

Dynamics of Tourism Development and Urbanisation in Coastal Areas: A Case Study of Pangandaran Regency

Arie Budiawan^{1*}, Erlan Suwarlan², Adityawarman³

^{1,2,3}Program Studi Ilmu Pemerintahan, Universitas Galuh. Jalan R.E. Martadinata No. 150, Kabupaten Ciamis, Jawa Barat, 46251, Indonesia.

ABSTRACT: Pangandaran Regency is one of the leading coastal areas in West Java Province that has experienced rapid development in the tourism sector since becoming a new autonomous region in 2012. Massive tourism growth has driven local economic growth and infrastructure investment, but on the other hand, it has also caused various complex problems related to urbanisation, spatial planning, social, environmental, and institutional issues. This study aims to analyse the dynamics of tourism and urbanisation development in the Pangandaran coastal area and to identify the impacts and policy strategies for sustainable development. Qualitative descriptive research was used to analyse the existing phenomena. Data collection was conducted through in-depth interviews with key informants (local government, business actors, local communities, and academics), field observations, and a review of regional planning documents. Data analysis was conducted using Miles and Huberman's interactive model, which includes data reduction, data presentation, and conclusion drawing. The results show that tourism has become the main driver of Pangandaran's economy, but the distribution of its benefits is uneven. From a social perspective, coastal urbanisation has triggered changes in values and increased social inequality. Meanwhile, from an environmental perspective, ecological pressures have emerged in the form of coastal erosion, pollution, and land conversion. Development governance remains sectoral in nature, with limited coordination between agencies.

KEYWORDS: Pangandaran; sustainable tourism; coastal urbanisation; spatial governance; sustainable development.

INTRODUCTION

Coastal areas play an important role in national development because of their great economic potential and strategic location between land and sea. In Indonesia, coastal areas are increasingly becoming centres of economic growth, especially in trade, fisheries, tourism, and other activities. One area that has developed significantly is Pangandaran Regency, which is now a major tourist destination in West Java Province. Over the past twelve years, Pangandaran has undergone a major transformation from a traditional coastal area to a more urban and modern tourism destination. The development of infrastructure such as hotels, restaurants, shopping centres, and the southern cross road has led to a rapid increase in the number of tourists. This growth has greatly benefited local revenues and the welfare of the local community, especially those working in the service and creative economy sectors. However, this rapid development has also brought various consequences and challenges. Tourism growth has triggered urbanisation, which has changed land use patterns in coastal and ecotourism areas. Some of the common impacts include: Environmental pollution, due to solid waste (plastic waste) and liquid waste from tourism activities. Ecosystem degradation, such as coral reef damage, coastal erosion, and reduced vegetation cover. Land use change, from agricultural or forest areas to hotels, restaurants, and tourism infrastructure, increased carbon emissions, due to increased tourist transportation and fossil fuel use.



Figure 1.1: Environmental Damage in Pangandaran Regency

From a social perspective, the advancement of tourism and modernisation has changed the traditional values of coastal communities. The traditional culture that was once the basis of community life is now being replaced by a consumerist and commercial culture. In addition, the economic inequality between the local community and large businesses is becoming more pronounced, as external investment has not yet fully benefited local residents.

Institutional and management problems also occur, as well as poor coordination between regional organisations, inadequate regulations in spatial planning, and minimal community involvement in development planning, resulting in coastal zone management policies that are often sectoral and inconsistent. As a result, the economic potential of the coast has not been fully realised, while environmental conservation and social empowerment efforts have not been optimal.



Figure 1.2: Environmental Conservation and Social Empowerment

Based on these phenomena, a comprehensive study is needed to analyse the dynamics of tourism and urbanisation in coastal areas, particularly in Pangandaran Regency. This research needs to look at the impact from various aspects, such as spatial planning, the environment, society, and institutions. This study is expected to understand the challenges of coastal development and help formulate sustainable tourism area management policies.

Therefore, a *sustainable tourism* approach is important to ensure that tourism activities provide economic benefits without damaging the environment. Sustainable tourism is a concept that emphasises a balance between three main dimensions: economic, social, and environmental.

