

INTEGRATING THE HEXA HELIX MODEL, ECOTOURISM, AND LOCAL WISDOM FOR SUSTAINABLE TOURISM A LITERATURE REVIEW

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Abstract: Sustainable tourism is a strategic approach to address the challenges of environmental degradation, cultural preservation, and empowering local communities. This study aims to examine the role of the Hexa Helix collaborative model, local wisdom, and ecotourism in supporting sustainable tourism development. This model is hindered by the absence of comprehensive frameworks, characterized by disjointed research across disciplines and limited long-term impact evaluations. Common issues include inadequate stakeholder coordination, resource constraints, insufficient community preparedness, and insufficiently examined cultural-ecological linkages. Literature reviews synthesize fragmented studies on Hexa Helix, local wisdom, and ecotourism to identify gaps such as coordination barriers and the necessity for theoretical advancement. They enable holistic frameworks for directing policy for tourism sustainable development. The study was conducted through a Systematic Literature Review (SLR) of scientific journals, policy reports, and case studies between 2015 and 2025 search through google scholar. The selection of the 50 most related to the variables of research was acquired to provide a more accurate analysis. This study revealed that the success of sustainable tourism is greatly influenced by the collaboration of Hexa Helix actors integrated with the principles of local wisdom and ecotourism, especially in destination management, strengthening local capacity, and digital-based promotion and environmental ethics. Local wisdom serves as a foundation for cultural values and identity that enrich destination narratives, increase local community involvement, and maintain environmental sustainability and cultural heritage. This study can be as reference that the integrative model of Hexa Helix, local wisdom, and ecotourism as a transformative strategy in developing inclusive, adaptive, and sustainable Indonesian tourism.

Abstract - Hexa Helix Model; Ecotourism; Local Wisdom; Sustainable Tourism

Keywords: *Ecotourism; Hexa Helix Model; Local Wisdom; Sustainable Tourism*

I. INTRODUCTION

Sustainable tourism has become a global priority in facing the challenges of climate change, environmental degradation, and socio-cultural inequality resulting from the massive development of mass tourism. The COVID-19 pandemic has exposed the vulnerabilities of the mass tourism model and accelerated a shift in attention to more sustainable practices., including strengthening engagement stakeholders, local economic development, economic diversification, and adoption of environmental conservation practices. Rapid tourism growth in Indonesia strains ecosystems and communities, making integrated approaches vital for balancing

economic gains with preservation. The Hexa Helix model fosters collaboration among academia, business, government, community, media, and investors, enhancing sustainable outcomes in areas like coastal Bali (Basri et al.,2025; Octavianto, et al.,2024; Candranegara et al., 2022). Ecotourism combined with local wisdom, such as in Bali known as Tri Hita Karana, preserves cultural heritage while minimizing negative impacts (Ardani et al.,2025; Suacana et., 2023; Budarma et al., 2017).

Recent literature reviews indicate a strong recommendation towards a collaborative model between stakeholders that integrates government, business actors, academics,

communities, media, and tourists/investor/legal/NGO as key stakeholders in sustainable destination planning and management. On the other hand, ecotourism is an alternative form of tourism that emphasizes nature conservation, local community participation, and tourist education. This concept aligns with the principles of sustainable development because it focuses not only on economic aspects but also on social and environment. Local wisdom inherent in destination communities also plays a strategic role in maintaining harmony between humans and nature. This wisdom reflects traditional practices and values relevant to resource management and mitigating the negative impacts of tourism. Local wisdom provides a foundation for culture and traditional practices that can enhance the social and environmental resilience of destinations

Integration of The Hexa helix, ecotourism, and local wisdom can provide a strong conceptual foundation for formulating sustainable tourism development strategies. However, there is still a gap in the literature regarding the integration of the three in tourism policy and governance practices in various regions. Therefore, a comprehensive literature review is needed to identify the roles and relationships between the hexa helix, ecotourism, and local wisdom in supporting the sustainability of the tourism sector. The purpose of this study was to examine the effectiveness of the integration of the Hexa-Helix model, ecotourism, and local wisdom in improving economic, socio-cultural, and environmental sustainability in tourism destinations, as well as formulating policy recommendations and replicable participatory governance models. Below is the conceptual framework of this research.

