CONCEPTUALIZING SEA-BASED WATER SPORTS TOURISM AS A COASTAL TOURIST ATTRACTION: EMPIRICAL EVIDENCE FROM AMPARA DISTRICT, SRI LANKA

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Abstract. *Sea-based water sports tourism has emerged as a significant niche within coastal tourism, offering opportunities for economic development, recreational engagement, and sustainable use of marine resources. This study conceptualizes sea-based water sports tourism as a coastal tourist attraction in Ampara District, Sri Lanka, using a mixed-methods approach. Quantitative surveys of 200 domestic and international tourists, combined with qualitative interviews with 15 local stakeholders, identified the key factors influencing tourist participation, satisfaction, and destination attractiveness. Factor analysis revealed that natural coastal resources, accessibility and infrastructure, safety management, and promotional activities are critical determinants for developing sea-based water sports tourism. Stakeholder insights emphasized the importance of regulatory frameworks, community involvement, and eco-friendly practices to ensure sustainable growth. Based on these findings, a conceptual framework is proposed linking tourist demand, destination attributes, and sustainable management strategies. This study contributes to the understanding of niche coastal tourism development and provides practical guidance for policymakers, tourism operators, and local communities aiming to enhance sea-based water sports tourism in emerging destinations.*

Keywords: *sea-based Water Sports Tourism, Coastal Tourism, Tourist Attraction, Ampara District, Sri Lanka.*

1. Introduction

Tourism plays a pivotal role in the Sri Lankan economy, serving as one of the country's major sources of foreign exchange, employment, and regional development (Rathnayaka & Fernando, 2020). As an island nation with an extensive coastline of approximately 1,600 km, Sri Lanka's coastal and marine environments are central to its tourism appeal, offering a variety of natural attractions ranging from beaches and coral reefs to marine biodiversity (Sri Lanka Embassy, 2024). Within the broader tourism industry, coastal tourism has been widely recognized as a significant contributor to both national and local economies, supporting activities such as beach recreation, cultural experiences, and sea-based water sports.

Sea-based water sports including surfing, snorkeling, scuba diving, jet skiing, and kayaking represent a growing niche within coastal tourism that appeals to adventure seekers and contributes to lengthening tourist stays and increasing expenditure (Nugawela & Perera, 2023). In Sri Lanka, well-known water sports destinations such as Arugam Bay in the Eastern Province have attracted international surf tourism, illustrating the potential of sport-related coastal tourism products to diversify tourist offerings and enhance destination competitiveness (Wikipedia: Surfing in Sri Lanka, 2025). However, there is limited empirical research on how such activities function as attractions in emerging coastal destinations especially in relatively underdeveloped regions such as the Ampara District.

Ampara District, located on Sri Lanka's east coast, boasts pristine beaches, coral reefs, and favorable sea conditions, yet it remains underutilized in terms of organized sea-based water sports tourism and lacks comprehensive infrastructure and promotional strategies to fully leverage its potential. Existing studies on Sri Lankan tourism have largely focused on beach tourism broadly or on environmental sustainability criteria such as coastal ecosystem management (Thirukeswaran & Jayawardena, 2024), while limited research addresses niche segments such as water sports tourism and their role as coastal attractions. Moreover, research on related sport tourism in Sri Lanka suggests that water sports are influential in shaping tourist motivation and revisit intentions, highlighting the relevance of sport-specific experiences in the tourism value chain (Rathnayaka & Fernando, 2020).

This study seeks to fill these gaps by conceptualizing sea-based water sports tourism as a coastal tourist attraction in Ampara District using empirical evidence gathered through mixed methods. Specifically, it investigates (1) the key factors influencing tourist participation in sea-based water sports, (2) how destination attributes such as natural resources, infrastructure, and safety measures affect attractiveness, and (3) a framework for sustainable development of water sports tourism in emerging coastal destinations. By doing so, the research contributes to both academic discourse on niche tourism products and practical strategies for destination planning and sustainable tourism development.

2. Literature Review

2.1 Coastal Tourism and Sea-Based Water Sports

Coastal tourism has been widely recognized as a major contributor to regional economic growth, recreational experiences, and community development due to its ability to attract diverse tourist markets (Duan & et al. 2022). Within this broader tourism sector, sea-based water sports tourism often termed marine sports tourism focuses on activities conducted in marine environments such as surfing, snorkeling, scuba diving, jet skiing, sailing, and kayaking. Recent bibliometric research highlights that marine sports tourism is an emerging niche within tourism studies, integrating economic, environmental, and social components (Duan & et al. 2022; El Silisna & Susanti, 2020). These activities offer unique opportunities for diversifying coastal tourism products and catering to adventure and experience-seeking tourists, thereby enhancing destination competitiveness and extending tourist stays.

