

Research on the Evaluation of Traditional Villages: A Literature Review

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Abstract

As an essential aspect of the preservation and development of traditional villages, the evaluation of traditional villages has not been thoroughly addressed in existing research. The current studies lack a comprehensive review of the research outcomes, making it difficult to fully reflect the status, challenges, and development trends in this field. This study aims to systematically review and analyse the literature related to traditional village evaluation. The research methodology integrates a comprehensive literature review, quantitative and qualitative analyses, and comparative study. The research summarizes existing evaluation models and findings, identifies existing issues, and offers insights into future research directions. The results reveal several problems in the current research on traditional village evaluation, including the limitations of evaluation methods, inconsistent evaluation standards, challenges in quantifying cultural value, and the partiality of data collection. Finally, the article outlines future research directions, calling for the further improvement of evaluation models, the unification of evaluation standards, and the innovation of evaluation methods to better promote the protection and development of traditional villages.

Keywords: Evaluation, literature review, traditional village

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Penyelidikan Mengenai Penilaian Kampung Tradisional: Ulasan Literatur

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Abstrak

Sebagai aspek penting dalam pemeliharaan dan pembangunan kampung tradisional, penilaian kampung tradisional masih belum ditangani secara menyeluruh dalam kajian sedia ada. Kajian-kajian semasa kekurangan ulasan komprehensif terhadap hasil penyelidikan menjadikannya sukar untuk mencerminkan sepenuhnya status, cabaran, dan arah aliran pembangunan dalam bidang ini. Kajian ini bertujuan menyemak dan menganalisis secara sistematik literatur yang berkaitan dengan penilaian kampung tradisional. Metodologi penyelidikan menggabungkan ulasan literatur yang komprehensif, analisis kuantitatif dan kualitatif, serta kajian perbandingan. Penyelidikan ini merumuskan model penilaian dan penemuan sedia ada, mengenal pasti isu-isu yang wujud, dan menawarkan pandangan terhadap arah penyelidikan masa depan. Hasil kajian mendedahkan beberapa masalah dalam penyelidikan semasa mengenai penilaian kampung tradisional, termasuk keterbatasan kaedah penilaian, piawaian penilaian yang tidak konsisten, cabaran dalam mengkuantifikasi nilai budaya, serta keterhadapan pengumpulan data. Akhirnya, artikel ini menggariskan arah penyelidikan masa depan dengan menyeru kepada penambahbaikan lanjut model penilaian, penyatuan piawaian penilaian, dan inovasi kaedah penilaian bagi memperkukuh usaha pemeliharaan dan pembangunan kampung tradisional.

Kata Kunci: Kampung tradisional, penilaian, ulasan literatur

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1.0 Introduction

Traditional villages refer to settlements with a long history, rich cultural heritage, and unique regional characteristics. These villages typically preserve traditional architectural styles, living customs, and social structures that reflect the historical, cultural, and social development of specific regions. The definition of traditional villages encompasses aspects such as historicity, cultural heritage, regional distinctiveness, and community identity (Q. Xu & Wang, 2021). The characteristics of traditional villages are mainly reflected in the following: diverse architectural styles that harmonize with the natural environment, living customs that include rich traditional festivals and folk activities, a social structure centered around clan organizations and village self-governance, economic activities based on traditional agriculture and specialized handicrafts, and a natural environment that demonstrates the harmonious coexistence of humans and nature (Q. Fang & Li, 2022). Through these characteristics, traditional villages showcase their unique cultural and ecological value (Dobrovodska et al., 2019).

The importance of preserving and developing traditional villages is reflected in various aspects, including cultural heritage, ecological protection, economic development, social harmony, and education and research (G. Li, Chen, Zhu, & Sun, 2023). Traditional villages carry rich historical memories and cultural connotations, making them a vital part of the cultural heritage of the Chinese nation. Protecting these villages helps to pass on and promote traditional culture, preserving the diversity and continuity of national culture (Jin, Wang, & Chen, 2022; Meng, Wang, Xu, Pi, & Wei, 2022). The construction and way of life in these villages embody the wisdom of harmonious coexistence between humans and nature. Protecting these villages can promote sustainable ecological development and maintain the ecological balance and natural landscapes of rural areas (M. Li, Zhang, Miao, He, & Chen, 2022).

