



Tourism Development in the Tam Giang–Cau Hai Lagoon System: Prospects and Challenges

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Abstract- *The Tam Giang – Cau Hai Lagoon is the largest brackish-water system in Southeast Asia, playing a pivotal role in the ecology, economy, and culture of Hue. Boasting unique natural landscapes, diverse ecosystems, and the rich heritage of local fishing communities, this region holds immense potential for ecotourism, community-based tourism, and experiential travel integrated with environmental conservation. However, tourism activities in the Tam Giang – Cau Hai lagoon system have yet to reach their full potential. Tourism products remain monotonous, while infrastructure and management practices are not synchronized. Furthermore, local community participation is still limited, and environmental challenges are on the rise. This necessitates strategic orientations and appropriate solutions to effectively harness the region's tourism potential, aiming toward sustainable development in the future.*

Keywords: *Ecotourism; Community-based tourism; Tam Giang–Cau Hai Lagoons system; Sustainable development*

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1. INTRODUCTION:

In the current process of socio-economic development, tourism plays an increasingly vital role. It not only contributes to stimulating economic growth and job creation but also actively participates in the preservation and promotion of local cultural values and natural resources. In this context, the Tam Giang–Cau Hai lagoons system emerges as a unique space with numerous advantages for tourism development. "As the largest brackish water lagoon system in Southeast Asia, it stretches across various localities within Hue City, playing a vital role in the ecological structure, economy, and cultural life of the coastal communities. This region possesses a diverse ecosystem and unique waterscapes, intertwined with traditional cultural values rooted in the lives of local fishing communities. These elements provide a vital foundation for the development of various tourism models, including ecotourism, community-based tourism, and experiential travel. Despite possessing outstanding advantages in natural resources, ecosystems, and community culture, the Tam Giang–Cau Hai lagoon system is recognized as a region with immense potential for the development of ecotourism and community-based tourism. However, in reality, tourism activities in this region have yet to reach their full potential. Tourism products remain monotonous, while infrastructure and tourism services are not well synchronized. Management and planning efforts lack a holistic approach, and local community participation, along with environmental protection, remains significantly limited.

2. The Tourism Development Potential of the Tam Giang – Cau Hai Lagoon Region

a. The Potential for Ecotourism Development

The Tam Giang – Cau Hai Lagoon system, stretching more than 68–70 km along the coast of Hue city, covers a water surface area of approximately 22,000 hectares (equivalent to 220 km²). It is recognized as the largest brackish water lagoon system in Southeast Asia. (Tam Giang–Cau Hai lagoon, 2025). It is a complex of interconnected lagoons, whose main components include the Tam Giang Lagoon, Thuy Tu Lagoon, and Cau Hai Lagoon. The system is connected to the East Sea (South China Sea) through two major inlets: Thuan An Inlet and Tu Lien Inlet. It is located within the administrative boundaries of five districts: Phong Dien, Quang Dien, Phu Vang, Phu Loc, and Huong Tra. It is a typical wetland lagoon system formed under tropical monsoon conditions and is the largest of its kind in Southeast Asia.

The Tam Giang–Cau Hai Lagoons system is the largest lagoon complex in Southeast Asia, possessing outstanding ecological and tourism value for Hue city. Among them, Chuon Lagoon stands out as a representative destination, marking the beginning of the journey to explore the beauty of the Tam Giang Lagoons system. Chuon Lagoon, also known as Cau Hai Lagoon. This site is located in An Truyen Village, Phu An Commune, Phu Vang District, Hue city, approximately 12 kilometers from the center of Hue. It is a lagoon belonging to the larger Tam Giang Lagoons system, covering an area of approximately 100

hectares (Nguyễn Thuy Moc Nhen, 2023). Today, visitors to Chuon lagoon are no longer limited to local residents; the destination now attracts domestic tourists from other provinces and international travelers. Over the past five years, food and beverage services at the lagoon have developed rapidly. Local residents have invested in building numerous eateries, guesthouses, and recreational facilities to better serve visitors. Typical examples include Dam Chuon Gathering House, Dam Chuon Huong (Fragrance) Restaurant, Dam Chuon Viet Restaurant, and Dam Chuon Windy Lagoon Restaurant (Nguyen Thi Hoai Thanh, 2022). With its distinctive lagoon landscape, convenient location near the center of Hue City, and an increasingly well-developed tourism service system, Chuon lagoon possesses significant advantages for the development of ecotourism. In addition, its tranquil waterscape and experiential activities closely connected to the daily life of lagoon communities create a unique appeal for visitors. Therefore, Chuon Lagoon is considered a destination with strong potential for sustainable tourism development in the coming years.

