



Sustainable Tourism Development in the Mandalika Special Economic Zone: A Comprehensive Analysis of Social, Economic, and Environmental Impacts

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ABSTRACT

This study aims to analyze the implementation of sustainable tourism development in the Mandalika Special Economic Zone (KEK), Central Lombok, and its impacts on social, economic, and environmental aspects. As an area prioritized in the development of super-priority destinations by the Indonesian government, the Mandalika SEZ is an important case study in seeing how the principles of sustainable development are applied in the tourism sector. This study uses a descriptive method with a qualitative approach that relies on secondary data from various previous literature sources, government reports, and relevant documentation. Data analysis was carried out with the help of Nvivo 12 Plus software to group key themes and understand patterns in the data collected. The results of the study show that development in the Mandalika SEZ does not only focus on physical and infrastructure aspects but also includes empowering local communities through strengthening the Micro, Small, and Medium Enterprises (MSMEs) sector, such as agriculture, coffee entrepreneurship, and handicrafts. Tourism has been shown to contribute significantly to local economic growth, creating jobs and increasing community income. This is reflected in the increase in the Human Development Index (HDI) of Central Lombok, which reached 67.57% in 2022. From the environmental side, air and soil quality indicators show significant improvement, with the target of increasing the ecological quality index by 43.31% in 2026, running according to plan, and reaching 43.03% in 2023. Tourism development in the Mandalika Special Economic Zone shows a positive direction in realizing sustainable development. A comprehensive approach to social, economic, and environmental aspects shows that tourism development can be a strategic instrument in improving the quality of life of local communities while preserving the environment.

INTRODUCTION

Sustainable development has become one of the central concerns of the 21st century, driven by the increasing awareness that economic growth must no longer come at the expense of the environment and social equity (Ardhiati et al., 2021). The convergence of global crises, climate change, biodiversity loss, rising inequality, and natural resource depletion demands a fundamental transformation in conceptualizing and implementing development (Caraka et al., 2023). Pursuing sustainability is no longer a choice but a necessity in this context. Countries like Indonesia, with their rich natural resources and dynamic demographics, are at the crossroads of economic opportunity and ecological vulnerability (Fonseca et al., 2020). As such, embedding sustainable development principles in all aspects of planning and implementation has become a critical imperative (Yuli et al., 2023).

Indonesia's rapid development in the tourism and infrastructure sectors has brought both promises and perils. On the one hand, tourism has become a major contributor to national and regional GDP, attracting investment and generating employment. Conversely, the dominant growth model has often prioritized short-term economic returns over long-term sustainability, leading to environmental degradation and social disruption (Susiyanto, 2022). Projects driven by national strategic priorities frequently emphasize infrastructure, capital flows, and investment climate while overlooking regions' ecological carrying capacity and local communities' cultural fabric (Kurniawan et al., 2022); (Mahandito et al., n.d.). As a result, tensions between economic ambition and environmental responsibility have become increasingly visible in tourism-focused regions.

One of the most illustrative examples of this tension is the development of the Special Economic Zone (SEZ) of Mandalika in Central Lombok, West Nusa Tenggara. Mandalika is a strategic tourism area designated under Indonesia's National Strategic Projects Kurniati & Suryanto, (2023), aimed at boosting regional development, increasing international tourist arrivals, and showcasing Indonesia's capacity to deliver world-class tourism infrastructure. With its scenic coastal views, unique topography, and cultural diversity, Mandalika holds enormous potential. However, as the zone welcomes investment and development on a massive scale, it also invites scrutiny on whether sustainability is truly embedded in its long-term vision (Adam, 2019; Triyanti et al., 2020; Wibowo & Hariadi, 2022; Widianingsih et al., 2023).

The physical transformation of Mandalika has been rapid. Tourism infrastructure, including international-standard hotels, the Mandalika International Street Circuit for MotoGP, and supporting facilities, has reshaped the region (Loupas et al., 2023). However, the pace and scale of development have also raised concerns among environmentalists, academics, and civil society organizations. Issues such as land acquisition, displacement of communities, destruction of natural habitats, water resource stress, and increased waste generation have emerged as pressing problems. Without careful planning and participatory governance, there is a risk that Mandalika may repeat the unsustainable tourism models seen in other global destinations where economic success comes at the cost of environmental collapse and social inequality (Dwiastuti, 2023).

