

PRESERVING THE AUTHENTICITY OF RURAL INFRASTRUCTURE IN SUSTAINABLE TOURISM DEVELOPMENT

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Abstract: Indonesia's rural landscape is rapidly changing, driven by the emergence of 6,109 registered tourist villages by 2024 (Jadesta, Ministry of Tourism and Creative Economy). While this rapid economic growth is revitalizing rural communities, it also risks eroding cultural and physical authenticity. Modernization often comes at the expense of important tangible heritage assets, including traditional housing, historic roads, and communal irrigation networks. This study investigates how sustainable tourism development can actively protect the structural integrity of rural infrastructure from modern commercial pressures. Using a Systematic Literature Review (SLR) adhering to PRISMA guidelines, we thematically analyzed 28 Scopus-indexed articles published between 2020 and 2024. We then screened an initial pool of 262 publications. The selection process involved evaluating criteria to target previous studies reviewed by defining keywords including: 1) rural tourism, 2) cultural heritage, and 3) sustainable infrastructure. A key tension identified in the global literature is illustrated by cases such as Uji City in Kyoto, Japan, where communities often delay conservation decisions in what scholars call "intergenerational delay." In contrast, Penglipuran Village in Indonesia offers a different alternative pathway: through structured spatial planning, preservation of traditional architecture, and a learnscape-based tourism approach. Penglipuran demonstrates how local communities can successfully maintain cultural authenticity and identity without imposing heavy responsibilities on future generations. Ultimately, this study proposes a place-based development framework that combines cultural roots, ecological responsibility, and long-term intergenerational awareness. The study translates empirical findings into a workable policy framework and implementation guidelines for destination planners and managers aims to maintain authentic rural infrastructure amidst rapid tourism growth. This framework offers global relevance for managing cultural heritage preservation in developing countries.

Keyword: sustainable tourism development, cultural heritage preservation, rural infrastructure, systematic literature review

Introduction

In these past five years, we have witnessed an unexpected boom in Indonesian tourism villages. Data from the Indonesian Tourism Village Network (Jadesta) shows that officially registered tourism villages will reach 6,109 by the end of 2024 (Ministry of Tourism and Creative Economy, 2025). This rapid growth reflects the government's efforts to promote rural tourism as an equitable development strategy, as well as a form of cultural preservation and economic revitalization. However, the development of tourism in rural areas also poses complex challenges, particularly in navigating the trade-off between modernizations and preserving authentic rural identity.

Infrastructure development is often prioritized, despite being at the heart of a dilemma. Infrastructure plays a crucial role in supporting accessibility and services. In essence, infrastructure not only has functional value but also carries cultural, historical, and environmental significance. However, rather

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than supporting local identity, these interventions often act as tools for architectural homogenization. As observed by Fathi et al. (2022) and Bai (2024), the pressure to meet urban tourists' expectations replaces unique vernacular designs and traditional spatial layouts with standardized modern structures. This can, in turn, weaken the authentic character of rural areas. Authenticity dominates current academic debates on sustainable tourism, yet remains highly vulnerable to market-driven commodification.

Rural infrastructure, from traditional housing facades to communal irrigation networks, is more than just functional concrete; it can represent tangible material expressions of local knowledge, social organization, and adaptation to historical environments. Remodeling these physical assets solely for commercial appeal can threaten the authenticity of material use in rural spaces and damage the intangible cultural heritage embedded in the daily lives of local communities. While the risks of infrastructure homogenization are clear, the existing literature lacks a cohesive synthesis on how rural physical assets can be modernized without compromising cultural integrity. Most reviews of sustainable tourism focus broadly on the economic impacts or community-based tourism in general, leaving the sustainability of physical heritage specifically under-researched. To bridge this gap, this study provides a systematic evaluation of sustainable infrastructure management.

Through a Systematic Literature Review (SLR) guided by the PRISMA protocol, this study analyzed 28 Scopus-indexed articles published between 2020 and 2024, filtered from an initial collection of 262 publications. This study aims to examine how infrastructure in rural tourism development can be managed sustainably without sacrificing its original character, so that tourism is not always perceived as an exclusive sector closely linked to modernity.