For instance, El Silisna & Susanti, (2020) emphasizes that marine and coastal sports tourism enrich waterfront experiences and can significantly contribute to local economies by attracting both participants and spectators of diverse water-based activities. This underscores the potential of sea-based sports not only as leisure pursuits but also as major coastal tourist attractions (El Silisna & Susanti, 2020). Moreover, the diversity of water sports from casual snorkeling to competitive surfing demonstrates the multifaceted nature of coastal sport tourism offerings, aligning with broader trends in experiential and adventure tourism.

2.2 Determinants of Tourist Attraction

Research on determinants of tourist attraction to coastal destinations consistently identifies natural resources and scenic beauty as foundational elements that draw visitors (Duan & et al. 2022; El Silisna & Susanti, 2020). High-quality beaches, coral ecosystems, and marine biodiversity create inherent value that attracts tourists, particularly for water-based activities. In addition to natural assets, infrastructure and service quality including ease of access, accommodation options, availability of equipment rentals, and professional guidance significantly influence tourist satisfaction and participation in sea-based water sports.

Further, managerial and safety measures play a crucial role. Studies suggest that proper risk management, safety protocols, and clear regulatory standards are essential for encouraging wider participation in water sports, especially among international tourists who may have higher expectations of safety and service quality (Wang & et al. 2020). These determinants interrelate with promotional activities, where effective marketing and visibility through digital platforms and travel media enhance destination appeal and raise awareness of sea-based water sports offerings (Duan & et al.2022).

2.3 Sustainable Development of Water Sports Tourism

Sustainability has become a central concern in tourism development, particularly in coastal and marine environments where ecosystems are fragile and prone to degradation. Unregulated sea-based water sports tourism can exert negative environmental impacts such as reef damage, marine pollution, and disturbance to wildlife, undermining long-term destination viability (Duan & et al. 2022). To counteract these effects, tourism scholars advocate for sustainable coastal management practices that balance tourist satisfaction, economic benefits, and ecological conservation.

This includes enforcing environmental standards, monitoring carrying capacity, and implementing eco-certification schemes like the Blue Flag program, which promotes environmental education, water quality, and safety standards in coastal tourism settings (Thirukeswaran & Jayawardena, 2024). Integrating sustainability reinforces the idea that water sports tourism must align with broader coastal conservation goals to ensure the longevity of both the tourism industry and the natural attractions that draw visitors.

2.4 Conceptual Gap

While global research underscores the importance of marine sports tourism, there is a notable research gap in context-specific studies, especially in emerging destinations such as the Eastern Province of Sri Lanka. Existing literature on Sri Lanka's coastal tourism primarily focuses on general beach tourism, ecosystem management, and visitor satisfaction in established destinations such as Nilaveli and southern beaches (Jassintha & Karunarathne, 2019; Thirukeswaran & Jayawardena, 2024). However, empirical studies that explicitly conceptualize sea-based water sports tourism as a coastal tourist attraction considering factors such as destination attractiveness, infrastructure determinants, sustainability considerations, and stakeholder perspectives in lesser-studied regions like Ampara remain sparse.

This gap highlights the need for research that not only assesses the potential of water sports as a niche tourism product but also examines how destination attributes and management frameworks can be tailored to specific local contexts. The current study responds to this gap by offering empirical insights from Ampara District, thereby contributing to both academic discourse and practical tourism planning for developing sustainable sea-based water sports attractions.

3. Methodology

3.1 Study Area

Ampara District is situated in the Eastern Province of Sri Lanka, encompassing a coastline of approximately 100 km along the Bay of Bengal (Department of Census and Statistics, 2022). The district is endowed with pristine beaches, coral reefs, and rich marine biodiversity, making it a potential hotspot for sea-based water sports tourism. Despite its natural assets, tourism infrastructure including accommodations, water sports facilities, and transportation networks remains underdeveloped, presenting both challenges and opportunities for the sustainable development of niche coastal tourism (Sullivan & et al. 1995).

3.2 Research Design

This study adopts a mixed-methods research design to conceptualize sea-based water sports tourism as a coastal tourist attraction. The approach integrates quantitative and qualitative data to ensure comprehensive insights into both tourist behaviors and stakeholder perspectives (Hirose & Creswell, 2023).