From Chuon Lagoon, the journey to explore the Tam Giang lagoon space continues to expand to Con Te, a destination that still preserves its pristine beauty, closely associated with the natural landscape and the distinctive lifestyle of lagoon communities. Con Te is a wetland area located opposite Thuận An, within Huong Phong Commune, Huong Tra District.

Since the Thao Long bridge-dam project began operating, this area has become an ecotourism site attracting many visitors traveling in groups of friends or families. (Khanh Chi, 2014). To reach Con Te, visitors depart from the center of Huế and travel along National Highway 49 toward Thuan An. Upon arriving at the Dien Trung Bridge area in Phu Tan Commune, Phu Vang District, they turn left and continue for about 5 kilometers to reach the destination. The water surfaces, covered with white water lilies and interwoven with wild reeds, create a poetic landscape ideal for visitors to capture memorable moments during their journey of exploration. Con Te is regarded as an important ecological habitat, serving as a shelter and breeding ground for many brackish-water aquatic species, giving the area the appearance of a miniature "natural museum." When the tide recedes, strips of brown land emerge along the small creeks, standing out against the green backdrop of mangroves and white river mangrove trees. In the afternoon, the sight of children from Thuan Ho hamlet diligently catching snails and

crabs along the lagoon shore contributes to a simple yet vivid portrait of daily life in the lagoon region.

From the pristine ecological setting of Con Te, the journey to explore the Tam Giang lagoon region continues to Ru Cha, a representative mangrove forest that plays a crucial role in environmental protection and maintaining the ecological balance of the lagoon system. Ru Cha is the only remaining mangrove forest within the Tam Giang – Cau Hai Lagoon, the largest lagoon system in Southeast Asia. Located about 14 kilometers east of Hue, Ru Cha covers an area of approximately 5 hectares and serves important functions such as preventing saltwater intrusion, protecting aquatic resources, and safeguarding inland areas (Nhat Linh, 2024). This mangrove forest is predominantly covered by naturally growing "chá" trees, which account for over 90% of its total area. In late autumn, the familiar green gradually gives way to brilliant shades of yellow, creating a peaceful and poetic natural landscape. The intact scenery and ecological value of Ru Cha make it an attractive destination for sightseeing tourism. Visitors can experience the area by traveling in small bamboo boats to observe the diverse primary ecosystem and various bird species, or by walking along the winding concrete pathway to explore the distinctive stilt-root system of the chá trees. The best time to visit is around September each year, when the forest turns yellow and red, and the weather is most favorable.

Not only impressive for its seasonal scenery and the distinctive beauty of its mangrove landscape, but this area also plays a vital role in the ecosystem of the Tam Giang – Cau Hai Lagoon. In fact, statistical data indicate that this lagoon system possesses exceptionally high biodiversity, clearly reflected in the richness of its plant communities and natural habitats. According to surveys, the lagoon has remarkable biological diversity. Its flora includes 221 species of phytoplankton, 46 species of seaweed, 18 species of higher aquatic plants (including 7 species of seagrass and 11 species of freshwater grasses), and 31 species of higher terrestrial plants (including 7 species of mangroves). The fauna is equally diverse, comprising 66 species of zooplankton, 46 species of benthic animals, 230 species of fish, and 73 species of birds, of which 34 are migratory and 39 are resident. (Tam Giang – Cau Hai lagoon, 2025). Statistical data indicate that the Tam Giang – Cau Hai Lagoon possesses an exceptionally high level of biodiversity, characteristic of tropical monsoon wetland ecosystems. The richness of species composition—from phytoplankton,