This study highlights several important aspects of maintaining authenticity, such as: 1) the integration of traditional architectural and spatial values; 2) the role of local communities as designers and storytellers of development; and 3) the strengthening of cultural and religious values in infrastructure planning. Furthermore, this study emphasizes the crucial role of governance. Fragmented policy frameworks and weak coordination between central and local governments often lead to over-commercialization and infrastructure development that is inconsistent with community values. When infrastructure planning ignores community values, it fuels severe social inequalities and weakens local resilience (Kuklina et al., 2021; Ursić et al., 2024). Therefore, responsive and integrated governance structures are crucial for aligning sustainable tourism growth. Therefore, this study seeks to contribute a place-based development framework that translates empirical insights into actionable guidelines for destination planners and managers, and offers concrete pathways to protecting the authenticity of rural spaces.

2. Materials and Methods

Systematic Literature Review (SLR) is a rigorous and structured approach to reviewing literature relevant to a specific research question (Mantsiou et al., 2023). This approach is designed to make the review process transparent, reproducible, and comprehensive, ensuring that all relevant studies are systematically considered and evaluated (Lame, 2019; Mantsiou et al., 2023). This method is important because it provides an evidence-based approach by objectively and methodologically assessing, evaluating, and categorizing published literature.

In the context of this research, SLR is used to analyze the role of tourism in maintaining the authenticity of village infrastructure, particularly in the development of sustainable tourism. Rather than relying on narrative commentary, this methodological structure ensures that all relevant evidence is objectively categorized to answer how rural destinations can maintain their authenticity amidst the pressures of modernization. A crucial step in this method is a comprehensive literature search process through the Scopus database. Scopus was chosen as the exclusive data source due to its rigorous quality standards of prior reviews, comprehensive coverage of social science journals with a broad and impactful network.

To capture the latest academic discourse, reviewing post-pandemic shifts in rural tourism planning, the search window was limited to articles published between 2020 and 2024. The search string was constructed using explicit keywords combined with Boolean operators (AND, OR) to refine target relevance. Some of the keywords used reflected the focus of the research, including “Sustainable Tourism Development,” “Rural Infrastructure Authenticity,” and “Tourism Village Preservation,” with Boolean operators such as AND, OR, and NOT applied to narrow and refine the search results. The filtering and selection process strictly followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Mancin et al., 2024; Tadesse et al., 2023).

In the initial identification phase, a search of electronic databases using predefined strings yielded 262 publications indexed in Scopus. During the subsequent screening phase, duplicate records were removed, resulting in 206 articles. Titles and abstracts were further screened for thematic relevance, reducing the number to 77 articles. The remaining 77 articles underwent a rigorous full-text review for eligibility. These publications were carefully scrutinized to ensure that prior studies evaluated physical infrastructure, such as traditional housing, irrigation networks, and village roads, rather than simply addressing the tourism economy in general. Once the selection process was complete, 28 articles met all stringent criteria and were selected for the final qualitative and thematic synthesis.

To maintain academic integrity, clear boundaries were established through specific inclusion and exclusion criteria. Inclusion criteria required articles to be published in peer-reviewed journals indexed by Scopus, written entirely in English, presented within an explicit methodological framework, and directly address sustainable tourism planning with a practical or theoretical emphasis on the authenticity of physical heritage and rural infrastructure. Conversely, exclusion criteria directly disqualified less relevant literature (including conference abstracts, industry white papers, and non-peer-reviewed government reports). Studies that focused solely on the macroeconomic impacts of tourism without evaluating spatial or physical infrastructure, and articles with inaccessible full texts, were also disqualified. After final selection, 28 core articles were selected for thematic analysis to identify qualitative patterns, policy trends, and structural gaps.

The extracted data was systematically organized into a matrix that included key variables: author name, year of publication, regional focus, specific methodological design, and key empirical findings. Using a three-step analytical protocol consisting of rigorous data extraction, thematic coding, and conceptual synthesis, the literature was grouped into structural pillars. This rigorous approach effectively translates fragmented global data into an actionable planning framework for protecting the cultural and physical life of rural environments.

3. Results and Discussion

3.1. Overview of Reviewed Studies

A systematic literature review gathered 28 peer-reviewed studies published between 2020 and 2024. Tracking the publication timeline reveals a significant surge in academic focus on physical infrastructure and its role in maintaining authenticity within rural tourism development schemes. A look at the research's origins reveals a broad global footprint. Researchers addressed more than just Asian contexts such as Indonesia, China, Japan, and Iran; they also gathered extensive evidence from European countries including Portugal, Spain, Romania, Slovakia, and the Czech Republic, as well as studies in Brazil, South Africa, Russia, and Ukraine. This broad geographic reach demonstrates that maintaining physical authenticity is a shared global challenge, not merely a local issue.

