cross-sectional, limiting the ability to assess whether identified opportunities lead to sustained economic growth. Longitudinal, mixed-methods, and quasi-experimental designs that capture dynamic livelihood patterns and evolving governance conditions can be a direction for methodology in future studies. Research quality can be improved by using more economic indicators, such as income stability, business sustainability, and value creation in supply chains. Thus, a wide range of methodologies is required to analyse the literature beyond the existence of opportunities and to better evaluate the economic effectiveness and sustainability.

Table 5. TCCM Framework Summary

Dimension	Key Findings	Gaps Identified	Future Research Direction
Theory	Dominated by livelihood and socio-ecological theories	Lack of integration with entrepreneurship theory	Integrate livelihood, business and institutional theory
Context	Focus on Global South	Lack of cross-country comparison	Comparative studies
Characteristics	Mixed definitions of opportunity	Lack of conceptual clarity	Classify types of livelihoods
Method	Mostly qualitative	Lack of longitudinal and quantitative	Use mixed and longitudinal methods

7. Limitations of The Review

This review has several limitations despite its systematic structure. First, the analysis may exclude relevant literature in regional journals and non-English journals as most of the article is based on articles indexed in Scopus and English articles. This includes articles in areas where coastal and marine economies are published at the local level but are not well-known internationally. Secondly, the blue economy tends to incorporate economic and livelihood activities into larger governance, environmental, or developmental systems due to its broad conceptual base. This may restrict the direct comparability of studies. Third, the use of

qualitative and case-based studies restricts the ability to assess the economic performance in the long run. Therefore, the limitations emphasise the importance of integrating wider data sources, comparative methodologies, and more relevant economic measurements in future research.

8. Conclusion

This review involved 53 documents and was synthesised into a systematic literature review. This study has explored the conceptualisation and realisation of economic and livelihood opportunities in the blue economy among local coastal communities. The findings show that these opportunities do not regularly arise from sectoral growth and are not equally available. Instead, economic outcomes depend largely on sectoral characteristics, governance structures, market access conditions, and community-level processes. The studies on aquaculture, fisheries-based business, coastal and marine tourism, processing, conservation, and new circular-economy frameworks are often treated as supplementary livelihood initiatives, although these studies are dominant in the literature.

Ongoing structural limitations in the existing body of knowledge are highlighted in the TCCM. The literature remains insufficient, with limited integration between livelihood-based models and entrepreneurship or value-creation approaches. The Global South, particularly in Southeast Asia and Africa, is mostly where studies take place. Although it is limited to cross-contextual learning but the reflects strong development and poverty reduction priorities. Methodologically, the qualitative case study method is employed extensively, and this limits the ability to assess the long-term economic performance, scalability, and resilience of the identified opportunities.

Hence, by integrating the TCCM framework and the thematic analysis, this review contributes to the current knowledge, particularly on how economic value is created, accessed, and distributed within the blue economy. At the same time, it is important to identify the critical gaps in theory, empirical evidence, and comparative insight from the previous study. The results reframe the blue economy not as a guaranteed path to inclusive development, but as a contingent economic environment in which the design of governance, institutional support, and collective organisation determines livelihoods. For policymakers seeking to develop a more inclusive, equitable, and context-sensitive blue economy policies, this study offers evidence-based guidance and provides a strong foundation to researcher in future studies.

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Author contributions

Sylvia Nabila Azwa Ambad conceptualised and designed the study, supervised the overall

research process, and led the development of the manuscript. Jasmine Vivienne Andrew, Dayang Haryani Diana Ag Damit, Faiqah Mawardi, and Ilyana Natalia Affendy contributed to the literature screening, data extraction, and analysis using thematic analysis and the TCCM framework in accordance with PRISMA guidelines, as well as assisting in the manuscript write-up. Nor Afifah Yusof contributed to the refinement of the research framework and provided critical review and intellectual input to the manuscript. All authors have read and approved the final version of the manuscript.

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Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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