seaweed, and seagrass to higher aquatic plants and mangroves - together with a diverse fauna including fish, benthic organisms, and waterbirds, has created a particularly favorable ecological foundation for nature-based tourism development. The abundance of aquatic vegetation and seagrass not only forms an attractive natural landscape but also provides ideal conditions for the development of ecotourism, scientific research tourism, and environmental education activities. The presence of numerous economically valuable fish and aquatic species not only sustains local livelihoods but also opens up opportunities for experiential tourism related to traditional fishing, aquaculture, and seafood processing. Notably, the diverse waterbird population, including a large number of both migratory and resident species, demonstrates the lagoon's strong potential for birdwatching tourism and seasonal ecotourism - forms of travel that are increasingly favored within the growing trend toward sustainable tourism.

The Tam Giang – Cau Hai Lagoon is one of the rare representatives of tropical coastal ecosystems characterized by complex and diverse environmental conditions. The area serves as an important congregationsiteformigratorywaterbirds,withmore than 20,000 individuals recorded during the winter season(Tam Giang–Cau Hai lagoon, 2025). The Tam Giang – Cau Hai Lagoon not only holds significant value for biodiversity conservation but also has outstanding potential for the development of specialized forms of ecotourism, particularly birdwatching, research-based, and environmental education tourism. This represents a distinctive advantage that few coastal areas in Vietnam can offer, contributing to the lagoon's unique identity and appeal within the broader context of sustainable tourism development today.

The area possesses significant natural and ecological potential thanks to its vast scale, diverse environmental structure, and its representative character as a tropical coastal wetland ecosystem. The Tam Giang – Cau Hai Lagoon exhibits a high level of biodiversity, encompassing various distinctive biological groups, including aquatic plants, seaweed and seagrass, fish, benthic organisms, and waterbirds. In particular, the lagoon's role as an important habitat for seasonal migratory birds further enhances its ecological and conservation value. These factors are not only environmentally significant but also provide a solid foundation for the sustainable development of ecotourism, scientific research, and nature-based experiential tourism.

2. Community Cultural Potential

The residential communities along the Tam Giang – Cau Hai Lagoon have been formed and developed over a long period, in close connection with the brackish-water environment, creating a distinctive cultural value system characteristic of the central coastal lagoon region. The daily life, production activities, and customs of local inhabitants reflect a strong adaptation to natural conditions. This is clearly demonstrated through traditional fishing methods such as stake traps, fish corrals, fixed bag nets, lift nets, and aquaculture practices conducted directly on the lagoon's water surface.

For hundreds of years, the fishing practices of local people in the brackish lagoons have remained unchanged. Rows of fish corrals and bamboo fish traps are set up by 1 fisherman throughout the lagoon area. This method of fishing has been preserved and passed . The floating market in Quảng Lợi Lagoon is one of the distinctive features of the area. Traders row their boats out to the middle of the lagoon to purchase shrimp and fish that fishermen have just caught after a sleepless night at sea. The shrimp, fish, and crabs that are caught are then brought ashore near Tam Giang Lagoon for sale. This tradition has been maintained by the lagoon communities for hundreds of years (Vo Thanh, 2020).

The centuries-old fishing practices of the Tam Giang Lagoon's residents reveal the area's distinctive cultural and ecological potential. The fact that fishermen continue to use traditional methods such as bamboo fish corrals (nò), stake traps, and fixed nets not only reflects their enduring adaptation to the brackish-water environment but also demonstrates a clear continuity of cultural heritage across generations. These are living cultural values that remain present in everyday life, creating a unique appeal that few other tourist destinations possess.

The extensive system of stake traps and bamboo fish corrals spread across the lagoon creates a distinctive working and landscape space that embodies both livelihood value and high aesthetic appeal. Fishing activities take place at night and last for many consecutive hours, reflecting the unique rhythm of life of the lagoon's inhabitants. From this foundation, experiential fishing tourism models can be developed, allowing visitors to directly participate in or observe traditional fishing activities closely connected to the daily lives of local fishermen. In areas such as Tam Giang Lagoon, these community-based experiences can enhance the value of indigenous knowledge while creating sustainable tourism products rooted in authentic cultural practices.

