Revitalization of Heritage Precincts in a town

Case application :

Krishna Bandh to Lal Bandh area. Bishnupur. WB

An Urban Design Thesis Report

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June 2024

ACKOWLEDGEMENT

I Malabi Makur, a student of M.Arch (Urban Design) , Department of Architectute, Jadavpur University, Kolkata would profusely like to thank Dr, Tapas Kumar Bhattacharjya, Head of Department, Faculty of Architecture, Jadavpur University, who gave me the opportunity to undertake **Revitalization of Heritage Precincts in a town** as my Master's thesis topic.

The still small voice of gratitude pays utmost respect to my guide Prof, Sanghamitra Sarkar, for her valuable insights and constant support during the entire course of my thesis project. Her perceptual guidance and constructive criticism have been of immense help during each stage of development.

I would humbly like to extend my heartfelt thanks to our thesis co-ordinator Dr. Tapas Kumar Bhattacharjya for his diligent efforts for successfully conducting our thesis.

I would like to take the opportunity to thank Mr.Naresh Chandra Modok, Mr Goutam Karmakar, Mr Sumit Bhowmik of Bishnupur for their help and co-operation. My sincere gratitude to my friends Prof, Sumana Gupta of IIT Kharagpur and Prof, Sujoy Sengupta of CCA Chandigarh for their co-operation and advise. A special mention for my juniors Rupaz Bhadra and Eshita Bhaumik for their tremendous support during my thesis.

Lastly during my entire course of work , there were many many people who helped me directly or indirectly , I would like to thank them all. I have thoroughly enjoyed the entire course of my project and leant a lot from it. The entire experience which I acquired during those months, will always be cherished in my memory.

Thank you,

Malabi Makur

ABSTRACT

Thesis title:-

Revitalization of Heritage Precincts in a town.

Case application : Krishna Bandh to Lal Bandh area.
Bishnupur. WB

Historic Indian cities have unique built and cultural heritage which has always attracted millions of tourists and has also been one of the prime sources of economic activities. But the condition of heritage precincts over the years has been degrading consistently. Not only are the conditions of heritage precincts deteriorating but the quality of living environment and infrastructures in those areas have been degrading. The unplanned expansion of Indian cities in the face of fast urbanisation has resulted in chaotic construction to accommodate the growing population with little concern for the significance of historic areas and heritage assets for the city's character formation and evolution. Today, cities & towns have a major challenge of building sustainable development practices that integrates their cultural heritage and future aspirations. It is imperative to link cultural heritage, city development planning and local economy development together for inclusive development. Bishnupur, located at the eastern part of India is an quaint town in West Bengal rich with an extensive variety of art, architecture & Culture. But due to lack of proper planning & management efforts , it not has been able to reach the heights of glory it is entitled to. Also uncontrolled growth and lack of awareness has resulted in utter neglect and degradation of the historic precincts. This dissertation aims to put forth the treasure trove of heritage that it holds to the people worldwide. Based on findings and observations strategies and proposals will be drawn up that could salvage local economy through revitalization of the historic quarters of the town

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INTRODUCTION

BACKGROUND

Historic Indian cities have unique built and cultural heritage which has always attracted millions of tourists and has also been one of the prime sources of economic activities. But the condition of heritage precincts over the years has been degrading consistently. Not only are the conditions of heritage precincts deteriorating but the quality of living environment and infrastructures in those areas have been degrading. Today, cities & towns have a major challenge of building sustainable development practices. It is imperative to link cultural heritage, city development planning and local economy development together for inclusive development. Bishnupur, located at the eastern part of India is an quaint town in West Bengal rich with an extensive variety of art, architecture & Culture. But due to lack of proper planning & management efforts , it not has been able to reach the heights of glory it is entitled to. Also uncontrolled growth and lack of awareness has resulted in utter neglect and degradation of the historic precincts. This dissertation aims to put forth the treasure trove of heritage that it holds to the people worldwide. Based on findings and observations strategies and proposals will be drawn up that could salvage local economy through revitalization of the historic quarters of the town.

REVITALIZATION…

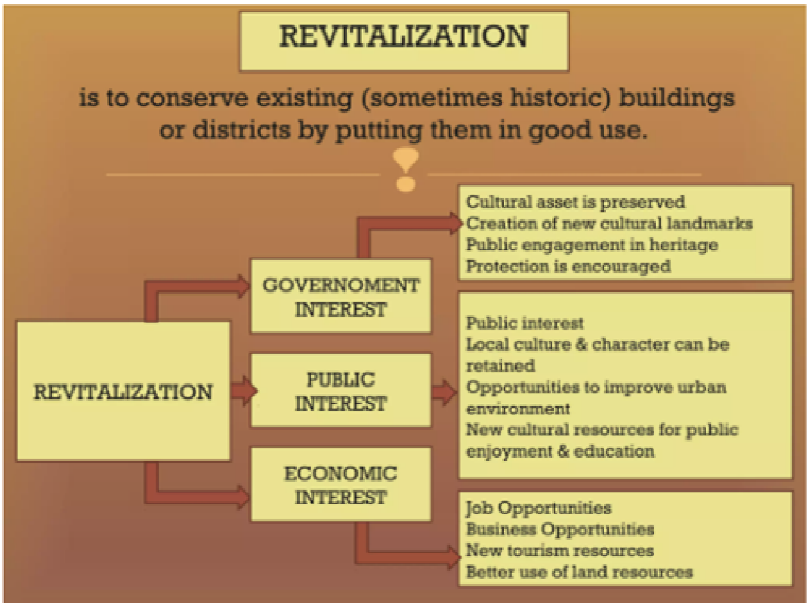
Cultural heritage presently holds an enormous potential for the development of not only large cities, but above all, small towns and town lets. The value of cultural heritage is used as a development factor, which, owing to conservation activities, is to serve both the city and the society.

Revitalisation and adaptation, along with protection and conservation of heritage objects, have recently become the most popular conservation activities throughout the world.

Revitalisation works are performed on a large scale with a view to improving the quality of life of the inhabitants of the revitalized area, raising both the city's standards and its aesthetic appearance, and consequently encouraging people to live in it as well as attracting tourists.

REVITALIZATION			
Physical	Mode of Renewal	Refurbishment	
		Conversion	Rehabilitation
		Demolition and Development	
Economic	Strategic Approach	Functional Restructuring	
		Functional Diversification	
		Functional Regeneration	

Revitalization through graphic



HERITAGE…

Heritage means features belonging to the culture of a particular society , such as

1. Traditions, languages, or buildings, that were created in the past and still have historical importance.
2. a person's racial, ethnic, religious, or cultural background
3. Relating to buildings, places, works of art, etc. that are considered to have historical importance for a particular area or for all people
4. (of fruit, plants, seeds, or animals) of a traditional or old-fashioned type that was popular in the past

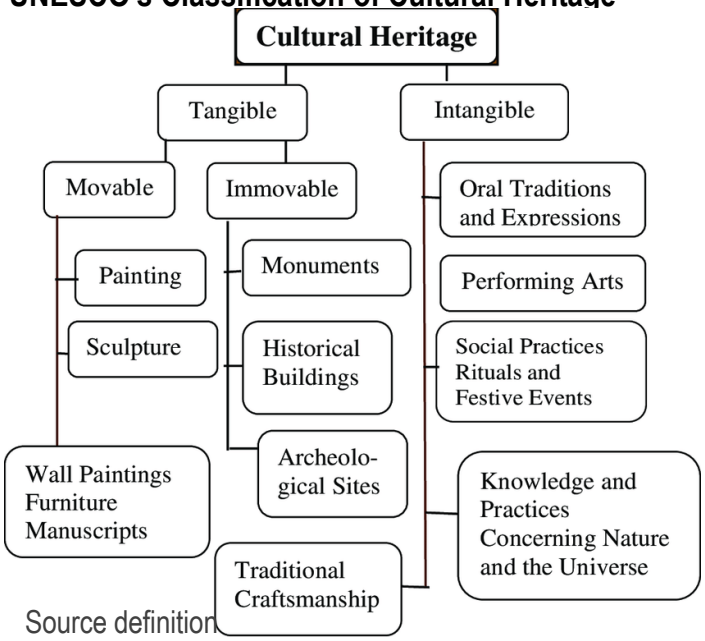
The concept of Cultural Heritage

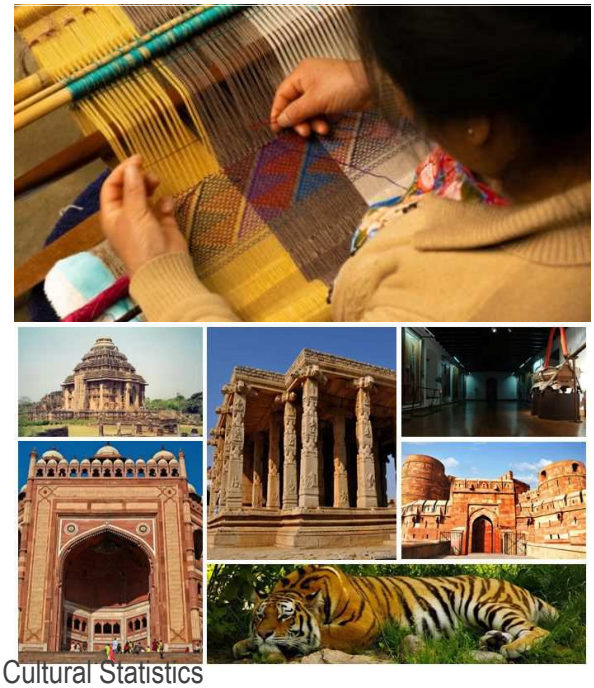
Cultural heritage can be defined as the legacy of physical artifacts (cultural property) and intangible attributes of a group or society inherited from the past. Cultural Heritage is a concept which offers a bridge between the past and the future with the application of particular approaches in the present. Due to its attached values for these groups or societies, cultural heritage is maintained in the present and bestowed for the benefit of future generations.

Cultural heritage

Cultural heritage includes artefacts, monuments, a group of buildings and sites, museums that have a diversity of values including symbolic, historic, artistic, aesthetic, ethnological or anthropological, scientific and social significance. It includes tangible heritage (movable, immobile and underwater), intangible cultural heritage (ICH) embedded into cultural, and natural heritage artefacts, sites or monuments.

UNESCO's Classification of Cultural Heritage





Source definition:
UNESCO Institute for Statistics, 2009 UNESCO Framework for Cultural Statistics

HERITAGE PRECINCT

Heritage Precinct means an area comprising heritage building or buildings and precincts thereof or related places. Heritage Precinct may also be defined as the neighbourhood or environs of a place or a group of buildings that share wholly or partly certain common physical, social, cultural significance worth preservation and conservation. Ambience can be defined as the quantitative, qualitative aspects attached to heritage building necessary for its appreciation of the space and viewing corridors.

A heritage precinct may consist of a number of buildings and spaces, such as streets, with cultural or heritage significance worth recognition and conservation, or it may be an area where the relationship between various elements creates a special sense of place like mass, scale, building material, typology, roof profile and shapes or containing architectural style or elements. Precincts are of different importance and are made up of different types of elements such as houses, trees, commercial properties and public spaces combining to create a unique significance.

Precincts deserve appropriate repair and maintenance and very sensitive development i.e. regarding the mass, scale and setting. It also requires conservation of its heritage and cultural significance but development of these areas should not alter the character of the building/ precinct.

Urban Design Guidelines should be prepared separately for each of the listed heritage precincts as extension of the bye laws. All constructions within heritage precincts should be governed by the

Puducherry

Cromwell Heritage Precinct, New Zealand

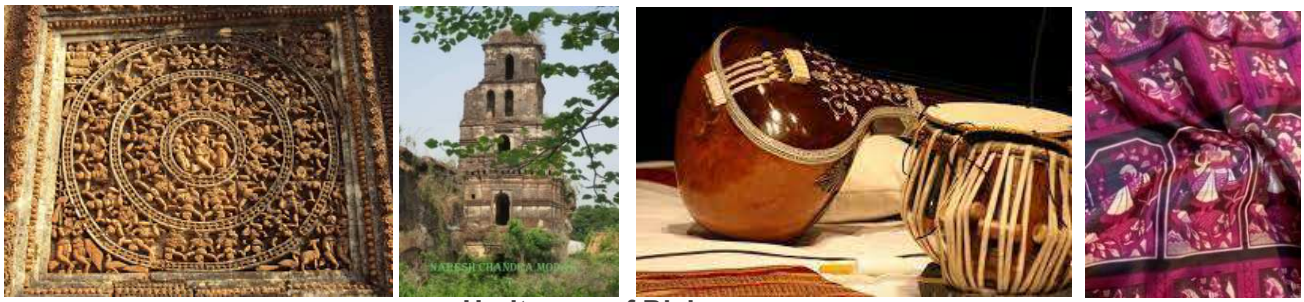
New addition to Heritage precinct: Intentional Juxtaposition Approach

BISHNUPUR.

