



Research Article

Analytical Framework for Oceanic Tourism: Effects, Dynamics, And Sustainable Trajectories

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Abstract	Manuscript Information
Oceanic tourism, which includes activities like cruising, coastal recreation, and marine wildlife experiences, is a quickly increasing part of the global travel and tourism industry. This article gives a full look at maritime tourism, looking at its economic importance, effects on the environment, and social and cultural aspects. The report looks at important trends like the growth of eco-friendly marine tourism, the effects of climate change on ocean travel, and new technologies in the cruise and maritime industries. The research also talks about the problems that mass tourism causes for coastal towns and ecosystems and gives suggestions for how to balance economic growth with caring for the environment. This analysis seeks to educate stakeholders and policymakers on how to create a more resilient and sustainable oceanic tourism business by combining data from global tourism organisations, case studies, and recent research.	- ISSN No: 2583-7397 - Received: 12-09-2025 - Accepted: 26-10-2025 - Published: 31-10-2025 - IJCRM:4(5); 2025: 511-522 ©2025, All Rights Reserved - Plagiarism Checked: Yes - Peer Review Process: Yes
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INTRODUCTION

1. Beginning

Since the beginning of the new millennium, policymakers and researchers have become more and more interested in oceanic tourism, which is a type of coastal tourism. The major problems with traditional tourism models have caused a lot of harm to people and the environment, which has led to initiatives to stop disasters from happening and lessen their effects. Some of these problems are overdevelopment, environmental damage, economic leakages, cultural assimilation, and the need for people to get involved in their communities. Oceanic and coastal tourism includes a wide range of activities, such as cruises, yachts, marine wildlife trips that focus on marine mammals, birds, and other aquatic life, and recreational fishing that targets a variety of species, from snapper to marlin. The need for these activities is growing all over the world, especially in small coastal islands with a lot of ocean resources. This analysis aims to address the existing gap in the literature about waterway tourism, emphasising the significance of marine tourism.

To gain a better understanding of oceanic tourism, it is necessary to elucidate some fundamental ideas. Ocean tourism includes all kinds of activities that have to do with the ocean. Marine tourism, on the other hand, is a narrower group of ocean activities that are mostly about learning about, enjoying, and appreciating the marine ecosystem. Oceanic tourism encompasses a range of marine tourism activities; small islands and coastal regions exemplify the ocean, but oceanic tourism maintains a distinct character separate from ecological [1]. Oceanic tourism can help us understand the economic side of ocean travel even better. Oceanic refers to both open waters and the ocean as a natural resource base over a greater space than coastal and the ecosystem span of the marine tourism.

1.1. Setting and Research Goals

People take more than 2 billion maritime trips every year, which costs \$500 billion [1]. Tourists from all over the world come to coastal areas looking for sun, water, and a variety of other activities. Small Island Developing States (SIDS) have taken on the governance and management problems that come with maritime tourism more than most other places. General preconditions look at both internal and external weaknesses and a strong marine legal framework. Composite indices, on the other hand, look at patterns of stay time, how much the travel market depends on other markets, and how low-capital urbanisation needs to be met. SIDS shows how governance frameworks can function with public-private partnerships for financing, investment, and technology. It also looks at how to meet sustainability criteria, eco-labeling, and regulatory frameworks.

Aquatic leisure tourism includes oceanic tourism on high-seas cruise ships, marine-sector tourism that combines marine activities with other land-based activities, coastal activities like diving, sailing, fishing, or whale-watching, and coast-sea sites where people from both the US and other countries can explore marine waters and coastal areas [2]. Economic preconditions

are integrated with established environmental, socio-cultural, governance, and management frameworks to provide a comprehensive overview of oceanic tourism. This includes indicators for marine resource use, access requirements, quality thresholds, utilisation limits, adaptive capacity, and resilience determination. Control-water approaches, previously structured as an inward-outward framework, are redefined as a multi-dimensional lens to promote collaborative exploration of the oceanic tourism landscape.

1.2. The range and definitions of oceanic tourism

Oceanic tourism is when people visit places that look like oceans for fun, relaxation, and amusement. The oceans comprise 70% of the Earth's surface, which means there are many places that may be part of marine tourism but haven't been explored yet. Oceanic tourism usually happens in shallow tropical and temperate areas. In the past, this only applied to small island nations. Now, it also includes coastal areas of semi-enclosed seas, freshwater lakes, rivers, and even provinces that are far from oceans. People that go on oceanic vacations like to go to the beach, do water sports, see whales, go boating, dive, and fish. The fastest-growing part of the global travel sector is coastal and marine tourism.

Tourist analysis usually emphasises on broad ideas like sustainable development and carrying capacity, but it doesn't pay enough attention to tourist carrying capacity as a way to plan for destinations in Small Island Developing States (SIDS) [1]. Carrying capacity encompasses economic, social, and political dimensions, recognising that disasters or environmental emergencies can deteriorate developmental conditions and induce outward migration. Recently, resilience has been a priority again to deal with weaknesses and uncertainties in areas including the environment, the economy, society, and governance. Oceanic tourism is typically a major industry in fragile and vulnerable systems, but it may also be a double-edged sword that hurts balance and sustainability while helping them. So, an assessment framework is suggested to measure the state and resilience of small islands, coastal areas, and river basins around the world. This framework connects tourist indicators with general development goals.