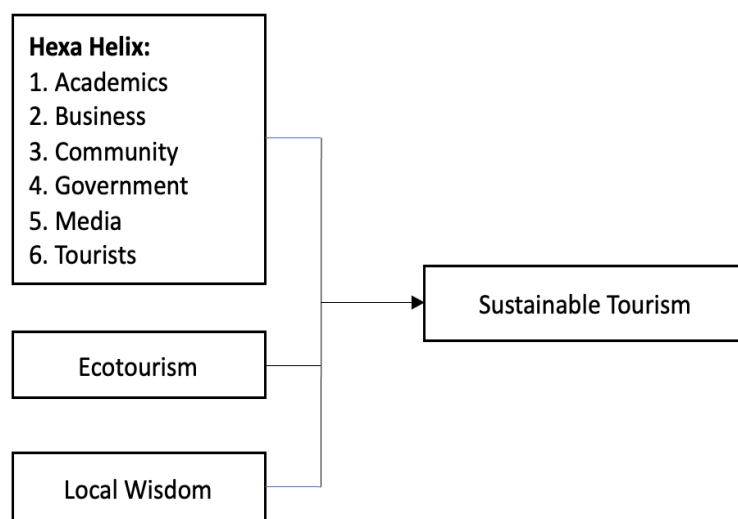


Fig. 1 : Conceptual Framework

II. METHODS

The precise identification of the causal relationship among the Hexa Helix model, ecotourism, and local wisdom in the development of sustainable tourism. Sustainable tourism presents significant challenges for researchers and requires further investigation for two primary reasons, 1) the integration of hexa helix model,

ecotourism, and local wisdom have not been systematically examined, 2) there remains a lack of consensus on the determinants of sustainable tourism. The systematic literature review (SLR) is used to analysis previous articles on the effect of Hexa Helix Model, ecotourism and local wisdom on sustainable tourism. The SLR methodology methodically synthesizes existing literature, enabling researchers to replicate or revisit the

search on the same or different subjects (Sanchez-Rebull et al., 2018). SLR is beneficial for practitioners and managers as they facilitate the establishment of a dependable knowledge base through the aggregation of insights from many studies. The initial phase involves defining the inquiry period, which spans from 2015 to 2025. The analysis of sustainable tourism has commenced, and it is confined to works published in English. A set of criteria for keyword selection has been established and integrated into the search to identify a suitable representative sample of articles pertaining to the subject of the paper.

There are five stages of SLR (Gallardo-Galla & Thunnissen, 2016). The first stage involves conducting an inquiry to develop a framework that includes the Hexa Helix Model, ecotourism, indigenous knowledge, sustainable tourism, and the perspectives of guests, tourists, academics, government, industry, community, media, and tourists. The search was conducted for keywords, titles, abstracts, and keywords of papers. The second stage is to identify the pertinent studies.

The third stage is assessing the relevance of each article based on the number of citations, which serve as a proxy indicator of quality. A compilation of the most frequently cited works was acquired to facilitate a more comprehensive study. A selection of 50 of the most relevant and cited articles was chosen to provide an accurate analysis. The fourth stage was to compile a list of the primary information present in the publications, including authors, year of publication, variables, and methodology. The fifth stage was to present the principal conclusions of the SLR.

III. RESULTS AND DISCUSSION

The following table synthesizes literature from 2015-2025, mapping contributions across Hexa Helix roles, ecotourism strategies, and local wisdom integration, and measuring their impacts on the development of sustainable tourism. The table indicates a growing consensus among stakeholders regarding the need for cooperation to achieve comprehensive sustainable tourism development in Indonesia.

Table 1 The role of hexa helix, ecotourism and local wisdom to develop sustainable tourism

