



Pathways through which island blue landscape resources enable new-quality cultural tourism: A case study of Cape Park in Daishan County

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Abstract Island and coastal rural destinations are shifting from conventional sightseeing-led development toward resource integration, scenario-based operation and composite consumption. In many regions, however, blue landscape resources are still used mainly as visual attractions and have not been fully transformed into stable industrial momentum or community benefits. Taking Cape Park in Daishan County, Zhejiang Province, as an exploratory case, this study examines how blue landscape resources can support new-quality cultural tourism through field investigation, spatial resource identification and an integrated SWOT-PEST analysis. Cape Park has a composite resource base formed by beaches, the sea, reefs, islands and fishing villages, yet it still faces weak resource connectivity, insufficient public service support, limited brand recognition and an imbalance between peak and off-peak seasons. This paper proposes a development logic of blue-green integration, land-sea coordination and production-living-ecological space integration, and identifies future pathways in spatial organization, business innovation and operational support. The findings suggest that the key to new-quality cultural tourism on islands lies in organizing blue landscapes, green ecology, grey infrastructure and local culture into a destination system that can be experienced, operated and shared.

Keywords blue landscape resources, new-quality cultural tourism, coastal villages, blue-green-grey infrastructure, island culture

1. Introduction

Island and coastal rural areas are spatial settings where land-sea coordination, ecological protection, industrial transformation and rural common prosperity converge most intensively. In 2024, China's gross ocean product reached RMB 10.5 trillion. The added value of marine tourism reached RMB 1.6 trillion, representing a year-on-year increase of 9.2%, which indicates that marine cultural tourism has become an important component of ocean economic growth [1]. China has continued to advance the construction of a strong maritime country, the cultivation of new-quality marine productive forces and the expansion of cultural tourism consumption [2]. As a coastal province with a strong foundation in the marine economy and a major mandate to demonstrate common prosperity, Zhejiang has treated the construction of the Island Grand Garden,

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island-wide common prosperity and beautiful bays as important measures for high-quality development in coastal areas [3, 4].

The development of island destinations still faces a central tension. Blue landscape resources are scarce and attractive, but their value conversion often remains at the level of sightseeing consumption. These resources have not been sufficiently embedded in service facilities, local cultural narratives or year-round operational systems[5]. Weak connections among blue-green resources, public services, community spaces and cultural tourism formats have created mismatches among visitor experience, resource use and local benefits. At the same time, ecological protection requirements are becoming more stringent. Island destinations can no longer rely on incremental expansion alone and must instead turn toward stock-based integration and low-impact renewal[6]. Recent discussions on sustainable coastal tourism and rural tourism transformation suggest that the integration of blue, green and grey infrastructure offers an analytical perspective for this transition. Through the coordination of blue waterfront systems, green ecological spaces and grey public facilities, this approach can improve spatial resilience, service capacity and the carrying capacity of cultural tourism [7, 8].

Using Cape Park in Daishan County as an exploratory case, this study examines how blue landscape resources can be transformed into drivers of new-quality cultural tourism in an island rural context. It addresses three questions. First, what is the composite resource base of Cape Park? Second, what are the main bottlenecks that currently constrain resource conversion? Third, how can blue landscape resources and new-quality cultural tourism be coupled through spatial, business and operational mechanisms? This paper argues that the key challenge for Cape Park is not a lack of resources, but a mismatch among landscape resources, tourism products, service infrastructure, cultural branding and year-round operation.

2. Methods

The core study area is Cape Park in Daishan County, Zhejiang Province, China (shown in Figure 1). It covers approximately 490 ha from Yanwo Mountain in the north to Beifeng Mountain in the south, and it relates to surrounding villages, coastlines, beaches, islands and reefs, wetlands, farmland and mountain resources. The area contains island landscapes, rural settlements and an existing foundation for cultural tourism development. It is therefore suitable as a typical case for observing the activation of blue landscape resources and the development of new-quality cultural tourism.

The research combines field investigation and spatial analysis, benchmark case comparison and an integrated SWOT-PEST assessment. Field surveys, questionnaire interviews, public data collection and GIS-based spatial analysis were used to identify the current characteristics of blue landscape resources, land use and infrastructure in Cape Park. On this basis, domestic and international cases of coastal cultural tourism and rural cultural tourism were compared to distil experience in resource activation, facility integration and operational management. The SWOT-PEST framework was then used to assess the coupling relationship between blue landscape resources and new-quality cultural tourism from the perspectives of resource conditions, facility support, business-format integration and market demand. This assessment also identified the main bottlenecks and directions for optimization. The research materials were mainly drawn from project reports, field investigation records, public plans and policy documents.