2. The Economics of Oceanic Tourism

Oceanic tourism encompasses activities that take place on the ocean and along the coast. These activities are very important to many countries, especially Small Island Developing States (SIDS), where tourism and related services are often the main source of income for the government. There are a lot of different providers and activity in the market, which makes it complicated. The price changes with the seasons and the economy as a whole. A lot of the money that comes in goes to other countries, which means that the economic retention rate is frequently low, even though there are a lot of marine coastal tourism sectors. Another big issue is gender equality, since women mostly work in low-paying jobs and there aren't many chances for them to move up to decision-making positions in the tourism macro-ecosystem [3] [4]. To ensure the long-term

growth of maritime tourism, it is important to be aware of these problems.

Oceanic tourism is a system that allows for the utilisation of natural and cultural marine resources, as well as the hazards associated with accentuating the oceanic brand narrative. Using a marine and coastal tourism lens allows for a large-scale study of maritime tourism. Marine and coastal tourism is a type of coastal tourism that only happens along a coast. Marine and coastal tourism can lead to both environmental sustainability, which is often talked about in different ways, and economic growth [5]. Marine and coastal tourism refers to activities that happen just along the coast after entering the country, even though there are many different types of activities that happen. The Zoom-in approach to oceanic tourist participation and the ocean brand story framework can help you figure out the pros and cons of oceanic tourism.

2.1. Market Size, Growth, and Ways to Make Money

Oceanic tourism is becoming more popular around the world because people are interested in places with water elements. But there aren't many statistics that show this increased interest, even though projections can help steer uncertain developments towards sustainability. An examination of the years 1993 to 2018 reveals numerous statistics pertaining to coastal, marine, or oceanic tourism across 23 countries. These statistics have been chiefly sourced from national tourism authorities, publications of the United Nations World Tourism Organisation, national and international strategic documents, and academic counter-references. Research delineates the annual national demand for coastal tourism in relation to oceanic tourism within specific countries. Forecasts for demand growth until 2030 show a wide range across countries. Japan is expected to have the lowest growth, which shows how important it is to balance socio-economic development with a sustainable approach after the 3R (reduce, reuse, recycle) concept is put into place in its 3Rs socio-ecological system.

Oceanic tourism is likewise a complex business that makes money in different ways depending on where you go. There are three main categories of commercial income from oceanic tourism: accommodation, excursions, and transportation. There is also a slowly growing park and related social earnings.

Statistics on the economic sustainability of tourist expansion through a leakage calculation show the economic impact of tourism in different nations using different methods, such as Input-Output Analysis, Social Accounting Matrices, and qualitative descriptions. The main areas looked at are hotels, restaurants, stores, transportation, and leisure activities. The research that were collected looked at both territorial and regional scale. The tourist industry involves examining backward links among producing sectors and identifying economic connections [5].

2.2. Job opportunities and connections to the local economy

There are several types of jobs in the tourism industry, including those in hotels, restaurants, bars, transfers, excursions, seafaring, and other associated fields. The impact of

oceanic tourism on employment is influenced by several aspects, including the development level of the host region, a focus on high-value tourists such as luxury cruises, and investment in the tourism industry. In bulk tourism scenarios, saturation in mass-market accommodations results in diminished backward linkages to the local economy, hence hindering job creation beyond the initial arrival of tourists [6]. There are two types of economic backward linkages: direct (like payments to hotels) and indirect (like inputs to the hotel industry). The ratio of indirect to direct backward linkages shows how much local sourcing is going on. For example, the Maldives and Papeete have low levels of local sourcing, which means that more money is leaving the economy. The oceanic tourism sector can bring in a lot of money and jobs, although multipliers are usually lower than for coastal and marine tourism because of these things. Offshore excursions generally account for more than half of excursion receipts, leading to a minimal impact on the local tourism sector and constrained local job creation [5].

There are two main categories of jobs in oceanic tourism: those that are based on the nature of the linkages between occupations and the economy. The second group includes local goods and services that serve tourism activities outside the coastal area but stay on the coast themselves. These do not count as oceanic tourism jobs. New jobs are also being created because of maritime tourism operations, especially in marine-protected areas. Oceanic tourism could make the existing high employment-to-population ratio even better and help some coastal developing countries' economies become more diverse.

2.3. Dependence on Seasonality and Destination

The fundamental economic framework of marine tourism resembles that of tourism in general, distinguished by several interconnected marketplaces. The demand for marine tourism, like the desire for travel and tourism in general, shows that people want a variety of experiences, relaxation, and fun. Accommodation and meals, excursions, activities, gear, equipment, and/or supplies, and transportation are all important parts of these adventures. In many places, ocean tourism offers a lot of activities that aren't directly related to the sea, such cultural or heritage practices, hiking, concerts, sports events, or soft adventure [7]. Patterns vary according on the place, the types of tourism available, and the local situation. However, philosophy and form are very similar across maritime markets. However, the features of aggregate demand often differ greatly from those of other groups. Oceanic tourism loves warm, sunny, temperate, and tropical weather, as well as beaches, islands, and coastlines in many different shapes and sizes. As a result, demand for oceanic tourism is very seasonal. Places that don't have access to the ocean usually don't have as many visitors all year round.

High seasonality causes peaks to be more concentrated. Most places have two to four clear times of the year when demand surges. Data shows that many places have seasonal peaks, and sometimes neighbouring marine locales can be a good option for both motivation and geography. Affluence affects demand

in some situations, and growth happens when there are a lot of things like time, travel stress, and income available [8]. When saturation points happen, different gear and activities often move sideways across intact asset clusters. "Spillover" locations in marine tourism are places where supply and demand meet—still oceanic but in a different way. Visitors are increasingly replicating previous journeys to new sites or destinations within accessible proximity. Oceanic markets continually demonstrate a significant dependence on government services. Seasonal flow and disruption are intimately related to tax systems that are decided by the public. Because of this, business deals typically change to provide room for balancing modifications. Local rules also come into play to make sure coverage during identification phases. Transport venture links often change frequencies through openings, tourists, and connections that regularly run into the same public services but change overall coverage. Being close to important places makes it possible for heavily taxed, crowded entrances to work in parallel and then switch between them.

