

Exploring the Transformation of the Madu River into a Sports Tourism Hub: Examining Challenges and Enhancing Safety and Security Measures

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Abstract- The Madu River, located in the Galle district of Sri Lanka, is a region of remarkable natural beauty and ecological significance. This paper delves into the prospects of transforming the Madu River into a thriving sports tourism destination while concurrently addressing the challenges posed and reinforcing safety and security measures. The study employs a qualitative approach, including site visits and interviews with stakeholders, to gain insights into the region's potential as a sports tourism hub. The research highlights the significance of the Madu River's mangrove ecosystems, its unique biodiversity, and the importance of environmental conservation. Challenges associated with promoting water sports and recreational activities in the area are discussed, including financial constraints faced by entrepreneurs and environmental preservation concerns. The study underscores the need for government intervention through licensing and financial support to ensure the responsible development of sports tourism. Furthermore, the paper emphasizes the pivotal role of safety and security measures in fostering a positive tourist experience. Recommendations for improving safety protocols, risk management strategies, and emergency response mechanisms are explored. In conclusion, this research provides a comprehensive examination of the Madu River's potential as a sports tourism destination and offers valuable insights into the challenges it faces. By addressing these challenges and prioritizing safety and security, the Madu River can emerge as a sustainable and vibrant sports tourism hub, offering both recreational opportunities and environmental conservation.

Index Terms- Madu River, sports tourism, safety protocols, ecological

I. INTRODUCTION

Sri Lanka's economy faced several challenges, including the impact of the COVID-19 pandemic. The pandemic had a significant adverse effect on the country's tourism industry, which is a vital contributor to its economy. In 2020, Sri Lanka's economy contracted by 3.6%, primarily due to reduced tourist

arrivals and economic disruptions caused by the global health crisis (The_World_Bank, 2023). As of the first quarter of 2023, Sri Lanka's economy has experienced a contraction of -11.5% in its growth rate (CBSL, 2023). Furthermore, Sri Lanka had been grappling with high levels of public debt and fiscal deficits. The country had sought assistance from international financial institutions to manage its debt burden and stabilize its economy. Additionally, inflationary pressures had been a concern, impacting the cost of living for citizens (CBSL, 2023). Tourism has the potential to serve as a significant remedy for the economic downturn. Table 1 below provides a summary of tourist arrivals categorized by their intention of visit.

Table 1: Percentage Distribution of Tourist Arrivals by Purpose of Visit -2015 – 2020

Purpose	2015	2016	2017	2018	2019	2020
Pleasure/Holiday	66.6	83.4	82.4	81.7	83.2	87.52
Business	1.3	1.8	3.3	4	3.65	2.75
Visiting Friends & Relations	25.5	11.5	11.3	10.8	10.48	7.61
Convention & meeting	0.3	0.8	1.3	1.7	0.99	1.13
Religious & Cultural	0.1	0	0	0.1	0.03	0.01
Health	3.2	0.6	0.5	0.9	0.59	0.67
Sports	0.7	0.4	0.8	0.6	0.72	0.25
Official	0.4	0.3	0.3	0.1	0.01	0.02
Education	0.2	0	0.1	0.1	0.32	0.03
Others	1.7	1.2	0	0	0.01	0.01
Total	100	100	100	100	100	100

Source: *The Sri Lanka Tourism Development Authority (SLTDA), 2020*

Table 1 reveals the diverse motivations behind tourists' visits to Sri Lanka in 2020. A significant 87.52% of visitors arrived for leisure purposes, encompassing holidays, recreational activities, and touring. Meanwhile, 7.6% of tourists traveled to reunite with friends and family, with 2.7% visiting for business-related endeavors and 1.1% participating in MICE (Meetings, Incentives, Conventions, and Exhibitions) events. The data also indicates that 0.25% of tourists were drawn to Sri Lanka for sports-related experiences, while 0.67% sought health-related tourism opportunities. Educational and religious purposes constituted a smaller fraction, with 0.03% arriving for educational activities and close to 0.01% for religious pilgrimages. A mere 0.02% of tourists reported official visits, and the remaining 0.01% represented various other travel intentions.