Traditional villages, with their unique architectural and cultural resources, have significant tourism value (W. Wang, Cheng, Chen, & Liu, 2022). By developing rural tourism and specialized industries, local economic development can be stimulated, increasing villagers' income, improving living conditions, and contributing to rural revitalization. The preservation and development of traditional villages also help to enhance community identity and cohesion, promoting social harmony and stability. The clan relationships and self-governing organizations within traditional villages are essential structures in rural society, and maintaining these traditions helps to build a harmonious rural (Shen & Shen, 2021). Protecting traditional villages provides rich material for academic research and serves as a vivid educational resource, enhancing public awareness and understanding of traditional culture (F. Wang, Zhao, Qiu, & Luo, 2023).

Currently, research on the evaluation of traditional villages primarily focuses on the construction of evaluation indicator systems, the application of evaluation methods, and case studies (Kong, Xu, Wang, Wu, & Zhang, 2021a). Many studies have proposed relatively systematic evaluation indicators, such as cultural, environmental, social, and economic value indicators. Despite growing attention, current research on traditional village evaluation remains fragmented. Most studies emphasize constructing evaluation indicator systems, applying assessment methods, or analyzing individual cases. While indicators covering cultural, ecological, social, and economic aspects have been proposed, there is still a lack of systematic review and comparative analysis. This makes



it difficult to capture the overall research progress, identify methodological limitations, or clarify development trends (Bi, Li, & Han, 2021; Fu, Zhou, & Deng, 2021; G. Li et al., 2023). This study pursues two specific objectives. The first is to conduct a systematic review and synthesis of the existing literature on traditional village evaluation, with particular attention to the categorization of prevailing models, indicators, and methodological approaches. The second is to undertake a critical analysis of the limitations, inconsistencies, and methodological challenges evident in current research, thereby identifying key gaps in knowledge and outlining directions for future investigation.

2.0 Materials and Methods

The data was sourced from the Scopus databases. The retrieval date was July 30, 2024, covering a time span from 2004 to 2024. The search was conducted using "traditional village" and "evaluate" or "assess" as the main keywords, resulting in 53. Publications not in English or Chinese, conference abstracts, and studies unrelated were excluded. the 47 papers were coded and categorized according to publication year, research theme, methodological approach, and key findings, allowing for both descriptive statistics and thematic synthesis (Rosalina, Dupre, & Wang, 2021; T. Wang, Chen, Liu, & Guo, 2023).

The research methods primarily include literature review, a combination of quantitative and qualitative analysis, and comparative study (Yanan, Ismail, & Aminuddin, 2024). First, by systematically collecting and analyzing existing academic literature, the evaluation models and outcomes of traditional village evaluation research are summarized. Next, qualitative methods are employed to comprehensively analyze the existing problems in traditional village evaluation research. Finally, through comparative analysis and the examination of existing problems, the study provides insights into the prospects of traditional village evaluation research (Mu & Aimar, 2022).