Oceanic tourism has a simple economic structure that is similar to that of general tourist. There are interconnected markets that are driven by different customer preferences. But the features of aggregated demand often differ greatly. Oceanic tourism thrives in warm, sunny, temperate, and tropical climates, particularly along beaches, islands, and coastlines. Demand, thus, has strong seasonal patterns. Many places also have reduced demand all year round if they don't have access to the ocean. High seasonality leads to sharp peaks. Most places see two to four big surges in demand per year. Data shows that many places have seasonal peaks, and neighbouring oceanic destinations might occasionally be good alternatives for both motivation and geography. The oceanic tourist "spillover" point idea means that supply and demand in the market are linked, but still oceanic. More and more visitors go back to places they've been before or to new places that are close by.

3. Environmental and Ecological Factors

Oceanic tourism is expected to generate economic growth and development prospects, while simultaneously exerting pressure to preserve marine and coastal ecosystems and sustain connectivity with communities [1]. The historical examination of maritime tourist development has indicated a heightened emphasis on sustainability [9]. Nonetheless, there exists a deficiency in the examination of the practical ramifications of implementing a sustainable approach, particularly with maritime tourism. Because of this, the analytical framework takes into account the environmental and ecological effects of maritime tourism operations. According to the framework, maritime tourism activities can affect marine ecosystems in different ways depending on the local and regional operational settings. Regulatory, institutional, and governance factors will affect the demand and supply of oceanic tourism activities. In developing or exterior-pegged economies, other factors will also come into play. Allowing access to maritime tourism markets is therefore an important approach for progress to be made. The environmental and biological factors linked to

oceanic tourism reveal the scope and nature of operational circumstances that typically arise in local and regional marine tourism monitoring and planning. Additionally, the considerations aid in delineating pathways for coastal and marine tourism and in recognising potential prioritising within a stratified governance and operational framework. Moreover, the examination of operational states in oceanic tourism contexts has delineated demand and supply-influencing trajectories, identified governance deficiencies and prioritisation, and analysed enabling and/or conditioning frameworks at the location, activity, and regional levels, thus offering a more nuanced understanding of the foundational planning and forecasting environment. The examination of coastal marine protected areas underscores operational frameworks, destination government-water governance, and marine resilience-enhancing strategies; the delineation of enforcement and co-managed characteristics facilitates the accessibility of essential insights regarding safeguarding capacities and/or river waterway-type conditions pertinent to the overarching coastal opportunity. The emergence of oceanic tourism site opportunities across various destinations, driven by unique patterns and factors influencing local articulation, represents the second defining outcome. This facilitates site-specific planning or the consideration of essential elements that bolster coastal and marine tourism opportunities, along with their corresponding economic attributes.

3.1. Impact Assessment of Marine Ecosystems

Changes in maritime tourism around the world have big effects on marine ecosystems. Since 1990, the number of tourists has increased fourfold. Oceanic locations are expected to be the fastest-growing sub-sector in the next several years [1]. The cumulative effects of maritime tourism can deplete local resources, harm community health, and damage natural resources that are needed for long-term growth. Most tiny island developing states are already seeing a steady decline in their resources. We don't know much about how ocean tourism affects ecosystems in particular, but we do know that it can lead to habitat loss, ecosystem disruption, biodiversity loss, plastic pollution, and the introduction of exotic species. So, when making policies and plans to boost the sector while protecting marine ecosystems, it is important to think about the effects and limits of ecology. Management interventions can stop marine ecosystems from getting worse and prevent paths that lead to catastrophic changes that can't be undone.

It is important to look at specific effects, such biodiversity and habitat disruption, to set management limits that follow the rules and keep ocean resource use on its current path. There needs to be a lot of research done on how ocean tourist activities will affect the marine environment so that ecosystem management goals are not violated. We need to set up monitoring systems as soon as possible to find out where and how big the changes in marine ecosystems are that are caused by oceanic tourism. This should be done even before activity or visitor level limits are achieved. To create strong policies and governance, we need to better understand the different hazards that ocean tourism might pose.

3.2. Managing Resources and Carrying Capacity

Oceanic tourism businesses on natural resources to run their businesses, hence it is very important to protect natural capital in order to keep tourism flowing. It is consequently important to keep an eye on how natural resources are used, find out what the limits are for their usage through ecological modelling, and modify resource governance. Management needs to know how many people can fit in a tourism "product," and more and more monitoring systems are being put in place to keep an eye on the state of the resources that maritime tourism destinations depend on (see Section 3.1 Impact Assessment on Marine Ecosystems). The carrying capacity is the most visitors that can be accommodated without harming the resource (like marine biodiversity), the user experience (like the presence of crowds), or the community hosting the activity (like visible effects on the local economy). Carrying capacity is different for each site, depends on what visitors expect (such the existence of aquatic animals), and might change over time. Oceanic tourism is the same as seasonal tourism. So, managing peak demand is very important for economic resilience. But it's also important to recognise the significance of tourism as a seasonal safety net, especially in SIDS. Sustainable tourism management principles advocate for the relocation of highly sensitive, resource-intensive, and seasonal activities to locations with enhanced resilience (characterised by low pressure and high resilience), hence facilitating the desired diversification of regional economies.