- Quantitative Component: A structured survey was administered to 200 domestic and international tourists visiting Ampara beaches. The survey captured tourist participation, satisfaction, perceptions of destination attractiveness, and key determinants influencing engagement in water sports.
- Qualitative Component: 15 semi-structured interviews were conducted with local stakeholders, including tourism operators, government officials, and community representatives. Interviews explored opportunities, challenges, infrastructure needs, and environmental and community concerns related to water sports tourism development.

3.3 Data Collection

- Survey Instrument: The survey consisted of 5-point Likert scale items (1=strongly disagree, 5=strongly agree) covering dimensions such as natural resources, safety measures, facilities, and promotional strategies. This approach is widely used in tourism research to measure perceptions and satisfaction (Backhaus & et al. 2021).
- Interviews: Semi-structured interview guides allowed stakeholders to discuss infrastructure, environmental management, local capacity, and future planning. Interviews were audio-recorded with consent and transcribed verbatim for analysis.

3.4 Data Analysis

- Quantitative Analysis: Data from surveys were analyzed using descriptive statistics to summarize tourist profiles, preferences, and satisfaction levels. Factor analysis was performed to identify the underlying dimensions influencing the attractiveness of sea-based water sports tourism (Aldrich, 2018).
- Qualitative Analysis: Interview transcripts were analyzed using thematic coding to identify recurrent themes and insights regarding challenges, opportunities, and sustainable development strategies. Coding followed an inductive approach, allowing patterns to emerge organically from stakeholder narratives (Braun & Clarke, 2006).

4. Results

4.1 Tourist Participation Patterns

The survey of 200 tourists revealed distinct participation patterns in sea-based water sports within Ampara District. Among respondents:

- Surfing attracted the highest interest, with 42% of participants engaging in or expressing interest in the activity.
- Snorkeling accounted for 35% of participation.
- Jet skiing was popular among 23% of respondents.

Tourists identified natural beauty, pristine beaches, and safe conditions as the primary motivators for participating in sea-based water sports. These findings align with previous studies suggesting that coastal aesthetics and environmental quality significantly influence tourist choice in water sports destinations (Duan & et al. 2020).

Additionally, tourists reported that clear signage, availability of equipment rentals, and guided services enhanced their willingness to participate, reflecting the importance of service provision and infrastructure in niche tourism products (Wang & et al. 2020).

4.2 Key Determinants of Attractiveness

Factor analysis of survey responses identified four primary determinants influencing the attractiveness of Ampara District as a sea-based water sports destination:

1. Natural Coastal Resources

- Includes beaches, coral reefs, biodiversity, and scenic vistas.
- Tourists ranked these as the most influential factor in destination selection, consistent with global literature emphasizing the primacy of environmental assets in water sports tourism (Duan & et al. 2022).

2. Accessibility and Infrastructure

- Refers to road networks, accommodation, equipment rental services, and availability of transportation.
- Poor accessibility and lack of standardized facilities were noted as constraints, echoing findings from other emerging destinations where infrastructure development is a prerequisite for attracting adventure tourists (El Silisna & Susanti, 2020).

3. Safety and Management

- Encompasses lifeguard presence, safety signage, insurance provisions, and adherence to safety protocols.
- Survey respondents reported that perceived safety strongly influenced their participation, reflecting global evidence that risk management and safety assurance are critical determinants of water sports tourism (Wang & et al. 2020; Mandić & Walia, 2023).

4. Promotion and Awareness

- Includes digital marketing, travel guides, social media campaigns, and tour packages.
- Respondents highlighted low awareness of Ampara's water sports offerings as a barrier to visitation, consistent with studies demonstrating the importance of strategic destination marketing in attracting both domestic and international tourists (Duan & et al. 2022).

4.3 Stakeholder Insights

The qualitative interviews with 15 local stakeholders revealed several recurring themes:

- Human Resource and Skills Gaps: Stakeholders highlighted the shortage of trained water sports instructors and tourism management personnel as a major barrier to developing high-quality services. Similar patterns have been reported in studies on emerging tourism destinations in Sri Lanka, where human capital constraints limit growth potential (Sullivan & et al. 1995).
- Safety and Regulatory Challenges: Lack of standardized safety regulations and formal certification for operators was identified as a risk factor affecting both participation and destination reputation. Stakeholders emphasized the need for government-supported guidelines and monitoring to ensure tourist safety.
- Infrastructure and Marketing Needs: Public-private partnerships were suggested as a means to enhance infrastructure, promote the destination, and provide integrated tour packages. The importance of collaboration between government agencies, local communities, and private operators has been stressed in previous research on sustainable coastal tourism development (Jassintha & Karunarathne, 2019).
- Sustainability and Environmental Practices: There was consensus on adopting eco-friendly practices to protect marine ecosystems, such as regulating boat traffic, waste management, and reef conservation. This aligns with global recommendations for sustainable water sports tourism, emphasizing environmental stewardship alongside economic benefits (Kumar & et al. 2023).

