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Brokered Collaborative Governance and the Conversion Bottleneck in Coastal Empowerment: Evidence from Pangkep, Indonesia

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ABSTRACT

Coastal economic empowerment increasingly depends on collaboration among public institutions, community organisations, and local intermediaries, yet the mechanisms through which collaborative capacity becomes durable economic autonomy remain insufficiently understood. This study examines how collaborative governance operates in coastal Pangkep, Indonesia, and why relational gains do not always translate into stronger economic control. A qualitative single-case study used semi-structured interviews with three purposively selected key informants representing the district fisheries authority, fisheries extension service, and fisher-group leadership. Interviews were conducted on 8–10 July 2026 and triangulated with field observations and relevant policy, planning, programme, statistical, and community documents. Data were analysed through deductive–inductive thematic coding and cross-informant comparison. Findings show that collaboration functions primarily through a brokered network linking government, extension services, and community organisations. This arrangement strengthens information exchange, trust, technical learning, financial awareness, and livelihood adaptation. However, limited access to untied finance, appropriate technology, storage, logistics, and diversified markets constrains the conversion of these capacities into economic autonomy; patron–client relations simultaneously provide livelihood protection and reproduce dependence. The study conceptualises this gap as a conversion bottleneck. Policy should therefore combine institutionalised collaborative brokerage with participatory procurement, flexible financing, value-chain infrastructure, and market diversification. The findings are analytically transferable rather than statistically generalisable and remain bounded by the three-informant case design.

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INTRODUCTION

Coastal areas constitute strategically important yet highly vulnerable social–ecological systems, supporting fisheries, tourism, trade, food security, and diverse community livelihoods (Cramer et al., 2023; Hidayati & de Vries, 2025). Within the sustainable blue economy agenda, the utilization of coastal resources is no longer assessed solely in terms of economic growth, but also in relation to the capacity to maintain ecosystem health, strengthen community resilience, reduce inequality, and respond effectively to climate change (Hidayati & de Vries, 2025). Pressures arising from environmental degradation, seasonal variability, market fluctuations, competition over resource use and coastal space, and climate-related risks require coastal communities to develop capacities that enable them not only to withstand disturbances but also to adapt and transform their livelihood strategies when existing arrangements are no longer sustainable (Clement et al., 2024; Xu et al., 2024). Recent literature suggests that such capacities are strongly shaped by social capital, learning processes, institutional quality, access to resources, and participatory governance (Clement et al., 2024; Eurich et al., 2024; OECD, 2025).

The complexity of coastal challenges also highlights the limitations of hierarchical and sectorally fragmented approaches to governance (Asio et al., 2026). Coastal governance involves governments, local communities, private-sector actors, academic institutions, civil society organizations, and diverse resource-user groups with different mandates, interests, and capacities (Cinti et al., 2025). Collaborative governance has therefore increasingly been recognized as an important approach for integrating knowledge, resources, authority, and interests across multiple actors (Asio et al., 2026; Rölfer et al., 2024). Rölfer et al. (2024) demonstrate that coastal resilience is shaped by interorganizational coordination, leadership, knowledge exchange, the presence of bridging organizations, and the inclusion of underrepresented groups. These findings suggest that collaboration cannot be reduced to the mere existence of multi-stakeholder forums; rather, it must be reflected in meaningful participation, clearly distributed roles and responsibilities, mutual trust, resource exchange, and the capacity for joint action (Cinti et al., 2025; Wiranthi et al., 2025).

Indonesia provides a particularly important context in which to examine these relationships (Hidayati & de Vries, 2025). Official statistics further underscore Pangkep's distinctive territorial setting. The regency comprises 13 districts, 82 villages, and 38 urban wards, while its archipelagic area includes approximately 115 islands; the research record also reports about 898.29 km^2 of land and 11,464.44 km^2 of waters (BPS-Statistics of Pangkajene and Kepulauan Regency, 2026). This spatial fragmentation is not incidental to empowerment: limited inter-island transport, basic infrastructure, communication access, and exposure to extreme weather complicate programme delivery and market connectivity. The thesis field evidence likewise identifies persistent constraints faced by coastal communities, including uneven access to capital, technology, managerial capacity, markets, and infrastructure, together with dependence on punggawa or collectors. Pangkep is therefore not merely a convenient site; it is a theoretically relevant case for examining whether collaborative capacity can overcome territorial fragmentation and structural market dependence.

