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İSTANBUL OKAN UNIVERSITY
GRADUATE SCHOOL

THESIS FOR THE GRADUATE OF MASTERS IN
ARCHITECTURE
MASTER'S DEGREE PROGRAM

Munira Jibrilla UMAR

A UNIQUE APPROACH TO ECO-TOURISM FOR
CULTURAL HERITAGE CONSERVATION IN KANO

THESIS SUPERVISOR

Asst. Prof. Dr. Eda ÖZSOY

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**IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
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**A UNIQUE APPROACH TO ECO-TOURISM FOR CULTURAL
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PREFACE

This thesis explores the potential of eco-tourism architecture in promoting sustainable development and preserving cultural heritage in Kano, Nigeria. The work was inspired by a personal commitment to sustainable design and the need to integrate cultural identity within architectural practices in tourism development.

During this research, I faced several challenges, particularly in obtaining localized data and aligning global eco-tourism principles with the realities in Nigeria. These obstacles, however, strengthened the depth and relevance of the study by encouraging a more grounded and context-sensitive approach.

The thesis is organized into four chapters. The first introduces the background, problem statement, and objectives of the research. The second chapter presents a literature review covering global practices, heritage concepts, and the relationship between eco-tourism and cultural heritage. The third outlines the research methodology and case study analysis, while the fourth chapter proposes design guidelines and recommendations tailored to the Nigerian context.

This study was conducted under the academic guidance of Istanbul Okan University, within the Faculty of Architecture and Design. I am especially grateful to my supervisor, Dr. Eda Özsoy, for her invaluable support and direction throughout this work.

Umar, Munira Jibrilla

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ÖZET

Eko-turizm, sürdürülebilir kalkınmayı teşvik ederken kültürel mirasın korunmasına katkı sağlaması bakımından hayati bir rol oynamakta olup, özellikle Kano gibi zengin kültürel geçmişe sahip bölgelerde giderek daha fazla önem kazanan bir çalışma alanı hâline gelmektedir. Bu araştırma, çevresel sürdürülebilirlik ile kültürel korumanın dengelenmesinde eko-turizmin ve ziyaret merkezlerinin potansiyelini incelemektedir. Yerel uygulamalar ve toplumsal katılımın analiz edilmesi yoluyla, eko-turizmin kültürel alanların korunmasına nasıl katkıda bulunabileceği ve ekonomik büyümeyi nasıl teşvik edebileceği araştırılmıştır.

Nitel ve nicel yöntemlerin bir arada kullanıldığı bu çalışmada, paydaşlar ve yerel topluluklardan elde edilen veriler doğrultusunda, bölgede eko-turizm gelişiminin avantajları ve karşılaşılan zorluklar değerlendirilmiştir. Ayrıca Çin'deki Badaling Çin Seddi, Ürdün'deki Petra Arkeolojik Parkı ve İngiltere'deki Hadrian Duvarı gibi küresel çapta değer taşıyan miras alanları; tarihi koruma, sürdürülebilir turizm ve topluluk katılımını etkin biçimde entegre eden, bu yönleriyle kültürel direncin ve toplumsal gururun simgeleri olan dikkate değer örnekler olarak ele alınmıştır. Bulgular, eko-turizmin çevresel koruma ve kültürel mirasın yaşatılmasına katkı sağladığını ortaya koymakla birlikte, altyapı ve yerel katılım konularında hâlen iyileştirilmesi gereken alanların mevcut olduğunu göstermektedir. Bu bağlamda, Kano'da eko-turizm faaliyetlerinin uzun vadeli sürdürülebilirliği ve mirasın korunmasını güvence altına alacak şekilde güçlendirilmesine yönelik çeşitli öneriler sunulmaktadır.

ABSTRACT

Eco-tourism plays a crucial role in fostering sustainable development while preserving cultural heritage, making it an increasingly significant area of study, especially in regions with rich cultural histories like Kano. This research investigates the potential of eco-tourism and visiting centres to balance environmental sustainability with cultural preservation. Through the examination of local practices and community involvement, this study explores how eco-tourism can contribute to the protection of cultural sites and promote economic growth.

Using a combination of qualitative and quantitative methods, data were gathered from stakeholders and local communities to assess the benefits and challenges of eco-tourism development in the region. Additionally, global case studies such as The Badaling Great Wall of China, The Petra Archaeological Park in Jordan, and The Hadrian Wall in England are outstanding examples of universally valued heritage places that effectively integrate historic preservation, sustainable tourism, and community engagement and are thus symbols of cultural resilience and pride. The findings reveal that while eco-tourism contributes to environmental conservation and cultural preservation, there are still areas for improvement, particularly in infrastructure and local engagement. Recommendations are made to enhance eco-tourism efforts in Kano, ensuring long-term sustainability and heritage protection.

Key Words: Eco-tourism, Heritage, Cultural Sites, Kano, Cultural Conservation, Historic City, City Wall, Cultural preservation.

Date: JUNE 2025

LIST OF ABBREVIATIONS

WTTC: World Travel and Tourism Council

UN: United Nations

GDP: Gross Domestic Product

UNESCO: United Nations Educational, Scientific, and Cultural Organization

WHS: World Heritage Site

SINAC: National System of Conservation Areas

NES: National Ecotourism Strategy

WTO: World Tourism Organisation

TDC: Tourism Development Corporation

CRSNP: Cross River State National Park (Nigeria)

UNCSD: United Nations Conference on Sustainable Development.

PAP: Policy Action Plan

NGO: Non-Governmental Organisation

NHLF: National Heritage Lottery Fund

WallCAP: Wall Community Archaeology Project

KNUPDA: Kano State Urban Planning and Development Authority

NTDC: Nigerian Tourism Development Corporation

TIES: The International Ecotourism Society

EEAA: The Egyptian Environmental Affairs Agency

GSTC: The Global Sustainable Tourism Council

NGOs: Non-Governmental Organisations

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CHAPTER ONE: INTRODUCTION

In recent years, there has been a significant increase in tourism to view wildlife, cultural, and natural scenic areas because of increased incomes and improved standard of living. (Budowski, 1976), facilitated by increased numbers of the population interested in and pursuing natural experiences. Tourism has increasingly been recognized as a pivotal factor in advancing sustainable development in the modern era, as previously analysed by the World Travel & Tourism Council. (WTTC, 2011), discovered by (Lenzen, 2018), the industry contributes approximately 8% to global greenhouse gas emissions, hence the need for its sustainability to reduce adverse environmental and socio-cultural impacts while trying to maximize economic benefits. Unfortunately, this growth has occurred so rapidly, the world, slightly taken aback, is not adequately prepared to manage its effect on the very resources it depends upon. As a result, widespread damage to natural assets, impacting tourism itself, many tourist destinations support fragile ecologies that cannot bear heavy disturbances, and once a critical threshold is crossed, swift degradation often ensues. (M Usher, 1974).i.e., the disappearance of wildlife because of human presence; destruction of scenery through road construction; and pollution from tourists. In addition, the arrival of tourists often influences local communities in a very detrimental way in terms of cultural and economic patterns. (Budowski, 1976).

Sustainable tourism is important in reducing environmental degradation, preserving cultural heritage, and benefiting local communities. Infrastructure is fundamental to the sustainable advancement of the tourism sector within any society, as underscored by (Eyak., 2019). James highlights that infrastructure (heritage) plays a crucial role in the sustainable development of tourism, especially within emerging economies such as Nigeria. He is the person who describes infrastructure as the fundamental facilities and systems on which a nation, city, or area exists, plus the services and buildings required for economic activity. It should be noted that cultural heritage is comprised of monuments, ensembles of buildings, and sites with a history, beauty, archaeological, scientific, or anthropological value. Natural heritage comprises outstanding physical, biological, and geological phenomena, habitats of threatened species, and areas worth preserving for conservation, science, or beauty. (UNESCO., 2007). Tourism, as a sector, relies heavily on this fundamental infrastructure to operate effectively.

Success for the World Heritage Convention goes beyond preservation efforts and demonstrates the transformational power of international cooperation. There is unprecedented engagement

with governments, communities, academia, and the private sector to prove how much collective action increases heritage conservation. This therefore shows the possibilities of a collaborative framework in sustainable tourism and heritage preservation and provides a model on how diverse stakeholders can come together for the cause of cultural and natural heritage.

Eco-tourism is a type of sustainable tourism that contributes to biodiversity conservation, socio-cultural growth, and economic growth in a country. Eco-tourism has increased rapidly since 1970, and by the end of the 20th century, it was the fastest-growing segment in the tourism sector, a feature that has carried over into the new millennium. (Hughes, 1998). According to (Anup, 2018), eco-tourism actively supports these goals and is increasingly recognized for its impact. Eco-tourism is important in enhancing the appreciation of natural environments and traditional cultures through educational and interpretive experiences; supporting local economies with sustainable income and employment opportunities; minimizing environmental and socio-cultural impacts; contributing financially to the conservation of natural areas; and improving the awareness of conservation principles among local communities and tourists. (World, 2024).

Nigeria, notably among the many countries in developing countries, faces significant challenges in the effort to preserve historical and cultural monuments due to the rapid economic growth and increasing demand for prime urban land. (Yusuf, 2023). Kano is Nigeria's oldest state capital, with a well-documented history, a very strong cultural heritage, and a long-standing architectural tradition. (Akeem, 2024). As a prominent centre of trade and commerce since the trans-Saharan era, the city has been shaped by a syncretic blend of Islamic, Hausa, and Fulani cultures.

Protected areas, such as those along the east coast of Sabah, promote sustainable use of natural resources and are frequently utilized by the tourism industry to generate revenue for local communities (Gabir, 2021). However, the situation in Nigeria can be different. According an article written by (Iliyasu., 2014), Kano has enormous cultural heritage, with much potential for eco-tourism in its historic city wall to drive interest, conservation, and a balancing process of preservation against urban development in a sustainable way, meanwhile, the several years of neglect of Kano's cultural landmarks, such as the deteriorating city wall; poor preservation; loss of continuity in culture; and lack of balance between development and conservation threaten to destroy its heritage forever. Ultimately, sustainability contributes positively to the region's socio-cultural and ecological balance, ensuring that eco-tourism in Kano is not just about economic gain but also about preserving and celebrating the unique cultural and historical identity of this remarkable city. Dala Hill, for instance, as concluded by

(Yusuf., 2024) holds a significant socio-economic impact on Kano, emphasizing its potential for heritage tourism. Nonetheless, preservation efforts have faced challenges due to natural erosion and human activities, including local encroachment, improper waste disposal, and poor management practices (Agbabiaka., 2021).

However, despite its rich cultural and environmental assets, modernization and environmental challenges threaten the city's heritage, making it a compelling subject for sustainable tourism strategies aimed at balancing heritage conservation with economic growth and community engagement. (Akeem, 2024). Kano, amongst others, also faces challenges related to sustainable tourism practices that balance economic growth with heritage and ecological preservation. Historic buildings in Kano have been part of every era; some are in ruins, while others remain intact. (Yusuf, 2023). Yusuf further elaborated that modern conservation techniques have developed new ways of preserving the built heritage, but these methods often do not agree with the traditional materials and construction techniques of the earlier ages. He also said the field of heritage conservation evolves, there is a growing effort to revive neglected cultural assets, through past preservation practices frequently overlook the more advanced preservation strategies available today.

1.1 BACKGROUND OF STUDY

Globalization and development projects have resulted in the exploitation of Indigenous Peoples, loss of traditional knowledge, and irreparable environmental impacts such as species extinction and resource destruction grave concern for the survival of many communities worldwide. (UN, 2009). Indigenous Australians, who are particularly disadvantaged socially and economically compared with others, struggle to utilize emerging ecotourism opportunities as a means to improve economic and human development in their remote communities. (Fuller, 2002) (Hughes., 2005). In a paper examined by (Caldicott, 2005), the potential of ecotourism to add social and economic challenges in remote Australian communities emphasized the economic and socio-cultural benefits crucial for development. However, (Taylor, 2003) Raised a concern about the economic impact the limited empirical evidence has, noting that although some economists have evaluated its income-generating potential, very few studies have been done regarding its broader economic impacts and its role in conservation, thus debates about how much economic gain is realized by local communities from ecotourism continue.

An indigenous Maori community in New Zealand, Kaikoura has been greatly and considerably favoured by ecotourism; whale watching, one of the wildlife tourism since its

commercialization in the late 1980s (Curtin, 2003). It has driven substantial revenue growth, employment opportunities, and socio-economic empowerment, with Maoris transitioning from marginalized status to influential employers. Additional benefits include education, training, and income for the local Marae.

Having known that ecotourism emphasizes the preservation of natural beauty, geology, flora, fauna, and indigenous cultures, along with a generation of revenue for unique-attribute destinations (Blangy, 1990), Turkey has considered ecotourism an essential mechanism to reach sustainable development. The Kavak Delta in Turkey, a vital wetland on a bird migration route, hosts unique vegetation and serves as a habitat for nesting birds, making it ideal for ecotourism. (Özcan, 2009). Despite its potential for birdwatching, botanical tourism, and coastal activities, the area remains underutilized due to limited awareness. The World Health and Safety (WHS) management in Turkey, according to Somuncu (2010), shares common problems with many developing countries: lack of management, lack of policy framework, and site-specific issues. Other key issues include a deficiency in management plans, insufficiency of coordination among stakeholders, funding shortfalls, and low levels of foreign investment. Somuncu (2010) further added outdated information, limited data at the site level, and the lack of structured rehabilitation programs. These shortcomings need to be addressed by giving precedence to good management practices and incorporating effective, current knowledge to ensure long-term WHS conservation.

In Singapore, tourism has risen steadily by 12% since 1970. Capturing from neighbouring south-east Asian countries (where the tourism industry was prominent), visitors started desiring something different. Singapore, with its strategic location, modern infrastructure, and early recognition by the government of the industry's economic potential, Singapore converted this island into a key Southeast Asian hub and much more than a stopover destination. (Teo, 1995). Singapore's Tourism Plan breathed new life into the industry by incorporating attractions into thematic clusters: cultural heritage preservation in areas like Chinatown, showcasing colonial history through conserved landmarks, resort development of islands like Sentosa, park enhancements for a "Clean and Green Garden City," and international sports events hosted on its soil. These were to create comprehensive and attractive tourist experiences. (MTI, 1986).

The concept of sustainable tourism originated in the late 1980s and has since then been a cornerstone of tourism research, policy frameworks, and strategic development in striking a balance between environmental, social, and economic concerns of sustainability within the industry (Halls., 2011). An article mentioned how well-documented in literature ecotourism is, as a strategy with potential economic and social benefits while avoiding harm to the natural

environment (Caldicott, 2005). Ecotourism has been widely recognized in the academic discourse as a critical strategy for activating community-led economic development. Its importance is demonstrated by its ability to provide tangible economic and social benefits with an emphasis on prioritizing the environment and its protection (Caldicott, 2005).

1.2 AIMS AND OBJECTIVES OF STUDY

This study aims to develop an architectural model for eco-tourism in Kano, Nigeria. It integrates sustainable environmental design and the preservation of cultural heritage. The research explores how eco-tourism can strengthen local communities, preserve architectural identity, and promote environmentally conscious tourism founded on international best practices and their contextual integration in Nigeria.

The aforementioned aim is set to be achieved through the following objectives;

1. To investigate the definitions, salient characteristics, and indicators of eco-tourism from environmental and architectural perspectives.
2. To examine how the preservation of cultural heritage can optimally be integrated in the development of eco-tourism in Kano.
3. To analyse successful international models of eco-tourism with sound sustainability and architectural frameworks and extract beneficial lessons for Nigeria.
4. To analyse the modern sustainability practices and environmental technologies in eco-tourism architecture and their adaptability to Kano.
5. To examine how the cultural, historical, and natural heritage of Kano influences its architectural identity and eco-tourism potential.
6. To propose a framework of architectural solutions and policy guidelines that promote sustainable eco-tourism while preserving the cultural heritage of Kano.

1.3 SCOPE OF STUDY

The study targets the growth of eco-tourism in Kano, Nigeria. Specifically, it deals with leveraging eco-tourism as a tool for the preservation of cultural heritage, sustainability, and community involvement through architectural interventions. The scope includes a theoretical review of definitions, attributes, and indicators of ecotourism sustainability; a review of international case studies of architectural significance in ecotourism; and a review of the architectural importance and cultural identity of Kano. The research is limited to heritage-based eco-tourism and not extended to mass tourism or other economic models of tourism that are

not applicable. It is concerned with architectural design, planning principles, environmental practices, and culturally responsive frameworks that may inform a replicable model suitable to the Kano local context.

1.4 PROBLEM STATEMENT/ RESEARCH QUESTIONS

Kano, a Nigerian metropolis, has been a game of balancing sustainable development of tourism and cultural heritage preservation to protect the environment against its richly diverse cultural heritage and unique architectural legacy. Though eco-tourism has already gained international acceptance as a viable alternative to ecotourism, its potential remains unexploited in Kano. The study bridges the gap between the integration of the principles of eco-tourism with architectural solutions that maintain the cultural identity, provide community involvement, and are environmentally friendly. It explores solutions to support sustainable growth while safeguarding Kano's invaluable heritage.

Main Question:

How can eco-tourism development architectural approaches promote cultural conservation, environmental sustainability, and the involvement of local people in Kano, Nigeria?

Sub-Questions: What are the most prominent architectural and environmental characteristics of eco-tourism, and how do they apply to Kano's context? What optimum international eco-tourism architecture practices can be adjusted to suit Kano's environment and culture? How do Western conservation models influence Nigeria's development of eco-tourism, and in what ways do they influence local participation and agency? How can Kano's unique cultural, historical, and architectural heritage be maintained and promoted through eco-tourism development?

1.4 METHODOLOGY

This study uses a mixed-methods approach, combining qualitative insights on historical and cultural narratives with quantitative data to provide measurable evidence for addressing the research objectives comprehensively.

The study employs qualitative methods, including relevant global studies, in-depth interviews (of officials and stakeholders) elaborating on the funding, policy planning, sustainability, community collaboration of Kano, and site observations of the locals and to explore cultural and architectural aspects of eco-tourism in Kano.

Quantitative methods, such as surveys and statistical analyses, are used to assess visitor satisfaction, community engagement, and economic impacts. Together, these approaches provide a comprehensive analysis, integrating nuanced insights with measurable data to evaluate the relationship between eco-tourism and heritage conservation.

Sampling was purposive for both qualitative and quantitative samples. For international case studies, purposive sampling is used for appropriate cases that represent successful eco-tourism, balancing the **parameters:** *sustainability, heritage conservation, community involvement, accessibility, policy, and planning*. In Kano, local experts, eco-tourism operators, government officials, and tourists were purposely selected for interviews and surveys for their understanding of the region's heritage sites.



CHAPTER TWO: LITERATURE REVIEW ON ECOTOURISM, CULTURAL HERITAGE, AND SUSTAINABILITY ECOTOURISM DEFINITION

The term 'ecotourism' gained prominence in the late 1980s as part of a broader global shift towards sustainable practices. (Diamantis, 1999). While some sources trace its origins to the late 1970s through Miller's work on ecodevelopment (Higgins, 1996), Ceballos-Lascuráin is credited with coining the term in the early 1980s, defining it as travel to relatively undisturbed natural areas for studying and enjoying their environment, wildlife, and cultural aspects (Thompson, 1995). "Ecotourism" is frequently overused and misapplied within the travel industry. Simply walking through a rainforest does not qualify as ecotourism unless it directly contributes to the well-being of the environment and the local communities. (Hussain, 2022). Hussain further elaborated that ecotourism involves hosting and entertaining visitors in a manner that minimizes environmental impact and preserves native cultures. Emphasizing the responsibility of both travellers and service providers in ensuring that tourism practices are sustainable and respectful of local communities. Ecotourism, as a subset of alternative tourism, has roots in earlier environmental concerns and the impact of human activities on natural ecosystems, which began to attract attention from environmentalists and scholars. (Fennell D. A., 2002). Offen (2016), in an article, also quoted that heritage is everything that has been passed on from earlier generations. These include physical items like historical artefacts in a museum or family mementos, and non-physical items like traditions, history, legends, and language. OpenLearn (2024) continued that heritage includes physical items like historic monuments and artefacts that can be passed down through inheritance, but also non-physical items like language, culture, and practices that are passed down across generations, which show individual values and even societal values.