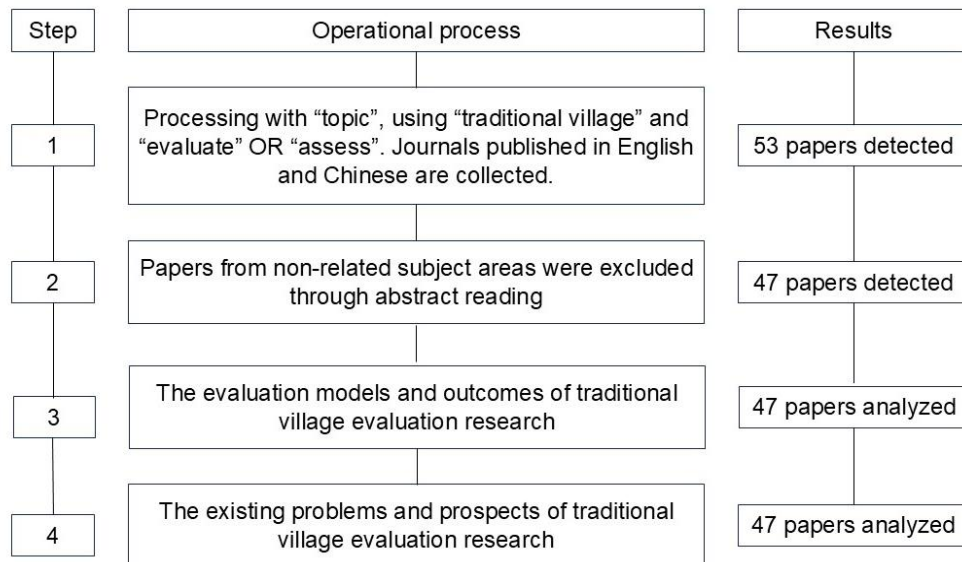


Figure 1: Flowchart of the study process



3.0 Results and Discussion

3.1 Evaluation Model

3.1.1 *Cultural Heritage Evaluation Model*

The cultural heritage evaluation model focuses on the protection and transmission of intangible cultural heritage, traditional skills, and festival customs that define the identity and continuity of traditional villages (C. Tang, Yang, Liu, & Xiao, 2023). This model emphasizes the preservation of generational cultural elements, such as folklore, traditional crafts, music, dance, and rituals (Hu, Xiang, Lin, Hou, & Dai, 2024). Evaluation criteria include the extent of preservation of these cultural elements, the vibrancy of cultural activities within the community, and the effectiveness of passing these heritage elements to younger generations. For example, in the of Qiandongnan, Guizhou, this model evaluates the continuity of Miao embroidery, silver jewelry making, and traditional festivals (Lei & Jialing, 2024). By focusing on these aspects, the model ensures that cultural practices remain vibrant and continue to contribute to the village's identity, while also addressing the challenges posed by modernization and external influences. By emphasizing both the preservation and intergenerational transmission of cultural heritage, this model provides a critical framework for sustaining the unique identity and cultural continuity of traditional villages.

3.1.2 *Ecological Protection Evaluation Model*

The ecological protection evaluation model aims to preserve the natural environment and traditional agricultural practices of traditional villages. This model is crucial for villages located in ecologically sensitive areas or those with unique agricultural systems that have coexisted with the environment for centuries (S. Liu, Bai, & Yao, 2021; Chengjun Tang, He, Zhang, Liu, & Zhang, 2019; J. Zhu et al., 2021). Evaluation criteria include the integrity of the surrounding ecosystem, the preservation of traditional farming methods, and the sustainable use of natural resources (G. Yang, Wu, Xie, Liu, & Li, 2023). For example, the Hani terraced fields villages in are evaluated based on their complex terraced farming system, which is closely integrated with natural landscapes and biodiversity (Shoo, n.d.). This model emphasizes the balance between human activities and environmental sustainability, ensuring the maintenance of traditional practices that contribute to ecological protection. It not only preserves the environment but also supports the cultural and economic livelihoods of the villagers. The ecological protection evaluation model serves as a vital tool for sustaining both environmental integrity and the socio-economic well-being of traditional village communities.



3.1.3 *Historical and Cultural Landscape Model*

The historical and cultural landscape evaluation model focuses on the preservation of traditional village architecture and overall landscape design. This model is particularly suitable for villages with significant historical buildings, traditional layouts, and cultural landmarks (Xia, Gu, Fu, Ren, & Sun, 2024). The evaluation emphasizes the condition of historical buildings, the integrity of traditional village layouts, and the authenticity of cultural landscapes (Kang & Liu, 2024; Pang & Lu, 2024). For example, Hong Village and Yixian Ancient Village in Anhui are evaluated for their well-preserved Huizhou architecture, traditional water systems, and village layouts reflecting historical settlement patterns. This model ensures that architectural heritage and the aesthetic quality of villages are maintained, turning these places into living museums showcasing historical lifestyles (Geng, n.d.). At the same time, the model also considers the challenges posed by modernization and the need for infrastructure development, balancing preservation with necessary adaptation. The historical and cultural landscape evaluation model provides a comprehensive approach to safeguarding architectural heritage while balancing preservation with contemporary development needs.

3.1.4 *Community Participation Evaluation Model*

The community participation evaluation model emphasizes the active involvement of villagers in the protection and development of their village. This model recognizes that protection efforts can only be sustained through the participation of villagers, ensuring they have a voice in decision-making and that their needs and desires are met (Ma, Wei, Yang, & Ran, 2024). Evaluation criteria include the level of community engagement, resident satisfaction, and the community's contribution to cultural preservation. For example, in traditional villages in Lishui, Zhejiang, villagers play a crucial role in heritage protection, managing cultural activities and maintaining traditional practices (Sheng Liu et al., 2022a). This model fosters a sense of ownership and pride among villagers, ensuring that protection efforts align with the community's values and long-term goals. It also promotes social cohesion and the sustainability of protection projects by utilizing local knowledge and resources. Community participation evaluation model highlights the essential role of villagers in ensuring sustainable heritage protection and fostering a cohesive, engaged community.

