

Reassessing Hunza's Cultural Value: Exploring Its Potential for Heritage Recognition Through Tourism

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Abstract- Numerous cultural landscapes remain under-represented in heritage discourses, despite reflecting the profound relationships among people, place, and history. This article reassesses the underrepresented cultural landscape potential of Hunza, Pakistan, an area renowned for its scenic beauty and historic architecture. The study employs a mixed-methods approach using field surveys, on-site observations, questionnaire surveys, interviews, geographic and architectural analysis and statistical analysis tool: Statistical Package for Social Sciences (SPSS) to analyze the factors affecting local participation, tourism infrastructure, tourist experiences and cultural continuity. It highlights how Hunza's rich cultural expressions, vernacular customs, and socio-historic identity are overshadowed by this restricted recognition. The results indicate that although Hunza's natural value is admired, its architectural distinctiveness is being lost, and its potential for cultural tourism is not being fully comprehended. The study positions Hunza as a cultural landscape in transition, and recommends its recognition using contextual strategies that protect its tangible and intangible heritage. It highlights the significance for incorporating local stakeholder involvement and heritage-sensitive tourism planning to achieve sustainable preservation and enhance recognition of Hunza's distinctive cultural identity.

Indexed Terms- Cultural Landscape, Cultural Tourism, Heritage Recognition, Tourism Management

I. INTRODUCTION

The importance of cultural landscapes and cultural tourism in conserving cultural assets while promoting local communities and sustainable development across the globe is becoming more widely acknowledged. These concepts have gained academic attention in recent decades, however mainly in isolation from each other. The amalgamation of these concepts to jointly promote one another remains an underexplored area in academic and cultural-heritage narratives. South Asia is intricately layered with deep historical and cultural lineages, as well as vernacular identities, but they remain unrecognized in the broader academic narrative as critically argued by author (Sinha, 2016). One such underexplored regions in South Asia, is Hunza, located in the northern, mountainous region of Pakistan. It is a famous tourist destination, celebrated for its panoramic views of sceneries and centuries-old and preserved architectural heritage. Once an isolated region, Hunza has witnessed centuries of migrations and cultural evolvments, which are made accessible by the opening of the Karakoram Highway (KKH) (Naeem, 2016). Tourism in Hunza primarily focuses on natural landscapes, adventure-based experiences, and non-comprehensive heritage tours while its cultural and historic potential gets over-shadowed in the process. The purpose of this study is to show that Hunza satisfies the requirements for a UNESCO-recognized cultural landscape and that including cultural tourism can improve community involvement and heritage preservation in the process.

Hunza holds a significant place due to its strategic geopolitical location. From attracting numerous

civilizations to being a critical common point connecting with Karakoram Highway and China-Pakistan Economic Border (CPEC) (see figure 1), it continues to be utilized as a trading itinerary since the famous Silk Route (Kreutzmann, 2006).



Fig. 1: Accessibility Map highlighting Karakoram Highway and Regional Roads

Subsequently, tourism and cultural exchanges have also taken place. Moreover, the topography of Hunza creates a distinctive collection of terrains with mountains, slopes, terraced plains consisting of housing and agriculture, and flowing rivers. All these factors account for a rich geography for agriculture and adaptive lifestyles. Hence, Hunza is a complex combination of rich ancestral history, several ethnolinguistic and cultural diversities, heritage architecture, its dialogue with the geography's offerings, and its adapted lifestyles and identities.

Cultural Landscapes are the interactions between humans and nature, highlighting the development of human societies and settlement patterns shaped by the opportunities and constraints offered by the geographies, and evolving social-economic and cultural narratives. Carl O. Sauer defined cultural landscapes as the result of the interaction between natural settings and human actions, and this conceptualization is consistent with his definition (Sauer, 1925). Furthermore, by distinguishing the tangible and intangible characteristics of such landscapes, the UNESCO World Heritage Operational Guidelines provide a global framework for their recognition. They encompass land divisions, architecture, historical and heritage sites, national parks and ethnographic regions.

Cultural Landscapes are categorized and selected on the basis of three types as defined by UNESCO (UNESCO, 2024); Clearly Defined Landscapes; deliberately designed for ornamentation, Organically Evolved Landscapes; created as a connection with or as a response to an existing economic, administrative or religious discourse, further divided into Relict Landscapes; where the evolution took place and stopped or ended with time, and Continuing Landscapes; ongoing and actively engaging communities, and finally Associative Landscapes; having deep religious, cultural or artistic influence and connection with natural elements instead of tangible cultural evidence. For instance, Bamiyan Valley in Afghanistan and Cultural Landscapes of Uramanat are listed in the UNESCO World Heritage List as Continuing Cultural Landscapes (UNESCO, 2024). These global examples continue to evolve and engage their communities with culture, religion and natural landscapes. However, Hunza, despite its alignment with similar qualities and attributes, lacks this recognition.

This study uses comparative examples of globally known cultural landscapes, each of which offers unique but comparable forms of heritage preservation, community integration, and tourism management, to put Hunza's unrealized potential into perspective. Table 1 demonstrates a comparative analysis of Hunza with global examples recognized by World Heritage Convention as cultural landscapes or known for their strategic cultural tourism models. The examples showcase similarities with Hunza on geographical, architectural and cultural backgrounds, and demonstrate their tourism and management models which serve as a learning ground for Hunza.

