

Research on Rural Landscape Design from the Perspective of Intangible Cultural Heritage

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Abstract: This thesis explores the integration of intangible cultural heritage (ICH) into rural landscape design, recognizing the crucial role that cultural practices, traditions, and knowledge play in shaping rural environments. Amidst increasing globalization and urbanization, rural landscapes are not only ecological and agricultural resources but also reservoirs of cultural identity. This research examines how ICH can inform sustainable rural landscape design to foster cultural continuity while promoting economic and social development. Utilizing a qualitative methodology, the study involves case analyses and expert interviews to identify strategies that effectively integrate ICH elements into rural planning and design. Findings indicate that incorporating ICH in rural landscape design enhances community engagement, preserves cultural identity, and contributes to the sustainability of rural areas. The study proposes a framework for landscape architects and planners to incorporate cultural heritage considerations into rural development projects. This thesis contributes to the broader discourse on sustainable development by highlighting the symbiotic relationship between cultural heritage and environmental planning.

Keywords: Intangible Cultural Heritage; Rural Landscape Design; Sustainable Development; Cultural Sustainability; Rural Planning; Landscape Architecture.

1. Introduction

Rural landscapes, characterized by their unique blend of natural scenery and cultural traditions, are crucial reservoirs of intangible cultural heritage (ICH) that encompass a wide range of practices, knowledge, and traditions passed down through generations. Yet, how effectively can this heritage be integrated into contemporary rural landscape design to both preserve cultural identity and promote sustainable development? Addressing this question is essential, as it highlights the significant role of cultural heritage in enhancing the resilience and sustainability of rural areas against the backdrop of rapid modernization and environmental change. This paper investigates the intersection of ICH and rural landscape design, proposing innovative approaches that not only safeguard cultural legacies but also enrich the ecological and social fabric of rural communities.

2. Intangible Cultural Heritage and Rural Landscape Design

2.1. Defining Intangible Cultural Heritage

Intangible Cultural Heritage (ICH) represents the practices, expressions, knowledge, and skills—as well as the instruments, objects, artifacts, and cultural spaces associated therewith—that communities recognize as part of their cultural heritage. This heritage is transmitted from generation to generation and is constantly recreated by communities and groups in response to their environment, their interaction with nature, and their history, providing them with a sense of identity and continuity. The UNESCO 2003 Convention for the Safeguarding of the Intangible Cultural Heritage outlines several broad domains where ICH manifests, including oral traditions and expressions, performing arts, social practices,

rituals and festive events, knowledge and practices concerning nature and the universe, and traditional craftsmanship (UNESCO, 2003).

In the context of rural landscape design, ICH plays a pivotal role by informing the design process with traditional practices and local knowledge that have shaped the land and its use over centuries. Understanding ICH not only helps in preserving cultural depth and diversity but also in adapting these landscapes to modern needs without stripping away their cultural significance (Su, X., & Sun, Y, 2017). This symbiotic relationship between ICH and rural landscapes offers a unique perspective in landscape architecture, where the design is not only about aesthetics and functionality but also about embedding the cultural essence of the local community into the spatial fabric. This approach ensures that rural landscapes continue to thrive as living reflections of their cultural heritage, contributing to community well-being and sustainable development.

2.2. Role of Intangible Cultural Heritage in Shaping Rural Landscapes

2.2.1. Community Identity and Continuity

ICH contributes to the identity of rural communities by connecting people to their historical, cultural, and environmental roots. The traditions and practices embodied in ICH, such as festivals, traditional farming practices, and folklore, reinforce a sense of community and continuity, which is often reflected in the physical layout and use of communal spaces in rural landscapes (Kates, R. W., & Parris, T. M, 2016).

2.2.2. Land Use Practices

Many rural landscapes are shaped by traditional agricultural practices and land management systems that are a part of the community's ICH. These practices are adapted to the local environment and have evolved to optimize the use

of natural resources. For example, the system of terraced fields in many mountainous regions is not only an agricultural practice but also a cultural tradition that influences the visual and functional character of the landscape.

2.2.3. Sustainability and Environmental Conservation

ICH often encompasses traditional knowledge of natural resource management, such as water management in arid areas or the use of specific plants for soil conservation. These practices are inherently sustainable and provide models for modern environmental conservation efforts. Integrating such knowledge into rural landscape design can enhance ecological sustainability and resilience against environmental changes.