Authors	Year	Research Variables	Methodology	Findings
Basri et al.	2025	Hexa Helix (Academics, business, government, local community, media, and policymakers)	Mixed Method	Economic dimension critical for sustainable tourism, challenges include ambiguous land ownership, limited funding, poor stakeholder collaboration; need for formal collaborative institution.
Ardani, et al.	2025	Government role, community engagement, CSR based on local wisdom, sustainable on tourism village.	Mixed Method	The role of government, community empowerment, green marketing, and corporate social responsibility based on local wisdom are determinants of sustainable village tourism.
Elhoushy, et al.	2025	Sustainability certification, academic engagement in	Systematic literature, thematic analysis, cross-sectional and	Three stages of sustainability certification: exploration, implementation, outcomes;

		tourism sustainable practices	longitudinal studies	
Muryanti, et al.	2025	Business actors, sustainable tourism	Quantitative survey, comparative approach	Moderate sustainability level in corporate and non-corporate tourism, non-corporate tourism shows higher sustainability due to greater community engagement
Purnomo	2025	Community based tourism (CBT) Trends	Bibliometric analysis using VosViewer	Identified major research clusters in CBT including sustainability, economic growth, governance, and challenges; emphasized opportunities in green finance, renewable energy, marketing, and urban tourism
Faturohman & Subhan	2025	Local government policy, environment friendly, community-based tourism	Qualitative	Local governments are key factors in the advancement of sustainable tourism, prioritizing community engagement and conservation efforts.
Safdar & Bibi	2025	Social media's role in ecotourism growth	Quantitative survey	Social media effective for education, awareness, conservation activities, and promoting ecotourism.
Setiadi, et al	2025	Green marketing approach, destination image, social media, tourists' impressions	Systematic literature review	Green marketing and social media raise awareness and influence sustainable tourism practices positively.
Hadinejad et al.	2025	Sustainable tourism behaviour, psychology theories	Literature review, metacognitive approaches	Sustainable tourism behaviour research needs paradigm shift toward metacognitive theories; integration of social psychology models suggested.
Pagliara et al.	2025	Factors contributing to successful tourism destinations	Mixed methods (quantitative & qualitative)	Proposes mixed methods to identify success factors in tourism destinations, combining data for better insights.
Sufandy	2024	Hexa Helix (academics, business, government, local community, media, and visitors)	Qualitative descriptive case study with purposive sampling, in-depth interviews, observation,	The findings of research indicated that the Hexa Helix stakeholders significantly contributed to the advancement of natural tourism in Lejja.

			documentation, analysed by Nvivo 14	
Muhamad et al.	2024	Government role, Sustainable Tourism Ecosystem, BGCM Model	Qualitative, Explorative Descriptive	Government supports sustainable tourism via policies, partnerships, and sustainable tourism observatory, collaboration key to community and environmental benefits
Anwar	2024	Local government policy implementation and sustainable tourism	Qualitative Descriptive	Local government policy implementation not optimal, needs enhanced stakeholder participation, evaluation, and synergy to improve sustainable tourism
Hussain et al.	2024	Social media, risk perception, tourist behaviour	Quantitative	The influence of social media on tourist behaviour in mountain tourism
Zhu et al.	2024	Methodological advances in sustainable tourism research	Meta-analyses and field studies	Shift from self-report to interdisciplinary, behaviour-specific, and field-based methods enhancing research rigor
Ginting et al.	2023	Community participation in sustainable tourism and economic development	Mixed methods: questionnaires, interviews, observations	Community involvement promotes sustainable tourism and economic development; recommends further community engagement strategies
Krittayaruangroj et al.	2023	Sustainability tourism based on community participation	Bibliometric review	Focused on stakeholder participation, resident and tourist satisfaction, economic growth effects in CBT
Baloch et al.	2023	Tourism development and environmental sustainability	Quantitative, hierarchical regression	Tourism growth benefits socio-economic factors but also degrades environmental capital; suggests ecotourism frameworks
Agarwal, et.al	2022	Trends in sustainable tourism research including academic roles	Structural topic modeling articles from 1978-2022	Increasing publications and interest in sustainable tourism; academic focus evolving from environmental to integrated social and economic issues; methodological limitations noted in earlier studies
Asmoro and Cahyadi	2022	Content analysis of sustainable tourism	Content analysis	Content analysis reveals themes and concepts