3.1.5 *Tourism Development Evaluation Model*

The tourism development evaluation model focuses on promoting tourism while preserving the cultural and ecological integrity of traditional villages. This model is crucial for villages that have become or are becoming tourist destinations. Evaluation criteria include the potential for sustainable tourism development, visitor satisfaction, and the ability to maintain cultural and environmental values amidst increased tourism



activity (C. Tang, He, Zhang, Liu, & Zhang, 2019; S. Wang, Wang, Shen, & Wu, 2023; Zheng, Li, Fang, & Chen, 2024). An example is the Longsheng terraced fields villages in Guangxi, where tourism development management has protected the unique terraced landscapes and traditional lifestyles while providing economic benefits to the local community. This model ensures that tourism contributes positively to the village economy without damaging the cultural and ecological resources that attract visitors. It also addresses challenges such as over-tourism and the commercialization of cultural heritage, aiming to establish a sustainable and mutually beneficial relationship between tourism and conservation (Kimmel, Perlstein, Mortimer, Zhou, & Robertson, 2015). The tourism development evaluation model underscores the need to balance economic growth with the preservation of cultural and ecological resources, promoting sustainable and responsible tourism in traditional villages.

3.1.6 Comprehensive Evaluation Model

The comprehensive evaluation model offers an overall approach to assessing traditional villages from multiple dimensions, including cultural heritage, ecological protection, economic development, and social welfare. This model aims to provide a balanced assessment that captures the complex interactions between these factors (C. Hua, Li, Gao, & Ke, 2023; Kong, Xu, Wang, Wu, & Zhang, 2021b; C. Tang et al., 2023). Evaluation criteria include the effectiveness of cultural heritage preservation, the sustainability of environmental practices, the level of economic development, and social harmony within the village. For example, Wuzhen in Zhejiang is assessed under this model for its successful integration of heritage preservation with modern tourism development, infrastructure improvements, and community welfare. The comprehensive evaluation model is particularly suitable for formulating balanced strategies that respect the historical and cultural significance of the village while promoting its sustainable development (Y. Xu & Lu, 2024). It helps identify strengths and areas for improvement in various aspects of village life, ensuring that development efforts are holistic and inclusive. The comprehensive evaluation model provides a holistic framework that integrates multiple dimensions, guiding informed decision-making for the sustainable preservation and development of traditional villages.

3.1.7 Technology-Driven Evaluation Model

The technology-driven evaluation model utilizes modern technological tools to assess and protect traditional villages. This model employs technologies such as Geographic Information Systems (GIS), 3D scanning, and digital modeling to evaluate the condition of village assets and monitor changes over time (Jia et al., 2024). Evaluation criteria focus on the extent of digital preservation, the effectiveness of technology application, and the comprehensiveness and accuracy of data collection (Xiong & Peng, 2023). For example, in Fujian's Yongding Tulou, 3D



scanning and modeling techniques are used to record and assess the structural integrity of these ancient earthen buildings, ensuring precise and effective preservation efforts (L. Hua, Chen, Fang, & Wang, 2018). This model is particularly valuable for villages with complex architectural structures or facing environmental degradation risks. By applying advanced technologies, the model enhances the ability to manage and protect cultural heritage, providing detailed and accurate data to support decision-making in preservation and development efforts. The technology-driven evaluation model offers a precise and data-informed approach, enhancing the efficiency and accuracy of traditional village preservation and management.

3.1.8 Policy-Driven Evaluation Model

The policy-driven evaluation model focuses on aligning village protection and development with national or local policies. This model is particularly important in government-led heritage preservation efforts, especially in regions where legal frameworks and government resources play a crucial role. Evaluation criteria include the alignment with relevant policies, the effectiveness of policy implementation, and the impact of these policies on village protection and development (Z. Li, Lang, Lou, & Zheng, 2023; X. Liu et al., 2023). For example, villages participating in China's traditional village protection projects are evaluated based on how well their preservation efforts align with government guidelines and the resulting outcomes (Xuedong Liu et al., 2023). This model ensures that protection strategies are not only effective but also in line with broader government objectives. It provides a framework for integrating regional-level village protection with regional and national development goals, ensuring that policy-driven resources and support are effectively utilized to protect and enhance the cultural and ecological value of traditional villages. The policy-driven evaluation model ensures that village protection and development are systematically guided by policy frameworks, enhancing coordination, resource allocation, and long-term sustainability.

