



# Comparative analysis of legal, policy, and institutional frameworks for world heritage sites: Lessons from Africa, Europe, and Asia

Leonard Chitongo \*

*School of Social Sciences, College of Humanities, University of KwaZulu-Natal, Durban, South Africa*

## Abstract

Heritage sites are landscapes of distinct historical, cultural, or natural significance that need to be preserved for future generations. This research examines the importance of an integrated policy framework for planning world heritage sites and proposes improvements to existing spatial and heritage preservation policies to support sustainability. Using a qualitative approach, a desk review of secondary sources was conducted. The study adopts a comparative case study approach across three continents, examining Botswana and Zimbabwe in Africa, China and India in Asia, and Britain and Kosovo in Europe. Data were analysed using thematic content analysis. The paper argues that developing, protecting, and preserving heritage sites and monuments is critical for sustainable development. Findings indicate a gap between spatial policy, heritage preservation laws, and institutional frameworks. Since heritage sites are a public good, national development planning should include legislation to protect these sites. The paper concludes that a holistic, multi-stakeholder, and participatory approach to world heritage site planning and management is essential for building resilient communities. It recommends integrating spatial policies, laws, and institutions with preservation policies and laws to create sustainable cities that embrace cultural identity.

**Keywords:** Heritage; Policy; Legal, Institution; Spatial Planning; Development

Published by ISDS LLC, Japan | Copyright © 2025 by the Author(s) | This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



**Cite this article as:** Chitongo, L. (2025), "Comparative analysis of legal, policy, and institutional frameworks for world heritage sites: Lessons from Africa, Europe, and Asia", *International Journal of Development and Sustainability*, Vol. 14 No. 7, pp. 459-475.

---

\* Corresponding author. E-mail address: [vachitongo@gmail.com](mailto:vachitongo@gmail.com)

## 1. Introduction

Globalisation has facilitated processes where communities learn more about each other's cultural heritage through physical and virtual interaction from a cultural viewpoint (European Commission, 2022). Thus, inbuilt heritage interventions are essential for managing world heritage sites because they expand the lifespan of the sites and enable their use by multiple generations (Albert et al, 2022). In support of this practice intergovernmental organisations such as the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Council of Europe (CoE), as well as the International Council on Monuments and Sites (ICOMOS), have been developing doctrinal documents for more than half a century. These documents have played a fundamental role by offering statements, principles, and guidelines for conserving and managing places of cultural significance (Lin et al., 2023).

This study undertakes a comparative analysis of the legal, policy, and institutional frameworks governing World Heritage Sites (WHS) in Africa, Europe, and Asia. As such recognising the significance of these sites in promoting cultural diversity, environmental sustainability, and economic development is vital. This paper aims to identify best practices, gaps, and lessons learned in conserving and managing these precious resources. By examining the complexities of heritage governance across three continents, this study contributes to the debate on enhancing effective management strategies, policy reforms, and community engagement practices that safeguard the integrity and authenticity of World Heritage Sites for future generations.

Heritage describes geographic and cultural entities in space (Beel and Claire, 2020). Fused with culture, heritage comprises the sources and evidence of human history and culture regardless of origin, development, and level of preservation. Heritage is categorised as tangible or material, archaeological heritage, cultural heritage landscapes, integral heritage, complex open-air cultural heritage, moveable heritage, and intangible or non-movable heritage. Tangible heritage or material heritage is made up of individual buildings, groups of buildings, areas, objects, and collections of objects; the built heritage comprises buildings and their associated facilities, decorative elements, equipment and attached land, other built elements, settlements, and parts thereof and spatial arrangements (Rodwell, 2022). Archaeological heritage comprises all relics, objects, and human traces from past periods of history on the surface, in the earth, and in water, whose preservation and study contribute to the uncovering of the historical development of mankind (Foster and Jones, 2019).

Heritage sites are thus landscapes of special distinct areas of land that are recognised by people whose characteristics and spatial layout result from the operation and mutual influence of natural and human factors (Mtwana, 2012; Bonacchi et al., 2023). Heritage sites are then formed by units of the human environment or nature where elements of natural and cultural heritage are intertwined and whose values increase because they depend on each other (Chitongo and Naidu, 2025). Fairclough (2008) noted that national identity areas contain recognised and representative elements of the national landscape. It should also be noted that heritage does not end at monuments and collections of objects, but also traditions or living expressions inherited from people's ancestors and passed on to descendants, such as oral traditions, performing arts, social practices, rituals, festive events, knowledge and practices concerning nature and the universe or the knowledge and skills to produce traditional crafts, (UNESCO, 2015). This study maintains that heritage is an important aspect of sustainable development, and is included in sustainable development both in science and policy. Hence, this paper advocates for integrating heritage legal, policy, and institutional frameworks with spatial policies to achieve sustainability.

Legislation is a critical component in heritage protection and development. According to Liu and Tian (2019), Japan has one of the best legislations on heritage in the world. The Protection of cultural properties of Japan, which is purposively constructed to make the Japanese government and local bodies preserve the foundation for the country's cultural development for the future. In Africa, a good example is The National Heritage Resources Act No. 25 of 1999 of South Africa. Ndhlovu (2011) asserts that the heritage legislation of South Africa aims to promote good management of the national estate and enable and encourage communities to nurture and conserve their legacy as part of their well-being. Most legislation in the world concerning heritage focuses more on developing and protecting physical conditions, especially immovable heritage. This is substantiated by the practice in which heritage laws clearly outline the do's and don'ts and also on restrictions imposed upon people as possible threats to heritage, which are meant to distance people from monuments and sites. Ndoro and Pwiti (2009) indicate that in Zimbabwe, even native traditional practices such as rituals and ceremonies are not allowed in heritage sites, and there are strict controls to regulate activities and use of heritage sites. On the alarming side, only tourists and educational groups have free access to heritage sites. On this background, Ahmer (2020) argues that legislation thus becomes an instrument of oppression.

The institutional framework guiding heritage development and protection in most parts of the world highlights the remains of colonial auspices of colonial legislation (Chiwaura, 2014). The attainment of independence has not resulted in breaking off from cultural heritage protection systems installed by former colonial powers. There are mainly two situations that guide the protection and development of heritage, and these are the creation and adoption of laws protecting cultural heritage, which occurred immediately and not long after the attainment of independence in many countries. While there have been historical and conservation studies of heritage sites and cities in various settings (Hall, 2002). This paper contributes to the debate on the efficacy of legislative frameworks in guiding world heritage sites for their sustainability. In the face of globalisation, there is a greater need to institutionalise the protection of cultural heritage to foster cultural identity. The research is mainly qualitative in nature; data were collected from desk surveys and document reviews. A case study approach was adopted, sequestered from across the world, and cases were drawn from Africa (Zimbabwe and Botswana), Europe (Kosovo and Britain), and Asia (China and India). The six purposively selected countries, were selected due to their rich cultural heritage. Data were presented and analysed through a content thematic approach.