Table 1: Comparative Analysis of Hunza with UNESCO recognized Cultural Landscapes and Examples of Successful Cultural Tourism

Criteria	Hunza Valley, Pakistan	Bhutan	Bamiyan Valley, Afghanistan	Uramanat, Iran	Koutammakou, Togo	Sukur Nigeria
Landsc ape	Distinctive high-altitude valley, enclosed by Karakoram	Diverse elevation zones in Himalayas	High-altitude topography, located within Hindukush mountains	Steep mountain region, highlands of Kurdistan	Eastern houses with Savannah landscape	Hilly landscape and terraced fields
Cultural Significance	Tibetan, Central and South Asian fusion, historic trade route on the Silk road	Buddhist traditions, architecture and spirituality	Buddhist, Hellenistic and Islamic blend	Home to Hawrami tribe, retains Kurdish language and traditions	Inhabited by Batammariba tribe, well-known for mud-tower houses	Distinctive Hausa cultural heritage, ancient iron industry
Architecture and Built Environment	Historic heritage forts and palaces, terrace agriculture and housing, clustered settlement patterns, indigenous construction techniques, local material (stone, wood, mud etc.) houses	Forts (Dzongs), traditional housing layouts, monasteries	Cave paintings, massive Buddha figures and Buddhist temples	Clustered terraced housing, stone architecture w.r.t weather conditions	Takienta (towered mud houses) made of local materials	Slopped and stepped agricultural fields, iron industry, dry-stone construction.
Tourism Model	Attention towards sustainable tourism. Efforts on eco-tourism and cultural tourism	Sustainable tourism through “high value-low volume” dynamic	Heritage and Preservation tourism prompted by UNESCO	Recognized by UNESCO, cultural and eco-tourism initiatives Efforts on cultural and eco-tourism, acknowledged by UNESCO	Limited tourism due to preservation of traditional ways of life Confined tourism to safeguard traditional lifestyles	Minimum infrastructure with lesser amount of cultural tourism

Govern mental and Internat ional Recogn ition	Safeguarding cultural an architectural heritage, aims on sustainable tourism	Preservation of cultural and ecological character through firm government laws	UNESCO World Heritage Site; international restoration programs International preservatio n projects, UNESCO World Heritage Site	Listed in 2021, a UNESCO World Heritage Site	Listed in 2004, a UNESCO World Heritage Site	Listed in 1999, a UNESCO World Heritage Site
Comm unity Involve ment	Engagement in cultural and architectural heritage preservation, local businesses and eco-tourism	Community roles with government- backed projects on preservation	Preservatio n ruled by international parties and local government	Cultural preservation through community engagement	Traditional lifestyles, cultural authenticity	Preservation of indigenous practices
Touris m Manag ement	Demands standardized infrastructure development models	Stern management with international tourism costs	Managed by UNESCO, vandalism prohibited via safety precautions	Sustainable tourism idea led by government authority	Restricted tourism infrastructure to preserve integrity	Traces of cultural tourism
Challen ges	Modernization and unplanned urban expansion, limited resources and regulations, climatic variations	Harmonized economy and cultural integrity	Risks of vandalism and political disruption	Maintaining balance between modernizatio n and preservation Efforts towards coordinating tradition vs modern	Infrastructure development while maintaining traditional lifestyle Preserving traditional living style, infrastructure evolvment	Protection of heritage iron industry, constrained economical surplus via tourism
Lesson s for Hunza	Requirement of standardized models for supervision of heritage sites and tourism management.	It can adopt the policy of high value- low volume tourism from Bhutan	Similar collaborativ e drives for heritage preservatio n like Afghanistan	Iran's significant practices of balancing traditional activities with growth models	Similar community- driven efforts on cultural heritage restoration like Togo and Benin	Native craft and architecture maintenance like Nigeria.

The comparative analysis clearly exemplifies the significance of the perseverance of local culture which results in reinforced cultural distinctiveness, its tactical management and growth of tourism. Several similarities of culture, geography, and architecture are found with Hunza's region as well as potential areas of gaps are highlighted in terms of management and strategic policy making for its future development and recognition.

The first example highlights Bhutan as a successful case of tourism model through its Gross National Happiness (GNH) and other strict government policies. These policies not only preserve cultural authenticity but also control the flow of tourists by following the high value-low volume strategy. The firmness shown towards the policy obligation successfully results in cultural preservation, managed tourist influx and positive execution of governmental laws (Brooks, 2010). With the continual tourism growth in Hunza, this strategy can be highly effective.

The next global example is the Bamiyan Valley situated in Afghanistan. It is deeply-rooted with Buddhist history and is surrounded by scenic mountainous layers. This case of a cultural landscape is a true depiction of how cultural identities can survive the tests of recurring disputes and acquire acknowledgement with the continual support of authorized international bodies, and continued preservation efforts (UNESCO, 2024). As a habitat to numerous cultures and religions, Hunza can benefit from this case and preserve its cultural distinctiveness through concentrated preservation initiatives.

In the case of the cultural landscape of Uramanat Iran, the essential characteristics resulting in its recognition are its perseverance with cultural assets. For instance, its association with mountains and agricultural practices, language, clothing and the persistence to all such similar intangible cultural traditions continue to define Uramanat's identity (UNESCO, 2024). With Hunza serving similar traits of topography and cultural traditions, the aim to preserve the local customs nestled within the region can prove to be fruitful in its global recognition.

The connection between indigenous value systems, rituals, and sacred geography is highlighted in the

cultural landscapes of Koutammakou, Togo. These illustrations imply that community-led tourism and heritage narratives should more methodically activate Hunza's own spiritual landscapes, such as oral histories, and seasonal celebrations (UNESCO, 2024).

Lastly, Nigeria's Sukur Cultural Landscape serves as an example of how traditional governance, vernacular architecture, and cultural survival in a remote location may achieve international acclaim. Its focus on land use, belief systems, and stone architecture is similar to elements of Hunza culture, which emphasizes the close relationship between ecology, architectural form, and belief (UNESCO, 2024).

Building on these examples from around the world, it is clear how cultural tourism promotes engagement and preservation. It is a phenomenon that is driven by a tourist's interest towards discovering, learning, and immersing in the tangible and intangible values of a society (UNWTO, 2018). These values include art, architecture, heritage, culture, literature, cuisine, living cultures, lifestyles, and cultural beliefs. Theoretical frameworks like Butler's Tourism Area Life Cycle Model, which highlights how unchecked tourism growth can result in stagnation or decline unless strategies are aligned with sustainability and cultural preservation goals, also highlight the relationship between cultural tourism and heritage (Butler, 1980).