Bishnupur is a town in the Bankura District of West Bengal and located at about 132 km from Kolkata. It is famous for its terracotta temples and Baluchari sarees. The town has a glorious past that is reflected in its rich architecture, music and handicrafts such as pottery and weaving. It prospered in the 17th and early 18th centuries. Ruled by a line of Hindu Rajas of the Malla dynasty, Bishnupur developed a unique form of architecture and has perhaps the most brilliant and detailed terracotta work in Eastern India that has withstood the ravages of time. The Terracotta tiles depict stories from Ramayana and Mahabharata. The Temples like the Shyam Ray Temple, the twin shrines of Jorbangla and the Rasmancha are a must visit. Apart from its heritage, Bishnupur is also known for its traditional handloom sarees. Pottery, artifacts and even jewellery made of terracotta in Bishnupur are also very popular. Bishnupur is also famous for the School of Hindustani Music which flourished under royal patronage along with the Bishnupur School of Painting. This style of music is still being kept alive in local academies of music. The history of Bishnupur can be traced back to 694 AD, when King Raghunath founded the Malla dynasty. However, it was much later in 994 AD that the place was named Bishnupur. The name is derived from the name of the Hindu God Vishnu. The most powerful king of the dynasty was King Raghunath Singh Dev II, who ruled from 1626 AD. At that time the administration of Bengal was in the hands of Shah Jahan and his son Shuja. He developed a close friendship with the king and there followed a period of peace when art and music already flourishing, reached great heights. It was during this period that the Jorbangla Temple was erected.

Location of Bishnupur

Bishnupur Location in West Bengal, India Show map of West BengalShow map of IndiaShow all	
Coordinates: 23.075°N 87.317°E	
Founded by	Raja Veer Hambir
Government	
• Type	Municipality
• Body	Bishnupur Municipality
Area[1]	
• Total	22 km^2 (8 sq mi)
Elevation	70 m (230 ft)
Population (2011)[1]	
• Total	75,000
• Density	3,400/km^2 (8,800/sq mi)
Languages	
• Official	Bengali, English
Time zone	UTC+5:30 (IST)
PIN	722122
Lok Sabha constituency	Bishnupur
Vidhan Sabha constituency	Bishnupur



Heritages of Bishnupur

JUSTIFICATION OF TOPIC…

Heritage, tangible as well as intangible, has a positive influence on many aspects of the way a community develops

- An attractive heritage benefits in attracting external investment as well as maintaining existing businesses and not just tourism.
- Adaptive reuse of heritage buildings is an important factor in creating sustainable communities.
- A greater social inclusiveness can be achieved through heritage protection.

Heritage places are an excellent educational resource for people of all ages.

- Heritage properties also harbour options for society to mitigate and adapt to climate change through ecosystem benefits, such as water and climate regulation as well as carbon that is stored in world forest sites

KEY REASONS

- **To control the Unplanned Urbanisation destroying heritage..**

Urbanization is a common and inevitable occurrence everywhere. But an unplanned one is potential for loss of historical areas that are the heritage value to people. The identification, conservation, and management of historic areas should be to plan properly to focus on physical characteristics as well as sociocultural and economic values.

- **To enhance the tourism Industry of the region…**

Tourism is now considered as an industry of worldwide significance. Tourism acts as the second largest foreign exchange earner after oil and petroleum. Old cities are always a matter of interest for the visitors. Rich architectural and cultural diversity, coupled with the wealth of natural elements, make these cities world's interesting tourist destinations.

- **To Include Cultural & Natural heritage into integrated tourist management**

The cultural & natural heritage resources have not been taken into account.

The artisan communities have not been made a part of the tourism,. Their socio cultural & economic development need a lot to be looked into.

AIM :

Creating an inclusive Urban development integrating tangible and intangible resources of the land using tourism as a tool for urban development.

OBJECTIVES :

To identify/acces tangible & intangible heritages resources of the region.

To promote character in townscape and landscape by responding to and reinforcing locally distinctive patterns of development, landscape and culture.

To conserve & retro-fit old heritage structures to revive the identity of the area.

To allocate proper spaces for the traditional activities for public interaction.

To promote sustainable practices for tourism development.

To improve the city's image as a centre of culture.

To improve the income generation of the city.

Finally to prepare a Urban design proposal of Bishnupur integrating the parameters of urban design & development activities to promote sustainable tourism of the area.

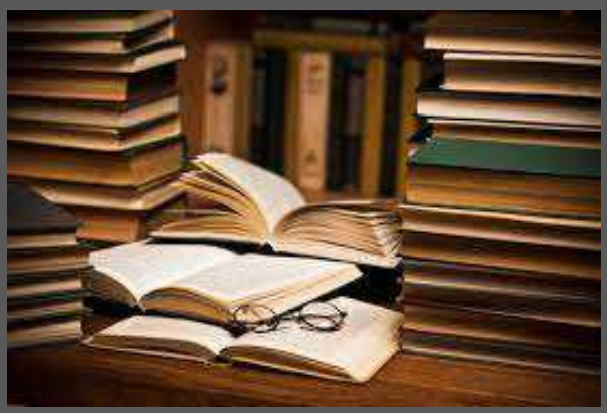
SCOPE OF WORK

Scope..

- The study area will not only take care of core area of Bishnupur town but also the hinterland significant for the built, natural & cultural heritage.
- Creation of easy but controlled accessibility to the heritage zones .
- Creation of a comprehensive urban design proposal for the area.
- Creation of public spaces within heritage zones in a sustainable manner.
- Creation of spaces for the traditional activities for public interaction.
- Improvement of income generation of the area.

Limitations..

- The study will primarily based on available information regarding heritage resources , which will be supplemented by primary data collection and personal observations.
- The study will not include detailed restoration/conservation measures for individual heritage structures.



02

LITERATURE STUDY

HERITAGE

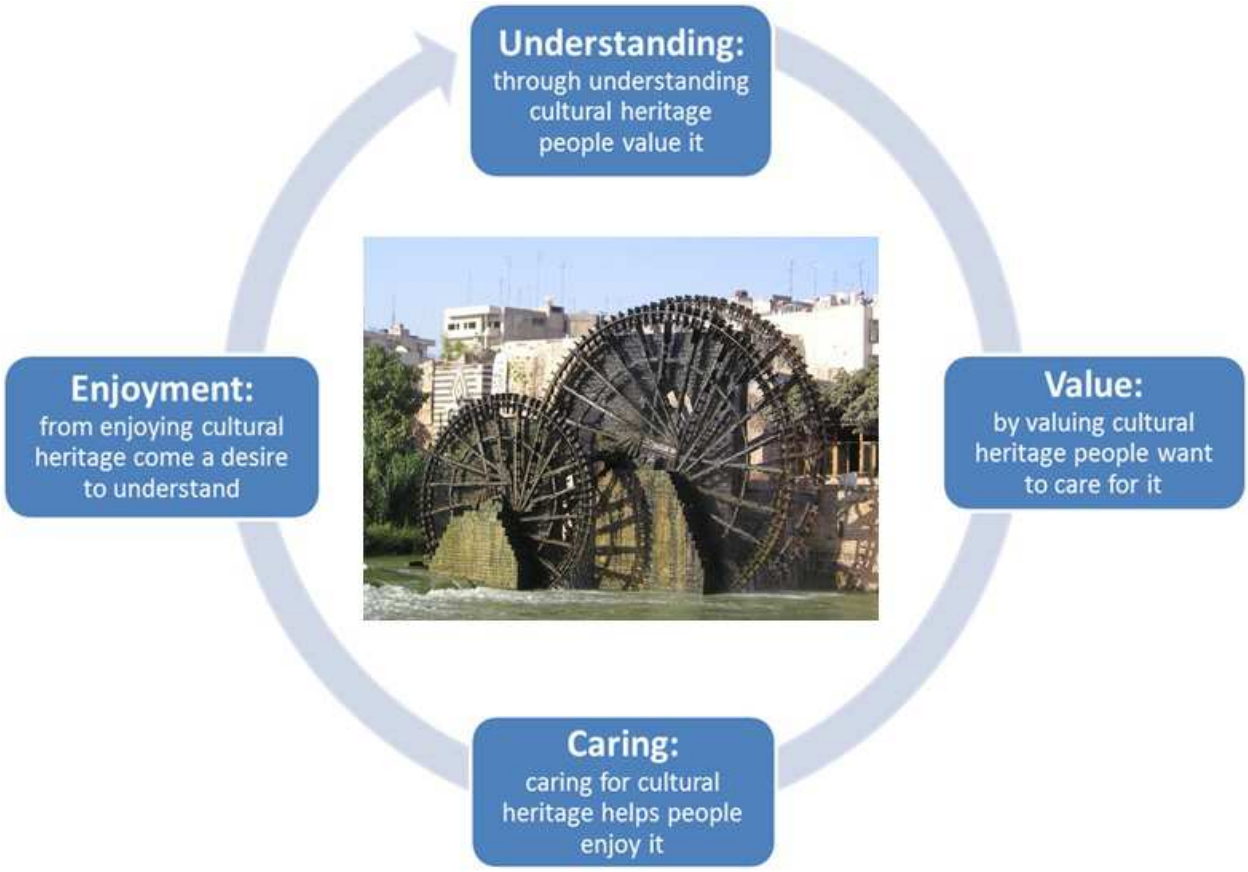
Cultural Heritage is an expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions and values. Cultural Heritage is often expressed as either Intangible or Tangible Cultural Heritage (ICOMOS, 2002).
As part of human activity Cultural Heritage produces tangible representations of the value systems, beliefs, traditions and lifestyles. As an essential part of culture as a whole, Cultural Heritage, contains these visible and tangible traces form antiquity to the recent past.

Tangible & Intangible Heritage

Having at one time referred exclusively to the monumental remains of cultures, cultural heritage as a concept has gradually come to include new categories. Today, we find that heritage is not only manifested through tangible forms such as artefacts, buildings or landscapes but also through intangible forms. Intangible heritage includes voices, values, traditions, oral history. Popularly this is perceived through cuisine, clothing, forms of shelter, traditional skills and technologies, religious ceremonies, performing arts, storytelling. Today, we consider tangible heritage to be inextricably bound up with intangible heritage. In conservation projects we aim to preserve both

Heritage Cycle

The Heritage Cycle diagram gives us an idea how we can make the past part of our future



ARCHITECHTURAL HERITAGE

Architectural heritage refers to the physical structures, buildings, and other structures that have historical and cultural significance and have been passed down from previous generations. It encompasses architectural styles, building techniques, and materials used in construction, as well as cultural and social values that are embodied in the structures

The expression of **"architectural heritage"** shall be considered to comprise the following permanent properties:
Monuments: They are referred to all the buildings and structures of conspicuous historical, archaeological, artistic, scientific, social, or technical interest including their fixtures and fittings;
Groups of buildings: The homogeneous groups of urban or rural buildings conspicuous for their historical, archaeological, artistic, scientific, social, or technical interest, which are sufficiently coherent to form the topographically definable units;
Sites: They are referred to the combined works of man and nature, the areas, which are partially built upon and sufficiently distinctive and homogeneous to be topographically definable and are of conspicuous historical, archaeological, artistic, scientific, social, or technical interest .

Source :https://heritagesciencejournal.springeropen.com/articles/10.1186/s40494-020-00416-w

Challenges to preserving architectural heritage: Urbanization, neglect, war

The preservation of architectural heritage faces numerous challenges in today's rapidly urbanizing world. As cities expand to accommodate growing populations, historic buildings often find themselves at risk of demolition or insensitive remodeling. The need for space and modern comforts often takes precedence over the preservation of cultural and historical landmarks. Additionally, neglect poses a major threat to architectural heritage. Many old structures are left abandoned, without proper maintenance, gradually falling into disrepair and ultimately facing irreversible damage or destruction.

Addressing these challenges requires a collective effort from governments, communities, and individuals. Stricter regulations on urban development should safeguard historic buildings while promoting sustainable growth. Increased awareness about the value of architectural heritage needs to be fostered so that neglect becomes unacceptable rather than overlooked. And during times of conflict, international bodies like UNESCO must play an active role in protecting historical sites by raising awareness and advocating for their preservation amidst the chaos of war

NATURAL HERITAGE

Natural heritage refers to the sum total of the elements of biodiversity, including flora and fauna, ecosystems and geological structures. It forms part of our natural resources.
Natural heritage refers to natural features, geological and physiographical formations and delineated areas that constitute the habitat of threatened species of animals and plants and natural sites of value from the point of view of science, conservation or natural beauty.
Heritage is that which is *inherited* from past generations, maintained in the present, and bestowed to future generations.[1] The term "natural heritage", derived from "natural inheritance", pre-dates the term "biodiversity". It is a less scientific term and more easily comprehended in some ways by the wider audience interested in conservation

Threats to natural heritage
The biggest threats to our natural heritage are climate change, invasive species, and the negative impacts of tourism.
Other factors threatening the safety of natural heritage and its biodiversity are man-made constructions, exploitation of earth's resources such as oil and gas, and mining. And another big problem is plastic pollution, especially harmful to marine biodiversity

CONCEPT OF WORLD HERITAGE SITE

A **World Heritage Site** is a landmark or area with legal protection by an international convention administered by the United Nations Educational, Scientific and Cultural Organization **(UNESCO)**.