These studies were developed by researchers using a variety of methods. Half of the collected articles (approximately 50%) chose a qualitative approach, using field ethnography and local case studies to explore community values and grassroots engagement. Quantitative approaches, such as statistical modeling and guest feedback surveys, accounted for 24% of the collected methodologies; while the remaining authors combined these perspectives through cultural zoning, spatial engineering, and long-term planning. The core topics reviewed focused on the preservation of vernacular architecture, the maintenance of historic irrigation networks, the management of public spaces, and the evaluation of the impact of laws on village development. A recurring point in this literature is how closely physical village elements are tied to meaningful travel experiences, local pride, and the constant threat of commercial degradation. The core subjects under review focus squarely on saving vernacular architecture, keeping historic irrigation networks alive, managing public spaces, and evaluating how laws impact village development. A major recurring point across this literature is how closely physical village elements tie into meaningful travel experiences, local pride, and the constant threat of commercial degradation.

3.2. Infrastructure Defined as Authentic

Peer-reviewed publications consistently demonstrate that infrastructure authenticity involves more than just stone paths or heritage buildings; it is deeply intertwined with the knowledge systems of the communities that constructed these spaces. The concrete examples in these papers highlight this connection. For example, the traditional wooden post architecture found in Romania (Lungu et al., 2024), the Subak irrigation system that traverses Bali (Rahmi & Setiawan, 2020), and the historic

Tabel 1 : Distribution of Study Publication Years

Year of publications	Number of Publication
2020	3
2021	4
2022	5
2023	3
2024	13

stone footpaths of Hakka settlements in China (Sun & Ou, 2021) serve as tangible expressions of cultural history, social organization, and ecological adaptation. This understanding extends beyond permanent stone structures. Even non-permanent landscape features, such as historic straight plow paths documented in Italy (Quaranta et al., 2023), have been defined by scholars as forms of "agrarian cultural infrastructure" that carry deep spiritual and symbolic meaning for a village's identity.

3.3. The Influence of Authentic Infrastructure on Tourism Experience

The authentic form and function of rural environments go beyond preserving history; they fundamentally reshape how tourists perceive and experience a destination. Research by Juliana et al. (2022) in Indonesia highlights this dynamic, showing that visitors develop deep and intuitive attachments to rural locations that retain their ancestral physical layout intact. This aligns with the findings of Zhang & Marzbali (2024), who observed that preserving the existential authenticity of traditional settlements serves as an emotional bridge, forging strong bonds of continuity between guests and the local landscape. This suggests that maintaining village authenticity is not just about preserving cultural heritage, but also creating authentic experiences that build emotional connections and increase tourists' loyalty (Zhang and Marzbali, 2024). Tourists understand the meaning of authentic after experiencing the experience of traveling in rural tourism (Juliana et al., 2022; Porya et al., 2024). This is reinforced by the findings of (Cozma et al., 2021) which show that tourists in the Rodna Mountains National Park in Romania value natural trails, houses that still maintain traditional styles, and minimalist facilities made of wood, rather than modern infrastructure that is felt to interfere with the local atmosphere. This preference for authenticity is not just a matter of aesthetics, but is related to the creation of amemorable experience, which in turn encourages loyalty and positive recommendations from tourists.

3.4. Factors Supporting Infrastructure Preservation

Preserving authentic infrastructure does not occur automatically but relies heavily on the existence of appropriate social mechanisms, regulations, and planning approaches. Research by Lee & Sam (2024) and Chenari et al. (2024) shows that community-based tourism (CBT) can maintain the authenticity of a village's physical space through community involvement in the planning and management process. Furthermore, the success of preservation in Dong Township, Zhejiang (Liu & Wang, 2024) is attributed to a zoning system based on local cultural values that places traditional infrastructure at the core of the village's layout. Furthermore, legal aspects also play a crucial role. A study by Martitah et al. (2022) in Wonogiri, Indonesia, highlighted the need for legal protection through village regulations (Perdes) to prevent the conversion of traditional spaces into commercial assets. Furthermore, preservation is also supported by the initiatives of value-oriented local entrepreneurs (Falter, 2024) who view authenticity as a market force.

