



Multilevel Governance and Adaptation of the GSTC International Regime in the Implementation of the Sigending Area Development Policy

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ABSTRACT

This study aims to analyze the dynamics of Multilevel Governance (MLG) in the implementation of the Sigending Ecotourism development policy and to examine how the Global Sustainable Tourism Council (GSTC) international standards are adapted at the local level in Teluk Sulaiman Village. The study uses a descriptive qualitative approach with a case study strategy through in-depth interviews, observations, document studies, and data triangulation. Informants consisted of village and district governments, Pokdarwis, FORLIKA, and conservation NGOs. The results show that Sigending's governance has mixed MLG characteristics with a predominance of type II, marked by overlapping authorities, dependence on non-state actors, and limited technical capacity in the village. GSTC standards have not been socialized and have not been translated into regional technical instruments or village SOPs, resulting in a translation gap between global norms and local implementation. At the district level, tourism policies do not yet provide operational guidelines based on GSTC indicators, while at the village level, regulations are still in draft form and monitoring mechanisms are not yet based on sustainability standards. In conclusion, the successful implementation of sustainable ecotourism in Sigending requires formal cross-level integration, the development of GSTC technical guidelines at the district level, capacity building in villages, and permanent multi-actor coordination mechanisms.

INTRODUCTION

Sustainable tourism development is increasingly becoming a strategic need in the governance of coastal areas in Indonesia, especially in areas that have sensitive mangrove ecosystems such as the Sigending Area in Sulaiman Bay, Berau Regency. This area has been designated as a protected area and ecotourism through the Decree of the Regent of Berau Number 474 of 2016 which designated 1,500 hectares of mangroves as a conservation and ecotourism area (Regent, 2014). This potential is strengthened by the existence of regional plans such as the 2016-2031 Regional Tourism Development Master Plan (RIPK) and the 2021-2026 Berau Regency RPJMD which emphasizes ecotourism development as a regional development strategy. However, at the village level, the implementation of these policies is highly dependent on local capacity, village regulations, and the involvement of non-governmental actors, who often face limited funding, human resources, and institutional coordination (RIPARDA, 2025) (Jamaluddin, 2021).

Previous academic studies have shown that sustainable tourism management in coastal areas is greatly influenced by cross-level interaction of government and local institutional capacity. Research (Triastuty et al., 2024) confirms that the success of coastal destination development depends on local ability to manage resources, build organizational structures, and ensure community participation and that governance is a determining factor in policy effectiveness. In the context of sustainability standards, sustainable tourism indicators can only be implemented if they are supported by technical instruments and policy mechanisms that are adaptive at the local level (Leite & Lousada, 2022). Meanwhile, (Giampiccoli, 2020) found that Community Based Tourism (CBT) practices in developing countries are largely controlled by networks of non-state actors, thus creating a type II governance model that is flexible but vulnerable to institutional sustainability when not supported by formal government capacity. In line with this, various recent studies show that villages or villages including coastal destinations generally face limited human resources, lack of funding, and weak regulatory support, this condition makes community tourism initiatives vulnerable and demands multilevel governance that integrates central policies, regional capacity, and strengthening local institutions to ensure the sustainability of tourism businesses (Wijayanti et al., 2022) (Cikolelet, 2024) In addition, maritime destination case research shows that the effectiveness of tourism policy implementation at the regional level is highly dependent on collaboration models between actors (local governments, communities, the private sector, and NGOs) and the existence of adaptive policy instruments to translate global standards into local practices (Arfin & Salim, 2021).

The novelty of this research lies in the merger of two focuses that are rarely combined simultaneously in the study of community destinations, the application of Multilevel Governance theory to map the path of international standard policy translation (GSTC) to district technical instruments and village regulations and, the empirical evaluation of the extent to which the international regime adaptation process (GSTC) is truly reflected in regulations, SOPs,

indicators, and management practices at the Sigending village level. In other words, this study not only illustrates who plays a role, but also how international norms become or fail to become operational guidelines at the lowest levels of governance. Research questions Based on this background, this study answers the question 1) How is the configuration of multilevel governance in the implementation of the Sigending Ecotourism development policy? 2) How are the international standards of the GSTC translated into policies and practices at the district and village levels? 3) What factors cause the translation gap between global norms and local implementation in Sigending?