CONCEPT OF WORLD HERITAGE SITE AS PER UNESCO

World Heritage

Heritage is our legacy from the past, what we live with today, and what we pass on to future generations. Our cultural and natural heritage are both irreplaceable sources of life and inspiration.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity. This is embodied in an international treaty called the Convention concerning the Protection of the World Cultural and Natural Heritage, adopted by UNESCO in 1972.

What makes the concept of World Heritage exceptional is its universal application. World Heritage sites belong to all the peoples of the world, irrespective of the territory on which they are located

SELECTION CRITERIA

(i) to represent a masterpiece of human creative genius;

(ii) to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

(iii) to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or has disappeared;

(iv) to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

(v) to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture, or human interaction with the environment when it has become vulnerable under the impact of irreversible change;

(vi) to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance.

(vii) to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;

(viii) to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;

(ix) to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;

(x) to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation

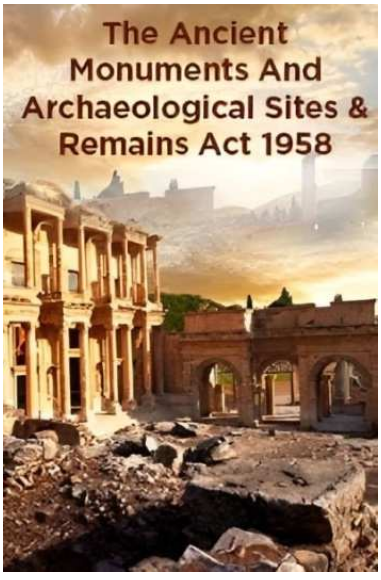
NATIONAL HERITAGE GUIDELINES.

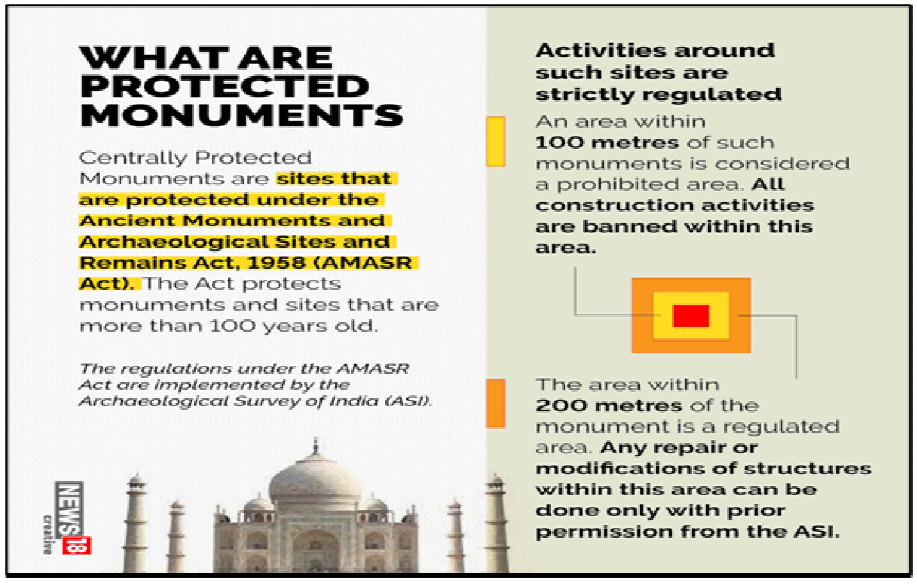
AMASR ACT-

The Ancient Monuments and Archaeological Sites and Remains Act (or AMASR Act) is an act of the Parliament of India that provides for the preservation of ancient and historical monuments and archaeological sites and remains of national importance, for the regulation of archaeological excavations and for the protection

The AMASR Act provides for preservation of ancient and historical monuments and archaeological sites and remains of national importance.
It provides for the regulation of archaeological excavations and for protection of sculptures, carvings and other like objects.
The Archaeological Survey of India functions under the provisions of this act.
The Act prohibits construction in 'prohibited area', an area of 100 meters around protected monument.
It does not permit construction in such prohibited areas even if it is for public purposes, except under certain conditions.
The central government can extend the prohibited area beyond 100 meters.
The iconic monuments in India, Taj Mahal, Ajanta Caves, The Great Stupa at Sanchi and the Sun Temple of Konark, among others are designated as "ancient monuments of national importance" and protected under the AMASR Act.
The **Archaeological Survey of India is the custodian of these monuments**.
National Monument Authority will make a recommendation, for construction of public works to the central government, only if it is satisfied that there is no reasonable possibility of moving the construction outside the prohibited area.

National Monuments Authority. Ministry of Culture. Govt of India → **Ancient Monuments & Archaeological Sites and Remains Act, 1958** → **Archaeological Survey of India. (Executing agency, Govt of India)**





A.S.I Guideline..

PRESERVATION OF HERITAGE SITES

Heritage, tangible as well as intangible, has a positive influence on many aspects of the way a community develops. Preservation, conservation and protection is highly valuable because:

- An attractive heritage benefits in attracting external investment as well as maintaining existing businesses and not just tourism.
- Adaptive reuse of heritage buildings is an important factor in creating sustainable communities.
- A greater social inclusiveness can be achieved through heritage protection.

Heritage places are an excellent educational resource for people of all ages.

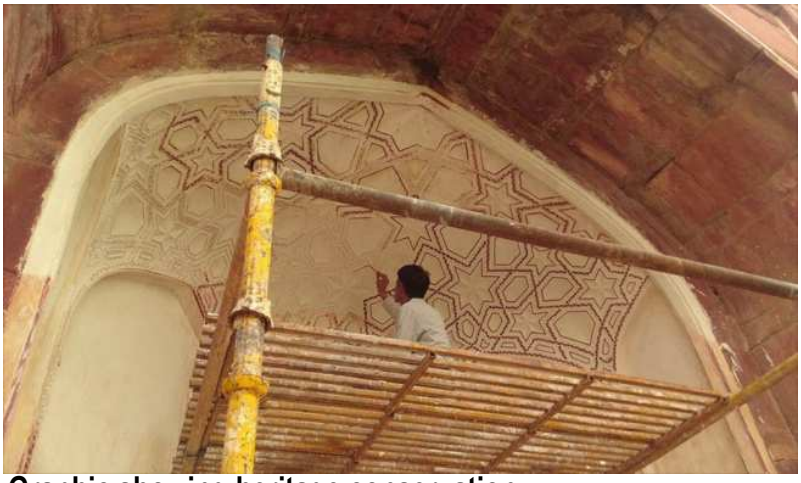
- World Heritage properties also harbour options for society to mitigate and adapt to climate change through ecosystem benefits, such as water and climate regulation as well as carbon that is stored in world forest sites

CHALLENGES FOR MANAGEMENT OF HERITAGE SITES

A few cities from India such as Ahmedabad, Jaipur, Gwalior and Orchha are listed as UNESCO's World Heritage Cities. Every city is promoted by the local governments by identifying its unique heritage in terms of architecture observed in palaces, forts, temples, individual houses or neighbourhoods. Due to the recognition by UNESCO, these cities get a chance of publicity and attracting tourists and may also gain some financial assistance from UNESCO for conservation of the sites.

However, India has immense wealth of heritage sites which also require attention and preservation. Only select sites, depending upon its significance, get more attention for conservation.

It is challenging to manage and protect the vast rich cultural heritage of India especially due to lack of proper funds. Moreover, apathy on the part of common public, government and other stakeholders results in complete neglect of sites of historical and cultural significance. Lack of latest technology and methods for conservation can also be a challenge in the current ever-increasing pollution and climate change



Graphic showing heritage conservation

EFFECTS OF URBANIZATION ON HERITAGE PRECINCT

- Urbanization is a common and inevitable occurrence everywhere. While growth and expansion are beneficial for many people and businesses, there is a potential for loss of historical areas that are the heritage value to people.
- Development, growth, and urbanization are inevitable to provide jobs for a burgeoning population, but new guidelines for planning, development, and implementation need to be created that include factors like cultural and architectural heritage.
- Excessive population growth, economic development and lack of institutional or legal frameworks in several cases set the stage for the destruction of the historic urban fabric. Development of towns and cities is not certainly destructive, but haphazard growth, the ungovernable intrusion of modernization, poor planning and inadequate awareness of heritage values combine to produce a host of problems that threaten the tangible and intangable heritage.
- In developing countries like India, urbanization is taking place at an unprecedented rate .Urbanization threatens many heritage towns possessed of unique aesthetic, architectural, cultural and historical significance.

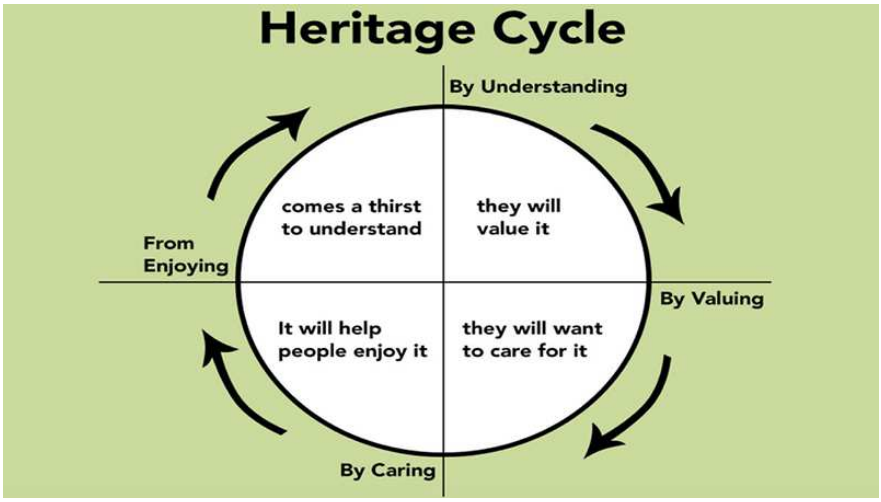
UNESCO's recommendations on planning for the Historic Urban Landscape emphasize that the urban heritage is a social, cultural, and economic asset (UNESCO, 2011). The identification, conservation, and management of historic areas should be included in a broad approach in urban planning that focuses on physical characteristics as well as sociocultural and economic values. While most rapid urbanization in the Asian context results in a decline in the built heritage of the historic environment (Zhang and Wa 2015), the conservation of heritage sites is alive and well in some tourism and associated commercial markets (Amin, 2018). Most of the Asian countries confront the pressure of urbanization to protect the identity and continuity of their rich heritage.

Graphic showing unplanned urbanization in heritage precinct

INTEGRATING HERITAGE & DEVELOPMENT

As more than 55% of humanity lives in cities, and more than 60% will live in them by the year 2021, cities and settlements have grown rapidly and exponentially, often inadequately planned, over the last few decades and will very likely continue to do so. At the same time, many cities and settlements have evolved over centuries and are rich repositories of history, heritage and identity. Their diversity of forms reflects the historical encounters, environments and influences that each city or settlement has lived.

The UNESCO World Heritage Centre is the Secretariat of the 1972 Convention concerning the Protection of the World Cultural and Natural Heritage governed by the intergovernmental World Heritage Committee. The World Heritage Cities Programme is one of the six thematic programmes approved and monitored by the World Heritage Committee since 2001. Today, 313 cities, inscribed on the World Heritage List are part of the World Heritage Cities Programme. These properties are inscribed for their Outstanding Universal Value (OUV) that makes the heritage valuable not only to that country or city but to all of humanity, and hence must be protected as a joint effort. With this in view, the properties must ensure the conditions of authenticity and integrity (Fukuoka Outcomes), while at the same time taking into account the local attributes of urban heritage identity.



Graphic showing heritage cycle

Source: https://www.superiormonument.com/2018/11/more-than-a-marker/

The 2011 UNESCO Recommendation on the Historic Urban Landscape (HUL Recommendation) was adopted by the UNESCO's General Conference on 10 November 2011. The key findings of the Second Member State Survey on the Implementation of the 2011 Historic Urban Landscape Recommendation (HUL Recommendation) had been that it needed to be implemented as an urgent and necessary tool for resolving the conflicting 1 CULTURE demands of heritage conservation and urban development towards more sustainable cities. This was necessary both for those cities that have properties inscribed on the World Heritage List as well as those that do not. With increasing threats from poorly planned urban development, World Heritage Committee decisions have identified the need to better address urban pressures for development in and around World Heritage as well as emphasized the crucial importance of implementing the HUL Recommendation for World Heritage cities.

