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An Integrated Stakeholder Framework for Ecotourism and Sustainable Regional Development in Dhofar, Oman

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Abstract

Ecotourism has emerged as an important strategy for promoting sustainable development by integrating environmental conservation, economic diversification, and community well-being. However, empirical evidence on the governance and stakeholder dimensions of ecotourism remains limited in emerging destinations, particularly within the Gulf Cooperation Council (GCC) region. This study examines the role of ecotourism in promoting economic development and environmental conservation in the Dhofar Governorate of the Sultanate of Oman. Guided by an Integrated Ecotourism Development Framework, the study adopts an exploratory qualitative approach based on 47 semi-structured interviews with government officials, tourism businesses, local communities, and environmental organizations, complemented by secondary data from national policy documents, tourism statistics, and academic literature. The findings reveal that Dhofar possesses considerable ecotourism potential owing to its rich biodiversity, unique natural landscapes, cultural heritage, and the distinctive Khareef season. However, institutional fragmentation, inadequate tourism infrastructure, limited stakeholder participation, uneven distribution of tourism benefits, and weak destination branding continue to constrain sustainable ecotourism development. The study demonstrates that environmental conservation, stakeholder participation, destination management, and ecotourism activities operate as interconnected dimensions that collectively shape sustainable development outcomes. A key contribution of the research is the development and empirical support of an Integrated Ecotourism Development Framework, which provides a holistic explanation of how environmental, institutional, economic, and community factors interact to influence sustainable tourism development. The findings offer practical insights for strengthening ecotourism governance, enhancing stakeholder collaboration, and supporting the implementation of Oman Vision 2040. More broadly, the study provides a transferable framework that may inform sustainable ecotourism development in other emerging destinations facing similar environmental and governance challenges.

1. Introduction

Tourism has become one of the world's most important economic sectors, generating employment, attracting investment, supporting regional development, and facilitating cultural exchange. Following the severe disruption caused by the COVID-19 pandemic, the sector has demonstrated remarkable resilience. According to UN Tourism (2026), international tourist arrivals reached approximately 1.5 billion in 2025, surpassing pre-pandemic levels and reaffirming tourism's role as a key driver of global economic growth. At the same time, the industry faces growing challenges from climate change, biodiversity loss, increasing visitor pressure on natural destinations, and geopolitical uncertainty. These challenges have shifted the focus of tourism policy and research from promoting growth alone towards achieving more sustainable, resilient, and inclusive forms of destination development (OECD, 2026; UN Tourism, 2026).

Ecotourism has emerged as one of the most promising approaches to achieving this balance. Rather than focusing solely on attracting visitors, ecotourism seeks to conserve natural environments, support

local communities, and provide meaningful educational and cultural experiences (The International Ecotourism Society [TIES], 2015). When effectively managed, ecotourism can generate employment, diversify rural economies, strengthen community participation, and finance biodiversity conservation (Buckley, 2009; Honey, 2008; Scheyvens, 2021). Consequently, ecotourism is increasingly recognized not merely as a niche tourism product but as a strategic approach to sustainable regional development and an important mechanism for advancing the United Nations Sustainable Development Goals (UNEP & UN Tourism, 2023; Bui et al., 2024).

The Sultanate of Oman provides a particularly relevant context for examining these issues. As part of Oman Vision 2040 and the National Tourism Strategy 2040, tourism is one of the country's priority sectors for economic diversification. National tourism policy places increasing emphasis on sustainability, environmental stewardship, cultural heritage preservation, community participation, and private-sector investment, recognizing that long-term destination competitiveness depends on conserving the natural and cultural assets upon which tourism is based (Oman Vision 2040, 2021; Ministry of Heritage and Tourism, 2021).

In Oman, the Dhofar Governorate is one of the country's most distinctive tourist destinations because of its exceptional combination of natural and cultural resources. The annual Khareef season transforms the region into one of the few green landscapes in the Arabian Peninsula, attracting more than one million visitors each year (National Center for Statistics and Information [NCSI], 2025). Beyond its seasonal appeal, Dhofar offers mountains, protected areas, coastal ecosystems, caves, wadis, and the UNESCO World Heritage-listed Land of Frankincense, providing significant opportunities for year-round nature-based and ecotourism development.

Despite these advantages, the full potential of ecotourism in Dhofar has yet to be realized. Tourism development continues to face challenges including limited ecotourism infrastructure, fragmented stakeholder collaboration, insufficient community participation, shortages of specialized human resources, and relatively weak destination branding beyond the Khareef season. Furthermore, increasing visitor numbers place additional pressure on environmentally sensitive areas, highlighting the need for more integrated approaches to destination planning, environmental governance, and sustainable visitor management (OECD, 2026; UNEP & UN Tourism, 2023).

Although tourism research in Oman has expanded considerably during the past decade, much of the existing literature has focused on destination attractiveness, visitor satisfaction, destination marketing, and the economic contribution of tourism. Comparatively little attention has been devoted to understanding how environmental conservation, stakeholder participation, destination governance, and local economic development interact to influence ecotourism development. Moreover, relatively few empirical studies have adopted a multi-stakeholder perspective that integrates the views of government agencies, tourism businesses, local communities, and environmental organizations. This gap is particularly important because sustainable ecotourism depends on effective collaboration among these

stakeholder groups rather than the actions of individual organizations alone (Freeman, 1984; Byrd, 2007; Scheyvens, 2021).

This study addresses this gap by examining the contribution of ecotourism to economic development and environmental conservation in the Dhofar Governorate through an exploratory qualitative study involving government officials, tourism entrepreneurs, local community members, and environmental organizations. By integrating multiple stakeholder perspectives, the research provides a comprehensive understanding of the institutional, environmental, economic, and governance factors shaping sustainable ecotourism development in the region.

This study makes three contributions to the literature. First, it provides one of the most comprehensive qualitative assessments of stakeholder perceptions of ecotourism development undertaken in Oman. Second, it advances the literature by developing and empirically applying an Integrated Ecotourism Development Framework that explains the relationships among environmental conservation, stakeholder participation, destination management, ecotourism activities, and sustainable development outcomes. Third, it offers evidence-based policy recommendations to strengthen ecotourism governance and destination management in Oman, while providing insights relevant to other emerging destinations seeking to balance economic development with environmental conservation and community well-being.

The remainder of this paper is organized as follows. The next section reviews the relevant literature and presents the conceptual framework underpinning the study. This is followed by the research methodology, the presentation and discussion of the findings, and finally the conclusion, which outlines the study's theoretical contributions, practical implications, limitations, and directions for future research.

2. Study Context

2.1 Tourism Development in Oman

Tourism has become a principal sector supporting economic diversification in the Sultanate of Oman. Historically dependent on hydrocarbon revenues, the country has increasingly positioned tourism as a strategic driver of sustainable economic growth, employment creation, private-sector investment, and regional development. Oman's competitive advantage lies in its diverse natural landscapes, rich cultural heritage, political stability, and strategic location at the crossroads of Asia, Africa, and the Middle East.

Source. https://www.nationsonline.org/oneworld/map/oman-map.htm

Recognizing the sector's long-term potential, the Government of Oman introduced the National Tourism Strategy (NTS) 2016–2040, which aims to establish tourism as a major contributor to the national economy through sustainable destination development, investment promotion, entrepreneurship, and job creation. The strategy aims to attract approximately 11.7 million visitors annually by 2040, while substantially increasing tourism's contribution to gross domestic product (Ministry of Heritage and

Tourism, 2021). These objectives are closely aligned with Oman Vision 2040, which identifies tourism as one of the country's priority sectors for economic diversification and emphasizes sustainability, innovation, environmental stewardship, and cultural heritage preservation.

Following the disruption caused by the COVID-19 pandemic, Oman's tourism sector has demonstrated a strong recovery. According to the National Center for Statistics and Information (NCSI, 2025), international visitor arrivals and tourism revenues have continued to increase, reflecting renewed market confidence and the effectiveness of national tourism recovery initiatives. Nevertheless, several structural challenges remain, including seasonality, uneven regional tourism development, workforce capacity, infrastructure gaps in remote destinations, and growing competition from neighboring Gulf countries.

2.2 The Dhofar Governorate

Located in southern Oman, the Dhofar Governorate represents one of the country's most distinctive tourism destinations. Covering approximately 99,300 km², the governorate is characterized by mountains, coastal ecosystems, wadis, deserts, caves, and protected natural areas. Its ecological diversity distinguishes Dhofar from most destinations within the Arabian Peninsula and provides exceptional opportunities for nature-based and ecotourism development.

Source. https://www.rop.gov.om/english/governoratemaps.html

The region is internationally recognized for the annual Khareef season, during which monsoon rains transform the landscape into a unique green environment that attracts visitors from across Oman and neighboring Gulf countries. According to NCSI (2025), visitor numbers during the 2024 Khareef season exceeded 1 million, underscoring Dhofar's growing importance in Oman's tourism portfolio.