According to the World Tourism Organisation (WTO, 2020), sustainable tourism is tourism development that meets the needs of tourists and local communities today without compromising the ability of future generations to meet their needs. The main principles of sustainable tourism include the preservation of the natural environment, including waste management and resource conservation. The involvement of local communities in the planning, implementation, and supervision of tourism activities. The fair distribution of economic benefits to the communities surrounding tourist areas. Environmental education and awareness for tourists and tourism businesses.

Dynamics of Tourism Development and Urbanisation in Coastal Areas: A Case Study of Pangandaran Regency

Research by Setiawan and Prasetyo (2020) shows that an increase in tourist visits to the southern coast of West Java is directly proportional to an increase in waste volume and water quality degradation. The relationship between tourism and environmental quality is two-way. On the one hand, a clean and sustainable environment is the main asset of tourist attraction. However, on the other hand, intensive tourism activities can actually reduce environmental quality if not managed properly. In the context of Pangandaran Regency, the implementation of sustainable tourism can be realised through integrated waste management policies, control of development in coastal areas, and strengthening the capacity of the community to maintain cleanliness and environmental conservation. The local government has a strategic role in establishing environmentally-based tourism management policies through spatial planning regulations, supervision of tourism activities, and empowerment of local communities.



Figure 1.3: Strategic Environmental Management Activities by the Local Government Pangandaran Regency

Based on Pangandaran Regent Regulation No. 23 of 2025 concerning Amendments to the 2025 Local Government Work Plan, the following issues remain unresolved in the tourism sector, which provides economic added value to the community:

1. Suboptimal management of tourism destinations and tourism products
 - Management and quality of tourism services are not yet optimal
 - Insufficient supporting facilities and infrastructure for tourism
 - Insufficient skills and competency certification of tourism human resources
 - Failure to meet the standard indicators for sustainable tourism development
 - Shift in tourist motivation from mass tourism to special interest tourism (destination segmentation, tourist villages)
 - Lack of integrated access to tourist attractions
2. Suboptimal tourism promotion
 - Lack of massive tourism promotion through media at the national and international levels
 - Suboptimal tourism promotion cooperation
3. Suboptimal tourist attractions
 - The lack of implementation of local culture as a regional identity for use in the tourism sector
 - The absence of distinctive tourist attractions/events
 - The lack of optimal coordination between the district government, villages, and tourism promotion groups in developing tourist attractions

Furthermore, these conditions are emphasised in the Pangandaran Regent Regulation Document Number 23 of 2025 concerning Amendments to the 2025 Local Government Work Plan, which states that environmental issues in Pangandaran District include:

1. The lack of an optimal sustainable environment
2. Poor water, air, and land cover quality indices
3. The continued destruction of protected areas
4. Suboptimal supervision and enforcement of environmental laws on activities/businesses
5. Suboptimal waste management
6. The occurrence of water pollution

The above phenomena indicate that tourism in Pangandaran Regency has not provided economic added value to the community and has resulted in a decline in the quality of the environment. Therefore, tourism and the environment in Pangandaran are crucial to realising sustainable tourism. The phenomena occurring in Pangandaran Regency are important and interesting to elaborate on through this study.

The objective of this research is to analyse the dynamics of tourism and urbanisation development in coastal areas: a case study of Pangandaran Regency.

Dynamics of Tourism Development and Urbanisation in Coastal Areas: A Case Study of Pangandaran Regency

RESEARCH METHODS

In this study, a qualitative approach using phenomenological methods was used because it was believed to be able to reveal the meaning of the phenomena being studied. The research was conducted from January 2025 to June 2025 at the Agriculture and Food Security Agency of Ciamis Regency, West Java. The informants in this study were determined *purposively* and consisted of: the Head of the Tourism and Culture Office, the Head of the Environment and Sanitation Office, the Head of the Public Works and Spatial Planning Office, the Head of Bappeda, the local community, private institutions, and communities. In this study, primary data was obtained from the informants' statements. Meanwhile, secondary data was obtained by collecting documents such as: Law Number 32 of 2009 concerning Environmental Protection and Management, Tourism Law Number, Law Number 23 of 2014 concerning Regional Government, Government Regulations, Presidential Regulations, Ministerial Regulations, Regional Regulations, Regent Regulations, strategic plans, and literature related to the focus of the study. Data collection was carried out through observation, interviews, and documentation. The data analysis technique used involved three simultaneous steps as described by Miles and Huberman (1992), namely: 1) *data reduction*; 2) *data display*; and 3) *conclusion drawing/verification*.