According to Table 1, there are untapped markets or segments that Sri Lanka can leverage by gaining a deep understanding of these intentions and offering tailored products and services to cater to these specific tourist needs.

The current study aims to explore an underutilized tourist destination with the potential for development into a sports tourism hotspot which is namely 'Madu River'. Situated in the southern region of Sri Lanka, the Galle district encompasses the inconspicuous town of Balapitiya, which garners significance primarily due to its geographical setting. At the heart of this significance lies the Madu River, a natural feature renowned for its exceptional biodiversity. This river traverses the wet zone of Sri Lanka, ultimately widening into the expansive Madu Lagoon before merging with the Indian Ocean (Lakpura.com, 2023).

The Madu River in Sri Lanka holds scientific importance due to its unique ecosystem and biodiversity, which make it a subject of interest for researchers and environmentalists. Madu River is surrounded by extensive mangrove forests. Mangroves play a vital role in coastal ecosystems, acting as nurseries for various marine species and providing protection against coastal erosion. Encompassing a vast expanse of land spanning 61 hectares, equivalent to more than 150 acres, this area is home to a rich diversity of mangrove species. Specifically, it harbors 14 out of the 24 known species of mangroves (Lakpura.com, 2023; Aluthge & Liyanage, 2017). The river and its surrounding areas are rich in biodiversity, including numerous bird species, fish, crustaceans, and plant life. Researchers study this diversity to document and protect threatened or endemic species and to understand the dynamics of these ecosystems.

After comprehending the scientific importance and environmental significance of the Madu River, the researcher adopted the site-seen technique for data gathering. This approach was selected aiming on to identify and propose sport tourism activities that could be promoted in the region, while simultaneously safeguarding the natural environment and adhering to the established rules and regulations governing environmental conservation.

II. RESEARCH ELOBORATIONS

Sport tourism is can be defined as a 'leisure based travel that takes individuals temporarily outside of their home communities to participate and/or watch physical activities or to venerate attractions associated with physical activities' (Gibson, 1998).

In 2022, the worldwide sports tourism market achieved a valuation of approximately USD 587.87 billion. Forecasts indicate that this market is poised for substantial expansion, with a projected compound annual growth rate (CAGR) of 17.5% from 2023 to 2030. This growth is primarily attributed to the surging popularity of global sporting events, including the Olympics, FIFA World Cup, NBA, and others. Furthermore, increased investments in sports infrastructure by governments around the world are expected to provide an additional impetus to this industry's growth (Grand_View_Research, 2023).

Scholars' classifications of sport tourism are valuable for suggesting suitable sporting activities that can be conducted in the Madu River. Active and passive sport tourism represents two distinct categories within the broader field of sport tourism, each offering different experiences for travelers (Glyptis & Chambers, 1982). Active sport tourism involves travelers actively participating in sports or physical activities during their trips. It often includes engaging in sporting events, recreational activities, or adventure sports (Glyptis & Chambers, 1982). In contrast passive sport tourism involves travelers as spectators or enthusiasts who attend sporting events, tournaments, or matches without actively participating in the sports themselves.

Non-competitive and competitive sports tourism are another two significant categories within the field of sport tourism, as discussed by John J. S. Hall in his 1992 work "Sport as Spectacle." These classifications reflect the diverse motivations and experiences of sports travelers. Non-competitive sports tourism revolves around the participation in and enjoyment of sporting activities without the primary focus on competition. Travelers engaging in non-competitive sports tourism often seek recreational experiences, adventure, and physical activity in scenic or unique environments. Examples include leisurely hikes in nature reserves, kayaking in serene waterways like the Madu River, or simply enjoying fitness and wellness activities at destination resorts. The emphasis here is on personal enjoyment, relaxation, and the exploration of sporting experiences within a travel context. In contrast, competitive sports tourism is centered on organized sports events, competitions, and tournaments. Travelers in this category typically participate as athletes or spectators in events ranging from local races to major international tournaments. Examples include individuals participating in marathons, triathlons, or golf championships held in different destinations. Spectators, too, engage in competitive sports tourism by attending events such as the Olympics or FIFA World Cup to witness and support their favorite athletes and teams. The allure here lies in the thrill of competition, performance excellence, and the sense of camaraderie among participants and fans.