## **2. Heritage legislation in Africa, policy implications and recommendations**

African is a resource endowed continent with a plurality of cultural heritage components such as monuments and heritage sites. Two case studies, Zimbabwe and Botswana, were purposively selected. African legislation concerning cultural heritage has affected the continent throughout its history. Chiwaura (2014) asserts that the colonial period in Africa marked the development of legal systems and, to a great extent, the concepts of preservation, protection, and identification of cultural heritage.

### **2.1. Zimbabwe: Cultural heritage legislation**

The colonization of Zimbabwe was driven by the need to find the second Eldorado. This was perceived after South Africa was richly endowed with minerals such as gold and diamond. There was hope that the second

rand would be found across the Limpopo in Zimbabwe (British South Africa Company Royal Charter, 1890). Addyman (1991) argues that cultural heritage sites suffered irreparable damage, mostly at the hands of the Rhodesia Ancient Ruins Company Ltd. This company was established under the British South Africa Company (BSAC) to hunt for treasure at heritage sites. There was a realisation that heritage sites were being destroyed at an alarming rate which led to pass of the Ancient Monuments Protection Ordinance in 1902 (Bennet, 1981). According to Ndoro and Pwiti (2001), it became the first formal law to govern heritage in colonial Zimbabwe. Mahachi and Ndoro (1997) noted that the second law to govern heritage in Zimbabwe was the Bushmen Relics Ordinance of 1912, passed to protect rock paintings. By 1912, Zimbabwe had two ordinances for heritage protection, and these were later replaced by the Monuments and Relics Act, which established the Monuments Commission as the implementing body (Mahachi and Ndoro, 1997). Byers et al (2001) highlighted that, in 1958, there was a statutory body to protect heritage site interests in Zimbabwe under the name Rhodesian Historical Monuments Commission. The major aim of this statutory establishment was to stop further excavations of heritage sites. This was followed by a major development through the passing of the 1972 National Museums and Monuments of Rhodesia Act Chapter 313 17/1972. After attaining independence, this same law was adopted as the National Museums and Monuments of Zimbabwe Act Chapter 313 and Chapter 25.11.

The National Museums and Monuments of Zimbabwe Chapter 313 is the major legislation governing cultural heritage in Zimbabwe. This act protects areas and objects of archaeological, historical, architectural, and paleontological value. Regarding heritage development, the areas and objects of cultural heritage importance cannot be altered, excavated, or damaged, and any material thereon cannot be removed without the written consent of the Executive Director of National Museums and Monuments of Zimbabwe (NMMZ) (Curran and Zimmermann, 2022). Furthermore, Curran and Zimmermann (2022) noted that the NMMZ preamble specifies that the law was established or promulgated to establish a Board of Trustees and administer museums and monuments in Zimbabwe, to provide for the establishment and administration of museums, to provide preservation for the ancient, historical and natural monuments, relics, and other objects of historical or scientific value or interest. The major law in Zimbabwe concerning cultural heritage thus concentrates on establishing governance and administrative aspects and preserving these historical monuments and sites (Munjeri, 1999; Ndoro, 2002).

To complement the NMMZ, the country of Zimbabwe uses the Natural Resources Act Chapter 20:13, enacted in 1941. This act empowers the State President to acquire land to conserve or improve natural resources. According to section 25 of the Natural Resources Act, the state may compulsorily acquire land under the Land Acquisition Act Chapter 20:10 of 1992 (Thondhlana et al, 2023). The Land Acquisition Act, just like the NMMZ, empowers the State President to set aside land or declare a part of it a natural resource, and this includes landscape or scenery that he considers should be preserved on account of its aesthetic appeal or value (Chirikure et al, 2022). These laws render monuments and natural resources state property, and once declared, they are protected from damage, alteration and demolition. The Land Acquisition Act complements both the NMMZ and the Natural Resources Act.

According to Chipunza (2014), from a planning point of consideration, the Regional Town and Country Planning Act Chapter 29:12, which is the major legislation or perhaps the planning bible in Zimbabwe, provides room for buildings that are not national monuments to be subject to a Building Preservation Order (Section 30, RTCP Act) if they are of special architectural or historical interest. These orders restrict the demolition, alteration, or extension of a building. This highlights a major discrepancy between the spatial policy

responsible for planning areas and the heritage policy concerned with preserving heritage in Zimbabwe. The formal laws governing heritage sites in Zimbabwe are highly blinkered towards the protection or preservation of heritage sites, and there is no clear linkage between them and spatial planning policies. In contrast, Botswana's spatial planning policies are in tandem with heritage preservation regulations.

## 2.2. Botswana

Heritage development and protection in Botswana dates back to 1911 under the Bushmen Relics and Ancient Ruins Protection Proclamation. This kind of legislation concerning heritage stemmed from protecting the Bushmen Relics and Ancient Ruins within Botswana, formerly the Bechuanaland Protectorate (Denbow and Thebe, 2006). The Bushmen Relics and Ancient Ruins Protection Proclamation prohibited the removal of the protected relics and ancient ruins without the written permission of the Resident Commissioner. All matters concerning developments on the heritage sites were supposed to apply for permission. The application was to be accompanied by drawings, photographs or tracings of the relics or the portion of the ancient ruin to be removed (Clover, 2003).

The Bushmen Relics and Ancient Ruins Protection Proclamation was later followed by The 1934 Natural and Historical Monuments, Relics and Antiquities Proclamation. This proclamation included new aspects such as geological formations, scenic beauty areas, and historical monuments (Stone and Stonembaiwa, 2017). The Government of Botswana (2001) highlights several proclamations on the preservation and management of WHS, such as 1935, the Bushmen Relics Proclamation, which was an amendment to the 1911 Bushmen Relics Proclamation. According to Stanikzai et al. (2023), the Act sought to consolidate and improve how heritage should be protected and preserved. He argued that the government is responsible for managing all WHS in Botswana, including those located on private property.