The World Heritage Committee has also noted in recent years that increasing pressures in and around numerous World Heritage properties pose major threats to their value, and cited the need for application of more effective and durable conservation and management of urban heritage inscribed on the World Heritage List. The Committee called upon State Parties to integrate the role of culture in sustainable urban development, in order to achieve vital goals for heritage and the environment (notably, SDG 11 / Target 4).

URBAN REVITALIZATION

Process by which a part of the city in social, urban or economic crisis undergoes a transformation, more or less deep, in order to reverse the declining trend.

Place de la Republique

As the largest and one of the most important squares in Paris, the Place de la Republique attracts thousands of visitors every day. Before it became a social hub in the city in 2013, it was more of a traffic hub, surrounded by cars and streets taking up more than two-thirds of the area.
The agency TVK consisting of Pierre Alain Trévelo and Antoine Viger-Kohler redesigned the whole square and 'gave it back to the Parisienne'. After a 2-year renovation process, the area designated for pedestrians increased from 12,000 sqm2 to 24,000sqm2 and opened the stop for many businesses and activities

Souece : https://architecturequote.com/before-and-after-urban-architecture

Revitalizing cultural heritage in Jakarta's historic Kota Tua neighbourhood

The city government of Jakarta has developed a comprehensive urban plan to revitalize the historic neighborhood of Kota Tua in an inclusive and participatory way.
The plan includes a proposal to apply for UNESCO World Cultural Heritage status. If successful, the revitalization program will be accelerated in developing Kota Tua as a more attractive destination to both domestic and international tourists further contributing to its overall economic growth.

Urban revitalization in highly localized squares: Historic Centre of Macao
Souece : https://architecturequote.com/before-and-after-urban-architecture

CASE APPLICATION

4.2

ZONAL LEVEL SURVEY.

SDG - SUSTAINABLE DEVELOPMENT GOALS

The Sustainable Development Goals (SDGs) were born at the United Nations Conference on Sustainable Development in Rio de Janeiro in 2012. The objective was to produce a set of universal goals that meet the urgent environmental, political and economic challenges facing our world. The Sustainable Development Goals (SDGs) aim to transform our world. They are a call to action to end poverty and inequality, protect the planet, and ensure that all people enjoy health, justice and prosperity. It is critical that no one is left behind.

For sustainable development to be achieved, it is crucial to harmonize three core elements: economic growth, social inclusion and environmental protection. These elements are interconnected and all are crucial for the well-being of individuals and societies.

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.

The **17 SDGs** are integrated—they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability

17 SUSTAINABLE DEVELOPMENT GOALS

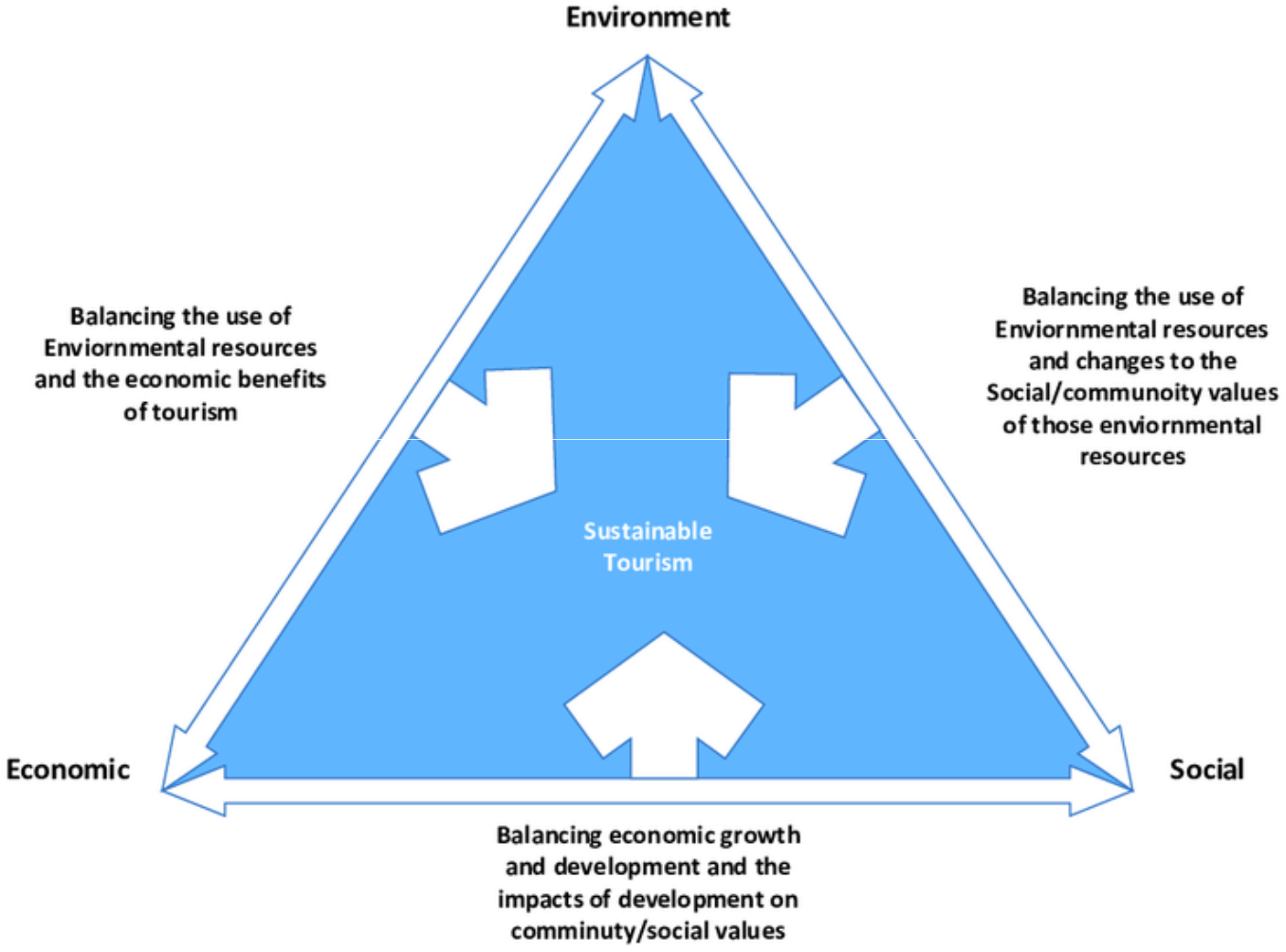
Source : https://www.undp.org/sustainable-development-goals

SUSTAINABLE TOURISM

- Tourism is one of the world's fastest growing industries and an important source of foreign exchange and employment, while being closely linked to the social, economic, and environmental well-being of many countries, especially developing countries.
- The World Tourism Organization defines sustainable tourism as “tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities“

Sustainable Tourism refers to sustainable practices in and by the tourism industry. It is an aspiration to acknowledge all impacts of tourism, both positive and negative. It aims to minimize the negative impacts and maximize the positive ones.

Sustainable tourism is defined by the UN Environment Program and UN World Tourism Organization as “tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.”



Dimensions of Sustainable Tourism Source: www.sustainabletourismonline.com

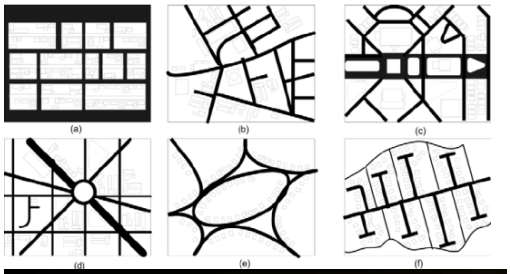
PARAMETERS OF STUDY

In a successfully designed Urban design, the designer needs to manage and manipulate multiple interconnected parameters. Each parameter can be investigated and developed independently, but will also have to be tested in relation to other related parameters.

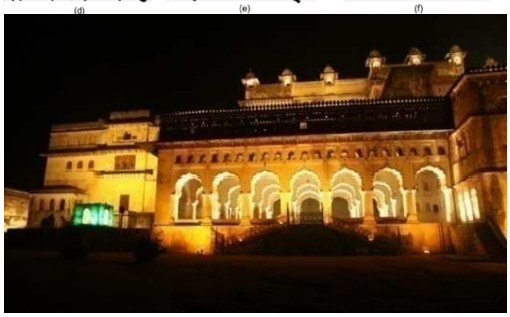
➢ Landform ;- Physical geography provides the essential background, against which tourism places are created and environmental impacts and concerns are major issues that must be considered in managing the development of tourism places

➢ Movement :- They have considerable effect on the city served by them and principle determinants of activities and form. It is not about speed, its about time, mass & cost.

➢ Pattern :- Essential to understand the layout, open to built ratio, distribution of public spaces , Utility services and how they develop over the years. It resolve conflicts between social & physical aspects of the design.



➢Activities:- Activities attracts tourism worldwide. Tourists in search of new experiences seem to look for a wide range of diverse activities which motivate them to visit certain destinations



➢ Space :- Strategic locations of space & the open-built relation should be a good study for future developments. Urban design literature provides evidence of the importance of attractive public space or referred as a “city moments” where strangers enjoy a shared experience..

➢Form:- The urban form, or three dimensional shape of a city is the result of the shape of the land, plus the shape of the built environment on it. The built environment and the spaces between them, are both of equal design importance

03

CASE EXAMPLES

SELECTION OF CASE EXAMPLE

Criteria for selecting case examples with respect to the site:

- Similar texture and pattern.
- Development by engaging local culture and heritage
- Interventions aimed at more gathering of tourists.
- Special emphasis on landform and eco system.
- Enhancing public recreational space
- Creating new identity of existing heritage buildings and landmarks.

3

Angkor world heritage site,
Cambodia

2

St.Augustine.
Frorida. USA

1

Orchha,
Madhyapradesh, India.

JUSTIFICATION FOR SELECTION

1

Orchha, Madhyapradesh, India.

- Orchha ,a small town rich in archiological,natural,cultural heritage .A planned tourism development is taking shape there.
- Bishnupur has almost similar set up as Orchha. .So it would be interesting to study a similar historic town.

2

St.Augustine. Florida,USA

- Claimed to be the Oldest town of U.S.A. and tourism developed around a fort .
- It has gone through a planned & sustainable development & a favourite tourism destination of U.S.A.
- Bishnupur also is a small town and prosper for a planned development, so a detail study would be beneficial.

3

Angkor world heritage site, Combodia

- An world heritage site. Example of a echo friendly sustainable development following the UNESCO guideline.
- Bishnupur also has ecologically sensitive areas , so we can learn how a place can be developed without affecting the natural heritage.

CASE STUDY
INTRODUCTION

Orchha,
Madhyapradesh, India.

Orchha is one of the many historical heritage towns of India with an irreplaceable wealth of medioval architecture. Situated on the bank of river Betwa it is an example and epitome of the Bundela dynasty to showcase their unique architectural style. The local geography aided to the incorporation of the various pragmatic planning principles in the historical town while the individual elements of architecture and gardens in various buildings and houses, borrowed from the several Rajput and Mughal traditions, gave a harmonious visual language to the settlement. The cultural landscape fostered various traditions of myths, ballads, literary and folk arts. The fortification, town planning, the garden design in Orchha evolved into a unique new form with amalgamation of Mughal style of gardens (cf. *char bagh),* Rajput Fort gardens, Hindu sacred groves and evolved hydrology systems. These gardens were strategically located around area of dense activities to provide relief to the urban fabric and to enhance the views from the high stories of palaces and temples.

The historical town situated in the Niwari district of Madhya Pradesh, India with a total population of around 12,000 inhabitants. The settlement derived its name from the phrase *'Ondo chhe'* meaning 'low' or 'hidden'. The site was indeed bowl-like, buffered by bluffs and forests, lying on the Betwa River. On an average 10,000 tourists visit per month, with the maximum tourist flow between October and March. Foreign tourists usually spend a day in Orchha on their way to Khajuraho

.

Heritages of Orchha

CASE STUDY-ORCHHA

Orchha - Justification of Outstanding Universal Value

(As submitted at World Heritage Convention)

As the capital of the Bundela dynasty from 1531-1783 CE, Orchha's monuments, gardens, temples, and murals as an ensemble, represent remarkable evolution in town planning, fortification of settlement, in buildings, garden design and art. The cultural landscape fostered various traditions of myths, ballads, literary and folk arts.