		methods		prevalent in sustainable tourism research articles.
Zhang et al.	2021	Corporate social responsibility (CSR)	Quantitative survey	CSR programs in the hotel industry improve community loyalty and trust, enhancing tourism sustainability
Shah & Jan	2021	Corporate social responsibility (CSR)	Quantitative survey	CSR programs in the hotel industry improve community loyalty and trust, enhancing tourism sustainability
Streimikiene et. al.	2021	Challenges in sustainable tourism development and competitiveness	Review and analysis	Highlights challenges and insights for strengthening competitiveness in sustainable tourism development globally.
Andari et al.	2020	Local wisdom and sustainable tourism	Case study, qualitative	Local wisdom values key for sustainable tourism development, enhancing uniqueness and sustainability of tourist attractions.
Chung, C. K	2019	Eco-friendly marketing, sustainable hotel management	Quantitative	Green marketing approach is essential for green hotels, stakeholders, and executives. CSR hotels have indirect effects to loyalty of customers
Khalid et. al.	2019	Community empowerment, Community Support and sustainable tourism Development.	Mixed Methods	Strong community empowerment enables the effective establishment of sustainable tourist development by garnering local inhabitants' support for tourism efforts
Hatipoglu et al.	2019	Corporate social responsibility, sustainable development	Qualitative research	Program of management, the synergistic nature of interests, the diverse capacities of partners, and an ongoing evaluation process are essential factors for creating shared value in CSR initiatives within the tourism sector. Perception is profoundly affected by social media, which influences the behaviour of tourists in rural mountainous areas.
Sarkar and George	2018	Applications of social media in sustainable tourism.	Qualitative	Social media substantially enhances knowledge of ecotourism and sustainable tourism
Molina and Font	2016	Mixed methodologies related with	Content analysis/mixed methods	Mixed techniques are frequently employed to enhance and expand results,

		research on sustainable tourism		offering a more profound understanding of tourist sustainability.
Roberts and Tribe	2008	Economic and socio-cultural dimensions of tourism sustainability	Indicator framework analysis	Indicators of business performance, employment, motivation, and community engagement key to sustainable tourism

3.1 *The role of Hexa Helix Model on Sustainable Tourism*

Hexa-Helix is an extension of the helix (triple/quadruple/penta/quintuple) innovation model that explicitly combines six stakeholder groups. Generally hexa helix model consists of academics, government, industry (private sector), community, media, and one of environmental/tourist/policy/legal actors. In the tourist sector, researchers employed the hexa helix model to encompass the socio-cultural and environmental factors that were inadequately covered by earlier helix formulations. Empirical applications of the hexa helix model in tourism focus heavily on destination development at the local scale such as tourism villages, small islands, or nature parks, primarily in Southeast Asia. Several case studies in Indonesia illustrated a recurring finding. Hexa-helix coordination enhances planning legitimacy and marketing reach, but often fails without institutionalized platforms and funding.

3.1.1. *Academics and Sustainable Tourism*

Academics play a role as thinker, educator, researcher, innovator, facilitator, and advocate. With this role, academics can ensure that tourism is not solely related with short term economic gain, but also preserves the natural environment, strengthens local culture, and improves community well-being in a sustainable manner. The role of academics can be as academic references for government, industry, and communities in tourism policy and strategy making. Organize formal education, give training,

workshops, and certification for tourism industry players, local communities, and local governments. Forming superior human resources which is able to manage tourism with the principles of sustainability. Do applied research which directly benefit the tourist destination, suggested digital innovation, providing data based on research to support evidence-based policy. Academics play a role as facilitator on program community-based tourism, give direct assistance so that local communities become the main actors in tourism, not just objects, and recommended ush technology transfer and management to the community so that independence is created. Become critical government partners in designing regulations that are environmentally friendly, inclusive, and equitable, produce policy brief and research-based recommendations that can be used as a basis for making tourism policies and encourage the existence of sustainability standards in managing tourist destinations. Academics bridge collaboration between government, private sector, society, media, and community, open access to international research and global best practices to be adapted locally, and build sustainable tourism research center as a national and regional knowledge hub. Academics can be a reminder of potential environmental and cultural exploitation due to mass tourism, teaching tourism ethics to tourists, industry, and destination managers. and develop sustainability indicators to measure the impact of tourism.