Table 1: Evaluation Model of Traditional Villages

No	Evaluation Model	Objective
1	Cultural Heritage Evaluation Model	Protect and inherit intangible cultural heritage, traditional skills, and festive customs
2	Ecological Protection Evaluation Model	Protect natural ecological environment and traditional agricultural production methods
3	Historical and Cultural Landscape Evaluation Model	Preserve and display historical buildings and traditional landscapes
4	Community Participation Evaluation Model	Promote villagers' participation and ensure residents' role in village protection and development
5	Tourism Development Evaluation Model	Develop rural tourism to promote economic growth while protecting



		cultural and ecological resources
6	Comprehensive Evaluation Model	Evaluate villages comprehensively from multiple dimensions, including culture, ecology, economy, and society
7	Technology-Driven Evaluation Model	Utilize modern technology to evaluate and protect villages
8	Policy-Oriented Evaluation Model	Evaluate villages systematically based on national or local policies

3.2 Research outcomes

3.2.1 Identification and Classification of Traditional Villages

The identification and classification of traditional villages are foundational tasks for their protection and development (S. Zhu, Choi, & Kang, 2022). Given China's vast territory and diverse historical and cultural backgrounds, the types and characteristics of traditional villages are extremely varied. In this field of research, scholars typically perform in-depth analyses of various dimensions, such as the village's historical background, cultural heritage, architectural style, and ecological environment, to identify the types and features of traditional villages (Sheng Liu et al., 2022b). These studies help clarify which villages have historical and cultural value and should be included in protection efforts.

To better classify traditional villages, researchers also consider regional characteristics, socio-economic development status, and other factors, establishing a scientifically rational classification system. For example, some scholars categorize traditional villages into types such as "cultural," "ecological," and "mixed." These classifications consider both the material cultural heritage, such as ancient buildings and historical sites, and the intangible cultural heritage, such as folk customs and traditional crafts. This classification system helps to implement targeted measures for different types of villages during the protection process, thereby better achieving dual protection of their cultural value and ecological environment.

3.2.2 Development of Evaluation Indicator Systems

The construction of evaluation indicator systems is a core component of evaluation of traditional villages. Its purpose is to provide comprehensive and scientific assessment tools to accurately measure and guide the value of traditional villages and their protection measures (Fu et al., 2021). To achieve this goal, researchers typically propose a series of detailed evaluation indicators from multiple dimensions, including cultural, social, economic, and ecological aspects (Z.-W. Yang, Chen, Duan, & Liu, 2021). These indicators not only cover the value of tangible cultural heritage, such as the architectural style of ancient buildings and the preservation status of historical sites, but also address the continuity of intangible cultural heritage, including the transmission of folk traditions and religious rituals (Long, Işık, Yan, & Zhong, 2024).



In terms of tangible cultural heritage, the evaluation indicators primarily include the architectural style, the preservation status of ancient monuments, the structural integrity of historical buildings, and their historical value. Additionally, assessing aspects such as building materials, craftsmanship details, and spatial layout helps to comprehensively understand the level of protection of tangible cultural heritage. The evaluation of intangible cultural heritage focuses on the vibrancy of folk activities, traditional crafts, local languages, and religious rituals, as well as the community's recognition and participation in these cultural elements.

Social indicators are evaluated based on factors like community demographics, residents' quality of life, and the degree of community involvement. Understanding the community's attitude towards conservation efforts and the residents' participation in the transmission of traditional culture reflects the social vitality of traditional villages (Chu, Lam, & Williams, 2023; Song, Zhu, & Fong, 2021; Yan, Huang, Tan, Lang, & Chen, 2023). Economic indicators, on the other hand, pertain to the economic development of the village, including income sources, economic growth rates, and the contribution of tourism to the economy. This economic data is crucial for developing effective support measures to promote the sustainable development of villages.

The ecological environment is also a key area of evaluation, encompassing the quality of the village's natural environment, the health of its ecosystem, and the sustainability of resource use (Y. Liu, Liu, Lu, & Zhang, 2020; Jinxin Zhu et al., 2021). Assessing the harmony between the village and its surrounding environment ensures that cultural heritage protection does not negatively impact the ecosystem, which is vital for achieving sustainable development.