When examining the various facets of sports tourism, it's essential to categorize it into three significant classifications: active sports tourism, sports event tourism, and celebrity and nostalgia sports tourism (Higman & Hinch.T, 2018). Active sport

tourism involves travelers actively participating in sports or physical activities during their trips. This category caters to individuals who seek hands-on, physically engaging experiences while exploring new destinations. Examples of active sport tourism activities include participating in marathons, triathlons, cycling tours, golfing vacations, hiking expeditions, and water sports adventures like kayaking or scuba diving. Travelers engaging in active sport tourism often prioritize personal engagement, skill development, and the challenge of physically demanding activities in unique and scenic settings (Gibson, 2007).

Sports event tourism revolves around attending organized sports events, competitions, or tournaments as a spectator or participant. Travelers in this category either go to witness and support sporting events or actively participate as athletes. Examples include attending major sporting events like the Super Bowl, the FIFA World Cup, the Olympics, or local sports competitions such as tennis tournaments or soccer matches. Sports event tourism offers enthusiasts the opportunity to immerse themselves in the excitement, performance excellence, and social aspects of sports gatherings (Weed & Bull, 2009). Celebrity and nostalgia sport tourism focuses on travelers' interests in meeting sports celebrities, visiting iconic sports venues, and reliving memorable sporting moments from the past. This category often combines elements of sports fan culture, entertainment, and nostalgia. Tourists may seek autographs, photo opportunities, or interactions with their favorite athletes, attend sports hall of fame exhibits, or visit historic stadiums and arenas. It caters to the emotional connection and nostalgia associated with sports, making it an appealing choice for sports enthusiasts who want to celebrate their sports heroes and relive iconic sporting memories (Gibson, 2007).

III. METHODOLOGY AND DATA COLLECTION

The researcher conducted the data gathering and analysis using a qualitative approach. Observation is one of the oldest and fundamental approaches in qualitative research (Smit & Onwuegbuzie, 2018). Qualitative research frequently takes place in a specific site or field; however, the geographical aspect of qualitative research has often been neglected in methodological conversations. This approach is comparable to tourism, where the sites serve as a setting rather than being the primary focus. Observation referred to as sightseeing hereon, provided valuable insights of present tourism activities which in turn helped to propose suggestion.

A site visit was conducted on July 31, 2023 as a participant observation technique, with the purpose of observing the location and gaining a profound understanding of it by engaging in conversations with individuals involved in boat operations. The predominant activities currently taken place are depicted with the purpose of analyzing.

Boat Safari

Boat safari services are offered by small and medium-scale entrepreneurs who possess a limited number of boats and hire both boat operators and guards to ensure the safety of tourists. While on the boat ride, the boat operator provided insights into

the significance of the natural environment, emphasizing the crucial role played by the mangrove forests and the noteworthy islands that merit close attention. The boats were carefully regulated to maintain a specific speed, ensuring the protection of the delicate mangrove ecosystem and the well-being of the aquatic life, particularly the fish.

Mangrove

Mangroves in the Madu River area are a vital and captivating natural feature. These lush and intertidal coastal forests serve as crucial ecosystems, acting as nurseries for various marine species and providing essential habitat for diverse wildlife. Madu River's mangroves are home to a myriad of bird species, fish, crustaceans, and other aquatic organisms, making it a bio diverse hotspot. Moreover, these mangrove forests play a pivotal role in stabilizing coastal areas, mitigating erosion, and sequestering carbon dioxide, contributing significantly to both environmental conservation and the global fight against climate change. Visitors to the Madu River are not only treated to their breathtaking beauty but also gain a deeper appreciation for the ecological importance of mangroves in sustaining life and maintaining the balance of this unique ecosystem.

