



Metamorphosis of Collaborative Governance: Designing an Integrated Model for Sustainable Marine Tourism in Teluk Kupang, Indonesia

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ABSTRACT

The Teluk Kupang Marine Nature Park (TWAL) in East Nusa Tenggara, Indonesia, represents a valuable marine conservation area with significant potential for sustainable tourism. However, its management faces persistent challenges, including conflicts of interest among stakeholders, environmental degradation, bureaucratic fragmentation, and centralized governance that limits local participation. This study aims to develop and evaluate a collaborative governance model that addresses these barriers and supports sustainable marine tourism. Using a mixed-methods design, the research combines surveys, in-depth interviews, stakeholder analysis, and document review to explore governance dynamics and stakeholder perceptions. The findings reveal that fragmented collaboration, unresponsive bureaucracy, and limited institutional capacity have constrained effective management. To overcome these challenges, the study introduces the Integrated Collaborative Governance Metamorphosis Model (ICGMM), which emphasizes decentralization, participatory decision-making, and capacity building as prerequisites for effective collaboration. The model outlines a transformation pathway from fragmented governance toward integrated, inclusive, and adaptive management practices. Results indicate that strengthening transparency, aligning conservation and tourism objectives, and empowering local communities are critical for achieving long-term sustainability. This study contributes theoretically by advancing collaborative governance through the metamorphosis concept and offers practical insights for policymakers and conservation managers seeking to balance ecological protection and economic development in marine protected areas.

INTRODUCTION

The Teluk Kupang Marine Nature Park (TWAL) is one of the conservation areas designated by the Indonesian government to support biodiversity and sustainable tourism. The designation of this area aims to preserve marine biodiversity and support the economy through environmentally friendly tourism (Astawa et al., 2024; Di Vaio et al., 2023; Mendes et al., 2024). Located in the East Nusa Tenggara Province, this area has great potential as a natural tourist attraction, with a rich marine biodiversity (Ma et al., 2024; Valderrama et al., 2025). As a marine nature park, TWAL Teluk Kupang is intended for the conservation of aquatic ecosystems while supporting environmentally friendly tourism activities (Wang & Aporta, 2024). Nevertheless, its management faces persistent challenges, including conflicts of interest among stakeholders, environmental degradation due to unregulated fishing, and declining ecosystem quality (Nuraini et al., 2025; Zheng et al., 2021). These issues highlight the urgent need for management approaches that integrate ecological, social, and economic dimensions through inclusive and collaborative governance.

The main issue in the management of TWAL Teluk Kupang is the conflict of interest among various stakeholders, including the government sector, local communities, the private sector, and non-governmental organizations (Aliandri et al., 2024; Gruber et al., 2024). This conflict often arises due to misalignment between conservation goals and the social and economic needs of the surrounding communities (Mendes et al., 2024). Illegal fishing practices and coral reef destruction are also major causes of environmental degradation in this area, which ultimately affects the tourism appeal and sustainability of the park. In various literatures, collaborative governance-based management is often

presented as a common solution. This collaborative approach allows for the active involvement of all parties in decision-making and the implementation of conservation programs as well as tourism management (Emerson et al., 2011; Ansell & Gash, 2008; Barandiarán et al., 2019; Ansel & Gash, 2017; Berkes, 2017; Plummer et al., 2017; Gurney et al., 2019; Bennett et al., 2020; Mistry et al., 2020). This approach is considered to reduce conflicts of interest, enhance cooperation among stakeholders, and ensure the sustainability of the existing ecosystems (Silva et al., 2024; Valderrama et al., 2025). This approach has proven effective in addressing conflicts of interest, strengthening cooperation, and ensuring the resilience of ecosystems in diverse contexts. However, its successful application requires contextual adaptation to local socio-political and cultural settings.

Previous studies have underscored the importance of collaborative governance in conservation management across different regions, including South America, Africa, and Asia (Khania et al., 2022; Lopes & Farias, 2020; Borrini-Feyerabend et al., 2013; Gruber et al., 2024; Robertson, 2011; Bennett et al., 2021; Gurney et al., 2019; Villanueva-Aznar et al., 2021; Cohen et al., 2022; Sowman & Sunde, 2021), including studies on community-based tourism (CBT) as a solution to increase local community involvement in natural resource management (Erkuş-Öztürk & Eraydin, 2010; Barandiarán et al., 2019). Yet, despite global recognition, many cases reveal persistent barriers in practice, such as power asymmetries, trust deficits, and the absence of effective mechanisms for conflict resolution (Aulia et al., 2021; Dewantama et al., 2007; Valderrama et al., 2025; Astawa et al., 2024; Rojas et al., 2024; Valderrama et al., 2024; Ansel & Gash, 2017; Emerson et al., 2020; Gray & Purdy, 2018; Scott & Thomas, 2017; Berdej & Armitage, 2018; Ojha et al., 2020; Vangen &

Huxman, 2021; Fliervoet et al., 2021). In Indonesia, particularly in marine and coastal areas with unique socio-cultural dynamics, these challenges remain underexplored. This creates a significant research gap in understanding how collaborative governance can be effectively implemented in such contexts.

