



## **Pentahelix Collaboration for the Development of Lappa Laona Tourism Village, Harapan Village, Tanete Riaja District, Barru Regency**

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### **ABSTRACT**

This study aims to analyze the effectiveness of the Pentahelix collaboration model in the development of Lappa Laona Tourism Village, located in Harapan Village, Tanete Riaja Subdistrict, Barru Regency. The Pentahelix model involves five key stakeholders: government, academia, business sector, community, and media. Collaboration among these actors is considered essential in driving sustainable rural tourism development. This research employs a qualitative descriptive approach, using data collection techniques such as in-depth interviews, field observation, and documentation. The findings indicate that the Pentahelix collaboration has had a positive impact on tourism promotion, local community engagement, and institutional strengthening within the village. However, several challenges remain, including budget limitations, suboptimal cross-sector coordination, and low capacity of local human resources. Strengthening synergy among stakeholders and ensuring active government involvement are recommended to support an integrated and participatory tourism village development strategy.

**Keywords:** Pentahelix, Collaboration, Tourism Village, Rural Development.

### **A.INTRODUCTION**



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Rural tourism has increasingly become a strategic tool for local economic development and cultural preservation. Many regions are now adopting collaborative governance models to foster tourism, one of which is the Pentahelix model. This model brings together five stakeholder groups government, academia, business sector, media, and

community—to ensure sustainable and inclusive development. Collaboration is seen as critical to balance growth with the needs of local populations.

The Pentahelix framework is an extension of the Triple Helix model and emphasizes broader stakeholder involvement. Each group plays a distinct role: government formulates policy, academia offers research and education, business drives commercialization, media manages promotion, and the community ensures cultural integrity. Effective coordination among these elements is essential for long-term success (Rahman and Wardana, 2025). Lappa Laona Tourism Village in Barru Regency exemplifies the potential of Pentahelix collaboration. Known for its highland savanna views and outdoor activities like camping and flying fox, the village has attracted significant attention since its inauguration in 2018. Its accessibility and unique attractions make it a strong candidate for sustainable tourism development.

However, despite growing interest, studies on stakeholder collaboration in Lappa Laona remain limited. Most literature discusses physical tourism potential without analyzing governance models or collaborative performance. This study seeks to address that gap by examining how multi-sector stakeholders are interacting within the Pentahelix framework. Prior research suggests that successful rural tourism hinges on clear roles and cooperation among actors. Strong stakeholder partnerships lead to inclusive tourism benefits, while poor coordination can hinder progress and sustainability (Putra and Hadiwijoyo, 2024). This highlights the need for well-defined collaboration strategies.

Rural tourism initiatives also require active participation from the local community. When local people are involved in planning and decision-making, tourism tends to be more culturally sensitive and economically beneficial. Without their input, projects risk eroding social values (Rahayu and Winata, 2023). Government involvement is equally vital. Local authorities play a bridging role in regulating, funding, and aligning tourism initiatives with regional development plans. However, they often face challenges such as budget constraints, inadequate infrastructure, and limited human resources (Susanti and Mahmud, 2023).

Academics contribute by providing research, conducting training, and evaluating program outcomes. Their role ensures that tourism planning is evidence-based and responsive to both environmental and socio-economic conditions (Yusuf and Halim, 2024). This is

particularly relevant in managing tourism in ecologically sensitive or culturally rich areas. The community, as one of the central actors, shapes the authenticity of the tourism experience. Their involvement ensures that tourism respects local customs, improves livelihoods, and strengthens community cohesion. When excluded, tourism risks being extractive rather than developmental (Rahayu and Winata, 2023).

Media serves as the voice and face of tourism destinations. Through effective storytelling and branding, media actors help generate interest and shape public perception. However, if media engagement is limited or misaligned with local identity, tourism promotion may fall short (Hasanah and Yusuf, 2025).

The business sector plays a critical role in enhancing service delivery, building market networks, and driving innovation in rural tourism. By aligning business interests with community values, tourism enterprises can foster inclusive economic growth (Junaedi and Salim, 2023). Indicators such as stakeholder trust, goal alignment, resource sharing, and adaptive learning are commonly used to assess Pentahelix collaboration. If these indicators function well, the collaboration has the potential to generate transformative impact on rural development (Sari and Nugraha, 2024).