The narrow perspective of marginalizing Hunza to mere its natural value limits its potential to be globally represented as a cultural landscape site. Regardless of its alignment with the stated characteristics of cultural landscape sites by UNESCO such as heritage architecture, vernacular living patterns and practices, tangible and intangible community values, it remains unnoticed within these frameworks. Feilden's heritage conservation principles, which emphasize the value of cultural significance and authenticity over just aesthetic enjoyment, can be used to understand this (Feilden, 2003). Similarly, Lowenthal's view of the importance of legacy warns against touristy or surface-level readings that might ignore deeply ingrained cultural manifestations (Lowenthal, 1985). The disassociation with cultural awareness, lack of documentation,

comprehensive engagement of the community, strategic policy making, and confined representation of Hunza obscures the entire process of recognition. Arnstein's Ladder of Participation, which describes the various levels of public participation in decision-making, further reflects this (Arnstein, 1969). Despite being essential to its legacy, the Hunza community seems to operate at the bottom of this hierarchy, having little say in preservation plans and tourism narratives.

This article explores the attributes of a cultural landscape through the lens of Hunza, addressing the gaps in academic discourses that have hindered its formal recognition. Only few studies have examined Hunza holistically via the perspective of cultural landscape frameworks that integrate both tangible and intangible features, despite the fact that much attention has been paid to the region's scenic beauty or individual cultural aspects. The study relooks Hunza from a fresh perspective of its cultural potential by analyzing its natural, architectural and economic values and how they can be leveraged to shape, promote and preserve its unique cultural identity. It discovers how the current tourism infrastructure and policies can be enhanced to maximize their use towards this recognition and promotion.

Moreover, it examines dimensions such as architectural evolution and settlement patterns, and levels of community engagement and awareness in order to optimize their use towards global outreach of Hunza. Altogether, these variables support and direct the research and combine the attributes of a cultural landscape potential to understand the cultural account from a regional perspective.

Existing literature tends to concentrate either on Hunza's tourism potential or on its diverse ethno-cultural and agrarian heritage or on preservation of heritage architecture, often overlooking a comprehensive outlook that frames these within a cultural landscape structure. This study reframes Hunza as a cultural landscape in transition, accentuating its significance beyond aesthetic appeal. It acts as a paradigm shift towards understanding Hunza not only as a passive recipient of tourism but an active site of cultural expression and contextually-

driven tourism policies. Moreover, this paper assesses the cultural landscape characteristics of Hunza stakeholder viewpoints, emphasizing deficiencies in heritage acknowledgment and tourism administration. The results indicate strategic avenues for improving community engagement, policy development, and sustainable tourism to preserve Hunza's cultural landscape designation.

Cultural landscape theory, heritage authenticity and conservation (Feilden, 2003; Lowenthal, 1985), tourist life cycle models (Butler, 1980), and community participation models (Arnstein, 1969) are some of the multidisciplinary theoretical frameworks that guide this research. Together, these frameworks and international examples discussed above facilitate the analysis of Hunza's cultural characteristics, stakeholder relationships, and changing identity in the context of a larger international conversation about cultural heritage and travel strategy.

The study demonstrates the region's orientation with UNESCO-defined cultural landscape criteria and stresses the significance for incorporating local stakeholder involvement and heritage-sensitive tourism planning.

II. RESEARCH METHODOLOGY

Using a mixed-methods approach, this study investigates Hunza's potential as a cultural landscape from the perspective of cultural tourism. To guarantee a comprehensive understanding of how Hunza's natural, architectural, and economic features interact with tourism dynamics and community values, the research blends qualitative and quantitative methodologies. The mixed-methods approach enhances the validity and breadth of the research findings by integrating rich, contextual insights with statistical patterns (Creswell, 2014). Studies involving heritage, community values, and spatial practices where both quantifiable and experiential elements intersect are especially well-suited to this methodological diversity. The reason of selecting a mixed-methods approach is due to the interdisciplinary character of the research, which require both numerical assessment as well as contextual analysis.

For the purpose of building a strong theoretical foundation and direct the flow of research, a detailed study of literature is carried out. This study focuses on the topics most relevant to the objectives of the research and gains academic insights from books, journal articles, scholarly theories, official reports such as UNESCO etc., and from the analysis of recognized cultural landscapes and successful tourism models. This comprehensive study enlightens the research process by formulating research questions and variables, comparing Hunza with other acknowledged cultural landscapes, and by highlighting research gaps that hinder the representation of potentially lesser-known South-Asian cultural assets and regions, such as Hunza, in the world heritage and academic narratives.

The primary research phase is embedded in a thorough case-study of Hunza, accompanied by a comparative analysis with similar global examples, known for their cultural tourism, or acknowledged by UNESCO as cultural landscapes such as Bhutan, Bamiyan Valley in Afghanistan, Cultural Landscapes of Uramanat, Iran, Koutammakou, Togo, and Sukur, Nigeria. Hill top topography, vernacular architectural traditions, community involvement in heritage, and UNESCO cultural landscape classification are some of the factors used to choose the comparative studies. These examples share geographical and cultural similarities with Hunza and deliver critical visions into the characteristics and management strategies contributing to worldwide identity. By making comparative analysis with relevant international contexts, this framework benefits in evaluating Hunza's untapped potential and association with recognized global criteria.

In order to govern this part of the study, three interrelated value systems—natural, architectural, and economic—are adopted and interpreted (see Figure 2). Factors such as geographical and climatic distinctiveness, traditional architectural styles, settlement patterns, tourism economy, community awareness, and visitor satisfaction etc. are examined from a variety of angles.