Before the 1980s, heritage management in Botswana suffered from a lack of skilled personnel to manage their heritage. Economic changes in Botswana manifested in a shift from cattle ranching as the major branch of the economy to mining. Ndoro and Pwiti (2009) indicated that mining damaged several heritage sites due to mining activities, road construction, urban building construction, and other related development initiatives. With this dilemma for heritage and cultural preservation, Botswana introduced a set of procedures requiring developers to conduct and finance archaeological impact assessment studies (Stanikzai et al., 2023).

In order to augment the Heritage Protection after the 1970 Act, the Monuments and Relics Act of 2001 was enacted. In the 2001 Act, heritage included monuments, waterfalls, and relics, extending to meteorites and treasure troves. The Act made pre-development environmental impact assessment compulsory for any development in cultural heritage sites (Government of Botswana, 2001). The act also encouraged local communities to develop monuments as tourist attractions to derive economic benefits and engendered a sense of ownership and participation in heritage management. Related to the development of heritage sites, the law stated that no land development within one kilometer of any national monument should occur without the Minister's prior written approval. The Minister would only grant approval for any development near heritage sites if they are satisfied that such development will not be incompatible with the preservation of the national monument and that it is in the country's best interest.

The 2001 Act on Heritage in Botswana also came on board with various powers in the minister's hands. According to Clover (2003), the minister can pass regulations to manage sites open to the public better. These

powers allow the minister to charge entrance fees and control access and visitor behaviour in camping locations. The activities allowed in heritage sites differed from sites due to factors such as the type of site since all the sites carried with them a unique location and context. The regulations also included provisions for research and monument development. To communicate the developments on heritage sites, the law provided tools such as information brochures and pamphlets with guidelines for contractors and developers and posters for distribution to the public. Workshops were also considered for various stakeholders, such as community trust boards, police officers, and regional planners, and issues relating to the development and management of Botswana's heritage sites were discussed (Son, 2008).

Despite Botswana's rich national heritage, there remain issues of concern regarding spatial planning and policy. Keitumetse (2011) indicate an important issue of concern: The Town and Regional Planning Act of Botswana overrides all other acts in the country. This threatens cultural heritage rather than promoting a symbiotic relationship between spatial policy and heritage development and management. According to Molefe (2016), heritage tourism sites within Botswana's is a fast-growing tourism industry. There is need to foster cultural preservation strategies in WHS of Botswana to maintain cultural identity in the face of tourism. For instance, Mantenge heritage site is currently without official protection from the Department of Museum and National Monuments, which, in effect, is the primary custodian of all heritage sites protected under the National Museum, Monuments and Relics Act of 2001. The hill also has some fine ancient rock paintings at one end. At the foot of Mantenge hill, the community is in the process of constructing a cultural village to be used to showcase the local community cultures to visitors.

### 3. Heritage legislation in Asia, policy implications and recommendations

Asia, home to over 4.5 billion people, is a region of immense cultural and natural diversity. The continent boasts a rich tapestry of heritage sites, including the ancient cities of Angkor Wat and Borobudur, the Taj Mahal, and the Great Wall of China (Zhang et al, 2023). Colonial cities in Asia and Africa, developed under the dual influence of native and sovereign cultures during the colonial era, exhibit unique urban morphological characteristics and reflect the planning ideologies of diverse cultures. These, in turn, enable and influence the formulation of legislative frameworks guiding heritage sites. The study purposively selected China and India to represent the Asian context due to their rich cultural heritage.

#### 3.1. China

China has gone a long way in crafting its heritage laws. Since the 1980s, China has embedded the state's duty to protect its cultural heritage in the constitution. The Chinese constitution's provisions allow the Chinese national legislatures to enact various national statutes to protect cultural heritage. China has also entered into various international treaties about developing and protecting cultural heritage. Since the 1980s, the National People's Congress (NPC) and its Standing Committee have enacted various statutes that have a direct bearing on the protection of Cultural Objects (Cultural Objects Law) and the Criminal Code of the PRC (Criminal Code) (Shulan and Hillier, 2018).

The Cultural Objects Law is the most significant national statute passed at the 25<sup>th</sup> session of the NPCSC on 19 November 1982. According to Chai and Li (2019), this law has been amended several times and still



assumes a prominent role in cultural heritage protection in China. The Cultural Objects Law provides the definition and category of cultural objects, sets up the principles for protecting cultural objects, and charges the governments at all levels responsible for protecting and administering cultural objects. Shulan and Hillier (2018) argue that enacting the Cultural Objects Law in 1982 is a benchmark for China's initiating the task of building a modern legal regime for cultural heritage. The most important point to note in Chinese heritage laws and institutional frameworks guiding heritage protection and development is the strong emphasis on protection rather than exploitation through inappropriate commercialisation and over-exploitation, which are seen as serious threats to Chinese cultural heritage development (Beijing Municipal People's Congress, 2021). The Cultural Objects Law, through the 2002 amendment, also bans the sacrifice of cultural heritage for economic development, and it makes it clear that governments shall incorporate the undertaking of the protection of cultural heritage into their plans for economic and social development. Through the 2002 amendment of the Cultural Objects Law, Article 66 provides that those people who undertake illegal construction at designated protected sites or destroy immovable cultural property shall be fined not less than RMB 50 000 Yuan but not more than 500 000 Yuan by local governments if the circumstances are serious. This provision has not been effective due to its purported subjectivity and mildness (Luo et al., 2019).

### 3.2. India

As noted by UNESCO (2015), India is one of the countries with rich natural and cultural heritage. As a result, several policies and legislations have been enacted to protect and preserve heritage. Legislation on heritage preservation and protection in India dates back to the 19th century when monument sites were discovered. The discovery of heritage sites led to the enactment of legislations such as the Ancient Monuments Preservation Act 1904, The Ancient and Historical Monuments and Archaeological Sites and Remains Act (AMASRA) 1951, and also the current Constitution of India as sections that guide matters on heritage. Article 49 of the Indian Constitution states that the state must protect and preserve every monument object, or place of historical or artistic interest (Gupta and Rathore, 2016). Article 49 of the Indian Constitution protects the heritage from spoliation, destruction, disfigurement, removal, disposal, and export, as enshrined in the constitution of India. In 2011, the National Monuments Authority was established after the amendment of the AMASRA, and one of its aims is to suggest measures for implementing the AMASRA. The importance of heritage in India is stressed in the Charter for the Conservation of Unprotected Heritage and Sites adopted in 2004 (Facchinetti, 2014). India is among the countries that ratified the 1972 Convention concerning the Protection of the World Cultural and Natural Heritage. The convention, among other things, encourages members to develop and implement policy and institutional frameworks for conserving heritage properties. The above objective is operationalized by the UNESCO New Delhi office, which provides technical support to India to realize the goal of conserving the heritage sites in India (UNESCO, 2015).