Initial field observations in Lappa Laona suggest that some level of collaboration exists, especially in the areas of event management and infrastructure. However, coordination appears fragmented, with few structured mechanisms to ensure consistent inter-stakeholder communication and decision-making. This study investigates how the five stakeholder groups—government, academia, business, media, and community—contribute to Lappa Laona's development. It explores their roles, interactions, and the challenges they face in working together effectively. The research draws on qualitative data gathered from interviews and observations.

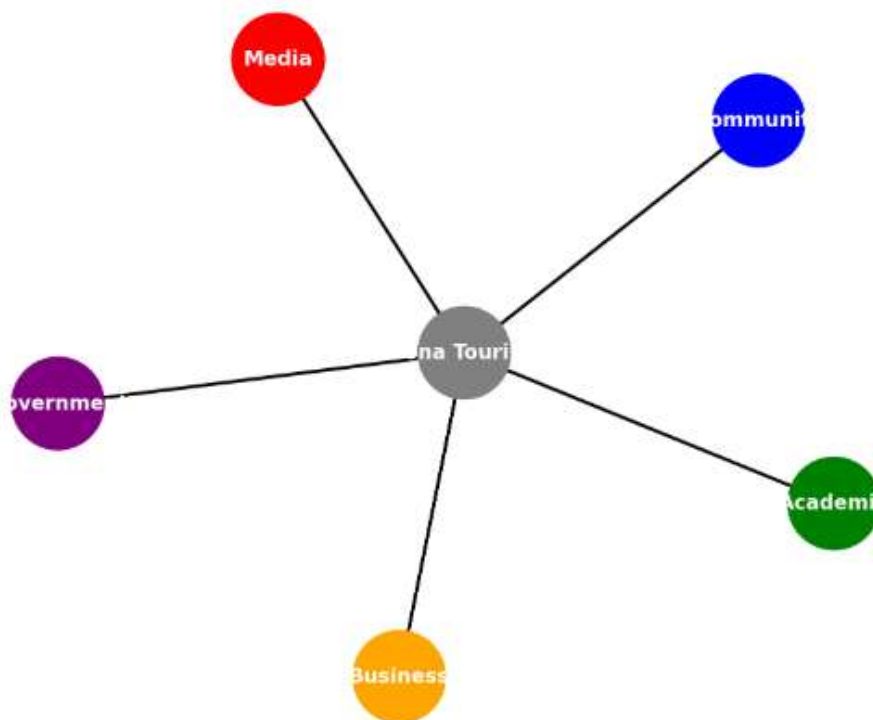
Understanding this collaboration is crucial because Lappa Laona represents a growing number of rural destinations that are actively trying to manage tourism growth. Its experiences could serve as a reference for other villages facing similar dynamics of development, resource scarcity, and stakeholder diversity. Moreover, this research contributes to existing literature by grounding the Pentahelix concept in a practical case. It helps bridge

the gap between theoretical frameworks and local implementation challenges, offering insights for policy and planning improvements.

In addition to contributing to academic discourse, this research has practical implications for tourism governance in Barru Regency. It can inform local authorities, community leaders, and private actors in creating better-aligned, people-centered tourism initiatives. Tourism villages must adapt quickly to shifting visitor expectations and global market trends. Structured, cross-sector collaboration allows rural communities to innovate while preserving their unique identities. Hence, strategic stakeholder alignment is key to resilience and competitiveness.

This introduction sets the context for understanding Pentahelix collaboration in Lappa Laona. The following sections will elaborate on the methods used, findings obtained, and implications for sustainable tourism development policy in similar rural settings.

Pentahelix Model for the Development of Lappa Laona Tourism Village



**Figure 1** Pentahelix Model for the Development of Lappa Laona Tourism Village

- a) **Green** – Academia
- b) **Orange** – Business

- c) **Purple** – Government
- d) **Blue** – Community
- e) **Red** – Media

## **B.RESEARCH METHODOLOGY**

This study adopts a qualitative descriptive approach aimed at understanding the dynamics of Pentahelix collaboration in the development of Lappa Laona Tourism Village. The qualitative method was chosen to enable in-depth exploration of stakeholder interactions, perceptions, and roles in tourism development. The research focuses on the five actors of the Pentahelix model: government, academia, business sector, community, and media.