The purpose of this study is to analyze how Multilevel Governance works in the implementation of the Sigending Area development policy, as well as how the GSTC international standards are adapted and translated into local policies, including the Sigending Regional Regulation, RIPK, Berau RPJMD, and village action plans. This research also aims to identify the positions, authorities, and interests of actors across the levels of the central government, districts, villages, communities, and NGOs and assess the extent to which the interaction between these actors affects the success of sustainable ecotourism development in Sigending. Through this approach, the research is expected to make a theoretical contribution to the study of tourism governance and offer evidence-based policy recommendations for local governments and village governments.

LITERATURE REVIEW

The concept of Multilevel Governance (MLG) departs from the idea that public authority is no longer centralized in one state actor, but is spread across various levels of government and non-state actors interacting with each other. MLG's classical literacy explains that contemporary government structures cannot be analyzed only through hierarchical regional central relationships (Hooghe et al., 2020). The concept of Multilevel Governance (MLG) explains how authority, decision-making processes, and policy implementation are no longer in one single level of government, but are scattered and interacting with each other at various levels of government and non-state actors. This model separates the two main forms of Type I MLGs, which are hierarchical, structured, and based on formal jurisdictional divisions and Type II MLGs, which are characterized by flexible networks, the role of non-governmental actors, and collaborative mechanisms that do not always follow administrative boundaries. In the context of coastal area management and local tourism (Hooghe et al., 2020). Recent research confirms that the Multilevel Governance approach is important to understand how national policies and global standards translate into local practices through cross-actor coordination, local government capacity, and interaction between communities, governments, and business actors in the management of tourist destinations (Arfin & Salim, 2021). This confirms the relevance of MLG as an analytical framework to see how Berau Regency and Teluk Sulaiman Village manage Sigending development policies.

The Global Sustainable Tourism Council (GSTC) is an international regime that produces sustainability standards that are used as a reference for tourist destinations in various countries. However, the literature shows that the

successful adoption of GSTC is highly dependent on policy translation mechanisms into regional technical instruments, including indicators, SOPs, monitoring systems, destination governance, and certification. Recent research confirms that sustainability standards will only be effective if they are translated into regional policies through operational regulations, coordination between actors, and institutional capacity at the local level (Lolkary & Laurens, 2024). With this, the challenges of GSTC integration in the context of Sigending can be mapped through the ability of districts to translate global standards into local policies, as well as the ability of villages to implement them in practice. Recent literature highlights that coastal destinations have high ecological sensitivity and socioeconomic dependence, thus requiring an adaptive, integrated, and participation-based governance model. (Triastuty et al., 2024) show that local institutional capacity is the main factor that determines the sustainability of coastal area management. In the context of Sigending, these findings are relevant to the condition of limited human resources, funding, and operational instruments at the village level.

Sustainable coastal governance also demands synchronization between conservation, local economies, and social sustainability dimensions that are also reflected in the GSTC standard. The Community Based Tourism (CBT) study shows that non-state actors such as local communities, Pokdarwis, BUMDes, and NGOs are often the main drivers of tourism development in the region when government capacity is limited. (Giampiccoli, 2020) found that these models can generate innovation but face sustainability risks when not supported by regulatory frameworks and formal policy instruments. In the context of Sigending, the position of NGOs and communities as the main implementers shows the character of Type II MLGs, which reinforces the relevance of this theory in research. Research on the implementation of tourism policies in local governments shows that the main obstacles lie in limited technical capacity, cross-level coordination, and unstable funding (Cikolelet, 2024). These findings are in line with the condition of villages and districts in the context of Sigending, where regional planning (RIPK, RPJMD) has not been translated into operational guidelines, indicators, and evaluation systems. Thus, this literature strengthens the argument that successful GSTC integration requires the role of districts as translators of global standards and facilitators of local implementation.