## 4. Heritage legislation in Europe, policy implications, and recommendations

While the Asian experience highlighted the complexities of balancing economic development with heritage conservation, the European context offers valuable insights into the role of institutional frameworks and legal instruments in safeguarding cultural and natural heritage. With a rich tradition of heritage conservation, European countries have developed sophisticated legal and institutional frameworks that prioritise the

protection of World Heritage Sites. From the EU's Heritage Label to the Council of Europe's European Cultural Convention, European countries have established a robust heritage conservation framework emphasising the importance of community engagement, sustainable tourism, and transnational cooperation (Valagussa et al, 2021).

Cultural heritage represents one of Europe's most important drivers for personal development, social cohesion, and economic growth. It is axiomatic that, experiences differ at each age in the course of history to a greater or lesser extent. However, in the 21st century, it hardly seems an exaggeration to suggest that the world faces epochal changes affecting every part of society, including the arenas in which cultural heritage is created, collected, curated, and exhibited (Borowiecki, 2016).

The first real notion of linking heritage protection with territorial planning was evidenced through the International Charter for the Conservation and Restoration of Monuments and Sites (ICOMOS, 1964) (the "Venice Charter") of 1964. These movements emphasized the cultural significance of individual monuments. They extended the concept of the historical monument from single architectural works to the urban setting in which the evidence of a particular civilization (Gustin and Nypan, 2010). The Venice Charter and International Council of Monuments and Sites (ICOMOS) paved the way for the real consideration of the need to develop an integrated approach to protecting and managing architectural heritage through a series of resolutions by the Council of Europe's Committee of Ministers.

#### 4.1. Kosovo

The cultural heritage of Kosovo is the expression and creativity of life realities that have developed for more than eight thousand years, from prehistory to the present day. This wealth inherited with unique artistic, aesthetic, historical values and traditional characteristics is illustrated by the rich diversity of architectural, archaeological, movable, and spiritual heritage, as well as the rich cultural landscape (Jerliu, 2016). According to KAS (2022), Kosovo is a landlocked territory in the Balkan Peninsula, bordered by Albania to the southwest, Montenegro to the west, and Serbia to the north and east. It has a land area of 10,908 square kilometers and provides a strategic position in the Balkan Peninsula, serving as an important link in the connection between Central and Southern Europe.

Under The Council of Europe Framework Convention for the Protection of National Minorities, conditions necessary for persons belonging to national minorities are spelled out to maintain and develop their culture and to preserve the essential elements of their identity, namely religion, language, traditions, and cultural heritage (Gustin and Nyran, 2010). The preservation and development of cultural heritage is not an automatic endeavour that happens out of nowhere rather, it is the work of a framework that may be legal, institutional, and policy-related. Hence, this section discusses Kosovo's legal, policy, and institutional framework for developing and preserving heritage. Kosovo's legal framework provides for the preservation, protection, public access, communication, and provision of necessary resources to facilitate the enjoyment of cultural heritage by current and future generations. According to the Tzivaras (2022), Kosovo institutions have the responsibility to preserve and protect the cultural and religious heritage of all communities and shall ensure the effective protection of the entirety of sites and monuments of cultural and religious significance to communities. Several laws, such as the Law on Cultural Heritage, The Law on Historical Centre of Prizren, and the Law on the Village of Velika Hoca/Hoce e Madhe, outline what protection of heritage sites entails. These laws were promulgated in 2012.



Some other relevant laws on the development and protection of cultural heritage in Kosovo include the Law on Local Self Government, the Law on the Protection and Promotion of the Rights of Communities and their Members in Kosovo, the Law on Spatial Planning, and the Law on Construction. Institutional frameworks entail the departments or structures responsible for overseeing the issues at hand, and issues of heritage in Kosovo are mainly the preserve of The Department of Cultural Heritage. This department is responsible for the management of cultural heritage in Kosovo. It manages the Kosovo Institute for the Protection of Monuments (KIPM) and other six regional centers for cultural heritage, which carry out the responsibility for protection and preservation of tangible cultural heritage (OSCE, 2014). These regional centres protect and restore historic buildings and permit development within historic areas.

The Archeological Institute and the Museum of Kosovo are important arms of the Department of Cultural Heritage. These institutions are mostly responsible for archaeological heritage and cultural heritage values' restoration, conservation, protection, and presentation. In all Kosovo's municipalities, there are provisions for a director for culture and heritage who reports to the regional institutes for the protection of monuments and the Department of Cultural Heritage. The Kosovo Council for Cultural Heritage (KCCH) is an advisor in approving the List of Cultural Heritage, identifying priority measures for financial support for cultural heritage protection, and evaluating submitted project proposals (KCCH, 2018).

Planning that is spatial policy enters the game through The Department on Spatial Planning and Institute on Spatial Planning of the Ministry of Environment and Spatial Planning (MESP) through their engagement in the protection of Special Protective Zones (SPZs) and ensuring that Spatial plans for areas within the SPZs conform with laws regulating SPZs. OSCE (2014) indicates that the legislation on cultural heritage foresees zoning measures controlling the use of property and prohibiting certain activities that harm the environment or disturb monastic life in the sites, such as industrial construction. Kosovo has in place spatial planning standards that advocate for public consultation in both the design of the legislation and the design of the perimeter of the zones and making zoning restrictions subject to the laws protecting related rights and interests. The importance of spatial planning cannot be undermined in Kosovo's heritage, with the Kosovo Spatial Plan 2010-2020 provides a strategic framework for integrated preservation of cultural heritage sites. However, integration of such plans with local spatial plans remains problematic.