This study seeks to address that gap by focusing on TWAL Teluk Kupang as a critical case. Its novelty lies in the development of a collaborative governance model specifically tailored to Indonesia's socio-cultural and administrative realities, with particular relevance to East Nusa Tenggara. By identifying key factors that determine successful collaboration, this research introduces an innovative framework—the Integrated Collaborative Governance Metamorphosis Model (ICGMM)—which responds to local dynamics often overlooked in existing models.

The scientific novelty of this article lies in the development of a collaborative governance model tailored to the social, cultural, and public administration context in Indonesia, particularly in East Nusa Tenggara. This study identifies the factors that influence the success of collaborative governance at TWAL Teluk Kupang and offers innovation in the form of a model that considers local dynamics that may not have been found in previous models (Khanian et al., 2022; Lopes & Farias, 2020). This approach seeks to address conflicts of interest in areas with open access and how this approach can be adapted within the Indonesian context to sustainably manage natural tourist areas, contributing new insights to the theory and practice of community-based conservation area governance.

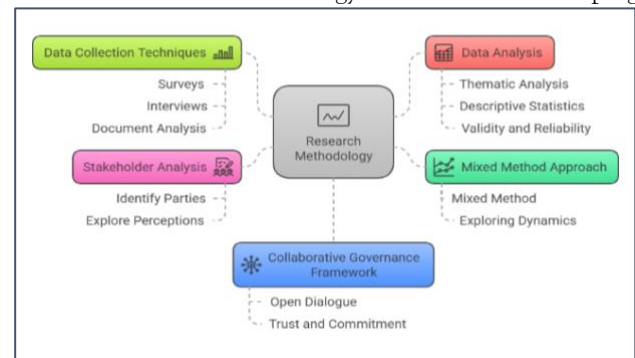
The study aims to design and evaluate this model to reduce conflicts of interest, strengthen stakeholder cooperation, and sustain both biodiversity and tourism development. By doing so, it provides theoretical contributions to collaborative governance scholarship and practical guidance for conservation managers and policymakers working in similar socio-ecological contexts.

METHOD

This study uses a mixed-method approach. This approach was chosen to provide a deeper understanding of the management issues of the Teluk Kupang Marine Nature Park (TWAL) and the challenges and potential in the application of collaborative governance (Creswell, 2022). Using a case study method, this research aims to explore the dynamics of TWAL Teluk Kupang area management in a real-world context, with a focus on conflicts of interest, environmental damage, and the implementation of a collaborative governance model (Yin, 2009).

Data were collected using several techniques. Both **primary and secondary data** were utilized. Primary data were obtained through surveys, in-depth interviews, and stakeholder analysis. The survey targeted local communities, government officials, NGOs, and private sector actors, aiming to capture stakeholders' perceptions of environmental conditions, tourism impacts, and governance practices. In-depth interviews were conducted with key actors, including local governments, indigenous communities, conservation NGOs, and tourism entrepreneurs, to obtain insights into inter-stakeholder dynamics, challenges, and expectations. Stakeholder analysis was conducted to map actor interests, influence, and potential areas of conflict or collaboration (Reed et al., 2009; Kimmich et al., 2012). Secondary data were drawn from policy documents, zoning plans, and management reports to complement and validate primary findings.

Picture 1: Research Methodology for TWAL Teluk Kupang



Management

Source: Processed by the researcher (2024)

The study applies the collaborative governance framework developed by Ansell and Gash (2008) and Emerson et al. (2011), emphasizing open dialogue, trust-building, and joint commitment. Qualitative data were analyzed using thematic analysis to identify recurring patterns and themes across interviews and focus group discussions. Quantitative data from surveys were examined using descriptive statistics to summarize stakeholders' views. To ensure validity and reliability, the study employed data triangulation, cross-checking findings across multiple sources and verifying preliminary results with respondents (Guba, 1981; Straub et al., 2004).

The mixed-method approach was chosen because fragmented governance and conflicting stakeholder interests cannot be fully understood through a single data type. Surveys provided measurable insights into stakeholder perceptions, while interviews and stakeholder analysis offered contextual depth and revealed power dynamics. Document analysis added institutional perspectives, ensuring a comprehensive understanding of governance challenges and opportunities.