In practice, coastal community empowerment remains largely dominated by program-based interventions, including productive assistance, training, group formation, and infrastructure or facility provision (Latief & Wijaya, 2025). Although such interventions are important, they do not necessarily generate sustained community autonomy when communities continue to have limited access to markets, finance, technology, information, and decision-making processes (Syahza et al., 2025; Gorain et al., 2026). Studies of fishing communities in Indonesia further indicate that the government's roles as regulator, facilitator, and catalyst continue to be constrained by limitations in regulatory frameworks, program implementation, infrastructure, and access to resources (Latief & Wijaya, 2025). Accordingly, the effectiveness of empowerment should be assessed not merely in terms of program outputs, but also in terms of the extent to which programs and their broader governance arrangements contribute to adaptive capacity and the long-term sustainability of community livelihoods.

This perspective positions community resilience as a critical link between governance and economic sustainability. Effective collaborative governance can expand community access to knowledge, networks, resources, economic opportunities, and decision-making arenas (Rölfer et al., 2024; Wiranthi et al., 2025). Such access can strengthen communities' capacities to anticipate pressures, adjust livelihood strategies, diversify economic activities, and sustain economic activities in the face of changing conditions (Eurich et al., 2024; Suradja et al., 2024). Sustainable economic empowerment should therefore not be understood merely as short-term income improvement, but rather as the capacity of communities to sustain and further develop their livelihoods autonomously under changing social, economic, and ecological conditions (Hidayati & de Vries, 2025; Setiawan et al., 2025).

Despite these developments, the existing literature remains analytically fragmented. Studies of collaborative governance have predominantly emphasized coordination, networks, participation, and adaptation; research on community resilience has focused primarily on capacities to cope with and respond to disturbances; while studies of coastal economic empowerment have generally concentrated on livelihoods, market access, financing, and welfare. The relationships among these three domains have rarely been examined within an integrated analytical framework, particularly in the context of coastal governance in Indonesia. This gap is conceptual, because the mechanisms linking collaboration, resilience, and economic sustainability remain insufficiently articulated;

contextual, because Indonesia's archipelagic geography, decentralized governance arrangements, prevalence of small-scale fisheries, and institutional diversity differ considerably from many settings examined in the existing literature; and empirical, because the effectiveness of government strategies continues to be assessed largely through program-based indicators and formal participation rather than through community capacities and the sustainability of economic benefits.

Against this background, this study examines how collaborative governance is constructed in coastal Pangkep, how relational processes strengthen adaptive capacity, and under what conditions these gains are converted into sustainable economic empowerment. The study addresses the following research question: How does collaborative governance generate adaptive capacity, and under what conditions is that capacity converted into greater economic autonomy in coastal Pangkep? The novelty lies in three linked propositions. First, collaboration in fragmented coastal territories may operate through brokered relational networks rather than permanent multi-stakeholder forums. Second, the study proposes the concept of a conversion bottleneck to explain why relational and adaptive capacities do not automatically become economic control. Third, community resilience is treated as a contingent bridge between collaboration and empowerment, not as evidence of transformation by itself. These propositions extend collaborative-governance analysis by separating the creation of joint capacity from the structural conditions required to convert that capacity into durable economic agency.

METHOD

Research Approach

This study adopts a qualitative case-study approach to develop an in-depth understanding of collaborative governance within local-government strategies for strengthening the resilience and economic empowerment of coastal communities. The qualitative approach is appropriate because the analysis focuses on processes, inter-actor relationships, patterns of interaction, role distribution, institutional dynamics, and stakeholder experiences that cannot be adequately captured through numerical measurement alone. The study therefore examines how collaboration is established, implemented, negotiated, and sustained within the social, economic, and institutional context of coastal Pangkep.

Research Design and Case Selection

The study employs a qualitative single-case design centred on coastal Pangkep, with field evidence focused on Ma'rang District. The case was selected because Pangkep combines strong dependence on fisheries-based livelihoods with persistent constraints in capital, technology, market access, transport, and inter-agency coordination. These conditions make it an information-rich setting for examining how collaborative arrangements operate under territorial fragmentation and unequal resource control. The analysis treats collaboration not simply as the formal existence of a forum, but as the relational mechanisms through which public agencies, extension services, and community organisations exchange information, articulate needs, coordinate programmes, and respond to implementation problems.