Model-driven estimates can help us understand the limits of natural resources, but these numbers are not usually checked in real-world situations. In some circumstances, site usage is being tracked, which is vital for people to know about overcapacity warnings. But technology now makes it possible to keep an eye on activities that are meant to take place in a certain region and how they will be used in the future, which makes it possible to send out alerts about climate and congestion risks. At many oceanic SIDS, the management of shared resources is a tragedy of the commons: people exploit them without supervision, do reckless things, and don't follow the Voluntary Tourism Standards very well. These tendencies have led to community-driven resource stewardship, which, along with financial support, has become a significant management technique for coastal Marine Protected Areas. Such community involvement is the only way to make tourism sustainable. Regulatory systems supported by the tourism sector, which designate local stakeholders as the primary stewards and advocate for their participation in enforcement, monitoring, and co-management, have demonstrated efficacy.

3.3. Climate Change and Being Strong

Oceanic destinations are affected by climate change and environmental vulnerability in different ways. For example, sea-level rise and coastal erosion are structural threats, while changing marine-photonic ecologies, temperature-related bleaching and biodiversity loss, plastic pollution, and overexploitation are all direct health impacts on visitors. There are also more indirect effects on local communities, cultures,

and economies. So, tactics for climate change mitigation and building resilience range from place to place. They can include things like improving infrastructure and technology, focussing on nature-based solutions, protecting traditional ecological knowledge, and diversifying local livelihoods.

The connection between ocean tourism and climate change is a bad one. Ocean tourism is often seen as something that makes climate change worse (through carbon emissions from air and ship travel) or its effects (which are often called an oceanographic-hydrological-chemical-photonic-polar-ecosystem living trophy). Climatological evidence concerning the spatial-temporal dynamics of climate change and the reception of oceanic sites renders the formulation of a positive narrative possible, contingent upon the implementation of suitable adaptive-capacity-regenerative-resilience measures before and/or during the manifestation of climate change exposure/vulnerability. Such measures encompass the initiation of requisite mitigation actions at local, national, and international levels, alongside the execution of tourism-development management and planning processes designed to avert the overexploitation and degradation of natural, economic, and built-environment assets and conditions.

4. Social and cultural effects

Oceanic tourism is an important issue, especially in coastal areas of developing countries. The ocean is sold as a desirable tourism commodity for underdeveloped countries, as it remains mostly unaffected by mass tourism. Many small island developing states (SIDS) have oceanic features that make maritime tourism a possible way to grow. Oceanic tourism is most similar to a range of tourism options that focus on bodies of water that are not in the ocean. Oceanic tourism is defined as tourism that involves marine-based recreational activities on the coastal ocean surface [1]. The framework is used to show where oceanic tourism activities are happening on the three islands of the Caribbean Archipelago.

People think that oceanic tourism has a lot of benefits, such as lower costs for building and running facilities than traditional coastal resorts, more flexibility in development, lower risks to social safety and security, and the chance to avoid the crime that is common in many parts of the Caribbean. Potential oceanic tourism offshore destinations present opportunities for alternate ocean tourism markets. The suggested oceanic tourism activities are not swimming, snorkelling, or diving. Instead, they are various fun things to do in the ocean. These activities are not just different from traditional tourist attractions; they are also complementary. Oceanic tourism is a new trend that hasn't caught on in many Medium- and Long-Haul Asian Destinations.

4.1. Community Wellbeing and Involvement of Stakeholders

For maritime tourism to have a good effect on communities and last over time, it is important to engage stakeholders effectively. Stakeholders may encompass institutions, governments, private enterprises, and civil society participants, each possessing

distinct ideas and expectations [10]. It is very important to be involved in decisions on tourist policies, strategies, and projects [4]. Active participation can have good effects by making things more fair and encouraging the sharing of tourism's economic benefits. Good engagement can also help people and communities connect with each other, whereas bad engagement can hurt community well-being by ignoring local standards that put equal engagement first.

Active participation, openness, and monitoring are all important parts of effective stakeholder engagement. It looks different at different levels. Participation is more complicated when more people get involved, but it's still important because there are so many possible advantages. National legislation and international rules can set the limits on what counts as engagement. To keep engagement from being just talk, it should be monitored so that problems can be found and fixed. Engaging stakeholders can also help maritime places look better to locals, make the oceanic tourist dividend more fair, and foster stewardship and community-based governance.

4.2. Cultural Heritage, Local Stories, and Destination Image

Destination images are the general thoughts, feelings, and mental images that people have about a certain place. These mental images come from the interactions and effects that the location and tourists have on one other. There are two types of destination images: the organic origin, which makes the destination more appealing, and the induced origin, which helps people connect with the product. Destinations want to stand out from the rest by branding themselves, which means using visual aspects to make the area unique. Tourism stakeholders who tell stories, host events, use logos, and other things to promote the territory's identity are involved in these kinds of strategies.

Culture is very important for tourism experiences because it makes them seem real, which gives them a competitive edge. Still, commodification threatens the distinctiveness and identity that come with culture. Making exaggerated connections between locations, products, and services is bad for culture. Also, keeping and promoting the culture of a place frequently means closing off the area, which goes against the fundamental idea of tourism: bringing together various and distant civilisations. But alternative kinds of stories, like those about the harshness of a colonial authority or a horrific civil war, can be used to create a real tourist attraction. There is no easy answer, but the story that the area tells typically shows the tourist the way to go. Stories that come from a certain place often lose their original purpose when they are moved to a different place that supports them.

Culture, and specifically cultural heritage, is seen as something that makes a place more appealing and sets it apart from other places. But when culture is turned into a tourist attraction, the image of the place that is founded on its authenticity tends to fade. Destinations create their tourism products around stories about their cultural legacy, and the image of the destination is becoming more and more dependent on this heritage.

