



Received: 25-09-2025
Accepted: 05-11-2025

International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

Institutional Strengthening in Mangrove Forest Management for Sustainable Ecotourism from the Perspective of Common- Pool Resources (CPRs)

¹ Rahayu Sulistiowati, ² Nana Mulyana, ³ Dodi Faedlulloh, ⁴ Ani Agus Puspawati, ⁵ Anisa Utami
^{1, 2, 3, 4, 5} Public Administration, Faculty of Social and Political Sciences, University of Lampung, Indonesia

DOI: <https://doi.org/10.62225/2583049X.2025.5.6.5247>

Corresponding Author: Rahayu Sulistiowati

Abstract

This research aims to analyze the role and dynamics of institutions in mangrove forest management for ecotourism, as well as to evaluate the application of Common-Pool Resources (CPRs) management principles. The study is expected to formulate an adaptive and sustainable institutional model to support mangrove forest management as a shared resource that promotes both local community welfare and environmental conservation. The research employs a descriptive qualitative approach to gain an in-depth understanding of institutional dynamics in ecotourism-based mangrove forest management in Cukunyinyi, Pesawaran Regency, from the perspective of CPRs. Data collection techniques include observation, interviews, and documentation. Data analysis follows Miles and Huberman's stages of data reduction, data display, and conclusion drawing, while data validity is ensured through source triangulation. The findings indicate that the

governance framework of common-pool resources has sufficiently supported mangrove ecotourism management in Cukunyinyi, Sidodadi Village, Teluk Pandan Subdistrict, particularly in terms of resource availability, commitment, and monitoring. Given the open-access nature of mangrove forests as a public good, the area meets the criteria of CPRs in natural resource management. Furthermore, the Sidodadi Village Government has established institutional structures through village regulations and the Village-Owned Enterprise (BUMDes) that actively support mangrove ecotourism. Nonetheless, the development of Cukunyinyi ecotourism faces significant challenges, including inadequate infrastructure (poor road access and drainage), limited tourism promotion, shortage of trained human resources for guiding and facility management, and constraints in securing environmental conservation funding.

Keywords: Institutional Strengthening, Sustainable Ecotourism, Mangrove Forest Management, Common-Pool Resources (CPRs)

Introduction

Institutions serve as rules and guidelines that regulate binding or interdependent relationships within a community group. Institutional arrangements can be determined by several elements: operational rules for resource utilization, collective rules for decision-making, law enforcement and modification of operational rules, as well as the regulation of organizational authority relations (Ostrom, 1990). Fundamentally, institutions are established to prevent opportunistic behavior, reduce rent-seeking and free-riding tendencies, and enhance information exchange among stakeholders, thereby minimizing coordination costs (Eggertson, 1990 as cited in Nurgoho, 2013). The effectiveness of institutions is determined by the effectiveness of social interactions, which include participation in rule-making processes that foster a sense of ownership of the rules, as well as communication, interpretation, and internalization of rules that involve knowledge, experience, and existing networks of power (Ribot & Peluso, 2003). In addition to social interaction, institutional effectiveness is influenced by several other factors, such as the value and scarcity of resources (Sudtongkong & Webb, 2008), dependence on resources (Nurlaila *et al.*, 2014), state policy support, technology and markets, community and resource characteristics (Agrawal, 2000; Nursidah *et al.*, 2012), clarity of boundaries, and the number of resource users associated with institutional enforcement (Wittayapak & Dearden, 1999). Clearly defined boundaries are regarded as a key institutional factor for the success of sustainable resource management (Ostrom, 2000; Agrawal, 2000), as they reduce uncertainty regarding who benefits and who bears the costs (Gibson *et al.*, 2000).

Mangrove forests are one of the coastal ecosystems with significant ecological, economic, and social value. Beyond their

function as natural buffers against coastal abrasion and climate change, mangroves also provide resources that can be utilized for community-based ecotourism development. However, the use of mangrove forests for ecotourism often generates conflicts of interest among stakeholders, environmental degradation, and failures in sustainable resource governance.