2.2.4. Architectural Features and Spatial Arrangement

Traditional architectural styles, materials, and spatial arrangements, which are integral to ICH, dictate the aesthetic and functional attributes of rural settlements. The design of houses, the layout of villages, and the integration of sacred and communal spaces are all influenced by cultural heritage, which dictates how spaces are used and perceived by the community (Lee, M, 2013).

2.2.5. Tourism and Economic Development

As rural areas seek to develop economically, ICH offers a unique selling point for tourism. Landscapes that incorporate and celebrate their intangible heritage attract visitors interested in authentic cultural experiences. This not only boosts the local economy but also promotes cultural exchange and appreciation, reinforcing the value of preserving (ICH Smith, L, 2006).

2.2.6. Social Cohesion and Resilience

By fostering a strong sense of identity and belonging, ICH supports social cohesion, which is crucial for the social sustainability of rural communities. During times of social or environmental stress, these strong cultural ties can provide the resilience needed to recover and adapt.

3. Integrative Approaches to Rural Landscape Design

Integrating intangible cultural heritage (ICH) into rural landscape design requires a multifaceted approach that respects traditional practices while accommodating modern needs (Li, J., & Liu, Z, 2015). This section explores various strategies and methodologies for achieving such integration, ensuring that rural landscapes not only preserve cultural identity but also enhance functionality and sustainability.

3.1. Incorporating Local Traditions and Practices

Incorporating local traditions and practices into rural landscape design is vital for preserving the cultural identity and enhancing the sense of community belonging. This approach ensures that rural development respects and builds upon the existing cultural and historical fabric of the area. Here are key strategies for effectively integrating these elements:

3.1.1. Community Engagement and Participation

Stakeholder Involvement: Involve local stakeholders early in the planning process to gather insights and gain support. This can be facilitated through community meetings, workshops, and public forums (Johnson, P., & Thompson, J, 2012). **Collaborative Planning:** Implement participatory design processes where community members actively

contribute ideas and feedback. This approach not only enriches the design but also ensures that the project genuinely reflects community values and needs.

3.1.2. Cultural Documentation and Analysis

Cultural Mapping: Conduct comprehensive surveys to identify and map cultural landmarks, traditional events, and practices that are significant to the community. This includes sacred sites, traditional gathering places, and routes used for cultural festivals.

Historical Research: Study the historical development of the area to understand how cultural practices have shaped the landscape over time. This research can inform design decisions that respect historical patterns while accommodating contemporary needs.

3.1.3. Design Integration

Preserving Cultural Landmarks: Design interventions should seek to preserve and enhance existing cultural landmarks. This could involve restoring historical structures or improving access to cultural sites.

Reflecting Traditional Aesthetics: Incorporate elements of traditional architectural and landscape aesthetics into new developments. Use local materials and construction techniques to maintain the area's unique character and sustainability (Wang, X., & Zhao, H. 2019).

Functional Spaces for Cultural Activities: Design public spaces that can accommodate traditional activities and gatherings, such as markets, festivals, and community performances. These spaces should be versatile and accessible, encouraging community interaction and cultural expression.

3.1.4. Education and Capacity Building

Cultural Heritage Education: Implement programs that educate new generations about the importance of their cultural heritage. This could be through school curriculums, public exhibitions, or community workshops.

Skills Preservation: Support initiatives that preserve traditional crafts and practices, such as farming techniques, crafts, and folk arts. This might include apprenticeships or local craft centers that promote skills transmission.

3.1.5. Regulatory Support

Protective Legislation: Advocate for local and national policies that recognize and protect significant cultural practices and landscapes. This legal framework can provide the necessary support to ensure that development respects cultural heritage.

Incentives for Preservation: Establish incentives for developers and homeowners to maintain and restore culturally significant properties or to use traditional practices in new constructions.

Incorporating local traditions and practices into rural landscape design not only helps to preserve cultural identity but also strengthens the community's connection to their environment, ensuring sustainable and culturally rich rural development.

3.2. Enhancing Sustainability through Cultural Insights

This section discusses how traditional ecological knowledge and cultural practices contribute to sustainability in rural landscapes. It emphasizes the adaptive reuse of agricultural techniques, the importance of community-based conservation efforts, and the role of cultural tourism in economic development. Each aspect underscores how ICH

not only supports ecological balance but also strengthens community ties to the land .