To enhance the scientific accuracy of these evaluations, many researchers have adopted quantitative analysis methods such as the Analytic Hierarchy Process (AHP) and Fuzzy Comprehensive Evaluation. The Analytic Hierarchy Process breaks down complex evaluation issues into multiple levels and quantifies the indicators at each level to derive a comprehensive score (Qunli Fang & Li, 2022). The Fuzzy Comprehensive Evaluation method deals with fuzzy data and uncertainty, providing more flexible and comprehensive evaluation results (Lee, Chen, Tsui, Che, & Chiang, 2021). These methods, by assigning weights to different indicators and quantifying the scores, enable an objective assessment of the overall value of traditional villages.

Such an evaluation system not only provides reliable scientific evidence for decision-makers but also aids in formulating more reasonable and effective protection and development strategies. Through quantified evaluation results, decision-makers can identify the priority areas for protection in traditional villages during modernization, balance cultural heritage preservation with economic development, and ensure that



traditional villages can continue to thrive and develop within modern society. In summary, a scientific evaluation indicator system is fundamental to achieving the sustainable development of traditional villages, helping to promote comprehensive progress in culture, economy, and society while preserving cultural heritage.

3.2.3 Case Studies and Practical Applications

Case studies are a crucial means of validating and refining theories on traditional village evaluation (Liqun, Mari, & Gunasagaran, 2022). In this field, researchers conduct on-site investigations of specific villages to gain a deep understanding of various aspects such as the village's history, culture, architecture, and ecology, and to assess their current state of preservation and development potential (Aryana et al., 2023). For example, villages like Hongcun in Anhui are not only renowned for their unique architectural styles and rich cultural heritage but have also become exemplary models in research due to their successful practices in conservation and development (Zhao, Deng, Shen, Ryan, & Gong, 2018).

In these case studies, researchers typically apply the constructed evaluation indicator systems to systematically assess the villages and then propose specific conservation and development strategies. For instance, in the study of the Fujian Tulou, researchers discovered that protecting the village required not only the preservation of its unique architectural forms but also the safeguarding of the Hakka culture that underpins them. As a result, practical efforts included not only the restoration of damaged buildings but also the enhancement of cultural identity and participation among residents through cultural events (L. Hua et al., 2018).

3.3 Problem Analysis

3.3.1 Limitations of Evaluation Methods

Current evaluation methods for traditional villages often emphasize quantitative indicators, such as the number of historical buildings, their preservation status, and the area of historical sites. While these methods provide specific data, they fail to fully capture the cultural depth and social value of the village. Quantitative indicators cannot adequately reflect qualitative aspects like the village's cultural atmosphere, traditional crafts, and community activities. This focus on data-driven quantitative measures can result in evaluation outcomes that do not fully represent the overall cultural and social value of the village, potentially leading to the development of conservation and development strategies that lack comprehensiveness.

For cultural aspects, the evaluation standards are often concentrated on tangible cultural heritage, such as architectural styles and the preservation of artifacts, while there is relatively less focus on intangible



cultural heritage, such as traditional festivals and folk activities. This limitation makes it difficult for evaluation results to comprehensively cover the cultural and social life of traditional villages, affecting the accurate understanding of the village's overall value. The limitations of the evaluation standards mean that the cultural richness and social functions of traditional villages are not fully reflected, which in turn affects the effectiveness and comprehensiveness of conservation strategies.

3.3.2 *Lack of Standardization in Evaluation Criteria*

There is a diversity of evaluation criteria for traditional villages and a lack of standardization, which makes it challenging to effectively compare and reference evaluation results. Different regions and organizations often use varying standards and methods when evaluating traditional villages, leading to significant differences in outcomes and contributing to the complexity and confusion of evaluation systems. For example, some evaluation frameworks may focus on the condition and quantity of historical buildings, while others may prioritize the frequency of cultural activities and community involvement. This lack of a unified framework often results in an incomplete assessment of the overall value of traditional villages.

Additionally, the absence of standardized evaluation criteria makes it difficult to conduct horizontal comparisons between evaluation results. This means that even two similar traditional villages may have significantly different evaluation outcomes due to differing standards, reducing the value of the results for policymakers and conservationists. Furthermore, the lack of standardized criteria hampers the ability to learn from and apply experiences and lessons across regions and fields. Therefore, establishing a scientific and unified evaluation standard system is crucial for improving the scientific accuracy and comparability of traditional village evaluations and for promoting coordination and collaboration in conservation efforts.