In the context of common-pool resource (CPR) management, the success of mangrove forest management is largely determined by the effectiveness of local institutions and organizations involved. Ostrom's CPR framework emphasizes the importance of rules, social norms, and organizational structures that enable resource users to collectively regulate, monitor, and sustain the resources. Unfortunately, in many cases, local institutions managing mangrove areas remain weak, poorly organized, or lack government policy support. On the other hand, ecotourism initiatives managed through participatory and community-based approaches may serve as key drivers for institutional strengthening and incentives for environmental conservation.

Sidodadi Village, located in Teluk Pandan Subdistrict, Pesawaran Regency, Lampung Province, covers an area of 563.25 hectares and is home to 534 households. The village also possesses natural resource potential for ecotourism development, particularly mangrove forests managed by the Village-Owned Enterprise (BUMDes) and the Tourism Awareness Group (Pokdarwis). This mangrove area, covering approximately 12 hectares, is popularly known as "Cuku Nyi Nyi Mangrove Ecotourism," which serves as both a natural tourism destination and a center for mangrove-based environmental education in Lampung.

CPRs are characterized by their economic value and the difficulty of excluding potential users from benefiting from them (non-excludability). Moreover, CPRs face the problem of overexploitation because, unlike public goods, their use by one actor reduces the availability for others (subtractability/rivalry) (Ostrom, 2003). The management of CPRs requires collective action to ensure sustainability (Edwards & Steins, 1999; Nursidah *et al.*, 2012; Cox *et al.*, 2010; Kobayashi *et al.*, 2014; Carter & Heikkilä, 2014). Numerous studies have shown that local institutions play a decisive role in ensuring sustainable resource governance, including for CPRs such as forests, although debates remain regarding the most suitable forms of local institutions and tenure arrangements for CPR management (Gautam & Shivakoti, 2005; Baral & Stern, 2011).

This study, therefore, aims to analyze the roles and dynamics of institutions in mangrove forest management for ecotourism, as well as to evaluate the extent to which CPR principles have been applied in practice.

Mangrove forests represent one of the most significant common-pool resources (CPRs) with high ecological, economic, and social value, particularly in Indonesia's coastal regions. However, numerous reports indicate that mangrove ecosystems continue to face pressures from land conversion, exploitation, and weak institutional governance at the local level. These conditions directly contribute to the decline of coastal protection functions, the loss of biodiversity, and the diminishing livelihoods of coastal communities.

In this context, sustainable mangrove forest management cannot be separated from the effectiveness of institutions

that regulate access, control, and the distribution of benefits from these resources. According to Ostrom's theory of Common-Pool Resources, the success of resource governance largely depends on the existence of adaptive, participatory, and resilient local institutions. Nevertheless, previous studies have demonstrated that many mangrove areas in Indonesia lack institutional capacity sufficient to address these challenges.

Furthermore, the potential for mangrove-based ecotourism development has not been optimally utilized as a strategy for both conservation and local economic enhancement. An ecotourism approach that is institutionally managed can serve as an incentive mechanism for ecosystem preservation. Therefore, this research is crucial to examine how institutional strengthening can promote sustainable mangrove forest management, particularly in the context of ecotourism development by integrating institutional perspectives and approaches. Moreover, this study is expected to provide both practical and theoretical contributions to the formulation of equitable, sustainable, and adaptive coastal resource management policies.

Research Methods

This study employs a descriptive qualitative approach, aiming to gain an in-depth understanding of institutional dynamics in the management of mangrove forests for ecotourism. According to Mappasere *et al.* (2019), qualitative research is descriptive in nature, tends to employ analytical techniques, and is essentially exploratory. This approach is adopted as it enables researchers to capture social realities holistically and contextually, particularly in relation to common-pool resource management.

The research focuses on the following aspects:

1. The structure and dynamics of institutions in mangrove forest management.
2. The application of CPR principles at the community level.
3. Barriers and challenges of local institutional arrangements.
4. The roles of local communities and other actors in decision-making processes.

The fieldwork is conducted in the mangrove forest area of Sidodadi Village, Teluk Pandan Subdistrict, Pesawaran Regency, Lampung Province.