Beyond its natural attractions, Dhofar possesses significant cultural and historical assets, including the UNESCO World Heritage-listed Land of Frankincense, archaeological sites, traditional settlements, and a long maritime trading history. These resources create opportunities to integrate nature, heritage, and cultural tourism within a comprehensive sustainable destination management approach.

Recognizing its strategic importance, the Ministry of Heritage and Tourism has identified Dhofar as one of the country's priority tourism clusters. The Dhofar Tourism Master Plan promotes environmentally responsible tourism development through infrastructure investment, destination management, conservation initiatives, community participation, and sustainable private-sector investment.

2.3 Ecotourism Potential and Development Challenges

Dhofar possesses many of the characteristics associated with successful ecotourism destinations. Its biodiversity, protected areas, coastal landscapes, mountain ecosystems, and cultural heritage provide an excellent foundation for developing high-quality nature-based tourism experiences. Growing international demand for authentic, environmentally responsible tourism further strengthens the region's long-term market potential.

Several conservation-oriented tourism initiatives have already been implemented, particularly within Wadi Darbat, Jabal Samhan Nature Reserve, Al Mughsail, and the Land of Frankincense World Heritage sites. These initiatives demonstrate increasing recognition of the need to balance tourism development with biodiversity conservation and community well-being.

Despite these favorable conditions, ecotourism development continues to face important challenges. Stakeholders have identified limited ecotourism infrastructure, fragmented institutional coordination, insufficient community participation, shortages of specialized human resources, limited destination branding beyond the Khareef season, and the need for stronger environmental monitoring and visitor management systems. Addressing these challenges will be essential if Dhofar is to realize its ambition to become a leading ecotourism destination in the Gulf region.

Accordingly, Dhofar provides an appropriate case for examining how environmental conservation, stakeholder participation, destination management, and tourism development interact within an emerging ecotourism destination. The governorate therefore offers valuable insights for both tourism policy and sustainable destination management in Oman and comparable regions.

3. Literature Review

3.1 Ecotourism as a Sustainable Development Strategy

Ecotourism has evolved from a niche form of nature-based tourism into one of the most widely recognized approaches to sustainable tourism development. Early definitions emphasized responsible travel to natural areas and environmental conservation. In contrast, more recent perspectives position ecotourism as an integrated development strategy that generates economic opportunities, conserves biodiversity, strengthens community well-being, and enhances destination resilience (Honey, 2008; Buckley, 2009; UNEP & UN Tourism, 2023).

The International Ecotourism Society (TIES, 2015) defines ecotourism as responsible travel to natural areas that conserves the environment, sustains the well-being of local communities, and incorporates interpretation and education. Similarly, the International Union for Conservation of Nature (IUCN) emphasizes environmentally responsible travel that supports conservation and benefits local populations. Contemporary scholarship extends these definitions by recognizing ecotourism as a governance and policy instrument that can support multiple Sustainable Development Goals (SDGs), particularly those related to decent work, climate action, biodiversity conservation, and sustainable economic growth (OECD, 2026; UN Tourism, 2026).

Despite broad agreement regarding its objectives, scholars continue to debate whether ecotourism consistently delivers its promised environmental and socio-economic benefits. While many destinations demonstrate positive conservation and development outcomes, others have experienced environmental degradation, the commercialization of natural resources, and an unequal distribution of tourism benefits.

These contrasting findings suggest that successful ecotourism depends not only on natural assets but also on effective governance, stakeholder collaboration, and destination management.

3.2 Ecotourism, Economic Development and Environmental Conservation

The relationship between ecotourism, economic development, and environmental conservation remains central to the sustainable tourism literature. Numerous studies demonstrate that ecotourism generates employment, stimulates local entrepreneurship, increases household income, and supports regional economic diversification, particularly in rural and environmentally sensitive areas (Lai & Nepal, 2006; Buckley, 2009). Community-based ecotourism has also been associated with improved livelihoods and reduced dependence on environmentally harmful activities (Stronza & Durham, 2008).

Ecotourism contributes to environmental sustainability by generating financial resources for protected area management, biodiversity conservation, ecosystem restoration, environmental education, and visitor awareness (Kiper et al., 2016). However, these benefits are not automatic. Inadequately planned tourism can contribute to habitat degradation, pollution, overcrowding, and ecosystem disturbance (Pigram & Wahab, 2005). Consequently, recent studies increasingly emphasize the management of carrying capacity, environmental governance, climate adaptation, and destination resilience as essential conditions for sustainable ecotourism development (UNEP & UN Tourism, 2023; OECD, 2026).

3.3 Stakeholder Participation and Destination Governance

Stakeholder participation is widely recognized as a fundamental determinant of sustainable ecotourism development. Stakeholder Theory proposes that sustainable outcomes are more likely when governments, businesses, communities, environmental organizations, and visitors actively participate in planning and decision-making processes (Freeman, 1984). Tourism scholars argue that collaborative governance improves destination legitimacy, enhances conservation outcomes, and promotes more equitable distribution of tourism benefits (Byrd, 2007; Scheyvens, 2021).

Recent research emphasizes that participation should extend beyond consultation to include genuine partnership, shared ownership, and collaborative governance (Bui et al., 2024). Nevertheless, many emerging destinations continue to face institutional fragmentation, overlapping responsibilities, limited community empowerment, and insufficient coordination among tourism stakeholders. These governance challenges often constrain the long-term sustainability of ecotourism despite favorable environmental conditions.

3.4 Ecotourism Development in Emerging Destinations

Ecotourism has become increasingly important in emerging economies seeking to diversify their economies while conserving natural resources. Studies from Asia, Africa, and Latin America show that ecotourism can contribute significantly to biodiversity conservation, rural livelihoods, and regional

development when supported by effective governance, infrastructure investment, and stakeholder collaboration (Scheyvens, 2021; Bui et al., 2024).

Within the Gulf Cooperation Council (GCC), tourism has become a strategic component of national diversification policies. Oman has positioned tourism as a priority sector under Oman Vision 2040, emphasizing sustainability, cultural heritage, environmental conservation, and community participation. Among Oman's tourism regions, the Dhofar Governorate possesses exceptional ecotourism potential because of its biodiversity, protected areas, mountain ecosystems, coastal landscapes, and the unique Khareef season. However, realizing this potential requires stronger institutional coordination, improved visitor management, and greater community participation.

3.5 Research Gap and Literature Synthesis

The literature consistently demonstrates that ecotourism can contribute to economic diversification, biodiversity conservation, and community development when supported by effective governance and sustainable management practices (Buckley, 2009; Scheyvens, 2021; Bui et al., 2024). However, previous research has generally examined these dimensions independently, focusing on economic impacts, environmental conservation, stakeholder participation, or destination marketing rather than investigating how these elements interact within an integrated governance framework.

Although tourism research in Oman has expanded over the past decade, most studies have concentrated on destination attractiveness, visitor satisfaction, tourism marketing, and the economic contribution of tourism. Comparatively little attention has been given to understanding the relationships among environmental conservation, stakeholder participation, destination management, and sustainable regional development within the context of ecotourism. Moreover, empirical evidence from the Dhofar Governorate remains limited, particularly regarding the perspectives of multiple stakeholder groups involved in ecotourism planning and management.

Another limitation of the existing literature is its methodological focus. Much of the research relies on visitor surveys or secondary data. In contrast, relatively few studies have adopted qualitative, multi-stakeholder approaches that incorporate the views of government agencies, tourism businesses, local communities, and environmental organizations. Such perspectives are essential because sustainable ecotourism depends on collaboration among these actors and the effective integration of conservation and development objectives.

Collectively, these gaps indicate the need for a more comprehensive framework that explains how environmental conservation, stakeholder participation, destination management, and ecotourism activities interact to influence sustainable development outcomes. Addressing this need, the present study develops and empirically applies an Integrated Ecotourism Development Framework, drawing on qualitative evidence from multiple stakeholder groups in the Dhofar Governorate. In doing so, the study contributes to both theory and practice by advancing understanding of ecotourism governance in

emerging destinations and providing evidence-based recommendations for sustainable tourism development.

4. Conceptual Framework

4.1 Theoretical Foundations

Understanding ecotourism requires more than a single theoretical perspective, as its success depends on the interplay of environmental, institutional, economic, and social factors. Accordingly, this study integrates four complementary perspectives—Stakeholder Theory, Sustainable Tourism Theory, Destination Management Theory, and Environmental Conservation Theory—to explain how these factors collectively shape sustainable ecotourism development.