METHODOLOGY

This study uses a descriptive qualitative approach with a case study strategy, because the research focuses on an in-depth understanding of the dynamics of multilevel governance in the development of Sigending Ecotourism in Kampung Teluk Sulaiman. This approach was chosen to describe the process of policy implementation, relationships between actors, and the adaptation mechanism of the GSTC international standards in local contexts involving various levels of government and non-state actors.

The research location is in Teluk Sulaiman Village, Biduk-Biduk District, Berau Regency, which is the center of the management of the Sigending Ecotourism Area. This research involved seven key informants from three levels of governance, namely village governments (Village Secretary), district

governments (Tourism Office), and community and non-state actors such as Pokdarwis, FORLIKA, YKAN, and other conservation partner institutions. The selection of informants was carried out using the purposive sampling technique, which is selecting informants who have knowledge and direct involvement in the management of the Sigending area, as well as snowball sampling to expand the network of informants based on recommendations in the field.

The data collection technique was carried out through four methods, namely in-depth interviews, non-participatory field observations, document studies, and digital searches. The interviews were conducted in a semi-structured manner to explore narratives related to the division of authority, policy implementation practices, cross-level coordination, and challenges in implementing the GSTC. Document data was analyzed from various official regulations such as the Berau RPJMD 2021-2026, RIPPARDA 2018-2031, the Tourism Office Strategic Plan, the Sulaiman Bay RPJMK, and the draft Sigending Village Regulation, including the GSTC international standard document.

Data analysis was carried out using a qualitative analysis model (Miles & Huberman), which consisted of three stages of data reduction, data presentation, and conclusion drawn. Data reduction was carried out by grouping findings into three levels of governance (national, district, village), while data presentation was carried out through MLG type mapping, identification of actors, and analysis of policy conformity with GSTC standards. Conclusions were drawn by connecting empirical findings with the concept of Multilevel Governance theory and sustainable tourism literature.

To ensure the validity of the data, the study used source triangulation and triangulation methods by comparing the results of inter-stakeholder interviews, matching field data with formal policy documents, and verifying findings through the GSTC standard as a global reference. This research is limited to the analysis of the implementation and governance process, not to the evaluation of the economic impact of tourism. Thus, the method used allows researchers to comprehensively describe the dynamics of cross-level governance in the management of the Sigending area.

RESULTS AND DISCUSSION

The results of this study show that the development of sustainable tourism in Berau district, especially in Teluk Sulaiman Village, is supported by various programs and policies as stated in the village regulations on the protection and management of the SiGending Area. This policy is aimed at preserving ecosystem diversity and advancing the welfare of the community through sustainable ecotourism management. And based on the analysis of the planning documents of the Teluk Sulaiman RPJMK, the Berau Regency RPJMD and all field interviews, it can be seen that the SiGending governance pattern has the character of Multilevel Governance (MLG) and is dominant to type II (network-based governance), namely the existence of overlapping authority, the role of non-state actors such as NGOs, Pokdarwis, limited village technical capacity and the absence of a formal mechanism for adaptation of GSTC international standards at the village and district levels. Empirical sources of the village

regulation and RPJMK, interviews with the village secretary (Mr. Suryandi Lesmana), the Chairman of the Pokdarwis (Mr. Risno Kyai), the Chairman of Forlika (Mrs. Vera Rosita Ekayanti).

Table 1. Challenges and obstacles at 3 levels of governance (international or national, district, village or community).