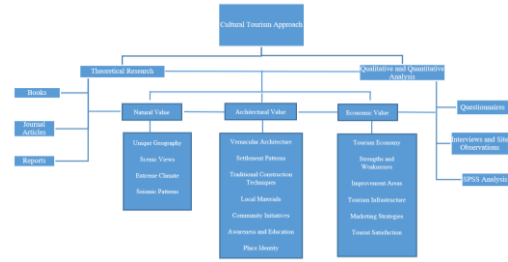


Fig. 2: Factors used to Evaluate Cultural Landscape Potential of Hunza

To carry out fieldwork and data collection in Hunza, a combination of site visits, structured and semi-structured interviews, observations and standardized questionnaire surveys are conducted to ensure triangulation of information collected from various stakeholders. Interviews are collected from four experts from the fields of architecture, culture and architectural heritage whose insights help to analyze Hunza's historical significance, architectural identity and tourism potential. Simultaneously, structured questionnaire surveys are taken from 40 local residents and 49 national and international tourists. The questionnaires are designed to gain awareness levels of the two groups regarding Hunza's cultural and architectural heritage, its tourism practices, management potential and cultural participation.

Apart from questionnaire distribution, informal conversations and interviews are also conducted from local community to dig deeper into their ancestral practices, oral history and their evolving relationship with the landscape. The qualitative data is enriched with this local knowledge, memory and how it is transmitted. Existing architectural conditions, settlement patterns, public areas, and their interactions with the environment are all documented through site observations to capture the tangible perspective of the region.

The quantitative data collected from surveys is interpreted through IBM SPSS Statistics Version 27 software. Descriptive statistics such as frequency distributions are used to broad patterns of awareness and opinions, while spearman correlation analysis is used to identify relationships between variables such as cultural and regional identity, and architectural knowledge. This analysis helps to create improvements in awareness levels, management

potential as well as in tourism infrastructure. Together with the quantitative data, thematic analysis is carried out for qualitative data acquired from interviews, field notes, and on-site findings. Variables like spatial memory, construction techniques, challenges in lifestyles due to the geography are cross-checked from the survey results to ensure coherence and accuracy in interpretation.

Participants for the research are decisively selected, with professionals selected based on their knowledge, experience and involvement in projects related to cultural and architectural heritage, and planning. Likewise, locals are chosen from various age brackets and backgrounds, while tourists are randomly selected to establish diverse viewpoints. All the participants are clearly briefed about the nature of the study, its purpose and verbal consent is acquired prior to interviews or surveys with their anonymity maintained throughout the research phase. The verbal consent involves conducting and publishing the study. The study keeps their identities anonymous with no photos or images used.

Although the research design strives for comprehensiveness, it acknowledges certain limitations. These include the time-bound nature of the data collection phase, seasonal fluctuations in the number of tourists, logistical challenges during fieldwork, and communication difficulties caused by language problems. Nonetheless, a strong basis for evaluating Hunza's potential as a cultural landscape is provided by the integration of several data sources and analytical methods.

The research is able to develop a complex narrative regarding Hunza's cultural and architectural landscape, its present difficulties, and its possible future within a more strategic framework for cultural tourism as an advantage from the interaction between interpretive analysis and empirical observation. This methodology lays the foundation for reinterpreting Hunza as a cultural landscape in evolution rather than just a picturesque destination by combining heritage studies, architectural documentation, cultural analysis, and tourism research. It enables the study to critically evaluate the identity of the area, the regulatory and representational deficiencies, and the prospects for the growth of sustainable, culturally-

based tourism that is in line with international frameworks for cultural assets.

III. RESULTS

The results of this study offer a multifaceted examination of Hunza as a changing cultural landscape, highlighting the importance of maintaining and exploiting its potential for cultural tourism. In addition to evaluating Hunza's tourism and management capabilities, this section provides insights based on cultural, architectural, geographical, and economic viewpoints, drawing on answers from the local population, tourists, and experts.

Both qualitative and quantitative data are collected in Hunza based on carefully thought-out fieldwork phase. Through systematic surveys and unstructured inter-views, 40 residents, 49 visitors and 4 experts in the fields of architecture, culture, and architectural heritage participate. While interviews, site observations (including forts and settlement patterns), casual conversations, and open-ended questionnaire replies provide qualitative insights, the quantitative data from the questionnaires are analyzed using SPSS software. To guarantee the credibility of the results, this thematic material is cross-referenced with numerical findings.

In order to highlight the research's emphasis on architectural history, community involvement, and the cultural environment, the demographic portion of the study is purposefully simplified. Local respondents are asked how long they have lived in Hunza in one of the main questions. Strong long-term settlement patterns are found in the results: 35% of participants have been in Hunza for 15–25 years, and 30% have been there for more than 25 years. Twenty percent have been in Hunza for 10 to 15 years, five percent have been there for 5 to 10 years, and ten percent have been there for less than five years. This information aids in assessing local familiarity and attachment to the changing cultural environment.

The core area of knowledge of the experts is architecture and architectural heritage encompassing studies in heritage preservation and techniques, and spatial planning. Due to their profound knowledge in the field as well as the comprehension of socio-

cultural and geographic contexts, their perspectives become fundamental in evaluating the cultural landscape potential of Hunza, its architectural patterns, historical consciousness, the effects of tourism on its development and promotion and the threats to cultural preservation posed by modernization and unrestrained tourism.

A. Cultural Landscape Potential of Hunza

Hunza is a geographically unique and culturally rich region that satisfies a number of requirements for cultural landscape criteria, according to survey results and expert assessments. According to the data (see figure 3), 36% of visitors say that the area's picturesque views, mountains, and natural surroundings are the main reason of their travel. They spend between less than 25,000 and more than 100,000 PKR on geographical attractions. The most important geographic opportunity, according to the local respondents is also tourism.