3.5. Threats to Infrastructure Authenticity

Although authenticity has strategic value in the development of tourism villages, studies show that authentic infrastructure faces various threats. Modernization oriented towards economic efficiency, without considering local values, is often the main cause of degradation. In the context of post-conflict Ukraine, for example, a study by Hopkalo et al. (2024) showed that infrastructure development that is not based on a place-based approach has the potential to ignore local architectural and spatial patterns. Furthermore, challenges arise from the phenomenon of intergenerational deferral of preservation responsibilities mentioned by Bai (2024), where communities tend to allow damage to occur in the hope that future generations will repair it.

Another threat stems from the privatization and commodification of public spaces, such as the conversion of village paths into restricted access for exclusive tourism interests, as criticized in a study by Martínez et al. (2024). Without strong structural and social guarantees, the authenticity of rural infrastructure risks being gradually or permanently lost. A study by Horgan & Baum (2023) shows that the failure to maintain and manage basic infrastructure in Cork, Ireland, has resulted in the degradation of public spaces and the weakening of the city's identity. The study demonstrates how the absence of pro-local spatial policies makes tourism less inclusive and accelerates spatial inequality. This situation serves as an important warning for infrastructure development in rural tourism areas to avoid being trapped by the logic of mere commercialization.

The study case of Cork, Ireland, offers additional lessons and warnings. Horgan & Baum (2023) document how the absence of participatory governance, the weak integration of spatial planning and community engagement, and the neglect of historic buildings and basic amenities have resulted in spatial degradation, a weakening of public identity, and accelerated inequality. Ultimately, the situation in Cork highlights how physical development driven solely by commercial interests without a framework for sustainability and grassroots engagement often leads to social exclusion, the erasure of heritage authenticity, and the deterioration of collective travel experiences. These insights highlight the urgent need for inclusive, pro-local, and highly participatory spatial strategies to protect rural destinations from repeating the same destructive patterns.

Moving away from the blind obsession of restoring past authenticity, Feng & Xiao (2021) introduce a highly systematic conservation methodology. Their framework relies on a categorization that divides

physical assets into three distinct lifecycle stages, identifying cultural architectural assets that have successfully continued, are undergoing dynamic transformation, and have disappeared entirely. Through this perspective, planners can precisely map how authenticity changes over time. Rather than freezing rural spaces in a static past, this analytical method offers a physical identity anchor for forward-looking villages seeking to maintain historical continuity amidst a rapidly changing global landscape.

3.6. Discussion

The empirical insights gained from this synthesis confirm that rural infrastructure operates far beyond its basic technical utility. Physical village assets serve as foundational pillars for sustainable tourism, while also acting as concrete markers of cultural identity, physical manifestations of local history, and functional expressions of environmental adaptation. To unravel these dynamics, this section explores four interrelated core themes: 1) Leveraging infrastructure authenticity as a primary development approach, 2) Mapping tourist responses to authentic spaces, 3) Building active community ownership alongside robust legal protections, and 4) Facing the aggressive structural challenges brought by modernization.

A critical initial conclusion is that preserving the authenticity of village infrastructure serves as a powerful strategic mechanism for building long-term competitive advantage for community-based destinations. Adopting place-based development strategies, as documented in Meicheng (Sun & Ou, 2021), Zhejiang (Liu & Wang, 2024), and Okinsky District (Kuklina et al., 2021) demonstrates that a destination's authentic appeal is not determined by high-end luxury amenities. Rather, long-term success hinges on preserving historic landscapes, traditional architecture, and deeply rooted social structures that reflect indigenous values. Within this framework, physical elements such as handcrafted wooden houses, unpaved dirt paths, ancestral irrigation networks, and shared communal lands transform from static heritage landmarks into active economic and social tools capable of driving community-wide revitalization.

On the other hand, understanding how tourists perceive these spaces is closely related to the quality of the overall tourism experience. Longitudinal findings by Cozma et al. (2021) and Juliana et al. (2022) show that modern tourists do not view authenticity solely as superficial architectural beauty. Rather, they are invited to experience the "authentic" conditions as an emotional bridge to the destination. When tourists stay in traditional houses, walk along ancient footpaths, or actively engage in heritage farming routines, they can potentially create deep emotional bonds. These emotional bonds directly encourage repeat visits and build strong brand loyalty. Authentic infrastructure essentially serves as a physical storytelling medium, enhancing the guest experience while clearly separating the village from mainstream commercial venues.