5. Policy, Governance, and Management

The Cape Verde archipelago's municipal governance systems support long-term ocean tourism. Good planning for coastal and marine areas is very important for all nautical destinations. The country has a lot of ocean space (nearly 800,000 square kilometres) compared to a little amount of land space (4,033 square kilometres). To minimise problems, ocean zoning rules are needed for ocean space that isn't being used enough. Informal governing coalitions encourage stakeholder participation and make it easier to negotiate shared duties to deal with the problems that tourism brings to governance. A co-management method that was in place before marine protected areas were created lets communities take part in the integrated co-management of fishery resources. Communities are more likely to protect their fishing resources when they own them and the maritime area around them, especially when tourism is growing [2].

5.1. Standards for sustainability and regulatory frameworks

There are already a lot of voluntary sustainability standards and regulatory frameworks for marine tourism. These focus on making sure that people act responsibly and conserving marine environments. They help oceanic tourism directly by doing annual audits, giving out certifications, and making sure things keep getting better. The Green Globe and EarthCheck programs work all across the world. In the Caribbean, which has a lot of ocean tourism, there are also the Travelife and Global Sustainable Tourism Council (GSTC) certifications and the GSTC criteria that are used around the world [1]. Still, even if steps have been taken to lessen the effects on the environment and society, worries remain about how well the rules are being followed and enforced [2].

5.2. Planning planning and zoning for oceanic destinations

The goal of governing oceans, coasts, and coastal space is to make sure that people can safely get to the sea while also managing land and sea resources in a way that is good for the environment [1]. Tourism on the ocean is very important for islands, coastal communities, and developing countries along the coast, yet it often gets in the way of other activities. Zoning rules control how land and coastal areas can be used and developed, in addition to marine spatial planning that gives people exclusive rights to use ocean and coastal areas. Governance of ocean tourism requires cooperation among many tiers of government and tourist scales. Some of the stakeholders are government groups, the tourism industry, non-governmental organisations, universities, traditional leaders, and other local leaders. Common aims include environmental, economic, social, and political sustainability. Comparing the frameworks that are already in place lets us look into the institutional and infrastructural aspects, policy goals, capacity-building techniques, monitoring, evaluation, and funding of investments. Cross-examination of frameworks reveals strengths and shortcomings, offering guidance for selecting suitable methodologies.

5.3. Partnerships between the public and private sectors and incentives to invest

Private businesses working with public groups typically invest in maritime tourism. A structured strategy makes it easier to choose, share risks, and get funding. IMF grants, on the other hand, let sites that haven't gotten enough investment get more money by redistributing net revenue. Public-private partnerships are very important for carrying out development plans that need government money for a long time. They provide a way to put the plans into life, either by private developers investing directly, by working together with authorities in partnerships or joint ventures, or by using a leasing structure. Tourism is also an export-oriented growth sector, which means that a lot of the investment comes from people who don't live there. Because of this, the tourism authority needs to make sure that long-term financing is available on the international market in a timely manner. To make sure that net tourism income, which are usually sent back to the country, are recycled back into the country, special finance mechanisms may need to be set up.

Governments want to get foreign private investment in tourism, but they often don't have the right legal framework or incentives to do so. People don't often think of markets as being active enough to draw private investment on a regular basis. This means that public agencies take on more risk than they should, which makes it hard for them to plan and pay for the building and upkeep of good tourist amenities. Most new infrastructure is being built to extremely high standards, but there is little guarantee that the money set aside for maintenance will be enough. People generally ignore dock infrastructure, which makes shipping more expensive and, in turn, makes it more expensive for visitors. So, a good investment plan should make sure that all sections of the market have the resources they need.

6. Designing technology, new ideas, and experiences

Improving efficiency, resilience, and the visitor experience through technology is a method to connect sustainable maritime tourism with larger goals for prosperity and ecosystems. This will help the industry grow while keeping risks low [11]. Digital platforms, booking ecosystems, and data analytics make things more efficient, open, and engaging. This helps manage demand and prepare for the long term, which helps with the pressure on coastal infrastructure and resources caused by seasonal and space-time limits. Sustainable infrastructure design and the use of renewable energy reduce ecological footprints. Regenerative-objective frameworks that include site selection, delivery modes, and total life cycles maximise life-cycle sustainability and climate resilience. Experiential marketing, responsible visitor practices, and education on negative externalities and local eco-ethical narratives expand the resilience-diversification possibility area while enhancing the common-good dimension. Cross-referenced case studies show how these technology-led methods may be used in oceanic tourism locations of different types and risk profiles. They also show how governance circumstances, adaptability

levers, and the balance between exposure, vulnerability, resilience, and adaptive capacity can be achieved.

6.1. Digital Platforms, Booking Ecosystems, and Data Analytics

Data governance in tourist research exhibits diverse paths across chronological, geographical, and thematic dimensions. Using digital platforms is at the heart of data governance. This includes not just choosing a venue and service, but also the whole tourist experience, from getting there to staying there. So, the way providers work together is more important than the way digital platforms work for certain services. Monitoring Google Search Trends every month shows which booking systems are more popular in certain areas. Search data at finer spatial scales show how different housing services are. Individual services' spatial-temporal analysis keeps track of changes and connections between them to better manage demand. It's still important for destinations to understand these kinds of dynamics, but it's not always easy. National platforms for booking, motorhomes, rental cars, and 4WD vehicles are all closely linked to oceanic services. This gives us a better idea of what people want and shows us what the government is interested in when it comes to planning and infrastructure. The Googledirection integrated data methodology makes it clear how linked services work.