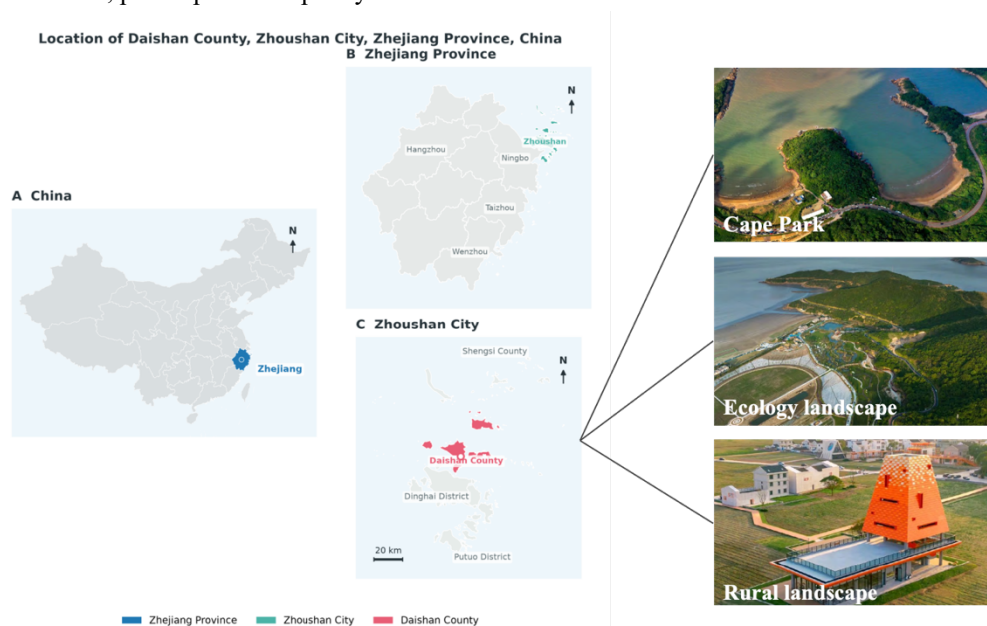


Figure 1. Location of Daishan Cape Park and its main blue landscape resources

3. Results and Discussion

3.1 Resource Endowment and Spatial Structure

The basic advantage of Cape Park is that its blue landscapes do not exist in isolation. Instead, they form a composite destination resource together with mountains, fields, villages and streets. Field investigation shows that the area contains blue landscape resources such as coastlines, beaches, islands and reefs, tidal flats and coastal wetlands. These resources are interwoven with Beifeng Mountain, Laoying Mountain, the East Sea Country Park, agricultural land and fishing-village settlements. Lulan Qingsha already provides a basis for coastal sports and leisure vacation, while Xu Fu culture, fishing customs, salt-field culture, lighthouse culture and intangible cultural heritage activities provide cultural support for resource narration. The potential of Cape Park therefore derives not only from seascapes, but from the superposition of blue ecology, rural production and local culture.