Criterion (ii): Orchha thrived to be an example and epitome of the Bundela dynasty to showcase their unique architectural style. The local geography aided to the incorporation of the various pragmatic planning principles in the historical town while the individual elements of architecture and gardens in various buildings and houses gave a harmonious visual language to the settlement

The fortification, town planning, the garden design in Orchha evolved into a unique new form with amalgamation of Mughal style of gardens, Rajput Fort gardens, Hindu sacred groves and evolved hydrology systems

Criterion (iv): Palatine and temple designs of the Bundelas were stylistic innovations in medieval Rajput architecture. Based upon archetypal mandala forms with elements from Sultanate and Mughal architecture, they are unique aesthetic statements,with highly evolved composition & massing and play of solids & voids..

This amalgamation of various styles can be seen in both tangible and intangible practices.

unesco
World Heritage Convention

India
Date of Submission: 15/04/2019

Criteria: (ii)(iv)

Category: **Cultural**

Submitted by:
Archaeological Survey of India

State, Province or Region:
Madhya Pradesh

Coordinates: N25.35 E78.64

Ref.: 6404

Statements of authenticity and/or integrity

Orchha is a living cultural site where the new development has not been too much against the character of the historical township. The cultural landscape survives as a discernible palimpsest, its historic layers still overpowering the new development. Orchha has retained the geomorphological character with evident historical connections between the settlement, the river Betwa and the forest around it

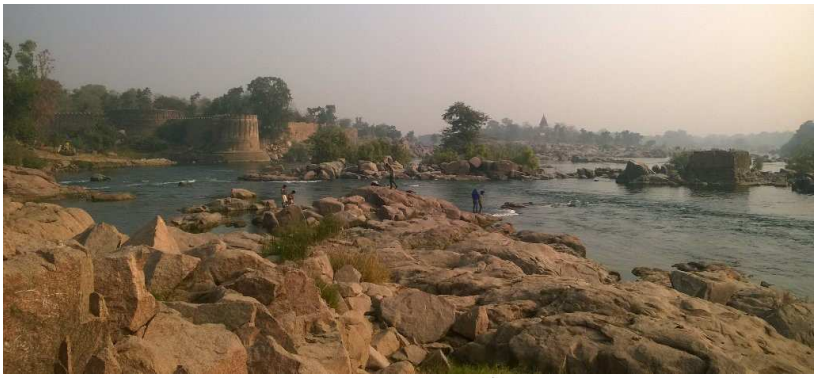
CASE STUDY-ORCHHA

LANDFORM

- Orchha's heritage is multi-dimensional although its monuments receive the most attention and are protected by the Department of State Archaeology. Archaeological heritage, however, is only one segment of its heritagescape. Its landscape heritage is of equal, if not greater significance than its historic architecture.

- The Bundelkhand region is made of an old landmass comprising of rugged rocks ,it is defined by an undulating terrain, rocky outcrops, narrow valleys,dry grasslands, throny forests and plains watered by several tributaries of the Yamuna. This facinating geographical environment was the chosen territory to establish a safe heaven of power.

- Orchha Wildlife Sanctuary, covering an area of 46 sq. kms with its flora & fauna is nearby



Landform of Orchha and surroundings

Analysis;-

- Though the natural heritage is fascinating & can play a much bigger role in tourism industry, it is been neglected & not plan fully incorporated in tourism industry.
- It is a dry region, rivers & water bodies become completely dry during dry season but no measure of water harvesting scheme has been taken up by the Govt.

Dumping on the Moat

Inferences;-

- Natural heritage should be taken into account for prospective tourism development.
- Water harvesting scheme to be planned.
- Proper waste management scheme should be started.

CASE STUDY-ORCHHA

MOVEMENT…

Connected to metropolitan cities through other cities.

- Nearest **Airport** to Orchha is **Gwalior Airport (113 kms)**.
- Orchha is **250 km** and 4 hours drive from **Kanpur Airport**

- Nearest railway junction to Orchha is **Jhansi** which is **16** km away. However Orchha itself a railway station.

- Orchha is well-connected to places like Jhansi,Gwalior, Khajuraho, Kanpur etc.

- Orchha has one **east west spine** & one **north south spine** running along river & few other main streets. The houses are built **along the few main roads** of the town.

- There are few **important nodes** at intersecting points other than minor ones.

- Roads are **narrow** & built forms are exactly on the **road edge.**

- Shops, restaurants and cheap lodging has spung up on both sides of north south spine and on the important nodes.

Analysis;-

- Orchha does not have an airport.
- Nearest airport Gwalior is not directly connected to all major cities.
- Though Orchha is connected by railways, it is not connected by super fast trains by major cities.
- Major trains do not halt at Orchha.
- Shops spill onto streets.
- Unorganised public spaces along streets
- Encroachment

Inference;-

- Connectivity should be improved.
- Roads should be widened with separate space for pedestrians.
- A bypass road may solve some problem.

Action;-

States · 2 Min Read

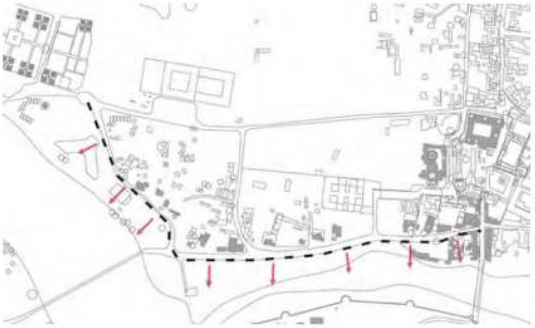
Orchha in Madhya Pradesh gets 18 National Highway projects worth INR 6800 crore

18 National Highway projects with a total length of 550 km in Orchha, Madhya Pradesh worth INR 6800 crore were inaugurated by Union minister for Road Transport and Highways Nitin Gadkari on Jan 23. These projects will provide easy connectivity to reach the tourist places of Madhya Pradesh including Orchha, Khajuraho, Panna, Chitrakoot, Tikamgarh, Sanchi.

CASE STUDY-ORCHHA

PATTERN

- Organic development over the years
- Road intersections are not following any particular pattern and are irregular in shape.
- Building blocks and road layouts are not very **planned.**



Riverfront Streetscape

Analysis;-

- Lack of presence of geometrical shapes & pattern in the built forms and open spaces.
- Due to organic streets the area is highly walkable as it provides low speeds of travel in the organic streets.

Inference:-

- Need for regularization of the irregular intersections to some extent for better design intervention.

Shops spill onto street

Too close to monument

CASE STUDY-ORCHHA

ACTIVITY.

Rituals and Festivals

Pilgrims visit the Orchha temples in large numbers on religious festivals. Outside the temples, pilgrim activities include bathing in Betwa and participating in the ritual processions that culminate in the immersion of idols in the river. Fairs (melas) on festivals in the public spaces draw huge crowds from nearby towns and villages. Panchkroshi parikrama (circumambulation) on Orchha streets occurs every month... The circulation of images and objects in the temple plazas and fairs is part of Orchha's local economy..

Ritual at Orchha

Events to promote tourism

- 'Namaste Orchha', an initiative by the Madhya Pradesh Tourism Board started in 2020. The festival aims to create new opportunities to promote the rich cultural, natural and architectural heritage, traditions and history of the state.

- Light & Sound show, an initiative to promote tourism.After a long day, relax at the fort courtyard as you watch the spellbinding sound-and-light show. The one-hour show brings to life the 500-year-old glorious history of Orchha, from Rudra Pratap Singh's discovery of the hunting spots to the rise of a mighty kingdom.

- Heritage walk, cycle trails also introduced.

Events at Orchha

Analysis;-

- The ritual procession is a meaningful use of public spaces, an aspect of intangible heritage that should be conserved by addressing its spatial requirements.
- The festivals and fairs, although 'pulse events' occurring occationcally, stretch the carrying capacity of public spaces causing over - crowding, traffic glitches, solid waste management problem and river pollution.

Inference;-

- Govt bodies should have strict vigilance & policy to protect the natural heritage of the region.

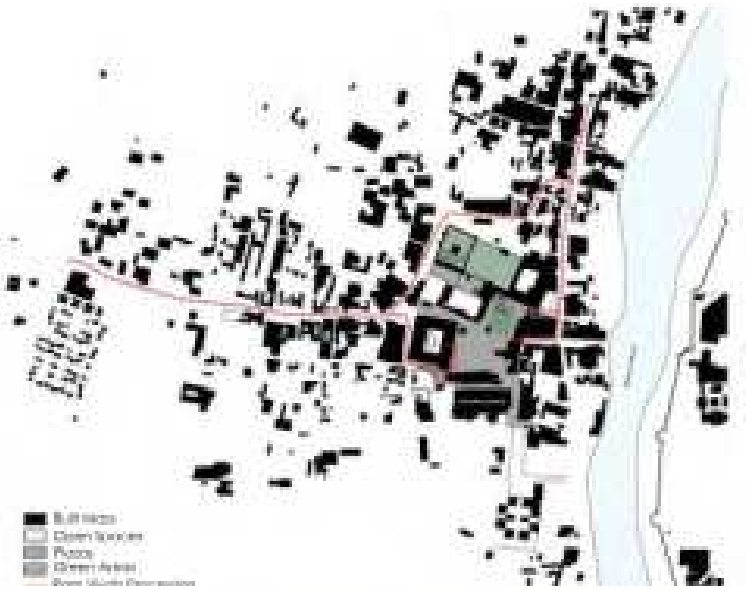
CASE STUDY-ORCHHA

SPACE

- The fortification, town planning, the garden design in Orchha evolved into a unique new form with amalgamation of Mughal style of gardens, Rajput Fort gardens, Hindu sacred groves and evolved hydrology systems.

- The historical gardens of Orchha were strategically located around area of dense activities to provide relief to the urban fabric and to enhance the views from the high stories of palaces and temples.

- The riverfront of Orchha is fascinating and a major public space.



Unorganised public spaces

Riverside public spaces

Analysis;-

- Encroachment is a problem for public spaces, thus creating congestion, obstructing view etc.
- All the gardens are not well maintained.

Inference:-

- There should be proper planning to use the river front or historical gardens strategically for tourism development.
- Need organised, planned public parking space.

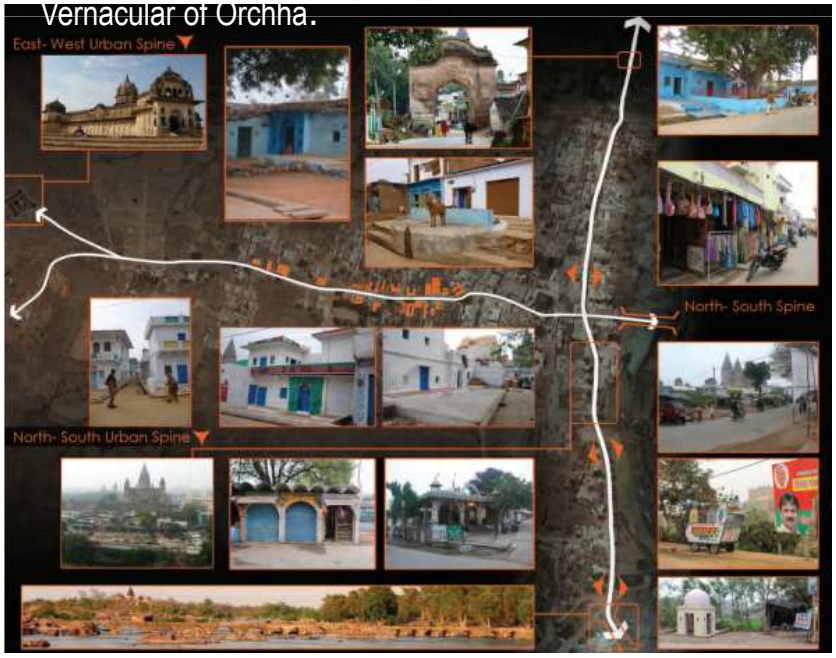
Anand Mahal Bagh

CASE STUDY-ORCHHA

FORM

The fortification, town planning, the garden design in Orchha evolved into a unique new form with amalgamation of Mughal style of gardens (cf. *char bagh),* Rajput Fort gardens, Hindu sacred groves and evolved hydrology systems.

Orchha is a living cultural site where the new developments has not been too much against the character of the historical township. The cultural landscape survives as a discernible palimpsest, its historic layers still overpowering the new development.



Vernacular of Orchha.

Encroachment obstructing landmark

New hotel at Orchha- touch of tradition.

Analysis;-

- The view of fort across the moat are obstructed by various unplanned structures.
- The temples in use are well maintained but the historic precincts that are not site of worship lie neglected and uncared for.
- Typically the built form of the town is not obtrusive in scale with the monuments.

Inference:-

- Stricter heritage controls in terms of street frontages and heights need to be put in place to promote homogeneity and lack of incongruence in new developments.