Results and Discussion

Cukunyi Ecotourism is located in Pesawaran Regency, Lampung Province, which hosts an extensive mangrove ecosystem functioning as a coastal ecological buffer. In addition to serving as a vital habitat for marine biodiversity and a natural barrier against coastal abrasion, the area has also been developed as a community-based ecotourism destination. The management of mangrove forests in this region involves local communities, the village government, tourism awareness groups (Pokdarwis), non-governmental organizations (NGOs), and support from regional authorities. The key challenge, however, lies in ensuring that mangrove forest management remains sustainable—not only from an ecological perspective but also from an institutional standpoint—so that the ecosystem's role as a common-pool resource (CPR) can be governed in a fair, participatory, and continuous manner.

Institutional Arrangements in Mangrove Management

Ansell and Gash (2007: 557-561) propose that collaboration occurs in three stages: problem setting, direction setting, and implementation. In this context, collaboration is understood as an effort primarily aimed at achieving goals grounded in ideals such as communication, trust, commitment, mutual understanding, and results. It has become a fundamental vision for collaborative leaders to build trust among stakeholders. The process of building such trust is a long-term endeavor that requires considerable time and a high level of commitment.

Commitment plays a crucial role in the collaboration process because it is closely related to the intrinsic motivation of the actors involved. Each stakeholder in the collaboration inherently possesses a strong desire and commitment to fulfill their tasks and responsibilities based on collectively made decisions. A good level of commitment among stakeholders can be fostered through mutual trust, which respects the perspectives and interests of others, thereby creating a sense of shared responsibility.

It is widely acknowledged that the success of tourism development depends heavily on sound planning and responsible management. Therefore, the realization of effective tourism governance necessitates the active involvement of stakeholders through a collaborative process that includes government, private sector, international organizations, and local communities. Through collaboration among these stakeholders, it is hoped that solutions can be found to complex challenges in ecotourism development that cannot be resolved by individual actors alone.

The development of the Cuku Nyinyi Mangrove Forest Ecotourism Area has encouraged various stakeholders to collaborate with shared commitment and aligned objectives. Commitment is a crucial element that is continuously observed throughout the collaboration process, serving as the foundation for cooperation from the initial stages to the achievement of tangible results. Research findings indicate that all parties involved in the collaboration at Cuku Nyinyi demonstrate strong commitment, which is reflected in the issuance of Village Regulations aimed at protecting the environment, specifically within the mangrove forest area of Sidodadi Village—namely Perdes 01 and Perdes 02, which regulate mangrove conservation and ecotourism levies.

Beyond establishing regulations, Mr. Tunggal Saputro, the Head of Sidodadi Village, collaborates closely with multiple entities including the Village-Owned Enterprise (BUMDes), KTH Bina Jaya Lestari (Forest Farmers Group), Lanal Lampung, PT Bukit Asam, PT PLN, PT Pelindo, the Village Consultative Body (BPD), MSME groups, community leaders, and local residents. Each stakeholder has diligently performed their assigned roles and responsibilities as agreed upon during the initial collaboration arrangements.

PT Bukit Asam, a state-owned enterprise (BUMN), contributes through its Corporate Social Responsibility (CSR) program by providing funding for environmental conservation, community development, fostering good relations between the company and local communities, and enhancing the company's reputation. Due to these efforts, PT Bukit Asam has received recognition and awards from the Ministry of Environment and Forestry for its commitment to environmental and climate care. Motivated by this recognition, PT Bukit Asam continues to extend and even expand its support for ecotourism development and

community empowerment in Sidodadi Village.

Another form of commitment is demonstrated by BUMDes Sidodadi through its efforts to empower local MSME actors. According to an interview with Mr. Wiyanto, Chairman of BUMDes, various local enterprises exist in Sidodadi, including shell crafts and mangrove-based batik produced by housewives. This empowerment is supported by PT Bukit Asam's CSR initiatives, which provide funding and implement community development policies. Contributions include education and training programs facilitated with the assistance of several stakeholders to help residents capitalize on opportunities arising from the ecotourism area.

PT Bukit Asam also plays a significant role in addressing long-term challenges related to ecotourism management by organizing training programs for stakeholder actors from Sidodadi. Participants are sent to Gunung Kidul, Special Region of Yogyakarta, to acquire new knowledge that can be applied to managing the Cuku Nyinyi Mangrove Forest Ecotourism Area. Human resource challenges remain significant, including limited environmental awareness and a lack of competent personnel to fill vacant organizational positions within BUMDes. Mr. Wiyanto continues to seek qualified and credible individuals to fill these gaps. Therefore, increasing environmental awareness and encouraging community contributions to ecotourism development remain critical.