Ecotourism has been conceptualized and defined by scholars and institutions differently, with usual underlying common themes where education, conservation, community development, and sustainability are concerned. For the International Ecotourism Society (TIES, 2015) ecotourism represents sustainable tourism, which entails visiting places of natural beauty that aim at preserving the environment, sustaining well-being for people residing in visited areas, and encompasses interpretation and education. This recognizes three primary factors: conservation, the well-being of locals, and learning experience, i.e., ecotourism must equal

human use and nature and culture sustainability. Similarly, Ceballos-Lascurain (1996) also defines it as environmentally conscious tourism to natural destinations. That promotes conservation, has low visitor impact, and provides beneficial active socio-economic involvement of local people, emphasizing low-impact activity and incorporation of built environments with natural and cultural contexts. Withiam (2001) builds on this by describing ecotourism as a form that encourages learning opportunities about nature, supports environmental appreciation, and makes a direct contribution towards ecosystem conservation with consideration for local cultural practices, thereby highlighting the importance of culturally sensitive designs in ecotourism architecture. Ecotourism is a tourism mode of alternative that inspires respect for both natural environments and traditional cultures, requiring ecologically friendly infrastructure, and a close relationship with sustainable building practices (Honey, 2008). In the same way, Fennell (2008) defines ecotourism as traveling to quite untapped natural areas for recreation and study, with a major focus on long-term conservation, that is, any architectural intrusion will have to minimize disturbance of the environment. Lastly, Stronza (2007) highlights that ecotourism prioritizes the ecological and cultural aspects of an area, minimizes human impact, and provides direct economic returns for conservation and local people, reinforcing the double intention of benefiting nature and local communities. Combined, these definitions present a lasting framework for understanding ecotourism in terms that are solidly grounded in architectural accountability, environmental protection, and cultural sensitivity.

2.1 GLOBAL PERSPECTIVE

Ecotourism has become increasingly popular globally as a means of sustainable development for harmonizing economic development with natural and cultural heritage preservation. While its usage and impacts differ in countries, the common aim is to encourage collaboration in responsible travel to increase conservation, community involvement, and education.

Egypt has centred on conserving protected areas as well as archaeological heritage in trying to integrate ecotourism within national development policies. Over 30 of its protected areas, including the Ras Mohammed National Park and the White Desert, offer unique ecotourism experiences (El-Kholei, 2010). The Egyptian Environmental Affairs Agency (EEAA) has worked to promote environmentally responsible tourism, often collaborating with local communities and international NGOs. Still, over-tourism at historic sites, inadequate waste management, and weak eco-certification schemes for tour operators and accommodations

continue to be a problem in Egypt (Said, 2018). To minimize such issues, measures such as ecotourism zoning, Indigenous community-run eco-lodges, and environmental education campaigns have been implemented.

In Australia, the introduction of the National Ecotourism Strategy (NES) in 1994 was a significant move towards establishing ecotourism frameworks that emphasize natural resource management, planning, and Indigenous community involvement. (Charters, 1996). The policy initially enjoyed the complete support of the government, but this waned following the 1996 federal elections, resulting in disjointed implementation across different states (Grant, 1998). However, ecotourism remains a major conservation and economic tool in Australia, supporting both environmental management and regional development. (Soaga, 2022).

Malaysia, with its high biodiversity and scenic landscape, declared tourism a national priority in the early 1990s. Initiatives like the "Visit Malaysia Year" encouraged ecotourism, particularly in rainforests and marine conservation sites. (Nair., 2015). The country continues to experience poor site management, greenwashing, and weak certification programs. Absence of a centralized ecotourism database has also been a challenge, despite having more than 500 potential ecotourism sites. (Tagi., 2001). In Thailand, although the country boasts Asia's largest hotel inventory and a firmly rooted cultural heritage, unregulated mass tourism and environmental degradation threaten its ecotourism potential. Robert Burns Research Fellow of the World Travel & Tourism Council (WTTC) prioritized region-focused ecotourism research, education, and capacity-building of stakeholders. (Dowling, 1995). Thailand conducted priority settings on raising awareness and implementing sustainable infrastructure in a bid to reduce pressure on its vulnerable ecosystems.

Slovenian ecotourism is embedded within national development. The Global Sustainable Tourism Council (GSTC) evaluated Slovenia to be the globe's most sustainably performing country. Slovenian tourism is founded on low-impact tourism driven by eco-certified sites such as Ljubljana and Triglav National Park. Slovenia has embraced the "Green Scheme of Slovenian Tourism" to certify tourism providers according to environmental and social criteria. (Board, 2010). This initiative has enhanced community participation, environmental awareness, and long-term sustainability.

Norway is one example of ecotourism in a developed context, where low-impact travel, respect for local culture, and prudent environmental management take precedence. Sustainable tourism is developed by Norway via its "Nature-Based Tourism Strategy," which promotes eco-lodges, hiking trails, fjord cruises, and Arctic wildlife safaris—all within conservation goals (Norway, 2017). The Norwegian government also collaborates with Sami communities to promote

indigenous cultural experiences while ensuring that tourism is never commodified or exploited heritage. In destinations such as Lofoten and Svalbard, regulation is high to manage tourism inflow to suppress carbon prints and preserve vulnerable environments. According to (Haukeland, 2020), visitor management systems as well as sustainability certification have ensured the suppression of overtourism and the preservation of Norway's natural and cultural heritage.

Together, these foreign experiences illustrate the diversity of ecotourism efforts and shared challenges of how to reconcile economic development with the conservation of cultural and natural heritage. Some countries have codified sustainable tourism policy tools, while others grapple with poor implementation, commodification, and environmental degradation. Nevertheless, the global pattern shows that ecotourism, if practiced sustainably, holds enormous potential for equitable and long-term development.

2.2 ADVANTAGES AND DISADVANTAGES

Ecotourism has significant advantages when well-integrated into architectural design and the conservation of cultural heritage. One of the key advantages is that it encourages the construction of environmentally sensitive buildings that blend with the natural and cultural landscape. Ecotourism encourages green infrastructure, which uses local materials, traditional construction techniques, and designs that minimize ecological footprint (Honey, 2008). This is consistent with sustainable architectural design in which buildings are made to accommodate the local climate, culture, and ecosystem. This promotes the creation of context-sensitive design, hence preserving the integrity of built and natural environments.

Ecotourism can also be employed as a way of reviving and preserving cultural heritage. As contended by Fennell (2008), ecotourism promotes appreciation and preservation of indigenous cultures, motivating communities to conserve indigenous building forms, craft, and ways of life. By stimulating economic benefits for conservation, communities are motivated to conserve their indigenous knowledge systems, including native building practices. This is thus a stimulus for architectural heritage preservation, providing economic and social benefits to otherwise deserted historic landscapes.

In Costa Rica, the Monteverde Cloud Forest Reserve is a success story of the beneficial impact of ecotourism in supporting both cultural heritage and the environment. Ecotourism activities in Monteverde have not only preserved endangered environments but have encouraged the use of local materials as part of building materials for the building of visitor centres and eco-lodges,

encouraging sustainable design practices (Wearing, 2001). This shows that when managed well, ecotourism fosters architectural responses that respect ecological and cultural contexts. Similarly, in Bhutan, the "High Value, Low Impact" tourism policy of its government has successfully integrated local design into tourist facilities and fostered economic growth while not sacrificing cultural identity. As recorded by (Ritsma, 2001), Bhutan expects new hotel development to follow traditional Bhutanese architecture so that tourism adds to and increases architectural heritage and not depletes it. This is proof of the way regulation can make ecotourism mix with architectural preservation. In Kenya's Maasai Mara, ecotourism activities like the Il Ngwesi Lodge have integrated modern eco-architecture with indigenous Maasai building practices to achieve both cultural pride and conservation of habitat (Honey, 2008). Ecotourism here is a demonstration of indigenous architectural wisdom adapted for sustainable tourism without compromising culture.

But ecotourism has its downsides as well. Unplanned ecotourism can lead to commercialization and cosmetic modification of native architecture to suit tourist needs. (Stronza, 2007) Warns that while ecotourism strives to minimize human impacts, in practice, more tourists translate into longer infrastructure, which risks destroying or modifying original cultural sites. This translates into pressures to trade historical accuracy for modern convenience, thereby undermining the very heritage that ecotourism claims to preserve. Moreover, environmental degradation is still a major threat. Even low-impact tourism is capable of generating cumulative effects in terms of pollution, disruption of habitat, and overuse of heritage sites, especially where the interventions in architecture are not well managed (Weaver, 2001). This underscores the importance of architects adhering firmly to notions of sustainable design, site-specific planning, and adaptive reuse so as to avoid long-term harm to natural and cultural environments.

There is also the social disruption in host communities as another significant drawback. Increased tourist flows can cause local priorities to change from preserving culture to economic use, destroying intangible heritage values that architecture cannot help save (Ceballos-Lascurain, 1996). Thus, architectural responses have to form part of an overall culturally responsive planning framework that supports, not displaces, indigenous values and practices. Just like in Peru, the ecotourism boom in Machu Picchu has led to widespread environmental degradation and architectural strain. Quoting Buckley (2010), over-visitation by tourists has exerted tremendous pressure on the Incan ruins, leading to erosion, structural compromise, and forcing the government to restrict access to visitors. This confirms that unregulated ecotourism can physically degrade world heritage architecture.

Similarly, in the Galápagos Islands, Ecuador, ecotourism formerly ensured conservation, but now is a cause of habitat destruction, increased waste, and ill-conceived architectural development incompatible with the delicate island ecosystems. (Epler, 2007). This case illustrates that good-intentioned ecotourism can ultimately prove to be environmentally and culturally catastrophic if adequate planning is absent. Another example is the Bali, Indonesia, case of ecotourism plans to conserve cultural landscapes that have led to commodification and overdevelopment. Cole (2007) discovers that Balinese traditional architecture and sacred sites are being commercialized for tourists at the expense of the cultural meaning of places. The Bali experience illustrates that ecotourism threatens both physical (architecture) and nonmaterial (cultural meaning) heritage if profit maximization dominates preservation goals.

In short, while ecotourism holds a lot of potential for promoting sustainable architecture and the conservation of cultural heritage, it also carries risks that have to be dealt with in a situation-specific way. Architects and planners must be involved in participatory design, maintain traditional knowledge systems, and adhere to rigorous environmental and cultural guidelines to ensure that ecotourism development truly serves its conservation purpose.

2.3 ECOTOURISM THROUGH CULTURAL HERITAGE

The concept of heritage encompasses tangible and intangible items passed from generation to generation, which are part of a society's cultural identity. The Oxford English Dictionary defines heritage as "property, buildings, or places that can be inherited, conserved, or passed down through generations," emphasizing its physical and cultural nature. UNESCO (2008) expands on this definition, making clear that such heritage sites can be either natural, such as the Barrier Reef, or man-made, such as architectural sites, all of which must be carefully conserved to maintain their importance at both the local and global levels.

In addition to these definitions, scholars have also explored heritage as a constructed and managed phenomenon. Carman (2002) argues that heritage is not discovered but rather created through processes of categorization and formal designation, with legal and moral pressures for its preservation. McClelland (2013) also argues that heritage values are socially constructed, emergent from emotional and intellectual relationships between communities and historic sites. These perspectives highlight that conservation efforts must consider not only the physical preservation of heritage sites but also the meanings and identities they embody.

Moreover, Pearson (1995) highlights that effective heritage management involves a participatory process of consultation with various stakeholders to be able to ascertain the

spectrum of values attached to heritage resources. This is also agreed upon by (OpenLearn, 2024), who conceptualizes heritage as any historical or cultural element that is preserved as a legacy for future generations, referencing the significance of inclusive community involvement in conservation plans. Together, these definitions and conceptualizations form the basis of understanding the necessary role of conservation policies in safeguarding architectural and cultural heritage so that both the physical building and the intangible significance it holds are preserved.

Heritage preservation is a critical aspect of the architectural and environmental facets of ecotourism. This section discusses how chosen nations deal with the preservation of cultural heritage within their environmental settings, making connections among architectural identity, community involvement, and ecotourism growth. Through these case studies, although each nation has distinctive approaches, there are also common challenges, especially in reconciling modernization with cultural and architectural continuity.

Egypt's national heritage designation is unique and diverges from UNESCO's broader categorization. Heritage is categorized as "monumental" and "heritage" buildings with local architectural importance, but constrained by patchy application. (Shalaby., 2018). The approach criticizes global conservation trends and identifies weaknesses such as restricted public participation, fragmented partnerships, and inadequate funding mechanisms.

Despite the architectural riches of districts like Historic Cairo, urban intervention has largely failed due to weak enforcement of conservation policies. Although many plans were made and conferences held Abdul-Baky (1999) , implementation has remained low. Financial limitations, environmental degradation, and fragmented urban planning have compounded the situation of built heritage, Al-Sakakīnī Palace being a very conspicuous example of government inaction (Tadamun, 2018). Urban development comprises infrastructural and traffic developments that take place without any regard to heritage sites (Nairy, 1999). These interventions not only overlook the architectural integrity of heritage buildings but also impede the potential for their integration into ecotourism circuits. Environmental risks like rising water tables and abandonment of building maintenance (UNESCO, 2014)(also compromise attempts at sustainability. The cumulative effect of looting, vandalism, and abandonment since the 2011 revolution demonstrates the exposure of Egypt's built heritage to the absence of a coherent architectural conservation policy. In Egypt, the failure to integrate heritage architecture in a viable model of ecotourism is due to the disparity between institutional frameworks and on-the-ground practice. Without firm architectural planning and environmental vision, the potential of heritage buildings to attract and educate ecotourists is not realized.

China's rapid modernization since 1978, China's monumental modernization has created public fascination with heritage as well as preservation concerns. ZHU (2017) acknowledges contradictions between worldwide standards of authenticity and the Chinese tendency to rebuild rather than keep original features, leading to a loss of architectural authenticity. Loose interpretation by the government of conservation standards leans toward tourism-driven restoration, excluding locals and professionals from decision-making processes. This results in piecemeal intervention that erodes the cultural and spatial integrity of historic environments. This shows how modernization, if not directed by architecturally sensitive heritage control, risks transforming culturally significant spaces into commercialized tourist zones, stripping them of their initial character and environmental equilibrium.

The Philippines presents a different solution by highlighting participatory conservation. The Ifugao Community Heritage Galleries illustrate how local knowledge and community-driven interpretations of architecture can become tools of inclusive heritage representation. (Acabado., 2020). The galleries challenge the colonial museum model and resist the hegemony of Western paradigms of conservation. Though not an exercise in architectural preservation in the traditional sense, the use of vernacular spatial types and the active demonstration of traditional building techniques turn the museum into an active learning environment for architectural heritage. The indigenised galleries present architecture not just as an artifact but as a living, evolving cultural expression. This illustrates how built heritage, when rooted in local knowledge and spatial tradition, can give rise to sustainable ecotourism activity that is both educational and ecologically viable.

In England, the preservation of architecture falls under the remit of a pragmatic, case-by-case planning framework now encompassing both tangible and intangible heritage. (Ashworth., 1999); (Orbasli, 2000). However, this balance is hard to maintain. Local heritage assets are not safeguarded despite their contribution to community identity and place-making. England's evolving notion of heritage—from physical monuments to vernacular and community heritage—offers a model wherein urban development and heritage conservation must coexist. However, limited legislative protection for non-designated buildings (Boland, 1998); (Ludwig, 2016) Leaves them vulnerable to redevelopment pressures. England's model of conservation illustrates the importance of architectural sensitivity in heritage planning. Ecotourism ventures can be successful only if buildings valued by the community are conserved and integrated into tourism planning as cultural and architectural experiences.

Unlike other countries, Costa Rica's evolution away from an agriculture-based economy to one based on land conservation, ecotourism, reforestation, and conservation education has been

deliberate. Building and landscape heritage conservation is intimately connected to ecological tourism strategies that emphasize natural materials, low-impact structures, and traditional building techniques (Hall, 2003). This alignment of vernacular architecture with ecological principles creates a direct link between heritage and ecotourism. Eco-lodges, community centres, and nature reserves are often framed in vernacular terms that respect both landscape and local knowledge systems.

Another good example of successful integration between heritage conservation and ecotourism development is the Medina of Fez in Morocco. Consistent with large-scale conservation driven by UNESCO and the Moroccan government, it not only preserved its Islamic architectural heritage but also revived the location for sustainable cultural tourism. Eco-tourists seeking authentic cultural experiences now visit Fez, contributing to heritage conservation as well as economic empowerment of artisans and local communities. Similarly, the conservation of Peru's Historic Sanctuary of Machu Picchu. Through a mix of cultural heritage protection, environmental preservation, and managed eco-tourism, the government of Peru, in collaboration with UNESCO, has succeeded in matching tourist access to site preservation. Tourist arrivals are strictly controlled, and economic benefits accrue to local people through eco-tourism endeavours, promoting sustainable livelihoods. In addition, in Kenya, cultural heritage conservation in community conservancies like the Il Ngwesi Conservancy has facilitated more eco-tourism. Local Maasai communities run eco-lodges while maintaining their cultural traditions and protecting historical sites, giving tourists authentic cultural experiences that are heritage conservation-based (Honey, 2008). In Australia, the Burra Charter principles ICOMOS (2013) have played a major role in cultural heritage place conservation with a major focus on ecotourism and community engagement. Such places as Tasmania's Port Arthur Historic Site have successfully embraced environmentally friendly tourism measures by being sensitive to the historic status of the place and at the same time offering educational and low-impact visitor experiences.

Together, these diverse examples illustrate how, when strategically combined with ecotourism planning, conservation of heritage not only yields preservation of cultural identities but also sustainable socio-economic benefits. For Nigeria, and Kano's historic sites specifically, the application of such integrated strategies could help restore threatened heritage assets as well as enhance environmentally friendly tourism activities in line with international best practice.

2.4 SUSTAINABLE PRACTICES

Sustainability is central to ecotourism to achieve a balance between tourism development and environmental conservation, and involves a strategic collaboration among governments, the private sector, and local communities (Zhang, 2021). While there has been widespread consensus on the need for sustainability (Gray, 2010), its operationalization continues to be elusive, and multiple interpretations have surfaced in various sectors. These include concepts like social responsibility, environmental management, and business sustainability, which are more commonly handled in isolation, so corporate expectations of sustainable development are bewildering (Dixon, 1989). The Brundtland Report infamously characterized sustainability as meeting the needs of the present without compromising the future generations' capabilities to meet their own needs, calling on long-term environmental stewardship (WCED, 1987). Likewise, Scoones (2007) characterized sustainability based on the resilience of systems to external shocks and stresses, an idea at the heart of survival in the face of dynamic environmental circumstances. Besides, Johnston (2007) alerted us to sustainability as a process of harnessing resources in ways that do not lead to their irreversible degradation, such as sustainable agriculture and lifestyles within ecological limits.

In ecotourism, these tenets are realized through ensuring that the development of tourism is not realized at the expense of the environment. Sustainable property planning is one of the key practices in realizing this, involving the designing and construction of eco-friendly tourism properties with emphasis on energy conservation, water efficiency, and waste management (Cohen, 2020). This not only needs to be supported by the government but also incentivized to encourage green property development (Kapoor, 2019). Incorporation of the local workforce also adds to ecotourism's sustainability through enabling economic gains to the host populations, a feature that makes investments from the regional areas take root and boost the local economy further (Perez, 2021).

Sustainable practice of tourism has to be embedded across different scales — from the property level to higher-level national policy. A mix of strategies for sustainability involves environmental protection, community, and socio-economic development, such that all three are considered in decision-making. According to the BBC (2024), successful eco-tourism destinations entail tourist facilities being integrated into the natural environment. This integration typically means locally sourced food, efficient on-site recycling systems for waste, and controls on visitor numbers to minimize the ecological footprint. While such practices

inevitably drive up the cost of eco-tourism ventures, they are a necessity if the very environments which attract tourists in the first place are to be preserved.

One of the best examples of sustainable ecotourism in practice is the Cross-River State National Park (CRSNP) in Nigeria. Recognized as one of the world's 25 biodiversity hotspots by the United Nations (nigeriaparks, 2014), CRSNP is an extremely valuable nature-based tourism resource. However, despite its ecological significance, the park remains underdeveloped due to a lack of infrastructure and investment by the government and private investors. (Ofem, 2012). There is a great lesson this case informs us: the full potential of ecotourism is only realized where significant investments are made in infrastructure development, benefit-sharing for the locals from tourist revenues, and promotion of the sustainable use of natural resources. Without these essential ingredients, ecotourism projects are bound to fail, as has been with the underutilization of CRSNP.