Overall, the results suggest that while Ampara District has strong potential as a sea-based water sports destination, coordinated interventions in infrastructure, safety, marketing, and sustainability are required to maximize its attractiveness and ensure long-term viability.

5. Discussion

The findings of this study indicate that Ampara District possesses substantial potential for developing sea-based water sports tourism, supported by its pristine beaches, coral reefs, and rich marine biodiversity. However, several critical factors need to be addressed to realize this potential effectively.

5.1 Infrastructure Gaps

Tourist responses and stakeholder interviews highlighted the lack of adequate infrastructure including roads, accommodations, and water sports facilities as a key barrier. Similar patterns have been observed in other emerging coastal destinations in Sri Lanka, where insufficient infrastructure limits tourist accessibility and reduces destination competitiveness (Sullivan & et al. 1995; Jassintha & Karunarathne, 2019). Investments in well-planned transport networks, quality lodging, and professionally managed water sports centers are therefore essential to attract both domestic and international tourists.

5.2 Safety and Regulatory Concerns

Safety emerged as a major determinant of tourist participation. The absence of formalized safety standards, certified operators, and lifeguard services can negatively influence tourists' perception of risk and discourage engagement in water sports. This finding aligns with global research emphasizing that safety regulations and risk management protocols are critical for the successful development of adventure and marine sports tourism (Wang & et al. 2020). Implementing standardized safety measures, including insurance options and operator certification, can enhance both tourist confidence and destination reputation.

5.3 Promotion and Awareness

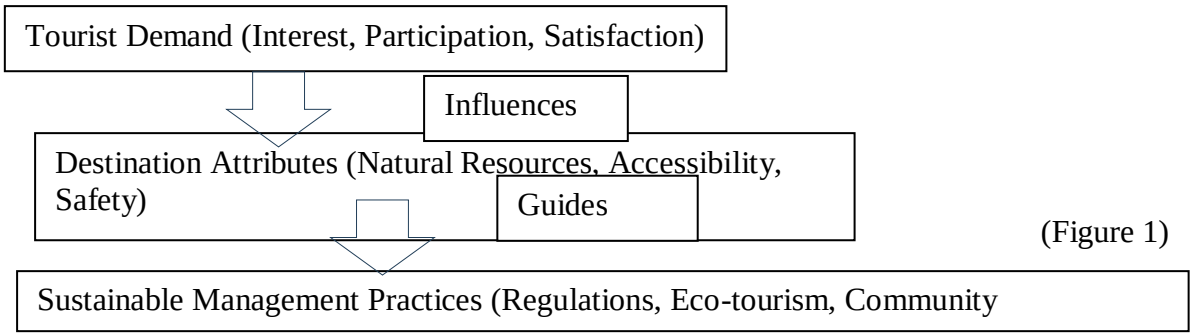
Despite Ampara's natural attractions, promotion remains limited, particularly in digital and international tourism channels. As noted in the literature, effective marketing strategies including social media campaigns, travel guides, and integrated tour packages are crucial for increasing tourist awareness and participation in niche tourism products (Duan & et al. 2022). Collaboration between public and private stakeholders in destination promotion can significantly boost Ampara's visibility as a sea-based water sports destination.

5.4 Conceptual Framework for Sustainable Development

Based on the study findings, a conceptual framework was developed (Figure 1) to guide the sustainable development of sea-based water sports tourism in Ampara District. The framework links three key dimensions:

1. Tourist Demand – Capturing interest, participation, and satisfaction in water sports.
2. Destination Attributes – Including natural coastal resources, accessibility, and safety measures.
3. Sustainable Management Practices – Encompassing regulatory policies, eco-friendly tourism initiatives, and community involvement.

This framework aligns with the principles of sustainable tourism, which advocate balancing economic development, environmental protection, and social benefits (Kumar & Singh, 2021; Duan & et al. 2022). It can serve as a strategic tool for policymakers, tourism operators, and local communities to plan, implement, and monitor sea-based water sports tourism initiatives, ensuring that the district develops as an attractive yet environmentally responsible destination.



(Figure 1)

5.5 Implications

The study demonstrates that emerging coastal destinations like Ampara can diversify their tourism offerings by promoting niche products such as water sports, but success depends on coordinated actions:

- Infrastructure development to improve accessibility and service quality.
- Enforcement of safety and regulatory standards to protect tourists and ecosystems.
- Targeted promotion to raise awareness locally and internationally.
- Integration of sustainability measures to maintain the long-term viability of marine environments.