Beyond economic benefits, commitment is also evident in maintaining security, comfort, and order through the role of the Water Police. An interview with Mr. Suwartono, Head of the Water Police Unit in Pesawaran Police Department, revealed that the Water Police contribute by ensuring safety and order using approaches such as humanistic communication. Given the concerning condition of coastal areas around Sidodadi, which suffer from litter pollution, the Water Police take responsibility to educate and direct the community towards Clean and Healthy Living Behaviors (PHBS), especially since the area is an access point for tourists visiting the ecotourism site. The Water Police's commitment is further demonstrated through weekly communal clean-up activities held every Sunday along the coast.

The village government's commitment is also evident in empowering women's groups through supporting MSMEs beyond shell and mangrove batik crafts, such as Bugis culinary businesses. Interviews with local women revealed that the village government organizes weekly culinary exhibitions at the village's main access road, attracting visitors from Lampung and beyond. Coordination efforts ensure that local women are informed and prepared whenever guests arrive to visit the ecotourism area.

Furthermore, the village government is preparing for additional income-generating ventures, such as maggot farming. This initiative aims to engage the community further in sustainable economic activities linked to the ecotourism area, fostering broader participation and benefit sharing.

Share Understanding

Shared understanding is a critical factor in achieving common goals. It can be defined as a common mission, common purpose, common objectives, and a shared vision that can be implemented through relevant agreements to address existing problems.

1. Shared Understanding Focused on Common Vision and Mission

Referring to shared understanding, which emphasizes the alignment of vision and mission, these elements are essential to the success of any collaboration. Collaboration can only be established when there is agreement on a shared vision and mission, accompanied by commitments to implement agreed-upon actions. Based on field findings from interviews with several informants and researcher observations, Mr. Tunggal Saputro (Village Head) in the development of the Cuku Nyinyi Mangrove Forest Ecotourism envisions becoming the best ecotourism destination in Indonesia. The mission includes increasing community income through mangrove tourism, benefiting fishermen, local communities, and the government, promoting environmentally friendly tourism, and generating village original revenue.

Previous research by Rozikin (2019) ^[15] states that shared understanding can be developed through continuous meetings and communication, fostering mutual comprehension among actors. This aligns with field findings where stakeholders regularly communicate and hold meetings to decide on policies. Consequently, all actors clearly understand the vision and mission behind the establishment of the Cuku Nyinyi Mangrove Forest Ecotourism (Wiyanto, BUMDes). This collaborative process illustrates effective management among stakeholders, enabling shared decision-making and responsibility towards achieving common vision and mission.

2. Shared Understanding Focused on Common Goals

Collaboration is fundamentally driven by shared goals aimed at achieving the desired outcomes of the partnership. Field data indicate that the actors involved in the development of Cuku Nyinyi Mangrove Forest Ecotourism share a unified goal: to establish the mangrove forest as a tourism area capable of enhancing available resources, including natural resources, human resources, and financial assets. This is evidenced by environmental improvements and capacity building of human resources resulting from the ecotourism activities. The local community has experienced financial benefits through MSMEs and weekly markets. Additionally, every household is required to plant mangrove seedlings, fostering community capacity to nurture and care for these plants. Essentially, the management of the Cuku Nyinyi Mangrove Forest Ecotourism is carried out through community empowerment.

According to Ansell and Gash (2008), as cited in Danastry and Kurniawan (2021, p. 160) ^[14], collaborative governance is a governance type that highlights cooperation between the public and private sectors. This cooperation produces effective and targeted regulations and policies for the community. The local government has successfully coordinated this collaboration, allowing each actor to participate actively in achieving shared goals.

3. Shared Understanding Focused on Common Objectives

The collaboration undertaken is objective and impartial, without discrimination among actors involved. "Access to Authority" refers to the availability of rights and clear, acceptable procedures that all stakeholders respect. The Cuku Nyinyi Mangrove Forest Ecotourism is managed directly by the local community in cooperation with various actors such as the Village Consultative Body (BPD), Police, State-Owned Enterprises (BUMN), private sectors, tourism

awareness groups (Pokdarwis), and Forest Farmer Groups (KTH). All actors carry out their duties and roles well, which contributes to the smooth running of the collaborative process.