Research Participants

Three key informants were purposively selected because each occupied a strategically different position in the collaborative-governance process: the Head of the Pangkep Marine and Fisheries Agency (I1), a fisheries extension officer (I2), and the leader of the Bahari Sejahtera fisher group (I3). Interviews were conducted on 8 July 2026 for I1 and I2 and on 10 July 2026 for I3. The small-N design was deliberate and mechanism-oriented rather than representative: I1 provided the district policy and programme perspective, I2 represented field-level brokerage and implementation, and I3 provided the community and livelihood perspective. These three positions enabled comparison across policy formulation, intermediary facilitation, and beneficiary experience. Nevertheless, the limited number of informants is treated explicitly as a methodological limitation, and the study does not claim statistical representation or saturation across all coastal actors in Pangkep.

Table 1. Data sources and analytical roles

Data source	Position / material	Analytical role
Interview I1	Head, Pangkep Marine and Fisheries Agency	Policy authority, programme design, institutional facilitation
Interview I2	Fisheries extension officer	Field-level brokerage, accompaniment, implementation
Interview I3	Leader, Bahari Sejahtera fisher group	Community experience, programme fit, finance and livelihood constraints
Observation	Field and community settings	Contextual checking of interaction, participation and implementation conditions
Documents	Policy, planning, programme, statistical and community materials	Contextual, procedural and source triangulation

Research Instruments and Data Collection

The researcher served as the primary instrument, supported by a semi-structured interview guide, observation protocol, field notes, and document review. Interviews covered actor configurations, participation, facilitative leadership, trust, resource exchange, joint action, livelihood adaptation, economic access, and constraints on self-reliance. The three interviews were conducted on 8 July 2026 (I1 and I2) and 10 July 2026 (I3). The source research record does not preserve standardised interview-duration logs; consequently, interview lengths are not reconstructed retrospectively. Field observation was undertaken in Ma'rang District as part of the same fieldwork process, focusing on community settings, actor interaction, participation, information transparency, coordination practices, and implementation conditions; however, a separate observation-date log is not preserved in the source record. Documentary analysis covered five documented categories: government regulations/policies, development and programme planning documents, programme/activity reports and technical guidance, statistical materials, and group/community or cooperation records. Because the source record does not preserve a reliable item-by-item document register, an exact document count is not retrospectively asserted.

Triangulation compared the three interview perspectives with these observational and documentary materials. Regarding research ethics, the available thesis record does not contain a formal ethics-approval number or a separate written-consent log; the manuscript therefore does not claim either retrospectively. No quotation marks or reconstructed verbatim statements are used where the source record preserves only attributed interview summaries. These documentation constraints are reported transparently as methodological limitations rather than filled with unverifiable details.

Data Analysis

Data were analysed through a combined deductive–inductive thematic procedure. First, interview, observation, and documentary materials were organised by source. Second, deductive codes were applied to collaborative-governance dimensions, including principled engagement, shared motivation, facilitative leadership, resource exchange, and capacity for joint action. Third, open coding identified context-specific patterns such as brokerage, territorial access barriers, power asymmetry, programme fit, patron dependence, financial literacy, livelihood adaptation, and market constraints. Fourth, codes were compared across I1–I3 to identify convergence, divergence, and actor-specific interpretations. Fifth, interview patterns were checked against field observations and documentary evidence where available. Sixth, related codes were consolidated into higher-order themes and examined for limiting or contradictory evidence before theoretical interpretation. Credibility was strengthened through source and method triangulation, cross-informant comparison, and explicit separation between empirical observation, researcher interpretation, and theoretical proposition. Dependability was supported by maintaining a traceable chain from interview dates and actor roles to coded themes and reported findings.