RESULTS AND DISCUSSION

The discussion and analysis of the dynamics of tourism development and urbanisation in the coastal area of Pangandaran Regency show that the rapid progress of the tourism sector has had multidimensional positive and negative impacts on the economic, social, environmental, spatial planning, and institutional structures of the region.

In terms of the economy, the tourism sector has become the main driver of regional growth. Its contribution to local revenue has increased significantly, creating new jobs and stimulating the creative economy of the local community. However, the distribution of economic benefits remains uneven, as most of the investment and profits are controlled by parties from outside the region. This situation highlights the need for local economic empowerment and *community-based tourism* models. Furthermore, discussions and analyses related to social and cultural aspects reveal changes in the social structure of coastal communities. Urbanisation and labour migration have expanded social interactions and opened up opportunities for modernisation, but they have also given rise to shifts in values, the loss of local cultural identity, and social inequality. Coastal communities now face the challenge of maintaining a balance between adapting to change and preserving local wisdom. Furthermore, discussions and analyses related to environmental and ecological aspects show that the pressure of tourism development has caused the degradation of coastal resources, including coastal abrasion, domestic waste pollution, and mangrove land conversion. Environmental carrying capacity has not been optimally taken into account in development planning. This indicates the need to apply the principles of *eco-tourism* and strict *carrying capacity management* to ensure sustainable development. Furthermore, the discussion and analysis related to spatial planning and urbanisation aspects show that the development of coastal tourism areas has triggered spontaneous urbanisation and uncontrolled land use change. The implementation of the 2018–2038 Pangandaran Regency Spatial Plan still faces challenges in terms of supervision, zoning compliance, and cross-sectoral integration. Strengthening environmental-based spatial planning and coastal disaster risk management is very important. Furthermore, the discussion and analysis related to institutional and governance aspects show that inter-agency coordination and community participation in decision-making are still limited. Development governance tends to be sectoral and reactive, not yet based on collaboration. A transformation towards a *collaborative governance* model is needed, which combines the roles of the government, the private sector, and the community in integrated coastal zone management. \

The results of the research that have been discussed and analysed are outlined as follows:

Aspect	Current Conditions	Main Issues	Strategic Direction
Economy	Rapid growth of the tourism sector and MSMEs	Inequality of benefits, dominance of foreign investors	Strengthening community-based tourism (CBT)
Social	Changes in the values and lifestyles of coastal communities	Shift in local culture, social integration	Revitalisation of local culture and festivals
Environment	Exploitation of coastal resources	Waste, erosion, land conversion	Application of the <i>eco-coastal tourism</i> concept
Spatial planning	Growth of tourist areas and settlements	Zoning violations, weak supervision	Enforcement of spatial planning and coastal zoning
Institutional	Cross-sector coordination is not yet optimal	Weak participation and collaboration	Strengthening collaborative governance (ICZM)

Dynamics of Tourism Development and Urbanisation in Coastal Areas: A Case Study of Pangandaran Regency

The results of this study imply that:

1. Tourism growth must be accompanied by sustainable spatial planning.
2. A collaborative institutional system involving the community, government, and private sector is needed.
3. The principles of *sustainable coastal development* need to be integrated into regional policies so that a balance between economic, social and ecological aspects can be maintained.