Stakeholder Theory (Freeman, 1984) provides the governance perspective of the framework by emphasizing that sustainable tourism depends on collaboration among governments, tourism businesses, local communities, environmental organizations, and visitors. The theory argues that involving these stakeholders in planning and decision-making improves governance, strengthens conservation efforts, and promotes a more equitable distribution of tourism benefits.

Sustainable Tourism Theory extends this perspective by recognizing that long-term tourism development requires balancing economic prosperity, environmental protection, and socio-cultural well-being. Drawing on the principles of the Triple Bottom Line, the theory suggests that destinations achieve lasting competitiveness only when economic growth is accompanied by environmental stewardship and community development (Weaver, 2001; Honey, 2008).

Destination Management Theory focuses on the institutional mechanisms that coordinate tourism development. It highlights the role of destination management organizations in planning tourism, coordinating stakeholders, managing visitor flows, promoting destinations, and monitoring sustainability performance (UN Tourism, 2024; OECD, 2026). Effective destination management is therefore essential to translate tourism policies into practical, sustainable outcomes.

Environmental Conservation Theory provides the ecological foundation of the framework. Natural resources, biodiversity, and ecosystem integrity are the primary assets that attract visitors to ecotourism destinations. Protecting these resources is therefore not only an environmental objective but also a prerequisite for maintaining destination competitiveness and ensuring the long-term viability of tourism.

While each theory explains a different aspect of ecotourism, none independently captures the complex relationships among environmental conservation, stakeholder collaboration, destination governance, and tourism development. By integrating these perspectives, the proposed framework offers a more comprehensive explanation of how sustainable ecotourism can be achieved in emerging destinations.

4.2 Integrated Ecotourism Development Framework

Building on the literature reviewed in the previous section, this study proposes an Integrated Ecotourism Development Framework that explains how environmental conservation, stakeholder participation, destination management, and ecotourism activities interact to generate sustainable development outcomes. The framework addresses a key limitation in previous research, where these dimensions have often been examined independently rather than as interconnected elements of destination governance. Figure 1 illustrates the proposed framework.

Source: Developed by the Authors

The framework comprises five interconnected constructs that collectively explain the processes through which ecotourism contributes to sustainable development.

Environmental conservation forms the ecological foundation of the framework. Biodiversity, protected areas, natural landscapes, and healthy ecosystems provide the essential resources upon which ecotourism depends. Conserving these assets ensures the long-term sustainability of tourism while maintaining the environmental quality that attracts visitors.

Stakeholder participation reflects the collaborative involvement of government agencies, tourism businesses, local communities, environmental organisations, investors, and visitors in tourism planning, implementation, and governance. Effective collaboration encourages shared decision-making, improves conservation outcomes, promotes community ownership, and enhances the distribution of tourism benefits.

Ecotourism activities represent the operational component of the framework. Nature-based experiences, environmental education, cultural tourism, wildlife observation, and community-based tourism transform environmental and cultural resources into economic, environmental, and social value while encouraging responsible visitor behaviour.

Destination management organisations (DMOs) serve as the coordinating mechanism that links stakeholders, tourism activities, and sustainability objectives. Through strategic planning, destination marketing, visitor management, sustainability monitoring, and policy implementation, DMOs help balance tourism growth with environmental protection and community well-being.

The final construct, **sustainable development outcomes**, represents the desired results of ecotourism development. These outcomes include economic diversification, employment generation, community well-being, cultural preservation, biodiversity conservation, and improved environmental stewardship. Together, they reflect the principles of sustainable tourism and the Triple Bottom Line.

Unlike many existing models that examine these dimensions separately, the proposed framework conceptualises ecotourism as an integrated governance system in which environmental conservation and stakeholder participation create the conditions for effective destination management and successful ecotourism activities. These interactions ultimately contribute to sustainable development

while reinforcing conservation efforts and stakeholder commitment, creating a continuous cycle of sustainable destination development.

To enhance conceptual clarity, Table 1 summarises the principal constructs underpinning the Integrated Ecotourism Development Framework. For each construct, the table provides a conceptual definition, identifies the supporting literature, and explains its role within the framework. Together, these constructs provide the analytical foundation of the study and guide the data collection, thematic analysis, and interpretation of the findings.

Table 1
Description of the Conceptual Framework Constructs

Construct	Definition	Supporting Literature	Role within the Framework
Environmental Conservation	The protection, preservation, and sustainable management of natural resources, biodiversity, ecosystems, and environmental assets that underpin ecotourism experiences.	Weaver (2001); Honey (2008); Buckley (2009); TIES (2015); Gössling et al. (2021)	Serves as the foundational resource base for ecotourism and contributes to long-term environmental sustainability.
Stakeholder Participation	The involvement of government agencies, tourism businesses, local communities, environmental organizations, investors, and tourists in tourism planning, management, and decision-making processes.	Freeman (1984); Byrd (2007); Scheyvens (2021)	Facilitates collaboration, enhances governance, improves benefit-sharing, and supports sustainable tourism outcomes.
Ecotourism Activities	Nature-based, conservation-oriented, and educational tourism experiences designed to promote environmental awareness, cultural appreciation, and responsible visitor behavior.	TIES (2015); Honey (2008); Stronza & Durham (2008)	Functions as the operational mechanism that converts environmental resources into economic, socio-cultural, and conservation benefits.
Destination Management Organizations (DMOs)	Organizations responsible for tourism planning, destination marketing, stakeholder coordination, visitor management, sustainability monitoring, and policy implementation.	UN Tourism (2024); OECD (2024)	Acts as the coordinating and governance mechanism linking stakeholders, tourism activities, and sustainable development outcomes.
Sustainable Development Outcomes	The economic, socio-cultural, and environmental benefits generated through ecotourism development, consistent with the Triple Bottom Line approach.	UNEP & UN Tourism (2023). OECD (2024); Scheyvens (2021)	Represents the desired outcomes of ecotourism development, including economic diversification, community well-being, and environmental conservation.

Source

Developed by the Author based on Freeman (1984), Weaver (2001), Honey (2008), Buckley (2009), UNEP & UN Tourism (2023), OECD (2024), and related literature.

4.3 Theoretical Propositions

The Integrated Ecotourism Development Framework proposes a series of theoretical relationships that explain how environmental conservation, stakeholder participation, destination management, and ecotourism activities interact to support sustainable development. Rather than serving as hypotheses for statistical testing, these propositions provide an analytical lens for exploring stakeholder perspectives and interpreting the qualitative findings. Collectively, they describe the expected relationships among the framework's core constructs and guide the analysis presented in the subsequent sections.

Proposition 1

(Environmental Conservation)

Environmental conservation provides the ecological foundation for ecotourism by protecting the natural resources and ecosystems upon which tourism experiences depend.

Proposition 2

(Stakeholder Participation)

Active stakeholder participation enhances the planning, implementation, and long-term sustainability of ecotourism development.

Proposition 3

(Destination Management)

Effective destination management facilitates stakeholder coordination and strengthens the relationship between ecotourism activities and sustainable development outcomes.

Proposition 4

(Ecotourism Activities)

Well-designed ecotourism activities contribute to economic development, environmental conservation, and socio-cultural well-being.

Proposition 5

(Integrated Governance)

The integration of environmental conservation, stakeholder participation, destination management, and ecotourism activities enhance destination resilience and supports long-term sustainable tourism development.

The Integrated Ecotourism Development Framework provides the conceptual foundation for the empirical component of this study. It informed the development of the interview guide, structured the thematic analysis, and guided the interpretation of stakeholder perspectives presented in the following sections.

5. Methodology

This study employed an exploratory qualitative research design to investigate the role of ecotourism in promoting economic development and environmental conservation in the Dhofar Governorate of the Sultanate of Oman. A qualitative approach was considered appropriate because the study seeks to understand how different stakeholder groups perceive ecotourism development, destination governance, environmental conservation, and community participation within a context that remains relatively underexplored. Guided by an interpretivist perspective, the research focuses on understanding participants' experiences and the meanings they attach to ecotourism development rather than measuring predefined variables (Creswell & Poth, 2018).

The study used the Integrated Ecotourism Development Framework presented in the previous section. The framework guided the development of the interview guide, informed the thematic analysis, and provided the analytical lens for interpreting the findings. It focused on five interconnected dimensions: environmental conservation, stakeholder participation, destination management, ecotourism activities, and sustainable development outcomes.

To address the research objectives, the study combined primary and secondary data. Primary data were collected through semi-structured interviews with key stakeholders, while secondary data were drawn from government reports, policy documents, tourism statistics, and academic literature to provide context and support triangulation.

Participants were selected using purposive sampling, a widely accepted strategy in qualitative research for identifying individuals with relevant knowledge and practical experience (Patton, 2015). Rather than seeking statistical representation, purposive sampling enabled the inclusion of stakeholders directly involved in ecotourism planning, management, and development in the Dhofar Governorate. A total of 47 participants took part in the study, representing four principal stakeholder groups involved in ecotourism development (Table 2).