RESULTS AND DISCUSSION

Fragmented Collaboration Dynamics as a Challenge for Tourism Development

Tourism management in the Teluk Kupang Marine Nature Park (TWAL) faces various administrative and policy challenges. One of the main challenges is the limited area allocated for tourism activities. The TWAL Teluk Kupang area is vast, but only a small portion is allowed to be developed as a tourism destination, specifically a utilization block of 9,193.57 hectares or 14.39% of the total area (BBKSDA NTT, 2020). This limitation leads to the establishment of highly controlled natural tourism areas, which reduces flexibility for the development of the tourism sector in the region, as well as the presence of an authority institution with the mandate to manage the area in accordance with applicable regulations.

The centralization of area management by BBKSDA NTT, which represents the Ministry of Environment and Forestry (KLHK), results in a top-down management policy, where decisions and policies are made by the central government without directly involving local stakeholders in the process. This policy focuses on the protection of natural areas and conservation but does not fully consider the potential for tourism development that involves local communities and the related private sector. This finding directly addresses the first research question of how governance structures shape collaboration dynamics, revealing that excessive centralization produces systemic fragmentation and weakens local ownership (Denhardt & Denhardt, 2000).

Tourism development collaboration governance, based on research findings, faces challenges in the form of (1) unresponsive bureaucracy, (2) poorly coordinated and non-transparent budgets, (3) limited human resource competency, (4) low collaboration capacity, (5) centralized tourism policies, and (6) aspirations for better collaboration governance. These six themes confirm the second research question regarding the main barriers to collaborative governance in conservation-based tourism, aligning with previous findings on governance failures in protected areas globally (Ansell & Gash, 2017; Emerson et al., 2016; Berkes, 2017; Scott & Thomas, 2017; Ojha et al., 2020), emphasizing dynamic processes, not static conditions, which enable transformation (Ansell & Gash, 2017; Westley et al., 2017; Fazey et al., 2018; Olsson et al., 2020; Moore et al., 2018), (2) collaboration, representing the theme of hopes for better cooperation (Emergent Agency and Aspirational Governance), captured through the emergence of theme 6, which is the aspiration for better collaboration governance, and limited collaboration capacity (Human Capital Deficit), reflecting the tension between collaborative aspirations and structural barriers (Ansell & Gash, 2018; Emerson et al., 2016; Berkes, 2017; Fazey et al., 2020; Ojha et al., 2020), and (3) fragmented, referring to centralization, budget fragmentation, and bureaucratic inertia (Structural-Institutional Dysfunction) (Ansell & Gash, 2017; Emerson et al., 2016; Plummer et al., 2017; Gurney et al., 2019; Bennett et al., 2020).

In practice, although BBKSDA NTT recognizes the importance of collaboration in tourism management, the bureaucratic processes that are hierarchical and centralized often hinder the implementation of more inclusive policies. The decision to develop tourism in the area requires permits and coordination with multiple parties, including local government agencies and non-governmental organizations. This often results in fragmented policies that are poorly coordinated (Bramwell, 2020; Dredge & Jamal, 2016; Nunkoo et al., 2020; Moyle et al., 2018; Saarinen, 2020; Yang & Wong, 2018; Bramwell & Lane, 2019; Hall, 2017). Furthermore, budget limitations become an acute issue. Funds allocated are primarily directed towards conservation, not tourism development. Information from interviews reveals that many development plans, such as boat tours or yacht docking facilities, could not be realized due to insufficient funding.

Sectoral ego, differing priorities, and unclear roles between institutions such as the Tourism Department and the Fisheries Department become obstacles. The misalignment between central policies and local needs exacerbates implementation on the ground, especially in relation to the gap between policy and local practices (Dressler et al., 2021; Suhardiman & Giordano, 2019; Agrawal & Benson, 2021; McCubbin & Smit, 2022; Eriksen et al., 2021; Chomba et al., 2020; Yasmi & Enters, 2018). Centralized authority and limited budgets are the main barriers to the effective implementation of collaboration in sustainable tourism management (Ansell & Gash, 2017; Emerson et al., 2016; Plummer et al., 2017; Gurney et al., 2019; Bennett et al., 2020).

The author emphasizes that to overcome this fragmentation, a more open, participatory, and inclusive collaborative governance approach is required. This aligns with the theory of Ansell & Gash (2008), which argues that collaboration must involve all stakeholders and create policies that are responsive to local dynamics. Collaboration should not only rely on the initiatives of authority institutions or institutional reforms alone but should also involve three components: institutional

fragmentation, capacity deficits, and emergent agents, to break the existing fragmentation cycle. Thus, institutional design that combines structural improvements (Ansell & Gash, 2017; Emerson et al., 2016; Cox et al., 2016; Scott & Thomas, 2017; Berkes, 2017), tourism capacity development (Moscardo, 2017; Dredge & Jamal, 2016; Nunkoo et al., 2020; Yang & Wong, 2018; Bramwell & Lane, 2019), as well as creating space for emergent agents to participate in decision-making is essential (Ansell & Gash, 2017; Heikkilä & Gerlak, 2019; Fischer et al., 2020; Ojha et al., 2020; Armitage et al., 2020).