Starting Condition

Pangandaran Regency was formed from the division of Ciamis Regency in 2012 based on Law Number 21 of 2012. Geographically, this region is located in the southeastern part of West Java Province and borders the Indian Ocean to the south. It covers an area of 1,010.92 km² with a coastline of approximately 91 km and has ten subdistricts, including Pangandaran, Parigi, Cijulang, Cimerak, Kalipucang, Langkaplancar, Cigugur, Sidamulih, Padaherang, and Mangunjaya. The administrative centre is in Parigi Subdistrict. As a leading tourist area in the province, Pangandaran is known for its diverse natural potential, ranging from beaches, nature reserves, karst caves, and underground rivers that attract domestic and foreign tourists. Based on data from the Pangandaran Regency Tourism and Culture Office (2024), the number of tourist visits reached 3.8 million people per year, an increase of nearly 45% compared to 2017. The development of tourism has significantly boosted local economic growth. The contribution of the tourism sector to the Regional Original Income (PAD) increased from Rp 21.3 billion in 2017 to Rp 67.5 billion in 2024 (Bappeda, 2024). The main economic activities that have developed include: hotel, restaurant, and tourist transportation services; micro businesses such as culinary and souvenirs; and a creative economy based on local culture and marine tourism. However, from the above data, after conducting observations, research, and interviews with informants, we found that there are economic inequalities among the actors. According to an informant from the Head of the Tourism and Culture Office: *"Tourism growth is indeed significant, but most of the profits are still enjoyed by large investors from outside the region. The local community mostly plays a role as a provider of supporting services such as parking or street vendors."* Furthermore, according to an informant from a culinary MSME: *"Our turnover has increased since the southern cross road was built, but sometimes we cannot compete with large restaurants. The local government needs to pay more attention to local MSMEs so that they can move up the ladder."* This condition shows that tourism is not yet fully inclusive. In the future, a *community-based tourism (CBT)* strategy is needed so that the economic benefits can be felt more evenly. The transformation of coastal areas into leading tourist destinations has also brought about significant social changes. Urbanisation has increased due to the influx of workers from outside the region, putting pressure on social infrastructure such as housing and public services. Based on interviews and field research, there has been a shift in the values and lifestyles of coastal communities, from traditional fishing to a service economy. Social interactions have become more heterogeneous, giving rise to cultural integration but also the potential for social conflict. The changing role of women is quite prominent, with many now actively involved in the tourism service sector and MSMEs.

Furthermore, according to an informant who is a community leader in Pananjung Village: *"Young people are now more interested in working in cafes or hotels than going to sea. On the one hand, this is positive, but we are beginning to lose our identity as a coastal community."* Furthermore, according to an informant who is the head of the Tourism Awareness Group/Pokdarwis: *"We are trying to preserve local wisdom by holding an annual coastal traditional festival so that the culture is not lost even though this area is becoming more modern."* Analysis shows that the social dynamics in Pangandaran reveal a duality: modernisation and economic opportunities on the one hand, but also challenges to cultural preservation and social cohesion on the other. Tourism growth and coastal urbanisation have a significant impact on environmental quality. Based on data from the Environment Agency (DLH, 2024), several major issues have been identified, including: an increase in the volume of tourist waste (\pm 30 tonnes/day during peak season); coastal erosion and abrasion in the Batu Hiu and Bulaksetra areas; seawater pollution from domestic and hotel waste; and the conversion of mangrove and coastal areas for the construction of tourist facilities. Field observations show that several coastal areas have experienced natural vegetation degradation, particularly around West Pangandaran Beach and Batu Karas Beach. Furthermore, an informant from the Environmental Activists, Green Coastal Community, stated: *"The biggest problem now is waste and hotel waste. Waste management infrastructure is still limited, and tourist awareness is not yet high."* Meanwhile, an informant from the District Environmental Agency said: *"We have built a TPS3R and implemented an integrated waste management system, but its capacity is not yet sufficient for the volume of tourists who come."* Ecologically, this condition indicates that the pace of development is not always in balance with the carrying capacity of the environment. An *ecotourism* approach and strict regulations on coastal zoning are important for long-term sustainability. Pangandaran District has a 2018–2038 Spatial Plan (RTRW) that designates the Pangandaran, Cijulang, and Parigi areas as strategic tourism areas. However, implementation in the field still faces serious challenges: many accommodation and tourism businesses are not in accordance with spatial zoning, land use conversion from agriculture and conservation is increasing rapidly, and the growth of coastal residential areas is uncontrolled. Furthermore, an informant from the District Development Planning Agency (Bappeda) stated: *"Our RTRW actually regulates strict zoning along the coastline, but there are still many buildings that violate this due to weak supervision and economic pressure from tourism."* A local academic informant stated that: *"Urbanisation in Pangandaran tends to be spontaneous and uncontrolled. Without spatial planning enforcement, the coastline will experience ecological degradation."*

Dynamics of Tourism Development and Urbanisation in Coastal Areas: A Case Study of Pangandaran Regency

The analysis shows that spatial control in Pangandaran is still sectoral in nature and has not yet integrated the principles of *Integrated Coastal Zone Management (ICZM)*, which combines ecological, social and economic aspects into a single planning system. Institutional arrangements are a key aspect of successful coastal zone management. Currently, coordination between agencies in Pangandaran District (Bappeda, Tourism Office, DLH, PUPR Office) is still partial. The main weaknesses lie in: overlapping authorities between the tourism, environment and fisheries sectors; weak community participation in the planning process; and a lack of collaborative forums across stakeholders.