Consequently, placing conservation rights in the hands of local communities, along with formal institutional protection, is a non-negotiable success factor for structural sustainability. Communities that maintain direct sovereignty over their physical landscapes, whether through customary village regulations, active tourism cooperatives, or value-oriented local businesses, demonstrate a significantly higher capacity to protect both the physical resilience and cultural significance of their assets. These grassroots efforts require institutional support. As Martitah et al. (2022) emphasize, the

enactment of a binding legal framework, such as tailored village regulations (Peraturan Desa or Perdes) and strict cultural zoning boundaries, is essential. Without these protective legislative walls, rural spaces face rapid commercial conversion, rapidly leading to a weakening of local character and a collapse of sustainability.

Finally, this analysis must squarely confront the severe structural threats facing authentic rural spaces today. Aggressive, top-down, market-driven modernization continues to drive spatial homogenization. This corporate expansion not only eradicates unique vernacular architecture but also creates profound spatial and social dissonance within host communities. Clear warnings of this destructive pattern are evident in post-war Ukraine (Hopkalo et al., 2024) and contemporary Japan (Bai, 2024), where rapid post-conflict reconstruction and uncontrolled urbanization have severely damaged traditional structural heritage. The physical damage is further compounded by the invisible threat of intergenerational delay. As Bai (2024) documents, when current residents consistently postpone crucial maintenance tasks, assuming that future generations will handle the preservation, collective memory surrounding the importance of local infrastructure is rapidly disappearing, leaving rural identity severely threatened.

Facing this situation, a conservation approach is needed that focuses not only on the physical and aesthetic aspects, but also takes into account the social, ecological, and psychological dimensions of village infrastructure. As shown by (Ursić et al., 2024) in the context of remote islands in Japan, village houses and alleys are not simply inanimate objects, but rather part of a network of social and spiritual relationships maintained collectively, especially by marginalized groups such as women and the elderly. Lessons from Cork, Ireland in Horgan & Baum (2023) show that failure to maintain basic infrastructure in tourist areas can accelerate the process of social exclusion, leading to a loss of sense of place ownership, and a decline in the quality of the tourism experience itself.

Therefore, preserving authentic infrastructure must be viewed as a multidimensional project involving interactions between local actors, maintaining cultural values, paying attention to legal structures, and context-sensitive development practices. Through the integration of these aspects, sustainable tourism development can truly be realized in rural areas. Although much literature indicates that preserving authentic infrastructure can strengthen the competitiveness of tourist destinations, several important contradictions reflecting the complexity of implementation on the ground arise from the tension between authenticity and modern conveniences. Empirical data from Juliana et al. (2022) reveals that while modern tourists actively seek authentic environments, they simultaneously demand contemporary amenities such as clean sanitation and high-speed digital connectivity.

This duality demonstrates that isolating physical structures in a historical vacuum will fail without an adaptive framework that seamlessly integrates modern infrastructure into heritage forms. Furthermore, there is a profound conflict between cultural preservation and market-driven commodification. Martínez et al. (2024) warn that excessive cleaning or “polishing” of village streets and ancestral homes to satisfy the tastes of urban tourists will diminish the communal and spiritual significance of these spaces for local residents. This excessive commercialization results in what MacCannell calls “engineered authenticity,” a surface aesthetic fabricated solely for tourism consumption (Jia, 2009; Jiao, 2024).

This spatial threat is exacerbated by the friction between rigid material conservation and changing intergenerational dynamics. Bai (2024) uncovered a systemic pattern of intergenerational delay, whereby rural youth show declining interest in pursuing heritage conservation because static historical

preservation conflicts with their personal life aspirations. Addressing this generational shift requires highly flexible, inclusive, and adaptive spatial strategies. In the context of authenticity-based infrastructure design, consideration of local cultural and environmental aspects is crucial. For example, in Iran, the integration of ecological, social, and spatial elements in planning directly reinforces the unique identity of historic settlements (Fathi et al., 2022). Similarly, the expansion of tourism in Indonesian villages should build on, rather than replace, the village's traditional spatial and cultural structures (Hariyadi et al., 2024). When implemented through this perspective, infrastructure evolves from a generic logistical mechanism into a living medium for place-based heritage. This model relies on strong local participation and the mobilization of grassroots social capital to foster resilience, collective ownership, and destination regeneration (Ursić et al., 2024).