Field findings indicate that each actor holds specific roles and responsibilities in managing the Cuku Nyinyi Mangrove Forest ecotourism. The Village Consultative Body (BPD), PT Bukit Asam Tbk, PLN, PT Pelindo, KTH Bima Jaya Lestari, and educational institutions contribute to managing the mangrove ecotourism both financially and through training programs. Meanwhile, BUMDes, MSMEs, and the local community act as managers through village development programs.

Based on the above explanation, several challenges have been identified, including inadequate promotion and low tourist interest. Additionally, the mangrove forest management team strongly hopes for continuous training and guidance to improve the management of the mangrove forest. PT Bukit Asam Tbk, through its Corporate Social Responsibility (CSR) program, has been providing ongoing assistance and capacity-building efforts. Therefore, collaboration among all actors—including government, private sector, NGOs, educational institutions, and local communities—is essential to sustain the long-term viability of the Cuku Nyinyi Mangrove Forest.

Face-to-Face Dialogue for Trust Building in Collaboration

The government cannot work alone. In managing tourism and culture, cooperation with multiple stakeholders is required. Collaborative governance is the key. Through collaboration, various actors can work together to achieve common goals, namely effective decision-making and the development of targeted solutions. Tourism and culture are complex sectors that demand multidimensional considerations. Hence, collaborative governance becomes crucial. By involving stakeholders such as local communities, business actors, and academics, policies can be designed in a more comprehensive manner, reflecting the needs of all parties.

This study employs the framework of Ansell and Gash, which consists of five indicators: (1) face-to-face dialogue, (2) trust building, (3) commitment to the process, (4) shared understanding, and (5) intermediate outcomes. Within collaborative governance, face-to-face dialogue between actors is not only about establishing relationships but also about creating opportunities for mutual benefits and fostering trust. Trust serves as a vital foundation for aligning programs and commitments. Building trust is distinct from dialogue and substantive negotiation. It involves understanding each party's interests and perspectives, thus creating security, commitment, and a conducive environment for cooperation. A successful collaborative governance process therefore requires not only dialogue but also trust-building among actors, which becomes the key to achieving common goals and producing sustainable programs.

Face-to-face dialogue has become a fundamental component in the collaborative development of the Cuku Nyinyi Ecotourism. Direct meetings among stakeholders provide space for communication and strengthen trust. In the collaborative process, such dialogue serves as a bridge to achieve effective communication, ensuring that messages exchanged lead to shared meaning between two or more

parties. Through this process, mutual understanding and collective commitment emerge, forming the foundation of effective collaboration. Face-to-face dialogue is not a mere conversation but a complex and meaningful process of communication. Both speakers and listeners have equal opportunities to express ideas, perspectives, and concerns, complementing one another to reach shared meaning and trust.

This is reflected in field interviews with Mr. Tunggal Saputro, the village head of Sidodadi and an environmental activist, who has persistently advocated for the preservation of the Cuku Nyinyi Mangrove Forest. His vision to develop ecotourism began with courageous steps, such as building consensus through dialogue with religious leaders, community members, and traditional leaders to foster mutual understanding and shared commitment. This process resulted in *Perdes* 01, a village regulation to protect the mangrove forest. He subsequently established KTH Bina Jaya Lestari, a farmer group operating alongside the Village-Owned Enterprise (BUMDes). Later, he initiated direct dialogue with the Regent, seeking permission to designate state forest areas as protected forest. This dialogue opened up new opportunities for ecotourism development, which was formalized through *Perdes* 02, balancing conservation with economic benefits. This collaborative, dialogue-driven approach demonstrates that determination, cooperation, and open communication can achieve collective goals.

Further evidence is provided through interviews with Mr. Wiyanto, head of the BUMDes, who highlighted the importance of regular communication and meetings among actors to discuss policy decisions. This ensured that all stakeholders shared a clear understanding of the vision and mission of developing Cuku Nyinyi Mangrove Ecotourism. The consensus orientation within collaborative governance underscores the crucial role of face-to-face dialogue. Effective collaboration emerges when open discussion spaces allow stakeholders to identify joint solutions and formulate appropriate strategies. Such direct interaction not only builds trust but also fosters respect, shared understanding, process commitment, and collaborative innovation among stakeholders.