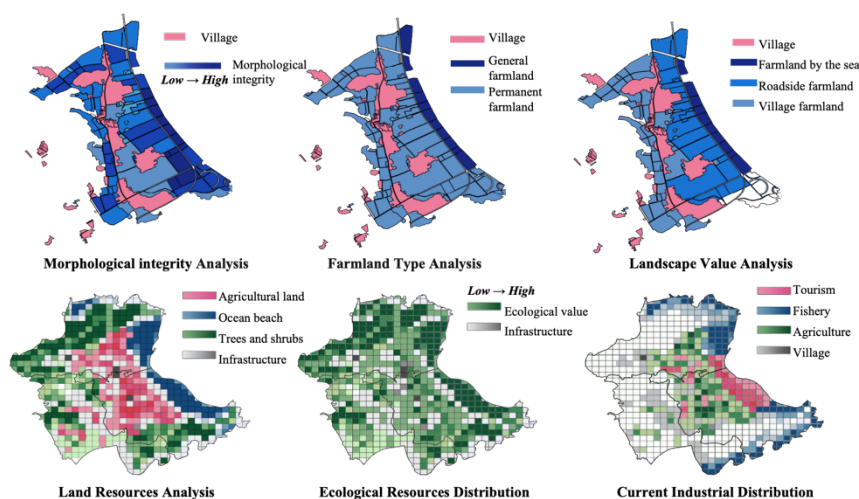


Figure 2. Analysis of land resources and industrial formats in the core area

3.2 Analysis of Land Resources and Industrial Formats

The spatial identification results show that the study area is characterized by concentrated agriculture in the central area, prominent coastal ecological landscapes, distinctive cape-based fisheries and weak infrastructure support (Figure 2). Agricultural land in the core area is relatively contiguous and provides a basis for scaled development. However, the integrity of its spatial form remains insufficient, and the value of farmland landscape display, cultural tourism conversion and comprehensive utilization has not been effectively released. Coastal beach resources are distributed along the shoreline and, together with coastal ecological resources, form a landmark landscape-ecological corridor. This corridor has multiple values for ecological protection, coastal scenery and recreation. Arbor woodland is embedded in agricultural and rural spaces in a patch-like form. Although ecological resources have broad coverage, their spatial continuity and system coherence remain weak. Infrastructure is highly concentrated in the central area, while the overall regional layout is sparse. Its spatial linkage with high-quality coastal landscape and ecological resources is also insufficient. As a result, central cultural tourism, agricultural industries and cape-based specialty fisheries remain separated, and a synergistic industrial network has not yet formed.

Overall, the area has a composite development base that includes agricultural production, coastal tourism, specialty fisheries and ecological resources. However, resources and business formats are spatially fragmented. Future development should focus on connecting central agricultural spaces, coastal landscape belts and cape fishery nodes, thereby improving spatial integrity, industrial synergy and the value conversion of ecological landscape resources.

3.3 Integrated SWOT-PEST Analysis

This study uses an integrated SWOT-PEST model to assess the internal and external conditions for new-quality cultural tourism in Daishan, shown in Figure 3. The external PEST dimensions provide favorable support. Policy orientation, the Yangtze River Delta economy, micro-vacation consumption trends and digital technologies jointly create a supportive development environment. At the internal SWOT level, the island has strong blue, green and cultural resources and sufficient market consumption potential. However, it also has weaknesses in public supporting facilities and brand influence. Although it has opportunities for land-sea coordinated development, it faces homogeneous regional competition in cultural tourism and

tensions between ecological protection and development. Four core pain points are present on site: a fractured blue-landscape and cultural experience chain, separated production-living-ecological spaces, incomplete grey cultural tourism support facilities and seasonal imbalance in operation. The upgrading of island cultural tourism therefore depends less on adding isolated projects than on rebuilding spatial linkages among resources and constructing an integrated development system.

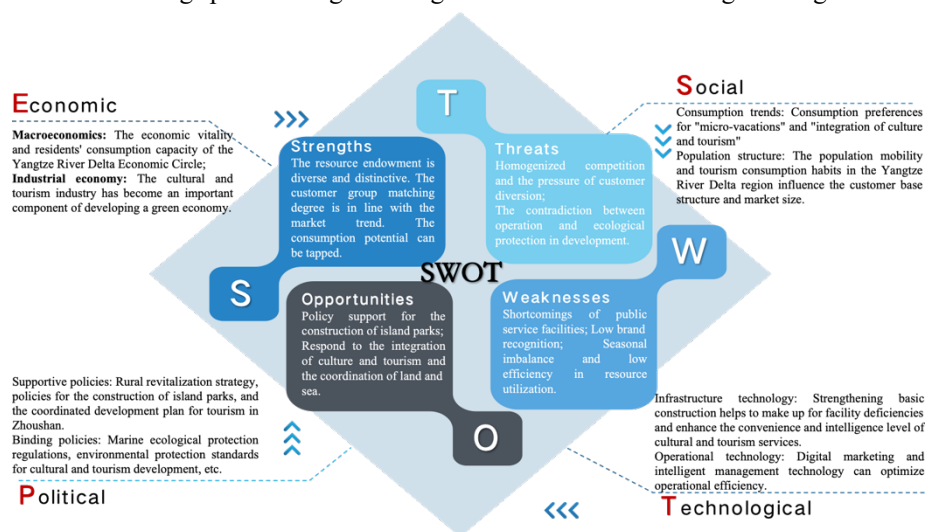


Figure 3. SWOT-PEST analysis results for Cape Park in Daishan County

3.4 Coupling Mechanism between Blue-Green-Grey Infrastructure and Tourism Innovation

Based on the above assessment, this paper summarizes the pathway for new-quality cultural tourism in Cape Park as blue-green integration, land-sea coordination and production-living-ecological space integration, as shown in Figure 4. Blue-green integration emphasizes shorelines, bays and wetlands as value anchors. Through facilities such as coastal trails, viewing platforms, ecological parking, stormwater management systems and rural greenways, blue resources can be transformed into public spaces that are accessible, stayable and consumable. Land-sea coordination emphasizes breaking the separation between coastal attractions and inland villages. Marine sports, coastal cycling, mountain hiking, rural study tours, fishing-family intangible cultural heritage and hot spring wellness can be organized into continuous routes. Production-living-ecological space integration requires production spaces, living spaces and ecological spaces to participate jointly in cultural tourism value creation. Farmland, courtyards, fishing harbours, mountain forests and seawalls can thereby become components of rural common prosperity and destination operation.