It is within this context that this study is situated. The research aims to analyze how sustainable development principles defined by the interplay between environmental integrity, social

inclusion, and economic viability are integrated into the Mandalika SEZ's development (Ardhiati et al., 2021). This focus is significant for assessing a single project's sustainability and drawing broader lessons for SEZ development across Indonesia and the Global South (Sayuti et al., 2023). By focusing on Mandalika, the study seeks to answer key questions: What are the main sustainability challenges facing tourism SEZs, How are social and ecological considerations being incorporated into planning and implementation? Moreover, what lessons can be drawn for policy and governance to ensure that SEZs become growth engines and sustainability champions (Islahuddin et al., 2021).

The novelty of this research lies in its interdisciplinary and integrative approach. While most existing literature on SEZs focuses heavily on economic performance, such as investment trends, fiscal incentives, and trade liberalization, this study departs from that norm by emphasizing sustainability as the analytical lens. It incorporates qualitative and quantitative methods, including systematic literature review, thematic content analysis using NVivo, secondary data examination, and bibliometric mapping using VOSviewer. This methodological pluralism allows the study to explore macro-level trends in global discourse and micro-level dynamics in Mandalika.

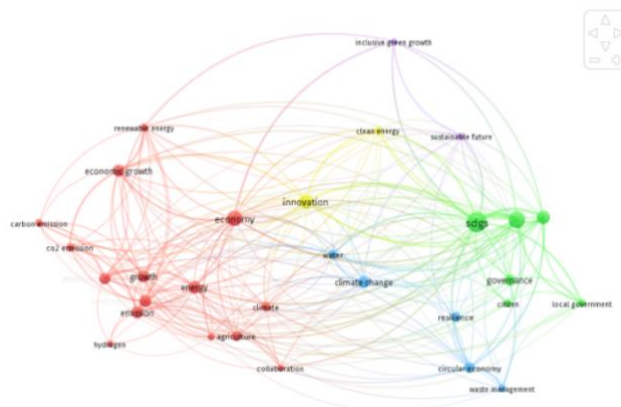


Figure 1. Visualisation of literature review

The bibliometric analysis provides an overview of international research trends in sustainable development and SEZs. Using VOSviewer, the study identified five major keyword clusters: economic growth and carbon emissions, clean energy and innovation, governance and local authority roles, environmental resilience, circular economy, and inclusive green development. These clusters highlight how sustainability is being interpreted across disciplines but also reveal gaps, particularly the lack of studies that integrate all three dimensions of sustainability (social, environmental, and economic) within SEZ contexts in developing countries (Kurniawan et al., 2023). Mandalika represents a valuable case for addressing this gap and proposing a more comprehensive framework for sustainable SEZ development.

The research contributes to theory by linking regional development concepts, sustainability science, and participatory governance. It also offers practical insights for stakeholders from national and local governments, investors, and civil society on managing tourism-led development to respect ecological boundaries and social rights. Specifically, it proposes that sustainable tourism in Mandalika should be understood as a sectoral goal and a governance challenge that demands cross-sectoral coordination, community empowerment, and adaptive policy-making.

Community participation is at the heart of this research. Previous studies have shown that tourism development that marginalizes local actors often results in social resistance, project failure, or unintended consequences (Aprilani et al., 2021); (Dwiastuti, 2023). In Mandalika, the presence of local Sasak communities, their dependence on traditional livelihoods, and their cultural relationship with the land make inclusive planning even more crucial. However, many reports have documented a lack of transparency in land acquisition, inadequate consultation processes, and limited economic benefits reaching local households. Therefore, This study argues for a reconfiguration of development priorities that places local agency and justice at the center of planning (Yohanes et al., 2023).

Environmentally, Mandalika faces significant pressure due to its coastal location and fragile ecosystems. Construction activities and mass tourism threaten the region's biodiversity, including marine life and coral reefs (Widjaja et al., 2023). Water consumption and waste generation are also rising, with existing infrastructure struggling to cope. If not managed sustainably, these pressures could undermine not only environmental quality but also the long-term attractiveness of Mandalika as a tourist destination. The research thus emphasizes the importance of integrating environmental impact assessments, conservation strategies, and low-carbon technologies into SEZ planning and regulation (Hendra et al., 2023).