The dynamics of fragmented collaboration reveal that fragmentation in tourism development collaboration is multidimensional. Non-transparent bureaucracy and unintegrated budget allocations create systemic barriers in tourism management (Diedrich et al., 2019; Bennett et al., 2021; Plummer et al., 2017; Cinner et al., 2018; Gurney et al., 2019). Furthermore, limited human resource competence and the lack of a collaborative orientation worsen the implementation of collaboration (Moscardo, 2017; Dredge & Jamal, 2016; Nunkoo & Ribera, 2020; Gurney et al., 2019; Bramwell & Lane, 2019). On the other hand, past experiences and excessive formalization in cooperation strategies can be counterproductive if not adapted to the local context (Moscardo, 2017; Dredge & Jamal, 2016; Nunkoo & Ribera, 2020; Gurney et al., 2019; Bramwell & Lane, 2019).

This model emphasizes the importance of a holistic approach that combines administrative transparency, collaborative-based human resource training, and flexible strategy design that can adapt to local dynamics. An effective collaborative model does not only prioritize administrative efficiency but also allows local communities to actively engage in decision-making, thus creating a balance between nature conservation and local economic development. Therefore, structural changes in management policies are required to be more decentralized, providing greater space for local communities to play an active role in area management and decision-making.

For this collaboration to succeed, it is crucial to shift from a highly centralized bureaucracy to a more decentralized and open system, providing more room for local communities and other stakeholders in the area management process. A more adaptive and inclusive approach will strengthen coordination between BBKSDA NTT, local governments, and local communities, ensuring the sustainable development of tourism in the TWAL Teluk Kupang area. With these steps, it is expected that effective collaboration can be achieved, which not only protects the natural area but also provides sustainable economic benefits for local communities.

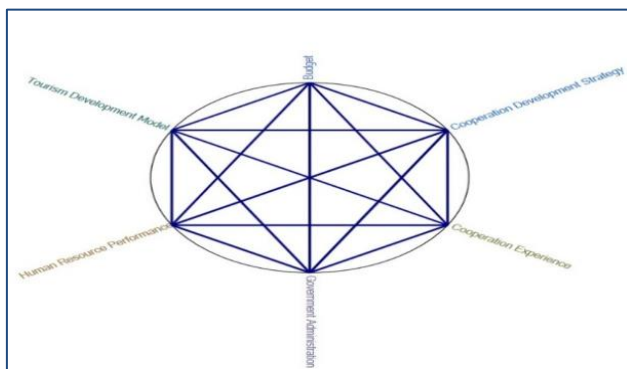
Metamorphosis of Fragmented Collaboration Dynamics Towards an Integrated Collaborative Governance Model

The current tourism management model in the Teluk Kupang Marine Nature Park (TWA) can be described as a fragmented collaboration dynamic. Based on research findings, this model is considered an empirical model that marks the initial step in the process of transformation towards a more structured model, namely one that refers to the Collaborative Governance Regime (CGR) (Emerson et al., 2012). This directly answers the third research question on possible solutions to overcome fragmentation by proposing the Integrated Collaborative Governance Metamorphosis Model (ICGMM).

This metamorphosis process involves a transformation from six main themes, which then become six new collaborative aspects: (1) unresponsive bureaucracy changes into more efficient

government administration; (2) poorly coordinated and non-transparent budgets change into a more structured budgeting system; (3) centralized tourism policies change into a more decentralized tourism development model; (4) limited human resource competency is improved into enhanced HR performance; (5) low collaboration capacity evolves into more mature collaboration experiences; and (6) aspirations for better collaborative governance are formulated into more directed cooperation development strategies. Thus, the metamorphosis of fragmented collaboration dynamics results in the Integrated Collaborative Governance Metamorphosis Model (ICGMM).

Several theories underpin the use of the metamorphosis concept in this research, including: (1) the "metamorphosis" process of collaboration from fragmentation to integration through collective learning (Huxham & Vangem, 2005); (2) collaboration transformation through an iterative cycle of participation, deliberation, and agreement (Ansell & Gash, 2008); (3) the metamorphosis of fragmented tourism policy networks into integrated ones through institutional adaptation (Dredge, 2006); (4) the transformation of polycentric systems through adjustments in collective rules and norms (Ostrom, 2010); and (5) a collaborative framework that facilitates metamorphosis from conflict to synergy (Emerson et al., 2012).