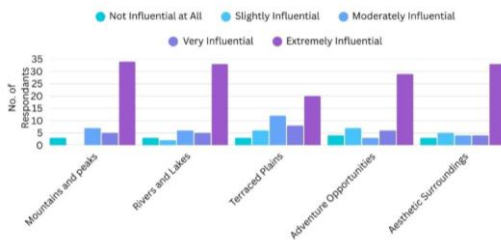


Fig. 3: Factors Rated by Tourists as Influential in Visiting Hunza

Additionally, visitors recognize the connection between Hunza's architectural identity and its geography. Stone masonry, old watchtowers, the actual arrangement of streets and homes, and bridges/pathways are all recognized as architectural typologies impacted by the topography of the area (see figure 4).

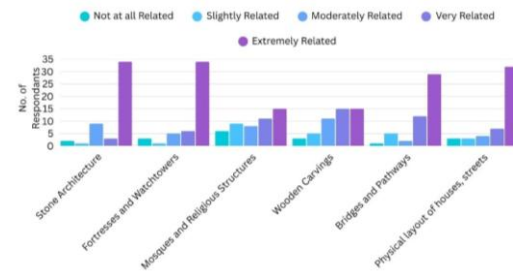


Fig. 4: Tourists' Perspective on the Relation Between Hunza's Architectural Identity with its Geography

Moreover, they correlate various aspects of culture that they believe are shaped by the region's geography such as terraced agricultural fields, traditional clothing, cuisine, and physical layout of houses and streets. The tourists also draw a strong relation between cultural and architecture heritage attributes and how they shape the cultural and regional identity for instance historical continuity, native construction and preservation techniques, local place identity, and adaptation to environment.

A technical perspective is offered by experts, who highlight key landscape aspects that present both opportunities and challenges, such as terraced fields, mountainous terrain, and earthquakes. Although the terraced fields are a tourist attraction and showcase the community's adaptive agricultural methods, they also need constant upkeep and are susceptible to erosion. Also, as much as the region's defensive architectural arrangements and striking natural beauty are enhanced by the mountainous terrain, it also places limitations on the growth, accessibility, and development of infrastructure. In a similar manner, the area's earthquake vulnerability highlights the necessity of robust construction methods based on local expertise while also presenting a continual risk to the preservation of historic buildings. In addition to affecting cultural traditions, these topographical features have a direct impact on building techniques, material utilization, bridge and path development, and settlement patterns.

Regardless of Hunza's serene setting, visitors mention accessibility problems such as landslides and inadequate secondary road maintenance etc. (see figure 5).

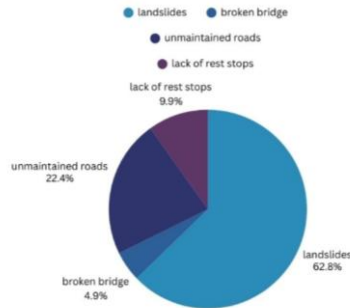


Fig. 5: Accessibility Issues Faced by Tourists

Road upkeep and the installation of rest areas and public toilets and other such essential amenities are the most often recommended enhancements as a response (see figure 6).

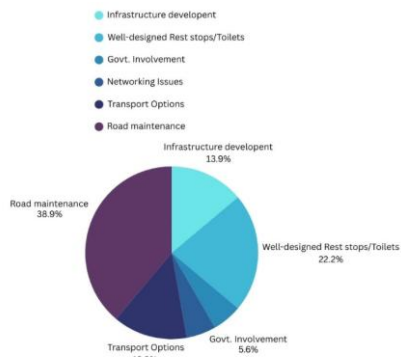


Fig. 6: Recommended Enhancements in Accessibility by Tourists

From the standpoint of architecture, the information shows rich customs in building materials and methods that characterize Hunza. In order to demonstrate their usefulness in earthquake resistance and cultural preservation, the locals cite traditional building techniques such as cator cribbage construction, stone masonry, timber tracery, and mud-straw construction. They rate them as strongly correlated with each other having the least correlation coefficient as 0.92 and as much 1 (see figure 7). Experts elaborate on this by emphasizing technical aspects that contribute to earthquake resistance, such as low-profile structures, foundational systems, and building alignment with natural slopes.

Correlations

	Cator Cribbage Contribution (contribution to seismic stability)	Stone Masonry (contribution to seismic stability)	Wooden Tracery (contribution to seismic stability)	Mud and Straw Construction (contribution to seismic stability)
Spearman's rho				
Cator Cribbage Contribution (contribution to seismic stability)	1.000	1.000 ^{**}	.997 ^{**}	.944 ^{**}
Sig. (2-tailed)			<.001	<.001
N	40	40	40	40
Stone Masonry Contribution (contribution to seismic stability)	1.000 ^{**}	1.000	.997 ^{**}	.944 ^{**}
Sig. (2-tailed)			<.001	<.001
N	40	40	40	40
Wooden Tracery Contribution (contribution to seismic stability)	.997 ^{**}	.997 ^{**}	1.000	.942 ^{**}
Sig. (2-tailed)	<.001	<.001		<.001
N	40	40	40	40
Mud and Straw Construction Contribution (contribution to seismic stability)	.944 ^{**}	.944 ^{**}	.942 ^{**}	1.000
Sig. (2-tailed)	<.001	<.001	<.001	
N	40	40	40	40

^{**}. Correlation is significant at the 0.01 level (2-tailed).

Fig. 7: Correlations of Earthquake-Resilient Construction Techniques

According to local responders, Hunza's cultural character is mostly determined by elements such as historical continuity, symbolism, preservation methods, place identification, environmental adaptation, and cultural exchange. While tourists viewed cultural exchange as having a comparatively minor impact, they mirrored these feelings, naming historical continuity, local construction methods, and place identity as very influential. This suggests that there may be a potential gap in its cultural promotion.

The majority of residents do not participate in group cultural activities, suggesting a lack of community involvement. Some of them take part in festivals, guided tours, and voluntary activities in architectural preservation. Tourists see a similar trend. To improve cultural experiences and increase capacity, experts suggest extending educational programs for residents and setting up joint workshops between residents and tourists.