Tourism search data is a big part of how data is used for maritime travel and activities. This lets people look at both supply and demand. Posts that talked about ocean activities, wetlands, or both were categorised as outdoor play (like fishing or swimming), whereas flow-in sites were essential for both active and passive seeking (like receiving user-generated information). Systematic literature analysis and bibliometric methods identify the junction of data science with smart-destination tourist assessments, encompassing climate change, sustainability, management, and related fields. Spa's case studies demonstrate that oceanic tourism affects destinations in multiple ways, particularly through the interplay of tourist flows with tourism development, organisational governance participation, and domestic travel activities that influence either the demand or supply side for international to small-island reflection.

The topic brings attention to the complex nature of new data use ecosystems and shows how they are related to the clearly defined category of digital platforms. Observations from sites like booking.com, tripadvisor (SVC), and airbnb provide for a tourism-focused selection of terms relating to methodologies, process, and open-data-sourcing. An open-source program for self-evaluation lets you see how the importance of keywords varies. To create sustainable ecosystems in impoverished countries, it is important to make sure that datasets may be collected or shared in ways that encourage data flows in tourism-importance-driven directions.

6.2. Integration of renewable energy and sustainable infrastructure

Most of the time, ocean tourist infrastructure (buildings, roads, harbours, and wharfs) is found along the coast. Oceanic tourism infrastructure should be designed, built, and maintained in the following ways to avoid harming the environment during construction and to make sure it is resilient to climate change (like flooding): (1) Be built as far inland as possible; (2) Use materials that are easy to find commercially in different parts of the world; (3) Be easy to take apart at the end of its life; and (4) Use as little energy, water, and waste as possible during operation [2]. The electricity grid must be able to withstand climate change in order for the oceanic tourism infrastructure to keep working. This is because losing power can ruin the tourism experience. Adding renewable energy sources like wind, solar, waves, and hydrogen to the grid of the marine tourism infrastructure will make it more resilient to climate change and cut down on the use of fuel, which is the main cause of maritime tourism's carbon footprint [1]. Adding off-grid power to the infrastructure's energy grid (such a renewable microgrid) can make the environment even more resilient and defend against rising fossil fuel prices.

6.3. Experiential Marketing and Responsible Tourism Practices

Experiential marketing was first used in the early 1990s so that businesses could create and share significant and memorable events that may help their brand. This marketing technique focusses on the built environment and the decisions people make in such surroundings. This leads to a clever manipulation of consumer behaviour, which is then refined and included in the brand promise [12]. The growth of the internet and related information technologies made it possible for businesses to connect with their various stakeholders and suppliers. For operators who promote oceanic tourism, creating a sustainable and responsible position can be a great marketing tool that lets them send messages about their products and information packages. Also, this kind of positioning can help choose the topics that put pressure on stakeholders and get them involved. So, it's very important for people who work in ocean tourism and care about sustainability and want to market themselves as responsible and aware operators to make sure that the messages they send through their regular communication channels are in line with their values and the scope of the offer they have planned. There are various types of events, places, and planned actions that tourism businesses can use to show their commitment to sustainability. There are several ways to propagate this dedication, such as through newspapers, journals, social media, fliers, and more, each of which has its own consequences. In conclusion, you can get more people to know about the possibility of improving education and information shared with potential tourists in the same way.

7. METHODOLOGY

A structured framework has been developed to examine the operation of marine tourism in connection with the landscape, locations, activities, and communities that support it. This methodology is thoroughly detailed, and its application is demonstrated through three case studies selected to illustrate different levels of oceanic tourism and their corresponding dynamics. Oceanic tourism includes a variety of businesses that are based on coastal and island areas around the world that are connected to the ocean. It includes scuba diving, snorkelling, sea kayaking, sailing, and sportfishing, as well as activities on land and on the water at travel destinations. Island contexts are highlighted due to their early and significant engagement with marine tourism, extant empirical data, and considerable global significance—Small Island Developing States represent 7 percent of the world's population while generating 25 percent of its gross national product from tourism [1].

Data strategies usually link observable conditions to destination features, site qualities, and market activity. The primary aim of the research is to elucidate the characteristics—rather than the magnitude—of maritime tourism activity. Quantitative datasets that show scale, growth trajectories, and revenue streams are used to measure economic dimensions. Environmental effects are analysed through indicators and thresholds related to land and resource utilisation implications, species conservation, and ecosystem functionality. Frameworks that look at well-being and governance are used to measure how society is doing. Analytical layers include goals, drivers, paths, effects, and tools. The guides for choosing, regulating, and designing marine and coastal functions are also important for certain topics.

7.1. Sources of Data and Ways to Analyse It

Oceanic tourism analytics depend on both quantitative market dynamics and qualitative evaluations of specific sites. There are both general and ocean-specific aspects to these forms of data. Because the ocean is so important, we need to think about the marine ecosystem that supports emission, infrastructure, and ecological-commercial exposure assessment. The outlook is shaped by the hopeful idea of regenerative development that focusses on sustainability and resilience. The operational footprints of maritime tourism are still important for lowering carbon emissions around the world. It's important to set a limit on the number of visitors and build infrastructure that can use green energy and cut down on emissions. In islands marked by consolidation and monopoly, geographical time-series analytics of coastal visitors support demand management and the forthcoming implementation of tourism revenue capture. Regulatory design deals with changes in global demand centres and bad travel conditions. Quantitative patterns suggest changing external conditions that could make new places with weak per capita economic ties more appealing. Parts of the baseline trajectory suggest that the market will grow even more, that prices will rise from outside sources, and that there will be a need for more diversity [1].