Environmentally, Mandalika faces significant pressure due to its coastal location and fragile ecosystems. Construction activities and mass tourism threaten the region's biodiversity, including marine life and coral reefs. Water consumption and waste generation are also rising, with existing infrastructure struggling to cope. If not managed sustainably, these pressures could undermine not only environmental quality but also the long-term attractiveness of Mandalika as a tourist destination (Ibrahim et al., 2024). The research thus emphasizes the importance of integrating environmental impact assessments, conservation strategies, and low-carbon technologies into SEZ planning and regulation.

Economically, the Mandalika project aims to generate employment, increase local incomes, and boost regional GDP. However, economic success alone does not equate to sustainability. The distribution of benefits, the creation of decent work, and the resilience of local economies in the face of shocks such as pandemics or climate-related disasters must also be considered. Moreover, reliance on international tourism exposes the region to external market fluctuations (Affandi et al., 2024). As such, the study explores how economic diversification and support for local enterprises can enhance the sustainability of Mandalika's financial model.

Despite these concerns, Mandalika also presents a unique opportunity. With national attention and international investment already in place, the region has the potential to become a pioneering model of sustainable SEZ development if the right policies, governance structures, and monitoring mechanisms are adopted. The study proposes that welcoming sustainable development in Mandalika means going beyond rhetoric and ensuring that sustainability principles are institutionalized in planning documents, stakeholder roles, and implementation practices (Japa et al., 2022).

In acknowledging its limitations, the study recognizes the constraints of data availability, particularly long-term environmental monitoring and comprehensive social impact assessments. External factors such as government policy changes, global economic shifts, and climate-related events can also influence development trajectories. Additionally, while this research adopts a descriptive and exploratory approach, further studies with longitudinal and participatory methods are needed to deepen understanding and support evidence-based policymaking.

The case of Mandalika provides a timely and instructive example of how developing countries can reconcile growth with sustainability. The Special Economic Zone is a physical space and a testbed for new development paradigms. By welcoming sustainable development through inclusive governance, environmental stewardship, and economic justice, Mandalika can help chart a new path for SEZs in Indonesia and beyond. The findings of this research call for a shift from economy-centric development models to ones that prioritize the balance between people, the planet, and prosperity. Only by doing so can the promise of Mandalika as a beacon of sustainable tourism be fully realized.

METHOD

This study employs a qualitative research approach to explore and analyze the phenomenon of sustainable development within the Mandalika Special Economic Zone (SEZ) in Central Lombok. The qualitative approach was chosen due to its ability to capture the complexity of social, economic, and environmental dynamics that unfold naturally in real-life contexts (Kurniawan, et al., 2023). This methodology is especially relevant when the research seeks to understand meanings, perceptions, and social interactions deeply embedded within specific local settings (Kurniawan et al., 2023). Unlike quantitative approaches that emphasize numerical data and generalization, qualitative research enables rich, contextual, and nuanced descriptions of phenomena, which is essential in investigating sustainable development processes involving multiple stakeholders and layers of policy (Sayuti et al., 2023); (Ali et al., 2023). Specifically, this study adopts a case study design, a qualitative model that allows an in-depth examination of a bounded system or case. The Mandalika SEZ is selected as a single instrumental case because of its strategic position as a national pilot project for tourism-led development and its implications for sustainable development discourse in Indonesia (Zitri Ilham et al., 2024). The case study model is suitable for answering “how” and “why” questions, such as how sustainability is operationalized in policy and practice or why certain challenges persist in balancing economic growth and environmental protection. As Yin (2014) explains, the case study method is particularly effective in investigating contemporary phenomena within real-life contexts when the boundaries between the phenomenon and context are not evident.

In addition to the case study framework, this research draws conceptually from hermeneutic analysis, which focuses on interpreting texts and meanings behind policy documents, development narratives, and community responses. Hermeneutics is useful for understanding how actors such as government bodies, local communities, and private developers construct and communicate their ideas about sustainable development in Mandalika. This interpretive dimension enhances the study's capacity to uncover the underlying

assumptions, power relations, and symbolic meanings embedded in development discourse.

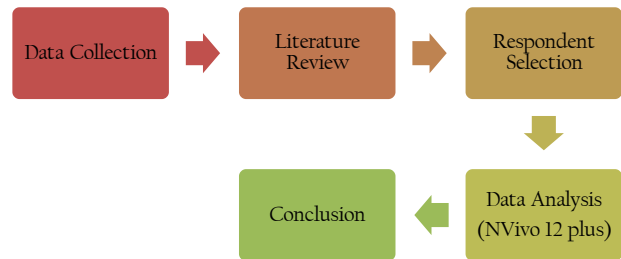


Figure 2. Research Methodology Flow

Data used in this study consist primarily of **secondary sources** collected through a comprehensive literature review and analysis of relevant documents. These include government planning documents, SEZ development reports, environmental assessments, academic journal articles, and media publications that address sustainable development in Mandalika (Sayuti et al., 2023; Ali et al., 2023). The literature review serves as a data collection tool and a strategy for theoretical positioning, helping the researcher identify knowledge gaps and build analytical frameworks for interpreting the findings.