3.1.2. *Business/Industry*

Business actors are key actors in sustainable tourism, not only as a service provider, but also as a driver of green economic transformation in the sector tourism. By integrating aspects economic, social, cultural, and environmental, business actors are able to create sustainable added value for tourists, local communities, and the destination environment. The role of business actors in realizing sustainable tourism. The tourism businesses such as hotels, restaurants, transportation, and travel agents play an important role in reducing their carbon footprint through energy efficiency, water management, and waste reduction. The Standard implementation eco-label and eco-friendly certification (e.g. Green Hotel or Global Sustainable Tourism Council. The providing tourism packages based on ecotourism, local culture, and authentic experiences which focuses on sustainability. The developing attractions that do not damage the environment and prioritize community empowerment. Welfare the empowering local communities as workers, suppliers of local products, and business partners. The opening up economic opportunities through community-based tourism (CBT) which encourages independence and well-being, The collaborate with government, academics, communities, media, and financial institutions (penta/hexa helix) to create competitive and sustainable destinations. The involved in CSR (Corporate Social Responsibility) forums and environmental responsibility programs. The educating tourists about environmentally friendly travel behavior. The marketing tourism destinations and products with narrative sustainability branding, for example responsible tourism or eco-friendly travel. The utilizing digital technology to reduce resource usage (e-ticketing, virtual tour, paperless operation). The promoting destinations through online platforms with transparent information regarding sustainability practices. The prioritize the use of local, organic, and environmentally friendly products. The

reducing dependence on imports and supporting local MSMEs to enter the tourism supply chain.

2.1.3. *Communities*

Local communities are the foundation of sustainable tourism, as the success of a destination depends heavily on their involvement, care, and participation. Through cultural preservation, environmental protection, active participation, and economic development, communities contribute significantly to the realization of equitable, sustainable, and long-term beneficial tourism. Local communities are not just objects of tourism, but the main subjects who manage, develop and maintain destinations. They play a role in creating tourism products based on culture, local wisdom, and ecotourism. Examples: providing homestays, culinary specialties, arts and cultural attractions, and local guide services. Local communities maintain customary values, traditions, languages and arts to keep them alive and authentic. Sustainable tourism does not only sell attractions, but also emphasizes cultural authenticity as an attraction. Examples: Balinese traditional ceremonies, Yogyakarta batik, or the Sasi tradition in Maluku which also preserves the environment. Local communities have an important role in nature conservation through environmentally friendly practices. They protect forest areas, seas, rivers and mountains from being damaged by mass tourism. Examples: customary forest management, the subak system in Bali, or community-based ecotourism in Tangkahan (North Sumatra). Through direct involvement, communities gain economic benefits from tourism. They create tourism-based micro, small, and medium enterprises (MSMEs). This promotes income equality and reduces economic inequality, The principles of sustainable tourism emphasize the active participation of local communities in planning, implementation and evaluation. This involvement creates a sense of ownership so that people care more about maintaining the destination. Local communities can become educational agents by providing

tourists with an understanding of customary rules, such as visiting etiquette, how to protect the destination environment, and fosters harmonious interactions between tourists and hosts. Local communities develop innovative tourism products that combine technology and tradition. Examples: digitalization of tourism village promotions, recycling-based eco-crafts, or local homestay booking applications.

3.1.4. Government

The role of government is very vital as regulator, facilitator, catalyst, and supervisor. Without the active involvement of the government, sustainable tourism is difficult to achieve, because sustainability requires integration between economic, socio cultural, and environmental with fair and inclusive management. The government play roles in determining regulations, laws, and policies which supports sustainable tourism management, compile tourism master plan based on environmental carrying capacity, and develop environmentally friendly infrastructure, setting policies for environmental protection and conservation, promotion and branding of sustainable tourism, and create procedure standard of monitoring, evaluation, and law enforcement. The government plays a role as policy makers which regulates the direction of tourism development to ensure it is in accordance with the principles of sustainability. This includes drafting regulations related to environmental conservation, waste management, and protection of local culture. Implementation zoning regulations tourist destinations to prevent overcapacity and ecosystem damage. Encourage implementation standard green tourism and environmentally friendly certification. The government functions as macro planner in developing sustainable tourism destinations. A master plan for tourism development that takes into account social, cultural, economic and environmental aspects. Controlling infrastructure development so that it does not damage the environment and still provides economic benefits