Table 2
Profile of Interview Participants

Stakeholder Group	Participants
Government agencies	11
Tourism businesses and entrepreneurs	15
Local communities	17
Environmental organizations	4
Total	**47**
Source. Authors	

Government participants represented the Ministry of Heritage and Tourism, the Environment Authority, and Dhofar Municipality. Participants from the tourism sector included hotel managers, tour operators, tourism entrepreneurs, and investors. Community participants were residents actively involved in tourism and cultural heritage initiatives, while representatives from environmental organizations contributed perspectives on biodiversity conservation and environmental awareness. Interviews continued until data saturation was achieved, whereby additional interviews generated no substantial new insights and recurring patterns became evident across stakeholder groups.

Semi-structured interviews were conducted between February and April 2025. This format provided sufficient flexibility to explore participants' experiences while ensuring that all interviews addressed the key issues relevant to the research objectives. The interview guide was developed from the literature review and the Integrated Ecotourism Development Framework and focused on five broad themes: the current state of ecotourism development, environmental conservation, stakeholder participation and destination governance, economic and community benefits, and future priorities for ecotourism development. Before fieldwork began, two academics with expertise in tourism and qualitative research reviewed the interview guide to ensure its clarity, relevance, and content validity.

Interviews were conducted face-to-face or by telephone, in Arabic or English depending on participants' preferences, and typically lasted 45 to 90 minutes. Informed consent was obtained from all participants prior to the interviews. With participants' consent, interviews were audio-recorded and subsequently transcribed verbatim. Interviews conducted in Arabic were translated into English while preserving the original meaning and contextual nuances of participants' responses.

Secondary data were obtained from reports published by the Ministry of Heritage and Tourism, the National Center for Statistics and Information (NCSI), Oman Vision 2040, the National Tourism Strategy, peer-reviewed journal articles, and publications from UN Tourism, OECD, UNEP, and other international organizations. These sources complemented the interview data by providing policy, statistical, and contextual information relevant to ecotourism development in Oman. Triangulation was achieved by

comparing stakeholder perspectives with documentary evidence and secondary data, thereby enhancing the credibility of the findings.

The interview data were analyzed using the six-phase thematic analysis approach developed by Braun and Clarke (2006). Analysis began with repeated readings of the interview transcripts to become familiar with the data, followed by generating initial codes. Related codes were then grouped into broader categories and progressively refined into higher-order themes through constant comparison across stakeholder groups. The emerging themes were continually reviewed against the original transcripts to ensure that they accurately reflected participants' perspectives. Throughout the analytical process, the Integrated Ecotourism Development Framework served as the primary analytical lens, enabling the empirical findings to be interpreted in relation to environmental conservation, stakeholder participation, destination management, ecotourism activities, and sustainable development outcomes.

To enhance the trustworthiness of the study, the quality criteria proposed by Lincoln and Guba (1985) were applied. Credibility was strengthened through purposive sampling, the inclusion of multiple stakeholder groups, prolonged engagement with participants, and data triangulation. Transferability was supported by providing detailed descriptions of the research setting and participant characteristics. Dependability was enhanced through transparent documentation of the research process, interview procedures, and analytical decisions, while confirmability was strengthened through systematic coding, reflexive note-taking, and verbatim quotations to support the interpretation of the findings.

Given the interpretive nature of qualitative inquiry, reflexivity was maintained throughout the research process. The researcher's academic and professional experience in tourism management and sustainable tourism development in Oman facilitated access to participants and provided an informed understanding of the local context. At the same time, the researcher made conscious efforts to minimize potential bias through reflexive practice, systematic coding, data triangulation, and continuous comparison of stakeholder perspectives, ensuring the findings remained grounded in participants' experiences rather than the researcher's prior assumptions.

6. Findings

This study examined stakeholders' perceptions of ecotourism development in the Dhofar Governorate to understand the opportunities, challenges, and conditions necessary for achieving sustainable tourism. Analysis of the interview data revealed eight interrelated themes that capture stakeholders' perspectives on the institutional, environmental, economic, and social dimensions of ecotourism development. While participants consistently recognized Dhofar's exceptional natural and cultural assets, they also identified several institutional, infrastructural, and governance challenges that continue to constrain the sector's long-term development.

The findings demonstrate that sustainable ecotourism depends on the interaction of institutional capacity, tourism infrastructure, community participation, environmental conservation, economic opportunities, stakeholder engagement, and effective destination management. Collectively, these

themes provide empirical support for the Integrated Ecotourism Development Framework by illustrating how environmental conservation, stakeholder participation, destination management, and ecotourism activities influence sustainable development outcomes in the Dhofar Governorate.

The findings are presented under eight themes: (1) institutional capacity and governance, (2) tourism infrastructure and visitor services, (3) community participation and stakeholder collaboration, (4) environmental conservation and sustainable management, (5) economic contributions of ecotourism, (6) stakeholder satisfaction, (7) future priorities for ecotourism development, and (8) challenges affecting sustainable ecotourism development. A SWOT analysis is then presented to synthesize stakeholders' views of the strengths, weaknesses, opportunities, and threats shaping the future of ecotourism in the region.

6.1 Institutional Capacity and Governance

Institutional capacity emerged as one of the most influential factors shaping ecotourism development in the Dhofar Governorate. Across all stakeholder groups, participants agreed that Dhofar possesses exceptional natural landscapes, rich biodiversity, favorable climatic conditions, and a distinctive cultural heritage that provides a strong foundation for ecotourism. However, these competitive advantages have not yet been fully translated into sustainable tourism development because of weaknesses in institutional capacity, human resources, and governance.

Participants consistently identified shortages of specialized expertise, limited technical skills, and fragmented institutional coordination as major constraints. Government representatives acknowledged that important progress has been made through tourism planning, infrastructure development, destination promotion, and protected area management. Nevertheless, they recognized that the sector continues to face a shortage of professionals with expertise in ecotourism planning and sustainable destination management. As one government official explained: *"Dhofar possesses exceptional natural assets, but we still need more specialized expertise and trained professionals to manage ecotourism effectively"* (GOV3).

Private-sector stakeholders broadly shared this assessment but emphasized the practical challenges associated with operating ecotourism businesses. Many reported that bureaucratic procedures, lengthy approval processes, and limited access to financial support constrain investment, particularly for small and medium-sized tourism enterprises. One tourism operator observed: *"The challenge is not attracting visitors; it is having enough qualified personnel who understand ecotourism management and sustainability practices"* (BUS4).

Similarly, another participant noted: *"Support mechanisms exist, but obtaining approvals and funding can be a lengthy process, particularly for smaller tourism businesses"* (BUS7).

Community participants and environmental organizations also highlighted the need to strengthen local capacity through training programs for eco-guides, conservation specialists, and tourism entrepreneurs.

They argued that investing in local skills would not only improve service quality but also increase community participation and strengthen environmental stewardship.

Although stakeholders recognized the government's commitment to tourism development through infrastructure investment, destination marketing, support for tourism-related SMEs, and conservation initiatives, many believed that greater emphasis should be placed on ecotourism-specific policies, stronger inter-agency coordination, and more effective implementation of existing strategies. As one government representative observed: *"The government has invested significantly in tourism infrastructure and destination promotion, but more targeted support is needed for ecotourism projects"* (GOV2).

6.2 Tourism Infrastructure and Visitor Services

Tourism infrastructure and visitor services emerged as among the most significant constraints on ecotourism development in the Dhofar Governorate. Although stakeholders agreed that the region possesses exceptional natural and cultural attractions, many believed that tourism infrastructure has not kept pace with visitor demand, limiting both the quality of visitor experiences and the sector's long-term sustainability.

Across all stakeholder groups, participants identified shortages of eco-lodges, environmentally sensitive accommodation, visitor information centers, interpretation facilities, eco-trails, directional signage, sanitation facilities, and sustainable transport services. These shortcomings were considered particularly evident outside Salalah, where many environmentally and culturally significant sites remain difficult to access and lack the facilities necessary to support nature-based tourism.

A tourism business operator explained: *"Visitors are attracted by Dhofar's natural beauty, but many sites lack basic services and facilities needed to support a quality ecotourism experience"* (BUS8).

Community participants expressed similar concerns, particularly regarding the unequal distribution of tourism infrastructure across the governorate. As one respondent noted: *"Tourists visit our area, but we have no visitor center, limited facilities, and poor access roads"* (COM11).

Stakeholders also highlighted the challenges created by the strong seasonality of tourism demand. During the Khareef season, the sharp increase in visitor numbers places considerable pressure on existing infrastructure, leading to congestion at popular attractions and reducing the quality of the visitor experience. Many participants suggested that expanding sustainable tourism infrastructure beyond the main tourism centers would help disperse visitor flows, encourage year-round tourism, and create new economic opportunities for rural communities.