Data analysis uses NVivo 12 Plus, a qualitative data management and analysis software widely used for handling unstructured data. NVivo facilitates thematic coding, pattern identification, and content organization, allowing researchers to systematically map relationships among key concepts, actors, and narratives. It also supports multiple forms of qualitative analysis, including discourse analysis, grounded theory coding, and even phenomenological interpretation, depending on the nature of the data. In this study, thematic analysis is the primary technique, supported by coding frameworks derived from the literature and emergent themes found during document analysis. NVivo's data visualization tools, such as word clouds, cluster maps, and coding matrices, enhance analytical clarity and support the interpretive rigor of the research (Zitri Ilham et al., 2024).

While the primary unit of analysis is the Mandalika SEZ, the research also integrates multi-scalar perspectives, considering both national policy frameworks and local implementation realities. The analytical process follows a structured flow: (1) selection and collection of relevant documents; (2) review and classification of materials; (3) coding and thematic mapping in NVivo; and (4) interpretation of findings through hermeneutic and case study lenses. This approach allows for **triangulation** of information sources, improving the credibility and depth of the research findings.

Furthermore, although the research is primarily documentary and analytical, it reflects the principles of constructivist grounded theory, wherein categories and insights emerge inductively through iterative engagement with the data. Rather than imposing pre-existing frameworks, the study allows patterns and themes to surface organically, enhancing the richness and trustworthiness of the analysis. This is particularly valuable when investigating complex and evolving contexts like Mandalika, where multiple interpretations of sustainability coexist and compete.

A qualitative case study model supported by hermeneutic interpretation and thematic analysis via NVivo provides a comprehensive and context-sensitive methodology for examining sustainable development in the Mandalika SEZ. This

methodological design accommodates the case's complexity and enables a deeper understanding of how development actors perceive, articulate, and implement sustainability in practice. This approach's structured yet flexible nature ensures that the study yields insights grounded in empirical data and analytically robust.

RESULTS AND DISCUSSION

Implementing sustainable tourism development in the Mandalika Special Economic Zone (SEZ), Central Lombok must be understood as a multidimensional process that intertwines economic growth, social inclusivity, and environmental protection. These three pillars popularized by the United Nations Sustainable Development Goals (SDGs) form the foundation of sustainable development theory introduced by the Brundtland Commission (Brundtland, 1987; WCED). Sustainable tourism, therefore, is not merely about generating economic returns through visitor numbers or infrastructure expansion but is equally about ensuring that such growth does not compromise the ecological integrity of the destination or exclude local communities from meaningful participation and benefit sharing. Achieving a balance among these three elements is particularly complex in rapidly developing areas like Mandalika, where pressures from foreign investment, national policy priorities, and global tourism trends converge.

To move beyond descriptive narratives and toward a more analytical understanding, these dimensions must be examined through appropriate theoretical frameworks that reveal what is happening but why, for whom, and with what consequences. For instance, economic growth in tourism zones can be analyzed using the *Tourism-Led Growth Hypothesis* (TLGH), which posits that tourism can catalyze broader economic expansion. However, unless paired with theories such as *inclusive growth* or *sustainable livelihoods*, such analysis may overlook the distributional effects of that growth. Similarly, environmental management in a tourism-heavy zone like Mandalika cannot be adequately understood without referencing frameworks like *carrying capacity models* or the *Environmental Kuznets Curve*, which help explain the thresholds beyond which development may cause irreversible ecological damage. On the social front, analyzing community participation and equity requires tools like *Arnstein's Ladder of Participation* or Amartya Sen's *capability approach*, both of which stress the importance of agency and justice in development processes.