Shrimp Farming and Cinnamon Cultivation

As per the boat operator and from observation it was noted that shrimp farming is a notable economic activity in the Madu River region. The brackish waters and mangrove-lined estuaries create an ideal environment for shrimp cultivation. Shrimp farms in the area often consist of a network of ponds and tanks where various species of shrimp are raised. They employ traditional bamboo separators, locally known as 'ja-kotu' (Wijethunga & Jayarathne, 2020) as a part of their method. These farms play a significant role in the local economy, providing employment opportunities and contributing to the country's seafood industry. Cultivated shrimp species include the iconic giant tiger prawn (*Penaeus monodon*) and other economically valuable varieties. Shrimp farming typically involves the careful management of water salinity, water quality, and feeding regimes to ensure optimal growth and minimize environmental impacts. Sustainability practices are increasingly emphasized in the industry to mitigate potential ecological consequences.

Cinnamon cultivation is another notable activity along the Madu River's banks. Sri Lanka is renowned for its high-quality cinnamon, often referred to as "Ceylon cinnamon." The region's tropical climate, fertile soil, and proximity to water sources like the Madu River create ideal conditions for growing this aromatic spice. Cinnamon trees, scientifically known as *Cinnamomum verum* or "true cinnamon," are cultivated in small plantations or gardens. The inner bark of the cinnamon tree is harvested, dried, and rolled into cinnamon sticks or ground into powder for various culinary and medicinal uses. The traditional methods of cinnamon cultivation and processing are often showcased to tourists, providing them with insights into this valuable spice's production. Visitors to the Madu River area have the opportunity to explore both shrimp farms and cinnamon plantations, gaining a deeper understanding of these important economic activities and their significance in the local culture and economy.

Fish Therapy and Kirala Juice stalls

Fish therapy centers, found along the banks of the Madu River, offer a unique and rejuvenating experience for visitors. These centers typically feature large tanks or ponds filled with small fish, often Garra rufa or doctor fish. Visitors immerse their feet in the water, and the fish gently nibble away dead skin cells, providing a natural exfoliation and relaxation. Fish therapy is believed to have beneficial effects on skin health and is a popular activity for those seeking a soothing and novel spa experience while enjoying the scenic surroundings of Madu River. Kirala juice stalls are a delightful culinary feature in the Madu River area. The taste of 'Kirala Juice' is similar to wood apple juice to me.

Kothduwa Temple and other islands

Kothduwa is one of the islands in the Madu River, and it is known for the Kothduwa Temple, a historic Buddhist temple. Visitors can take a boat ride to this island and explore the temple, which features unique architectural elements and religious significance. It is often mentioned that there are a total of 64 islands within the Madu River area. However, the Madu River itself spans across 31 Grama Niladhari (GN) divisions, with 25 GN divisions falling under the purview of the Balapitiya Divisional Secretariat and the remaining 6 GN divisions falling under the Karadeniya Divisional Secretariat (Wijethunga & Jayarathne, 2020).

IV. EXAMINING CHALLENGES AND ENHANCING SAFETY AND SECURITY MEASURES

The study's initial objective was to conduct site observations with the aim of formulating strategies for transforming the Madu River region into a sports tourism destination while concurrently ensuring the preservation of environmental conservation efforts. The initial question that was addressed from Barker's (1980) perspective was "What should be observed?" Consequently, the decision was made to focus on observing three key aspects: the distribution of mangroves, the extent of shrimp farming, and potential areas of concern that could pose obstacles to water sports tourism. During the boat ride along the Madu River, information was systematically documented with the assistance of both the boat operator and the helper designated by the boat service provider. Numerous clarifications were sought and provided during this journey.

Jet skiing and banana boat rides have already gained popularity on Madu River. Introducing new water sports are challenging due to environmental conservation since the area is listed as a RAMSAR wetland (Wijethunga & Jayarathne, 2020). IUCN Sri Lanka carried out a systematic assessment of biodiversity in Maduganga and found how the diverse and interconnected ecosystems of the Madu River contribute to its ecological importance and its appeal as a destination for nature enthusiasts and eco-tourists. By considering all the facets below water sports events are proposed to be promoted in future in the Madu river region.