6.3 Community Participation and Stakeholder Collaboration

Community participation emerged as a central factor influencing the long-term sustainability of ecotourism development in the Dhofar Governorate. Although government agencies described existing

consultation mechanisms, many community participants felt that their involvement in tourism planning remained limited and largely consultative rather than genuinely participatory. Respondents across stakeholder groups agreed that local communities should play a more active role in shaping tourism policies, managing tourism resources, and sharing the economic benefits generated by ecotourism.

Community members emphasized that they were often informed about tourism initiatives but had limited opportunities to contribute to decision-making or influence development priorities. As one participant explained: *"We are informed about tourism projects, but we are rarely involved in making decisions about them"* (COM3).

Environmental organizations reinforced this perspective, arguing that local communities possess valuable knowledge of Dhofar's natural environment, cultural heritage, and traditional resource management practices that remain underutilized in tourism planning. As one NGO representative noted: *"Local communities possess valuable environmental knowledge, but their voices are often underrepresented in tourism planning processes"* (NGO3).

Beyond participation in decision-making, stakeholders highlighted the importance of creating greater opportunities for local employment, entrepreneurship, and community-based tourism initiatives. Many participants believed that increasing community ownership and involvement would strengthen local support for conservation, improve visitor experiences through authentic cultural engagement, and ensure that tourism benefits are distributed more equitably across the governorate.

6.4 Environmental Conservation and Sustainable Management

Environmental conservation was widely recognized as the foundation of ecotourism development in the Dhofar Governorate. Across all stakeholder groups, participants agreed that the region's biodiversity, protected areas, mountain landscapes, coastal ecosystems, and unique Khareef environment constitute its greatest tourism assets. Consequently, conserving these natural resources was viewed not only as an environmental responsibility but also as a prerequisite for sustaining tourism and maintaining the destination's long-term competitiveness.

Government representatives highlighted the role of Environmental Impact Assessments (EIAs), protected area management, and environmental regulations in safeguarding natural resources. At the same time, many participants expressed concerns about inconsistent policy implementation, limited environmental monitoring, and increasing pressure on sensitive ecosystems resulting from growing visitor numbers. These concerns suggest that existing conservation policies provide an important regulatory framework but require stronger implementation and more effective management to achieve their intended outcomes.

As one environmental stakeholder observed: *"Environmental protection should be the foundation of tourism development because natural resources are the main attraction for visitors"* (NGO2).

Similarly, a government representative acknowledged the need to strengthen policy implementation: *"The policies exist, but stronger monitoring and enforcement are necessary to ensure long-term conservation outcomes"* (GOV10).

Participants also emphasized the importance of integrating conservation with tourism planning through improved visitor management, environmental education, and regular monitoring of ecologically sensitive sites. Several respondents argued that increasing public awareness among both visitors and local communities would encourage more responsible tourism practices while reducing pressure on fragile environments.

6.5 Economic Contributions of Ecotourism

Stakeholders consistently viewed ecotourism as an important driver of economic development in the Dhofar Governorate. Across all participant groups, respondents agreed that tourism has created new employment opportunities, supported local entrepreneurship, stimulated demand for locally produced goods and services, and contributed to the diversification of the regional economy. Many participants also highlighted the growing importance of ecotourism in creating income-generating opportunities linked to cultural heritage, traditional crafts, local food production, and nature-based tourism services.

Community participants emphasized the direct economic benefits that tourism provides to local households. As one respondent explained: *"Tourism provides additional income for many families through handicrafts, local food production, transportation, and guiding services"* (COM15).

Similarly, tourism business operators highlighted the sector's contribution to entrepreneurship and investment, particularly in rural areas where alternative economic opportunities are relatively limited.

"Ecotourism creates opportunities for entrepreneurs and stimulates investment in rural areas" (BUS10).

Despite these positive contributions, stakeholders acknowledged that the economic benefits of tourism are not shared equally across the region. Many participants observed that larger businesses and external investors often capture a disproportionate share of tourism revenues, while smaller enterprises and local communities receive more limited economic returns. Respondents therefore stressed the importance of strengthening community-based tourism, supporting small and medium-sized enterprises, and creating policies that encourage greater local ownership and participation in the tourism economy.

6.6 Stakeholder Satisfaction with Ecotourism Development

Stakeholder satisfaction with ecotourism development varied across the different groups, reflecting their distinct roles and experiences within the tourism sector. While most participants acknowledged that tourism in Dhofar has progressed over the past decade, particularly through increased investment, improved planning, and greater recognition of sustainability, they also expressed concerns about the pace of implementation and the extent to which tourism benefits are shared among stakeholders.

Government representatives were generally optimistic about recent developments, highlighting progress in tourism infrastructure, destination promotion, and strategic planning. Many viewed these initiatives as evidence of the government's growing commitment to developing tourism in line with sustainability principles. As one government official explained: *"Tourism development in Dhofar has improved significantly over the past decade, and there is a stronger focus on sustainability than before"* (GOV6).

In contrast, tourism business operators expressed more cautious views. Although they recognized the region's considerable tourism potential, many believed that bureaucratic procedures, regulatory complexity, and limited financial incentives continue to discourage investment and innovation, particularly for small and medium-sized enterprises. One entrepreneur commented: *"There is potential for growth, but administrative processes and limited incentives often discourage investment in ecotourism projects"* (BUS9).

Community participants were generally less satisfied, particularly regarding their involvement in tourism planning and their access to economic opportunities. Many felt that local communities have not benefited proportionately from tourism growth and remain underrepresented in decision-making processes. As one participant observed: *"Tourism is growing, but many local people still feel excluded from the decision-making process and do not receive a fair share of the benefits"* (COM10).

Environmental organizations offered a different perspective by emphasizing that tourism development should not come at the expense of environmental sustainability. While they recognized the economic importance of tourism, they argued that conservation objectives must remain central to future development. As one NGO representative stated: *"Economic growth is important, but sustainability must remain a priority if tourism is to succeed in the long term"* (NGO3).

6.7 Future Priorities for Ecotourism Development

Stakeholders identified several strategic priorities essential to unlocking Dhofar's ecotourism potential and supporting its long-term sustainability. While participants recognized the region's strong natural and cultural assets, they agreed that future development should focus on strengthening sustainable infrastructure, improving destination management, expanding community participation, and positioning Dhofar as a year-round ecotourism destination.

One of the most frequently discussed priorities was the need to invest in environmentally responsible tourism infrastructure. Participants highlighted the development of eco-lodges, nature interpretation centers, eco-trails, visitor facilities, and sustainable transport systems as important measures for improving visitor experiences while minimizing environmental impacts. A tourism operator explained: *"Developing environmentally friendly accommodation and improving visitor facilities would significantly enhance Dhofar's attractiveness as an ecotourism destination"* (BUS11).

Stakeholders also emphasized the importance of strengthening environmental education and awareness programs. Many believed that increasing environmental knowledge among both residents and visitors would encourage responsible tourism behavior and reinforce conservation efforts. As one representative

from an environmental organization observed: *"Education and awareness are critical because both visitors and residents need to understand the value of conservation and responsible tourism practices"* (NGO4).

Community participants highlighted the importance of investing in local people through training, entrepreneurship support, and capacity-building initiatives. Respondents argued that empowering communities to participate more actively in tourism enterprises would not only improve local livelihoods but also strengthen community support for environmental conservation. One participant commented: *"Providing training and support for local people would help communities benefit more directly from tourism development"* (COM13).

In addition to infrastructure and community development, stakeholders consistently identified destination marketing as a strategic priority. Most participants believed that current promotional activities focus too heavily on the Khareef season, limiting Dhofar's visibility as a year-round destination. They argued that the governorate's biodiversity, protected areas, cultural heritage, coastal landscapes, and outdoor recreation opportunities remain underrepresented in domestic and international tourism campaigns.

A tourism business operator explained: *"Most marketing campaigns concentrate on the Khareef season, while many of Dhofar's natural and cultural attractions remain largely unknown outside the region"* (BUS6).

Similarly, a government representative stressed the need for a stronger destination identity: *"Dhofar needs a dedicated ecotourism brand that highlights its environmental assets and unique visitor experiences throughout the year"* (GOV5).

Several participants also recommended expanding the use of digital marketing, social media platforms, and partnerships with international tour operators to reach wider markets. They further suggested that promotional campaigns should emphasize responsible tourism practices alongside destination attractions. As one environmental stakeholder noted: *"Promotional campaigns should communicate not only what visitors can see, but also the importance of conservation and responsible tourism"* (NGO2).