In the specific context of Mandalika, where tourism development is framed within the broader structure of a Special Economic Zone, it is critical to apply a systems-thinking approach that sees development as a set of interdependent variables rather than isolated achievements. Infrastructure growth affects land use; land use affects ecological systems; ecological degradation affects local livelihoods; and all of these, in turn, affect the sustainability of the tourism product itself. Therefore, an integrated analysis is essential to map the interplay between policy decisions, market dynamics, and grassroots realities. Such a perspective makes the analysis more grounded, conceptually robust, and useful for policy recommendations. Ultimately, sustainable development in Mandalika should not be measured solely by physical indicators of progress, such as hotels built or roads paved, but by the coherence, fairness, and resilience of the systems it puts in place.

From the economic standpoint, the Mandalika Special Economic Zone (SEZ) is strategically envisioned as a key driver of regional economic acceleration, leveraging the potential of

tourism, hospitality, and service-related industries. This vision aligns with the Tourism Led Growth Hypothesis, which posits that increased tourism activity can stimulate broader economic development by boosting foreign exchange earnings, generating employment, and encouraging investment in infrastructure (Brida et al., 2023). In Mandalika, large-scale tourism infrastructure ranging from star-rated hotels, restaurants, and entertainment venues to international events like MotoGP has drawn significant domestic and global capital, marking the area as a high, profile tourism and investment destination. This aligns with Indonesia's broader agenda to decentralize growth and make eastern Indonesia a new axis of economic activity.

However, the benefits of such top-down, investment-driven growth are not automatically distributed evenly. Relying exclusively on macro-level capital inflows and large-scale development can marginalize local economic actors, particularly in rural or semi-urban settings like Central Lombok. Here, the principles of Inclusive Growth Theory (Kanbur & Rauniyar, 2010) are critical. Inclusive growth emphasizes not just the pace but also the pattern of economic growth highlighting the importance of ensuring that disadvantaged groups, such as micro and small enterprises, farmers, fishers, and artisans, have equitable access to the opportunities and benefits that arise from development. While the government has initiated community-based empowerment programs, particularly targeting MSMEs in agriculture, coffee production, and handicrafts, these efforts are often fragmented and fail to establish robust linkages with the larger tourism ecosystem. For instance, many local businesses remain excluded from hotel procurement systems or are not equipped to meet international markets' quality and volume demands.

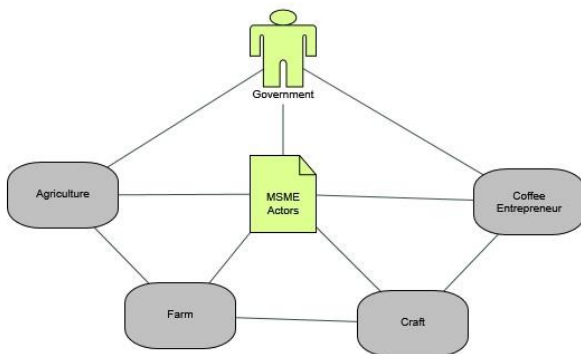
The value chain development perspective provides further insight into these challenges. Building inclusive economic linkages requires training and deliberate market interventions, such as preferential procurement policies, quality certification, brand development, and access to distribution networks. Without such mechanisms, local businesses cannot compete with larger players or participate meaningfully in the tourism-driven economy. Thus, while Mandalika SEZ may appear successful in macroeconomic terms, it risks reproducing unequal development patterns if inclusive mechanisms are not embedded into its core business and governance models.

Moreover, true economic sustainability goes beyond initial job creation; it requires building resilience within the local economy. According to the Sustainable Livelihoods Framework (Chambers & Conway, 1992); (Tan, 2022), communities need access to diverse and stable sources of income to adapt to economic shocks and environmental variability. In Mandalika, a significant proportion of residents are engaged in seasonal or informal tourism-related jobs such as tour guiding, street vending, or transport services, which are highly vulnerable to fluctuations in tourist arrivals, as seen during the COVID-19 pandemic. The over-dependence on tourism as a singular growth engine creates systemic risk and highlights the need for a diversified economic base. Promoting agro-tourism, creative economy sectors, digital entrepreneurship, and sustainable fisheries can help reduce this dependency while aligning with Mandalika's branding as a tourism destination.

In sum, while Mandalika SEZ demonstrates notable economic dynamism, the current trajectory requires reorientation toward inclusive and resilient economic planning. Long-term sustainability depends not only on attracting high

volumes of investment but also on ensuring that the fruits of economic growth are equitably shared and that local communities are empowered to become co-producers of the destination's success, not merely passive beneficiaries.