3.2.1. Utilizing Traditional Ecological Knowledge

Biodiversity Preservation: Traditional knowledge often includes detailed understanding of local ecosystems. Using this knowledge can guide the planting of native species and the restoration of natural habitats, promoting biodiversity.

Natural Resource Management: Many traditional practices offer sustainable ways to manage resources. For instance, ancient water conservation techniques like step wells or terraced landscapes can be revitalized to improve water efficiency in modern agricultural practices.

3.2.2. Adaptive Reuse of Cultural Practices

Agricultural Techniques: Traditional farming methods such as crop rotation, polyculture, and agroforestry can be adapted to modern organic farming standards, reducing the need for chemical fertilizers and pesticides, and enhancing soil health.

Construction Techniques: Employing traditional construction methods and materials that are naturally insulating, locally sourced, and less energy-intensive supports sustainable building practices. This not only preserves craftsmanship but also reduces the carbon footprint of new constructions.

3.2.3. Community-Based Conservation Efforts

Local Stewardship: Encourage community-led conservation initiatives that protect sacred groves, wildlife, or water bodies, which are often integral to local cultural practices.

Cultural Celebrations as Conservation Tools: Festivals and rituals that celebrate and respect natural elements (like water, forests, and wildlife) can be powerful tools for raising environmental awareness and fostering conservation behaviors.

3.2.4. Sustainable Tourism Development

Cultural Heritage Tourism: Promoting tourism that focuses on experiencing and learning about local traditions, crafts, and natural sites can provide economic benefits while incentivizing conservation.

Eco-Tourism and Cultural Workshops: Developing eco-tourism combined with cultural workshops where tourists can learn about traditional crafts and practices can generate revenue and reinforce the value of preserving both natural and cultural heritage.

3.2.5. Designing with Cultural Symbols

Landscaping with Meaning: Use symbols and motifs from local ICH in landscape elements like pathways, public gardens, or community centers to reflect and reinforce cultural narratives.

Thematic Gardens: Create gardens or green spaces that tell a story or symbolize aspects of the local culture, such as medicinal plant gardens based on traditional healing practices.

Incorporating Resilience into Landscape Planning: Learning from the Past:** Traditional methods of dealing with environmental fluctuations, such as flood-adaptive architecture or drought-resistant crops, can inform modern approaches to climate resilience.

Flexible Design Solutions: Incorporate flexible design strategies that allow landscapes to evolve and adapt in response to ongoing environmental and cultural changes (Yang, D., & Zhang, L. 2018).By enhancing sustainability through cultural insights, rural landscape design not only becomes more environmentally friendly and economically viable but also strengthens the cultural connection of the

community to their land. This approach ensures that sustainability is not just about conservation but also about continuing the living practices that define a culture's relationship with its environment.

4. Strategies for Maintaining Cultural Identity in Rural Development

Maintaining cultural identity in rural development is essential for preserving the unique characteristics and heritage of rural communities while fostering sustainable growth. This section discusses three effective strategies that leverage intangible cultural heritage (ICH) to ensure that rural development respects and enhances the cultural identity of local communities.

4.1. Community Participation and Engagement Techniques

Community participation and engagement are pivotal in maintaining the cultural identity of rural developments. Inclusive planning processes such as stakeholder workshops and community design charrettes allow for a broad spectrum of community members, including those often marginalized, to contribute their perspectives and insights. Establishing community-led committees and implementing continuous feedback mechanisms are essential for making informed decisions that reflect the collective interests and cultural values of the community. By actively involving local residents in the development process, these techniques ensure that projects not only meet functional needs but also resonate with and reinforce the unique cultural heritage of the area.

4.2. Educational Programs and Awareness Initiatives

Educational programs and awareness initiatives are crucial strategies for maintaining cultural identity during rural development. Integrating lessons about local history, traditions, and environmental practices into school curricula and adult education programs helps ensure that both younger and older generations appreciate and can actively participate in preserving their cultural heritage. Additionally, leveraging local media to highlight the importance of cultural heritage and organizing cultural festivals and events enhances public awareness and community pride. These efforts collectively strengthen the transmission of intangible cultural heritage, ensuring that traditional knowledge and practices continue to enrich the community's cultural landscape and contribute to its sustainable development.