6.8 Challenges Affecting Sustainable Ecotourism Development

Despite recognizing Dhofar's considerable ecotourism potential, stakeholders identified several interconnected challenges that continue to constrain the sector's sustainable development. Rather than viewing these barriers as isolated issues, participants emphasized that they reinforce one another and require coordinated policy responses involving government agencies, tourism businesses, local communities, and environmental organizations.

Institutional and governance challenges were the most frequently cited concerns. Participants highlighted weak coordination among public institutions, lengthy administrative procedures, and limited integration between tourism planning, environmental management, and local development. These governance issues were perceived to reduce the effectiveness of existing policies and slow the

implementation of ecotourism initiatives. As one government representative explained: *"One of the greatest challenges is the lack of coordination among organizations responsible for tourism, environmental management, and local development"* (GOV8).

Stakeholders also pointed to structural constraints that limit investment and business development. These included inadequate tourism infrastructure, shortages of skilled personnel, limited financial support for tourism enterprises, and insufficient incentives for sustainable investment. Many participants argued that these constraints are particularly challenging for small and medium-sized enterprises seeking to develop ecotourism products and services. A tourism operator observed: *"Investment opportunities exist, but access to funding and support mechanisms remains limited, particularly for smaller businesses"* (BUS12).

Environmental sustainability has been identified as another major concern. Participants warned that increasing visitor numbers, particularly during the Khareef season, could place additional pressure on sensitive ecosystems if tourism growth is not supported by effective visitor management, environmental monitoring, and conservation measures. As one representative of an environmental organization noted: *"Without effective visitor management and environmental monitoring, increasing tourism activity could place additional pressure on fragile ecosystems"* (NGO3).

Community participants also expressed concerns about the unequal distribution of tourism benefits and the limited opportunities available for local communities to participate in tourism development. Many believed that greater community involvement and fairer benefit-sharing arrangements would strengthen public support for conservation and encourage more sustainable tourism development. One participant commented: *"Tourism should benefit local communities more directly if it is to gain long-term public support"* (COM4).

6.9 SWOT Analysis of Ecotourism Development in Dhofar

The SWOT analysis provides an integrated summary of stakeholders' perceptions of the current state and prospects of ecotourism development in the Dhofar Governorate. Rather than introducing new findings, it consolidates the evidence presented in the preceding sections and highlights the internal and external factors shaping the region's ecotourism potential.

Stakeholders consistently identified Dhofar's exceptional natural and cultural resources as its greatest strengths. The unique Khareef season, diverse mountain and coastal ecosystems, rich biodiversity, UNESCO World Heritage sites, and authentic cultural heritage were widely regarded as distinctive assets that differentiate the governorate from other destinations in the Gulf region. Participants also recognized Oman Vision 2040 and the government's growing commitment to sustainable tourism as important foundations for future development. As one government representative observed: *"Few destinations in the Gulf possess the combination of environmental diversity and cultural heritage that exists in Dhofar"* (GOV4).

Similarly, a tourism business operator highlighted the region's untapped potential: *"Dhofar has all the ingredients needed for a successful ecotourism destination; the challenge is transforming those assets into sustainable tourism products"* (BUS10).

Despite these competitive advantages, stakeholders identified several internal weaknesses that continue to constrain ecotourism development. These include limited tourism infrastructure outside the main urban areas, shortages of skilled human resources, weak destination branding, fragmented institutional coordination, and limited opportunities for local communities to participate fully in tourism development. Participants generally viewed these weaknesses as governance and capacity issues rather than limitations of the destination itself.

Stakeholders also recognized a number of external opportunities that could support the future growth of ecotourism. These include increasing global demand for nature-based and sustainable tourism experiences, the policy direction provided by Oman Vision 2040, growing environmental awareness among travelers, and expanding investment in sustainable tourism initiatives. Many participants believed that these trends position Dhofar favorably to strengthen its role as a leading ecotourism destination in the region.

At the same time, respondents expressed concern about several external threats that could undermine long-term sustainability if not addressed effectively. Environmental degradation, increasing visitor pressure on sensitive ecosystems, climate change, regional competition, limited investment, and inconsistent enforcement of environmental regulations were identified as the principal risks facing the sector. Stakeholders emphasized that these challenges require proactive planning, effective visitor management, and stronger institutional collaboration to safeguard the natural resources upon which ecotourism depends.

7. Discussion

This study examined the factors shaping ecotourism development in the Dhofar Governorate through the perspectives of government agencies, tourism businesses, local communities, and environmental organizations. Drawing on the Integrated Ecotourism Development Framework, the findings demonstrate that the interaction of environmental conservation, stakeholder participation, destination management, and inclusive economic development shapes sustainable ecotourism. Although Dhofar possesses exceptional natural and cultural resources, the study shows that these assets alone are insufficient to ensure sustainable tourism. Their long-term value depends on effective governance, coordinated destination management, active stakeholder participation, and continued investment in institutional capacity and sustainable infrastructure.

7.1 Environmental Conservation as the Foundation of Ecotourism

The findings reinforce the widely recognized view that environmental conservation forms the foundation of successful ecotourism development. Across all stakeholder groups, Dhofar's biodiversity, protected areas, mountain landscapes, coastal ecosystems, and distinctive Khareef environment were consistently identified as the destination's principal competitive advantages. This supports previous research that argues ecological integrity is the primary resource on which nature-based tourism depends (Buckley, 2009; Honey, 2008).

However, the study also demonstrates that conservation cannot be regarded as a static condition. Stakeholders expressed growing concern about visitor pressure, waste management, habitat disturbance, and the limited capacity to monitor environmental impacts. These concerns suggest that increasing tourism demand must be accompanied by stronger visitor management, continuous environmental monitoring, and adaptive conservation strategies. Similar challenges have been identified in emerging ecotourism destinations where tourism growth has outpaced institutional capacity and environmental management (Gössling et al., 2021; Scheyvens, 2021).

Rather than treating conservation as an outcome of tourism development, the findings indicate that it should be viewed as the starting point for sustainable destination planning. Protecting ecological resources is essential not only for biodiversity conservation but also for maintaining destination quality, visitor satisfaction, and long-term economic competitiveness.

7.2 Stakeholder Participation and Governance

The study highlights stakeholder participation as a principal determinant of sustainable ecotourism development. Although consultation mechanisms have been established, many participants perceived existing governance arrangements as highly centralized, with limited opportunities for meaningful community involvement in planning and decision-making.

These findings reinforce Stakeholder Theory (Freeman, 1984), which argues that sustainable outcomes are more likely when those affected by development actively participate in governance processes. Previous studies show that collaborative governance improves conservation outcomes, strengthens local support for tourism, and promotes a more equitable distribution of tourism benefits (Byrd, 2007; Scheyvens, 2021).

The findings further suggest that community participation should extend beyond consultation to include genuine involvement in planning, implementation, and destination management. Empowering local communities not only strengthens trust among stakeholders but also encourages greater local ownership of conservation initiatives and tourism enterprises. In emerging destinations such as Dhofar, participatory governance therefore represents both a social objective and a practical mechanism for improving destination resilience.

7.3 Ecotourism as a Driver of Regional Development

The findings demonstrate that ecotourism has considerable potential to contribute to economic diversification, employment creation, entrepreneurship, and rural development. Participants consistently recognized tourism as an important source of income, particularly for local businesses, traditional handicrafts, guiding services, and community-based enterprises. These observations support previous research highlighting ecotourism's capacity to generate local economic opportunities while encouraging environmental stewardship (Stronza & Durham, 2008; Scheyvens, 2021).

At the same time, the study reveals that economic benefits are distributed unevenly. Stakeholders expressed concern that larger businesses and external investors often capture a disproportionate share of tourism revenues, thereby limiting tourism's contribution to local livelihoods. This finding reflects broader debates in the ecotourism literature on benefit leakage and the importance of community ownership for achieving inclusive development.

The findings therefore suggest that increasing tourism activity alone is insufficient to achieve sustainable regional development. Policies that strengthen local entrepreneurship, support small and medium-sized enterprises, and expand community participation are equally important for ensuring that tourism contributes to long-term economic resilience.

7.4 Destination Management as an Enabling Mechanism

Destination management emerged as a critical factor linking tourism development, environmental conservation, and stakeholder collaboration. Participants consistently identified deficiencies in tourism infrastructure, visitor management, interpretation facilities, transport services, and institutional coordination as constraints affecting both visitor experiences and environmental sustainability.

These findings support destination management literature, which argues that tourism competitiveness depends not only on the quality of attractions but also on the effectiveness of planning, governance, and visitor management systems (UN Tourism, 2024; OECD, 2024). In Dhofar, infrastructure limitations appear to reflect broader governance challenges rather than simply investment shortages. Fragmented institutional responsibilities and weak coordination reduce the effectiveness of tourism planning and slow the implementation of sustainable development initiatives.