Level	Key challenges and barriers	Proof of source (documents and interviews)
International/National (GSTC relevance)	At this level, the GSTC has not been socialized and has not been lowered to the village level (global standards are not integrated into regional technical documents).	(Lesmana, 2025) " <i>there is no standard like GSTC</i> ". Analysis of national legislation and no GSTC reference in the RPJMK document.
Kabupaten /Regional (berau)	District Policy (RPJMD) mentions tourism development but has not yet translated GSTC into SOPs or indicators such as technical coordination of districts to weak villages and funding schemes for tourism infrastructure depending on the APBD (Regional Revenue and Expenditure Budget) cycle and musrenbang proposals (development planning deliberations).	(RPJMK, 2022) RPJMK has no GSTC indicator, (Lesmana, 2025) states that the follow-up of Bapelitbang to the tourism office requires a technical program.
Village/local/community	The village regulations are still in the form of drafts or have not been fully ratified, operational SOPs have not been prepared, human resources and funding are limited, evaluations are ad hoc or not based on GSTC indicators and	Draft of the Planning Regulation and Participation Articles) and Pokdarwis Interviews (Kyai, 2025). Mangrove Planting Activities, Locket Management, Simple Report, Chairman of Forlika (Rosita Ekayanti, 2025)

	dependence on NGOs, then on the behavior of tourists and residents who still throw garbage and touch animals become a conservation threat	(Scott, Scott, Scott)
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(Note: the table above summarizes the main evidence of the RPJMK document, the draft of the Perdes, and related interview excerpts.)

International or National Level, Regulatory Regime (GSTC)

At the international level, the Global Sustainable Tourism Council (GSTC) acts as a global regime that develops tourism sustainability standards through the four main pillars of destination management, socio-economic sustainability, cultural preservation, and environmental conservation (GSTC, 2019). Many countries have adapted the GSTC into national technical instruments. Thailand, for example, integrates the principles of the GSTC in the Thailand Sustainable Tourism Standards program and the development of community-based tourism through a capacity building and community government collaboration approach (Lee-anant & Kungwansith, 2025). In addition, Costa Rica adopts Certification for Sustainable Tourism (CST), which is one of the most established certification models in the world and explicitly follows a sustainability framework in line with the GSTC (Lee-anant & Kungwansith, 2025). In Kenya, community-based ecotourism practices show a similar pattern of adaptation, i.e. downgrading the value of global sustainability to community-based management (Talvinen, 2017). These comparative findings suggest that cross-border GSTC adaptation has a pattern of whether or not the need to translate global standards into clear local operational instruments.

In the Indonesian context, GSTC adaptation has begun to be carried out, but most of it is still at the evaluative, not technical, level. Various studies in the Indonesian context confirm that some local destinations have entered the sustainability assessment stage using comprehensive indicators such as the study of tourist villages in West Sumatra, which evaluates stakeholder commitments, socio-economic performance, and environmental aspects as a foundation towards sustainable management (Ferdian et al., 2024). Indonesia also has official guidelines for the GSTC-based Sustainable Tourism Guidelines from the Ministry of Tourism and Creative Economy in 2022, but its implementation has not been fully internalized to regional policies (Kemenparekraf, 2022). Research findings on village tourism in Indonesia show that technical regulations and local policies often overlap and are less adaptive to local conditions, which is the main obstacle in the translation of sustainability principles into operational practices at the village or tourism level (Wibowo & Nur, 2024). An analysis of tourism villages in Manggarai reveals that without clear village regulations, it is difficult to realize a strong institutional monitoring and management mechanism for the sustainability of community tourism (Manggarai, 2024). This condition is consistent with the general pattern in developing countries that are facing a

translation gap between global standards and national capacity due to the lack of technical instruments, institutional capacity, and adequate monitoring systems (Palikhe et al., 2020).

With this, the opportunity for GSTC adaptation in Indonesia is very large. First, the Indonesian government is strengthening the destination standardization agenda through Permenparekraf 11/2022 and RPJMN 2020-2024, which are highly compatible with the four pillars of the GSTC. Second, many Indonesian destinations, including Berau mangroves, have a high conservation value so that they have the potential to enter global certification schemes such as Green Destinations and CST. Third, the presence of international conservation NGOs in various regions (e.g. YKAN in Berau) opens up opportunities for knowledge transfer and capacity building. Thus, Indonesia's current position is at a semi-adaptive stage of the value of sustainability is recognized, partially implemented, but does not yet have a complete technical instrument like Thailand or Costa Rica.