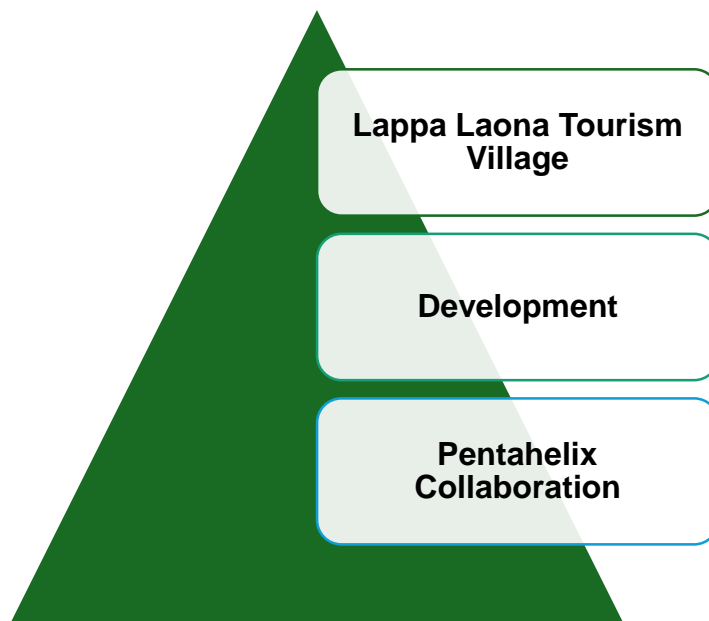
The research was conducted in Harapan Village, Tanete Riaja Subdistrict, Barru Regency, where Lappa Laona Tourism Village is located. This site was selected purposively due to its active development and visibility as a growing rural tourism destination. The selection was also based on the presence of diverse stakeholders involved in the tourism activities. Data collection techniques included in-depth interviews, direct observation, and documentation. In-depth interviews were conducted with key informants representing each stakeholder group, such as local government officials, tourism entrepreneurs, academic experts, community leaders, and local media practitioners. These interviews aimed to gather insights into their roles, contributions, and challenges in the collaborative process.

Direct observations were carried out in the tourism village to examine ongoing tourism activities, stakeholder involvement, and the condition of supporting infrastructure. The researcher documented interactions among stakeholders during events and regular tourism operations to provide contextual understanding. Documents analyzed included regional development plans, tourism promotional materials, stakeholder meeting records, and program reports. These documents served to support and triangulate the findings obtained through interviews and observations.

The data analysis technique used was interactive model analysis, which involves three main stages: data reduction, data display, and conclusion drawing. Data reduction was done by selecting, simplifying, and focusing the data relevant to the research objectives. Data display involved organizing the information into descriptive categories that reflect stakeholder dynamics and collaboration outcomes. The final stage, conclusion drawing, was

conducted by interpreting patterns, comparing field findings, and generating insights regarding the effectiveness of Pentahelix collaboration in developing the tourism village. The validity of the data was ensured through triangulation across data sources, informants, and techniques.

This methodology enabled the researcher to obtain a comprehensive understanding of the multi-stakeholder collaboration process in Lappa Laona and its implications for sustainable rural tourism development.



**Figure 2** Thinking Framework Diagram

## C. RESEARCH RESULTS AND DISCUSSION

### ➤ Lappa Laona Tourism Destination

Based on its topographical features, this region is naturally suited for nature-based tourism destinations located in highlands, plains, coastal areas, and marine zones. This discussion will focus on highland nature destinations. Tanete Riaja District is one of the districts in Barru Regency, which borders Soppeng Regency to the east. The area lies along a transit route from Makassar to the regencies of Soppeng, Wajo, and Bone.

In the local language, *Lappa Laona* means “a vast grassland as far as the eye can see.” Lappa Laona is an open natural tourism destination featuring a sweeping savanna located at

an altitude of 1,000 meters above sea level. This destination is situated in Warue Hamlet, Harapan Village, Tanete Riaja District, Barru Regency, South Sulawesi Province. The location is approximately 50 kilometers east of the capital city of Barru Regency. Lappa Laona offers an open natural landscape with stunning panoramic views from the highlands, a cool and refreshing atmosphere, and an expansive green savanna resembling a lush carpet that creates a sense of comfort and tranquility. From this altitude, visitors can also enjoy views of Pannikiang Island and the surrounding Tanete Riaja District.

The Green Highland Lappa Laona is a tourism destination that presents a savanna landscape in the highlands of Barru Regency. In addition to enjoying the grasslands, visitors can engage in various activities including a 270 meter long flying fox, camping ground, two selfie/photo spots, mountain bike park, and a number of iconic gazebos.