The findings therefore suggest that destination management organizations should play a stronger coordinating role by integrating tourism planning with environmental management, infrastructure development, community engagement, and sustainability monitoring. Such an approach would improve both destination competitiveness and long-term environmental resilience.

7.5 An Integrated Approach to Sustainable Ecotourism Development

A key contribution of this study is the empirical support it provides for the Integrated Ecotourism Development Framework. Rather than operating independently, environmental conservation, stakeholder

participation, destination management, and ecotourism activities were found to interact in mutually reinforcing ways that influence sustainable development outcomes.

The findings indicate that weaknesses in one component of the system can undermine progress in others. For example, inadequate stakeholder participation weakens governance, limited infrastructure reduces visitor satisfaction, and ineffective environmental management threatens the natural resources upon which tourism depends. Conversely, improvements in governance, conservation, and community participation create positive feedback loops that strengthen destination resilience and support more sustainable tourism development.

This integrated perspective extends existing ecotourism research by demonstrating how environmental, economic, institutional, and social dimensions interact within the context of an emerging tourism destination in the Gulf region. The framework therefore provides a practical foundation for future policy and research while illustrating that sustainable ecotourism should be understood as a coordinated regional development strategy rather than simply a tourism product.

8. Theoretical Contributions

This study makes three interrelated theoretical contributions to ecotourism and sustainable tourism literature. First, it extends understanding of stakeholder participation in ecotourism governance by demonstrating that sustainable tourism development depends not only on the presence of multiple stakeholders but also on the quality of collaboration among them. Second, Sustainable Tourism Theory advances by showing how environmental conservation, economic development, and community participation operate as mutually reinforcing rather than independent dimensions of sustainability. Third, the study develops and empirically supports an Integrated Ecotourism Development Framework that explains the relationships among environmental conservation, stakeholder participation, destination management, ecotourism activities, and sustainable development outcomes within the context of an emerging tourism destination.

8.1 Contribution to Stakeholder Theory

The findings reinforce the central premise of Stakeholder Theory (Freeman, 1984) by demonstrating that sustainable ecotourism development depends on effective collaboration among government agencies, tourism businesses, local communities, and environmental organizations. However, the study extends existing theory by showing that stakeholder participation should not be viewed simply as a governance principle but as a strategic capability that directly influences destination sustainability.

Participants consistently highlighted that limited community involvement, fragmented institutional coordination, and weak collaboration reduce the effectiveness of tourism planning and constrain long-term support for conservation initiatives. These findings suggest that meaningful stakeholder participation extends beyond consultation to shared decision-making, collaborative governance, and joint responsibility for destination management. In doing so, the study contributes empirical evidence

from the Gulf Cooperation Council (GCC) region, where research examining stakeholder relationships in ecotourism remains relatively limited.

8.2 Contribution to Sustainable Tourism Theory

The findings also contribute to Sustainable Tourism Theory by demonstrating that environmental conservation, economic development, and community well-being are closely interconnected rather than competing objectives. While stakeholders recognized ecotourism as an important source of employment, entrepreneurship, and regional development, they consistently argued that these benefits depend on maintaining ecological integrity and ensuring that local communities participate meaningfully in tourism development.

This finding reinforces the core principles of sustainable tourism while extending existing knowledge by illustrating how sustainability is achieved through the interaction of governance, environmental stewardship, and inclusive economic development. In the context of Dhofar, tourism growth alone was not considered a sustainability indicator. Instead, stakeholders emphasized that long-term success depends on balancing economic diversification with biodiversity conservation, cultural heritage preservation, and equitable benefit-sharing. These findings contribute to the growing literature on sustainable tourism in environmentally sensitive and emerging destinations.

8.3 Contribution of the Integrated Ecotourism Development Framework

The principal theoretical contribution of this study is the development and empirical support of the Integrated Ecotourism Development Framework. Unlike many existing approaches that examine environmental conservation, stakeholder participation, destination management, or economic development separately, the proposed framework conceptualizes these dimensions as an interconnected system that collectively shapes sustainable ecotourism outcomes.

The findings demonstrate that environmental conservation provides the ecological foundation of ecotourism, while stakeholder participation and destination management function as enabling mechanisms that influence the effectiveness of tourism planning and implementation. Ecotourism activities, in turn, generate economic, environmental, and socio-cultural outcomes that reinforce conservation efforts and strengthen stakeholder commitment, creating a continuous cycle of sustainable destination development.

By integrating these relationships into a single conceptual model, the framework offers a more comprehensive explanation of how ecotourism contributes to sustainable regional development. It also provides a foundation for future comparative and quantitative research to test the relationships among the model's core constructs across different tourism contexts. More broadly, the framework extends ecotourism theory by demonstrating that sustainable destination development is best understood as a dynamic governance system in which environmental, institutional, economic, and community dimensions operate in a mutually reinforcing manner.

9. Practical Implications

The findings offer several practical implications for policymakers, destination managers, tourism businesses, environmental authorities, and local communities seeking to strengthen ecotourism development in the Dhofar Governorate. Rather than requiring isolated interventions, the results suggest that sustainable ecotourism depends on coordinated action that integrates environmental conservation, destination management, community participation, and economic development.

9.1 Strengthening Governance and Strategic Planning

The findings highlight the need for a more integrated governance approach to ecotourism development. Although tourism has become an important pillar of Oman Vision 2040 and the National Tourism Strategy, stakeholders consistently identified institutional fragmentation and limited coordination among government agencies as barriers to sustainable development. Strengthening collaboration between the Ministry of Heritage and Tourism, the Environment Authority, Dhofar Municipality, and other relevant institutions would improve policy implementation, reduce administrative duplication, and promote more coherent destination management.

A dedicated ecotourism strategy for Dhofar could provide a common policy framework for coordinating conservation, tourism investment, infrastructure development, visitor management, and community participation. Such a strategy should also establish sustainability standards and encourage the adoption of certification schemes that promote environmentally responsible tourism practices.

9.2 Investing in Sustainable Tourism Infrastructure

Improving tourism infrastructure emerged as one of the highest priorities identified by stakeholders. Future investment should focus on environmentally sensitive infrastructure that enhances visitor experiences while protecting natural resources. This includes eco-lodges, visitor information centers, interpretation facilities, eco-trails, signage systems, public amenities, and sustainable transport services, particularly in rural and nature-based tourism areas.

Participants also emphasized the importance of integrating carrying-capacity assessments, environmental monitoring, and visitor management into infrastructure planning to minimize ecological impacts while maintaining the quality of visitor experiences.

9.3 Empowering Local Communities and Tourism Enterprises

The findings demonstrate that local communities should be recognized as active partners in tourism development rather than passive beneficiaries. Expanding community participation in tourism planning, supporting community-based tourism enterprises, and investing in education and capacity-building programs would strengthen local ownership and improve the distribution of tourism benefits.

Similarly, greater support for small and medium-sized tourism enterprises would encourage entrepreneurship, stimulate innovation, and diversify tourism products beyond the seasonal Khareef market. Simplifying administrative procedures and improving access to financial support would help create a more enabling environment for sustainable tourism investment.

9.4 Strengthening Environmental Stewardship

The study reinforces the importance of integrating environmental conservation into all stages of tourism planning and destination management. Participants consistently emphasized that the long-term competitiveness of Dhofar depends on protecting the natural and cultural resources that underpin its tourism appeal.

This requires stronger environmental monitoring, regular carrying-capacity assessments, improved enforcement of environmental regulations, and greater investment in biodiversity conservation. Environmental education programs targeting both residents and visitors should also be expanded to encourage responsible tourism behavior and strengthen public support for conservation initiatives.

9.5 Enhancing Destination Positioning and Market Competitiveness

Stakeholders also highlighted the need to reposition Dhofar as a year-round ecotourism destination rather than one primarily associated with the Khareef season. Developing a distinctive ecotourism brand that showcases the governorate's biodiversity, protected areas, coastal landscapes, outdoor recreation opportunities, and cultural heritage would strengthen its competitiveness in domestic and international markets.

Greater use of digital marketing, strategic partnerships with international tour operators, and destination branding centered on sustainability and authentic nature-based experiences would further enhance Dhofar's market position while supporting tourism diversification.

9.6 Towards Integrated Ecotourism Governance

The findings indicate that sustainable ecotourism development ultimately depends on strengthening collaboration among government agencies, tourism businesses, environmental organizations, local communities, and academic institutions. Rather than operating independently, these stakeholders should work within an integrated governance framework that promotes shared decision-making, coordinated planning, information exchange, and joint responsibility for sustainable destination management.

Such an approach would improve policy coherence, strengthen environmental stewardship, encourage community participation, and support more inclusive economic development. More broadly, it would contribute to the implementation of Oman Vision 2040 by positioning Dhofar as a leading model of sustainable and resilient ecotourism development within Oman and the wider Gulf region.