for local communities. Application of the concept⁶. carrying capacity to maintain balance between tourists, the environment and society. To support sustainability, the government provides environmentally friendly basic infrastructure (low-emission public transport, sanitation, renewable energy. Accessibility to remote destinations without damaging nature. Tax incentives and capital assistance for tourism businesses that implement sustainable principles. The government plays a role in providing training and mentoring for local communities to actively participate in the tourism industry. Push community-based tourism which prioritizes local wisdom. Ensuring fair distribution of economic benefits so that the community becomes the main actor, not just a tourist attraction. In order for the principle of sustainability to be implemented. The government monitors tourism activities that damage the environment or ignore local culture. Implementation of sanctions for violations, for example, indiscriminate waste disposal or illegal construction in conservation areas. Campaigning for sustainable tourism through national and international promotions. Providing education to tourists to behave responsibly. Encourage tourist destinations to implement eco-labeling and transparency of information. Become mediator in collaboration between academics, business actors, communities, media, and tourists within the framework hexa-helix tourism model.

3.1.5. Media

The media plays an important role in inform, educate, promote, connect, and monitor sustainable tourism practices. With the power of widespread information distribution, the media can shape public perception, encourage active participation, and ensure that tourism not only provides economic benefits but also preserves the environment and culture for future generations. Mass media (print, electronic, and digital) function to convey information about tourism potential, environmentally friendly practices, and the importance of sustainability. Media helps tourists understand visiting rules,

nature conservation, local culture, and travel ethics. Public campaigns through the media can raise awareness about the importance of preserving the environment and local culture. Education on issues such as reducing plastic waste, using environmentally friendly energy, and preserving local wisdom can be done through articles, public service announcements, and social media. Media bridges communication between the government, local communities, business actors, academics, and tourists. Public discussions, talk shows, and media coverage provide a space for dialogue to discuss sustainable tourism strategies. Social media and digital platforms are used to promote tourism destinations based on ecotourism, local culture, and community-based tourism. Promotions that highlight sustainability can attract the segment of environmentally conscious travelers (responsible travelers). Media plays a role in monitoring unsustainable tourism practices, such as exploitation of nature, over-tourism, or marginalization of local communities. Investigations and critical reporting help promote transparency and accountability among tourism destination managers. Digital platforms (blogs, vlogs, Instagram, YouTube, TikTok) are effective mediums for disseminating best practices in sustainable tourism. Interactive media technologies such as virtual reality (VR) and augmented reality (AR) can reduce physical pressure on destinations by providing virtual travel experiences.

3.1.6. Tourists

Tourists act as key co-creators of sustainable tourism outcomes. Their behavior can either reinforce ecotourism and local wisdom or undermine it, depending on how consciously they travel. There are roles for tourists to support the development of sustainable tourism, such as practicing responsible behavior at sites and choosing low-impact services. Ecotourists are expected to deepen their understanding of ecosystems and later advocate for protection, funding, and policy support in their home

networks. Tourists help managers keep tourism within ecological thresholds by accepting limits on access, group size, and activity types. Tourists can support local wisdom by valuing authentic practices, observing cultural norms, enabling cultural transmission, and avoiding cultural exploitation.

3.2. *The Effect of Ecotourism on Sustainable Tourism*

Ecotourism plays a role as a bridge between conservation, community empowerment, and economic development. With the principles of being environmentally friendly, respecting local culture, and providing fair economic benefits, ecotourism is able to become the main driving force in realizing sustainable tourism which is balanced between ecology, economy, and socio-culture. Ecotourism emphasizes the principle of conservation so that tourism activities are carried out without damaging the ecosystem. Income from ecotourism is usually allocated to nature conservation programs, such as reforestation, protected area management, and protection of endemic flora and fauna. Nature-based tourism also encourages the use of renewable energy and environmentally friendly waste management. Ecotourism provides direct employment opportunities (tour guides, homestays, local transportation) and indirect (handicrafts, traditional culinary). Increase community income without having to over-exploit natural resources. The community-based ecotourism model places local communities as the main actors, not just tourist attractions. Ecotourism respects local wisdom and community traditions, so that native culture is maintained while also becoming a tourist attraction. Tourists are introduced to traditional practices, arts, and rituals that strengthen cultural identity. Helps prevent cultural homogenization due to mass tourism. Every ecotourism visit is usually accompanied by education about the importance of protecting nature and sustainability. Increasing awareness of tourists and local communities on environmental issues such as climate change,

biodiversity conservation, and natural resource management. • Cultivating a responsible attitude among tourists in behaving in an environmentally friendly manner. Ecotourism is one of the real implementations of sustainable tourism concept which includes three pillars: environmental, socio-cultural, and economic. Reducing the negative impacts of mass tourism (over tourism) with a more selective and long-term oriented tourism approach. Becoming a role model for other tourism sectors to implement sustainability principles.