Collaborative governance in tourism development requires trust among actors (Agranoff, 2006; Kismartini & Pujiyono, 2020). The case of Cuku Nyinyi Mangrove Ecotourism illustrates the significance of building trust. As explained by Mr. Tunggal Saputro, the initial challenge lay in community skepticism due to poor access and doubts about the project's benefits. However, through perseverance, he successfully convinced the community by synergizing with the Village Consultative Body (BPD) and other local leaders. Community forums were held to discuss the goals and benefits of ecotourism, emphasizing that it served public welfare rather than private interests. By engaging all parties—local residents, business actors, and stakeholders—he succeeded in building trust and mobilizing collective involvement in ecotourism development.

Collaboration can be seen as a bridge connecting diverse actors toward shared objectives. Yet, this bridge cannot stand firm without a solid foundation of trust. Trust is vital in collaboration, nurturing a sense of security and commitment to move forward together. Without trust, suspicion and doubt would dominate interactions, hindering communication and obstructing collective goals. Conversely, trust paves the way for harmonious and

productive cooperation. Trust in collaboration goes beyond comfort—it signifies confidence in each other's capacity and commitment. With mutual trust, all parties can focus on collective objectives, work hand in hand to overcome challenges, and achieve shared outcomes.

Intermediate Outcomes

Impact, in its simplest sense, can be understood as the effect or consequence of decisions taken by individuals or institutions. It may also be seen as the subsequent results of certain actions or implementations. The village of Sidodadi has successfully developed the Cuku Nyinyi Mangrove Ecotourism through a series of productive initiatives that strategically integrate natural potential and local wisdom. By combining environmental conservation with community-based economic empowerment, the village has transformed the mangrove area into an attractive educational tourism destination.

The *Kelompok Tani Hutan (KTH) Bina Jaya Lestari* plays a pivotal role in managing the area, while local MSMEs (Micro, Small, and Medium Enterprises) have flourished by providing supporting products and services. In this process, the contribution of PT Bukit Asam has been particularly significant. The company not only offered financial assistance but also actively engaged in capacity-building programs for local residents. These training activities covered various aspects of mangrove ecotourism development, ranging from environmental conservation techniques and tourism management to MSME product development. Such contributions have accelerated community learning processes and enhanced the overall quality of ecotourism management. Through this holistic approach and strong multi-stakeholder support, Cuku Nyinyi Mangrove Ecotourism has emerged not only as a model of sustainable tourism development but also as a catalyst for the broader socio-economic progress of Sidodadi Village.

Several observable outcomes from the ecotourism development include:

1. Local economic growth – Increased income through MSME development, culinary activities (such as *nasi bakar* and traditional snacks sold by local women), handicrafts based on local resources (e.g., shell-based crafts), and growing numbers of visitors, including large groups such as university students.
2. Environmental awareness and management – Evident in community-driven mangrove planting, the establishment of a waste management system through a waste bank, and new initiatives such as maggot cultivation.
3. Strengthened social systems and coordination – Development of communication and coordination channels between tourism managers and the community through group platforms, alongside the reinforcement of communal cooperation (*gotong royong*) in joint activities.
4. Diversification and innovation – Emergence of new initiatives, including maggot farming, craft development, and culinary enterprises, demonstrating the community's capacity to innovate and diversify their income sources.
5. External partnerships and support – Active involvement of external actors such as PT Bukit Asam, which has contributed to tourism development and community empowerment, reflecting the establishment of

supportive partnerships.

These activities have created new employment and business opportunities around the mangrove and coastal ecosystem while also contributing to ecological balance and mangrove forest conservation. At the same time, visitors benefit from direct environmental education within the natural setting. Overall, these impacts indicate that the development of ecotourism has generated positive economic, social, and environmental changes for the local community, although several initiatives remain in the early stages and require further development.