Regional District Level

At the district level, the adaptation of GSTC is greatly influenced by the technical capacity of local governments, cross-sector coordination, and planning instruments. Analysis of the Berau RPJMD 2021-2026, RIPPARDA 2016-2031, and Strategic Plan Perbup 38/2021 shows that Berau Regency has provided a strategic place for ecotourism and conservation development, however, these documents have not lowered the GSTC principles into technical indicators, SOPs, or monitoring systems. In the 2021-2026 Berau Regency RPJMD document, it is used as a strategic guideline for medium-term regional development, all regional apparatus are required to draft a Strategic Plan based on the RPJMD so as to allow the alignment of sectors, including tourism or the environment, in planning, although in the process of drafting the 2021-2026 RPJMD, Berau Regency includes the preparation of supporting documents for the RKPD strategic environmental assessment as part of environmental planning, this is the basis for but there is no indication in the publication of the document that the KLHS-RPJMD or its derivative documents include sustainability standards or technical indicators or specific monitoring or reporting systems that are in line with international standards such as the GSTC. In the summary of the KLHS validation publication, strategic issues in the environment are generally referred to as water degradation, overlapping forest area management, and climate change (RPJMD, 2021). Then in the Berau Regency Regional Regulation document Number 3 of 2018 concerning the Regional Tourism Development Master Plan 2016-2031 (RIPPARDA) shows that the district regulates the development of the tourism sector in the long term, but this document provides a long-term framework for tourism development but the abstract content and structure are not the inclusion of specific indicators of conservation or environmental sustainability (RIPARDA, 2025). The Berau Regent Regulation Document Number 38 of 2021 concerning the Regional Apparatus Strategic Plan 2021-2026 shows that each regional apparatus must make a Strategic Plan in accordance with the RPJMD. With this in mind, there is a formal planning

mechanism to translate the vision or mission of the region into a program, which allows the integration of the tourism or environmental sector at the operational level but as a general planning document: there is no section that mentions conservation SOPs, tourism sustainability indicators, environmental monitoring or reporting mechanisms, or references to international standards such as the GSTC in the metadata of public legislation (Renstra, 2025). These findings are in line with research (Triastuty et al., 2024) which confirms that local governments in Indonesia often experience obstacles in bridging global standards into operational policies. Interviews with village officials (Lesmana, 2025) also show that none of the village parties understand or accept the socialization of GSTC from the district, resulting in a policy disconnection.

International comparisons show a similar pattern. In Thailand, the success of sustainability implementation occurs because the regions have a strong knowledge base and the policy framework is shifting from the central to the local (Jansuri, 2025). Meanwhile, in Kenya, districts have successfully implemented sustainable tourism through co-management between the government and the community (Talvinen, 2017). Berau faces similar challenges: regional central policy coordination is not fully synchronized, ASN technical capacity is limited, and infrastructure development and human resource training are still inconsistent. However, Berau has the structural advantages of a reputation as a world-class mangrove conservation area and the intensive involvement of NGOs such as YKAN, which is very much in line with the successful pattern of GSTC adaptation in other countries.

The opportunity for GSTC adaptation at the district level is quite large. First, the regional planning document has included the vision of ecotourism so that it is only necessary to reduce it to technical instruments. Second, Berau has active non-government actors who can be facilitators of transformation (YKAN, Pokdarwis, Forlika). Third, the Sulaiman Bay mangrove ecosystem has high ecological value so it is suitable as a pilot destination for the application of GSTC indicators. With this opportunity, Berau Regency has at least reached the stage of structural readiness, although technical implementation is still minimal. If local governments are able to develop SOPs, service standards, and audit mechanisms based on the four pillars of the GSTC, then Berau can become a national pilot.