(a) Suggestions of water sports which could be

promoted more in Madu River

Sunset, Sunrise and full moon kayaking

Kayaking is also famous in Madu River. Focusing more on Sunset, Sunrise and full moon kayaking to tour groups could add more value.

Stand up paddle boarding

It is an activity where one can enjoy picturesque views of the environment. But this water based activity requires more skills and not suitable during Warakan period.

Water bicycling

Travelers can have the option of embarking on either single or double bicycle trips, allowing them to savor the breathtaking scenery of the Madu River.

Pedal boat cruise

It is a mini type cruise where few members can enjoy the surrounding while peddling the boat.

(b) Challenges and enhancing safety and security measures

The primary consideration revolves around the environmental repercussions of further promoting water sports as mentioned above. Few water sports are already there and the present study suggest that those could be much more promoted to attract tourists.

Given that the study area is designated as a RAMSAR wetland, the presence of mangroves may pose challenges to the promotion of certain water sports. However, tourism can be facilitated in a manner that allows tourists to engage in water sports while experiencing the rich biodiversity of this region through sightseeing.

The promotion of certain water sports faces challenges because entrepreneurs are required to bear the financial burden of buying equipment.

The requirement of tour guides and the requirement of life savers are most prominent concerns that have to be dealt carefully by the enterprises.

The most important fact is that the safety and the security of the tourists. They need to be well protected from accidents, injuries and theft. All entrepreneurs should be united and protect the tourists from all unforeseeable issues to promote more tourism in that area.

Cleanliness, good food, and courtesy is also important to promote tourism and it is also proposed to develop a floating cafeteria along with a small market to facilitate income generation of the neighborhood.

It is of paramount importance for the government to take an active role in overseeing these activities to mitigate potential harm to tourists. This includes the issuance of licenses to businesses and the provision of funding to acquire necessary equipment.

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REFERENCES

- [1] Aluthge, I., & Liyanage, D. (2017). A Case Study of the Kithulgala Adventure Base Camp, whitewater rafting: Standards and Risk Management. *International Journal of Scientific and Research PublicationS*, 7(11), 409-14.
- [2] Barker, K. (1980). Data Collection Techniques: Observation. *American Journal of Health-System Pharmacy*, 37(9), 1235-45.
- [3] CBSL. (2023). Central Bank of Sri Lanka. Retrieved September 26, 2023, from Central Bank of Sri Lanka Web site: <https://www.cbsl.gov.lk/en/sri-lanka-economy-snapshot>
- [4] Gibson, H. (1998). Sport Tourism: A Critical Analysis of Research. *Sport Management Review*, 1(1), 45-76.
- [5] Gibson, H. (2007). *Sport Tourism* (1st ed.). NY: Routledge.
- [6] Glyptis, S., & Chambers, D. (1982). No place like home. *Leisure Studies*, 1(3), 247-62.
- [7] Grand_View_Research. (2023). Market Analysis Report.
- [8] Higman, J., & Hinch.T. (2018). *Sport Tourism Development* (3rd ed.). Pennsylvania: Channel View Publications.
- [9] Lakpura.com. (2023). Lakpura. Retrieved September 27, 2023, from Lakpura Web site: <https://lk.lakpura.com/pages/madu-ganga-river-safari>
- [10] Smit, B., & Onwuegbuzie, A. (2018). Observations in Qualitative Inquiry: When What You See Is Not What You See. *International Journal of Qualitative Method*, 17, 1-3.
- [11] The_World_Bank. (2023, April 03). Sri Lanka Development Update 2023. Retrieved September 26, 2023, from The World Bank Web site: <https://www.worldbank.org/en/country/srilanka/publication/sri-lanka-development-update-2023>
- [12] Weed, M., & Bull, C. (2009). *Sports Tourism; Participation, policy and providers* (2nd ed.). NY: Routledge.
- [13] Wijethunga, W., & Jayarathne, S. (2020). A Sociological study about revolutionary adaptations in the lives of pastoral communities due to tourism industry with reference to river 'Madu'. *International Journal of Research and Scientific Innovation (IJRSI)*, 7(10), 197-206.

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