CASE STUDY-ORCHHA

CONCLUSIONS

Landform

- Natural heritage should be taken into account for prospective tourism development.
- Water harvesting scheme to be planned.
- Proper waste management scheme should be started.

Movement

- Connectivity should be improved.
- Roads should be widened with separate space for pedestrians.
- A bypass road may solve some problem

Pattern

- Need for regularization of the irregular intersections to some extent for better design intervention

Activity

- Govt bodies should have strict vigilance & policy to protect the natural heritage of the region especially during festivals

Space

- There should be proper planning to use the river front or historical gardens strategically for tourism development.
- Need organised, planned public parking space

Form

- Stricter heritage controls in terms of street frontages and heights need to be put in place to promote homogeneity and lack of incongruence in new developments.

St.Augustine. Frorida. USA.

St. Augustine is a city on the northeast coast of Florida. It lays claim to being the oldest city in the U.S., and is known for its Spanish colonial architecture as well as Atlantic Ocean beaches like sandy St. Augustine Beach and tranquil Crescent Beach. Anastasia State Park is a protected wildlife sanctuary. The Castillo de San Marcos is a 17th-century Spanish stone fortress with views of the St. Augustine Inlet.

Founded: September 1565
Age: About 458 years
Population: 14,581 (2021)
Weather: 28°C, Wind E at 14 km/h, 80% Humidity

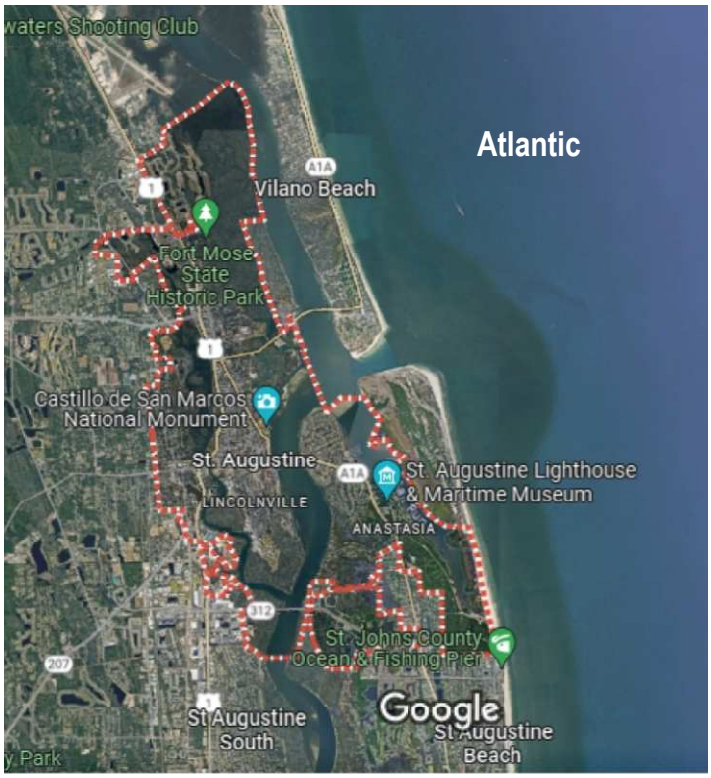
Location of St.Augustine.

Areal view of St.Augustine Fort

DESCRIPTION

HISTORY & BACKGROUND..

- The St. Augustine Town Plan Historic District, a National Historic Landmark, encompasses the site of the oldest continuously occupied European and African American settlements in the United States.
- Part of Ponce de León's 1513 claim to La Florida, St. Augustine was the site of Spanish military base established in 1565 by Don Pedro Menéndez de Avilés. The town of St. Augustine soon grew around the fort and became the seat of Spanish power in Florida.
- During the 16th, 17th and 18th centuries, free blacks and slaves found Florida a haven--the Spanish Crown granted refuge to blacks if they embraced Catholicism.



- Today the district retains the distinctive plan typical of a 16th century **Spanish Colonial walled town.** The colonial buildings in the district date from 1703 to 1821 period.
- Among the most noted buildings in the district are the **Plaza de la Constitución**, the colonial community's focal point (King Street), the **Oldest House,** a traditional **Spanish Colonial residence** and the oldest surviving residence in St. Augustine **Villa Zorayda**, an **exotic Moorish Revival residence** and the Gothic Revival style **Stanbury Cottage** (St. George Street)

CASE STUDY: ST.AUGUSTINE.

Development plans of St.Augustine.

Public and private efforts have been underway for many years to preserve and interpret the St. Augustine Town Plan National Historic Landmark District—especially the heritage that remains of the early colonial period. The city is now a fascinating visual mix of styles and typologies—a veritable timeline of built history ready to explore. St. Augustine prides itself on its historic district, and visitors are offered a wealth of walking tours, guided carriage rides, boat cruises, and historic reenactments

How does the City of St. Augustine regulate historic preservation?
The city's Comprehensive Plan and Code of Ordinances include regulations related to historic preservation including local archaeological zones, historic preservation zones, demolition review, and signage standards.

2018 Historic Preservation Strategy Overview

Plan Results During the public input phase several key topics of concern were identified and formulated into the 2018 City of St. Augustine Historic Preservation Master Plan recommendations. The goals, strategies, and tasks presented in Chapters 5 and 6 reflect eight different issues and themes identified during the SWOT analysis and community engagement during the plan development. These themes are:

A. City-Wide Planning
B. Historic Resource Inventory
C. Historic Preservation, Conservation & Zoning
D. Reducing Historic Building Demolition
E. Economics
F. Hazard Mitigation
G. Archaeology Program
H. Education & Advocacy

Guiding this process is The City of St. Augustine Historic Preservation Element of the Comprehensive Plan which includes the following goals:

- Preserve and protect the historic and authentic character of St. Augustine to minimize the demolition of historic buildings and structures
- Preserve and enhance the authentic features of St. Augustine's heritage and scale of the built environment in the distinctive neighborhoods, districts, structures, buildings, and vistas to strengthen St. Augustine's ability to convey the heritage of the city's diversity and development patterns

CASE STUDY: ST.AUGUSTINE.

LANDFORM

- Situated next to the Atlantic ocean & connected by water channels it has many exotic Atlantic Ocean beaches like sandy St. Augustine Beach and tranquil Crescent Beach.
- Anastasia State Park is a protected wildlife sanctuary.
- Faver-Dykes State Park Situated on Pellicer Creek just south of St. Augustine,

Eco Tours

St. Augustine Eco Tours

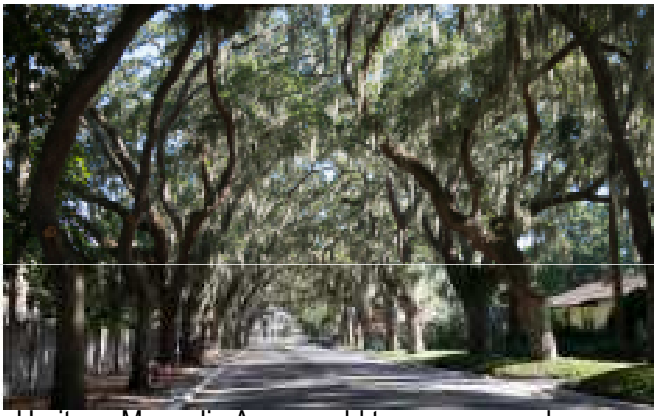
Set out to sea like the nation's early explorers did and get a closer look at some of St. Augustine's marine life as you keep an eye out for jellyfish, turtles, dolphins, and more

Guided Nature Walks

River-to-Sea Walk at Guana Tolomato Matanzas National Estuarine Research Reserve

Faver-Dykes State Park offers a slew of outdoor activities. A popular site for birdwatching, Faver-Dykes State Park also offers camping, hiking, canoeing, kayaking, fishing, and more. The playground and picnic area make this park a favorite for families.

Anastasia State Park



Heritage Magnolia Avenue-old trees preserved

Analysis;-

- Landform are been used to encourage tourism.
- There are many echo tours where one gets closer to the nature.
- Sea beaches are well maintained & have board walks into the sea so that people can enjoy it to the fullest.

Inference:-

- Example of how landform can be used in a sensitive way to attracts tourism

Exotic sea beaches

CASE STUDY: ST.AUGUSTINE.

MOVEMENT

- Augustine is easily accessible from the north and south by Interstate 95, U.S. Highway 1 and scenic Florida Highway A1A.
- The area is less than two hours away from most major Florida cities, including Jacksonville, Daytona Beach, Gainesville and Orlando. Savannah, Georgia, and Florida's capital, Tallahassee, are less than four hours from our shores.
- Well connected by air through national & International Airports

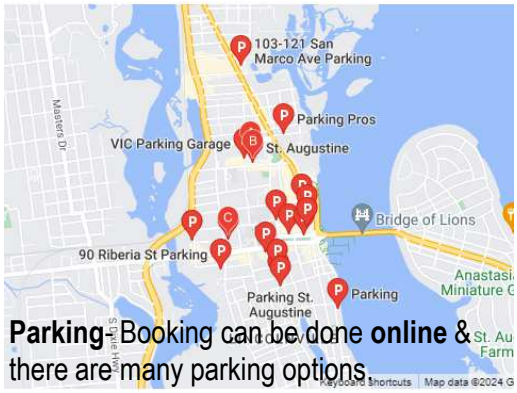
Travel By Air

Northeast Florida Regional Airport (UST) is a mere 10-minute drive to St. Augustine or Ponte Vedra for those traveling on private planes.

Jacksonville International Airport (JAX) is approximately 50 minutes north of St. Augustine and 30 minutes from Ponte Vedra.

Daytona Beach International Airport (DAB) is approximately 50 minutes to the south of St. Augustine and provides service to more than 150 destinations worldwide.

Orlando International Airport (MCO) is approximately 90 minutes to the south of St. Augustine and provides service to 135 destinations worldwide.



Parking- Booking can be done **online** & there are many parking options.

Movable bridge over sea inlet

- **St. Augustine is extremely walkable with friendly and inviting spaces in the Old City. Being a popular town, does have its disadvantages for motoring travellers.**
- **Old City has eateries & shopping along roads.**

Streets of St.Augustine.

CASE STUDY: ST.AUGUSTINE.

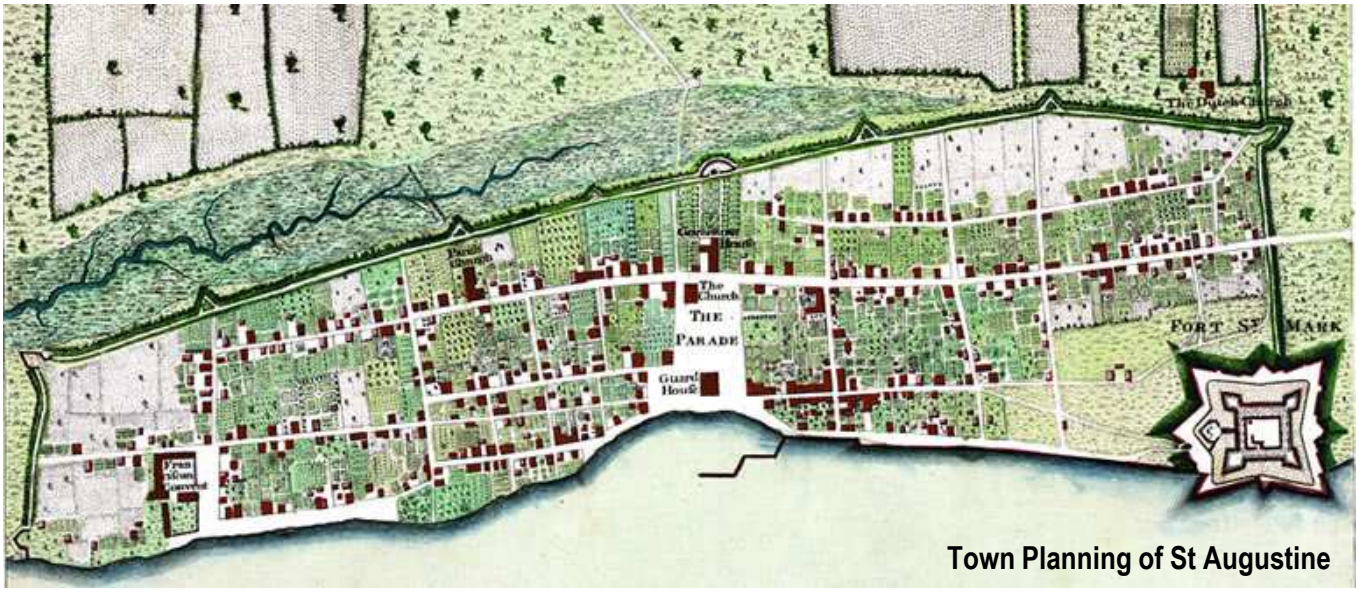
PATTERN

- The city is the oldest continuously occupied European settlement in the continental United States. The St. Augustine Town Plan National Historic Landmark District is the earliest extant example of a European planned community with a distinctive layout of a 16th century Spanish colonial town. The Spanish emphasized town planning and developed specifications for laying out new colonial towns in their 1573 Laws of the Indies.