#### 4.2. Britain

UNESCO recognizes 26 world heritage sites in Britain. Of the 26 recognized sites, 16 are in England, six are in Scotland, three are in Wales, and one is in Northern Ireland (UNESCO World Heritage Centre, 2015). Despite noting that there is no specific legislation on World Heritage Sites (WHS) in Britain, activities on World Heritage Sites result from material consideration. This consideration is guided by planning policies and processes. According to Valagussa et al (2021), In England, the planning guidance (PPG15) guides activities on WHS, whilst in Scotland, the Scottish Planning Policy of 2014 set out the basis for consideration of matters on heritage sites. Local and regional authorities in Britain have a responsibility of granting or refusing permission for developments that have a bearing on WHS. The preservation, protection, and management of heritage in Britain is administered under complex policy and legal framework. The Ancient Monuments and Archaeological Areas Act 1979 is a United Kingdom-wide act administered across the UK, though part II was never implemented in Wales. To augment this discrepancy, Wales in 2016 introduced the Historic Environment (Wales) Act. It is the sole responsibility of the central government to enforce the implementation

of legislation on scheduled monuments in Britain. In England and Wales, the Planning (Listed Buildings and Conservation Areas) Act 1990 (Sevieri et al, 2020).

## 5. Discussion and synthesis

This comparative analysis of legal, policy, and institutional frameworks for World Heritage Sites across Africa, Europe, and Asia reveals convergent and divergent heritage governance trends. From Britain's harmonised heritage policies to the innovative community-led conservation initiatives in Africa and Asia. The study synthesizes the key findings from each region, examining the implications of these differences and similarities for the effective conservation and management of World Heritage Sites. This paper informs policy and practice from the lessons learned from this comparative analysis, ultimately contributing to developing more effective and sustainable heritage governance frameworks globally.

Smart community development will require integrating existing legal, policy, and institutional frameworks on heritage with spatial planning processes. Heritage sites, just like any other sites, do exist in space. Thus some form of development control is needed to control and direct planning procedures. In Botswana, the Town and Country Planning Act overrides all other acts, meaning that the fate of heritage sites lies in town planning processes and developments (Son, 2008). Post-independence, many parts of Africa have witnessed a drive to institutionalization of the protection of cultural heritage due to deficiencies in the former colonial systems and also a bid to reject the colonial legacy and build the protection of cultural heritage on a new cultural identity. This move was crucial in the political contexts emerging from countries just escaping the shackles of war. However, they did not give much room for integrating spatial policies with the legal, policy, and institutional frameworks for managing heritage sites.

In Zimbabwe, Mutonhodza et al. (2021) noted that heritage is represented in spatial planning legislation through the Building Preservation Orders, where any form of spatial planning considerations for infrastructure development should preserve monuments due to their cultural and heritage significance. The majority of previous and ongoing research on the World Heritage Sites in Africa, Europe and Asia falls short of addressing the challenges in the management and preservation of the sites. This paper contributes to development planning of world heritage sites by broadening the scope from a narrow focus on operationalising policy and institutional frameworks. It integrates new interests, such as the intangible aspects of heritage sites, spirituality, and community beneficiation.

European countries have a rich cultural and natural heritage, with numerous World Heritage Sites recognized by UNESCO. The European Union (EU) has established a robust framework for heritage conservation, including the European Union Heritage Policy. Sevieri (2020) states that the EU provides significant funding and support for heritage conservation projects, such as the European Regional Development Fund (ERDF) and the Creative Europe program. On the other hand, many Asian countries face significant resource constraints, limiting their ability to manage and conserve their heritage sites effectively. This is coupled with rapid economic growth, which has led to widespread urbanization, destroying or degrading many heritage sites (Xiong et al., 2023). According to Heslinga et al. (2018), Asia's incredible cultural and linguistic diversity can make it challenging to develop and implement effective heritage management strategies.

Heritage site conservation in rural and urban areas involves complex systems often faced with the dilemmas of maintaining the built form's historical character, improving infrastructure, and managing development through stakeholder cooperation (Battaglini, 2020). Berta et al (2016) argues that Modern urban planning has considerably impacted the structure and evolution of urban, town, and regional landscapes. Cultural heritage is an important facet of the built and the physical environment. Recognizing the importance of heritage worldwide has led to the creation and adoption of strong and clear legal, policy, and institutional frameworks responsible for the development, management, protection, and preservation of heritage sites (Abdulrahiman et al., 2022). This influence has come formally and informally, incrementally and cumulatively, unilaterally and collaboratively. The outcomes have been for both better and worse. Heritage sites have not remained the preserve of cultural and heritage laws, policies, and institutions; they have graduated to be an important aspect of other bodies of knowledge, such as urban planning. With the adoption of the sustainability concept, calls have been made to create a legal, policy, and institutional fraternity that oversees heritage sites and other sensitive places to achieve sustainable development. The elusive nature of planning processes, an often negative public image associated with regulation, and the diversity and quality of its built environment require a participatory approach to legislation adoption. Policy frameworks for heritage conservation do not mandate the need for performance assessment; however, it is essential because it deals with public assets. Heritage assets are of national significance; their conservation must address various stakeholders since they influence multiple domains with conflicting interests (NIUA, 2015).

Sustainable spatial frameworks governing heritage sites are a prerequisite for sustainable development. This paper argues for an integrated policy framework to guide the planning of world heritage sites. To improve the existing spatial and heritage preservation policies in pursuance of sustainability. Emerging from the study, Heritage laws cannot operate alone. They must be fused with other spatial policies, especially those aligned more with urban planning.

Heritage sites are a public good; it is in the public interest for national development planning to come up with Legislation to protect and preserve these sites (Guzmán et al, 2018). Policy formulation and adoption must be participatory, taking into account Indigenous Knowledge Systems (IKS). The Netherlands is particularly encouraging communities to nurture and conserve their legacy as part of their well-being (Sevieri et al, 2020). Legislation concerning heritage should focus more on protecting the physical conditions, especially immovable heritage. These practices are essential in heritage management, but however, Mutonhodza et al (2021) noted that most parts of Africa or, rather, the developing world do not place much value on the local communities' attachment to their local heritage sites. This critical point is also supported by the widespread values attached to international tourists in many African countries rather than local tourists.

## 6. Conclusion and policy options

This comparative analysis of legal, policy, and institutional frameworks governing World Heritage Sites in Africa, Asia, and Europe reveals significant variations in conservation effectiveness. Despite shared challenges, regional nuances, context-specific solutions underscore the complexity of heritage governance. The analysis revealed that African World Heritage Sites face significant challenges, including inadequate legislation, insufficient funding, and limited community engagement. Despite these challenges, successful conservation initiatives, such as community-led tourism projects, have demonstrated potential for sustainable development.