10. Conclusion

This study examined the role of ecotourism in promoting economic development and environmental conservation in the Dhofar Governorate of the Sultanate of Oman. Drawing on the perspectives of government agencies, tourism businesses, local communities, and environmental organizations, the study explored the factors shaping ecotourism development. It assessed its potential to support sustainable regional development.

The findings demonstrate that Dhofar possesses exceptional natural and cultural resources that provide a strong foundation for ecotourism. Its biodiversity, protected areas, coastal landscapes, mountain ecosystems, cultural heritage, and unique Khareef season position the governorate as one of the most promising nature-based tourism destinations in the Gulf region. However, the study also shows that these assets alone are insufficient to achieve sustainable tourism development. Institutional fragmentation, limited tourism infrastructure, weak stakeholder coordination, uneven community participation, and limited destination branding continue to constrain the sector's long-term development.

The study further demonstrates that ecotourism can contribute to economic diversification, local entrepreneurship, employment creation, and community well-being while supporting biodiversity conservation and environmental stewardship. These findings reinforce the view that ecotourism represents an integrated development approach capable of generating economic, environmental, and socio-cultural benefits when supported by effective governance and strategic destination management.

A key contribution of this research is the development and empirical support of the **Integrated Ecotourism Development Framework**, which explains how environmental conservation, stakeholder participation, destination management, and ecotourism activities interact to influence sustainable development outcomes. The findings indicate that these dimensions should not be viewed independently but as components of an interconnected system in which improvements in one area reinforce progress in others.

The study suggests that the future of ecotourism in Dhofar will depend on strengthening governance, investing in sustainable infrastructure, empowering local communities, protecting natural resources, and improving collaboration among tourism stakeholders. By adopting an integrated, conservation-oriented approach, Dhofar has the potential to become a leading model for sustainable ecotourism development in Oman and the wider Gulf Cooperation Council (GCC) region.

11. Limitations of the Study

Several limitations should be considered when interpreting the findings of this study. First, the research focused exclusively on the Dhofar Governorate; therefore, the findings provide analytical rather than statistical generalization to other regions of Oman or different tourism contexts. Second, the study adopted an exploratory qualitative design based on stakeholder interviews, meaning that the findings reflect participants' experiences and perceptions rather than quantitatively measured relationships.

The limited availability of ecotourism-specific data in Oman also constrained the study. Information on ecotourism investment, visitor expenditure, environmental performance, employment generation, and conservation outcomes remain limited, while official tourism statistics continue to focus primarily on visitor arrivals and seasonal tourism activity.

Despite these limitations, the qualitative approach provided rich insights into stakeholder perspectives. It enabled a comprehensive understanding of the opportunities, challenges, and governance issues influencing ecotourism development in the Dhofar Governorate.

12. Future Research Directions

This study provides several avenues for future research. Comparative studies involving other governorates in Oman and neighboring Gulf countries would improve understanding of how different governance systems, environmental conditions, and tourism policies influence ecotourism development. Such research could contribute to a broader regional framework for sustainable ecotourism.

Future studies should also use quantitative and mixed-methods approaches to examine the economic, environmental, and socio-cultural impacts of ecotourism and test the relationships proposed in the Integrated Ecotourism Development Framework. Longitudinal research would further improve understanding of how tourism policies, conservation initiatives, and destination management practices influence sustainability outcomes over time.

Additional research is needed to investigate visitor behavior, environmental carrying capacity, climate change adaptation, biodiversity conservation, community-based tourism, and the application of digital technologies and artificial intelligence in sustainable destination management. Such studies would deepen understanding of ecotourism development in Oman and provide evidence to support more effective tourism policy and practice across the GCC region.

Declarations

Author Contribution

A.A. conceptualized the study; designed the research methodology; secured funding; conducted the investigation; collected, analyzed, and interpreted the data; developed the Integrated Ecotourism Development Framework; prepared the figures and tables; and wrote the original manuscript. W.G.A. critically reviewed the manuscript, provided intellectual input on its originality, theoretical contribution, and positioning within the international tourism literature, and contributed to manuscript revision. O.L. critically reviewed the manuscript, provided intellectual input on its theoretical and practical contributions, the interpretation of the findings, and its positioning within the sustainable tourism and ecotourism literature, and contributed to the manuscript revision.

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Ethics Declaration

This study was conducted in accordance with the ethical standards and institutional guidelines of the University of Technology and Applied Sciences (UTAS), Salalah Branch, Sultanate of Oman, governing research involving human participants. Ethical approval was granted by the relevant Research Ethics Committee at the University of Technology and Applied Sciences (UTAS), Salalah Branch (Approval/Reference No. SRT/AY/2024-25/SLL-006). All participants were informed about the purpose and procedures of the study, and participation was voluntary. Informed consent was obtained from all participants prior to their participation in the study.

Consent to Participate

Informed consent was obtained from all participants before they participated in the study. Participants were informed about the purpose of the research, the voluntary nature of participation, confidentiality and anonymity, and their right to withdraw at any time without consequence. Participants also consented to audio recording of the interviews and to the use of anonymized data for research and publication purposes.

Clinical Trial Number

Not applicable.

Conflict of Interest

The authors declare no conflict of interest.

Data Availability

The data supporting the findings of this study are available from the corresponding author upon reasonable request, subject to ethical requirements and the protection of participants' confidentiality and privacy.

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Figures



Figure 1

Oman Map

Source. https://www.nationsonline.org/oneworld/map/oman-map.htm



Figure 2

Dhofar Governorate Map

Source. https://www.rop.gov.om/english/governoratemaps.html

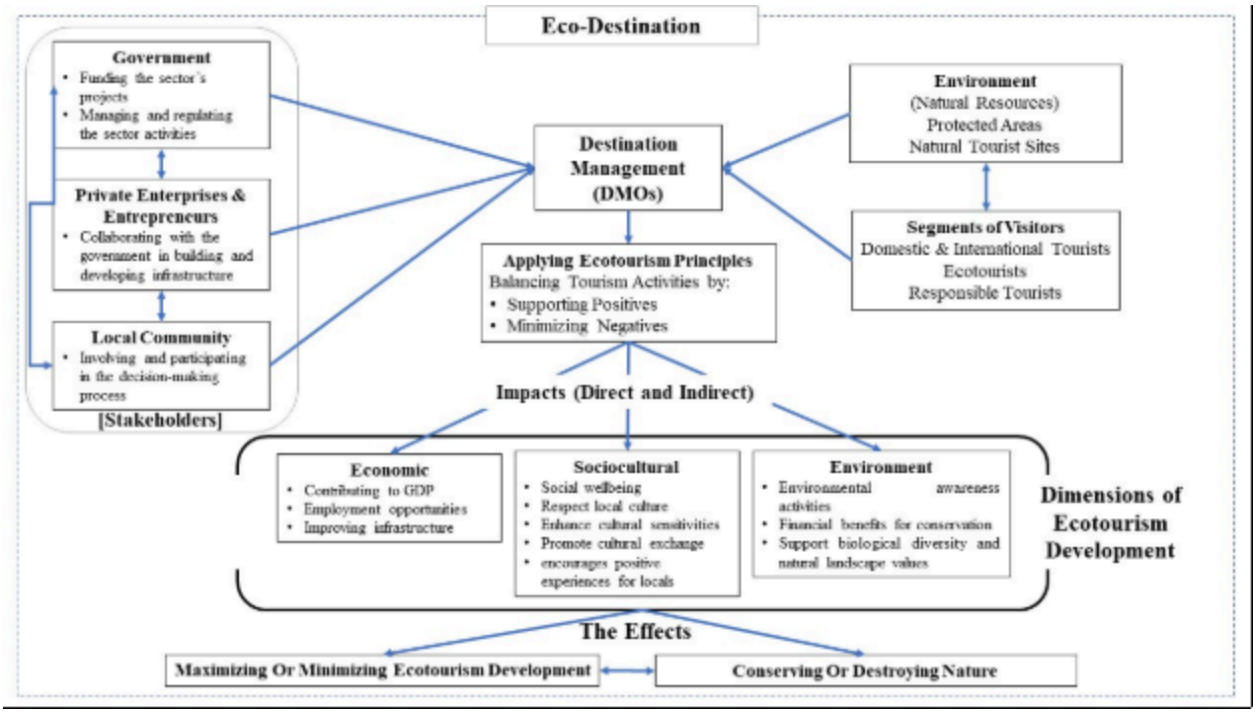


Figure 3

Integrated Ecotourism Development Framework: Relationships among Environmental Conservation, Stakeholder Participation, Destination Management, and Sustainable Development Outcomes

Source: Developed by the Authors