- Set among the network of narrow, sometimes winding streets, the district's existing architectural heritage spans nearly 300 years, but the district and the city are most renowned for the early Spanish colonial buildings.

- The 16th century Plaza de la Constitución still sits at St. Augustine's center – the metaphoric heart of the strong Spanish heritage thoughtfully preserved throughout the city.

- Vast area next to fort are kept open as a public space.



Town Planning of St Augustine

Analysis;-

- Grid Iron type layout with all roads at right angle.
- Old roads are narrow but generally have separate footpath for pedestrians.

Inference:-

- Roads are used as public spaces with eateries and shopping, seating area.

CASE STUDY: ST.AUGUSTINE.

ACTIVITY..

- The calendar of St. Augustine is **jammed full of special events. Christmas Parade** if you visit during winter, **magical illuminated boats** at December's Holiday Regatta of Lights or blend great food and blues at the **Rhythm & Ribs Festival** held in March
- The oldest city is known for its unique and **plentiful events.**

St. Augustine's annual celebrations reflect this **rich heritage and culture,** where visitors and locals alike pack historic downtown's brick streets. There are historic re-enactments, festivals and fairs, live concerts, and pirate parties, too. St. Augustine - **a small city with a big calendar**

- **It's a shopping paradise, have lots of eateries both sides of the old city roads.**
- **Destination marriages also getting organised here are very popular**

Events & Activities at St Augustine

Analysis;-

- Festivals & Events all year around attracts more tourist to the place.
- Activities are well organised.

Inference:-

- There should be strict rules & regulations during festival times to avoid any untoward incidences, also to protect the natural heritage .

CASE STUDY: ST.AUGUSTINE.

SPACE

The St. Augustine plaza in the center of town also dates from the early Spanish colonial period. Today, religious, commercial and governmental buildings from various periods surround the plaza, including the Cathedral of St. Augustine, the vernacular public marketplace (1824), and the Gothic Revival Trinity Episcopal Church (1825). Within the interior of the plaza is the Spanish Constitution Obelisk (1814)

The Plaza de la Constitución is the oldest public space in America. Laid out by Spanish Royal Ordinances in 1573, it has been, and still remains, a social gathering place and venue for special events in the center of St. Augustine's Historic District.

The Plaza was designated a National Historic Landmark in 1970 and is home to several monuments and landmarks:

St. Augustine plaza

Seating area

Footpaths as extension of Cafe

Analysis;-

- The St Augustine plaza is used as a social gathering place & venue for many events like concert, crafts fare,etc.
- In old city roads are used as public space as seating area, extention of café etc.

Inference:-

- The Roads are intelligently used as public space to encourage tourism.

CASE STUDY: ST.AUGUSTINE.

FORM

- The 16th century **Plaza de la Constitución** still sits at St. Augustine's center – the metaphoric heart of the strong **Spanish heritage** thoughtfully preserved throughout the city.

Spanish Colonial is at the root of St. Augustine and represents the settlers' earliest attempts to make stable homes out the bayside town using the resources available

The **Treasury on the Plaza** is located in St. Augustine's first and **only skyscraper.** The six-story building and its mezzanine went under construction in 1926, the same year as the opening of St. Augustine's famed **Bridge of Lions.**

Residential areas are dominated by Spanish colonial houses. Many of them are **reconstruction.**

Public Buildings of St Augustine

Spanish colonial houses

Residential areas

Analysis;-

- Public buildings with its Spanish flavour dominates the skyline.
- Treasury is the only high-rise which is a mismatch with the whole scenario.
- Residential buildings are maximum 2 story high .

Inference:-

- There should be strict restrictions about multi storied buildings so that it never overpowers heritage structures.

SURVEY

CONCLUSIONS

Landform

- Example of how landform can be used in a sensitive way to attracts tourism

Movement

- Well connected by various means.
- Good connectivity helps to improve tourism

Pattern

- Roads are used as public spaces for eateries and shopping, seating area.

Activity

- There should be strict rules & regulations during festival times to avoid any untoward incidences, also to protect the natural heritage

Space

- The Roads are intelligently used as public space to encourage tourism.

Form

- There should be strict restrictions about multi storied buildings so that it never overpowers heritage structures.

DESCRIPTION

Angkor world heritage site.
Combodia

- Angkor is one of the most important **archaeological sites** in South-East Asia.
- Stretching over some 400 km2, including forested area, Angkor Archaeological Park contains the **magnificent remains** of the different capitals of the **Khmer Empire,** from the 9th to the 15th century. They include the famous Temple of Angkor Wat and, at Angkor Thom, the Bayon Temple with its countless sculptural decorations.
- The Angkor complex encompasses all major architectural buildings and **hydrological engineering systems** from the Khmer period and most of these **"barays" and canals** still exist today. All the individual aspects illustrate the intactness of the site very much reflecting the splendor of the cities that once were.
- **UNESCO** has set up a wide-ranging programme to **safeguard** this symbolic site and its surroundings

CASE STUDY : ANGKOR WAT

LANDFORM

- Nature-culture linkages is the key in the evolution of Angkor
- Sustainable development of the Angkor ecosystem which includes the World Heritage site but is defined by the boundaries of the watersheds of the three main rivers that are critical to the hydraulics of Angkor monuments and heritage
- The Angkor ecosystem including the World Heritage site comprising the Angor Wat (central rectangle), Bantei Srey (square north of Angkor Wat) and Rolous (square south of Angkor Wat), the three watersheds that are central to Angkor Hydraulics,
- The modern Siem Reap city that has developed south of the Angkor World Heritage site

The Angkor ecosystem is defined by Kulen mountains in the north and Tonle Sap Lake in the south

The Angkor ecosystem including the World Heritage site comprising the Angor Wat (central rectangle), Bantei S

Analysis;-

- Landform are been used to encourage tourism.
- Moats and water bodies used for different tourism purposes like boating etc.
- Natural flora and fauna enhance the aesthetic and serenity of the place.

Inference:-

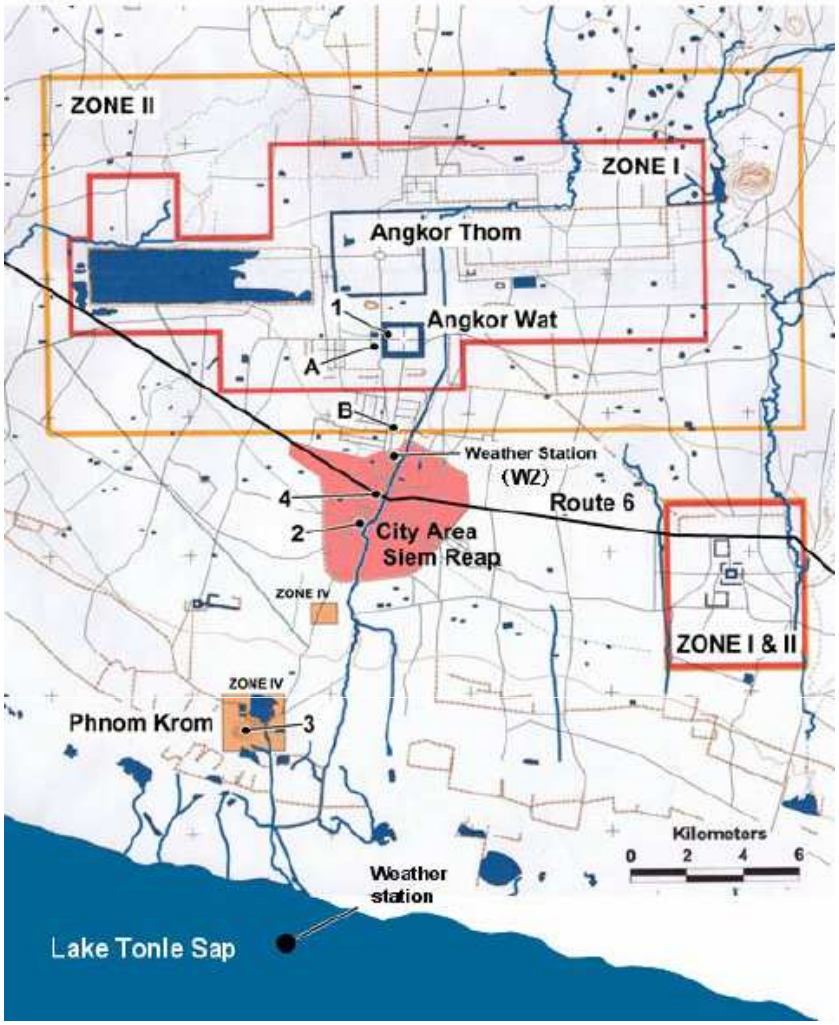
- Example of how landform can be used in a sensitive and sustainable way to attracts tourism

Nature at Angkor

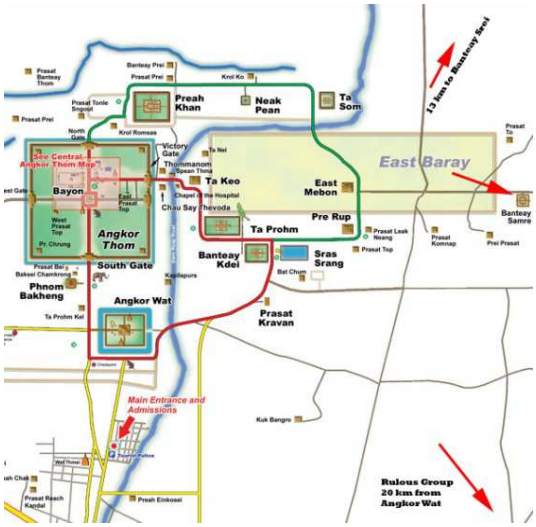
CASE STUDY : ANGKOR WAT

MOVEMENT

Sien Reap city is the closest town of Angkor Heritage Park.
The modern Siem Reap city that has developed south of the Angkor World Heritage site.
It is well connected through air and roads
The World Heritage site is 5.6 km from Sien Reap, takes 13 mins



Road to Angkor Heritage Park



Analysis;-

- Many options to reach there.
- Streets with its surrounding flora and fauna are well preserved & maintained.
- There are designated parking areas. But visitors sometime park there car on streets blocking obstructing traffic and lessening beauty of heritage structure.

Inference:-

- Well connected by various means.
- Good connectivity helps to improve tourism.
- There should be proper vigilance from authority for unlawful parking etc.

CASE STUDY : ANGKOR WAT

ACTIVITY

- Angkor wat is well protected from any kind of Human activities to preserve the nature.
- Few activities like boating ,balloon & helicopter rides are permitted for visitors

View Angkor Wat from above

- **Angkor Balloon** is a tethered helium balloon which is just 800 meters from Angkor Wat west gate. The 10-minute flight at 120 meters for a large bowl of fresh air allows tourists to witness **Angkor Wat**, **Phnom Bakheng**, and **West Baray** from a bird's eye-view. **Tonle Sap Lake** and **Phnom Krom** even can be seen from the distance in clear sky conditions.

- **Siem Reap Scenic Flight**

Tourists with better budget can try helicopter scenic tours above Angkor. This service is offered by Helistar Cambodia with 8-minute flight or 14-minute flight options. Helicopter flies along the moat of the magnificent Angkor Wat, Phnom Bakeng, Sras Srang, Pre Rup, East Mebon and Tasom temples. These flights give tourists better orientation of Angkor from a bird's eye view and surely one of the most amazing things to do in Siem Reap

Boating in Angkor Way Moats

Analysis;-

- Only environment friendly events are allowed around Angkor Archaeological Park .
- Festivals & Events happens at Sien Reap away from Angkor.