Furthermore, Quang Loi Lagoon floating market, characterized by direct trading on the water, is a

unique cultural feature that reflects the intimate relationship between humans and the lagoon environment. The sight of traders rowing out to the middle of the lagoon to collect seafood right after a night of fishing holds not only economic significance but also profound socio-cultural value. This provides a favorable foundation for developing cultural-community tourism products, centered around floating market tours and the discovery of local commerce and cuisine featuring fresh seafood. Consequently, the long-standing production and lifestyle habits of the Tam Giang Lagoon residents are not only a cultural heritage to be preserved but also a vital tourism resource, capable of creating unique and highly distinctive tourism products. If organized and exploited in a reasonable manner, in conjunction with the preservation of traditional values and local community participation, these factors will make a significant contribution to the sustainable development of tourism in the Tam Giang – Cau Hai Lagoon area.

3. Tourism development challenges

Limitations in tourism infrastructure and services

One of the primary barriers to Tam Giang's tourism is the lack of synchronization among its connecting transport networks. Regardless of its configuration, the existing system consists of narrow, linear links that fail to meet the circulation requirements for large-sized tourist coaches. Tourist boats here still rely on 'temporary' arrangements, sharing fishing ports with locals or using spontaneous piers from floating restaurants. This leads to a lack of safety and a deficiency in professional industrial aesthetics. Furthermore, the lack of large parking lots and a specialized signage system makes it difficult for independent travelers to access attractions deep within the lagoon's core.

The developed road network still largely consists of narrow interconnecting routes, making accessibility for 45-seater coaches extremely difficult. "The primary issue lies in the geographical divide, where the number of bridges connecting the East and West banks remains insufficient, creating fragmented tourism 'islands' [1] rather than a cohesive link. Along the shores, the boating system remains in a primitive state; tourists often have to board or disembark at makeshift fishing wharves or spontaneous piers that fail to meet safety and environmental protection standards. Despite its immense potential for eco-tourism, the Tam Giang - Cau Hai lagoon system suffers from a critical shortage of high-quality

accommodation. The existing homestay network is primarily family-run; while offering an authentic local experience, these establishments often fall short in terms of modern amenities and professional service standards. The near-total absence of 4 to 5-star resorts makes it difficult for the region to attract high-end travelers or international tourists with significant spending power. Furthermore, essential ancillary services—such as standardized public restrooms, centralized shopping hubs, and dedicated visitor support centers—remain underdeveloped and lack investment.

Product limitations and competitiveness

Tourism products in the Tam Giang lagoon are currently caught in a trap of monotony and experiential poverty, significantly diminishing the region's inherent charm and fostering a one-and-done mindset among visitors. The experiential script is critically thin: at almost every stop, tourists are confined to a single, repetitive itinerary—boarding a boat to watch the sunset, observing fishermen cast their nets, and dining on seafood at stilt houses. The total absence of recreational activities, water sports, or localized shopping hubs leaves the destination empty and lifeless once the sun goes down. This lack of a night-time economy prevents the lagoon from capturing additional tourist spending and building a sustainable competitive edge.

Furthermore, local tourism products remain largely spontaneous and lack cultural depth. Despite the distinct and vibrant lifestyle of the fishing communities, current tourist experiences remain superficial, failing to craft compelling narratives or immersive activities that encourage longer stays. The heavy reliance on natural scenery and lagoon-based cuisine has narrowed the product range, leading to visitor fatigue. Most critically, the tourism sector is paralyzed during the rainy and stormy seasons due to a complete lack of indoor attractions or alternative service models. This vulnerability highlights an urgent need for weather-resilient tourism development.