Picture 2: Map of interconnections between aspects of integrated collaboration dynamics

Source: Processed by the researcher, 2025

Metamorphosis in this context occurs through several important stages. The first stage is diagnosing the fragmentation that has occurred, as found in this research. Identifying the causes of fragmentation refers to studies by Scott (1995) and Dredge (2006), which mention sectoral ego, human resource capacity imbalances, and non-transparent budgets as contributing factors. The second stage is designing the necessary prerequisites for integration, referring to the requirements proposed by Emerson et al. (2012). The next stage is the implementation of an intermediate model, namely the Integrated Collaborative Governance Metamorphosis Model (ICGMM), which integrates administrative, budgeting, human resource, and tourism strategy aspects (Gray & Purdy, 2018). The final stage in the metamorphosis is the transition to the ideal model, based on the model by Emerson et al. (2012) through fulfilling the necessary prerequisites.

The necessary prerequisites to ensure that this transformation proceeds optimally include various aspects, with different critical points for each aspect. Some of these prerequisites include: (1) government administration that needs to align cross-sector policies and strengthen institutional coordination (Scott, 1995; Agranoff, 2007); (2) budgeting that

requires inclusive fund allocation mechanisms based on collaborative priorities (Bryson et al., 2015); (3) human resource performance that needs capacity improvement through competency-based collaboration training (Ansell & Gash, 2008); (4) tourism development models that need to adopt an ecosystem-based approach integrating sustainability (Dredge, 2006; Jamal & Stronza, 2009) while providing space for the involvement of local communities and other stakeholders (Gunn, 1994); (5) cooperation development strategies that require collaborative framework design with structured incentives (Emerson et al., 2018); and (6) collaboration experience that requires institutionalization of learning from previous collaborative practices (Ostrom, 2010).

At the model refinement stage, the ICGMM functions as a transformative bridge that integrates fragmented governance systems into holistic collaborative governance. This model meets the necessary prerequisites for adopting Emerson et al.'s (2018) model. The metamorphosis advanced by this model depicts the transformation from fragmentation to integration, emphasizing the unification of key aspects such as administration, budgeting, human resources, and tourism strategy. The name ICGMM is chosen based on the understanding that metamorphosis is a process of change from fragmentation to integration, while integrated collaborative governance underscores the importance of combining various elements into more holistic and coordinated governance. This model is designed to address the complexity of fragmentation while ensuring that all critical aspects are covered before the transition to the ideal collaboration model. The visualization of the metamorphosis process from themes to integrated aspects can be seen in Figure 3.

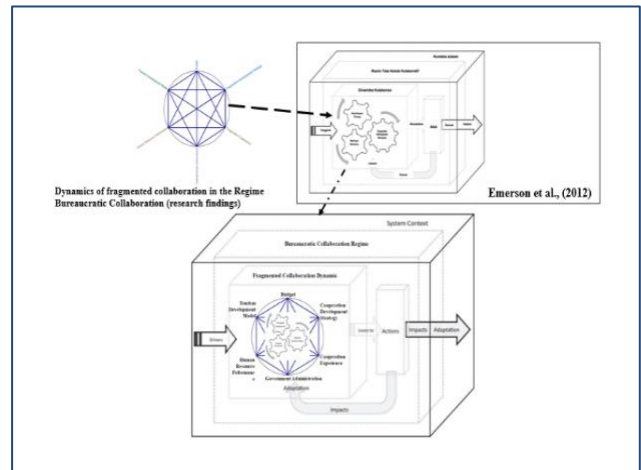


Figure 4: The metamorphosis of fragmented collaboration dynamics results in the Integrated Collaborative Governance Metamorphosis Model (ICGMM)

Source: Processed by the researcher, 2025

This study shows that the collaboration dynamics in area management are still fragmented. This fragmentation is reflected in the weak integration between institutions, unclear roles, and minimal coordination. To address this issue, a metamorphosis towards more integrated, adaptive, and responsive collaboration dynamics is required, in line with the model proposed by Emerson et al. (2018). This metamorphosis process involves structural and relational changes, from unresponsive bureaucracy, poorly coordinated and non-transparent budgets, to

centralized tourism policies. The final outcome of this process is the creation of harmonious integration through policy synergy, resources, and more inclusive governance, which is crucial for the sustainable development of tourism in the TWA Teluk Kupang. To realize this, collaboration among stakeholders, including the government, the private sector, and local communities, is key to overcoming the existing ecological, economic, and social challenges.