Despite Africa borrowing much from its colonial history in heritage preservation and protection, there are few traits of integration of heritage legislation, policies, and institutional frameworks with spatial planning policies. For instance, in Zimbabwe, only Building Preservation Orders seem to be the major cultural heritage aspect in spatial planning laws. In Botswana, it has also been noted that although the Town and Country Planning Act overrides all other acts, it does not support heritage issues rather, rifts and conflicts occur between cultural heritage and planning. Diverse governance frameworks, with varying levels of effectiveness, characterize Asia's World Heritage Sites. China and India have established robust conservation policies. However, they face challenges in ensuring community involvement. The paper identified that most parts of the world, especially the First World, have an integrated heritage and spatial planning framework. However, some countries, like Kosovo, still have problems linking or integrating heritage laws and municipal plans. European World Heritage Sites benefit from well-established conservation policies and strong institutional frameworks. Heritage is an important aspect of sustainable development, and its role may be enhanced by its inclusion in settlement planning. The study recommends the following to promote the sustainable preservation of world heritage sites through spatial planning spheres. Effective conservation requires tailored approaches to World Heritage Site conservation, considering regional nuances, cultural contexts, and community needs. Furthermore, the successful conservation and management of World Heritage Sites depend on collaborative efforts among governments, local communities, non-state actors, and international organizations to ensure the long-term preservation of shared cultural and natural heritage.

## Acknowledgement

Leonard Chitongo is a postdoctoral research scholar in the School of Social Sciences, College of Humanities, University of KwaZulu-Natal, South Africa. He would like to acknowledge the support given by his supervisor, Prof Maheshvari Naidu, throughout the study.

## Conflicts of Interest

The author declares no conflict of interest.

## References

- Abdurahiman, S. and Kasthurba, A.K. (2022), "Urban conservation of heritage-sensitive zones in India: A methodological approach", in: Versaci, A., Bougdah, H. and Akagawa, N. (Ed.s), *Conservation of Architectural Heritage*, Springer, Cham, pp. 281–289. [https://doi.org/10.1007/978-3-030-74482-3\\_22](https://doi.org/10.1007/978-3-030-74482-3_22)
- Addyman, P. (1991), "Tourism in the presentation of monuments in Zimbabwe", in: UNDP/UNESCO (Ed.), *Draft Consultants Report, Project ZIM 88/028*, Harare.
- Ahmer, C. (2020), "Riegl's 'Modern Cult of Monuments' as a theory underpinning practical conservation and restoration work", *Journal of Architectural Conservation*, Vol. 26 No. 2, pp. 150–165. Available at: <https://doi.org/10.1080/13556207.2020.1738727>

- Albert, M.T., Bernecker, R., Cave, C., Prodan, A. and Ripp, M. (2022), "50 years World Heritage Convention: Shared responsibility–conflict & reconciliation", *Springer Nature*, Cham. <https://doi.org/10.1007/978-3-031-05660-4>
- Battaglini, E. (2020), "Urban heritage conservation and development", in: Leal Filho, W., Azul, A.M., Brandli, L., Ozuyar, P.G. and Wall, T. (Ed.s), *Sustainable Cities and Communities*, Springer, Cham, pp. 840–850. [https://doi.org/10.1007/978-3-319-95717-3\\_10](https://doi.org/10.1007/978-3-319-95717-3_10)
- Beel, D. and Wallace, C. (2020), "Gathering together: Social capital, cultural capital and the value of cultural heritage in a digital age", *Social & Cultural Geography*, Vol. 21 No. 5, pp. 697–717. <https://doi.org/10.1080/14649365.2018.1500632>
- Beijing Municipal People's Congress (2021), "Regulations on Conservation of Beijing Historic City", *Beijing Municipal People's Congress*, Beijing.
- Bennett, T.W. (1981), "Conflict of laws: The application of customary law and the common law in Zimbabwe", *The International and Comparative Law Quarterly*, Vol. 30 No. 1, pp. 59-103. <https://doi.org/10.1093/iclqaj/30.1.59>
- Berta, M., Bottero, M. and Ferretti, V. (2016), "A mixed methods approach for the integration of urban design and economic evaluation: Industrial heritage and urban regeneration in China", *Environment and Planning B: Urban Analytics and City Science*, Vol. 45 No. 2, pp. 208–232. <https://doi.org/10.1177/0265813516669139>
- Bonacchi, C., Jones, S., Broccoli, E., Hiscock, A. and Robson, E. (2023), "Researching heritage values in social media environments: Understanding variabilities and (in) visibilities", *International Journal of Heritage Studies*, Vol. 29 No. 10, pp. 1021–1040. <https://doi.org/10.1080/13527258.2023.2231919>
- Borowiecki, K.J. and Forbes, N. (2016), in: Fresa, A. (Ed.), *Cultural Heritage in a Changing World*, Springer International Publishing AG, Switzerland. <https://doi.org/10.1007/978-3-319-29544-2>
- British South Africa Company (1890), "Royal Charter of the British South Africa Company", in: Her Majesty's Stationery Office (Ed.), *London*, pp. [not specified]. Available at: <https://digital.lib.sun.ac.za/bitstream/handle/10019.2/2860/leyds-60-8190.pdf> (Accessed 10 July 2025).
- Byers, B.A., Cunliffe, R.N. and Hudak, A.T. (2001), "Linking the conservation of culture and nature: A case study of sacred forests in Zimbabwe", *Human Ecology*, Vol. 29 No. 2, pp. 187-218. <https://doi.org/10.1023/A:1011012014240>
- Chai, R. and Li, H. (2019), "A Study on Legislation for Protection of Cultural Relics in China: Origin, Content and Model," *Chinese Studies*, Vol. 8, pp. 132147
- Chitongo, Leonard and Maheshvari Naidu. (2025) "The Interplay between Cultural Heritage and Urban Morphology: A Case Study of uMlazi Cultural Landscape," *E-Journal of Humanities, Arts and Social Sciences* 6, no.6 (2025), pp. 945 -962. <https://doi.org/10.38159/ehass.20256622>
- Chipunza, K. (2014), "Protection of immovable cultural heritage in Zimbabwe: An evaluation", in: *Legal Frameworks for the Protection of Immovable Cultural Heritage in Africa*, ICCROM Conservation Studies, pp. 42-45.