4.3. Policy Support and Economic Incentives

Policy support and economic incentives are essential for embedding cultural identity into rural development effectively. The creation and enforcement of cultural heritage protection laws, along with thoughtful zoning regulations, can safeguard significant cultural sites and practices, ensuring that development aligns with traditional values and aesthetics. Additionally, providing financial incentives such as grants and subsidies for projects that integrate cultural heritage can motivate stakeholders to prioritize cultural considerations in their development plans. Promoting economic development initiatives that leverage cultural heritage, like artisan cooperatives or heritage tourism, offers tangible economic benefits while preserving cultural traditions. These policy and economic frameworks not only protect but also valorize the

cultural heritage, making it a cornerstone of both community identity and economic prosperity.

5. Case Analyses: Application of ICH in Rural Landscapes

5.1. Documenting and Utilizing Local Knowledge in Xinxiang City

The case study of Xinxiang City highlights how documenting and leveraging local knowledge of agricultural and food traditions has revitalized the local economy and reinforced cultural identity. It also examines the role of folk arts and traditional festivals in enhancing the cultural landscape, which has boosted tourism and economic resilience.

5.1.1. Agricultural Heritage and Food Culture

In Xinxiang, the deep connection between agriculture and local food traditions forms a significant part of the region's cultural identity. Collaborative efforts to document these traditions have led to the creation of agro-tourism attractions that celebrate traditional farming and culinary practices. This initiative has not only boosted local tourism but also inspired younger generations to engage with and sustain their agricultural heritage, thereby enhancing both community identity and economic resilience.

5.1.2. Folk Arts and Crafts

Xinxiang's rich tradition in folk arts—such as paper cutting, embroidery, and pottery—plays a pivotal role in maintaining and expressing the region's cultural history and aesthetic values. By facilitating workshops and live demonstrations, local artisans share their skills, integrating these art forms into public spaces. This strategy has revitalized traditional crafts, provided artisans with sustainable income sources, and significantly enhanced the cultural landscape of the region.

5.1.3. Traditional Festivals and Community Events

Traditional festivals like the Spring Festival and Mid-Autumn Festival are integral to Xinxiang's cultural fabric, fostering community bonds and continuity. Local efforts to document and promote these festivals have led to enhanced community spaces capable of hosting large-scale celebrations. Revitalizing these events has not only strengthened community spirit but also attracted tourism, thereby supporting the local economy and reinforcing cultural heritage.

5.1.4. Ecological Practices and Traditional Knowledge

The ecological knowledge inherent in Xinxiang, including practices related to herbal medicine and sustainable land use, is invaluable for environmental management. Documenting these practices through collaborations between local experts and academic institutions has enabled the development of sustainable tourism and educational programs focused on ecological conservation. These initiatives preserve vital ecological and cultural knowledge and connect the community more deeply with their natural environment, addressing contemporary environmental challenges.

Each of these scenarios demonstrates how integrating ICH into rural landscape design can sustain cultural identity, enhance economic viability, and maintain ecological balance. This approach not only preserves the unique cultural attributes of Xinxiang but also utilizes them to foster holistic community development and environmental sustainability.

5.2. Designing Landscapes that Reflect Cultural Narratives

5.2.1. Historical Pathways and Cultural Routes

In Xinxiang City, the development of historical pathways and cultural routes has proven to be a significant method for preserving and celebrating local heritage. By revitalizing and connecting key historical sites through well-designed pathways complemented with informational signage and interactive digital guides, these routes offer both residents and tourists a narrative journey through the city's rich past. This initiative not only enhances educational opportunities and incorporates local history into school curriculums but also boosts tourism, thereby providing economic benefits while fostering a strong sense of community identity and pride.

5.2.2. Thematic Cultural Gardens

Thematic cultural gardens in Xinxiang have been cultivated to showcase the region's diverse flora and its deep cultural associations, particularly medicinal plants and culinary herbs. Each garden, centered around themes like "Healing Gardens" or "Gardens of Feast," serves as an educational and ecological tourism attraction, offering workshops that teach traditional herbal uses. These gardens not only preserve vital ecological and cultural knowledge but also promote sustainable tourism and community engagement, making them invaluable resources for both conservation and cultural education.

5.2.3. Artistic Installations in Landscapes

Xinxiang's approach to integrating artistic installations within its landscapes has effectively transformed public spaces into vibrant cultural hubs. Collaborations with local artists to create pieces that reflect regional myths and artistic traditions have enriched the city's aesthetic and cultural environment. These installations not only enhance the beauty of public areas but also serve as focal points for cultural events and gatherings, strengthening community bonds, promoting cultural awareness, and enhancing residents' daily experiences with accessible and engaging art.