RESULTS AND DISCUSSION

Brokered Collaboration as the Operational Form of Governance

Evidence from the three strategic informants—district fisheries authority (I1), fisheries extension (I2), and fisher-group leadership (I3)—shows a consistent but differentiated pattern. The district perspective emphasised programme authority and coordination; the extension perspective highlighted brokerage, accompaniment, and implementation; and the fisher-group perspective exposed programme fit, financing barriers, market dependence, and livelihood constraints. Across these positions, collaboration improved communication, trust, technical learning, financial awareness, and adaptive practices, but did not remove structural dependence on constrained finance, infrastructure, logistics, and markets.

Documentary triangulation was more specific: regulations and planning documents established the formal programme architecture; technical guidance and programme records documented assistance, reporting, and coordination procedures; statistical materials contextualised the archipelagic constraints; and group/community records provided a check on local organisational arrangements. Field observation was used to assess the visible settings of interaction, participation, coordination, and programme implementation in Ma'rang rather than to infer outcomes that were not directly observed. The result is therefore not a claim that collaboration caused empowerment, but a mechanism-based finding about where collaborative gains emerge and where they lose economic force.

Collaboration operated less as a permanent multi-stakeholder forum than as a brokerage chain linking the Marine and Fisheries Agency (DKP), fisheries extension services, and coastal groups. Interview evidence from I1 and I2 on 8 July 2026 identifies the district agency and extension service as central facilitators of coordination, information, technical assistance, and problem solving, while I3 on 10 July 2026 confirms the importance of these intermediary relationships for accessing programmes and communicating community needs. Documentary evidence makes this institutional architecture visible through regulations, planning documents, technical programme guidance, cooperation arrangements, and internal group rules governing task allocation, assistance distribution, reporting, coordination, and problem resolution. Field observation was used as a contextual check on how interaction and participation appeared in the study setting, while the interview evidence remained the primary basis for interpreting brokerage.

The pattern is consistent with Ansell and Gash's (2008) emphasis on dialogue, trust building, and facilitative leadership and Emerson et al.'s (2012) interaction among principled engagement, shared motivation, and capacity for joint action. The Pangkep case adds a territorial qualification: in geographically dispersed coastal settings, trusted intermediaries become part of the practical infrastructure of collaboration.

Participation, Power Asymmetry, and Programme Fit

The brokerage system nevertheless operated within clear power asymmetries. I1 and I3 reported that government actors possessed stronger authority over budgets, programmes, administrative requirements, and information, whereas coastal groups contributed local ecological knowledge, labour, experience, and social networks. The research evidence also shows that participatory spaces and programme processes did not eliminate barriers created by distance, transport costs, technical-administrative capacity, and patron-client dependence. This evidence distinguishes access to deliberation from control over final decisions. In comparative terms, the finding qualifies optimistic accounts of collaborative inclusion: participation can broaden voice without eliminating asymmetries in agenda setting, resource allocation, and implementation authority (Asio et al., 2026).

The same asymmetry helps explain why participation did not always translate into programme fit. I3 identified cases in which equipment specifications did not fully correspond to vessel type, fishing method, or operating area. The finding is important because it distinguishes procedural inclusion from effective influence. Consultation can be formally present while technical verification remains weak. For coastal empowerment programmes, participation should therefore be assessed not only by attendance or proposal submission, but by whether community knowledge changes

procurement specifications, implementation decisions, and post-distribution correction mechanisms.

Facilitative Leadership, Trust, and Institutional Vulnerability

Facilitative leadership was most visible in the combined roles of DKP and fisheries extension. I1 and I2 (8 July 2026) described coordination, training, needs identification, mediation, information provision, and field assistance as central facilitative functions, while I3's account (10 July 2026) indicates that these functions matter when they connect directly with the practical needs of fishing groups. Repeated interaction can build trust, but the thesis evidence also records operational vulnerabilities, including wide coastal coverage, transport and communication constraints, budget limitations, and limited extension capacity. The finding therefore advances beyond a simple 'leadership matters' claim: brokerage is more effective when facilitation is recurrent, accessible, and institutionally supported rather than dependent on occasional programme contact.

This pattern confirms the distinction between formal collaborative ties and actual knowledge exchange (Rölfer et al., 2024). At the same time, dependence on a small number of effective intermediaries creates institutional vulnerability. Staff transfer, retirement, workload changes, or interpersonal conflict can weaken the flow of information if collaborative relationships are stored primarily in individual experience. Brokerage therefore needs institutional support through shared records, documented follow-up, collective representation, and routines that preserve responsiveness beyond particular personnel.