- Chirikure, S., Ndoro, W., Chitima, S.S., Tevera, G. and Thondhlana, T. (2022), "Colonial statues in post-colonial Africa: Decolonising the narrative or destroying the heritage?", in: Abungu, G.O. and Ndoro, W. (Ed.s), *Cultural Heritage Management in Africa*, Routledge, London. <https://doi.org/10.4324/9781003199144-16>
- Chiwaura, H. (2014), "The development of formal legislation and the recognition of traditional customary law in Zimbabwe's heritage management", in: *Legal Frameworks for the Protection of Immovable Cultural Heritage in Africa*, ICCROM Conservation Studies, pp. 18–21.
- Clover, J. (2003), "Botswana: Future prospects and the need for broad-based development", *African Security Analysis Programme Situation Report*, No. 1, September 2003, pp. 1–11, Pretoria: Institute for Security Studies.
- Curran, K. and Zimmermann, N. (2022), "The dynamics of collaboration in heritage science", *Studies in Conservation*, Vol. 67 No. 1-2, pp. 136–149. <https://doi.org/10.1080/00393630.2021.1875175>
- Denbow, J. and Thebe, P.C. (2006), *Culture and Customs of Botswana*, Culture and Customs of Africa series, Bloomsbury Academic. Available at: <https://books.google.co.za/books?id=8ycoVZ-DfrYC> (Accessed 10 July 2025). <https://doi.org/10.5040/9798400635212>
- European Commission (2022), "Strengthening cultural heritage resilience for climate change: Where the European Green Deal meets cultural heritage," Publications Office of the European Union.
- Facchinetti, S. (2014), "Cultural heritage management in Myanmar: A gateway to sustainable development", *ELIAS Briefing Paper*, No. 6, European Institute for Asian Studies.
- Fairclough, G. (2008), "A new landscape for cultural heritage management: Characterisation as a management tool," in: *Landscapes under Pressure*, Boston, MA: Springer, pp. 55–74. [https://doi.org/10.1007/0-387-28461-3\\_4](https://doi.org/10.1007/0-387-28461-3_4)
- Foster, S.M. and Jones, S. (2019), "The untold heritage value and significance of replicas," *Conservation and Management of Archaeological Sites*, Vol. 21 No. 1, pp. 1-24. <https://doi.org/10.1080/13505033.2019.1588008>
- Government of Botswana (2001), "National CBNRM forum in Botswana: Proceedings of the 2nd National CBNRM Conference in Botswana, 14–16 November 2001 and the CBNRM Status Report 2001," Government of Botswana, Gaborone.
- Gupta, K.L. and Rathore, S. (2016), "Legal aspects of heritage in India," in: Versaci, A., Bougdah, H. and Akagawa, N. (Ed.s), *Conservation of Architectural Heritage*, Cham: Springer, pp. 291–298.
- Guštin, M. and Nypan, T. (Ed.s) (2010), *Cultural Heritage and Legal Aspects in Europe*, *Annales Mediterranea* series, Institute for Mediterranean Heritage & Institute for Corporation and Public Law, Science and Research Centre Koper, University of Primorska, Koper, Slovenia. Available at: <https://ehhf.eu/wp-content/uploads/2020/11/Cultural-heritage-and-legal-aspects-in-Europe-BOOK.pdf> (Accessed 10 July 2025).
- Guzmán, P., Pereira Roders, A. and Colenbrander, B.J.F. (2018), "Measuring links between cultural heritage management and sustainable urban development: An overview of global monitoring tools", *Cities*, Vol. 60, pp. 192–201. <https://doi.org/10.1016/j.cities.2016.09.005>

- Hall, P. (2002), *Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century*, 3rd ed., Blackwell, Oxford.
- Heslinga, J., Groote, P. and Vanclay, F. (2018), "Understanding the historical institutional context by using content analysis of local policy and planning documents: Assessing the interactions between tourism and landscape on the Island of Terschelling in the Wadden Sea Region", *Tourism Management*, Vol. 66, pp. 180–191. <https://doi.org/10.1016/j.tourman.2017.12.004>
- Jerliu, F. (2016), *National Strategy for Cultural Heritage 2017–2027*. Prishtina: Ministry of Culture, Youth and Sport. Available at: [https://www.mkrs-ks.org/repository/docs/eng\\_strategy\\_for\\_heritage.pdf](https://www.mkrs-ks.org/repository/docs/eng_strategy_for_heritage.pdf) (Accessed 10 July 2025).
- KAS (2022), "Series 5: Social Statistics – Assessment: Population of Kosovo 2021", KAS: Prishtina. Available at: [https://enlargement.ec.europa.eu/document/download/c790738e-4cf6-4a43-a8a9-43c1b6f01e10\\_en?filename=Kosovo%20Report%202024.pdf](https://enlargement.ec.europa.eu/document/download/c790738e-4cf6-4a43-a8a9-43c1b6f01e10_en?filename=Kosovo%20Report%202024.pdf) (Accessed 15 July 2025).
- KCCH (2018), "Report on Projects Invested in Cultural Heritage by MCYS 2008–2018 (Analysis of the current state of cultural heritage)", Prishtina: Kosovo Council for the Cultural Heritage. Available at: <https://www.iieta.org/journals/ijsdp/paper/10.18280/ijsdp.190610> (Accessed 15 July 2025).
- Keitumetse, S.O. (2011), "Sustainable development and cultural heritage management in Botswana: Towards sustainable communities," *Sustainable Development*, Vol. 19 No. 1, pp. 49–59. <https://doi.org/10.1002/sd.419>
- Lin, M., Pereira Roders, A., Nevzgodin, I., and de Jonge, W. (2023), "Values and interventions: Dynamic relationships in international doctrines," *Journal of Cultural Heritage Management and Sustainable*, Vol. 15 No. 3. <https://doi.org/10.1108/JCHMSD-10-2022-0178>
- Liu, L.T. and Tian, R.C. (2019), "On the absorption and inheritance of Chang'an capital culture by Nara Heijokyo in Japan," *Humanities Collection*, Vol. 01, pp. 269–290.
- Luo, Y.Y., Lu, Y., Qin, Y. and Wang, Z. (2019), "Dynamic regulation of natural scenic area system from the perspective of ecological civilization," *Revista Internacional de Contaminación Ambiental*, Vol. 35, pp. 203–212. <https://doi.org/10.20937/RICA.2019.35.esp01.20>
- Mahachi, G. and Ndoro, W. (1997), "The socio-political context of southern African Iron Age studies with special reference to Great Zimbabwe, Caves, Monuments and Texts," *Zimbabwean Archaeology Today*, pp. 89–109, in Pwiti, G. (Ed.), Department of Archaeology and Ancient History, Uppsala.
- Molefe, O. (2016), "The relevance of the Manifest of Amsterdam to the architectural heritage management in Botswana: The need for a functioning and integrated system," in: *Forty Years after The Declaration of Amsterdam: The Past, Present and Future of Integrated Conservation*, pp. 268–283.
- Mtwana, S.D. (2012), "Valorisation of Cultural Heritage in the Nairobi Central Business District through Spatial Planning," Department of Urban and Regional Planning, University of Nairobi, Kenya.
- Munjeri, D. (1999), "Cultural Landscapes in Africa: An Overview," in Rossler, M. and Saouma-Forero, G. (Eds), *The World Heritage Convention and Cultural Landscapes in Africa*, Paris: UNESCO, pp. 35–43.