Village, Local, Community Level to Implementation in the Field

At the village level, the implementation of sustainability principles is at the stage closest to field practice, but weakest in formal instruments. Based on the draft of the Sigending Regional Regulation, the 2022-2027 Teluk Sulaiman RPJMK, and interview transcripts, it can be seen that sustainability values such as visitor restrictions, environmental education, and mangrove conservation have been implemented voluntarily by the community. Pokdarwis implements restrictions on visitor behavior and prohibitions on feeding animals and requires tourists to bring back the waste they produce as part of the internal SOPs (Kyai, 2025). In addition, environmental education activities have been carried out through mangrove planting tour packages and counseling initiated by

Pokdarwis and FORLIKA (Kyai, 2025) (Rosita Ekayanti, 2025). Mangrove conservation efforts have also been running since before the Pokdarwis was formed, including the planting of around 250 thousand mangrove seedlings in an area of ± 25 hectares with the support of BRGM. However, the village until now does not have performance indicators, standard management SOPs at the village level, integrated monitoring mechanisms, and GSTC-based reporting systems, as conveyed by the village apparatus that there has been no direct socialization of the GSTC and village regulations regarding Sigending tourism are still in the draft stage and further discussion (Kyai, 2025) (Lesmana, 2025). This condition is in line with the findings (Giampiccoli, 2020) which states that community-based ecotourism destinations in developing countries are generally in MLG Type II relying on communities and NGOs rather than formal regulatory tools.

Comparison with Thailand and Kenya shows that the management model that occurs in Sigending is a common pattern in the newly developed mangrove ecotourism area. In Thailand, the practice of community-based tourism village management shows that successful conservation and the application of sustainable principles start with local initiatives. Community collaboration and governance strengthening before entering the formal stage such as certification or regional regulations. This phased approach has proven to be effective in ensuring operational sustainability at the destination level (Jansuri, 2025). Meanwhile, in Kenya, mangrove management and restoration are often initiated by community initiatives that manage conservation and mobilize local economic benefits before formal technical instruments and institutional support are issued by local authorities (Macamo et al., 2024) (Initiative & Studies, 2020). Thus, Sigending is in the early stages of a globally reasonable adaptation of value first, formal instruments follow.

In terms of opportunities, Sigending has strong social and ecological capital. The local community is very active (Pokdarwis, Forlika), there is support from NGOs such as YKAN, and the Sulaiman Bay mangrove ecosystem is unique in that it meets the criteria of a global sustainable destination. This condition allows the village to become a candidate for a pilot project for the implementation of GSTC indicators at the local level. The current adaptation achievement is not an instrument but the opportunity for instrument adaptation is wide open if supported by the district. Villages can immediately develop SOPs, derivative regulations, conservation indicators, and monitoring systems based on the four pillars of the GSTC, following the success patterns of Thailand and Kenya.

The results of this study make an important contribution to the enrichment of the theory of Multilevel Governance (MLG) and the theory of global standard adaptation in the context of sustainable tourism. The findings show that the flow of policies from the international level (GSTC) to the national, regional, and village levels is not linear, but in the form of a combination of Type I MLG (formal hierarchy such as RPJMD, RIPPANDA, REGENT'S DECREE) and Type II MLG (non-governmental networks such as NGOs, Pokdarwis, and Forlika). This confirms the theory that global standards are not automatically institutionalized

through bureaucratic channels, but are largely mediated by community actors and civil society organizations.

Theoretically, this study shows that the adaptation of global standards such as the GSTC requires three theoretical conditions that must be present simultaneously in the framework of macro policies (national enabling environment), technical capacity at the regional level (meso institution), and collective commitment at the community level (local stewardship). The findings in Sigending reinforce the adaptive model of governance that states that the effectiveness of the implementation of international standards is largely determined by their networks of local actors and operational capacities, not just by the power of central regulation. Thus, this study provides empirical evidence that translating global standards into local contexts requires a multilevel approach that is co-evolutionary, not just top-down. In addition, the Berau Sigending case contributes to the literature on global local fit, where the success of the adoption of international standards is determined by the suitability between the characteristics of local ecosystems (mangrove conservation), the structure of actors, and the institutional ability to adjust the GSTC indicators. These findings enrich the academic debate over sustainability that states that global standards often have to be recontextualized before they become local practices.