These multifaceted observations collectively highlight the enormous potential of Hunza's cultural landscape. The historical customs, architectural styles, geographic identity, and cultural practices of the area are all frequently highlighted by tourist respondents as having a high potential for international recognition. In Figure 8, correlation results between these potential aspects are strongly significant with correlation coefficients more than 0.70 and up to 0.934. The region's hospitality, winter food preservation methods, and cuisine are also cited by experts as important cultural assets

Correlations

	Cultural History and Practices (depth of hunza as a potential cultural landscape site)	Traditional Architectural Treasures (depth of hunza as a potential cultural landscape site)	Regional Identification (depth of hunza as a potential cultural landscape site)	Geography and Landscape (depth of hunza as a potential cultural landscape site)
Spearman's rho				
Correlation Coefficient	1.000	.891 ^{**}	.934 ^{**}	.714 [*]
Sig. (2-tailed)		<.001	<.001	<.001
N	49	49	49	49
Traditional Architectural Treasures (depth of hunza as a potential cultural landscape site)				
Correlation Coefficient	.891 ^{**}	1.000	.915 ^{**}	.819 ^{**}
Sig. (2-tailed)	<.001		<.001	<.001
N	49	49	49	49
Regional Identification (depth of hunza as a potential cultural landscape site)				
Correlation Coefficient	.934 ^{**}	.915 ^{**}	1.000	.721 [*]
Sig. (2-tailed)	<.001	<.001		<.001
N	49	49	49	49
Geography and Landscape (depth of hunza as a potential cultural landscape site)				
Correlation Coefficient	.714 [*]	.819 ^{**}	.721 [*]	1.000
Sig. (2-tailed)	<.001	<.001	<.001	
N	49	49	49	49

^{**} Correlation is significant at the 0.01 level (2-tailed).

Fig. 8: Tourists' Correlation and Perception on Potential Aspects of Cultural Landscape of Hunza

Although these results support Hunza's potential as a cultural landscape, the efficiency of tourist management techniques is still a crucial factor, as discussed in the following part.

B. Tourism Management Potential of Hunza

Hunza has seen a sharp rise in tourism with the construction of the Karakoram Highway, making it one of Pakistan's most popular domestic travel destinations. Significant economic gains have resulted from this influx, but it has also brought about serious problems with sustainability and tourism management.

For both locals and visitors, the Karakoram Highway is the main entry point, offering essential connectivity, business prospects, and picturesque travel experiences etc. Experts however, also identify a number of detrimental effects of increased tourism, such as poor traffic control, environmental degradation, congestion at heritage sites, and infrastructure deterioration. Experts suggest a number of tactical solutions to deal with these problems, including better road systems, the introduction of alternate modes of transportation, and legislative changes that support controlled tourism.

Experts see a lack of organized strategies and governmental involvement in strategic tourism marketing, despite the fact that cultural tourism has improved employment, economic growth, and social contact among residents. Current development initiatives are frequently ill-coordinated. Although visitors show interest in the area's historical value, architectural heritage, and cultural customs, there are still only a few efficient systems in place to manage cultural tourism.

A variety of efforts, including infrastructure development, educational and awareness centers, guided cultural tours, safety precautions, and waste management systems, are suggested by both tourists and experts as ways to improve the quality and impact of cultural tourism. In order to guarantee sustainable tourism growth, more comprehensive suggestions are put up, such as international cooperation, uniform preservation procedures, tourism promotion, cultural events, heritage education initiatives, local capacity building, and conservation incentives. Together, these tactics seek to preserve Hunza's architectural and cultural heritage while bolstering the city's tourism infrastructure.

Tourists and experts propose improvements so as to enhance tourism management including holistic cultural events, standardized preservation initiatives for heritage sites, tourism marketing, public awareness campaigns, tourism regulations, community involvement, architectural documentation, training and capacity building for locals, incentives for conservation initiatives and international collaboration. All of these factors contribute to the overall development of tourism management as well as the promotion architectural and cultural heritage, Hunza's distinct identity and cultural tourism.

The findings paint a vivid and coherent picture of Hunza's tourism and cultural environment. The study emphasizes the intricate relationship between geography, architecture, culture, and tourism by drawing on the combined viewpoints of residents, visitors, and experts. In addition to its remarkable natural beauty and historical continuity, Hunza also shows promise for international recognition as a cultural landscape. However, in order to reconcile cultural preservation with the rising demands of tourism, sustainable development necessitates cooperative management, well-informed legislative reforms, and greater community engagement. These revelations lay the groundwork for the subsequent analysis section, which examines best practices and strategic frameworks to aid Hunza's ascent to international cultural prominence. Overall, regardless of the fact that tourism has boosted the economy, preserving Hunza's architectural and cultural legacy

requires careful planning and sustainable management.

IV. ANALYSES AND FINDINGS

The results of this study demonstrate the complex interplay between community dynamics, architectural resilience, intangible heritage, and geographic distinctiveness that reinforces Hunza's changing identity as a cultural landscape. These observations highlight the possibilities and difficulties of promoting Hunza as a destination for sustainable cultural tourism. This further emphasizes the necessity of a contextualized tourism framework that takes into account regional chances and strikes a balance between economic development and heritage preservation. The delicate ecological and changing sociocultural dynamics that are specific to Hunza must be taken into consideration in such a model.

The inherent connection between Hunza's terrain and its cultural expressions is one of the most convincing conclusions. Local life, architectural styles, and community framework are actively shaped by the mountainous topography, terraced agricultural fields, and picturesque vistas, as both tourists and experts have seen. The UNESCO description of a cultural landscape as the product of the "combined works of nature and of man" is reflected in this correlation. This relationship is rendered concrete in Hunza by the way villages are laid out, the use of local resources like mud and stone, and building methods that have been adjusted to seismic activity. Additionally, this supports the idea that Hunza's constructed form and social behaviors are firmly anchored in its environment and is consistent with Carl Sauer's definition of cultural landscape as a product produced by both natural processes and human agency (Sauer, 1925; UNESCO, 2024).