Theoretical Implications of Fragmented Collaboration Dynamics and the Integration of Collaborative Governance Models

This study adopts Collaborative Governance Regimes (CGR) as the primary theoretical foundation, with the consideration that CGR can explain the dynamics of multi-stakeholder collaboration within the context of bureaucracy and fragmentation. As explained by Emerson et al. (2012), CGR provides a comprehensive analytical framework to understand complex collaborations in public governance, including challenges arising from bureaucratic fragmentation. The main components of CGR include: (1) system prerequisites, which encompass the influence of external environments (law, politics, social) on collaboration, (2) collaboration dynamics that accommodate negotiation, trust, and leadership, and (3) collaboration outcomes in the form of actions and policy impacts. The flexibility of CGR allows it to be applied in the context of complex bureaucracy (Emerson et al., 2012). However, CGR falls short in addressing fragmentation as a primary challenge in building effective collaboration, which is where the Integrated Collaborative Dynamics Model, resulting from the metamorphosis of fragmented collaboration, provides an important addition. This model offers a more in-depth analysis of the causes of fragmentation—such as sectoral ego, overlapping regulations—as well as mitigation strategies that can be implemented within a bureaucratic regime.

The findings of this research reveal six key aspects of integrated collaboration dynamics that can enrich and complement previous theories. These aspects include: (1) the analysis of fragmentation, which has not been discussed in CGR, such as fragmentation within specific sectors like tourism development, human resources, government administration, budgeting, collaboration experience, and cooperation development strategies. The transformation of fragmented collaboration dynamics towards integrated collaborative governance can be seen as a 'new genus' in collaboration theory. This model provides practical guidelines for designing collaboration strategies for tourism development in the era of bureaucratic collaboration regimes.

Theoretically, these findings enrich the Collaborative Governance Regime (CGR) framework developed by Emerson et al. (2012). While the CGR model explains collaboration dynamics in complex environments through system prerequisites, collaboration dynamics, and collaboration outcomes, this study identifies a gap in the aspect of fragmentation. CGR does not sufficiently emphasize fragmentation as a fundamental challenge in building collaboration. This study suggests that institutional fragmentation must be recognized and addressed before effective collaboration can be formed, as also emphasized by Ostrom (2010) on the importance of institutional fit in the management of common-pool resources. In the context of TWA Teluk Kupang, fragmentation is identified through the disintegration of

government administration, unclear policy coordination, low budget transparency, and limited collaboration capacity between institutions.

This research enhances the Collaborative Governance Regimes (CGR) theory developed by Emerson et al. (2012) by adding a new element regarding fragmentation in collaboration. Although CGR has successfully explained collaboration dynamics in complex systems, this model has paid less attention to the challenges of fragmentation, such as sectoral ego, capacity imbalances, and overlapping regulations, which often hinder effective collaboration. This study demonstrates that fragmentation is not only structural but also cultural, requiring a holistic and adaptive approach to collaboration management (Gray, 1989). By adding this analysis of fragmentation, this research makes a significant theoretical contribution by introducing metamorphosis as a dynamic transitional process from fragmented collaboration to more integrated collaboration (Figure 5).

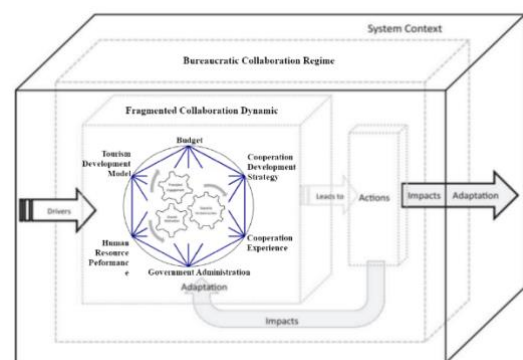


Figure 5. Integrated Collaborative Governance Metamorphosis Model

Source: Processed by the researcher, 2025

The Integrated Collaborative Governance Metamorphosis Model (ICGMM) shows that the success of collaboration does not only depend on formal relationships between institutions, but also on the dynamic interactions between structure (administration and budgeting), actors (human resources and experience), and strategic processes (model development and collaboration strategies). These findings enrich CGR with a new perspective, providing a deeper understanding of how collaboration can evolve from dysfunction to collective effectiveness, as well as offering practical guidelines for conservation area managers facing similar challenges in building more effective, adaptive, and sustainable governance.

Practical Implications of the Integrated Collaborative Governance Metamorphosis Model

This research has resulted in the Integrated Collaborative Governance Metamorphosis Model (ICGMM), designed to address fragmentation in tourism management within conservation areas such as the Teluk Kupang Marine Nature Park (TWA). This model functions as a transformative bridge that leads from fragmented collaboration towards a more holistic, adaptive, and inclusive collaborative governance system, considering social, ecological dynamics, and the needs of cross-sectoral management. The ICGMM is built on six interconnected strategic aspects: government administration, budgeting, human resource performance, collaboration experience, tourism development model, and cooperation development strategies.