Figure 3. Economic Empowerment by the Government



Source: Research Process Using Nvivo 12 Plus (2025)

The environmental aspect of Mandalika's development demands a careful and deliberate balance between economic exploitation and ecological preservation. While tourism can catalyze regional development, it also places increasing pressure on natural resources and ecosystems, particularly in fragile coastal areas such as Mandalika. The Environmental Kuznets Curve provides a useful theoretical lens for understanding this relationship, suggesting that environmental degradation typically increases during the initial phases of economic growth but may decline once societies reach a certain income threshold and begin to prioritize ecological quality. In the case of Mandalika, the region appears to be situated in the early, upward slope of this curve characterized by rapid infrastructure development, increased tourist traffic, and expanding urban footprints, which pose significant risks to local ecosystems if not managed appropriately.

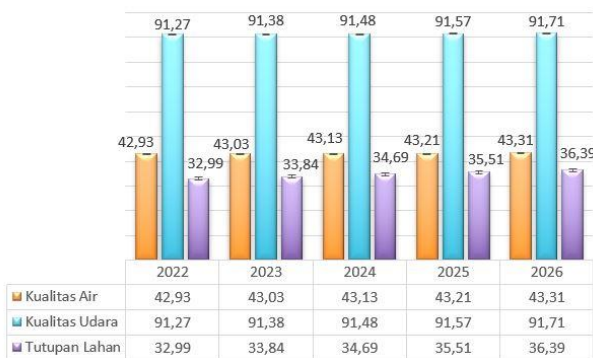


Figure 4. Environmental Quality Index
Source: Central Bureau of Statistics (BPS)

Although indicators from the Environmental Quality Index (Figure 4) for Central Lombok show relatively positive trends in air, water, and land quality, suggesting that government efforts in environmental management have yielded some measurable progress these aggregate figures may mask localized degradation, particularly in areas directly impacted by tourism activities. The application of carrying capacity models (Saveriades, 2000) is crucial in understanding Mandalika's ecological tolerance limits. Every destination has a finite capacity to absorb the pressures of tourism, whether in the form of waste generation, freshwater extraction, or erosion of natural habitats, without compromising the long-term health of its ecosystems. Mandalika's coastal zones,

coral reefs, and inland freshwater systems are especially vulnerable to overuse, pollution, and habitat fragmentation, all of which can occur rapidly and often irreversibly if development is not carefully regulated.

A key issue in Mandalika is the lack of robust, longitudinal environmental monitoring systems that can provide consistent data on biodiversity loss, coastal erosion, water quality, and ecosystem health over time. Most current ecological assessments are either snapshot studies or limited to baseline Environmental Impact Assessments (EIAs), which are often conducted at the start of a project but not followed by ongoing evaluations. Applying Ecosystem-Based Management (principles, as recommended by the Millennium Ecosystem Assessment (Kuhnert et al., 2023), is essential to address this gap. EBM emphasizes the need to manage human activities based on the knowledge of ecosystem dynamics, focusing on maintaining ecosystem services and resilience. Mandalika would entail developing and enforcing zoning systems that restrict high-impact activities in ecologically sensitive areas, promoting eco-tourism certification schemes to incentivize low-impact practices, and integrating cumulative impact assessments into planning processes.

In addition, stricter implementation and enforcement of Environmental Impact Assessments must be institutionalized. EIAs should not be treated as procedural checkboxes but as living documents that guide adaptive management. This includes pre-development assessments, post-construction monitoring, and transparent public reporting. Without such mechanisms, the risk remains that the rapid expansion of tourism infrastructure, though economically beneficial, may ultimately undermine the very natural assets that serve as the core attractions for the region. This paradox of development is particularly acute in tourism-dependent economies, where short-term gains can lead to long-term losses if ecological systems collapse or become degraded beyond recovery.

For Mandalika to truly embrace sustainable tourism, its environmental governance must evolve from reactive compliance toward proactive and integrated planning. This means embedding ecological sustainability at every stage of development, from land use planning and construction to tourism management and community education. By adopting a holistic, systems-based environmental approach, Mandalika can position itself not only as a premier tourist destination but also as a model of how tourism and conservation can coexist in a mutually reinforcing manner.

Sustainable tourism is not only about profits and preservation but also about people. The Social Sustainability model (Manis, 2020) highlights that long-term development must foster community cohesion, ensure equitable access to essential services, and protect the cultural identity of local populations. In the case of the Mandalika Special Economic Zone (SEZ), the Sasak community, as the region's indigenous inhabitants, represents a group with deep historical roots and rich cultural traditions. Yet, they remain socioeconomically vulnerable in the face of rapid tourism-driven transformation. The influx of large-scale investments and international visitors risks cultural displacement, social stratification, and economic marginalization if not carefully managed and inclusively governed.