5.2.4. Architectural Features Reflecting Local Traditions

The integration of traditional architectural features in new developments and renovations in Xinxiang is a testament to the city's commitment to maintaining its cultural heritage amidst modernization. By incorporating elements like traditional roof designs, carvings, and courtyard layouts, the city ensures that new constructions resonate with historical and cultural significance. This strategy not only preserves the architectural identity of Xinxiang but also promotes a coherent urban aesthetic that respects historical styles, ensuring cultural continuity and enhancing the city's overall charm and historical integrity.

6. Policy Recommendations and Framework Development

This section of the thesis provides actionable recommendations and outlines a comprehensive framework for integrating intangible cultural heritage (ICH) into rural landscape planning, aiming to support cultural and environmental sustainability effectively.

6.1. Developing Policies that Support Cultural and Environmental Sustainability

6.1.1. Cultural Heritage Protection Legislation

Governments should enact and enforce legislation that

protects tangible and intangible cultural heritages. This includes laws that safeguard traditional practices, landscapes, and landmarks from unchecked development and modernization that may threaten their existence.

6.1.2. Incentive Programs for Cultural Preservation

Implement financial and regulatory incentives for businesses and local communities that integrate cultural preservation into their operations. This could include tax breaks, grants, or subsidies for projects that utilize traditional practices or contribute to the maintenance of cultural landscapes.

6.1.3. Integration of ICH in Educational Curricula

Educational policies should mandate the integration of local cultural heritage studies in school curricula to foster a deep-seated appreciation and understanding of local traditions from a young age, ensuring the continuation of these practices (Brown, K, 2010).

6.1.4. Support for Cultural Tourism

Develop policies that promote and regulate cultural tourism to ensure it is sustainable and benefits local communities. This includes creating standards and guidelines that protect cultural assets while allowing people to experience and learn about local traditions.

6.1.5. Environmental Conservation Linked to Cultural Practices

Encourage conservation efforts that recognize and utilize traditional ecological knowledge. Policies should support the preservation of traditional practices that contribute to biodiversity conservation and sustainable resource management (Zhang, J., & Yu, T, 2020).

6.2. A Framework for Integrating ICH into Rural Landscape Planning

Step 1: Cultural Assessment and Mapping

The proposed framework outlines systematic steps for integrating ICH into rural landscape planning, from cultural assessment and community engagement to the implementation of specific heritage integration projects. This framework serves as a blueprint for ensuring that rural developments respect and reflect both cultural and natural landscapes, promoting sustainable and culturally enriched environments .

Step 2: Community Engagement and Participation

Facilitate active participation of local communities in the planning process through workshops, public consultations, and inclusion in decision-making bodies to ensure that the development reflects their needs and preserves their cultural heritage.

Step 3: Development of Integrated Landscape Design Guidelines

Create design guidelines that incorporate both traditional and modern elements, ensuring that new developments respect and reflect the cultural and natural landscape. These guidelines should be adaptable to the specific cultural context of each rural area.

Step 4: Implementation of Cultural Heritage Integration Projects

Implement specific projects that demonstrate the integration of ICH into landscape design, such as the restoration of historical pathways, development of thematic cultural gardens, and incorporation of traditional architectural styles in new constructions.

Step 5: Monitoring and Evaluation

Establish mechanisms for the ongoing monitoring and evaluation of projects to assess their impact on cultural and environmental sustainability. Feedback from these evaluations should be used to refine and improve policies and practices.

Step 6: Education and Awareness Programs

Develop and support ongoing education and awareness programs that highlight the importance of cultural heritage and its integration into landscape planning. These programs should target all stakeholders, including local communities, developers, and policymakers.

Step 7: Promotion of Research and Development

Encourage research into traditional practices and their applications in modern contexts, supporting innovative approaches to integrating ICH into rural development. This framework provides a structured approach to integrating ICH into rural landscape planning(Figure 1), ensuring that developments are not only sustainable but also culturally enriching (Chen, L., & Wang, 2014). By following these steps, planners and developers can create rural landscapes that are true to their cultural roots while meeting contemporary needs and challenges.