Quantitative analysis uses data on ocean tourism and the flow of money, labour, and resources to measure things like information supplies, wave-propagation analytics, geo-referenced demand, and eco-regional baselines. Qualitative data gathering annotates evaluations at designated locations, now organised to analyse the impacts of global shocks, dependence on marine resources, and the interrelations of resources and regulations. The examination looks at how strong tourist models, infrastructure, demand-formation agents, and global-shock vulnerabilities are. Cross-regional comparisons differentiate between small-island, protected-area, and emergent contexts, each focused on stewardship, co-management, and diversification, respectively, and linked to future-scenario trajectories.

7.2. Choosing Case Studies and Comparative Frameworks

The study is based on three groups of case studies. The first looks at small island developing states (SIDS) and their biodiversity and climatic vulnerabilities, as well as the policy, planning, and development contexts of tourism and the strengths of corporate, social, and ecological resilience. Second, a coastal marine protected area (MPA) and community-led tourist pathways are steps towards a sustainable functional carrying capacity. This is because they involve marine ecosystem care, real community involvement in management and enforcement, and a partnership for co-management. The third group includes new tourist spots in northern and central Mozambique. These places have higher risk profiles since they depend on tourism and don't have many other options. However, they also provide chances for MPA establishment, responsible development, and community-based cultural promotion. Combining these stories shows strategies to become more resilient and have less of an effect.

The destination cases use a comparative methodology that serves as a foundation for broader cross-case insights derived from other components of the study. Environmental deterioration, climate vulnerability, and market dependences on a small variety of experiences are all risk factors that are common. Regenerative tourism that values diversity in environment and culture is considered as a key counterpoint. However, hospitable narratives should be carefully examined because commodification and gentrification may be quite divisive. Results can help both planners and managers of destinations.

8. Case Studies

This part serves to fulfil the narrative structure and evidence integration function, offering the empirical foundation for the preceding analytical framework. It looks at three groups of marine destinations that offer different problems and opportunities in the sustainability-resilience matrix that was made before. The setting of Small Island Developing States (SIDS), marked by increased vulnerability to catastrophic events and environmental deterioration, is introduced initially. The next section talks about case study destinations that are in coastal marine protected areas. These places include

governance frameworks that let communities, public agencies, and the business sector work together to take care of resources. The analysis thereafter focusses on emerging oceanic destinations, where embryonic tourism markets may leverage ocean resources for economic diversification, yet encounter particular vulnerabilities and dangers in the absence of sufficient planning and management during development.

8.1 The Situation in Small Island Developing States (SIDS)

Climate change is likely to have a bigger effect on SIDS than on other places because rising sea levels make coastal settlements more vulnerable to flooding, erosion, and salinisation of freshwater sources. Changes in the climate are also likely to make extreme weather events like hurricanes happen more often and with more force. As marine ecosystems go worse, the fishing and tourism industries will suffer the most, and water resources will get worse as well. Most SIDS depend a lot on tourism and the jobs and money that come with it. Most of the people who come from other countries are wealthy tourists with big environmental impacts. Concerns regarding the long-term viability of tourism growth in SIDS are increasing, particularly among local communities experiencing substantial economic gains and capital accumulation that primarily favour foreign investments. The ownership structures and the balance between domestic and foreign investments are important, but the way that the public and private sectors work together is also very important in determining how tourism affects the culture, ecosystems, and consumption patterns of local communities.

8.1. Contexts of Small Island Developing States (SIDS)

Small Island Developing States (SIDS) are especially at risk from climate change because they have small land areas, fragile ecosystems, and few economic resources [1]; [13]. Although SIDS governments frequently utilise various policy instruments aimed at promoting sustainability, the prevailing backdrop is not favourable for fostering resilient oceanic tourism. The basic governance traits of SIDS contain flaws, such as decision-making processes that prioritise economic factors, the pursuit of foreign exchange earnings that encourages resource exploitation, and spatial planning components that are too narrowly defined. A lot of SIDS are working hard to grow their ocean tourist industries. These countries face social, political, economic, and environmental constraints, yet some SIDS have resilience measures that make it possible to build tourist systems that put sustainability first. The risk profiles of oceanic tourist-resource systems in SIDS vary widely, from very low to very high.

8.2. Marine Protected Areas on the Coast and Models Led by the Community

Tourism brings enormous benefits to communities that have access to coastal marine protected areas, but there are also trade-offs. Community-based tourism businesses help protect the environment and the market, and both mitigation and co-management have worked well. Visitors think that local

administrators know the locations well, and excellent enforcement makes the places more appealing. Visitors have a better experience when they learn more about natural areas, especially on guided excursions.

When done at the right level, marine tourism can help protect coastal marine protected areas in a way that is good for the environment. To get the benefits, there needs to be clear governance and internal cohesiveness, with fair decision-making and good involvement that creates trust and builds on local culture. A real local voice and fair sharing of expenses and benefits also encourage stewardship and balance the health of the community, conservation, and the appeal of the destination. Getting more experience makes results even better.

Along with clear guidelines and careful control of tourism growth, tunnelling consequences also need to be looked at. Key services, notably places to stay and eat, should stay in the area. This will help the community become more prosperous and strengthen the link between migration and tourism. It would also be a good idea to look at connections to the larger tourism business. Using airlift and speciality tours to get to farther, less-known sites is very promising. However, caution is necessary, as increased exposure exacerbates vulnerabilities and risks. Lastly, changes in the market create more opportunities. Getting more involved with inbound markets that are now mature can lead to host-guest encounters that are very valuable and interesting.