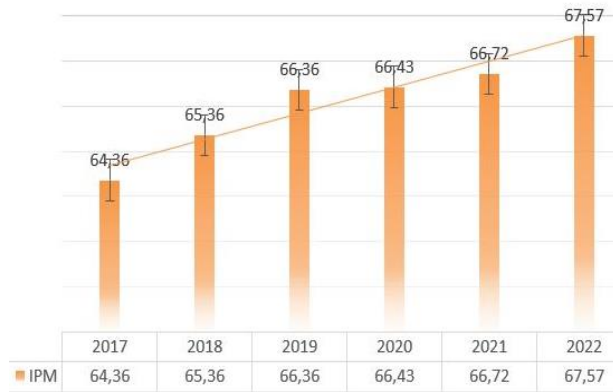


Figure 5. Human Development Index
Source: Central Bureau of Statistics (BPS)

Although statistical indicators such as the Human Development Index (HDI) in Central Lombok (as presented in Figure 5) demonstrate progress in education, health, and income, these surface-level improvements must be critically examined through the lens of Amartya Sen's Capability Approach (Reyes, 2018). According to this approach, development should not be understood merely as expanding resources or services. Still, as the enhancement of individuals' freedoms and capabilities to live lives, they have reason to value. Suppose community members are displaced from their ancestral lands, excluded from planning processes, or receive minimal benefits from tourism activities. In that case, the developmental gains reflected in macro-level indicators may mask deeper structural inequities. Social sustainability, therefore, must go beyond service provision to address power, participation, and justice.

To better assess the quality of community participation, Arnstein's Ladder of Citizen Participation provides a valuable framework. This model categorizes levels of engagement from mere tokenism (such as informing or consultation) to true citizen power (such as partnership or delegated authority). Analysis of Mandalika's development processes suggests that much community engagement remains within the ladder's lower rungs. Public consultations have occurred, but they often lack mechanisms for integrating community feedback into planning outcomes. As a result, local stakeholders usually feel heard but not genuinely involved in shaping the development agenda. For tourism to be sustainable in both form and substance, local actors must transition from passive recipients of external decisions to co-creators and stewards of their development trajectories.

Moreover, Cultural Sustainability (Åmot & Bjerklund, 2023) is increasingly relevant in Mandalika, where cultural assets such as Sasak architecture, dance, weaving, and religious practices are being marketed as tourist attractions. While cultural exposure can be empowering, it can also be exploitative, especially when traditions are commodified without the community's consent or are reshaped to suit tourist expectations rather than cultural authenticity. The danger lies in reducing rich, evolving traditions to fixed 'performances' tailored to external consumption, stripping them of their context, meaning, and community ownership. True cultural sustainability entails protecting intangible heritage as a living, evolving element of community identity that is practiced, transmitted, and innovated by the community.

To achieve genuine social and cultural sustainability, policy interventions must go beyond rhetoric and be operationalized in planning instruments, legal frameworks, and governance

structures. This includes securing land tenure rights for Indigenous communities, allocating equity stakes in tourism ventures, ensuring intergenerational cultural transmission through formal and informal education, and embedding community representation in every decision-making platform related to the SEZ. These steps would safeguard the Sasak community's rights and enhance the social legitimacy and long-term viability of Mandalika as a tourism destination. In short, development must be done *with* the community, not merely *for* them.

The fourth and cross-cutting pillar of sustainable development in Mandalika is governance, which serves as the institutional foundation that determines how effectively economic, social, and environmental objectives can be achieved and integrated. Governance is pivotal because even the most well-designed development initiatives can falter without clear roles, responsive policies, and institutional accountability. According to Institutional Theory (Basan et al., 2024), development outcomes are not only shaped by formal regulations but also by informal norms, practices, and the quality of coordination among stakeholders. In the case of the Mandalika Special Economic Zone (SEZ), the presence of diverse and overlapping actors such as the Indonesia Tourism Development Corporation (ITDC), regional governments, various national ministries, private investors, and local communities has created a highly complex institutional landscape. This multiplicity often leads to fragmented decision-making, inconsistent policy enforcement, and gaps in accountability.