**Figure 1:** Villa House and Gazebo at Lappa Laona



**Figure 2:** Nighttime Atmosphere at Lappa Laona

## ➤ Research Results

This research examines the effectiveness of the Pentahelix collaboration model in the development of Lappa Laona Tourism Village, focusing on the integration of academic, business, governmental, media, and community roles. Through a series of in-depth interviews, field observations, and document analysis, the study uncovers how each stakeholder contributes to and benefits from the growth of this rural tourism destination. The data collection process revealed strong multi-sectoral participation that aligns with the foundational principles of the Pentahelix framework, highlighting the unique roles and interactions among actors.

One of the most prominent components identified in the collaboration process is the role of academia. Researchers and university representatives have actively engaged with the development of Lappa Laona as a living laboratory for tourism studies and educational fieldwork. This interaction has created mutual value: students gain experiential learning opportunities while the village benefits from exposure and tourism activities. The involvement of academia reflects a broader strategy of integrating knowledge-based support into tourism development.

According to the Head of the Tourism Development Division, interviewed on July 29, 2024, academic institutions have become an integral part of the Pentahelix model. He stated that universities frequently visit Lappa Laona as part of academic field trips and tourism activities, treating it as a learning site. He emphasized that the village has seen full participation from all five Pentahelix sectors, particularly highlighting the economic benefits gained by local residents. This reinforces the notion that academic engagement extends beyond theory into real-world community impact.

Community members have also reported positive perceptions of academic participation. Their presence is not merely observational; it contributes to local development through workshops, student involvement, and tourism promotion. This knowledge-sharing process improves the skills of local stakeholders and strengthens tourism governance. The integration of academia in tourism reflects a meaningful collaboration that transcends the passive role often associated with external researchers in rural communities.

The involvement of local business actors plays a pivotal role in the economic sustainability of Lappa Laona. Entrepreneurs and micro-investors from the surrounding region have provided critical support in the form of capital, resource distribution, and operational management. Their contributions are evident in the establishment of food stalls, souvenir outlets, and accommodation services. These ventures have not only created jobs but also stimulated income generation for both the entrepreneurs and the broader community.

During an interview on July 29, 2024, the Head of the Tourism Development Division emphasized the essential role of the community in managing business operations within the tourism village. He noted that the villagers themselves are responsible for running key services and retail activities, showcasing a model in which the business component of the Pentahelix is embedded within the community structure. This arrangement has allowed for a more inclusive and sustainable business model that benefits local stakeholders directly.

The business component of the Pentahelix model has also encouraged innovation among local entrepreneurs. Residents have introduced various tourism-related services, including guided tours, culinary specialties, and eco-friendly lodging. These offerings reflect the creativity and adaptability of the local business community. Importantly, local businesspeople have expressed a sense of ownership and long-term commitment to the success of Lappa Laona, suggesting a high level of sustainability in their business practices.

The integration of business actors has contributed to the diversification of income sources for residents of Lappa Laona. Beyond agriculture and traditional occupations, tourism has opened new avenues for economic growth. Entrepreneurs benefit not only from direct sales but also from partnerships with government programs and training sessions led by universities and NGOs. This dynamic confirms the importance of business-community collaboration as a central feature of the Pentahelix framework in rural tourism development.

The role of government in the Pentahelix collaboration is foundational, as it provides policy support, regulatory oversight, and infrastructure development necessary for the tourism sector. At Lappa Laona, government agencies at the district level have been instrumental in constructing access roads, providing sanitation facilities, and organizing tourism awareness programs. Their support has created an enabling environment for the other four actors to participate effectively in the village's tourism activities.

An interview with the Head of the Barru Regency Tourism Office on July 29, 2024, revealed that the government views Lappa Laona as an effective tourism destination, frequently visited by both local residents and tourists from outside the region. The informant emphasized the financial and economic benefits generated by this site and credited the community's active involvement in operating tourism services as a key factor in its success. This reflects the government's recognition of collaborative governance as a driver of rural tourism.

Governmental involvement is not limited to infrastructure development. The local administration has also played a significant role in facilitating collaboration among the various stakeholders. Through forums, tourism development programs, and joint exhibitions, government officials have created a platform for academics, businesspeople, and media practitioners to contribute to the tourism narrative. These institutional mechanisms have increased transparency, improved stakeholder communication, and aligned village development with broader regional tourism strategies.

Additionally, the local government has supported legal and administrative frameworks that ensure the sustainable use of natural and cultural resources in Lappa Laona. By formalizing village tourism structures and providing access to tourism grants and technical assistance, the government has helped institutionalize tourism governance in the region. This formalization has enhanced the legitimacy and accountability of all actors involved, further reinforcing the implementation of the Pentahelix model in a real-world setting.