In essence, the findings reinforce global research suggesting that niche marine tourism products require an integrated approach, combining environmental, managerial, and marketing strategies to achieve sustainable growth (El Silisna & Susanti. 2020; Duan & et al. (2022).

6. Conclusion

Sea-based water sports tourism represents a promising niche for coastal tourism development in Ampara District, Sri Lanka. The findings of this study highlight that the district possesses substantial natural assets, including pristine beaches, coral reefs, and rich marine biodiversity, which can attract both domestic and international tourists. However, to fully realize this potential, key challenges related to infrastructure, safety regulations, and destination promotion must be addressed.

The study also underscores the importance of integrating sustainability practices into tourism planning. Eco-friendly management, regulatory frameworks, and community involvement are essential to protect coastal ecosystems while ensuring long-term economic and social benefits. By implementing such measures, Ampara District can enhance tourist experiences, stimulate local livelihoods, and maintain environmental integrity aligning with the principles of sustainable coastal tourism (Kumar & et al. 2023; Duan & et al. 2022).

Furthermore, this research provides empirical evidence supporting the conceptualization of sea-based water sports as a key coastal tourist attraction. The proposed conceptual framework, linking tourist demand, destination attributes, and sustainable management practices, offers a practical guide for policymakers, local authorities, and tourism operators to strategically develop water sports tourism in emerging destinations. This framework is not only applicable to Ampara but can also inform similar initiatives in other underdeveloped coastal regions of Sri Lanka and globally (El Silisna & Susanti. 2020.; Wang & et al. 2020).

In conclusion, strategic investment in infrastructure, rigorous safety standards, effective promotion, and sustainability-focused management can transform Ampara District into a model destination for sea-based water sports tourism, fostering economic growth, environmental protection, and social development.

7. Recommendations

Based on the empirical findings and stakeholder insights, several strategic recommendations are proposed to develop Ampara District as a sustainable sea-based water sports destination. These recommendations aim to enhance tourist experiences, stimulate local economies, and protect coastal ecosystems.

7.1 Develop Eco-Friendly Infrastructure

Investment in eco-friendly and sustainable infrastructure is critical to support water sports tourism while minimizing environmental impact. This includes constructing environmentally sensitive accommodations, boardwalks, and water sports facilities that avoid damage to beaches and coral reefs. Infrastructure improvements should also consider accessibility, including better road networks, signage, and transport options, to facilitate tourist movement. Sustainable infrastructure aligns with global best practices, which emphasize that well-planned development enhances destination competitiveness while preserving natural assets (Kumar & et al. 2023; Duan & et al. 2022).

7.2 Train Local Personnel in Safety and Tourism Management

The study revealed gaps in human resources, including trained water sports instructors, lifeguards, and tourism management personnel. Structured training programs should be established to develop skills in tourist safety, first aid, customer service, and environmental stewardship. Professional certification and adherence to international standards will increase tourist confidence, reduce risks, and improve service quality. Research indicates that human capital development is a major determinant of success in emerging adventure and marine tourism destinations (Wang & et al. 2020; El Silisna & Susanti. 2020).

7.3 Promote Ampara District through Digital Campaigns and Partnerships

Despite its natural beauty, Ampara remains under-promoted in domestic and international tourism markets. Destination marketing strategies should include digital campaigns, social media engagement, partnerships with tour operators, and inclusion in travel guides to raise awareness. Collaborative marketing involving government agencies, private sector stakeholders, and local communities can attract niche tourism segments, particularly adventure and marine sports tourists (Duan & et al. 2022; Mandić & Walia. 2023).

7.4 Implement Regulations to Balance Tourism Growth with Environmental Conservation

Sustainable tourism management requires the establishment of regulatory frameworks that balance growth with ecosystem protection. Measures may include:

- Limiting the number of watercraft and visitors in sensitive areas.
- Enforcing waste management and pollution control practices.
- Certifying operators to adhere to safety and environmental standards.

Such regulations ensure long-term destination viability, protect biodiversity, and align with international practices such as the Blue Flag certification for sustainable beaches (Thirukeswaran & Jayawardena, 2024; Kumar & et al. 2023; Kumar & Singh. 2021).

7.5 Encourage Community Participation in Tourism Planning and Management

Active involvement of local communities is essential for inclusive and sustainable tourism development. Community participation can include engagement in decision-making, employment opportunities, and small-scale entrepreneurship related to water sports tourism. Local stewardship fosters a sense of ownership, enhances social benefits, and ensures that tourism development aligns with community values (Jassintha & Karunarathne, 2019; El Silisna, & Susanti. (2020).

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