The competitiveness of Tam Giang lagoon tourism is currently stifled by substandard infrastructure and a lack of professional service standards. Compared to neighboring destinations, Tam Giang remains at a disadvantage due to its rudimentary docking systems and a shortage of basic amenities, such as hygienic restrooms, waiting lounges, and standardized parking facilities. Furthermore, the region's competitive edge is weakened by a workforce composed primarily of local fishermen who are transitioning into tourism spontaneously. While their hospitality is undeniable, a

significant gap in professional expertise and foreign-language proficiency hinders the lagoon's ability to serve and attract high-end international markets effectively. Notably, weather conditions exert a direct and heavy influence on tourism activities in the Tam Giang lagoon. During the rainy and stormy seasons, the local industry faces near-total paralysis due to the complete lack of indoor attractions or alternative service models. Furthermore, unplanned aquaculture and the alarming presence of floating plastic waste are directly degrading the landscape, causing the lagoon to lose its inherent pristine appeal. These infrastructural and environmental bottlenecks have confined the region to the low-cost, low-revenue segment, making it increasingly difficult to encourage repeat visits or sustainable growth.

4. Strategic orientations and development solutions

Strategic Orientations

First and foremost, there must be a strategic shift from a resource-extraction model to community-based experiential tourism, where local fishermen serve as both guides and environmental stewards. Tourism products should prioritize 'green' elements, such as utilizing water-friendly transportation, minimizing plastic waste, and developing accommodation facilities built from natural materials that harmonize with the surrounding landscape.

To address service quality and bolster competitiveness, it is essential to establish a clear distinction between conservation zones and commercial areas, preventing unregulated encroachment on water surface use. Simultaneously, local authorities must invest in supplementary attractions—such as lagoon cultural museums or coastal craft villages—to ensure a continuous service offering even during the rainy and stormy seasons.

Ultimately, the core of sustainability lies in providing professional training for the local community. This empowers them with a professional service mindset and the ability to bridge the gap between clean aquaculture and tourism hospitality. By doing so, the region can generate stable income streams for its people without depleting its natural capital.

Solution

Firstly, product diversification is essential to escape the trap of monotony. Instead of limiting activities to dining and boating, the region should develop immersive experiences, such as guided 'catch-and-cook' tours, sunrise SUP (Stand-Up Paddleboarding)

excursions, or dedicated lagoon cultural exhibition centers. To solve the 'stormy season' dilemma, investment should be directed toward land-based attractions, including tours of traditional craft villages (specializing in cake-making or fishing net weaving) and indoor culinary spaces, ensuring visitors have engaging options even during inclement weather. Secondly, it is imperative to upgrade infrastructure and standardize services. This must begin with the construction of safe docking facilities, hygienic restrooms, and a clear, comprehensive signage system. Professionalizing the local workforce is equally crucial; fishermen need formal training in hospitality standards, basic communication in foreign languages, and waterway safety protocols. Furthermore, local authorities must rezone aquaculture areas and implement regular plastic waste collection to restore a green, clean, and pristine environment. Such improvements are the only way to effectively attract high-spending segments and international tourists. Finally, it is essential to foster strategic linkages and promote the brand. Instead of operating in isolation, local businesses and tourism enterprises must collaborate to create an integrated service chain, effectively preventing price dumping and unfair competition. Building a distinctive brand identity for Tam Giang—positioning it as a 'Sunset Paradise' or a 'Slow-living Sanctuary'—on social media will significantly enhance the lagoon's competitive standing relative to other regional destinations.

5. CONCLUSION

Tam Giang–Cau Hai has long been likened to a rough diamond of Central Vietnam, a place where the poetic beauty of nature converges with a tranquil, century-old way of life. Although infrastructure gaps and a lack of professional services remain, these very challenges provide the 'room' for us to envision a unique tourism model—one rooted in kindness and sustainability. The journey ahead is not merely about building more piers or roads; it is about retelling the lagoon's story through a new language: the language of green experiences, pristine indigenous culture, and the heartfelt hospitality of local fishers. Once planning and product diversification are synchronized, Tam Giang – Cau Hai will undoubtedly transcend being a mere transient stop to become a 'must-visit' destination – a sanctuary where travelers find inner peace amidst the vast sunset of Southeast Asia's largest lagoon system.

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