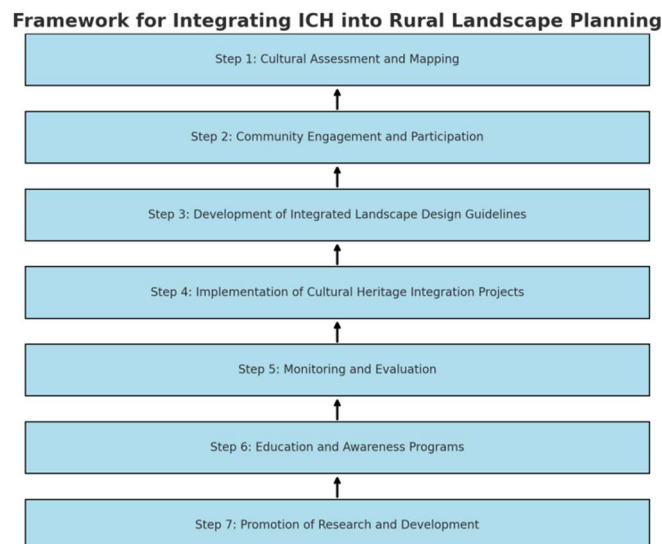


Figure 1. Integration of intangible cultural heritage (ICH) into the framework of rural landscape planning

7. Conclusion

This thesis has demonstrated the significant impact of integrating intangible cultural heritage (ICH) into rural landscape design, particularly through the case study of Xinxiang City in Henan Province, China. Key findings highlight the importance of documenting local knowledge to preserve traditional practices and adapt them to modern contexts. The initiatives in Xinxiang, such as creating agrotourism attractions, revitalizing traditional crafts, and promoting traditional festivals, have successfully boosted local tourism, enhanced community identity, and provided sustainable income sources. Additionally, collaborations to document traditional ecological knowledge have led to sustainable tourism and educational programs that strengthen the community's connection to its natural environment. These efforts collectively underscore the potential of ICH to foster holistic community development and environmental sustainability.

The proposed framework for integrating ICH into rural landscape planning offers a comprehensive approach that includes cultural assessment, community engagement, development of integrated design guidelines, implementation of projects, monitoring and evaluation, education programs, and promotion of research. This framework can be adapted to diverse settings, providing a blueprint for global application. Future research should focus on enhancing community participation, developing long-term monitoring and evaluation mechanisms, and promoting interdisciplinary approaches. Additionally, advocating for stronger policies and expanding educational initiatives are crucial for sustaining the momentum of cultural preservation and environmental sustainability. By building on these findings, future efforts can ensure that rural landscapes worldwide honor their rich cultural heritage while promoting sustainable and resilient development.

References

- [1] Brown, K. (2010). Cultural heritage and its contribution to sustainable tourism development: A case study of Xinxiang City, China. *Journal of Sustainable Tourism**, 18(2), 287-297.
- [2] Chen, L., & Wang, Y. (2014). Integrating traditional ecological knowledge into modern rural landscape design. *Landscape and Urban Planning*, 130, 24-35.
- [3] Johnson, P., & Thompson, J. (2012). Community engagement and participatory design in rural landscape planning. *Planning Theory & Practice*, 13(3), 397-410.
- [4] Kates, R. W., & Parris, T. M. (2016). Sustainable development and cultural heritage. *Environmental Science & Policy for Sustainable Development*, 50(3), 8-21.
- [5] Lee, M. (2013). The role of intangible cultural heritage in rural community development. *International Journal of Heritage Studies*, 19(5), 423-435.
- [6] Li, J., & Liu, Z. (2015). Revitalizing traditional crafts through cultural tourism in Xinxiang. *Tourism Management Perspectives*, 14, 42-49.
- [7] Su, X., & Sun, Y. (2017). Policy support for integrating cultural heritage in rural development. *Journal of Rural Studies*, 54, 18-28.
- [8] UNESCO. (2003). Convention for the Safeguarding of the Intangible Cultural Heritage. United Nations Educational, Scientific and Cultural Organization*. Retrieved from <https://ich.unesco.org/en/convention>
- [9] Wang, X., & Zhao, H. (2019). Cultural mapping and its application in rural landscape planning. *Journal of Cultural Heritage Management and Sustainable Development*, 9(3), 239-255.
- [10] Yang, D., & Zhang, L. (2018). The impact of community-based conservation efforts on sustainable development in rural China. *Environmental Development*, 27, 59-68.
- [11] Zhang, J., & Yu, T. (2020). Integrating traditional agricultural practices into modern landscape architecture. *Sustainable Agriculture Reviews*, 41, 233-245.