Conclusion and Recommendations

The collaboration among various stakeholders—such as Mr. Tunggal Saputro as the Head of Sidodadi Village, BUMDes (Village-Owned Enterprise), KTH Bina Jaya Lestari (Forest Farmers Group), Lanal Lampung, PT Bukit Asam, PT PLN, PT Pelindo, BPD, MSME groups, several community leaders, and the local residents of Sidodadi Village—in the development of the Cuku Nyinyi Mangrove Forest Ecotourism Area demonstrates the crucial importance of cross-sector cooperation in achieving shared goals. PT Bukit Asam's contribution to environmental conservation and community development has provided a strong foundation for this collaborative effort. The success of this partnership is rooted in a shared understanding of vision, mission, objectives, and a mutual commitment, along with clearly defined roles and responsibilities for each actor involved. Despite its achievements, the collaboration faces certain challenges, such as a lack of promotion and limited public interest in tourism. These issues highlight the importance of joint efforts in strengthening promotional strategies and enhancing the attractiveness of the destination.

The actor collaboration in developing the Cuku Nyinyi Mangrove Forest Ecotourism Area further illustrates that face-to-face dialogue, trust-building, and commitment to the process are key elements in cross-sectoral cooperation. Through this collaboration, multiple stakeholders are able to work together to create comprehensive policies that align with the needs and interests of all parties involved. Trust and mutual commitment are particularly vital in the sustainable development of the Cuku Nyinyi Mangrove Ecotourism Area, as they reinforce relationships and ensure smooth implementation throughout the process. The cooperation between government institutions, the private sector, non-governmental organizations (NGOs), academic institutions, and local communities in conserving the Cuku Nyinyi mangrove forest affirms that cross-sector collaboration is essential for effective environmental preservation. Sidodadi Village has successfully developed the Cuku Nyinyi Mangrove Forest Ecotourism Area with support from PT Bukit Asam, resulting in various positive impacts—such as enhanced local economic activity, increased environmental awareness, strengthened social systems, business diversification, and expanded external partnerships. Ecotourism development has also played a significant role in maintaining environmental balance and preserving the mangrove ecosystem, demonstrating that cross-sector collaboration can generate broad benefits for both society and the environment.

In summary, cross-sector collaboration in the development of the Cuku Nyinyi Mangrove Forest Ecotourism Area has proven to be a key factor in achieving collective goals. Its success is based on mutual understanding, clearly defined

roles, face-to-face communication, trust, and commitment to the collaborative process. Challenges such as limited promotion and low tourist interest must be addressed collectively through more intensive marketing efforts and improvements to tourism appeal. Ultimately, this collaborative model has the potential to deliver sustainable benefits for local communities, the environment, and the mangrove ecosystem, while supporting the long-term viability of ecotourism and environmental conservation efforts.

References

1. Arianti D, Satlita L. Collaborative Governance Dalam Pengembangan Konservasi Mangrove Baros di Desa Tirtohargo Kecamatan Kretek Kabupaten Bantul. *Journal of Public Policy and Administration Research*. 2018; 3(6):809-827.
2. Latif B. Optimalisasi Pemanfaatan Hutan Mangrove Berbasis Ekowisata Untuk Meningkatkan Perekonomian Masyarakat Pesisir Kota Tanjungpinang Mengunkan Konsep Lingkungan Bakau Kite. *Jurnal Ilmiah Akuntansi Dan Finansial Indonesia*. 2018; 1(2):65-78.
3. Mengenal Analisis Tematik: Apa Itu dan Bagaimana Melakukannya? Universitas Medan Area, 2024. <https://lp2m.uma.ac.id/2022/08/03/mengenal-analisis-tematik-apa-itu-dan-bagaimana-melakukannya/>
4. Penelitian Kualitatif: Pengertian, Metode, Jenis-Jenis, dan Karakteristik. Gramedia Literasi, 2024. <https://www.gramedia.com/literasi/penelitian-kualitatif/>
5. Suroija N, Asrori M, Nugroho BS. Strategi Pengembangan Ekowisata Dengan Model Pentahelix Pada Karang Jahe Beach Kab Rembang. In *Prosiding Seminar Hasil Penelitian dan Pengabdian Masyarakat*, May 2022; 4(1).
6. Syari C, Prasetyo BA, Dwiputra MA. Autokologi sebagai Tahapan Awal Rehabilitasi Ekosistem Mangrove Cuku Nyinyi, Desa Sidodadi, Kecamatan Teluk Pandan, Pesawaran. *INSOLOGI: Jurnal Sains dan Teknologi*. 2024; 3(1):76-82.
7. Alamsyah D, Mustari N, Hardi R, Mone A. Collaborative Governance dalam Mengembangkan Wisata Edukasi di Desa Kamiri Kecamatan Masamba Kabupaten Luwu Utara. *FisiPublik: Jurnal Ilmu Sosial dan Politik*. 2019; 4(2):112-127.
8. Maulana MFA, Putri SW, Ariesmansyah A. Analisis Collaborative Governance di Dinas Kebudayaan dan Pariwisata Kota Bandung. *Innovative: Journal of Social Science Research*. 2024; 4(1):4986-5004.
9. Permana RG, Afrizal T, Subowo A. Analisis Kolaborasi Dalam Pengelolaan Desa Wisata: Kasus di Desa Nganjat Kecamatan Polanharjo Kabupaten Klaten. *Journal of Public Policy and Management Review*. 2023; 12(2):667-679.
10. Saputra D. Tata Kelola Kolaborasi Pengembangan Kampung Wisata Berbasis Masyarakat. *Government: Jurnal Ilmu Pemerintahan*, 2020, 85-97.
11. Sudirman FA, Tombora ITA, Tarifu L. Tata Kelola Kolaboratif (Collaborative Governance) Pembangunan Pariwisata Bajo Mola Wakatobi. *Indonesian Journal of International Relations*. 2022; 6(1):114-132.
12. Umar A, Burhanuddin B, Nasrullohaq N. Kolaborasi Aktor dalam Pembangunan Pariwisata Hutan Mangrove Tongke- Tongke Kabupaten Sinjai, Sulawesi Selatan.