According to an informant from the Head of Bappeda Pangandaran: "*We still need an integrated coordination model. Often, tourism development takes place first, and only afterwards do we consider the environmental impact.*" Furthermore, a Pokdarwis leader stated: "*We are rarely involved in the planning process, even though the community on the ground knows best about changes in the coastal area.*"

The analysis indicates that governance in Pangandaran is still in a transitional phase from a bureaucratic model to a collaborative model. The concept of *governance-based coastal management* needs to be strengthened to make tourism development more participatory, adaptive, and sustainable.

CONCLUSION

Based on the research results, the following conclusions can be drawn: In terms of the economic aspect of the ' ', there is a need to strengthen the community-based local economy (Community-Based Tourism/CBT) through training in tourism management, digital marketing, and family-based homestay management. Diversification of the coastal economy through the development of the creative economy, local cuisine, and cultural products, so that the community does not depend entirely on mass tourism. Inclusive partnerships between large investors and local MSMEs through targeted and measurable *corporate social responsibility (CSR)* programmes. In the social and cultural aspects, there is a need for revitalisation of local coastal culture through traditional festivals, traditional arts, and cultural education in schools to preserve local identity. Capacity building for local communities in tourism management through training for *tour guides*, homestay managers, and environmental ethics education for coastal residents. Strengthening social cohesion through the establishment of an inclusive coastal community forum as a platform for dialogue between local communities, migrants, and business actors.

In terms of the environment and ecology, there is a need for regional policies on the implementation of the *eco-coastal tourism* concept with the principle of "green tourism" which limits tourist capacity, increases green open spaces, and manages waste in an integrated manner. Rehabilitation of coastal ecosystems through mangrove replanting, coastal zone management, and the development of infrastructure that is adaptive to abrasion. Implementation of a zone-based waste management system in each major tourist zone (West Coast, Batu Karas, Batu Hiu, Green Canyon). Periodic monitoring of environmental carrying capacity to determine the optimal limits of tourism development without damaging the ecosystem. In terms of spatial planning and infrastructure, Strict enforcement of spatial planning laws against violations of coastal zoning and conversion of conservation land. Integration of spatial planning and tourism infrastructure development with *low impact development (LID)* principles to remain environmentally friendly. Development of a sustainable coastal transportation system, such as bicycle lanes, electric tourist buses, and pedestrian facilities in major tourist areas. Utilisation of geospatial technology (GIS) for monitoring land use changes and adaptive spatial planning for disaster risk. In terms of institutional and governance aspects, it is necessary to implement the Integrated Coastal Zone Management (ICZM) model at the district level by forming the Pangandaran Coastal Forum, which involves government agencies, academics, business actors, and local communities. Encourage collaborative governance to strengthen inter-agency synergy and increase policy transparency. Enhance the role of Pokdarwis and environmental NGOs as government partners in monitoring, educating tourists, and conserving coastal resources. Implement a performance-based governance system in the tourism sector, so that success is not only measured by the number of tourists, but also by social and ecological sustainability.