The role of the local community is central to the success of Lappa Laona as a tourism village. As the primary custodians of the site's natural and cultural heritage, community members are directly involved in managing and operating the tourism facilities. They serve as guides, vendors, homestay providers, and event organizers. Their active participation ensures that tourism development reflects local values and that the economic benefits are distributed among residents.

An interview conducted on July 2, 2024, with a resident of Lappa Laona highlighted the transformative impact of tourism on the livelihoods of local people. The informant explained that since the official opening of Lappa Laona, local income has increased

significantly due to the influx of tourists. This rise in economic activity has allowed residents to sell local produce, including agricultural goods, directly to visitors—especially those from urban markets interested in natural and traditional products.

The involvement of the community has also fostered a strong sense of ownership and responsibility toward the sustainability of Lappa Laona. Residents have demonstrated pride in maintaining cleanliness, preserving the natural environment, and showcasing local culture through traditional performances and cuisine. This has helped to maintain the authenticity of the tourism experience and build a positive reputation for the destination.

Community empowerment has been further supported by training and mentoring programs facilitated by government and academic partners. These programs have focused on entrepreneurship, hospitality, marketing, and environmental management. The increased capacity has equipped residents with the skills needed to adapt to evolving tourism trends and improve service quality, ensuring that community participation remains relevant and impactful over time.

The integration of the five Pentahelix components—academia, business, government, media, and the community—has created a synergistic environment in Lappa Laona. These stakeholders have collaborated across various initiatives, such as tourism promotion campaigns, joint training sessions, and the organization of cultural festivals. This holistic approach has not only enhanced the tourism appeal of Lappa Laona but also contributed to the economic and social development of the surrounding area.

However, despite the overall success of the collaboration, several challenges persist. One of the main issues is the limited financial capacity of both the government and small-scale business actors to sustain long-term tourism development. Infrastructure expansion, maintenance of tourism facilities, and continuous training require consistent investment. At times, these needs surpass the available resources, making it difficult to implement strategic improvements in a timely manner.

Another challenge lies in the coordination among stakeholders. Although all five actors are involved, communication gaps and overlapping roles occasionally hinder effective decision-making. For instance, the lack of a unified management body or formalized tourism board means that some initiatives are carried out without full alignment among the parties.

This can lead to inconsistencies in service quality, fragmented event planning, and inefficient resource use.

In addition, not all community members have equal access to the benefits of tourism. While some have successfully established businesses or secured jobs in tourism services, others remain on the periphery due to lack of skills, capital, or information. This highlights the need for more inclusive policies and outreach programs to ensure that tourism serves as a tool for equitable development, not just a source of income for a few individuals.

Despite these challenges, the overall implementation of the Pentahelix model in Lappa Laona can be considered effective. Each actor has demonstrated a clear contribution toward the shared objective of transforming the village into a sustainable tourism destination. Government institutions have provided the necessary infrastructure, academia has facilitated capacity building, businesses have driven local economic activity, media has supported visibility, and the community has anchored cultural authenticity and operational continuity.

The research findings suggest that the benefits of this collaborative approach are tangible. Lappa Laona has gained popularity among both local and external visitors, income levels among residents have increased, and there is a growing sense of pride in preserving the village's natural and cultural resources. These outcomes are directly linked to the joint efforts of all five stakeholder groups, reflecting the successful operationalization of the Pentahelix model in a rural tourism context.

In summary, the Pentahelix collaboration at Lappa Laona exemplifies a functioning model of inclusive, multi-sectoral tourism development. While improvements are still needed in coordination, financing, and inclusivity, the village stands as a living case of how shared governance can drive meaningful local transformation. The research underscores the potential of this model to be replicated in other rural destinations aiming for sustainable and community-driven tourism growth.

#### ➤ Discussion

The findings of this research confirm that the Pentahelix collaboration model has been effectively implemented in the development of Lappa Laona Tourism Village. Each of the five elements—academia, business, government, community, and media—has played a

significant role in shaping the growth and sustainability of the destination. The integration of these actors demonstrates how cross-sector collaboration can lead to tangible economic, social, and cultural benefits at the village level.

The academic sector contributed not only by conducting research and field activities, but also by fostering knowledge transfer through training and engagement. This aligns with the goal of creating evidence-based tourism development and supporting local capacity building. The involvement of universities brought credibility and academic resources into the community, helping residents understand tourism trends and improve service delivery.