Adopting a place-based tourism approach ensures that local narratives and historical spatial practices underpin the visitor experience. Furthermore, this creates the potential for residents in low-level operational positions to become key decision-makers and co-creators of destination narratives (Bai, 2024; Juliana et al. 2022). From a governance perspective, an inclusive and multi-stakeholder management matrix is crucial for mitigating resource conflicts and planning fragmentation (Sun & Ou, 2021; Moscoso-Sánchez et al., 2024). Communities that enforce locally tailored zoning laws and grassroots regulations demonstrate significantly higher success rates in protecting their cultural and physical spaces. Conversely, cases like Musina reveal that a lack of vertical coordination between national ministries and local authorities fuels administrative stagnation and contradictory regional development (Ramaano, 2022).

A key consideration in planning models is the strong role of local religious and cultural values. Religious norms and customary institutions fundamentally guide how host communities organize and manage tourism landscapes, particularly in developing zones or post-disaster recovery (Fathi et al., 2022; Liu-Lastres et al., 2020). For example, in regions like Aceh and Yogyakarta, Indonesia, traditional religious structures have successfully mobilized collective conservation efforts, coordinated volunteer networks, and fostered a deep sense of shared responsibility for protecting local physical assets (Sari et al., 2020). Finally, environmental sustainability must be a cornerstone of infrastructure development. Integrating rigorous environmental impact assessments into rural tourism models is essential to protect fragile ecosystems (Liu-Lastres et al., 2020; Kuklina et al., 2021). Uncontrolled expansion of the tourist footprint risks destroying natural habitats and fragmenting the broader cultural landscapes that define rural areas. Infrastructure roadmaps must be explicitly aligned with land conservation and climate adaptation strategies to ensure long-term spatial resilience.

4. Conclusion

Through a systematic synthesis of 28 international publications, this study confirms that authentic rural infrastructure is the foundation for sustainable, place-based tourism development. Physical assets such as traditional architecture, local housing, ancient roads, historic irrigation channels, and shared public spaces hold immense material, historical, and ecological significance. These assets underpin community identity and enhance the tourist experience. Evidence suggests that successful long-term preservation requires a strategic combination of place-based planning, active community ownership, a binding legal framework, and culturally integrated spatial design. However, destination managers must contend with intense modernization pressures, including spatial homogenization, imposed

authenticity, top-down policy interventions, and conflicting generational goals. To translate these empirical patterns into actionable governance, this study offers concrete policy guidelines for planners and regional authorities.

First, the ministry should establish a vertical coordination mechanism that aligns national tourism investment with local zoning regulations to prevent administrative stagnation. Second, local governments should enact Village Regulations that establish customary land boundaries and legally protect communal physical assets from property speculation and privatization. Third, infrastructure budgets should adopt a dual-integration design mandate; all modern amenities (such as environmentally friendly sanitation and digital access networks) should be integrated into traditional structural shells to meet tourist needs without destroying the local architectural character. Finally, local planners should implement a participatory design framework that engages young people in adaptive reuse projects, transforming static cultural heritage buildings into functional community centers that align preservation with modern economic aspirations. Thus, by treating the authenticity of infrastructure as a strategic asset, rather than an obstacle to modernization, policymakers can ensure inclusive, resilient, and culturally sustainable rural destinations.

5. Research Limitations

While this study provides valuable insights, several methodological limitations must be acknowledged. The primary limitation stems from the bibliographic screening criteria; because this systematic review limited its scope to articles published in English and Indonesian between 2020 and 2024, relevant academic contributions beyond that timeframe or language boundaries were inevitably overlooked. Furthermore, this study did not include field verification or on-site checks. Consequently, the conceptualization of what constitutes structural authenticity relies entirely on secondary qualitative narratives provided by the original authors of the selected publications. Furthermore, the considerable geographic and socio-cultural heterogeneity among the 28 studies analyzed introduces highly local variations in how "authenticity" is defined, making it difficult to draw universal generalizations.

These limitations offer fertile ground for future empirical research to validate heritage preservation models in the field through participatory action research, directly assessing potential perception gaps between host communities and visiting tourists. Unlike conventional tourism studies that tend to focus on modern facilities and destination branding, this study positions the authenticity of infrastructure as central to the sustainability of tourism villages. Through an interdisciplinary and cross-regional SLR approach, this study presents a comprehensive synthesis of the dynamics, challenges, and best practices in village infrastructure preservation. Theoretically, this study reinforces the importance of place-based development paradigms and cultural landscape preservation within a sustainable tourism framework. Practically, the study's findings can serve as an important reference for local governments, tourism village managers, and local communities in designing preservation strategies based on local values and knowledge.

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Declaration of Interest Statement

The author(s) declare no conflict of interest.

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