Ecotourism is inherently a partnership venture, and it requires the active participation of multiple stakeholders to succeed in the long run. As argued by (Tagi., 2001), ecotourism succeeds best when there is a balanced partnership among the government, private sector, and local communities. The government offers regulatory institutions and infrastructure development; the private sector does product development, operation, and marketing; and the local communities take part in planning, development, and economic benefit realization. Through this, all stakeholders enjoy the fruits of ecotourism development, and it emerges as a viable, sustainable alternative for natural resource-dependent communities. For Nigeria, (Aloko O., 2024) Observed that while the country is endowed with a rich cultural and natural heritage, ecotourism has been hindered by various factors, ranging from weak infrastructure, governance, security, and cultural ignorance. These are some of the challenges that have retarded the full actualization of ecotourism, and their elimination will require concerted efforts to improve infrastructure, governance, and security. By addressing these issues, Nigeria can access ecotourism as a potential sustainable development driver source, which would not only provide an alternative to oil revenues but also support broader socio-economic goals (Enunwah, 2023) See Fig. 2.1.

Challenges Limiting The Potential Of Ecotourism Development In Nigeria

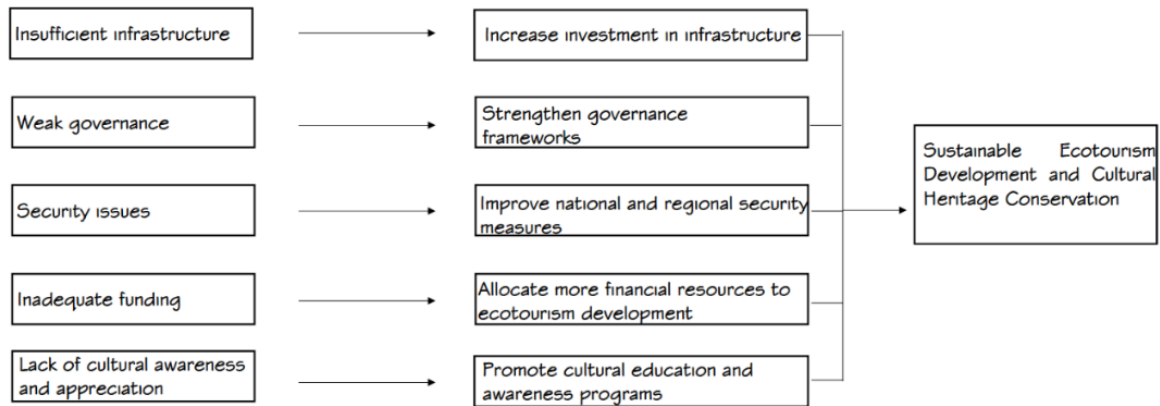


Figure 0.1 Challenges and Solutions of Ecotourism Development (Author's Work)

(Idowu, 2021) also elaborated more on the potential of ecotourism as an economic driver for nations, particularly for nations such as Nigeria, which are dependent on crude oil for revenues. Diversification of the economy through ecotourism can reduce reliance on non-renewable resources, resulting in long-term sustainability. Sustainable tourism development theory, as discussed by (Wearing, 2001), emphasizes the importance of ecotourism for communities that depend on natural resources. It focuses on three main issues: generating economic benefits for host communities, their own active involvement in development, and maintaining cultural heritage and natural resources for generations to come. Ecotourism, therefore, not only fosters nature's health but also economic resilience and empowerment of people.

Finally, sustainability in ecotourism is not only about preserving nature but also responsible stewardship of economics and society. Ecotourism must be viewed as a long-term investment that must bring value back to the environment, local communities, and national economies. The Nigerian case studies of CRSNP and the international lessons herein underscored reaffirm the necessity of a multi-faceted collaborative strategy with top priority given to sustainable practices at all levels. Properly implemented, ecotourism can be a powerful tool for sustainable development, cultural and natural heritage preservation, and socio-economic welfare improvement.

2.5 KEY FEATURES AND INDICATORS

Ecotourism operates on a special set of features and markers that differentiate it from conventional tourism. These are the building blocks of the mechanism of ensuring that ecotourism activity upholds environmental conservation, cultural preservation, and sustainable community development aspects. Various scholars and global institutions have offered essential features and measurable indicators that define successful ecotourism projects (Weaver, 2001) (Honey, 2008) (TIES, 2015). Table 2.1 presents the key features and indicators systematically, highlighting their interconnections and relevance to architectural and environmental contexts.

Table 0.1 key features and indicators, highlighting their interconnections and relevance to architectural and environmental contexts

Key Feature	Explanation	Connection to Other Features
Environmental Conservation	Protection and enhancement of biodiversity and natural ecosystems.	Linked to sustainable architecture and site management.
Community Involvement	Local populations actively participate in management, benefit economically, and preserve traditions.	Enhances cultural preservation and socio-economic development.
Cultural Heritage Preservation	Protection of local traditions, historical sites, and indigenous knowledge.	Strongly associated with architectural integrity and authenticity.
Education and Interpretation	Providing visitors with learning experiences about nature and culture.	Reinforces responsible visitor behavior and cultural sensitivity.
Low-Impact Infrastructure	Environmentally friendly buildings and facilities minimize ecological footprints.	Connects with sustainable construction practices and energy efficiency.
Economic Sustainability	Tourism provides long-term economic benefits without environmental or cultural harm.	Supports community involvement and limits destructive commercialization.
Visitor Management and Regulation	Limiting visitor numbers, regulating activities, and controlling access to fragile areas.	Protects conservation goals and cultural sites from degradation.
Sustainability Certification and Standards	Adoption of recognized eco-certifications for operations, construction, and management.	Strengthens credibility and accountability across all aspects.

(Bhattacharya, 2004), in a study on ecotourism in Sikkim, India, a comprehensive framework for assessing ecotourism sustainability was developed. This framework covers ecological, cultural, social, and economic dimensions:

Table 0.2 Criteria and Indicators for Wildlife Biodiversity Ecotourism (Bhattacharya, 2004)

Criteria	Indicators
1. Healthy Ecosystem	Wildlife presence, sacred sites, endemic and endangered species, rainfall, soil erosion, flora/fauna diversity
2. Cultural Heritage Conservation	Traditional foods, dress, language, handicrafts, festivals, monastery visits, and community openness
3. Enabling Environment	Community participation, infrastructure, funding, government coordination, and ecotourism policies
4. Livelihood & Poverty Alleviation	Employment rate, local entrepreneurship, NTFP usage, seasonal income, equity in benefit-sharing
5. Tourist Satisfaction	Visitor numbers, safety, repeat visits, complaints, feedback, product diversity, and stay duration
6. Carrying Capacity	Environmental limits, visitor load monitoring, habitat degradation control, and compliance norms
7. Participation & Awareness	Homestays, skills training, women's involvement, workshops, and local accommodation for tourists

The use of criteria and indicators (C&Is) is a widely accepted method for monitoring sustainable development, endorsed by the United Nations Commission on Sustainable Development (UNCSD) (Aziz, 2015). A criterion represents a key sustainability factor, while an indicator measures specific outcomes or evidence that reflect the progress made in achieving that criterion. (Aziz, 2015) further employed Hotelling's T-square test to validate generalized criteria and indicators across ecotourism settings, emphasizing the following:

Table 0.3 . (Aziz, 2015) generalized criteria and indicators across ecotourism settings

Criteria	Indicators
1. Healthy Ecosystem	Wildlife presence, sacred sites, endemic and endangered species, rainfall, soil erosion, flora/fauna diversity
2. Cultural Heritage Conservation	Traditional foods, dress, language, handicrafts, festivals, monastery visits, and community openness
3. Enabling Environment	Community participation, infrastructure, funding, government coordination, and ecotourism policies
4. Livelihood & Poverty Alleviation	Employment rate, local entrepreneurship, NTFP usage, seasonal income, equity in benefit-sharing
5. Tourist Satisfaction	Visitor numbers, safety, repeat visits, complaints, feedback, product diversity, and stay duration
6. Carrying Capacity	Environmental limits, visitor load monitoring, habitat degradation control, and compliance norms
7. Participation & Awareness	Homestays, skills training, women's involvement, workshops, and local accommodation for tourists

2.6 SELECTION OF RESEARCH ANALYTICAL PARAMETERS

The specific criteria and indicators discussed above were instrumental in determining the analytical parameters employed in this study. Based on internationally recognized frameworks and research, e.g., those of (Bhattacharya, 2004) and (Aziz, 2015)—These parameters were chosen with caution to provide a structured and comprehensive method of ecotourism assessment. Each parameter specifically addresses key dimensions affecting the sustainability of ecotourism development and conservation, especially in terms of environmental integrity, cultural heritage, and socio-economic impact. These parameters are as follows:

1. Accessibility

Accessibility is the heart of sustainable ecotourism because it enables destinations to be visited without compromising environmental integrity. This indicator examines the presence and condition of physical infrastructure, such as roads and transport facilities, and access to essential services. It also considers how accessible resources and benefits are to residents, an indicator of long-term sustainability and people's participation in tourism development.

2. Participation of the community

Successful ecotourism is based on the active involvement of local people, particularly poor and vulnerable groups such as women and indigenous groups. This metric assesses local representation in decision-making processes as well as local participation in planning and executing tourism. Effective community participation not only ensures cultural protection but also assures equitable benefit-sharing.

3. Policy and Planning

Strategic planning policies and policy platforms are the pillars of successful ecotourism. This dimension quantifies the degree of government and local institutions' participation in developing and implementing policies supporting environmental conservation and sustainable tourism development. It also evaluates coordination between the stakeholders and regulatory policies that offer guidelines on the effects of tourism on the livelihoods of communities and ecosystems.

4. Sustainability

Sustainability is the core of ecotourism, such as a balance between ecological, social, and economic systems. This indicator examines the capacity of the region to accommodate tourism without deteriorating natural resources, considers the capacity of local communities to absorb

tourism pressure, and provides economic sustainability based on sustainable utilization of resources. It maintains development within the carrying capacity of the region.

5. Conservation of Heritage

Ecotourism has a close connection with the conservation of natural and cultural heritage. The indicator highlights the preservation of old structures, religious sites, customary practices, and natural landscapes. It focuses on measuring preservation activities to preserve biodiversity as well as wildlife habitats to protect them for future purposes.

6. Economic Impact

This metric gauges ecotourism's contribution to local economies. It encompasses the creation of employment, income derived from tourism activity, promotion of small-scale businesses, and equitable distribution of benefits to the community. It also quantifies poverty reduction and entrepreneurial contributions of tourism, particularly in economically depressed areas.

7. Waste Management

Environmental health is key to the success of ecotourism. This indicator examines mechanisms for solid waste management, recycling, and minimizing pollution. Sound waste management lowers the environmental load of tourism and offers clean, safe, and sustainable environments to residents and visitors.

These parameters underpin the data collection and analysis framework of the research. They are meant to ascertain the state of affairs regarding ecotourism in Kano, establish the prevailing challenges, and suggest informed, practical recommendations for sustainable tourism development. Through making the study adhere to international standards of practice and localized relevance, this approach guarantees a comprehensive evaluation of ecotourism and offers pragmatic recommendations for planning and policy purposes in the future.

2.7 CASE STUDIES IN ECO-TOURISM: INSIGHTS FROM GLOBAL HERITAGE SITES

2.7.1 Introduction: Justification of Chosen Cases Studied

The Badaling Great Wall in Beijing, China, is an appropriate case study for the ancient Kano city wall, its gates, and other heritage monuments in Kano because of their outstanding heritage conservation measures, sustainable tourism management, and community engagement projects. The two walls share attributes as historic defence walls with deep cultural and architectural significance, which reflect the wisdom and strategic thinking of their civilizations. Being one of the best-preserved and most visited parts, the Badaling section shows effective policies related to heritage preservation, tourism regulation, and local community involvement in the protection of cultural landmarks. Management strategies at Badaling balance public access with environmental and structural conservation and could provide a model for the Kano city wall, which suffers from erosion, neglect, and a lack of community concern. Furthermore, it is at Badaling that educational programs, waste management systems, and sustainable tourism frameworks have been implemented and continue to yield valuable experiences that can be adapted towards the long-term conservation and promotion of Kano's historic assets in a way that enhances local socio-economic benefits. *The Petra Archaeological Park of Jordan* was selected as a case study due to its successful integration of eco-tourism and the preservation of a UNESCO World Heritage site, a matter of great significance to sustainable tourism initiatives in Kano. Known for its ancient rock-cut architecture, Petra has been able to strike a balance between tourism activities and the protection of its heritage through practices that minimize environmental impact while ensuring active involvement of the host community. (Baker, 2003). Similarly, tourism developments in Kano aim to preserve its rich cultural and historical heritage as well as allow sustainable development. The example of the partnership between the local communities and tourism stakeholders in Petra provides good lessons that will help Kano utilize its community-based initiatives to foster responsible tourism. (Baker J. &, 2007). Moreover, Petra's emphasis on controlled visitor numbers and strict regulations for tourism management can provide lessons for the management of eco-tourism in Kano's vulnerable sites. (Meyer, 2010).

Hadrian's Wall in England was chosen because of the striking similarity it shares with the cultural heritage of Kano, just like the Badaling Great Wall of China, as the two were ancient defence walls of immense cultural, architectural, and historical value. Hadrian's Wall is a

world-class model of heritage conservation, sustainable tourism management, and local community involvement, rich soil from which useful lessons can be learned and used to alleviate the problems plaguing Kano's old buildings. Both monuments are testaments to the ingenuity of ancient communities in harnessing local materials and architectural forms to build enduring monuments that have shaped their regions' identities. General policies and plans, such as Hadrian's Wall Management Plan, provide that the management of Hadrian's Wall prioritizes community engagement, environmental conservation, sustainable tourism, and education and outreach. These approaches will address the direct needs of Kano's old wall and gates that experience erosion, abandonment, and a lack of preservation interventions. By learning from the conservation experience at Hadrian's Wall, Kano can take lessons from best practices in balancing preservation and access management, involving local communities in heritage management, and using ecotourism as a tool for economic and cultural development.

The Badaling Great Wall, Petra Archaeological Park, and Hadrian's Wall, as historical defence walls with architectural and cultural importance, now models of heritage preservation and sustainable tourism, have nothing but striking similarities. Each of the properties demonstrates management that can efficiently balance conservation with public access, with a specific focus given to community engagement, environmental management, and education. These case studies illustrate the worth of community involvement at the local level in heritage initiatives, tourist management to mitigate impacts, and conservation as a vehicle for cultural and economic development—principles that can be applied towards sustainable redevelopment of Kano's historic city wall and heritage assets.

2.7.2 Case Study I: The Badaling Great Wall of Beijing, China.

Badaling Great Wall, located about 60 km northwest of downtown Beijing built in (770BC-476BC), rebuilt and restored during the following 2000 years. It is reachable in 1½ hours by car, is one of the most famous parts of the Great Wall, 7.6 km (4.7 miles) in length across mountain ridges, and it connects the Shixiaguan section to the south and the Shuiguan section



Figure 0.2 The Badaling Great Wall of China
Accessed on: 21st December (China, 2024)



Figure 0.3 The Badaling Great Wall of China Today
Accessed on: 21st December (China, 2024)

to the east (Mark., 2024). The walls were constructed of rammed earth, bar stones, and bricks along the top of mountains.

Constructed in 1505 during Emperor Hong Zhi's rule of the Ming Dynasty, this segment was overseen by General Qi Jiguang, known for defending China against Japanese pirates. The wall, averaging 7.8 meters (26 feet) high and 5.7 meters (19 feet) wide, allowed for five horses or ten soldiers to move side by side and includes 43 watchtowers. Historically, it served as a crucial defence line to block the invading northern tribes, among them the Mongols.

Badaling boasts a modern tourist facility that includes an extensive Great Wall Museum, dining and shopping facilities, and even accommodation for people with disabilities. With well-maintained granite pathways and handrails, safety is ensured here, although a few of the steep steps and dirt paths around the cableway station can be a bit tricky. North Eighth Tower, also known as the "Good Man Slope," is reachable via cable car, and a toboggan provides a fun way down from North Fourth Tower. (Highlights., 2024).

A city dais, also known as the wall dais, is usually a platform with battlements on top. Soldiers patrolled and defended there in the battles of ancient times. The platform atop the Pass City



Figure 0.5 The Badaling Beacon Tower
Accessed on 21st December (Chinaprivatetour, 2024)



Figure 0.4 A Badaling Watch Tower
Accessed on 21st December (Chinaprivatetour, 2024)

Gate is a typical example of one. The most impressive part of the Ming Great Wall is considered the Badaling section, and a watchtower is placed every few hundred meters. Large rocks and



Figure 0.6 The Badaling Great Wall Map
Accessed on 21 December (Vera, 2024)

bricks from the outside are used for this section of the wall, and earth fills up the interior. Visitors can reach North Eleventh Tower with a short walk from the valley station. High-speed trains from Beijing North Railway Station take only 20 minutes to reach the newly finished Badaling station.

Public transportation options include Bus 877 from Deshengmen, which terminates 400 meters southwest of the rollercoaster station, 1½ hours from central Beijing. Drivers can enjoy a nice view of the Juyong Pass Fort on the way in, which is otherwise unreachable to individual transit travellers. With its history and importance, accessibility and ancillary amusements, Badaling is arguably the most popular and easiest to visit section of the Great Wall.

At Badaling Great Wall, the Badaling section attracts 70% of all visitors and hence is pretty crowded. Its popularity is well-deserved, since it concealed the most vulnerable approach to



Figure 0.8 Zipline at The Badaling Great Wall
Accessed on 21 December (GmbH, 2024)



Figure 0.7 Toboggan at The Badaling Great Wall
Accessed on 21 December (Discovery, 2024)

the capital. Many tours to Badaling also include the Ming Tombs, bringing together the remarkable engineering and the burial sites of the emperors who commissioned them. (Mark., 2024).

2.7.3 Case Study II: Petra Archaeological Park, Jordan

(Park, 2015) The Petra Archaeological Park (PAP) of Wadi Musa, Jordan, a UNESCO World Heritage Site, covers an area of 264 dunums (264,000 square meters). It encompasses the ancient city of the Nabataeans, carved into the pink-coloured sandstone cliffs over 2,000 years ago. Voted one of the New Seven Wonders of the World in 2007, Petra is a premier global tourist destination, renowned for its imposing architecture and exemplary heritage conservation activities..



Figure 0.9 The Ancient City of Petra
Accessed on April 4th (Papertowns, 2021)

Petra's history began in the Iron Age (1200-600 BC) with the Edomites, who utilized the natural basin as a water collection point. The Nabataeans, who arrived around 312 BC, established Petra as one of their central trading hubs due to its location. (Tours, 2024). Their advanced building techniques and irrigation systems helped Petra thrive. After the city's decline under Roman and Byzantine rule and its subsequent abandonment, it was all but lost to memory until its rediscovery in 1812 by Johann Ludwig Burckhardt. Petra has since evolved into a top tourist attraction, struggling with the issue of mass tourist visitation while being able to preserve its heritage.

One of the most fascinating archaeological parks is Jordan's Petra Archaeological Park. With its incredible collection of architectural elements carved into the rose-red sandstone cliffs, Petra presents a mix of Nabatean, Hellenistic, and Roman architectural styles. The most iconic building is Al-Khazneh (The Treasury), featuring detailed carvings, Corinthian columns, and a central tholos; it was speculated to be either a royal tomb or a temple. (Macaulay, 2015). Equally impressive is Ad Deir (The Monastery), a monumental façade famous for its gigantic doorway and commanding views, which was very probably used for religious or ceremonial purposes (Alvarez, 2024).