Each of these aspects is analyzed based on systemic prerequisites, shared motivations, and institutional capacity, as outlined in the Collaborative Governance Regime (CGR) framework by Emerson et al. (2012).

Table 1: Integration of six aspects of integrated collaboration dynamics in the bureaucratic collaboration regime

Aspect	Prerequisite	Indicator	Collaboration Experience	Systemic Prerequisite	
Government Administration	Systemic Prerequisite	- Policy coordination and regulation between institutions - Clear legal framework for governance - Bureaucratic flexibility to respond to changing dynamics			- Regulations supporting transparency and effective communication - Legal framework for conflict mediation - Policies supporting periodic evaluations (organizational learning)
	Shared Motivation	- Leadership role in encouraging collaboration - Collective trust and commitment		Shared Motivation	- Trust between institutions - Open dialogue strengthens the shared vision - Conflict management guidelines
	Institutional Capacity	- Standardization of administrative procedures for efficiency - Mechanism for synchronizing collaborative programs		Institutional Capacity	- Consistency in institutional interactions - Ability to manage communication networks and mediation
Tourism Development Model	Systemic Prerequisite	- Alignment between tourism model and national policies	Human Resource Performance	Systemic Prerequisite	- Human resource performance aligned with government policies and regulations
	Shared Motivation	- Ability of the model to build a shared vision - Monthly consultation forum for development agenda		Shared Motivation	- Human resource skills in communication and building a shared vision - Conflict resolution training
	Institutional Capacity	- Institutional capacity to manage conflicts and resource allocation		Institutional Capacity	- Human resource development through technical and managerial training to enhance capacity in managing collaboration
Budgeting	Systemic Prerequisite	- Clear regulations for budget allocation - Alignment of fiscal policies between institutions - Budget coordination to avoid conflicts - Networks between institutions managing budgets	Collaboration Strategy Development	Systemic Prerequisite	- Collaboration strategy must align with bureaucratic regulations - A structured collaboration forum
	Shared Motivation	- Transparency and participation in budgeting - Involvement of stakeholders in budget preparation		Shared Motivation	- Strategy to build trust through continuous dialogue - Regular meetings to align perceptions
	Institutional Capacity	- Flexibility and sustainability in budget management - Institutional capacity to design and evaluate collaborations		Institutional Capacity	- Institutional capacity in managing conflicts, resources, and technology

Source: Processed by the researcher, 2025

The government administration aspect emphasizes the importance of harmonizing cross-sector policies and aligning regulations between institutions. This is essential to overcome

overlapping authority and clarify coordination mechanisms between government agencies at various levels, such as central, provincial, and district/city levels (Scott, 1995; Agranoff, 2007). The establishment of a formal and ongoing coordination forum will create space for negotiation and synchronization of more effective tourism development programs. Meanwhile, the budgeting aspect demands transparency, accountability, and flexibility in fund management. Adopting a participatory budgeting model (Bryson et al., 2015; O'Leary & Vij, 2012) in budget preparation will enhance stakeholder ownership and minimize potential conflicts over resource allocation. Strengthening the institutional capacity to manage fiscal risks and adapt to changes in program priorities is also crucial for improving the smooth allocation of collaborative-based budgets.

For the human resource performance aspect, capacity building through technical, managerial, and collaborative leadership training is essential. These training programs must focus on negotiation skills, trust-building, conflict management, and initiating collaborative innovations (Ansell & Gash, 2008; Agranoff & McGuire, 2003). Human resources must play a crucial role in managing collaboration, not only at the administrative level but also as agents of change who drive the success of collaboration. The collaboration experience aspect highlights the importance of fostering a collaborative culture based on organizational learning. Every past experience, whether successful or unsuccessful, should be archived and used as a reference for future best practices (Huxham & Vangen, 2005; Gray, 1989). The establishment of a continuous dialogue forum between stakeholders will strengthen cross-institutional communication and maintain trust among involved actors.

In terms of tourism development models, principles of ecotourism and community-based destination development should be adopted. This model must balance ecological conservation, local community empowerment, and the preservation of local culture (Dredge, 2006; Jamal & Stronza, 2009). Local communities must be involved in every stage of planning and implementation to ensure the long-term sustainability of tourism programs. For the cooperation development strategy aspect, the strategies designed should be flexible yet structured, considering local dynamics and external changes. The formulation of collaborative strategies should include incentive mechanisms, proactive conflict management, and the use of digital platforms to enhance transparency and coordination (Folke et al., 2005; Emerson et al., 2018). All actors involved must internalize this strategy as a shared guide for managing collaboration.