Capacity Development and the Conversion Bottleneck

Capacity development was the most consistent positive outcome in the extension and fisher-group evidence. I2 reported training and accompaniment related to technical production, business management, financial recording, and market information, while I3 identified the practical value of improved knowledge and financial awareness. The evidence simultaneously records uneven application because knowledge gains were constrained by capital, production facilities, post-training accompaniment, and the fit between assistance and local livelihood conditions. This contrast is analytically important: exposure to knowledge is not equivalent to routine adoption, and routine adoption is not equivalent to economic control.

The three perspectives converge on a conversion bottleneck between capacity development and economic autonomy. I1 and I3 identify administrative and collateral barriers, uneven access to formal finance, and continued reliance on informal financing relationships; I2 identifies technology, maintenance, transport, market-information, and buyer constraints encountered in field implementation. Documentary and observational triangulation supports the existence of programme mechanisms while the interview evidence specifies where conversion fails in practice. Financial literacy cannot generate bargaining power when catches must be sold immediately; market information has limited value without reliable transport or storage; and productive equipment has limited effect when access, maintenance, or market conditions are unsuitable. This finding extends Stacey et al. (2021) and Syahza et al. (2025): capacity building becomes economically transformative only when learning is coupled with finance, infrastructure, organisational capability, and market alternatives.

Patronage as Protection and Structural Lock-in

The continuing punggawa–sawi relationship illustrates the structural constraint most clearly. I3's fisher-group evidence shows why informal patrons remain economically attractive: they can provide accessible working capital and livelihood support where formal finance is constrained by administration, collateral, distance, or bankability. At the same time, tied finance can narrow buyer choice and weaken bargaining power. This dual function is consistent with Roberts et al. (2022) and Elsler et al. (2023), who show that Indonesian fisher–trader relations extend beyond simple commercial exchange and are embedded in wider livelihood relations. The policy implication is therefore not to remove patronage administratively without replacement, but to reproduce its protective functions through accessible cooperative funds, credit guarantees, seasonal repayment

arrangements, and transparent market information while expanding fishers' freedom to choose buyers. Patronage is thus simultaneously a resilience resource and a source of structural lock-in.

Seasonal Adaptation, Stewardship, and the Limits of Resilience

Seasonal livelihood strategies reveal the difference between resilience and transformation. During rough weather and lean fishing periods, households may reduce expenditure, use savings, undertake supplementary work, or rely on family and informal borrowing. I2 and I3 described adaptation as a gradual process supported by technical learning, financial awareness, and livelihood adjustment. These practices can strengthen absorptive and adaptive capacity by helping households maintain consumption and reduce pressure to fish under unsafe conditions. However, borrowing may reinforce dependence, while alternative activities remain vulnerable when finance, storage, inputs, and demand are unstable. Diversification therefore improves resilience only when complementary market and infrastructure conditions are present (Suradja et al., 2024; Eurich et al., 2024).

Economic adaptation was also linked to ecological continuity. I2 and I3 referred to the use of permitted gear, avoidance of destructive practices, protection of fishing grounds, and the connection between environmental stewardship and continuity of catches. This supports a process-based understanding of resilience in which learning, coordination, adaptation, and stewardship jointly sustain livelihood capacity (Clement et al., 2024). Nevertheless, these environmental practices were self-reported and were not verified through ecological observation or catch data. The evidence therefore supports a claim about strengthened pro-stewardship norms, not a demonstrated improvement in ecosystem condition.

Relational–Structural Explanation and Policy Implications

Taken together, the findings support a relational–structural explanation of coastal economic empowerment. The empirical layer shows that brokerage, dialogue, accompaniment, and group interaction improve information flow, trust, learning, and adaptive practices. The interpretive layer is that these gains constitute relational and adaptive capacity. The theoretical proposition is that such capacity becomes durable economic empowerment only when actors can convert it into greater control over finance, technology, logistics, and markets. This distinction deepens Emerson et al.'s (2012) capacity-for-joint-action framework: joint capacity explains the ability to coordinate and act, but it does not by itself explain redistribution of economic control. Compared with studies emphasising governance capability and knowledge exchange (Rölfer et al., 2024; Wiranthi et al., 2025), the Pangkep evidence shows that stronger relational governance may coexist with persistent material asymmetry. Compared with livelihood studies stressing diversification and institutional support (Stacey et al., 2021; Syahza et al., 2025), it identifies the governance mechanism through which support is accessed—but also where that mechanism becomes insufficient.