Figure 0.10 Ad Deir of Petra (The Monastery)
Accessed on 22nd December (Argenberg, 2024)

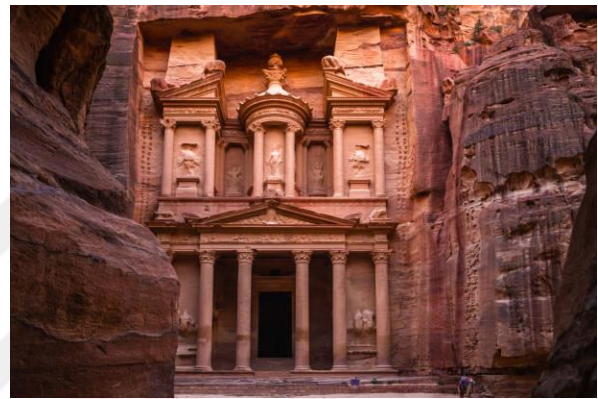


Figure 0.11 Alkhazneh of Petra (The Treasury)
Accessed on 22nd December (Photo, 2024)

The Siq is Petra's main entrance, a narrow, 1.2-kilometer-long canyon lined by towering cliffs, with ancient water courses cut into the rock. The Royal Tombs, such as the Urn Tomb, Silk Tomb, Corinthian Tomb, and Palace Tomb, are towering mausoleums with elaborate façades and towering proportions.

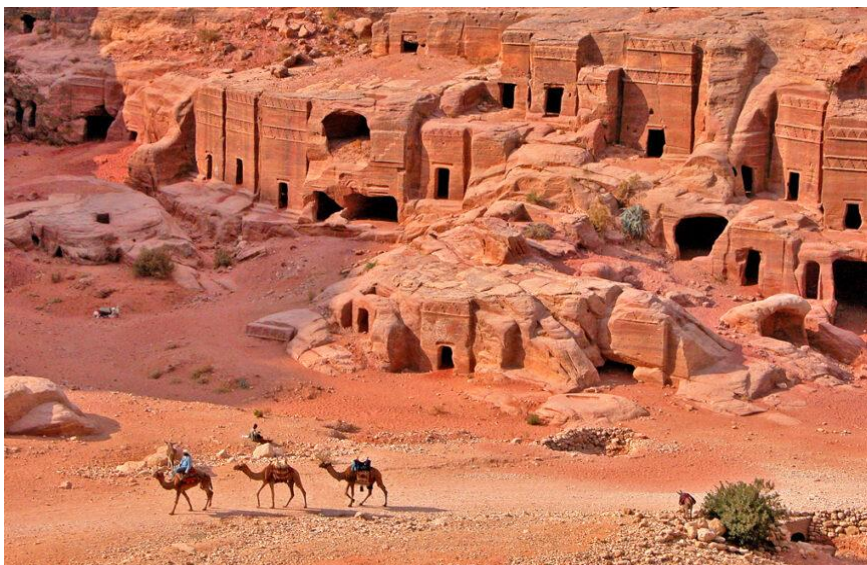


Figure 0.12 Tombs at Petra
Accessed on 22nd December (Macaulay, 2015)

The Great Temple Complex is overwhelming in its design of the city plan, having multi-levelled courtyards, while Qasr al-Bint (Temple of Dushares), one of the few free-standing structures, thrusts forth sturdy stone walls and imposing gates. (Expert, 2000).

The Water Supply System of Petra comprises aqueducts, cisterns, and reservoirs, displaying an intelligent engineering feat to ensure a regular supply of water in arid conditions. The Colonnaded Street was the centre of commerce, lined with columns that defined the urban structure of the city, and the Triclinium Chambers are areas carved into rock walls to hold ceremonial feasts and gatherings. These architectural wonders not only represent a demonstration of extraordinary craftsmanship but also echo critical themes of heritage conservation, sustainability, and community participation that make Petra an invaluable case study with which to underpin your research focus. (Expert, 2000).

The Petra Development and Tourism Regional Authority (PDTRA), established in 2009, governs the Petra Region, including the Policy Action Plan PAP. The PDTRA manages and

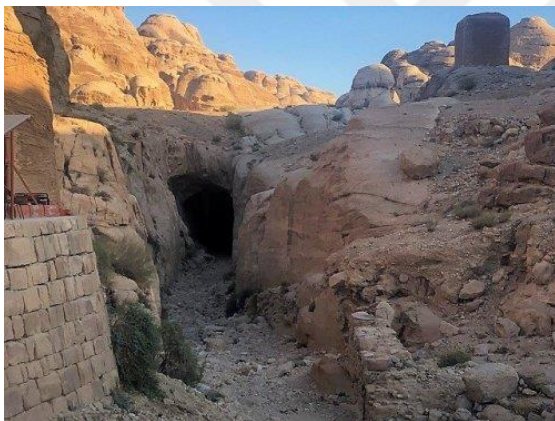


Figure 0.13 Remnants of the Zurraba Reservoir
Accessed on 22nd December (Slaght, 2024)



Figure 0.14 Clay Aqueduct of the Nabataeans
Accessed on 22nd December (Omrania, 2024)

protects the park, encourages tourism, and improves local socio-economic status. The park management is funded by state subsidies, foreign donations, park entrance fees, and voluntary contributions. Conservation focuses on protecting Petra's archaeological and cultural heritage from the impacts of mass tourism by controlling visitor access, closing pathways, and adopting sustainable management.

In Petra, such practices are driven by community involvement and stakeholder collaboration. The local Bedouin tribes participate in tourist activities, like guiding tourists and selling crafts, towards economic empowerment. Conservation efforts by NGOs and government bodies have come together to ensure the historic landmarks of Petra are well preserved. These initiatives blend local knowledge and traditions with practices that ensure the site is authentic to its own culture. The framework that Kano can borrow is primarily the efficient conservation of the

Petra Nabataean city and interaction with the local communities, partnerships with stakeholders, and ensuring that tourism development conforms with cultural preservation and environmental sustainability to encourage responsible tourism (Akrawi., 2014).

Efforts to reduce tourism's environmental impact include waste management, energy-efficient infrastructure, and controlled visitor flows. The park uses regulated paths, ticketing systems, and restricted access to protect its fragile structures. Local participation is a significant aspect, with tourism-dependent local businesses and entrance charges generating income to support conservation and infrastructure.

Tourism benefits local communities economically in terms of employment and business opportunities. The income generated is recycled back into conservation initiatives and infrastructure improvement, making it sustainable in the long term.(Tours, 2024)

2.7.4 Case Study III: Hadrian's Wall, England

Hadrian's Wall was the northwestern boundary of the Roman Empire for nearly 300 years. Built by a Roman legion on the emperor's visit to Britain in AD 122, the wall ran across the northern part of the nation, from Wallsend on the River Tyne in the east to Bowness-on-Solway in the west, a distance of 73 miles (corresponding to 80 Roman miles) (Heritage E. , 2024).



Figure 0.15 The Haiden's Wall
Accessed om 21ST December (Outdoors, 2024)

It is considered the most famous frontier of the Roman Empire and was designated a World Heritage Site in 1987. Hadrian's Wall was built a little north of an earlier line of military installations, using the topography to its advantage, with stone and turf sections, and a ditch in front, except where natural defences existed. It was a wall that contained milecastles with gates, one-third of a mile observation towers, and sections wide enough for a walkway.



Figure 0.17 Haiden's wall Castle
 Accessed on 21st December (Heritage E. , 2024)



Figure 0.16 The Ruins of the Milecastle
 Accessed on 21st December (TheCaptain, 2024)

The Housesteads Roman Fort is one of the most famous forts on Hadrian's Wall. The fort covers five acres on an escarpment and was the home for 300 years to the Roman auxiliaries before becoming the heart of the civilian settlement that grew up outside the fort.



Figure 0.18 Housesteads Roman Fort (Vercovicium)14th Century AD
 Accessed on 21st December (Sheldon, 2024)

Although large parts of Hadrian's Wall have perished over the centuries, considerable lengths are still standing and attract visitors from all over the world. The Wall testifies to Roman engineering ingenuity and Britain's heritage. The conservation is facilitated by inclusive

management plans such as Hadrian's Wall Management Plan 2024-2029, which has provided policies for the conservation of the Outstanding Universal Value of the site. The policies are on the promotion of common standards on the identification, registration, study, protection, conservation, management, presentation, promotion, and interpretation of each component of the WHS, the Frontiers of the Roman Empire.

Access has also been enhanced by such developments as Hadrian's Wall Path National Trail (a coast-to-coast natural footpath in England that is signposted), enabling visitors to walk the length of the Wall. The trail follows the line of Hadrian's Wall through some of England's most beautiful countryside- from rolling open fields and windswept moors to vibrant cities like Newcastle and Carlisle. This trail project has emerged as a global example of sustainable heritage access management, combining archaeological preservation with public access. Besides, environmental conservation has remained paramount, with organizations like The Vindolanda Trust committed to minimizing impacts on the environment and integrating this into their long-term practice.



Figure 0.20 Hadrian's wall path
Accessed on 21st December (Nationalpark, 2024)



Figure 0.19 Hadrian's wall path
Accessed on 21st December (Nationalpark, 2024)

After abandonment, the decaying Wall was conveniently quarried for building material by nearby castles, churches, and farms. Its striking visibility in the landscape also led to its use as a parish and estate boundary. It then inspired painters, photographers, poets, novelists, archaeologists, and historians, and it still draws visitors from across the world. (Heritage E. , 2024).

When Hadrian passed away in AD 138, he was succeeded by Emperor Antoninus Pius, who abandoned Hadrian's Wall and pushed the frontier north to the Forth–Clyde isthmus, where he built the Antonine Wall, which was mainly of turf. This new frontier was not to be permanent, and it lasted for approximately 20 years before it was abandoned and the Romans retreated to Hadrian's Wall. During its abandonment, Hadrian's Wall was slighted, the milecastle gates

having been removed and the Vallum ditch crossed by causeways. When the Wall was reoccupied, an attempt was made to renovate it, but the restoration of the Vallum was never finished. Finally, a metalled road was laid along the frontier. The Wall appeared to have remained in this state until late in the 2nd century. Around AD 180, a serious battle occurred when tribes broke through the Wall and killed a Roman general and his troops. Although the battle is not well documented, it probably led to changes in the Wall, such as the abandonment of many of the turrets in the rocky areas and the tactical withdrawal of Roman troops.

Funded by the National Lottery Heritage Fund (NHLF) and led by Newcastle University, the WallCAP project got local volunteers involved with both archaeological research and the conservation work at Hadrian's Wall. This approach thus aimed at the development of a better understanding of the Wall's significance in history, taking up all conservation concerns, and ensuring an integrated, professional-led community involvement. This therefore places active participation in enabling local communities to take primary roles in the protection and sustainability of the site and its iconic heritage landmark.

2.8 CONCLUSION OF CASES STUDIED

In conclusion, analysis of the Badaling portion of the Great Wall, 60 km northwest of Beijing, revealed that it is the most visited and accessible portion of the wall, receiving 70% of the tourists who come to see the wall. Originally built between 770–476 BC and rebuilt over the centuries, it was significantly lengthened in 1505 during the Ming Dynasty. It runs 7.6 km long with 43 watchtowers, formerly guarding against northern invasions, and is famous for its strategic importance. Today, it prides itself on modern tourist amenities, including museums, cableways, and walkways. Its history, stunning mountain landscape, and convenient transportation links make it the busiest and most visited section of the Great Wall. Petra Archaeological Park in Jordan, a UNESCO World Heritage Site and one of the New Seven Wonders of the World, also boasts ancient Nabataean architecture carved into rose-red mountains. Al-Khazneh, Ad Deir, and the Siq are renowned, and Petra is a mix of Nabataean, Hellenistic, and Roman architecture. Under the operation of the PDTRA, the area focuses on sustainable tourism, conservation of heritage, and people participation—locally, the Bedouins—in achieving a harmony between tourism and nature conservation. Revenues support conservation programs, and Petra is a model of marrying cultural heritage, sustainability, and local empowerment. Furthermore, Hadrian's Wall, which was built during AD 122 by Emperor Hadrian, formed the northwest border of the Roman Empire, which ran

73 miles along the north of England. It is a UNESCO World Heritage Site since 1987 and has forts, milecastles, and scenic paths like the Hadrian's Wall Path, which are testaments to Roman engineering and British heritage. Although partially ruined, conservation activities like the Hadrian's Wall Management Plan and WallCAP prioritize sustainable tourism, local community, and environmental protection. The Wall is still a symbol of resilience from the past and still inspires international tourists and researchers today.



CHAPTER THREE. NIGERIA: THE HISTORICAL TAPESTRY OF KANO

Nigeria is located in West Africa, surrounded by Niger to the north, Chad to the northeast, Cameroon to the east, and Benin to the west. To the south, there is an Atlantic coast that is a mangrove forest with swampy regions (see fig.20). Its terrain ranges from arid deserts in the north via savannas to tropical rainforests in the south. It is further characterized by its topography, consisting of plateaus, highlands, and river systems such as the Niger and Benue rivers.

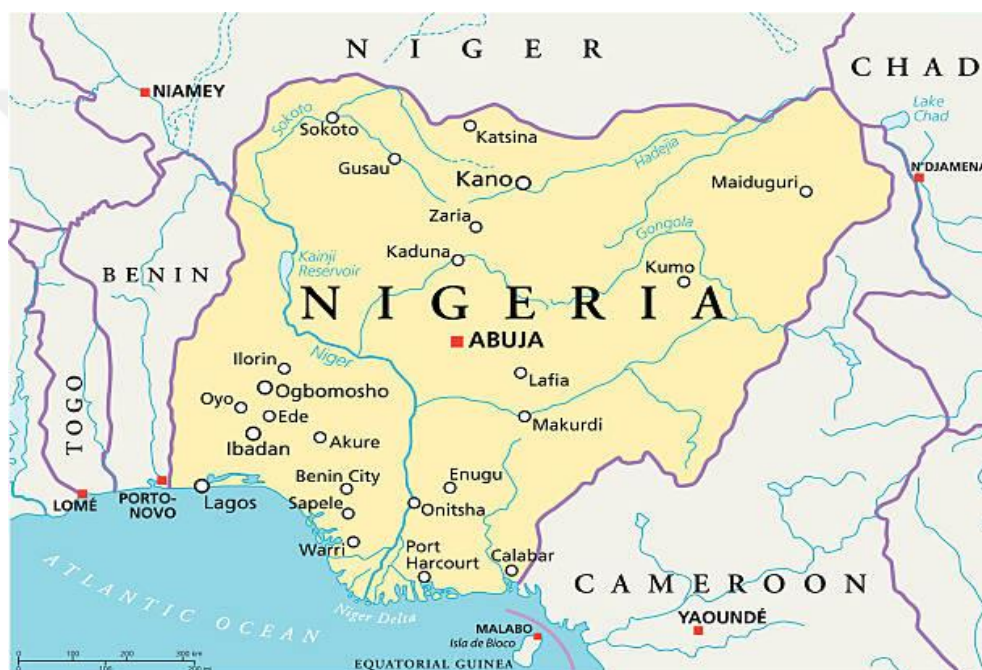


Figure 0.1 Geographic Map of Nigeria
Accessed on 22nd December (Photo, 2024)

The climate in Nigeria varies by region. The northern part is hot and dry with lengthy dry seasons, whereas the southern part has a humid, tropical climate with a high level of rainfall. On average, the temperature is warm all year round, with altitude and distance from water bodies as the moderating factors (Falola, 2024); (Kirk-Greene, 2024,); (CIA., 2024).

Nigeria is rich in biodiversity and has very interesting natural scenery to offer, which makes it a top possible ecotourism destination, especially among the national parks. The activities conducive to growth in the sector of ecotourism in Nigeria include its biodiversity, as pointed out by (Scholars, 2024), strikingly beautiful landscape, and at-risk wildlife species. There is also cultural diversity, which gives unique cultural experiences and traditional clothes. Major ecotourism activities are activities like wildlife viewing, trekking, birding, and national parks

and protected areas. Nigeria has several biodiversity hotspots like Yankari National Park, Cross River National Park, and Gashaka Gumti National Park. The other major activities are cultural tourism, where the tourists can directly interact with the culture, and community-based tourism, which includes a combination of conservation and preserving culture. Some of the best practices in ecotourism strongly associated with the cultural heritage of Nigeria include visiting historical sites, participating in traditional festivities, and engaging in indigenous crafts and community-based cultural activities (Scholars, 2023). However, after several studies on ecotourism in national parks worldwide, there is still a vast information gap in the case of Nigerian national parks and other tourist destinations—a gap fueled by past historical events that have limited Nigeria's development as an international tourist destination (EVESO, 2017). The 1967-1970 civil war, and then the economic restructuring brought about by the 1973 oil boom, directed the country's attention to rapid urbanization and industrialization at the expense of rural desertion. The period was characterized by rampant corruption and an overvalued naira, which made Nigeria a costly and less competitive destination than other countries in Africa. And also, regular military coups in the 1970s through the 1990s further gave Nigeria a terrible image in the international arena, discouraging foreign tourists from visiting the country (Falad, 1999). Furthermore, the biodiversity of Nigeria in national parks, game reserves, and forest reserves is highly threatened by poaching due to economic stress and demand for bushmeat. The flora is also being heavily depleted by the local people through logging for fuel and timber, which disrupts the ecosystem and affects flora and fauna alike (Symes, 2018). Nigeria stands out so prominently in the rest of sub-Saharan Africa when it comes to multiple and wealthy cultures with gigantic prospects for development in tourism and sustainable development (Owunmi., 2008). NTDC came into being in 1992 when the Nigerian Tourism Development Corporation Act was passed. It formed part of the broader effort to harness tourist potential towards giving input in the economic development of Nigeria. It was established as a regulatory body to guide, encourage, and develop tourism in Nigeria for the preservation of Nigeria's cultural heritage, international growth of tourism, and development of the related infrastructure towards tourism development. This was a start in efforts at positioning Nigeria as a major player in global tourism. Artefacts and socio-facts from Nigeria's diverse environments encapsulate the living memories of its rich cultural heritage. These can be housed in museums and potential historical sites across the country, serving as significant centres for tourism that not only attract visitors but also generate substantial revenue and employment opportunities (Ukpere, 2018). The rich array of cultural festivals across Nigeria, including the Lagos Eyo Festival, the Kogi Argungu Fishing Festival, and in particular, the Kano Durban Festival,

presents a very attractive potential for using eco-cultural tourism to create wealth, employment, and sustainable development. These popular locally and globally, both set the efficacy of well-organized and well-marketed cultural tourism activities (Ukpere, 2018).

The NTDC was created to develop and encourage Nigeria's tourism sector. It is primarily engaged in boosting tourism through proper marketing, enhancing tourist infrastructure, and ensuring that tourism is developed in a sustainable and responsible manner. Aside from that, it makes policies and regulations that will ensure a facilitative environment for tourism operators. It was mandated with the promotion of Nigeria's cultural, historical, and natural attractions for domestic and international tourism and for enhancing a good image of Nigeria worldwide. Some successes have been registered by the NTDC in recent years. One of its finest achievements has been to ensure that domestic tourism is enhanced, encouraging Nigerians to make trips around their large country, rich in heritage and views. The NTDC has also encouraged more in the conservation of Nigeria's cultural sites, such as those that have been designated UNESCO World Heritage Sites, such as the Osun-Osogbo Sacred Grove. It has, on the global front, helped to restore the reputation of Nigeria as a destination for tourism through marketing and global tourism festivals. This has created greater interest in the nation among global investors and tourists. Yet, some challenges have been around the NTDC in its quest to promote the tourism sector of Nigeria. Insecurity, especially in a part of the country, has deterred local as well as foreign tourists. Inadequate infrastructure in the form of road networks, accommodation, and attractions at the destinations of tourists remains a bane in their way. Misinformation among the global public about Nigeria due to adverse information provided by the media on insecurity, as well as corruption, has also acted as a giant barrier towards development.

These notwithstanding, NTDC has been trying to break most of those barriers to pave the way for sustainable tourism development, attracting adequate investment to ensure the sector realizes its full potential (NTDC, 2024).

3.1 THE CULTURAL AND ENVIRONMENTAL IDENTITY OF KANO

Kano is a city with high ecotourism potential, boasting its unique mix of physical landscapes, cultural heritage, architectural heritage, and dynamic socioeconomic life. Its ancient walls, traditional bazaars, and monuments witness the wealth of its cultural identity, while its physical environment and people-centered lifestyle offer possibilities for sustainable tourism development. These attributes not only enhance the city's value as a historical site but also contribute to its future as a city where heritage preservation, environmental consciousness, and people's empowerment converge.