The business sector, while community-based, provided the foundation for economic advancement. Micro-enterprises created by villagers showed how local entrepreneurship could be a driver of inclusive development. The villagers' ability to manage stalls, offer services, and build networks with outside markets illustrates the adaptability and resilience of rural entrepreneurs. This aspect of the Pentahelix model shows that business does not have to be external or corporate—it can and should be rooted in the local community.

From the government side, the support for infrastructure, promotion, and coordination has been essential. Local authorities not only developed physical infrastructure such as roads and rest areas, but also facilitated partnerships among the actors. Their role as a facilitator and enabler has proven effective in fostering a collaborative environment. However, the need for more sustained funding and formalized coordination mechanisms remains an area for improvement.

Community participation has been the strongest driver of success in Lappa Laona. The local residents' ownership of the tourism process has translated into economic benefits and cultural preservation. Their active engagement has made the tourism experience authentic, which in turn attracts more visitors. This indicates that empowering local communities to be central actors in tourism development can ensure the long-term sustainability of the destination.

Despite the clear successes, there are notable limitations. Financial constraints, especially among micro-entrepreneurs and the local government, limit the scalability of tourism activities. Moreover, stakeholder coordination can be inconsistent due to the absence

of a formal tourism governance structure. These challenges suggest the need for improved institutional frameworks and long-term strategic planning.

Another challenge is inclusivity. While many residents have benefited, some groups—particularly women, youth without access to training, and the elderly—are not yet fully integrated into the tourism value chain. This calls for targeted interventions to ensure that development is equitable and leaves no one behind. Future collaborative efforts should prioritize outreach and inclusion for these underrepresented segments.

In conclusion, the Pentahelix model, when implemented with community-driven priorities, can become a powerful tool for rural development. The case of Lappa Laona demonstrates that sustainable tourism requires not only natural and cultural attractions, but also strong partnerships built on mutual benefit and shared responsibilities. With continued commitment and strategic enhancements, the model can be replicated in other areas seeking to unlock their tourism potential through collaborative governance.

## **D.CONCLUSION AND RECOMMENDATIONS**

### ➤ Conclusion

The implementation of the Pentahelix collaboration model in the development of Lappa Laona Tourism Village has proven to be effective in mobilizing various stakeholders toward a shared goal. The research revealed that all five elements—academia, business, government, media, and community—have contributed significantly to the progress of tourism in the village. Each sector played a distinct but complementary role, forming a cohesive framework that fostered growth, sustainability, and inclusivity.

Academics provided knowledge and capacity-building efforts, the business sector drove economic activity, the government offered infrastructure and policy support, the media facilitated visibility, and the community ensured cultural authenticity and service delivery. Together, their coordinated efforts have enhanced the tourism experience while increasing income levels and promoting local pride.

Nevertheless, the research also identified key challenges, including limited funding, coordination inefficiencies, and the unequal distribution of tourism benefits among community members. Addressing these issues is crucial for ensuring the long-term success of the tourism initiative and for maximizing the potential of the Pentahelix model.

➤ Recommendations

1. Formalize Stakeholder Coordination

It is recommended that a formal tourism board or management committee be established in Lappa Laona, comprising representatives from each Pentahelix sector. This would enhance coordination, reduce duplication, and ensure unified planning.

2. Increase Inclusive Participation

The tourism development agenda should incorporate specific programs that target underrepresented groups such as women, youth, and marginalized community members. This will promote equity and broaden the distribution of tourism benefits.

3. Enhance Financial Support Mechanisms

Local governments and private investors should collaborate to expand funding sources for tourism-related infrastructure, training, and business development. Access to microfinance or tourism grants can empower small entrepreneurs.

4. Strengthen Capacity Building

Continuous training in hospitality, digital marketing, product innovation, and environmental conservation should be provided to both new and existing tourism actors to sustain service quality and competitiveness.

5. Promote Sustainable and Eco-Friendly Practices

To preserve the natural beauty of Lappa Laona, environmental sustainability must be prioritized. Stakeholders should promote eco-tourism principles and enforce regulations that prevent environmental degradation.

## 6. Leverage Media for Broader Exposure

Enhanced collaboration with media—both traditional and digital—can increase the visibility of Lappa Laona as a tourism destination. Media campaigns should highlight community stories, local products, and unique cultural experiences.

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