Within the empirical boundaries of this case, three analytical propositions follow. First, collaboration in territorially fragmented coastal settings may be brokered rather than forum-based: continuity depends on actors who translate, connect, and follow up across institutional levels. Second, a conversion bottleneck separates improvements in knowledge, trust, and adaptive capacity from control over productive and market resources. Third, resilience is a contingent bridge rather than proof of empowerment: fishing households may become better able to cope with seasonal and market shocks while remaining dependent on patrons, narrow buyer networks, or externally controlled assets. Because these propositions arise from only three strategic informants, they should be treated as mechanism-oriented propositions for comparative testing, not as universal claims.

For policy, Pangkep requires institutionalised brokerage combined with measures that address the conversion bottleneck. A district coastal collaboration mechanism should document community proposals and government responses, verify equipment specifications with users, coordinate field follow-up, and monitor asset utilisation after delivery. Intervention should combine flexible untied finance, shared storage and transport, participatory procurement, and buyer diversification. Monitoring should move beyond counts of meetings, trainees, and distributed assets toward equipment utilisation, diversity of finance and buyers, reduction in tied selling, continuity of

livelihood activities during lean periods, and sustained financial recording. These indicators are more closely aligned with whether collaborative gains are converted into economic agency.

Theoretical Contribution

The principal theoretical contribution is the separation of relational capacity from conversion capacity. Collaborative-governance scholarship commonly explains how engagement, motivation, leadership, knowledge, and resources enable joint action (Ansell & Gash, 2008; Emerson et al., 2012). The Pangkep case suggests an additional boundary condition: joint action can improve coordination and adaptive capability without substantially changing who controls capital, infrastructure, logistics, and market access. The proposed conversion bottleneck therefore does not replace collaborative-governance theory; it specifies the structural conditions under which collaborative capacity is more or less likely to become economic agency. This interpretation also clarifies the role of resilience. Resilience is valuable when it expands options and reduces vulnerability, but it should not be equated with empowerment if adaptation continues within structurally dependent value-chain relations.

Scope and Boundary of the Findings

Collaborative governance in Pangkep was consequential but incomplete. It improved the channels through which needs were articulated, implementation problems were communicated, trust was built, skills were developed, and seasonal uncertainty was managed. Yet it did not sufficiently redistribute control over capital, technology, storage, logistics, and markets. The coexistence of stronger adaptive capacity and continuing dependence is therefore the principal explanatory result.

The evidentiary scope remains deliberately bounded. Three strategically selected informants provide complementary perspectives from district policy, field-level extension, and fisher-group experience, but they do not represent all islands, village governments, women's groups, non-participants, patrons, buyers, private firms, or households. The study does not estimate causal effects on income, bargaining power, or ecosystem condition. The source record also does not preserve standardised interview-duration logs, a separate observation-date log, an itemised document register, a formal ethics-approval number, or a separate written-consent log; these details are therefore not reconstructed retrospectively. In addition, the thesis record available for manuscript revision preserves attributed interview summaries but not a set of verbatim transcript excerpts suitable for quotation; accordingly, no quotations have been reconstructed. Source and method triangulation improve credibility but do not remove these documentation and small-sample limitations. The findings should therefore be read as mechanism-oriented and analytically transferable to comparable coastal settings rather than statistically generalisable.

CONCLUSIONS

This study answers the research question by showing that collaborative governance in coastal Pangkep generates adaptive capacity through a brokered network linking district government, fisheries extension, and fisher organisations, but that this capacity becomes durable economic empowerment only when relational gains are matched by structural access to economic resources. Across three purposively selected strategic informants, collaboration strengthened information exchange, trust, technical learning, financial awareness, and livelihood adaptation. Yet limited access to untied finance, appropriate technology, storage, transport, and diversified buyers, together with continuing patron–client dependence, constrained the translation of these gains into stronger economic control.