3.1.1 Physical Identity

Kano metropolis, the capital of Kano State in Nigeria, is located in the northwest part of the country with a large urban and metropolitan area. Kano is one of the oldest of West African cities, with a rich and colourful history spanning more than 1,000 years. It was established around 999 A.D. by Bagauda, the first of the Bagauda line of rulers. The most important geographic feature in the description of Kano City is the two prominent and historic hills of Dala and Goron Dutse, rising to the height of 453.67 and 517.59 meters above mean sea level, respectively, which were identified as the beginning of settlement in the region. The community clustered around the two rocks was referred to as the capital of Gazarzewa territory, later renamed Dala region (Kasar Dala). The old city, now comprised of Kano Municipal, Dala, and Gwale local governments, is surrounded by a defence wall built in 1100 AD to ward off the people from external attacks, particularly from the northern side (Iliyasu, 2014). The 19 km Kano ancient city wall, complemented by its fifteen gates, forms a vital part of Kano's cultural heritage, reflecting the city's rich history and traditional architecture. The gates bear their names based on significant events and incidents that occurred over a given period. Other sites include: The Local Tannery and Goldsmith, Madabo Mosque, The Dye Pits, and The Emir's Palace (Akinade, 2005). Nowadays, the original purposes and overall structure of the Kano city wall and gates have been significantly altered. The former essential security and defensive roles of such heritage objects have been largely invalidated. Although the ancient title of Sarkin Kofa (Gatekeeper) is still preserved, their functions in observing and regulating traffic within and outside the city have significantly declined. Besides, the city wall is being increasingly demolished, giving rise to numerous unplanned entrances into the old city outside the original gates. Due to modernisation and reforms brought by urban development and civilisation in Kano, several gates have lost their historical architectural form and cultural identity—examples

are the Nasarawa, Mazugal, Wambai, and Kofar Mataa gates. Others, such as Dukawuya, Kabuga, Na'isa, Gadonkaya, and Kofar Ruwa, though still standing, are in a very advanced state of decay and critical need of conservation.

3.1.2 Socio-economic Identity

Known as a major business hub, Kano is always referred to as the hotbed of commerce of the country because of its economic and historical importance (Ibrahim, 2014); (Ayila, 2014). It emerged as a leading commercial and cultural centre in the Sahel region, and the second largest industrial and commercial centre in Nigeria, with a very significant role in trans-Saharan trade. Today, Kano has over 300 large and medium industrial establishments. Its growth was right tied to its strategic location, abundant natural resources, and early activities such as iron smelting and agriculture around Dala Hill. During the reign of Muhammad Rumfa (1463–1499). Kano was at its apogee as a political, economic, and cultural power, with Rumfa establishing the ancient city wall and building the Gidan Rumfa, or Emir's Palace. Kano was at the peak of its influence as a political, economic, and cultural power, with Rumfa establishing the old city wall and building the Gidan Rumfa, or Emir's Palace. Kano became an important stop on the trans-Saharan trade routes, renowned for leather goods, indigo-dyed cloth, and agricultural produce. Its popularity stems from the historical trade and industrial enterprises that have attracted millions of people from all over the country and beyond.. Population growth, through a 3% natural increase and further economic growth, is still projected to remain (Nabegu, 2010).

3.1.3 Cultural Identity

The people of Kano maintain distinct cultural traditions, with religion, clothing, language, and cuisine that have largely resisted external colonial influences (Lambu, 2019). Festivities, cultural entertainment, local boxing and wrestling (dambe), as well as the famous durbar, and the very old Gano festival, are what characterize the culture of the people of Kano. Kano is blessed with abundant indigenous craftsmen, blacksmiths, cloth makers, creative artists, poets, and builders. Even though Hausa language is predominantly spoken in Kano by both the indigenous and non-indigenous people, English is the official language in government and educational institutions as well as modern business transactions. Arabic, Yoruba, Igbo, Kanuri, and Igbira are also spoken by the settler communities to a large extent. Their agricultural activities are significant, and millet, rice, and sorghum are the mainstays of traditional foods such as Tuwo, which is accompanied by soups such as Miya. Kano is also renowned for meat delicacies such as Suya and Kilishi, which had their origin in the cattle-rearing culture of the

region. Milk products such as Nono and Fura are also widely used and have a cherished status in the food culture of Kano.

3.1.4 Architectural Identity

The Kano classical architecture is a manifestation of a rich cultural heritage that harmonizes with the climatic and Islamic input environment. Islam became deeply rooted, shaping the city's culture, architecture during the 15th century Muhammadu Rumfi regime. The architecture is primarily constructed using tubali (sun-dried mud bricks), and it features heavy earthen walls, flat roofs, and inward-facing courtyards, which offer efficient temperature control and privacy, both being essential aspects from environmental and socio-cultural perspectives (Denyer, 1978); (Prussin, 1986). It is also expressed symbolically through decorative motifs and highly detailed relief designs, as in cultural monuments such as the Gidan Rumfa and ancient city gateways (Aradeon, 1981). The mud artefacts and structures, the defensive wall (ganuwa), which surrounds the old city with its gate, are all a reflection of the architectural skills of the people of Kano. The designs operate not only at the functional level but also carry a profound meaning that is reflective of the art, values, and spatial rationale of Hausa culture. In preserving such architectural heritage, Kano stands to benefit well from promoting ecotourism that focuses on cultural authenticity and adaptation to the environment (Njoh, 2006).

3.2 PHASES IN THE HISTORICAL DEVELOPMENT OF KANO CITY WALL

The history of Kano City Wall is deeply intertwined with the general socio-political evolution of Kano itself, once one of the seven Hausa Bakwai city-states, but nowadays a federating unit in Nigeria. The construction and development of the wall come in three general phases, each of which bears parallel with a dominant period in Kano's development (Haruna, 2022).

3.2.1 Phase One: The Foundational Wall and Early Urban Protection (1095- 1134 AD)

The construction of the Kano City Wall began during the reign of King Sarki Gijimasu in approximately 1095 AD, one of the early kings of the Bagauda Dynasty. The early phase marked Kano's ascension to be one of the seven Hausa city-states (Hausa Bakwai) renowned for their urbanization, political governments, and commerce operations (Palmer, 1908). The wall was made of mud and laterite, its primary function being a defensive one to protect the

growing city from foreign invaders and regulate commerce through its initial seven gates see fig.21 below).

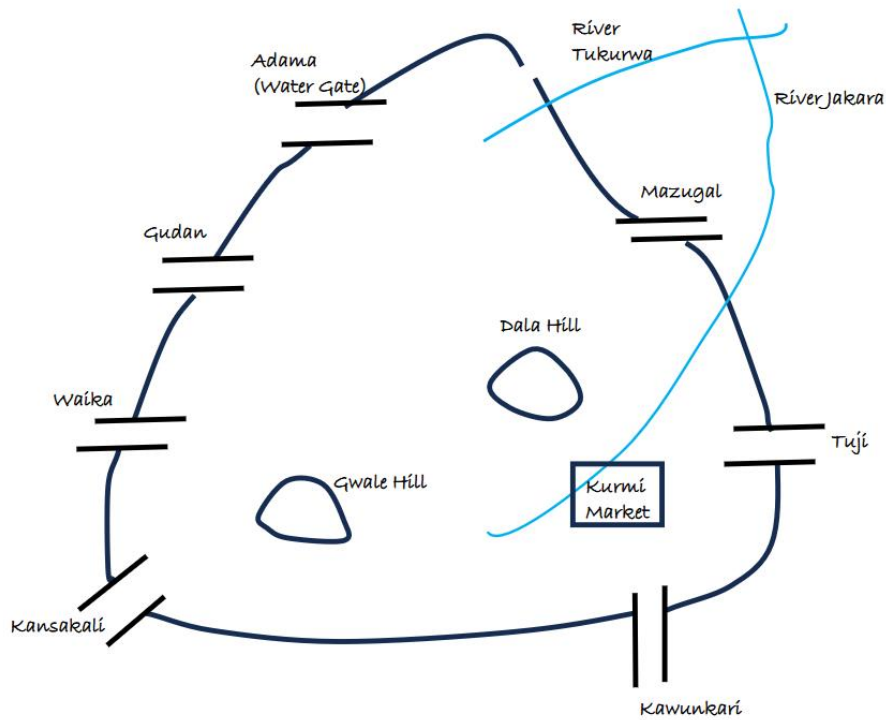


Figure 0.2 Map of the Kano city 9-10th Century
Source: Author's Work

In the mid-14th century, under King Yaji I (1349-1385), Kano had become a full-fledged Hausa kingdom. It was also under his rule that Islam was formally introduced into the palace, further shaping the political and cultural identity of Kano. The growing importance of the city as a market in the trans-Saharan trade circle increased the need for a perimeter defence. Later, kings lengthened and fortified the wall in response to urban growth and administrative elaboration (Last, 1967).

3.2.2 Phase Two: Strategic Expansion and Reinforcement during Political Consolidation (1463- 1499AD)

The second main period of expansion was between the 15th and 19th centuries, particularly during the reigns of Muhammad Rumfa (1463–1499) and after 1807, upon the Sokoto Jihad. During Rumfa's reign, Kano was one of the wealthiest and most influential Hausa city-states with achievements in administration, architecture, and Islamic learning. The wall was extended

to include the rapidly expanding population, enhanced palace grounds, and markets (see fig.22 below).

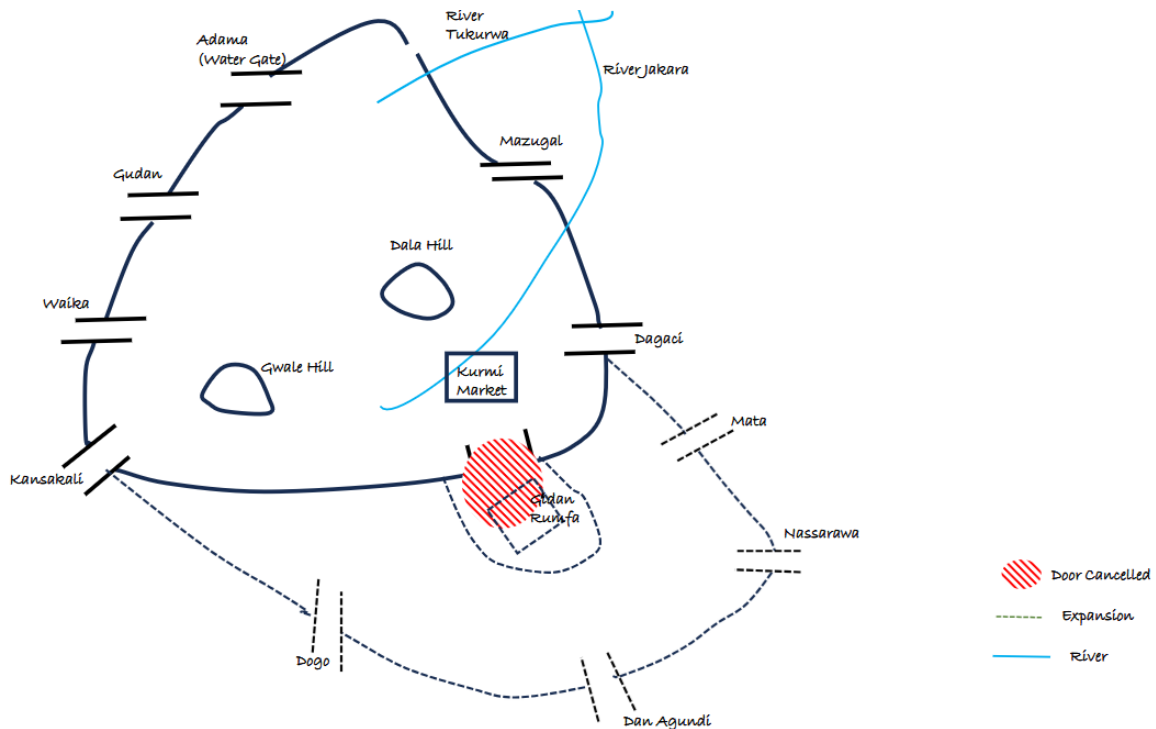


Figure 0.3 Map of Kano 13th Century
Source: Author's Work

This period saw the development of three more sophisticated gates, bastions, and moat systems, combining aesthetics with military strategy (Hogben, 1966).

The Sokoto Jihad, led by Usman dan Fodio between 1804 and 1808, transformed Kano into an Islamic emirate of the Sokoto Caliphate. Emir Suleiman, who ruled from 1807, was appointed the first Fulani Emir of Kano. The wall's strategic role shifted from defending a kingdom to consolidating Muslim rule, and new administrative and religious centres were established within the walled city. Although the wall remained a vital component of defence, its roles were expanded to policing, taxation, and religious surveillance (Trimingham, 1962).

3.2.3 Phase Three: Further Expansion, Decline, Fragmentation, and Modern Encroachments (1582 AD-till-date)

The third phase marked further expansion under the rule of Muhammadu Na Zaki, which was from 1582- 1616 AD (see fig.23 below), which is still maintained as the main (cikin gari) Kano today. The decline of the wall's functional and symbolic importance began with British colonization in 1903. Following the British conquest of Kano, led by Colonel Lugard's forces, the city became part of the Northern Protectorate and later a province under colonial

administration. The Emirate system was retained under indirect rule, but the wall's defensive purpose was rendered obsolete by modern warfare and governance structures.

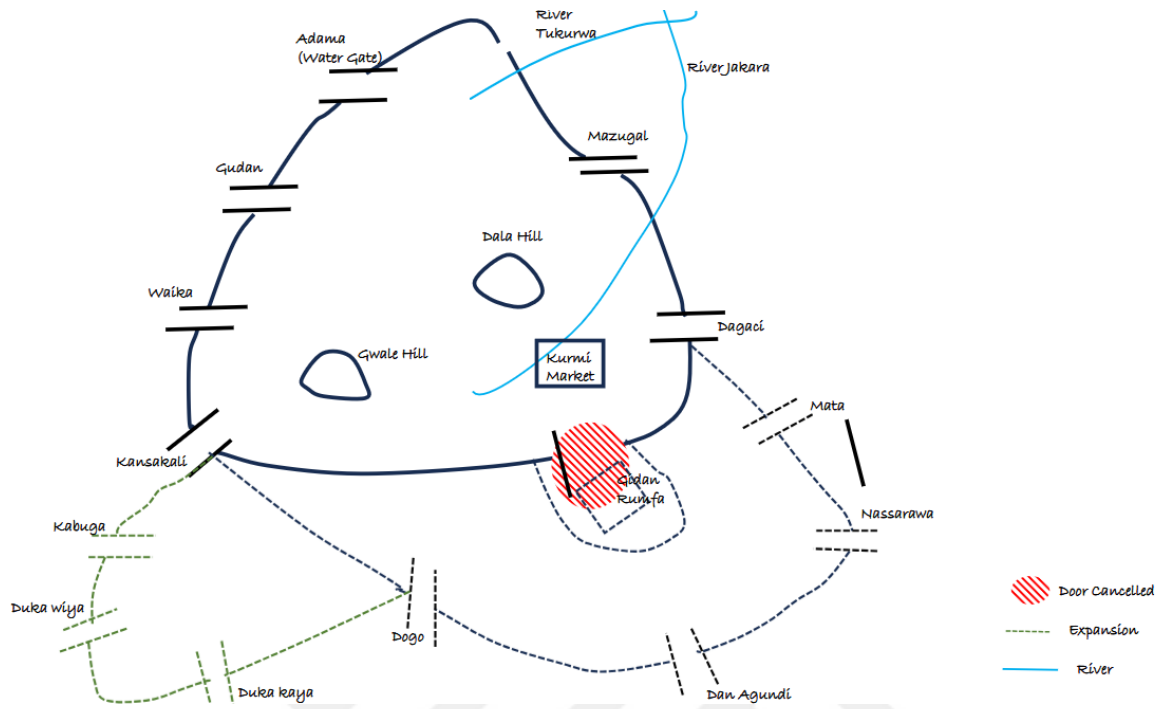


Figure 0.4 Kano City Map 15th Century
Source: Author's Work

During the colonial period (1903–1960), urban expansion, road construction, and new administrative demands led to portions of the wall being demolished or repurposed. Several unauthorized entrances were made into the city, and the role of the gatekeepers (Sarakunan Kofa) diminished significantly.

In the post-independence period from 1960 onwards, Kano emerged as one of Nigeria's 36 federating states. Rapid urbanization, lack of heritage awareness, and erosion led to further deterioration of the wall and gates. Nowadays, the city continues to be a hub of trade, culture, and education, amidst addressing issues like urbanization, heritage conservation, and sustainability (Iliyasu., 2014). It comprises eight Local Government Areas, including Dala, Fage, Gwale, Municipal, Nasarawa, Tarauni, as well as parts of Kumbotso and Ungogo (see fig.24 below). Only a few segments remain intact today, with some gates like Nasarawa, Mazugal, and Kofar Mata losing their original architectural character, while others such as Dukawuya and Na'isa are in critical condition (Adamu S. , 2012). Despite its decline, the wall remains a powerful cultural symbol and a candidate for heritage revival through eco-tourism and conservation-led initiatives. The city fell to British colonial rule in 1903, with the collapse of the Sokoto Caliphate, and was incorporated into the colonial economy, which began

exploiting its resources. With Nigeria's independence in 1960, Kano continued to grow as an important commercial and industrial centre in northern Nigeria.

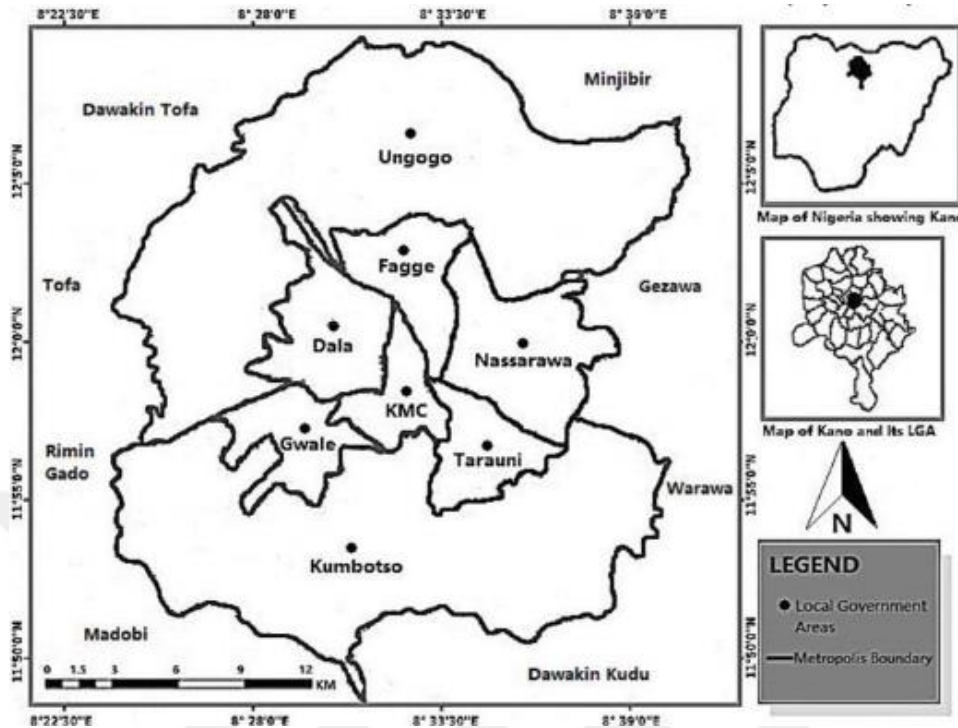


Figure 0.5 Geographic Map of Kano State After the British Rule
 Accessed on 22nd December (Faisal, 2024)

In an article by (Sani., 2024), it was observed that cultural heritage sites in Kano metropolis showed variation in the importance of heritage resources, with most of the sites having more historical, social, and economic significance than architectural or spiritual. This is in the wake of Kano's longstanding social and economic relevance for many centuries, attracting people across the globe for various reasons such as seeking knowledge, tourism, and other purposes. As noted by (Muhammad, 2017), the many historical attractions within the city have continually attracted visitors, among them notable figures like Hugh Clapperton, Henry Barth, and Lord Lugard during the 19th century. The 15th edition of the World Travel Guide even describes Kano City as offering a "medieval atmosphere" and one of Nigeria's top destinations (Barau, 2007).