- Matra Pembaruan: Jurnal Inovasi Kebijakan. 2019; 3(1):57-66.
13. Yahya AS, Wardhono H, Haryati E. Pengembangan Desa Wisata Dalam Perspektif Collaborative Governance di Kota Wisata Batu. Soetomo Administrasi Publik. 2023; 1(3):535-550.
 14. Danastry AG, Kurniawan T. Tata Kelola Kolaboratif pada Penetrasi Jaringan Fixed Broadband di Indonesia. Jurnal Ilmiah Administrasi Publik. 2021; 7(2):158-163.
 15. Rozikin M. Kolaborasi Antar Stakeholders Penta Helix Dalam Pengembangan Kota Kreatif (Studi di Kota Malang). Pangripta Jurnal Ilmiah Kajian Perencanaan Pembangunan. 2019; 2(2):49-57.
 16. Taufiq A. Kolaborasi Stakeholders Dalam Pengembangan Agrowisata Jambu Kristal. JIAN-Jurnal Ilmu Administrasi Negara. 2021; 5(1):16-24.
 17. Firdaus M, Isabella M, Ningsih NS. Collaborative Governance Sebagai Langkah Pengembangan Pariwisata di Kabupaten Karimun. Journal of Comprehensive Science (JCS). 2022; 1(3):460-465.
 18. Maulana MFA, Putri SW, Ariesmansyah A. Analisis Collaborative Governance di Dinas Kebudayaan dan Pariwisata Kota Bandung. Innovative: Journal of Social Science Research. 2024; 4(1):4986-5004.
 19. Medho YF. Collaborative Governance Antara Bengkel APPEK Dengan Pemerintah Desa Lifuleo Dalam Pengembangan Wisata Pantai Oesina. Innovative: Journal of Social Science Research. 2023; 3(3):5705-5721.
 20. Pamungkas OD, Sudibyo DP. Collaborative Governance Dalam Program Perbaikan Rumah Tidak Layak Huni di Kota Surakarta. Journal of Governance and Policy Innovation. 2021; 1(1):1-17.
 21. Rahman AFB, Zitri I. Collaborative Governance dalam Perkembangan Pariwisata di Kawasan Senggigi Kabupaten Lombok Barat. Nusantara Hasana Journal. 2023; 3(2):144-159.
 22. Sudirman FA, Tombora ITA, Tarifu L. Tata Kelola Kolaboratif (Collaborative Governance) Pembangunan Pariwisata Bajo Mola Wakatobi. Indonesian Journal of International Relations. 2022; 6(1):114-132.