The study's theoretical contribution is the concept of a conversion bottleneck: capacity for joint action and resilience are necessary but insufficient when material and market asymmetries remain intact. Practically, coastal empowerment should institutionalise collaborative brokerage while linking training and participation to participatory procurement, post-distribution verification, flexible financing, shared logistics and storage, stronger community organisations, and diversified market access. The study is limited by its single-case design and three strategic informants and does not establish population-level or causal effects. Future research should compare multiple coastal

districts and include village actors, women-led enterprises, patrons, buyers, non-participants, and household members to test whether improvements in finance, infrastructure, and market access enable collaborative capacity to become sustained economic autonomy.

AUTHOR CONTRIBUTION STATEMENT

Nurul Islamiyah M contributed to the conceptualization of the study, research design, literature review, data collection, field investigation, data analysis and interpretation, and preparation of the original manuscript. She was primarily responsible for conducting the interviews, observations, documentation, data processing, and synthesis of the research findings. Rasyid Thaha contributed to the conceptual development of the study, methodological guidance, supervision, critical review, validation of the research interpretation, and scholarly revision of the manuscript. Rabinah Yunus contributed to research supervision, methodological and analytical guidance, critical review of the findings, and revision and refinement of the manuscript. All authors reviewed and approved the final version of the manuscript and agreed to be accountable for their respective contributions to the work.

AI DISCLOSURE STATEMENT

The author used generative artificial intelligence (ChatGPT, OpenAI) to assist with language refinement, manuscript organization, academic writing, and formatting. The AI tool was not used to generate, fabricate, or alter the research data or empirical findings. All AI-assisted suggestions were critically reviewed, verified against the original research data, and revised by the author. The author takes full responsibility for the accuracy, integrity, and final content of the manuscript.

REFERENCES

Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. Journal of Public Administration Research and Theory, 18(4), 543–571. https://doi.org/10.1093/jopart/mum032

Asio, M. V. S., Cvitanovic, C., Lau, J., & Diedrich, A. (2026). Collaborative governance in marine and coastal management: A systematic review. Ocean & Coastal Management, 272, Article 108020. https://doi.org/10.1016/j.ocecoaman.2025.108020

BPS-Statistics of Pangkajene and Kepulauan Regency. (2026). Kabupaten Pangkajene dan Kepulauan Dalam Angka 2026 [Pangkajene and Kepulauan Regency in Figures 2026]. BPS-Statistics of Pangkajene and Kepulauan Regency.

Cinti, A., Ramirez, L., Castrejón, M., Aburto, J. A., Loto, L., Fulton, S., Rueda, M., Schiavetti, A., Fernández-Rivera Melo, F. J., Bravo, M., Alarcon, D. T., Araújo, V. P., & Parma, A. M. (2025). Small-scale fisheries in ecologically sensitive areas in Latin America and the Caribbean: Do marine protected areas benefit fisheries governance? Ambio, 54(1), 20–42. https://doi.org/10.1007/s13280-024-02062-z

Clement, S., Jozaei, J., Mitchell, M., Allen, C. R., & Garmestani, A. S. (2024). How resilience is framed matters for governance of coastal social-ecological systems. Environmental Policy and Governance, 34(1), 65–76. https://doi.org/10.1002/eet.2056

Cramer, L. A., Beaullieu, J., Doyle, J., Maldonado, M., Egna, H., Johnson, M., & Conway, F. D. L. (2023). The importance of the seafood processing sector to coastal community resilience. Marine Policy, 156, Article 105797. https://doi.org/10.1016/j.marpol.2023.105797

Elsler, L. G., Neil, M., Ferse, S. C. A., 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

Emerson, K., Nabatchi, T., & Balogh, S. (2012). An integrative framework for collaborative governance. Journal of Public Administration Research and Theory, 22(1), 1–29. https://doi.org/10.1093/jopart/mur011

Eurich, J. G., Friedman, W. R., Kleisner, K. M., Zhao, L. Z., Free, C. M., Fletcher, M., Mason, J. G., Tokunaga, K., Aguion, A., Dell'Apa, A., Dickey-Collas, M., Fujita, R., Golden, C. D., Hollowed, A. B., Ishimura, G., Karr, K. A., Kasperski, S., Kisara, Y., Lau, J. D., . . . Mills, K. E. (2024). Diverse pathways for climate resilience in marine fishery systems. Fish and Fisheries, 25(1), 38–59. https://doi.org/10.1111/faf.12790