3.3 CULTURAL HERITAGE SITES IN KANO IN KANO

Kano is a very historic city in Nigeria, yet there is no development of tourism in a sustainable manner. Kano is also a city of many cultural and historical attractions, all pointing to its architectural genius, heritage, and economic importance. This includes the 11th-18th century

city wall, an exemplary traditional Hausa architecture that stands as much as a historical symbol as it serves to bring in tourism revenues. The ancient city wall with some if not most of its 15 gates has been abandoned, with most of the gates reformed or abandoned to rid them of their historic soul.

Kano today, amongst others, majorly lacks infrastructural development, not to mention the rural areas of Kano, where most of the eco-tourism attractions are found. While there is some reasonable infrastructure development in major towns, most of the rural areas lack proper amenities that may support ecotourism, which has the potential to improve the economic welfare of the local people. A dearth of infrastructure negatively contributes to ecotourism development and its potential for pro-poor effects.

Kano State Government is committed to safeguarding its heritage sites, especially the ones under threat from mining activities and urban encroachment. Key historical landmarks, including Dala Hill (see fig. below 27) an archaeological site that bears witness to Kano's pre-Islamic history and ancient city walls of Kano (see fig. below 25& 26) —only 20% of which remain intact—are facing extreme threats due to population growth, pressure on land, and lack



Figure 0.7 The Old Kano City Wall
(Path, 2024)



Figure 0.6 The Ruins of the Kano City Wall
(Architecture, 2024)

of preservation funds. Dala Hill is one of the most important historical sites in Kano, Nigeria, and is considered to be the very cradle of the city, which is said to date back more than 1,000 years. In local tradition, on this hill was located the site where the first Kano ruler, Bagauda, founded the city around the year 999 AD.

It has on it a lot of ancient structures consisting of remains of early houses, pottery, and inscriptions that give insight into the early history of Kano. Dala Hill is culturally important because it has been associated with the spiritual life of the city and also as a symbol of the origins of Kano. This has remained a popular landmark, commanding good views over the city, both for locals and tourists interested in exploring the history of Kano.



Figure 0.10 The Famous Dala Hill of Kano City
(NG, 2024)

The Kurmi Market (see fig.28&29 below), established in the 12th century, stands as one of West Africa's oldest and largest markets, brimming with locally crafted goods and textiles. It was an important Trans-Saharan trade centre and is still a thriving international business centre that reflects the tradition and culture of the Hausa community. It was an important staple to the economic welfare of Kano. Merchants in such goods as gold, ivory, salt, leather, and textiles were gathering here to sell their wares and attracting traders throughout Africa and the Arab world. Through its congested alleyways and stalls, Kurmi Market is a labyrinth of trade activity. Eminent in the past for indigo-dyed cloth, handlooms, and properly bossed leather items, it remains a pulsating reminder of Kano's commercial past and cultural heritage, where local craftsmanship continues to be preserved and up for sale.



Figure 0.9 The 15TH Century Kurmi Market
(News, 2024)



Figure 0.8 The Kurmi Market Today
(NigeriaGalleria, 2024)

The Kofar Mata Dye Pits are one of the oldest functioning dye pits in Africa, tracing their history for over 500 years (see fig.30&31 below). They were built during the reign of Emir Muhammadu Rumfa and are situated near the Kurmi Market. The pits are primarily known for traditional indigo dyeing passed down through generations. Their dyeing technique uses natural indigo plant extracts mixed with ash, potash, and other natural ingredients. For very deep and

rich indigo colours, artisans dip the fabrics several times into these pits. The dyeing pits represent more than a source of livelihood; rather, they are a cultural asset that helps to highlight the skilful craftsmanship of Kano's artisans.



Figure 0.12 Kano Beautiful Dye cloth (Image, 2007)



Figure 0.11 The Kano Dye Pits (Abubakar, 2024)

The Emir's Palace, the oldest occupied palace in West Africa, has Islamic educational and judicial roles and attracts national and international tourists. The Palace of the Emir is also known as the Gidan Rumfa is one of Nigeria's oldest royal palaces, built in the 15th century by Emir Muhammadu Rumfa, and it is a very important political and cultural centre of Kano. A good representation of the Sudano-Sahelian building tradition, its walls made of mud-bricks have geometrical patterns. It also serves as the official residence of the Emir of Kano today. The administrative buildings, residential quarters, and ceremonial spaces are some of the other components in the palace complex. It has historically been the epicentre of decision-making and has hosted many royal and political events.



Figure 0.14 The 18th century Main (south) gate of Emir's Palace (ngconsulate, 2024)

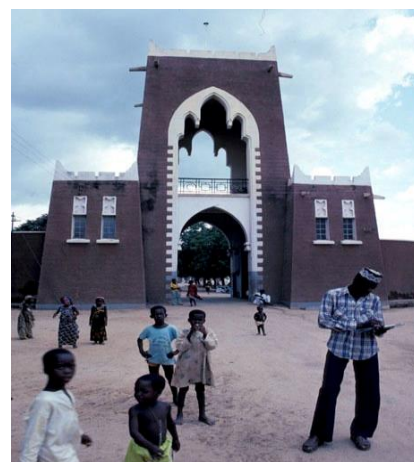


Figure 0.13 The Southern gate of The Gidan Rumfa today (Archnet, 2024)

Gidan Makama Museum (fig.34) was a palace in the 15th century, but later converted into a museum in 1953. Employed to demonstrate the affluent history, culture, and heritage of Kano, the museum is located in an architectural marvel that demonstrates conventional Hausa architecture, made up of mud and ornamented with beautiful carvings and geometric patterns. It boasts 11 halls of Kano history, including themes like traditional architecture, crafts, economy, and social life. There are materials on offer spanning from traditional dressing to royal dress, weapons, and ancient literature. Gidan Makama is a National Monument, serving as a very valuable tool of education and culture.



Figure 0.16 The Gidan Makam Museum (Madaki, 2024)



Figure 0.15 The 15th Century Gates of the Old City preserved in the Makama Museum Author's Cam

The tanneries at Kofar Wambai, one of the gates from the 15th Century in Kano, have been central to its economic identity for centuries, tracing back to the days of the trans-Saharan trade routes. Skilled artisans have traditionally processed animal hides and skins into high-quality leather goods, using traditional tanning methods (fig. 37 and 38), which were in demand across Africa, Europe, and the Middle East. Historically, leather from Kano tanneries was much more



Figure 0.18 The Kano Tanner (Edozie, 2017)



Figure 0.17 The Leather at the Tannery (Capter, 2021)

often dyed with natural pigments and exported for use in luxury goods, ranging from Moroccan slippers to Ottoman saddles. Much of the so-called "Moroccan leather" that was highly prized in medieval Europe came from Kano's tanneries. Today, though modern technology has been integrated, many tanneries still use traditional, labour-intensive methods, preserving centuries-old techniques

The Madabo Mosque is an old and cultural landmark located in the Kano municipal area of Madabo. It is one of the oldest mosques in Kano, said to have been built during the reign of the great Kano Emir Muhammad Rumfa during the 15th century (see fig. 38 & 39).

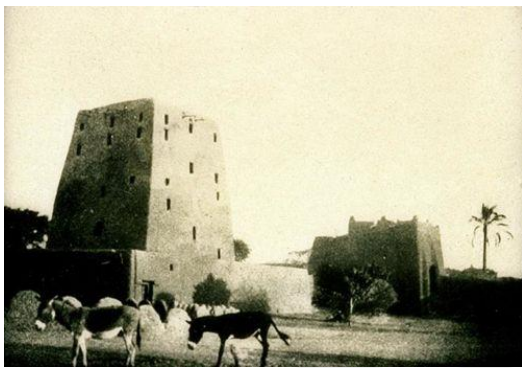


Figure 0.20 The 15th Century Madabo Mosque (ArchNet, 2024)



Figure 0.19 The Madabo Mosque Today (ArchNet, 2024)

This mosque is a very good example of traditional Islamic architecture in the region. The architecture is simple and strikingly beautiful, using mud and brick construction. Fascinating fact: the mosque has undergone several renovations throughout the centuries but remains much the same as it was originally, with its open courtyard and imposing minaret. To this day, it remains a place of worship and draws tourists interested in Kano's rich Islamic history and architecture.

Other landmarks include the Gidan Dan Hausa (fig. 40&41). The Gidan Dan Hausa, popularly known as the Hausa House, is an architectural beauty from history in Kano, Nigeria. The house demonstrates the classic Sudano-Sahelian architecture typical of its thick walls made of mud,



Figure 0.22 The Gidan Dan Hausa (Tayo, 2024)



Figure 0.21 The Interior design Finish of the Gidan Dan Hausa Showcasing the Depth of the Hausa Traditional Architecture (Abdul, 2024)

timber, and geometric design. Initially built during the pre-colonial era, this structure was not only meant for residential but also had some administrative function, indicative of the societal structure and cultural identity that Hausa society represents. Unique features in Gidan Dan Hausa include a natural cooling system because of its thick mud walls that regulate indoor temperatures effectively despite the scorching temperatures recorded in Kano. It is not only ornate carvings that have adorned the building, but symbolic wall designs that are both spiritual and cultural. It was historically a symbol of authority and prestige, later a venue for the first Western school in Northern Nigeria—a milestone within the annals of education in the area. Today, it is a cultural monument visited by tourists, historians, and researchers alike, who marvel at its perfect balance between functionality and artistic expression.

Officials managing Kano's cultural heritage indicate that the local communities even before the arrival of Europeans, strongly valued their history, and social and economic activities were well embedded in their culture, a factor well reflected in the cultural landscape of both the state and the metropolis, depicting the area's enduring cultural importance (Barau, 2007). However, (Naniya., 2015) assesses the current implementation of the Kano Comprehensive Tourism Master Plan through a "process evaluation" approach, disclosed that the implementation of this plan has been slow due to inadequate funding, limited interest among stakeholders, weak marketing, and ineffective promotion. He also identified key issues include a failure to define the tourism industry's role in job creation, inadequate identification of tourist attractions, and subjective selection of potential sites, which hindered private investment. Recommendations are made to improve future phases of the plan (Gambo., 2008).

The absence of eco-tourism frameworks has made Kano's heritage vulnerable to urbanization, poor conservation, and underutilization, and absence of cohesive tourism strategies that balance conservation with development goals. This research examines the void in sustainable tourism strategies, proposing solutions to preserve Kano's heritage while fostering community and environmental sustainability Still on (Sani., 2024).

In response, the Ministry of Solid Mineral and Natural Resources, with other agencies such as the State History and Culture Bureau, the Ministry of Justice, and State Urban Planning and Development Authority KNUPDA, launched emergency measures to stop further encroachment and damage. Irrespective of the funding challenge, these preservations are considered vital in terms of cultural pride, historical importance, and economic development via tourism revenues and community participation; there is a need to call for support by government agencies, NGOs, and other stakeholders for long-term sustainability of heritage sites in Kano (Anyanwu, 2024).

Finally, festivals in Kano mirror the vivid cultural celebration of their city's rich history and Islamic heritage, deeply cemented in tradition. Amongst a few are the Durban and The Gani Festivals.

The Durbar Festival is an iconic and flamboyant event that occurs during Eid al-Fitr and Eid al-Adha. Dating back to the 14th century, this was a military parade meant to display the loyalty of the Emir's cavalry to the throne. During Durbar, all noblemen, traditional rulers, and horse riders will pass through the city in flamboyant attires, with their horses also looking good in various decorations. He is accompanied by a procession headed by the Emir of Kano, drummers, trumpeters, and praise singers. The festival is not only a celebration of Kano's Islamic heritage but also a great tourist attraction. The Durbar is often regarded as one of the most colourful equestrian festivals in the world. The Gani Festival is celebrated annually in Kano and predates the Durbar Festival.



Figure 0.23 A Horserace of the Famous Durban Festival (Culture, 2024)

Gani Festival is the annual festival celebrated in Kano, which is even older than Durbar. It involves cultural displays entailing traditional dances, music, storytelling, and colourfully arrayed parades. This is a unifying event that brings all the cultural groups within Kano together to celebrate their identity through art performances. The Gani Festival was historically used for the settlement of disputes, reinforcement of alliances, and celebration of harvests. Traditionally, the Gani Festival was used as a time to settle disputes, reinforce alliances, and celebrate harvest.

(Reuter, 2021) Traditions of hyena men are a singular cultural sight in northern Nigeria, with performances quite common during festivals, coronations, and durbars. Such performers-like



Figure 0.24 Hyena Festival in Kano
Accessed on 27TH December (Reuter, 2021)

Abdullahi Jahun-control and showcase hyenas while snake charmers, drummers, and dancers have crowds agog with bravado stunts and performances, including having children sit on the animals. Despite their reputation as scavengers, hyenas are central to this fading art that speaks to deep cultural roots but faces challenges with shrinking habitats and modern views on animal welfare. Additionally, the hyena plays a part in local life through traditional healers such as Yaya Kawu, who uses its dung, saliva, and hair for remedies believed to cure everything from ailments to social issues (Reuter, 2021).

3.4 CHALLENGES FACING KANO METROPOLIS: A MULTI-DIMENSIONAL OVERVIEW

Kano's location in the northern region of Nigeria subjects it to a semi-arid climate, characterized by erratic rainfall and frequent droughts. These climate conditions significantly affect agricultural productivity, with unpredictable weather patterns leading to crop failure and contributing to food insecurity. Having known that Kano's economy heavily depends on agriculture (Sule, 2018), Farmers in the region face challenges such as the lack of water for irrigation, resulting in poor agricultural output and impacting local livelihoods (Ayodele, 2019). Other major issues include insecurities, which is a blanket problem of the entire country which nothing has been done to curb. Additionally, water shortage in Kano. While Kano River runs through the region, improper management of water resources, the issue of rapid

urbanization has led to unplanned settlements and inadequate infrastructure, putting a strain on essential services like water supply, waste management. Overcrowding and poorly constructed roads exacerbate traffic congestion, making transportation a significant issue in the metropolis (Adamu S. &, 2018). This further aggravates the challenges faced by the region, especially the rural people who depend on regular water supply for domestic and farm use (Bello, 2020).

Industrialization-wise, Kano has conventionally been an industrial hub, however, it faces significant gaps in diversifying its economy. The growth of industries has been constrained by factors such as inadequate infrastructure, limited access to financing for SMEs, and poor access to global markets, thereby preventing Kano from fully capitalizing on its industrial potential (Aminu, 2019).

Another major problem is the environmental degradation characterized by a decline in natural resources as evidenced by deforestation, land degradation, and pollution of the air. Due to the expansion of agricultural land and construction activities, it has brought about soil erosion and loss of biodiversity that has contributed to poor environmental conditions in the region (Oluwaseun, 2021). With Kano being in the modernization process, it constantly faces friction between preserving its cultural heritage and taking up the contemporary ones. This city, with much rich history regarding trade, religion, and education, often suffers at the hands of modernization that can obscure conventional practices and architectural style (Olaniyi, 2017). Apart from this, ethnic diversities, such as groups of Hausa, Fulani, and Kanuri, sometimes cause social tensions. Although it is enriching culturally, it also is difficult for social cohesion to take place because there may be conflicts between them (Sule, 2018).

Lastly, while huge strides have been made compared to access to education, sustaining quality education is a problem, particularly in rural areas where minimum facilities are still inadequate therefore, budgeting and planning for activities facilitating the protection of cultural heritage becomes increasingly difficult. Piling this issue on top makes Kano end up having to balance development and conservation. Therefore, the economic, social, and infrastructural problems exist intertwined in all aspects with Kano's ability to preserve and conserve cultural heritage for future generations (Aliyu, 2019)

3.5 IDENTIFIED RESEARCH GAPS AND THE RATIONALE FOR FURTHER INVESTIGATION

1. Lack of In-Depth Studies on Eco-Tourism in Kano: While studies on cultural heritage sites in Kano are extensive, there is a lack of studies on the integration of eco-tourism principles into these sites. This lack hinders the development of strategies for the promotion of sustainable tourism that leverages Kano's environmental and cultural assets.

2. Failure to Perform Detailed Analysis of Sustainable Practices: Past research has rarely given much focus to the use of sustainable practices toward managing heritage sites. Theoretical studies in embracing or modernizing traditional practices for sustainable eco-tourism use can provide guidance toward designing environmentally friendly models of tourism.

3. Inadequate Case Studies of Best Eco-Tourism Practices in Nigeria: There is a need for more thorough case studies of existing successful eco-tourism programs in Nigeria to enable relevant comparisons and identification of best practices. This can help identify methods that have been successful elsewhere under comparable conditions and assess them for suitability in Kano.

4. Untapped Tourist Influence on Host Communities: Despite the socio-economic effects of tourism being well noted, there is limited study of the direct tourist influence of eco-tourism on communities in Kano. Understanding this influence is critical for crafting policies of tourism to yield maximum community advantage while preserving cultural heritage.

5. Integrated Heritage and Environmental Conservation Strategies are needed: Research tends to delineate heritage conservation and environmental sustainability as independent issues. Rather, an integrated approach needs to be designed in order to devise guidelines that simultaneously address cultural heritage conservation and environmental conservation.

Rationale for Further Research: Closing these gaps is crucial in developing an integrated tourism strategy that leverages Kano's cultural richness while ensuring environmental sustainability. In addressing these gaps, research can assist in developing a model of eco-tourism that not only attracts tourists but also gains benefits for local communities and preserves the heritage of the area. In addition, this study can provide useful recommendations for other areas with comparable cultural and environmental backgrounds, facilitating wider use of sustainable tourism methods

3.6 RESEARCH METHODOLOGY

This study employs a mixed-methods approach that combines qualitative methods, including global case studies, stakeholder interviews, and site observations, with quantitative methods, such as surveys and statistical analysis, to assess the relationship between eco-tourism and heritage conservation in Kano.

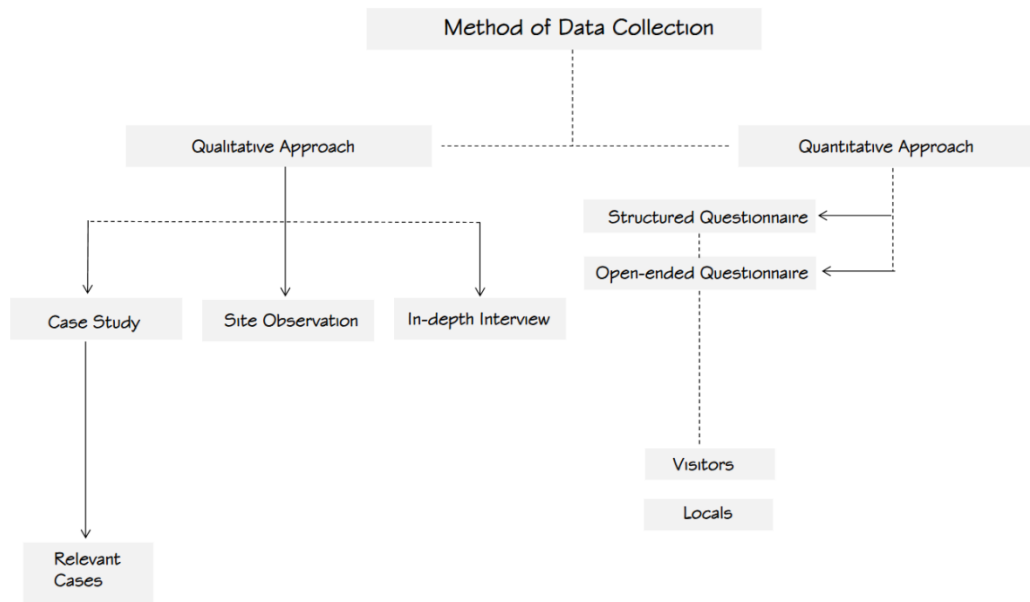


Figure 0.25 Research Methodology
Source: Author’s Work

3.6.1 Survey and Structured Questions

The survey conducted was based on the judgment that there is a need to garner multiple perspectives concerning ecotourism development and heritage preservation in Kano using both structured and open-ended questions. Participants have been selected in order to be representative of the overall population, with a variety of voices being captured for those directly affected or directly involved in tourism, cultural heritage, and its conservation in the city. This approach has thus enabled the research to capture many opinions of the existing challenges and opportunities regarding eco-tourism and heritage conservation in Kano.