3.3. Local Wisdom on Establishing Sustainable Tourism

Local wisdom is a crucial foundation for achieving sustainable tourism because it maintains a balance between environmental, social, cultural, and economic aspects. By integrating local wisdom into tourism development, destinations can achieve long-term sustainability, remain authentic, and provide tangible benefits to both local communities and tourists. Local wisdom is the values, norms, traditions, and cultural practices passed down through generations within a community, proven to maintain harmony with the social and natural environment. In the context of tourism, local wisdom forms the basis for sustainable destination development because it reflects the identity and unique characteristics of a region. The role of local wisdom in sustainable tourism as environmental conservation. Local wisdom often contains customary rules regarding procedures for utilizing natural resources (for example: the system Subak in Bali. Encourage conservation practices through rituals, taboos, or customary prohibitions. Limiting the exploitation of nature so that the ecosystem is maintained. Providing uniqueness and attraction for tourists. Preserving local arts, languages, cuisine, architecture and traditions, To differentiate from other tourist destinations. Involving the community in managing tourism based on culture and local wisdom. Creating business opportunities (homestays, crafts, local culinary). Reducing dependence on external

investors who have the potential to damage the environment. Cultivate a sense of ownership and pride in the destination. • Reducing social conflict through customary rules that regulate interactions between residents and tourists. Establishing inclusive and participatory tourism governance. Local wisdom becomes a learning medium for tourists about living in harmony with nature.

3.3.1. Tri Hita Karana (Local wisdom of Balinese)

Tri Hita Karana serves as a foundation of values and an operational model that synergizes spiritual, social, and ecological dimensions to realize true Balinese tourism.-truly sustainable from upstream to downstream destinations to field practices. The Tri Hita Karana concept combines three domains: spirituality, human life, and nature. The three dimensions of Tri Hita Karana described as following: 1) Parahyangan is establishing sacred ethics, visitor etiquette, and strengthening rituals as cultural barriers that guide tourist behaviour and management of sacred sites, including educating tourists to respect the sanctity of space. 2) Pawongan is placing community participation, mutual cooperation, equitable distribution of benefits, and customary-based governance as the core of community-based tourism for social resilience and economy. 3) Palemahan is directing conservation, controlling land conversion, and cross-watershed water management.

The sustainable tourism strategy for the cultural landscape of Bali Province formalizes Tri Hita Karana in its vision, strategic objectives, and action plans related to education, spatial planning, water distribution, visitor management, and product development that respects local values, restrictions on single-use plastics, and cultural tourism standards to strengthen the implementation of sustainable principles that align with the implementation of Tri Hita Karana in tourist destinations. Penglipuran Village is one of the tourist villages in Bali that implements Tri Hita

Karana in its development of sustainable tourism villages based on Tri Hita Karana. Penglipuran Tourism Village has successfully received the Kalpataru Award, the highest award from the Indonesian government given to individuals, groups, or institutions for their services and dedication in preserving the environment, maintaining the function of environmental order, and increasing environmental carrying capacity.. In addition, Penglipuran Village received the UNESCO Award as the Cleanest Village in the World and an award from UNWTO as the Best Tourism Village in 2023.

IV. CONCLUSION

The synergy between the hexa helix to practice ecotourism and implement local wisdom are key factors to build sustainable tourism in Indonesia. The integration among stakeholders can improve governance, lessen the negative impact on the environment, and increase the use of local wisdom to support tourism development. Additionally, tourism development provides greater benefits to communities. This study revealed that the hexa-helix approach can improve coordination and encourage eco-friendly services at tourist destinations. The community can be involved to teach the tourists to care for the environment and introduce local wisdom as the uniqueness of the destination. Future study should focus on long-term ecological and economic balancing, longitudinal studies, and improved policies to address coordination issues. The development of sustainable tourism should give priority to training programs that combine academic research with community-based tourism and increase media campaigns.

V. Disclosure

The authors used Artificial Intelligence for language refinement and take full responsibility for verifying the accuracy and integrity of the manuscript

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