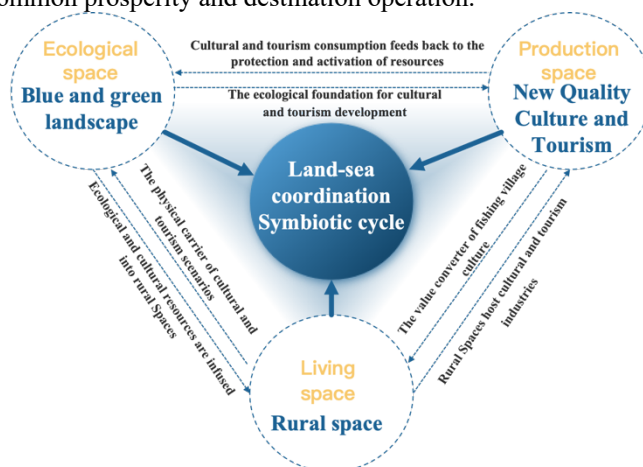


Figure 4. Conceptual framework of blue-green integration, land-sea coordination and production-living-ecological space integration.

Drawing on local resources and benchmark cases, this study proposes optimization strategies from the perspectives of spatial organization and business operation (Table 1). Spatially, the “Half-Sea, Half-Field, Half-Street and Half-Hill” structure can serve as the basic organizing unit of Cape Park. Half-Sea accommodates coastal activities such as kiteboarding, surfing, sea fishing, tide watching and coastal art. Half-Field highlights paddy-field landscapes, agricultural study tours and land art. Half-Street relies on courtyard-based economies, homestays and dining, intangible cultural heritage workshops and community participation. Half-Hill develops hiking, hot spring wellness and ecological education.

In terms of business operation, cultural IP and four-season operation are important pathways for resource conversion. By

integrating Xu Fu culture, salt-field culture and fishing customs, a “Tracing Mountains and Seas” identification framework can be developed. This IP can be embedded in guided tours, study programs, cultural and creative products, AR interaction and festivals, while preserving the authenticity of fishing village life, salt-field memory and coastal ecological knowledge. Four-season operation can emphasize spring outings and study tours, summer coastal sports and nighttime consumption, autumn harvest experiences and cultural markets, and winter hot spring wellness and slow leisure. This strategy can reduce dependence on a single peak season.

Table 1. Operational strategies and expected functions

Strategic Dimension	Core Strategy	Expected Function
Spatial Organization	Build an integrated headland park structure based on marine, agricultural, village-street, and mountain resources	Strengthen resource integration and form a coordinated mountain-sea-field-street development framework
Half-Sea	Develop coastal sports and marine experience activities	Enhance the vitality of coastal spaces and increase the attractiveness of marine tourism
Half-Field	Highlight rural landscapes and agricultural experiences	Expand rural tourism functions and enhance the value of agricultural landscapes
Half-Street	Activate community participation and courtyard-based economy	Promote resident participation and strengthen everyday local life and consumption
Half-Hill	Introduce wellness, leisure, and ecological education	Enrich mountain-based recreation and extend visitor stays
Node Network	Build an integrated “point-line-area” system	Improve route organization and strengthen the identity of all-region tourism
Cultural IP	Construct a “Tracing Mountains and Seas” narrative framework	Provide a unified identification system and narrative carrier for dispersed resources
IP Transformation	Embed cultural IP into operational scenarios	Enhance visitor engagement and transform cultural resources into tourism products
Four-Season Operation	Build a seasonal product system	Balance seasonal fluctuations and reduce dependence on a single peak season

4. Conclusion

Using Cape Park in Daishan County as an exploratory case, this study examined how blue landscape resources, green ecological spaces and grey service infrastructure can be coupled to support tourism transformation in island rural destinations. The analysis identified a strong resource base, but these assets have not yet been fully transformed into integrated tourism experiences. The main constraints include insufficient resource-tourism coupling, fragmented land-sea spatial connections, inadequate public service infrastructure, seasonal imbalance in operation and limited destination branding.

The main contribution of this study is the proposal of a blue-green-grey infrastructure and tourism innovation framework for island rural destinations. In this framework, blue resources provide the main landscape attractions, green spaces support ecological and rural experiences, and grey infrastructure provides accessibility, service supply and operational efficiency. This pathway offers reference value for other island and coastal rural destinations. New-quality cultural tourism is not simply the introduction of new technologies or projects. Rather, it is a systematic renewal process constrained by the ecological base, enriched by local culture, supported by public facilities and secured by operational mechanisms.

This study has limitations because it has not yet been tested through large-scale visitor surveys, spatial accessibility modelling or long-term operational data. Future research should quantify the coupling relationship between resources and tourism to examine the broader applicability of this framework.

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