The primary populations to be targeted in the survey were: residents of the urban and rural areas in Kano, and visitors who have visited Kano heritage sites. The population for the participants was also diversified according to gender, age, and socioeconomic status. Using participants of varying ages guarantees representation of opinions by both the youth and elderly populations, given that these groups could have varying perspectives towards tourism development and heritage protection. It also considers gender representation to ensure that

men's and women's voices are equally heard. Additionally, the participants were selected from different socioeconomic statuses to assess how different levels of income perceive and are affected by tourism growth. This diversity of experience provides a comprehensive view of the opportunities and threats that ecotourism in Kano can bring. It specifically includes rural areas in the survey, as most heritage sites are situated there and often are neglected in tourist planning, which is normally focused on urban centres. This is where the impacts of tourism and heritage conservation impinge most directly, so the representation of rural perspectives was essential for this research. These included urban residents to provide an understanding of the challenges of rapid urbanization, infrastructure deficits, and strain on heritage sites.

3.6.2 In-depth Interview

In-depth interviews were conducted among 4 well-selected stakeholders within urban and rural Kano. They included policymakers, tourism practitioners, heritage conservationists, and residents with varying age ranges and genders. The aim was to gain the challenges and possibilities of tourism and heritage conservation as seen from varied perspectives. Interviews broached themes such as community participation, views towards eco-tourism, the effectiveness of policy, and the economic impacts of tourism operations.

These were designed around seven key research parameters: Accessibility, Community Participation, Sustainability, Cultural Heritage, Policy and Planning, Waste Management, and Economic Impact. The parameters thus provided a framework for gaining insight into the current state of Kano's heritage sites and festivals from many different perspectives.

3.6.3 Site Observations

Site visits focused on well-documented and lesser-documented heritage sites, such as the ancient city walls and gates, selected for their cultural significance and current conservation problems. Site visits permitted direct observations of site conditions, infrastructure, accessibility, sustainability practices, and local involvement in tourism. They also granted the researcher access to interaction with the members of the community and tourism operators, which gave the researcher an overview of the status and geographical location of heritage sites in Kano and how they benefit the development of eco-tourism.

3.7 RESULTS

Questions were developed to aim at the research parameters; accessibility, community participation, sustainability, cultural heritage, policy and planning, waste management, and economic impact.

The responses gathered from the administered questionnaire offer key insights into public perception of heritage conservation and the potential for eco-tourism in Kano. A notable proportion of respondents from local residents rated the current state of conservation of the Kano City Wall and gates as excellent, yet many others expressed concern, rating the current state as inadequate or poor. This reveals a general awareness of the need for preservation but highlights dissatisfaction with present efforts (see Chart 3.1), similarly, majority respondents from tourist also rated the current state of Kano’s cultural heritage as excellent (see Chart 3.2)

On a scale of 1-5, how would you rate the current state of conservation of the ancient city wall and its gates in Kano?
63 responses

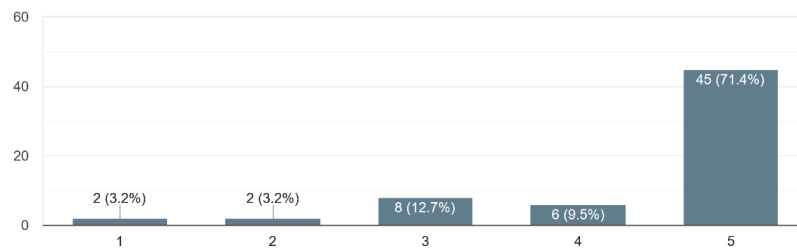


Chart 0.1 Local Responses to the State of Heritage Rating
Source: Author’s Work

How would you rate the current state of heritage conservation efforts in Kano?
19 responses

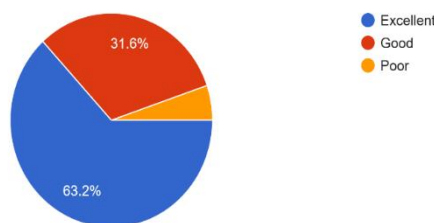


Chart 0.2 Resident's Responses to State of Heritage Rating
Source: Author’s Work

Equally significant is the high level of belief in eco-tourism as a tool for heritage preservation. Many respondents strongly agreed that eco-tourism could make a positive contribution to sustaining Kano's cultural landmarks (see Chart 3.3), similarly, majority respondents from tourist also rated that they believe that ecotourism could be a tool for heritage conservation (see Chart 3.4).

How well do you think that ecotourism could contribute to the preservation of Kano's heritage sites?
63 responses

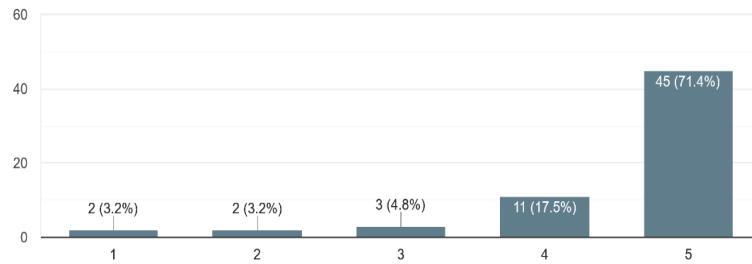


Chart 0.3 Local Rating for Ecotourism Contribution to Preservation
Source: Author's Work

Do you think Eco-tourism can play a significant role in conserving the natural environment of Kano?
19 responses

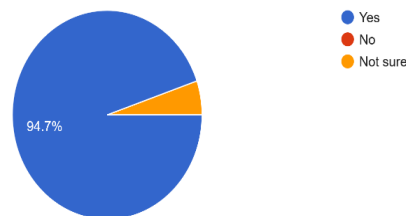


Chart 0.4 Tourist's Rating for Ecotourism Contribution to Preservation
Source: Author's Work

While a considerable number of visitors expressed willingness to pay for access to heritage sites, a disparity remains between interest and the perceived state of the sites. This discrepancy underlines the need for improved conservation practices and infrastructure development to match visitor expectations.

Community involvement emerged as another vital factor. Although over 60% of tourists acknowledged the participation of local communities in cultural site activities (see Chart 3.5), a larger majority stressed the critical importance of community engagement in heritage management. Many respondents recommended that locals play an active role in decision-making alongside the government. They believed such collaboration would positively impact the promotion and development of eco-tourism in Kano. See also (see Chart 3.6), where 25 of

the 63 respondents acknowledge that they are not directly or indirectly related to ecotourism activities going on in Kano.

What role do local communities play in the decision-making processes related to tourism development?
7 responses

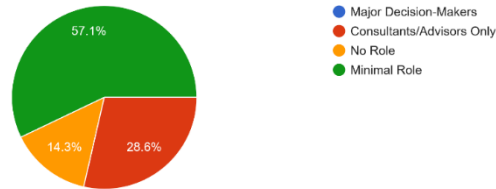


Chart 0.5 Tourists Community Role Rating
Source: Author's Work

Are you or your family members employed or engaged in any activity related to Eco-tourism?
63 responses

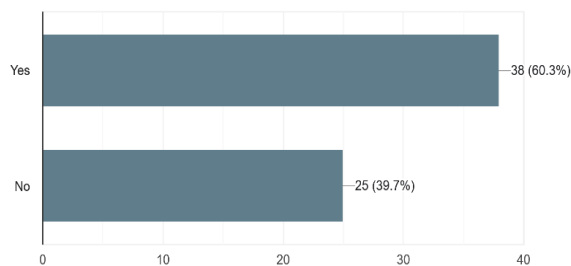


Chart 0.6 Local's Community Role Rating
Source: Author's Work

In terms of economic impact, most participants conceded that heritage sites in Kano help local businesses and jobs. As a result of fewer than half of them reporting direct involvement in local cultural events, which suggests that community events related to heritage may be under-promoted or underutilized.

In relation to awareness of existing government policy regarding heritage and eco-tourism, 92% locals reported awareness, while a minority were not aware (see Chart 3.7), however, 38% tourists express that they are not aware of any policies (see Chart 3.8). This calls for greater communication and public education on policy implementation reflecting a need for better communication and public education in policy implementation.

Do you feel that the government has implemented effective policies to preserve Kano's cultural heritage?
63 responses

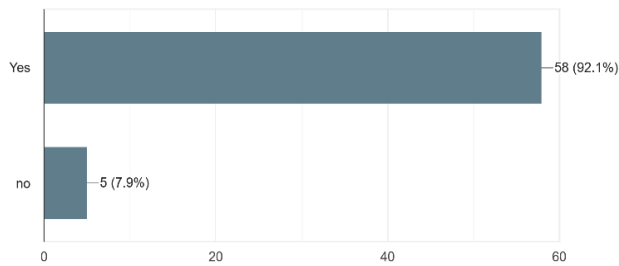


Chart 0.8 Local awareness of local policies
Source: Authors' Work

Are you aware of any local policies aimed at promoting eco-tourism in Kano?
19 responses

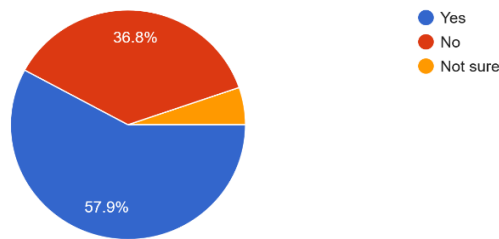


Chart 0.9 Tourist awareness of Local policies
Source: Authors' Work

Sustainability initiatives in cultural sites of Kano appear to be modest as per the responses, but many respondents have concerns and agreed there was minimal publicity or talk of sustainability among the locals (see Chart 3.9). A large proportion of tourist respondents expressed concern over a lack of environment sustainability and waste management practices at tourist sites (see Chart 3.10), asserting that stronger, more prominent programs are needed.

Are there any environmental concerns (e.g., pollution, overuse of natural resources) you have noticed due to increased tourism activities in the region?
62 responses

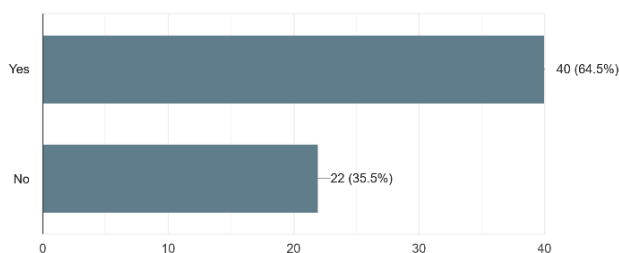


Chart 0.7 Local Sustainability rating
Source: Author's Work

How would you rate the environmental sustainability of tourism practices in Kano?
19 responses

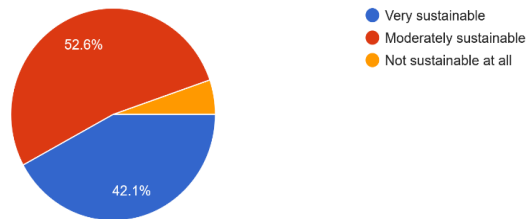


Chart 0.10 Tourist's Sustainability rating
Source: Author's Work

Overall, the survey findings identify the contribution of eco-tourism to the support of cultural heritage conservation in Kano but also reveal extensive gaps in conservation, community involvement, policy knowledge, and sustainable practice [Find link to the questionnaire in the Appendix.]. These observations form the basis of recommendations and design guidelines in subsequent chapters.

The results of the interview have been organized under the basis of each question, the interviewees' responses, the themes that emerged, and the main insights. Each section is titled with a question.

Accessibility: To assess the accessibility of Kano's heritage sites to locals and tourists, and to assess infrastructure, inclusivity, and supporting services such as tour guides and transportation.

Responses of Interviewees:

The views expressed regarding accessibility in heritage sites by the interviewees were mixed. Person 1 noted that though heritage sites are generally accessible and free, they are not user-friendly to persons with impairments, and only Gidan Makama Museum provided a tour guide for visitors. Person 2 contributed by saying that public transport systems to the heritage sites are available, like the *Keke Napep*, which is very affordable, but added that Dala Hill is not accessible for impaired persons and does not have tour guides. Person 3 said that heritage sites are very accessible, and that one can always ask his or her way through, and that events are often held at Gidan Dan Hausa. Person 4 reported that the sites are not user-friendly, with poor thermal comfort except for Gidan Makama Museum. Signboards gave good directions, the road networks, especially to the Kurmi market, were poor, and cellular services were unreliable.

The recurring themes in the results indicate that while heritage sites in Kano are physically accessible, they are not inclusive for impaired visitors. Tour guiding services are either unavailable or highly limited, except at Gidan Makama Museum. Besides, poor road infrastructure and cellular services further hinder the overall visitor experience. These insights

show that while there is ease of access in terms of location and transportation, there are still important gaps in inclusivity, tour guide availability, and supporting infrastructure that impact both site usability and visitor satisfaction.

Cultural Heritage: To analyze the historical and cultural value of these sites, and also the assessment of the state of conservation and representation of the traditional architecture and artifacts of Kano is made.

Responses of Interviewees:

Person 1 pointed out that the traditional Hausa architecture is well-represented and the palace itself is 70% intact; it is partly accessible for visitors. Person 2 mentioned structures like Kofar Dan Agundi and Sabuwar Kofa that have been conserved, while Kofar Kabuga was cleared in 2014 for road construction, and Kofar Duka Wiya has not been tampered with since the 15th century. Person 3 noticed that while many of the gates have been renovated, political interests have denied these places their architectural authenticity. Person 4 stressed the role of Gidan Makama Museum in preserving historic artifacts and hosting cultural plays.

Insights: The cultural heritage of Kano is still visible and well-represented; however, inconsistent conservation efforts and political interventions have denied it its historical authenticity.

Recurring Themes: Traditional architecture possesses a lot of representative significance and culturally yet is ill-preserving. Many conservation projects guided a political interest. Still Gidan Makama Museum occupies a front row for culture preserve.

Community participation: To analyze the level in which local communities are actually involved in management and care of heritage site and tourism therein. Ascertain whether the cultural and economic benefits are acquired by the locals.

Response by the Respondents:

Person 1 reported that community involvement stands at 100%, since all workers are from Kano. Person 2 reported 100% community involvement, with the Gidan Makama Museum contributing positively through events and small commercial activities. Person 3 said that community involvement is at its peak, with the community members playing a central role in the management of the site and in organizing events. Person 4 explained that there is full collaboration between the government and the community in managing the heritage sites.

These themes keep reiterating that, in the case of Kano, community involvement in heritage management has reached its pinnacle, with unanimous agreement among interviewees regarding indigenous people being fully engaged in the management and upkeep of these sites. This entrenched participation extends to representation in cultural issues and operational

activities, making the community one of the most resilient pillars in the management of heritage sites within the region.

Sustainability: To assess whether current conservation and management practices ensure the long-term preservation of heritage sites in Kano. To identify any sustainable tourism practices in place.

Interviewee Responses:

Person 1 said that sustainability is partial; the main efforts are in the gates and selected areas like the palace. Person 2 commented that nothing seems to be done visibly in terms of sustainability, only some limited efforts which are not enough. Person 3 mentioned that she did not know of any sustainable measures being taken. Person 4 commented that conservation is unsustainable, with the absence or low fees from visits undermining the long-term preservation process.

There are general indications of the lack of sustainability practices at the heritage sites of Kano, while the conservation efforts have also been intermittent and limited. Besides, financial sustainability, including entry fees, is also either lacking or minimal. The insights herein demonstrate that some challenges are linked to sustainability, given that no effective visible measures are laid down toward the future survivability and economic viability at these heritage sites.

Policy and Planning: The question is designed to ascertain how much the existence and effectiveness of government policies and plans in terms of heritage preservation and management.

Interviewee Responses:

Person 1 felt that very little policy influence or regulation is felt. Person 2 mentioned that no policies were seen and only recently the governor has promised to protect heritage sites. Person 3 felt that there are no policies guiding heritage management. Person 4 pointed out that although regulations exist, partial implementation is carried out.

These themes occur almost uniformly and indicate that whatever policies exist are poorly implemented or cannot be observed in practice. Some recent political rhetoric about heritage preservation promises possible actions for the future, but as yet it includes no action taken or any physical outcome. The second major theme and finding relates to the marked inadequacy regarding the formulation and implementation of efficient, enforceable policies, which could guide proper management and conservation of heritage sites within Kano.

Waste Management: To find out how practices are in place to manage wastes around heritage sites. To assess the hygiene and environmental conditions.

Response of Interviewees:

Poor practice of managing wastes was mentioned by Person 1. Person 2 also told us there is no management concerning waste. According to person 3, sanitations are done once a month throughout the city. Person 4 said a little waste management practice is followed, with low hygiene.

The recurring themes suggest that, while monthly sanitation activities are held in the metropolis, they do not target heritage sites; therefore, the general waste management around heritage sites is poor. Such findings have highlighted the insufficiency of current practices in managing waste and low levels of hygiene that are harmful to the general environment and visitor experience at Kano's heritage sites.

Economic Impact: To establish how heritage sites contribute to the local and regional economy. How revenue generation and employment opportunities are assessed.

Response from the Interviewees:

Person 1 noted that the economic impact is only felt at Kurmi Market. Person 2 mentioned that Gidan Makama Museum generates income through events it hosts. Person 3 highlighted major economic activities such as tannery exports, leather goods, rugs, and cultural outfits. Person 4 pointed out that, overall, the economic impact is low, except for Kurmi Market, which remains competitive.

Recurring themes indicate that Kurmi Market has been at the heart of economic activities associated with heritage sites in Kano. However, overall economic gains accruing from the heritage sites remain limited. These insights emphasize that while certain locations do much to enhance the local economy, the wider economic potential of Kano's heritage sites remains underutilized, with their capacity for sustainable economic growth correspondingly reduced.

Based on experiences gathered during the site visitations, the cultural and environmental significance of the sites in Kano, particularly the ancient city walls and its gate were mostly either in complete ruins, or have been abandoned or worst has been completely refurbished to a modern design. Better yet, Gidan Makama Museum, Emir's Palace, Kurmi Market, and dye pits, which are deeply tied to the preservation of the city's history and identity still are functioning well. These heritage sites serve as symbols of Kano's historical importance in trade, culture, and governance, reminding the local community of their rich past. Additionally, these sites contribute economically by creating jobs, furthering the significance of their preservation. The ancient city walls, built as a form of protection, and the Gidan Makama Museum, recognized as a UNESCO World Heritage site, continue to uphold Kano's legacy for future generations while fostering a connection to traditional leadership and craftsmanship.

The architectural element of these site is closely tied to traditional design principles (Hausa Traditional Architecture) and maintains a very strong architectural link to cultural heritage. The use of local material was evident enhancing the authenticity of the sites which further enhances the reflection of these cultural sites to the local tradition in Kano. The building sites blend so well with the natural environment thereby creating a sort of sequence even though it is important to note that all of the gates except one were completely renovated to modern structures thereby hindering the indigenous cultural narrative and introducing western ideologies.

On-site measures aimed at water and energy conservation were lacking. Very few sites have recycling and waste management systems the use of renewable energy and eco-friendly facilities were majorly lacking in the sites. The absence of sufficient signage, exhibitions, and guided tours suggests a gap in educating visitors about the importance of the site, both culturally and environmentally. This lack of informational facilities may hinder the overall experience and understanding of the heritage and environmental value, pointing to an area for improvement in eco-tourism development efforts. Resulting to the overall visitor experience as an average.

Synergy and Analysis of cases studied

The table below highlights the synergies between the selected case studies, offering valuable insights into how eco-tourism can be developed while respecting cultural heritage and ensuring environmental sustainability. Each case demonstrates effective strategies in balancing tourism, conservation efforts, and community involvement, providing key lessons for fostering responsible and sustainable tourism practices.

Table 0.1 Case Study Synergy

<i>Variables</i>	The BADALING GREAT WALL OF BEIJING	PETRA ARCHAEOLOGICAL PARK, JORDAN	THE HADRIAN’S WALL OF ENGLAND
<i>ACCESSIBILITY</i>	The Badaling Great Wall is easily accessible from Beijing, with high-speed trains, buses, and cable cars, hence, accessibility is not a problem in all respects for both locals and tourists alike.	Accessibility at the Petra Archaeological Park through regulated paths, the creation of a ticket system to control and limit visitors, will ensure protection for these very fragile structures.	Accessibility to Hadrian's Wall has been realized by the Hadrian's Wall Path National Trail, which, being one of the sustainable heritage access management projects, allows people to walk right through the full length of the Wall while relating its preservation with public access.