Experts' focus on earthquake-resistant elements, such as durable foundations, low-profile structural forms, and orientation with respect to natural slopes, is consistent with academic philosophy of vernacular architecture, specifically Amos Rapoport's contention that traditional architecture changes in direct reaction to cultural demands, materials, and environment as an environmental adaptation strategy (Rapoport, 1969). Thus, Hunza's architectural practices—like Cator Cribbage construction and timber tracery—embodied

sustainability in the face of ecological concerns as well as heritage value. Furthermore, by showing how traditional knowledge and building techniques may be used to improve climatic resilience while preserving architectural authenticity, these practices offer important lessons for other seismically vulnerable cultural zones. Feilden's concept of compatible and context-sensitive conservation, which emphasizes adjusting structures to environmental realities while preserving authenticity, is also in line with experts' emphasis on seismic-responsive construction techniques (Feilden, 2003).

The deep settlement patterns witnessed in the region with locals living here for more than 15 years point to a strong sense of place and rootedness. Residents' long-term occupation indicates a constant struggle with location, practice, and identity; they are not passive inheritors of space.

But the analysis also identifies a contradiction. The majority of residents do not participate in official heritage preservation programs, despite their strong ties to Hunza. A crucial gap in cultural transmission and preservation is suggested by the lack of organized activities, even though some people take part in festivals, cultural exchanges, and unofficial tour guiding. The community's poor involvement in official heritage projects, despite strong ties to the location, indicates a lower position on Arnstein's Ladder of Participation, one that is more akin to tokenism than true citizen power (Arnstein, 1969). This suggests a big chance to investigate hybrid heritage governance models that combine institutional frameworks with indigenous knowledge systems, enabling local groups to be involved in preservation policy decisions as well as informants. Future research must thoroughly examine this disengagement in order to promote true inclusion, as it may result from a lack of knowledge, a lack of resources, or historic exclusion from planning discussions.

The study's experts recommend community seminars, training courses, and educational programs to boost local involvement. This strategy is consistent with participatory heritage methods, which place more emphasis on grassroots engagement than top-down measures.

This study emphasizes the depth of Hunza's intangible heritage, which goes beyond building and settlement. Traditional preservation methods, storytelling, hospitality, and food are recognized by experts as crucial cultural resources. These customs are part of everyday life and have a lot of promise for experiential tourists. However, responses from tourists only moderately acknowledge these components, suggesting a possible discrepancy between what is provided and what is conveyed or understood.

This disparity indicates the necessity for interpretive infrastructure and carefully chosen cultural events to close this gap. In line with Lowenthal's theory that the heritage value rests in how cultures choose to remember and depict it, tourism attitudes can be shifted from aesthetic enjoyment to cultural knowledge to assist close this interpretation gap (Lowenthal, 1985). Heritage storytelling, culinary festivals, story-based experiences, and guided tours could all improve visitors' cultural immersion. Furthermore, marketing and branding strategies need to be adjusted to emphasize Hunza's stories, knowledge, and ideals in addition to its aesthetic appeal. Working together with regional artists, storytellers, and craftsmen to co-create material that embodies Hunza's character through real voices and lived experiences can be one way to reposition branding.

The inauguration of KKH and the growth of Hunza's identity are simultaneous. Once an isolated region, Hunza has gained accessibility, tourist increment and economic surplus upon the KKH opening. Tourists identify numerous advantages of this access, but also present key challenges such as lack of tourism infrastructure such as insufficient amenities including rest stops and toilets. As Butler states in his Tourism Area Life Cycle Model (Butler, 1980), and what is important in Hunza's context is that it has now reached the development phase instead of its initial exploration phase before the construction of KKH. Another learning from his model is how Hunza's development can remain stagnant if timely strategic management initiatives are not generated and executed.

Apart from tourist perspectives, experts recognize the lack of standardized environmental protection policies and governmental laws which result in the development of unplanned areas, disturbed ecosystems, misuse, traffic, and cultural saturation. UNESCO also highlights similar concerns of tourism-controlled developments which cause all the above mentioned encounters. An example of such a case can be Machu Picchu in Peru. Considering such examples and learning from cases that effectively adopt heritage-sensitive policies can be a turning point for Hunza's development.

ICCROM and UNTWO also classify constraints such as availability of alternative roads, and waste management etc. in their sustainable tourism policies (ICCROM, 2016; UNWTO, 2018). Therefore, in order to uplift the development as per the acceptable tourism standards, multiple procedures need to be undertaken in Hunza including government-approved zoning laws, stakeholder involvement and other such strategies for the sustainable tourism growth of Hunza.

Table 2 reinstates Hunza's potential to be recognized globally in terms of the cultural landscape criteria it fulfills based on the criteria list provided by UNESCO.

Table 2: Hunza's Potential Cultural Landscape Criteria and Gaps

Criteria	Hunza's Potential	Gaps
Cultural and Historical Significance	Rich history with ancient forts, historic strategic location, ancient migrations, ethnic diversity and trade system, existence of rock carvings and petroglyphs	Historic settlements have modified into modern development, unsystematic conservation initiatives
Authenticity	Vernacular	Urbanization and

and Integrity	architecture, traditional settlement patterns, local construction techniques, indigenous building techniques to adapt to mountain terrain authentic culture with traditional farming, and social beliefs.	contemporary construction methods threaten traditional architecture, tourist commercialization impacts local culture
Outstanding Universal Value	Globally distinct geography, with human settlements along varying terrain, traditional and sustainable lifestyle adapted to extreme conditions	Lack of recognition as a potential cultural landscape, more comparative analysis required to support the nomination
Human-Nature Interaction	Traditional irrigation techniques, terrace farming, eco-friendly agrarian practices for harsh climate	Influence of modern lifestyles impacting traditional irrigation systems
Sustainable Land Use and Cultural Continuity	Self-sustaining lifestyles, traditional economy based on natural farming and	Influence of modern lifestyles impacting traditional cultural systems