REFERENCES

- 1) Land Cover Changes of Pangandaran: Revealing the Tourism Attraction Impact on Coastal Urban Expansion (Abdurrahman et al., 2025) — discusses land cover changes and urban expansion in Pangandaran due to tourism attractions.
- 2) Small town urbanisation and project experimentation in the Pangandaran Region, Indonesia (Astuti et al., 2021) — examines the urbanisation of the small Pangandaran area in the context of infrastructure and tourism projects.
- 3) APPLICATION OF COMMUNITY-BASED TOURISM IN THE SUSTAINABLE MANAGEMENT OF MARINE TOURISM POTENTIAL IN PANGANDARAN REGENCY (Putra & Suroso, 2023) — focuses on marine tourism management and community participation in Pangandaran Regency.
- 4) Analysis of Coastal Tourism Development Strategies: A Study of the Pangandaran Regency Culture & Tourism Office (Latif, National University) — analysis of coastal tourism development strategies in Pangandaran Regency.
- 5) Sustainable Tourist Behaviour on Environmental Aspects in Pangandaran Beach (Nizar & Leo, 2022) — research on tourist behaviour towards environmental aspects in Pangandaran Beach.

Dynamics of Tourism Development and Urbanisation in Coastal Areas: A Case Study of Pangandaran Regency

- 6) Toward a tourism destination brand equity of coastal tourism of Pangandaran Regency (Rashid, 2023) — discusses the brand image of Pangandaran coastal tourism destinations and its implications for urbanisation.
- 7) Policy model for development of tourism villages based on local wisdom towards self-reliant village in Pangandaran Regency, Indonesia (Aziz et al., 2024) — policy model for the development of tourism villages based on local wisdom in Pangandaran.
- 8) Putra, A., & Suroso, D. (2023). *Application of Community-Based Tourism in the Sustainable Management of Marine Tourism Potential in Pangandaran Regency*. *Journal/Article (community-based management study)*.
- 9) *Pangandaran Tourism Object Development Strategy - research study (Neliti)*. (n.d.). *Pangandaran Tourism Object Development Strategy*. Neliti.
- 10) Aziz, A., et al. (2024). *Policy model for development of tourism villages based on local wisdom towards self-reliant village in Pangandaran Regency, Indonesia*. *Journal (tourism village policy model)*.
- 11) *Tourism Destination Management (2021)*. *Textbook/compilation on sustainable destination management (ed./collective authors)*.
- 12) Rudiarto, I. (2018). *A Regional Perspective on Urbanisation and Climate-Related Disasters in the Northern Coastal Region of Central Java, Indonesia*. *Land (MDPI) - a useful study for discussing coastal urbanisation and climate disaster risks*.
- 13) *Wahana Riset / WRI Indonesia — analysis of coastal city resilience and urbanisation challenges (WRI Indonesia reports & blogs; relevant for policy implications)*.
- 14) *Blue Economy / National State of Oceans and Coasts (NSOC) - Indonesia (PEMSEA / Ministry of Environment) - national reports related to the blue economy, coastal areas, and marine management. Suitable for coastal policy and development frameworks*.
- 15) *Bappenas / technical publications related to coastal area development and infrastructure (e.g., “Blue and Green Book”/technical assistance proposals)*.
- 16) Hudyana, R. N. (n.d.). *Guide Book Design of Tourism Object Kabupaten Pangandaran (abstract / Telkom University repository) - practical reference for attraction maps and destination guides. Local journal articles and theses/dissertations about Pangandaran (community involvement, CBT, tourist behaviour, beach litter) e.g. Sustainable Tourist Behaviour on Environmental Aspects in Pangandaran Beach; studies from local/university journals (2020–2025)*.
- 17) *Coast & Ocean (journal on coastal resource management), a collection of relevant articles for coastal ecology studies and management policies*.
- 18) *Reports and documents on regional development plans/tourism strategies for Pangandaran Regency (RPJMD, tourism agency documents) can be found in the Pangandaran Regional Government repository/Neliti/local university repository*.
- 19) Ayyagari, S. V., Wulan Aprilia, G. K., & Mehmoud Fawaz, N. (2024). *Sustainable Policy Interventions for Coastal Erosion Affecting Eco-Tourism and Development in Bali, Indonesia*. In IAPA Proceedings Conference. ISSN 2686-6250. Focus: policy interventions on coastal erosion related to coastal tourism destinations. Relevant to the chapter on issues and responses to coastal tourism urbanisation management.
- 20) Ellisa, E. (2023). *Urban Design Concept to Enhance Tourism in Cilincing Coastal Area*. In Conference Proceedings – Department of Architecture, University of Indonesia. Focus: urbanisation design of coastal areas to support tourism. Relevant for analysis of urbanisation in the Pangandaran coastal area.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.