8.3. New Oceanic Destinations and Their Risks

Tourism development happens in places with different levels of risk. This is true for new maritime destinations like the Seychelles, the Maldives, and the Bahamas. Paying attention to metrics that are in line with sustainable tourism development might help lower the hazards that come with tourism growth in these areas. Small island developing states (SIDS) that are dry-footed and wet-footed have different weaknesses and governance systems, which leads to different paths, even though many indicators are the same. The Bahamas case highlights the essential function of comprehensive and community-oriented engagement in sectoral strategies for ensuring sustainable oceanic tourism. The applicability of indicators, measurements, and frameworks designed for dry- and wet-footed SIDS to tiny island territories of larger nations [14] facilitates the premature implementation of preventative interventions, prior to the establishment of tourism markets [1]. Concentrating on the feasibility of implementing the indicators, instead of refining their conceptual foundations, further augments policy relevance and promotes the sustainability of burgeoning maritime tourism.

9. Possible Future Scenarios and Sustainable Paths

Plausible future scenarios are not prophecies; they are methods for testing how well people can adapt to changes in the outside world. The scenarios stress low impact and making things more resilient. The traffic-light metaphor shows a range of operational footprints: green for the lightest footprints, amber for moderately exploitive outcomes, and red for development

that has a lot of environmental, social, and cultural consequences.

Low-impact development scenarios necessitate intimate integration with adjacent waters. The lack of resources in both the ocean and on land limits the potential for tourism development. When destinations focus on limiting and offsetting their footprints instead of unlimited growth, investing in aquaculture, mariculture, sustainable fisheries, and fishing-based industries can meet local needs without harming tourism development. tourist numbers and activity intensity stay below set ecological and climatic limits. Demand-modelling operations for destination management cut down on tourist numbers in an uneven way, and using green technology separates operational footprints from visitor numbers. These places should aim for regenerative tourism, where visitors help the community reinvest in cultural and environmental resources.

Tourism is at the heart of resilience, adaptation, and diversification plans for maritime locations. Governance frameworks take into account the views of enterprises and people when making decisions. They also diversify the economic and social bases, strengthen the ability of coastal marine environments to adapt, and keep cultural vibrancy alive. In places where tourism is expected to grow beyond the ability to handle it, it is very important to make people less vulnerable to things that aren't related to tourist, like political instability, extractive industries, and land-based resource management.

9.1 Scenarios for Low-Impact Development

Research focused on comprehending and fostering sustainable results for maritime tourist activities conducted in coastal environments is essential. Such activities frequently correlate with significant environmental effect, increased vulnerability to fluctuating climatic circumstances, and growing adherence to external rules [1]. Because supporting local economic growth is important and there is a growing demand for such activities in many nations, there should also be a clear framework for looking at possible ocean tourist development possibilities in these trade-offs.

Many countries' objectives for developing maritime tourism destinations explicitly push frictionless, efficient, quick, and all-inclusive experiences (such as cruise ships and yacht charters). National authorities always advocate these kinds of ocean tourism, even if the operational footprint, number of visitors per unit of time, and infrastructure needed to support such high-impact activities are usually far bigger than for other types of ocean tourism.

Scenarios forecast continuous growth in oceanic tourism along existing paths, although they do not promote high-impact cruises or yacht charters—such travel arrangements predicated on a one-to-many information asymmetry are prohibited. Development along these continued-travel lines is also directly linked to the widespread use of renewable energy sources, such as solar and wind energy, which greatly lower or get rid of carbon footprints.

9.2. Strategies for Resilience, Adaptation, and Diversification

Future possibilities for maritime tourism may also include being able to adapt and be strong in the face of environmental and societal change. Trade-offs will be discussed in other sections. Diversification techniques that are clear and easy to understand are in line with low-impact scenarios, but they also deal with both environmental and socioeconomic hazards. They also include ties to spacing and zoning categorisation to help with decision-making.

Governance and institutional frameworks that prioritise broader social, economic, and environmental resilience—rather than solely concentrating on tourist development—facilitate low-impact destination development and vibrant tourism planning. Regulatory frameworks for marine locations ought to examine the degree to which tourism licenses, concessions, and development applications are approved. The tourism economy needs tools to check and adapt the state of readiness of the whole tourism economy to handle the transition to environments that are getting worse and change scenarios that show progress when the overall quality of the environment and the natural habitat's ability to handle the tourism that comes to the destination is under stress. In a broader sense, the fact that the overall tourism activity being hosted is under pressure means that destination marketing organisations and other related groups need considerably less budget focused on tourism promotion and incentives.

As the world gets less hospitable, local communities should put a lot of effort into finding new ways to make money. For many places that depend on tourism, natural disasters that are caused by climate change test how quickly and how well they can recover. The pace of recovery may be changed at best, but not changed in reference to the prior opening time, if the complete activity is affected and not just a part of it. When both climate change and natural disasters affect common tourism economies, it becomes hard for the whole destination to recover. To support a successful switch into other activities or at least into other markets or seasons, tourism destination development needs to be carefully planned, both operationally and strategically.

10. Final Thoughts

Oceanic tourism has an impact on its social and natural surroundings, which can be both good and bad. This relationship is shaped by rules and policies. An analytical framework enables diagnostics and advice to equilibrate desirable outcomes. The study shows that there are strong economic forces at work, little connections between local businesses, big environmental problems, and a need for a more inclusive story about how government works. Pathways show strategies to develop with less effect and build resilience through diversification [1].

Even while they helped, the insights have certain problems. Data gaps, like those on value retention, make it harder to explain. Factors that are hard to measure, including how tourism affects stories, still need more study. In certain circumstances, different governing systems lead to very distinct

experiences. The cross-case analysis includes only one Caribbean SIDS. Due to increasing pressures and interest, a more comprehensive analysis and involvement are necessary. A subsequent review may expand the geographical scope and substantially enhance the comparison framework [9].

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