	handicrafts, rich communal values	
Legal Protection & Management	Baltit and Altit forts protected under Aga Khan Trust for Culture, community-led conservation initiatives in some villages	Lack of official government-supported conservation framework or strategies, lacks strong legal support required for nomination
Community and Stakeholder Support	Highly engaged in cultural preservation through homestays, festivals, handicrafts and guided tours, support of Aga Khan Trust for Culture	Requires stronger interaction among local organizations, government and international bodies, awareness and education programs required to train locals in heritage conservation etc.
Tourism Sustainability	Some eco-tourism initiatives, local businesses promote traditional cuisine, crafts etc.	Mismanaged tourism growth, lack of management in visitor control to avoid overcrowding at historic sites.

However, acknowledgment is not only a matter of qualifying attributes, it requires documentation, advocacy, and institutional backing. Expert recommendations including creating architectural inventories, promoting awareness, and encouraging international cooperation are in line with the best practices seen at sites that have been nominated successfully, such as the Bamiyan Valley in Afghanistan (UNESCO, 2024).

The ideas drawn from the results of the research can give direction to the recognition process as it delivers a complete picture of Hunza's potential, significance, and weaknesses collected from various stakeholders. However, the process also necessitates international support, authentic documentation, environmental assessments, lawful planning and a mix of local and legislative participation to thoroughly ensure heritage and culture preservation as well as effective management strategies. As a consequence of these policies, local community's participation can be leveraged and they can be treated as active contributors in the tourism as well as heritage and cultural preservation process instead of being passive contributors.

Community participation as active contribution can be boosted by capacity building through cultural documentation, language learning, and other such techniques resulting not only in the region's development but also multiplying their cultural pride. Additionally, if essential support is provided with proper fund management, the economy can also be improved.

As a final understanding from the study's results, it urges to rethink Hunza as a versatile and evolving potential cultural landscape in addition to being a serene touristic destination. The results also emphasize to reconsider tourism in Hunza as just a commercial industry but also uplift it through management strategies, and improved tourism infrastructure. Both of these considerations can be used in future research studies to observe long-term effects on the cultural identity and authenticity of Hunza. Moreover, to ensure future recognition in the global context, academic and authoritative collaborations can result in the positive development process based on its unique landscape.

CONCLUSION

This study examines Hunza's changing identity in relation to its geographical, architectural, cultural and economic characteristics, evaluating how well it aligns with important characteristics of acknowledged cultural landscapes. It explores an integrated methodology that combined qualitative and quantitative tools, such as surveys with residents and visitors, expert interviews, and on-site

observations. Together, the results show that although Hunza portrays many of the traits and multi-layered values that are commonly associated with cultural landscapes, further concerted efforts are needed for it to be officially recognized.

The research further provides a theoretical framework for assessing lesser-known, vernacular landscapes in addition to adding to the applied understanding of Hunza's potential as a cultural landscape. By placing Hunza in the context of UNESCO's cultural landscape criteria and international case studies, the study connects scholarly discussion with practical relevance. It fills a void in the literature on how to integrate cultural and natural assets in developing regions such as Northern Pakistan.

The use of locally available building materials, earthquake resistant construction techniques, and adaptive architectural designs showcase the association of the locals with the geography. These techniques are part of Hunza's embedded landscape, seismic zone as well as its cultural individuality. Despite the heritage significance of these aspects, they tend to get altered by modernization and tourism demands identifying the requirement for planned development along with architectural expertise.

Moreover, it is noted that regardless of a strong local place identity, their participation in the development process is not sufficient and rather passive. This necessitates raising awareness of Hunza's potential to the locals and ensuring capacity building as identified by experts.

The research also recognizes the positive and negative effects of tourism on Hunza. As much as it benefits from the increasing awareness of the region and its economy, it also withstands environmental hazards, infrastructure strains and cultural dilution. While tourists are drawn towards Hunza's serene atmosphere, local community and culture, experts and tourists also highlight infrastructural scarcity of basic amenities entailing the need for responsible strategies, heritage-aware development and improved tourist management.

Even though Hunza is not officially recognized as a cultural landscape yet, the results of this study indicate that it has a good chance of becoming one in the future. A solid basis for such assessment is formed by the interplay of unique architecture, cultural traditions, geographic identity, and community tales. However, accomplishing this necessitates a variety of multifaceted initiatives, from the creation of conservation policies and better infrastructure to inclusive planning frameworks and educational outreach.

Future studies can examine Hunza's intangible cultural practices in greater detail, look into how seasonal tourism affects local livelihoods, or assess if policies are ready to recognize cultural assets. To further enhance the representation of Hunza's multifaceted legacy in national and international registers, it is also necessary to investigate digital documentation technologies, oral history archiving, and GIS mapping. Identifying and safeguarding new cultural landscapes such as Hunza is crucial for maintaining local identity and fostering regional sustainability.

In conclusion, Hunza is a distinctive area that has a great deal of potential for cultural landscape recognition. The interaction of historic architecture, cultural expression, environmental adaptation, and growing tourism interest shapes its changing identity. But only with meticulous, well-coordinated efforts by local communities, heritage experts, legislators, and tourist stakeholders can this potential be fulfilled.

ACKNOWLEDGMENT

I would like to extend my deepest gratitude to my thesis advisor and co-author, Assistant Professor Dr. Özgün Arın at Okan University, for her valuable vision, support, and continued feed-back that helped me outline the direction of the study. Special thanks to the local community of Hunza, tourists and the experts for whole-heartedly helping me throughout the primary research phase and sharing their time, insights and opinions through surveys, interviews and informal conversations. Their perspectives helped me carry out an in-depth analysis on cultural, architectural and management background of the region.

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