3.3.3 *Difficulty in Quantifying Cultural Value*

The cultural value of traditional villages is difficult to accurately measure using quantitative indicators, which introduces a strong element of subjectivity into the evaluation process. Traditional villages encompass not only tangible cultural heritage but also rich intangible cultural heritage, such as local customs, traditional crafts, and festival activities. These cultural elements are often challenging to quantify with specific numbers or indicators. For example, while a village's traditional craft may have high cultural value, its influence and transmission cannot be fully captured through simple numerical statistics. In contrast, indicators like the number of buildings and their preservation status can be objectively measured, but these data do not fully reflect the cultural depth of the village and the community's spirit.



As a result, evaluating cultural value often requires a combination of qualitative analysis and expert judgment, rather than relying solely on quantitative data. This introduces challenges related to subjectivity, as different evaluators may provide varying results based on their personal cultural understanding and experience. This subjectivity not only increases the uncertainty of evaluations but may also lead to biased results. To address this issue, evaluation methods should incorporate more qualitative assessment tools, such as expert interviews, community feedback, and cultural observations, to comprehensively consider the cultural significance and social value of traditional villages, while minimizing the impact of subjectivity.

3.3.4 *Partiality in Data Collection*

In data collection, there is often a focus on quantifiable indicators, with less attention given to subjective community perceptions and the dynamic changes in cultural transmission. This partiality can lead to an incomplete understanding of the current state of conservation and development in villages. For example, data collection might concentrate on the number and area of buildings while overlooking residents' views on the actual use and cultural value of these buildings. Such a singular approach to data collection may result in evaluation outcomes that do not accurately reflect the real situation, thereby affecting the scientific and effective nature of subsequent decision-making.

Data sources for traditional village evaluation are often limited, relying heavily on historical documents, expert assessments, and surveys. While these sources can provide valuable information, they also face issues such as outdated data and incomplete information. Additionally, there may be biases and subjective judgments in the data collection process. For instance, expert evaluations might be influenced by personal opinions, and surveys may not fully capture the genuine feelings and needs of community residents. These limitations can result in skewed understanding of the conservation and development status of traditional villages, affecting the accuracy and reliability of evaluation results.

Given the diversity and complexity of data collection, integrating and analyzing data from various sources presents a challenge. Traditional village conservation and development involve multiple aspects of data, such as building conditions, community activities, and cultural transmission, which often come from different channels and research methods. Finding effective ways to integrate and analyze these heterogeneous data to form a comprehensive and accurate evaluation result is an urgent issue. The lack of effective data integration and analysis mechanisms can lead to inaccuracies in evaluation results, impacting the formulation and implementation of conservation strategies.



4.0 Conclusion and Prospects

This review systematically synthesizes a large body of literature on traditional village evaluation, proposing a comprehensive framework and a research roadmap to provide clear guidance for future studies. The findings indicate that, as a critical component of cultural heritage, traditional villages require multi-dimensional and scientifically robust evaluation tools encompassing cultural, ecological, economic, and social aspects. However, existing approaches exhibit certain limitations, including an overreliance on quantitative indicators, difficulties in measuring cultural value, inconsistent evaluation standards, and partial data collection that often neglects residents' subjective perceptions and the dynamic nature of cultural transmission.

By integrating the strengths of various single-mode approaches, a comprehensive evaluation framework can offer more balanced and thorough analyses, thereby supporting the formulation of evidence-based conservation and development strategies. Moreover, the application of modern technologies, such as GIS and 3D modeling, can enhance both the precision and efficiency of evaluations. The establishment of standardized evaluation criteria and a universal framework not only facilitates cross-regional knowledge exchange but also improves the operational applicability of evaluation results and their utility in policy-making.

Furthermore, this review underscores the importance of community engagement and stakeholder collaboration. The introduction of community-led evaluation methods can strengthen villagers' sense of participation and ownership, thereby increasing the practical applicability of evaluation outcomes and promoting the effectiveness and sustainability of conservation measures. By integrating policy-oriented evaluation models and tourism development considerations, it is possible to harmonize heritage protection, village development, and economic interests, ensuring the sustainable development of traditional villages in the context of modernization.

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