- Mutonhodza, C., Mashingaidze, N., and Chirisa, I. (2021), "Furthering the Sustainable Development Agenda by Putting Urban Heritage and Value Extraction at the Center," in *The Palgrave Encyclopedia of Urban and Regional Futures*, Palgrave Macmillan, Cham. [https://doi.org/10.1007/978-3-030-51812-7\\_100-1](https://doi.org/10.1007/978-3-030-51812-7_100-1)
- Ndhlovu, N. (2011), "Legislation as an Instrument in South African Heritage Management: Is It Effective?", *Conservation and Management of Archaeological Sites*, Vol. 13 No. 1, pp. 31–57. <https://doi.org/10.1179/175355211X13097877338932>
- Ndoro, W. and Pwiti, G. (2001), "Heritage Management in Southern Africa: Local, National and International Discourse," *Public Archaeology*, Vol. 2, pp. 1–13. <https://doi.org/10.1179/pua.2001.2.1.21>
- Ndoro, W. and Pwiti, G. (2009), "Legal Frameworks for the Protection of Immovable Cultural Heritage in Africa," *ICCROM Conservation Studies*, ICCROM, Rome, pp. 1–50.
- Ndoro, W. (2002), *Your Monument, Our Shrine: The Preservation and Management of Great Zimbabwe*, Department of Archaeology and Ancient History, Uppsala University, Uppsala, Sweden. British South Africa Company Royal Charter, 1890.
- NIUA (National Institute of Urban Affairs). (2015), *Urban heritage in Indian cities*, New Delhi: National Institute of Urban Affairs.
- Organisation for Security and Co-operation in Europe (OSCE) (2014), *Challenges in the Protection of Immovable Tangible Cultural Heritage in Kosovo*, Kosovo: OSCE.
- Rodwell, D. (2022), "Inhabited historic cities, urban heritage, and dissonances at the heart of the World Heritage system," *European Journal of Post-Classical Archaeologies*, Vol. 12, pp. 291–352.
- Sevieri, G., Galasso, C., D'Ayala, D., De Jesus, R., Oreta, A., Grijo, M.E.D.A., Ibabao, R. (2020), "A multi-hazard risk prioritisation framework for cultural heritage assets," *Natural Hazards and Earth System Sciences*, Vol. 20 No. 5, Art. no. 77, pp. 1391–1414. <https://doi.org/10.5194/nhess-20-1391-2020>
- Shulan, F. and Hillier, J. (2018), "Disneyfication or self-referentiality: Recent conservation efforts and modern planning history in Datong," in: Ding, Y., Marinelli, M. and Zhang, X. (Ed.s), *China: A Historical Geography of the Urban*, Cham: Springer International Publishing, pp. 165–191. [https://doi.org/10.1007/978-3-319-64042-6\\_8](https://doi.org/10.1007/978-3-319-64042-6_8)
- Son, E.Y. (2008), "Competing values in world culture and the emergence of middle ground," *Comparative Sociology*, Vol. 7 No. 1, pp. 28–50. <https://doi.org/10.1163/156913308X260457>
- Stanikzai, I.U., Seerat, A.H. and Humdard, W.U. (2023), "Role of Sustainable Tourism in Preserving Cultural Heritage of Afghanistan: A Comprehensive Review," *Society & Sustainability*, Vol. 5 No. 2, pp. 30–38. <https://doi.org/10.38157/ss.v5i2.594>
- Stone, L.T. and Stonembaiwa, E. (2017), "Special Issue on Environment, Tourism and Contemporary Socio-economic Issues in the Okavango Delta and other Ecosystems: Tourism in Botswana in the Last 50 Years: A Review", *Botswana Notes and Records*, Vol. 49 No. 1, pp. 57-72.
- Thondhlana, T.P., Mukwende, T., Machiridza, L.H., Musindo, T.T., Tevera, G. and Maduro, N. (2023), "When theory meets praxis – enhancing heritage management through practice-led research at Great Zimbabwe World Heritage property", *Journal of Cultural Heritage Management and Sustainable Development*, Vol. 13 No. 3, pp. 428-446. <https://doi.org/10.1108/JCHMSD-08-2022-0149>

- Tzivaras, I. (2022), "Organization for Security and Co-operation in Europe (OSCE)," in: *International Conflict and Security Law*, pp. 555–573. [https://doi.org/10.1007/978-94-6265-515-7\\_25](https://doi.org/10.1007/978-94-6265-515-7_25)
- UNESCO World Heritage Centre (2015), "Operational guidelines for the implementation of the World Heritage Convention," July, p. 167.
- UNESCO (2015), "State of Conservation – Timbuktu," United Nations, available at: <http://whc.unesco.org/en/soc/261> (Accessed 10 July 2025).
- Valagussa, A., Frattini, P., Crosta, G., Spizzichino, D., Leoni, G., Margottini, C. (2021), "Multi-risk analysis on European cultural and natural UNESCO heritage sites," *Natural Hazards*, Vol. 105 No. 3, pp. 2659-2676. <https://doi.org/10.1007/s11069-020-04417-7>
- Xiong, K., Chen, D., Zhang, J., Gu, X., Zhang, N. (2023), "Synergy and regulation of the South China Karst WH site integrity protection and the buffer zone agroforestry development," *Heritage Science*, Vol. 11 No. 1. <https://doi.org/10.1186/s40494-023-01061-9>
- Zhang, J., Xiong, K., Liu, Z., He, L., Zhang, N., Gu, X., Chen, D. (2023), "Exploring the synergy between Karst World Heritage site's OUV conservation and buffer zone's tourism industry development: a case study of the Libo-Huanjiang Karst," *Heritage Science*, Vol. 11 No. 1 S, art. no. 202. <https://doi.org/10.1186/s40494-023-01036-w>