Then on the practical applicative implications, this study provides a number of direct implications for district governments, village governments, and sustainable tourism stakeholders. First, the findings of the gap between GSTC standards and actual conditions show the need for technical guidelines for GSTC adaptation at the Berau district level. These guidelines must include indicators, SOPs, audit mechanisms, and reporting formats that can be directly used by the village. With these guidelines, districts can act as policy translators, namely bridging global principles into operational instruments. Second, this study emphasizes the importance of strengthening technical capacity for village officials, Pokdarwis, BUMDes, and district officials. Training on the four pillars of the GSTC, destination management, visitor management, environmental monitoring, and benefit-sharing models will enhance local capacity to run destinations according to international standards.

Field findings that villages are highly dependent on NGOs (e.g. YKAN) show the need for capacity independence so that sustainability does not stop when the project is completed. Third, in terms of regional development, this study provides the basis for designing a GSTC certification pilot program for Sulaiman Bay mangrove destinations. This program can enhance Berau's reputation as a world-class conservation area while providing added economic value for the community. In addition, local governments can design multi-year funding schemes to support the strengthening of infrastructure, tourist education, and a consistent monitoring system. Fourth, for Sigending village, this research helps direct the improvement of the Ecotourism Village Regulation to include GSTC indicators more structured, set carrying capacity limits, create an institutional structure for managers, and develop rules for the distribution of economic benefits based on social justice. Thus, the implementation of

sustainability at the village level is no longer an informal value and practice, but is institutionalized in binding rules. With all these applicable implications, this research not only strengthens the scientific understanding of multilevel governance, but also provides a very concrete policy direction that can be directly used by local stakeholders to improve the implementation of sustainable tourism in Berau and Sigending.

The limitations of this research have limitations. First, the research focuses on a single case study so that the findings are not intended for statistical generalizations, but rather analytical generalizations. Second, this study does not evaluate the economic impact of tourism quantitatively but focuses on the aspects of governance and the policy adaptation process. These limitations open up opportunities for further research with comparative approaches or mixed methods.

CONCLUSION AND RECOMMENDATION

The results of the study show that the implementation process of Sigending Ecotourism development takes place in a Multilevel Governance (MLG) configuration that is not completely linear, but a combination of regional hierarchical structures and community actor networks. The adaptation of GSTC international standards has not yet been formed as an operational instrument at both the district and village levels, resulting in a translation gap between global norms and local practices. The absence of indicators, SOPs, and monitoring systems based on the four pillars of GSTC both in the RPJMD, RIPPARD, Strategic Plan of the Tourism Office, and Perdes Sigending makes sustainability standards only present as values, not governance mechanisms. At the district level, the commitment to ecotourism has been reflected in the planning documents, but has not produced technical guidelines that are able to bridge the principles of GSTC to the village level. At the village level, environmental conservation and education initiatives have been carried out by Pokdarwis, FORLIKA, and residents, but limited technical capacity, dependence on NGOs, and the absence of operational rules have caused implementation to remain informal. Thus, the success of the implementation of GSTC in Sigending is highly dependent on strengthening cross-level coordination, the preparation of district technical instruments, and increasing the capacity of local managers.

Overall, this study concludes that translating global standards into local practices requires the active role of local governments as policy translators, support of community networks as daily implementers, and integrated institutional instruments. The Sigending mangrove ecosystem, strong community actors, and NGO support show that the region has a great opportunity to achieve more comprehensive sustainability adaptation if districts and villages immediately develop SOPs, performance indicators, evaluation mechanisms, and GSTC-based regulatory tools.

ADVANCED RESEARCH

Future research is recommended to examine more deeply the institutional mechanisms and policy instruments required to effectively translate Global Sustainable Tourism Council (GSTC) standards into operational practices at the

local level. Further studies could focus on designing and testing GSTC-based standard operating procedures, performance indicators, and monitoring frameworks that are adaptable to village governance structures. Comparative research involving other ecotourism destinations with similar multilevel governance arrangements may also provide valuable insights into best practices for cross-level coordination and policy alignment. In addition, participatory action research involving local governments, community groups, and NGOs could help assess how capacity-building initiatives and regulatory innovations influence the long-term sustainability and governance effectiveness of ecotourism development.

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