Table 0.2 continuing

<p><i>HERITAGE CONSERVATION</i></p>	<p>This part of the Great Wall in Badaling, which was constructed during the Ming Dynasty maintains its historical value, all the remnants of the ancient defence structure, and allows visitors to get a hint about China's past.</p>	<p>The historical and architectural importance of Petra, comprising the iconic Al-Khazneh and Ad Deir structures, represents a blend of Nabatean, Hellenistic, and Roman styles, thus making it an invaluable example of cultural heritage conservation.</p>	<p>Hadrian's Wall stands as a testament to Roman engineering and Britain's heritage, with its many iconic structures, including milecastles, observation towers, and forts like Housesteads Roman Fort, being the reason for its immense historical and cultural value.</p>
<p><i>COMMUNITY PARTICIPATION</i></p>	<p>Locals are involved in tourist service facilities, such as development related to modern tourist service facilities: museums, catering, shopping, and the provision for people with disability.</p>	<p>This place involves participation of local communities, that is, the Bedouins, by tour guiding and craft vending in order to gain economic benefits and personal satisfaction derived from being engaged in an area of personal interest, thereby bringing them closer to their ancestors.</p>	<p>The WallCAP project enables the involvement of the local community in the archaeological research and conservation of the site as volunteers, developing a sense of responsibility and belonging toward the heritage site.</p>
<p><i>POLICY AND PLANNING</i></p>	<p>The provision of modern facilities, including a Great Wall Museum, with accessibility features, speaks to good planning regarding heritage conservation and tourism management.</p>	<p>he policies of the PDTRA, involving state funding, foreign aid, park fees, and donations, have been well planned as evidenced by how Petra has been managed and protected to date, given tourism and conservation considerations.</p>	<p>The Hadrian's Wall Management Plan 2024-2029 provides comprehensive policies on the protection and management of the site, ensuring that its Outstanding Universal Value is conserved through research, conservation, and presentation.</p>
<p><i>SUSTAINABILITY</i></p>	<p>The well-maintained granite pathways and handrails ensure safety and minimize environmental impact, though steep steps and dirt paths may challenge some visitors.</p>	<p>he PDTRA has adopted sustainable tourism practices at Petra, including waste management, energy-efficient infrastructure, and controlled visitor access to reduce environmental impact and ensure long-term preservation.</p>	<p>There is a core focus on environmental conservation, with organizations like The Vindolanda Trust working to minimize environmental impact while maintaining the long-term sustainability of the Wall and its surroundings.</p>
<p><i>ECONOMIC IMPACT</i></p>	<p>Popularity at Badaling, representing 70% of the total number of visitors, heavily influences the local economy through various services and attractions linked to tourism, including transportation, food, and accommodation.</p>	<p>Tourism provides great benefits to the local communities due to the fact that economic flows from park fees were invested in conservation projects and infrastructural development, hence raising both the economy and the heritage.</p>	<p>Tourism and related projects, such as the Hadrian's Wall Path National Trail and the WallCAP project, provide a boost to the local economy through employment opportunities, income generation, and regional development by better visitor use and community involvement.</p>
<p><i>WASTE MANAGEMENT</i></p>	<p>Though not mentioned, well-kept facilities and safe pathways insinuate efforts towards managing the environmental impact and cleanliness around the heritage site.</p>	<p>The strategies on waste management instituted at Petra complement other environmental conservation measures, such as energy-efficient infrastructure, to reduce negative impacts associated with mass tourism and assure sustainability.</p>	<p>Waste management at Hadrian's Wall is integrated within the broader conservation of the property, focusing on sustainable practices that protect the archaeological integrity of the site while accommodating high visitor numbers.</p>

3.8 FINDINGS

The results indicate a dual perception of the accessibility of Kano's heritage sites. On-site observation and interviews with stakeholders revealed that while most heritage sites are

physically accessible to the public, there are loopholes as far as accessibility for individuals with impairments is concerned. Interestingly, Gidan Makama Museum provides a tour guide, yet other heritage sites like Dala Hill lack accessible facilities such as ramps and tour guides. There are means of transportation such as Keke Napep, but poor road infrastructure, particularly in the area surrounding Kurmi Market, undermines overall accessibility. Additionally, poor cellular coverage undermines the visitor experience.

Survey data also corroborates these findings, with respondents noting concern at the lack of accessibility features for people with disabilities, and citing enhanced infrastructure and transportation as necessary to ensure Kano's heritage areas are accessible for all visitors comfortably.

Cultural Heritage Conservation

Conservation of cultural heritage in Kano is another critical area to pursue. On-site observations indicate that the majority of the sites of cultural heritage, like the city walls and gates dating back to ancient times, are abandoned in various states of disrepair or have been gentrified to the point of losing their cultural and historical significance. While the Emir's Palace and Gidan Makama Museum retain their cultural significance, the majority of the gates have been renovated using new materials at the expense of losing their originality.

Interview answers reflected the same concerns, with stakeholders noting that most conservation projects are politically motivated, often at the expense of the sites' historical accuracy. There is, however, notable effort as seen in Gidan Makama Museum, where it is key to the preservation and exhibition of traditional artifacts.

Respondents in the survey also claimed a strong need for more authentic conservation work. Most of the respondents agreed that the ancient Hausa architecture should be preserved and that new renovations should be more sensitive to the cultural and historical context of the sites.

Community Participation

Local communities' involvement in heritage site management and conservation is yet another bedrock finding. Major stakeholders' interviews revealed that community participation in heritage management is high, with locals directly involved in the upkeep of sites like Gidan Makama Museum and Kurmi Market. Community members also actively host cultural events and educational activities at these sites.

Survey results show overwhelming support for increased community involvement in heritage management, with the majority of respondents pointing out that local communities need to have a larger share in decision-making. There is a general agreement that involving locals not

only guarantees improved management but also increases the connection between the heritage sites and the community.

Sustainable Practices

The long-term sustainability of conservation efforts is a growing concern. Observation at the sites indicated the lack of eco-friendly infrastructure, such as waste treatment systems, renewable energy provision, and measures for water conservation. Sustainability measures are used by very few sites, and there is a clear indication of the lack of initiatives for educating visitors on environmental sustainability.

Interviewees confirmed the above observations, with some of the stakeholders conceding that despite some attempts at conserving some sites, such attempts are not sufficient for sustainable conservation. Uniformity in sustainability practices is perceived as a major obstacle to the achievement of successful heritage conservation.

Survey respondents emphasized more efforts at sustainability, particularly waste management and the application of renewable energy within cultural heritage sites. There was a general consensus that more efforts at sustainability would not only ensure the sites are preserved for the future but would also enhance Kano's eco-tourism value.

Policy and Planning

The biggest issue encountered during the study was that the government planning and policies for heritage conservation did not exist or were poorly implemented. From the interview of the stakeholders, it was observed that there were either no policies or policies were poorly implemented. Despite recent political speeches regarding heritage preservation, no significant action has been taken to establish these commitments.

Survey results also corroborated the inadequacy of planning and policy, as a majority of the respondents decried the lack of proper guidelines and policies for the administration of heritage sites. The vast majority of respondents agreed that proper policy implementation is required to guarantee the long-term preservation of the heritage of Kano.

Waste Management

Waste disposal within the heritage sites in Kano is another issue that needs immediate attention. Observations during the site visit indicated that sanitation is not prioritized, with monthly citywide sanitation schemes not specifically addressing heritage sites. Inadequate waste disposal activities at some of the sites like Kurmi Market and the historical city walls undermine the tourists' experience.

Interviews revealed the lack of waste management systems, with the majority of sites being in an area of neglect as far as sanitation is concerned. The lack of recycling bins, segregation of wastes, and sanitary facilities is further aggravating the situation.

Surveys provoked concern over the environment at heritage sites, with respondents asking for improved waste management practices as well as for improved hygiene in these sites.

Economic Impact

While some of the heritage sites, such as Kurmi Market and Gidan Makama Museum, contribute to the local economy in terms of commerce, events, and activities, otherwise the economic potential of Kano's heritage sites is untapped. Findings on site and from interview responses were that the economic value is largely confined to certain sites, with little linkage of other heritage sites to the broader tourist economy.

Survey respondents expressed a desire to have more economic opportunities tied to heritage tourism, particularly in areas like handicrafts, cultural performances, and local food markets. Many respondents reported that a more concerted effort at heritage tourism would significantly contribute to the local economy by creating employment and catering to local businesses.

3.9 A CONTEXTUAL FRAMEWORK FOR ECO-TOURISM AND HERITAGE CONSERVATION IN KANO

Based on the literature review, this study establishes a framework of widely accepted criteria and indicators (C&Is) essential for sustainable ecotourism development. These indicators were adapted from studies in diverse global settings (Bhattacharya, 2004; Aziz, 2015; TIES, 2015). For the sake of formulating a context-specific eco-tourism strategy for Kano, these universal indicators were nevertheless subjected to critical scrutiny and adapted to suit the region's unique environmental, cultural, and socio-economic characteristics. The outcome strategy offers a tailored framework that includes heritage conservation principles and sustainable tourism practices that are appropriate for Kano's natural and built environment.

Table 0.3 Tailored Criteria and Indicators for Eco-Tourism and Heritage Conservation in Kano

Criteria	Indicators	Kano-Specific Application
Accessibility	Quality of roads and signage to heritage sites- Availability of public transport and pedestrian pathways- Physical access to monuments for diverse groups	Upgrade access routes to Kano City Wall and Kurmi Market; introduce inclusive design in heritage facilities (e.g., ramps, maps, multilingual signage)
Cultural Heritage Conservation	Preservation of traditional architecture and building methods- Promotion of festivals, crafts, language, and oral history- Protection of heritage zones	Reinforce indigenous Hausa styles in new eco-tourism structures; curate heritage exhibitions and storytelling sessions at city wall locations
Policy and Planning	Local policies supporting ecotourism and conservation- Integration of traditional institutions into planning- Cross-sectoral collaboration	Empower Emirate councils and local artisans through policy incentives; collaborate with tourism boards and town planners
Carrying Capacity	Monitoring visitor numbers at heritage sites- Site protection measures (e.g., erosion control, pathway restrictions)- Infrastructure to support sustainable visitation	Develop a visitor quota for high-traffic areas like Kurmi Market; implement digital monitoring systems; designate peak/off-peak visitation times
Participation and Awareness	Community-led tourism initiatives- workshops and training- educational programs for tourists and locals	Promote local homestays, crafts cooperatives, and eco-tour guides; engage youth and women in training programs for sustainable tourism
Economic Impact	Income generation for residents- microenterprises- Equitable benefit-sharing from tourism	Support small businesses near cultural sites; create heritage tourism marketplaces; ensure fair wages for local tour operators and artisans
Sustainability	Use of eco-friendly materials and renewable energy- Water and waste management practices- Long-term ecological and cultural monitoring	Encourage traditional construction with adobe and thatch; adopt solar-powered facilities; implement local waste recycling programs at tourist centers

Secondary literature and on-site field observations at Kano's principal heritage and urban areas, including the Kano City Wall, Kurmi Market, Gidan Makama Museum, and the gates like Kofar Nassarawa, Kofar Mata, and Sabuwar Kofa, guided the adaptation of global ecotourism indicators to the Kano context.

For example, under the Accessibility criterion, the interview conducted revealed significant limitations such as poorly degraded access roads, especially on the road to Dala Hill and Kofar Nassarawa, and a lack of directional signage or visitor-friendly navigational features. These

conditions highlighted the need for better roads, more signage, and inclusive design features to provide for a wider range of visitors, such as those with mobility problems (Field Interview notes, 2025).

The criterion of Conservation of Cultural Heritage draws heavily from visual and material records of traditional Hausa architectural designs from the field observation, particularly the mud-brick walls, ornate facades, and decorative motifs still visible in sections of the Emir's Palace and Gidan Makama. However, recent renovations, typically using cement blocks and iron sheets, threaten the authenticity of these buildings and demonstrate the absence of conservation guidelines for cultural aesthetics preservation (Field notes, 2025).

The need for Policy and Planning being one of the principal criteria was forced by interviews with Director HCB, unofficial guides, and individuals associated with traditional institutions. These unveiled the lack of integrated conservation policies, with heritage planning often done in a vacuum, with no collaboration between tourism, cultural, and urban development authorities like the KANUP. Input from the Emirate Council also indicated the tourism' disjointed governance (Field interview notes, 2025).

The inclusion of Carrying Capacity was directly guided by what was observed at Kurmi Market, where an excess of traders, visitors, and informal stalls led to crowding and limited visitor movement. The absence of official visitor routes and rubbish removal systems also threatened both the cultural atmosphere and physical integrity of the market, fostering doubts about long-term sustainability (Field notes, 2025).

Awareness and Participation criterion was formulated after encountering unemployed youths and informal tour guides loitering around Gidan Makama, Dala Hill, and the gates of the city who were interested in the history of the sites but lacked formal engagement and training that represented a missed opportunity for community-based tourism development (Field notes & Interview, 2025).

While developing the Economic Impact indicator, in consideration was the plight of small-scale traders, artisans, and local craftsmen who operate within the neighborhood of heritage sites and depend on tourist traffic for their survival. While they are making valuable cultural contributions, these stakeholders lack any access to structured platforms for marketing or tourism integration, which results in skewed profit distribution and low visibility (Field notes, 2025).

Lastly, the Sustainability criterion took center stage with notes of improper waste disposal, particularly around traffic-prone areas like Kurmi Market. Additionally, the diminished application of traditional materials in place of less sustainable, modern alternatives presents

environmental, not to mention cultural, jeopardy. Fieldwork stressed the need for environmentally aware construction legislation for the encouragement of a return to local, climate-sensitive materials (Field notes, 2025).

These first-hand observations allowed generic global indicators to be interpreted within a more nuanced, contextually aware framework that was attuned to the specificities of eco-tourism, heritage management, and sustainable development in Kano.

These indicators and criteria form the heart of a Kano-specific ecotourism model that blends general practices of sustainability with indigenous cultural principles. Compared to ecotourism generic models, such context-sensitive design points towards the emphasis of Kano's heritage-rich Hausa culture, institutional systems, and people-centered strengths. It is a working tool for enabling the formulation, implementation, and assessment of eco-tourism projects in a way that protects the city's intangible and tangible heritage as well as short-term and long-term socio-economic and environmental benefits.

CHAPTER 4: RECOMMENDATION AND CONCLUSION

4.1 CONCLUSION

This research began with a hypothesis that Kano, a city in Nigeria, is encountering enormity in attempting to reconcile sustainable tourism development and heritage preservation, as well as environmental conservation, with its very richly diversified cultural heritage and unique architectural history. Although the world at large acknowledges eco-tourism to be a viable substitute for traditional tourism, its full potential remains untapped by Kano. The research, therefore, sought to close the gap between the theory of eco-tourism and architectural designs that promote cultural identity, engage local communities, and support environmental sustainability.

To validate this hypothesis and develop implementable solutions, the study aimed to adopt an eco-tourism model that equates nature protection with protection of cultural heritage in Kano. With this goal in mind, six distinct objectives guided the research, ranging from evaluation of local culture practices in eco-tourism, identification of international best practice, verification of Western conservation ideologies, exploration of sustainable construction methods, and proposing a culture-oriented flexible model for implementation of eco-tourism in Kano.

The study utilized a mixed method, which comprised literature review, surveys, focused and in-depth interviews, case study analysis, and site observation. Such instruments were employed to gain a qualitative and quantitative understanding of the real status of tourism and the

conservation of heritage sites in Kano and to generate public awareness and professional reaction on the planning of eco-tourism.

Research outputs are a validation of the reality that the initial hypothesis is true. The city of Kano certainly faces the challenge of maintaining tourism development in harmony with preserving its rich architectural and cultural heritage. Nonetheless, the study also reveals that eco-tourism, if combined with contextually appropriate architectural design and participatory planning, has the potential to transform Kano's tourism development for the positive. Studies found that the primary limitation is not the absence of heritage value, but rather the misapplication of sustainable models and minimal local community participation in planning tourism.

Besides, the strength of Western conservation philosophies, as powerful as they are, have sometimes pushed aside community practices and led to a gap between preservation tactics and people's everyday lives. This study dictates that a successful eco-tourism example for Kano must be based on local conditions—drawing on cultural practices, ecologically friendly architecture, and participatory action by the people.

The research concludes that the potential contribution of eco-tourism to Kano is very positive, subject to significant conditions. They are:

- i. Adoption of eco-sensitive architectural design that is an expression of local heritage;
- ii. Empowerment of the community and ownership of eco-tourism activities;
- iii. Institutional support and government towards heritage-friendly policies of tourism.
- iv. Incorporation of the best international practices tailored to the country's cultural and environmental settings.

The research concludes that a unique approach to eco-tourism in Kano must be grounded in a context-sensitive framework that aligns global sustainability indicators with localized cultural, environmental, and socio-economic realities. By proposing a tailored set of criteria and indicators, this study contributes a replicable yet flexible model that can guide future eco-tourism planning and heritage conservation in Kano and similar historic urban centres.

By providing the above concrete framework and realistic architectural solutions, this research adds value to current literature on sustainable tourism and heritage conservation in Nigeria. The experience gained underscores the necessity of an intentional, place-based approach to tourism growth, where growth is in harmony, traditions are respected, and nature is preserved for generations to come.

4.2 RECOMMENDATION

Improve Heritage Site Accessibility and Inclusivity

Despite the ease of physical accessibility to heritage sites overall, inclusivity is an issue. Most sites are not accessible for people with impairments, i.e., ramps, handrails, and clear pathways. Guided tours are available in only a few of them, e.g., the Gidan Makama Museum. Implement inclusive design by installing accessibility features, enhancing paths, and training site staff on how to handle different visitor needs. Improve road links and signage to places like Dala Hill and Kurmi Market, and enhance low-cost public transport modes, such as Keke Napep, to serve heritage tourism better.

Improve Cultural Heritage Preservation and Presentation

Site visits reveal that while some structures like the Emir's Palace and Gidan Makama Museum are preserved through cultural harmony, many city gates have been completely modernized and hence destroyed the original indigenous building histories. Encourage true restoration, sensitive to traditional Hausa building typologies, utilizing native materials and practice. Develop a heritage-sensitive code for development such that no further renovation activities include Westernized designs, which degrade native identity.

Increase Community Participation

Interviews right across the board referred to 100% participation of the people, with native populations managing and staging events within venues like Gidan Makama and Kurmi Market. Institutionalize this community interaction into formal co-management and heritage models. Invest in training, financing, and recognizing local custodians and artisans.

Sustainable Eco-Tourism Practices

Site tours demonstrated a significant absence of water and energy conservation gadgets, waste recycling, and eco-friendly facilities. The sustainability gap jeopardizes long-term conservation and tourist enjoyment. Install solar lighting, rainwater harvesting facilities, and waste segregation bins at strategic points. Conduct monthly heritage site sanitation drives with the community and local government. Establish eco-tourism education programs through signage, exhibitions, and guided tours to increase visitor knowledge and appreciation.

Policy and Planning

Both interview and observation indicate a dearth of policy influence over heritage management or poor policy influence, with no well-enforced preservation policies. Implement and adopt an inclusive heritage preservation policy for Kano State. Establish preservation standards, identify protected areas, and allocate funds to preserve them. Regular mandatory

auditing and public disclosure should be instituted to ensure transparency and efficiency. Enhance Visitor Experience and Interpretation. Current site conditions reveal a paucity of interpretive signs, cultural exhibits, and guided tours, creating a disappointing visit experience. Establish interactive visitor centres at key heritage sites featuring exhibits, digital storytelling, and culturally themed guided tours. Collaborate with local artists and historians to create interpretive installations to capture the story of each site.

Optimize Economic Contribution of Heritage Sites

Though Kurmi Market and Gidan Makama Museum are examples of economic prosperity through events and commerce, the other sites contribute little to local coffers. Encourage micro-enterprises (performances, food, crafts) around heritage sites through tax breaks, training, and market outlets. Create heritage tourism circuits connecting active and dormant sites to distribute tourism dividends throughout the region.

Establish Ongoing Monitoring and Evaluation Systems

Lack of systematic evaluation means escalating problems are not detected until it is too late. Set up a Kano Heritage Monitoring Unit with regular site visits, community feedback collection, and reporting on sustainability. Utilize digital platforms and participatory data collection, and transparency methods.

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APPENDIX A

Structured questionnaire and Survey links

<https://bit.ly/42b4Cd5>

<https://bit.ly/4lquVmT>

<https://bit.ly/3Rd8kMU>