To ensure the sustainability and success of collaboration, a collaboration readiness assessment tool is used, which allows managers to systematically evaluate the strengths and weaknesses of each aspect before initiating collaborative efforts. This assessment involves evaluating the six aspects discussed previously, which can be illustrated through an indicator assessment matrix (Table 14) and the visualization of aspect strengths (Figure 68). This assessment tool will generate a score for each aspect, which can then be used to identify areas that need strengthening. As an example, Table 15 presents an initial design of the assessment matrix, which still requires further study to determine the appropriate weight for each indicator. The results of this assessment can be used to determine the policy steps that need to be taken to improve collaboration and strengthen areas that are less optimal.

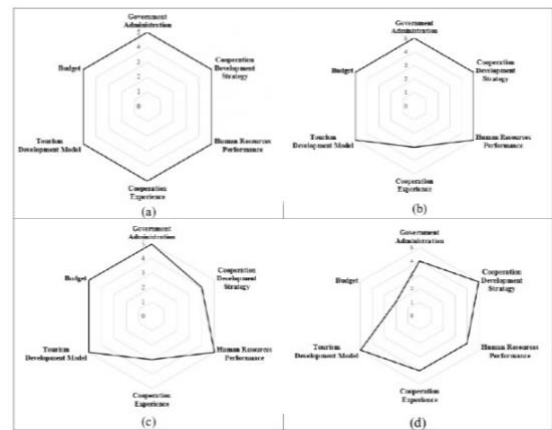


Figure 6: Visualization of the research implications in the form of strength assessments of each aspect constructing the resilience of collaborative actions

Source: Processed by the researcher, 2025

Description:

- Perfect resilience leads to collaborative action represented by a 'spider web' structure, where each aspect scores 5.
- Perfect resilience leads to collaborative action represented by a 'spider web' structure, although each aspect scores 3, not 5.
- Resilience requires strengthening of aspects to achieve collaborative action, with areas needing strengthening being collaboration experience (scoring 3 at the time of assessment) and cooperation development strategy (scoring 4 at the time of assessment).
- Resilience requires strengthening of aspects to achieve collaborative action, with areas needing strengthening being the budget (scoring 4 at the time of assessment).

The ICGMM model is not only relevant to the Teluk Kupang Marine Nature Park but can also serve as the best model for conservation areas seeking to adopt collaborative-based governance. Conservation area managers will have tools to measure the strengths and weaknesses of their collaboration systems and identify areas that need strengthening to function more effectively and sustainably. This model provides a clear, applicative framework for building effective, participatory, and sustainable cross-sector collaboration, which will yield long-term benefits both for conservation area management and the communities dependent on these natural resources.

Theoretically, this study contributes to collaborative governance scholarship by expanding the CGR framework (Emerson et al., 2012). Unlike prior studies that assume collaboration begins once conditions are favorable, this research demonstrates that collaboration often starts under fragmented regimes, requiring deliberate metamorphosis. This addresses a key gap identified in comparative governance research (Gray & Purdy, 2018; Vangen & Huxham, 2021). Thus, the proposed ICGMM can be considered a conceptual advancement, offering a new lens to analyze transitions from dysfunction toward effective collaboration in marine conservation contexts.

CONCLUSION

This study demonstrates that the management of the Teluk Kupang Marine Nature Park (TWAL) is constrained by fragmented governance dynamics, manifested in unresponsive

bureaucracy, non-transparent budgets, limited human resource capacity, and centralized tourism policies. These conditions create systemic barriers that weaken collaboration and prevent the realization of TWAL's full potential for sustainable marine tourism. The findings reveal that effective collaboration cannot emerge automatically within fragmented regimes. Instead, a metamorphosis process is required, involving structural reforms, capacity building, and adaptive strategies to bridge fragmentation. This research introduces the Integrated Collaborative Governance Metamorphosis Model (ICGMM) as a transformative framework that aligns administrative transparency, decentralized authority, participatory budgeting, and local community empowerment. By doing so, the ICGMM provides both a conceptual advancement to the Collaborative Governance Regime (CGR) framework and a practical roadmap for conservation managers.

Theoretically, the study enriches collaborative governance literature by highlighting fragmentation as a critical starting point in multi-stakeholder governance, an aspect often overlooked in existing models. Practically, the research underscores the importance of decentralizing authority, institutionalizing transparency, and strengthening human capital as prerequisites for sustainable collaboration. These insights not only apply to TWAL but also hold broader relevance for other marine and coastal conservation areas facing similar governance challenges. Despite its contributions, this study acknowledges limitations in stakeholder involvement due to time and resource constraints, as well as variations in stakeholder interests. Future research should expand participation, refine the assessment of collaboration readiness, and test the adaptability of the ICGMM in diverse socio-ecological contexts.

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