Gorain, S., Dutta, S., Thapa, A., Seenivasan, P., & Suresh, A. (2026). Global assessment of financial mechanisms supporting blue livelihoods and sustainable development in coastal and marine fishing communities. Discover Oceans, 3, Article 30. https://doi.org/10.1007/s44289-026-00140-6

Hidayati, D. R., & de Vries, W. T. (2025). Connecting the dots between blue economic development and coastal community development using a seaweed case study in Madura, Indonesia. Discover Sustainability, 6, Article 1346. https://doi.org/10.1007/s43621-025-02264-9

Latief, J. A., & Wijaya, N. (2025). Exploring the role of local government in empowering small-scale fishing communities in Northern Coastal Jakarta, Indonesia. Maritime Studies, 24(3), Article 49. https://doi.org/10.1007/s40152-025-00442-z

Organisation for Economic Co-operation and Development. (2025). The ocean economy to 2050. OECD Publishing. https://doi.org/10.1787/a9096fb1-en

Prianto, A. L., Abdillah, A., & Yama, A. (2024). Multi-level governance as a climate change adaptation strategy in the coastal cities in Indonesia and Thailand. Journal of Government and Politics (JGOP), 6(1), 12–26. https://doi.org/10.31764/jgop.v6i1.24292

Roberts, N., Mengge, B., Utina, M. R., Muhatar, F., Anugerah, Icwardanhi, A., Zulkifli, R. M., & Humphries, A. (2022). Patron-client relationships shape value chains in an Indonesian island-based fisheries system. Marine Policy, 143, Article 105142. https://doi.org/10.1016/j.marpol.2022.105142

Rölfer, L., Celliers, L., Fernandes, M., Rivers, N., Snow, B., & Abson, D. J. (2024). Assessing collaboration, knowledge exchange, and stakeholder agency in coastal governance to enhance climate resilience. Regional Environmental Change, 24(1), Article 6. https://doi.org/10.1007/s10113-023-02163-7

Setiawan, T., Myrna, R., Isnawati, N. W., Samith, M. F., & Mughits, M. H. (2025). The environmental dynamics in shaping ecological governance for sustainable development in coastal areas. Discover Sustainability, 6, Article 925. https://doi.org/10.1007/s43621-025-01849-8

Stacey, N., Gibson, E., Loneragan, N. R., Warren, C., Wiryawan, B., Adhuri, D. S., Steenbergen, D. J., & Fitriana, R. (2021). Developing sustainable small-scale fisheries livelihoods in Indonesia: Trends, enabling and constraining factors, and future opportunities. Marine Policy, 132, Article 104654. https://doi.org/10.1016/j.marpol.2021.104654

Suradja, I., Asih, T. S., Basir, Dyspriani, D. P., Lionata, H., Marsiyono, A., Nugraha, B. A., Palupi, T. I., Salam, I. A. P., Sierra Castillo, L., Toldo, A., Trisnawati, A., & Aceves-Bueno, E. (2024). Alternating livelihoods and coping with shocks: An examination of coastal tourism in Indonesia amidst COVID-19. Marine Policy, 170, Article 106379. https://doi.org/10.1016/j.marpol.2024.106379

Syahza, A., Tampubolon, D., Asmit, B., & Irianti, M. (2025). Poverty alleviation through cross-sectoral approaches: Solutions to accelerate coastal community economy. Cogent Social Sciences, 11(1), Article 2462451. https://doi.org/10.1080/23311886.2025.2462451

Wiranthi, P. E., Toonen, H. M., & Oosterveer, P. (2025). Dynamic interactions and governance capabilities of state and non-state actors in small-scale tuna fishery certification in Indonesia. Environmental Policy and Governance, 35(6), 1012–1027. https://doi.org/10.1002/eet.70014

Xu, H., Shen, L., Cui, Y., & Gao, J. (2024). Multi-agent collaborative management of coastal pollution from land-based sources from the perspective of emissions trading: An evolutionary game theory approach. Ocean & Coastal Management, 251, Article 107067. https://doi.org/10.1016/j.ocecoaman.2024.107067