Figure 6. Sustainable Development Model
Source: Research Process Using Nvivo 12 Plus (2025)

As visualized in Figure 6 (based on NVivo coding results), the concept map underscores the pressing need for an integrated policy framework that aligns the objectives and responsibilities of all involved institutions. Without a shared vision and operational clarity, stakeholder interests can become misaligned, leading to inefficiencies, redundancies, or conflict. The Adaptive Governance Model (Haase, 2021) provides a compelling approach to address this. This model emphasizes flexible, participatory governance and can learn from experience. In rapidly evolving contexts like Mandalika, where environmental, economic, and social dynamics are in constant flux, adaptive governance allows for iterative planning, continuous monitoring, and the recalibration of strategies based on real-time feedback.

Key features of adaptive governance include multi-level collaboration, feedback loops, knowledge co-production, and institutional reflexivity. These elements ensure that governance

structures are not rigid but can respond to changing conditions, community needs, and environmental signals. In practice, this means institutionalizing mechanisms for community engagement beyond one-off consultations, such as participatory planning forums, citizen monitoring groups, and inclusive oversight committees. Furthermore, transparency and data accessibility are essential for building public trust and ensuring that development decisions are subject to democratic scrutiny.

In addition to flexibility, effective governance in Mandalika must also be context-specific. Drawing from Place-Based Development Theory (Lepore, L., Paolone, F., Pisano, S., & Alvino, 2017), sustainable development strategies should be tailored to the region's unique social, cultural, and ecological characteristics. Mandalika, with its indigenous Sasak population, coastal ecosystems, and historical marginalization, cannot be governed using a generic SEZ model designed for industrial parks or urban megaprojects elsewhere in Indonesia. Policies must recognize and incorporate local knowledge, customary land tenure systems, and community governance structures. Failure to do so can result in policy mismatch, resistance from regional actors, and long-term unsustainability.

Therefore, rather than treating Mandalika as a replicable blueprint for other SEZs, governance should frame it as a learning site to experiment with localized, participatory, and ecosystem-sensitive planning approaches. By embracing place-conscious policy innovation, Mandalika can lead the way in demonstrating how governance reform can catalyze sustainable and equitable development. Ultimately, the success of Mandalika will depend not only on its physical transformation but also on its governance systems' strength, inclusivity, and adaptability.

CONCLUSION

Sustainable development involves meeting the needs of the present while considering future generations. This includes economic prosperity, social justice, and environmental preservation. Sustainable development has many aspects relating to the social, economic, and ecological areas with related institutions. The Lombok government empowers communities through MSMEs, including agriculture, coffee entrepreneurship, and crafts. Tourism contributes significantly to local and global economic progress and is the largest industry in the world. Indonesia's tourism sector is ranked ninth globally, providing employment and income through various small businesses. Central Lombok's Human Development Index (HDI) showed an increase of 67.57% in 2022, offering better wages, health, and education. Socially sustainable tourism development improves social life, health services, and education. The Environmental Quality Index, which targets a 43.31% improvement in air quality by 2026, is on track and will reach 43.03% in 2023. The land quality index target is also met. Sustainable tourism development in Central Lombok Regency maintains environmental quality by increasing air and soil quality indexes. The three aspects of sustainable development contribute to tourism development in the Mandalika special economic zone through empowering existing communities. The weakness of this study lies in looking at only three aspects, so it cannot be generalized; therefore, further research will emphasize how sustainable tourism in the Mandalika special economic zone emphasizes collaborative governance so that the discussion will be broader later.

This study significantly contributes to developing academic and practical literature on sustainable tourism development in special economic zones. In the context of Indonesia, where

tourism development is being promoted as the main driver of economic growth, this study can be a critical evaluation of various policies that have been implemented. The findings of this study are expected to provide concrete input for local and central governments in formulating more inclusive and sustainable development policies. In addition, nationally, this study also includes space for local community voices so that they are not marginalized in the mainstream of development.

However, this study also has several limitations that need to be considered. First, the availability of long-term primary data is still limited, so the analysis of social, economic, and environmental impacts is carried out mainly based on secondary data and short-term observations. Second, external factors such as changes in government policy, global economic dynamics, and climate change can influence the desire for projects in the Mandalika Special Economic Zone but have not been fully studied in this study. Third, local community participation in decision-making and project implementation is still challenging, so their perspectives have not been fully explored. Finally, the descriptive and exploratory research approach needs to be complemented with more in-depth follow-up studies, both quantitatively and qualitatively, to obtain a more comprehensive picture.

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