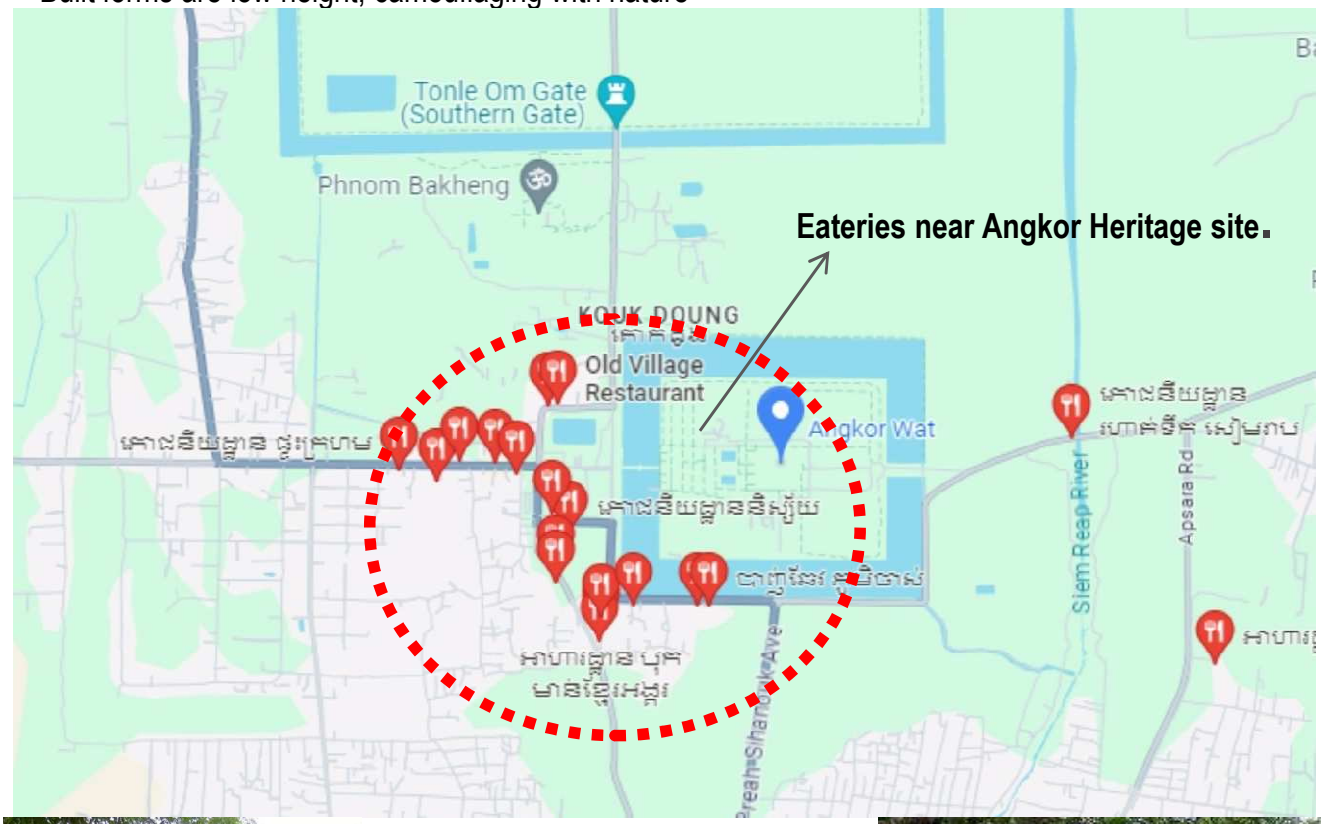
Inference:-

- Example of how lenvironment friendly events can be used in a sensitive and sustainable way to attracts tourism

CASE STUDY : ANGKOR WAT

PATTERN & FORM

- No accommodation is permitted for visitors in and around Angkor World Heritage site, Tourists has to travel from Sien Reap city.
- However public facilities like eateries , souvenir shops etc are permitted near Heritage site.
- There are considerable amount of eateries near Angkor Thom along the main spine of movement.
- Built forms are low height, camouflaging with nature



Analysis;-

- Only one road connecting temples, natural landscape retained.
- No permanent accommodation permitted around Angkor Archaeological Park..
- Only single story eateries are permitted near Temples.

Inference:-

- Restrictions should continue for any structures more than single storey high. Nature to overpower.

CASE STUDY

CONCLUSIONS

Landform

- Example of how landform can be used in a sensitive and sustainable way to attracts tourism .

Movement

- Well connected by various means.
- Good connectivity helps to improve tourism.
- There should be proper vigilance from authority for unlawful parking etc.

Pattern

- Restrictions should continue for any structures more than single storey high. Nature to overpower.

Activity

- Example of how environment friendly events can be used in a sensitive and sustainable way to attracts tourism

Form

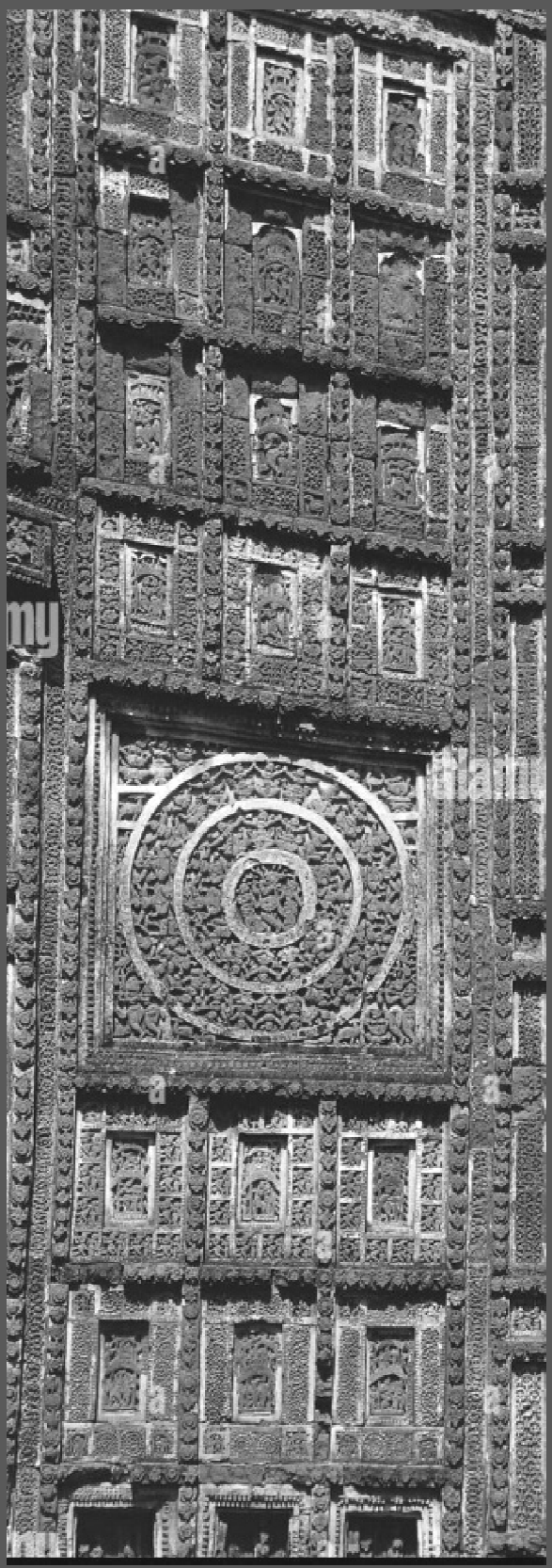
- Restrictions should continue for any structures more than single storey high. Nature to overpower.

COMPARISON OF CASE EXAMPLES

	ORCHAA	ST.AUGUSTINE	ANGKOR WAT
Landform	▪ Natural heritage should be taken into account for prospective tourism development. ▪ Water harvesting scheme to be planned. ▪ Proper waste management scheme should be started.	▪ Example of how landform can be used in a sensitive way to attracts tourism	▪ Example of how landform can be used in a sensitive and sustainable way to attracts tourism .
Movement	▪ Connectivity should be improved. ▪ Roads should be widened with separate space for pedestrians. ▪ A bypass road may solve some problem.	▪ Well connected by various means. ▪ Good connectivity helps to improve tourism	▪ Well connected by various means. ▪ Good connectivity helps to improve tourism. ▪ There should be proper vigilance from authority for unlawful parking etc.
Pattern	▪ Need for regularization of the irregular intersections to some extent for better design intervention	▪ Roads are used as public spaces for eateries and shopping, seating area.	▪ Restrictions should continue for any structures more than single storey high. Nature to overpower.
Activity	▪Govt bodies should have strict vigilance & policy to protect the natural heritage of the region especially during festivals	▪There should be strict rules & regulations during festival times to avoid any untoward incidences, also to protect the natural heritage	▪ Example of how environment friendly events can be used in a sensitive and sustainable way to attracts tourism .

COMPARISON OF CASE EXAMPLES

	ORCHAA	ST.AUGUSTINE	ANGKOR WAT
Space	▪ There should be proper planning to use the river front or historical gardens strategically for tourism development. ▪ Need organised, planned public parking space	▪ The Roads are intelligently used as public space to encourage tourism.	▪ Water bodies, Moats Open greens are used as public spaces..
Form	▪ Stricter heritage controls in terms of street frontages and heights need to be put in place to promote homogeneity and lack of incongruence in new developments.	▪ There should be strict restrictions about multi storied buildings so that it never overpowers heritage structures.	▪ Restrictions should continue for any structures more than single storey high. Nature to overpower.



04

CASE APPLICATION

Revitalization of Heritage Precincts in a town.

Krishna Bandh to Lal Bandh area. Bishnupur. WB

CASE APPLICATION

HISTORY & BACKGROUND

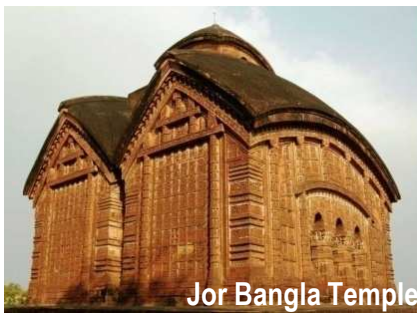
Located around 160 km from Kolkata it is a popular tourist destination of eastern India.

- It prospered in the 17th and early 18th centuries. Ruled by a line of Hindu Rajas of the Malla dynasty, Bishnupur developed a unique form of architecture and has perhaps the most brilliant and detailed terracotta work in Eastern India that has withstood the ravages of time. The Temples like the Shyam Ray Temple, the twin shrines of Jorbangla and the Rasmancha are a must visit.
- Apart from its heritage, Bishnupur is also known for its traditional handloom sarees. Pottery, artifacts etc.
- Bishnupur is also famous for the School of Classical Music .This style of music is still being kept alive in local academies of music
- Apart from all these Bishnupur has a vast reserve of natural resources which are mostly unexplored.

History

- The history of Bishnupur can be traced back to 694 AD, when King Raghunath founded the Malla dynasty. However, it was much later in 994 AD that the place was named Bishnupur. The name is derived from the name of the Hindu God Vishnu.
- The most powerful king of the dynasty was King Raghunath Singh Dev II, who ruled from 1626 AD.

Heritages of Bishnupur


Jor Bangla Temple

RasmanchaTemple

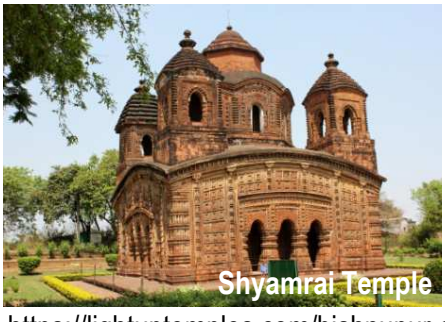
Terracotta work

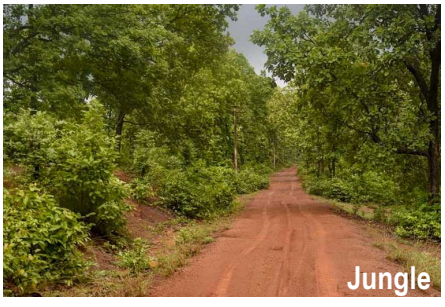
Garh Darwaja

Jor Mandir

Lalbandh

MadanmohonTemple


Shyamrai Temple


Jungle

Source : https://lightuptemples.com/bishnupur-shyam-rai-temple-west-bengal/
https://www.telegraphindia.com/
Source :https://bankuratourism.com, Wikipedia, Author

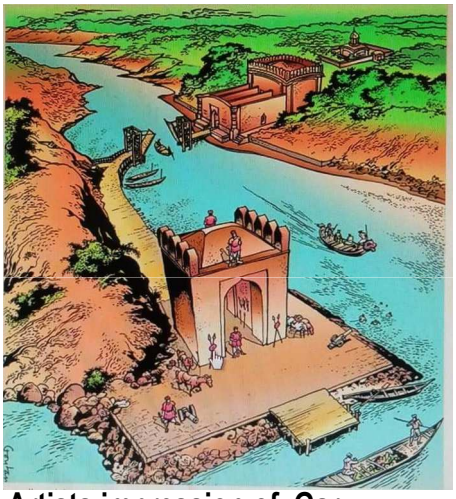
HERITAGE OF BISHNUPUR: NATURAL HERITAGE

CONCEPT OF BAN BISHNUPUR:

- Bishnupur once was surrounded by **jungles** & characterised by **large water bodies** and **multiple moats** all around it. Bishnupur has 7 large water bodies or bandhs. Raj Darbar area is was plan fully done on a high starta

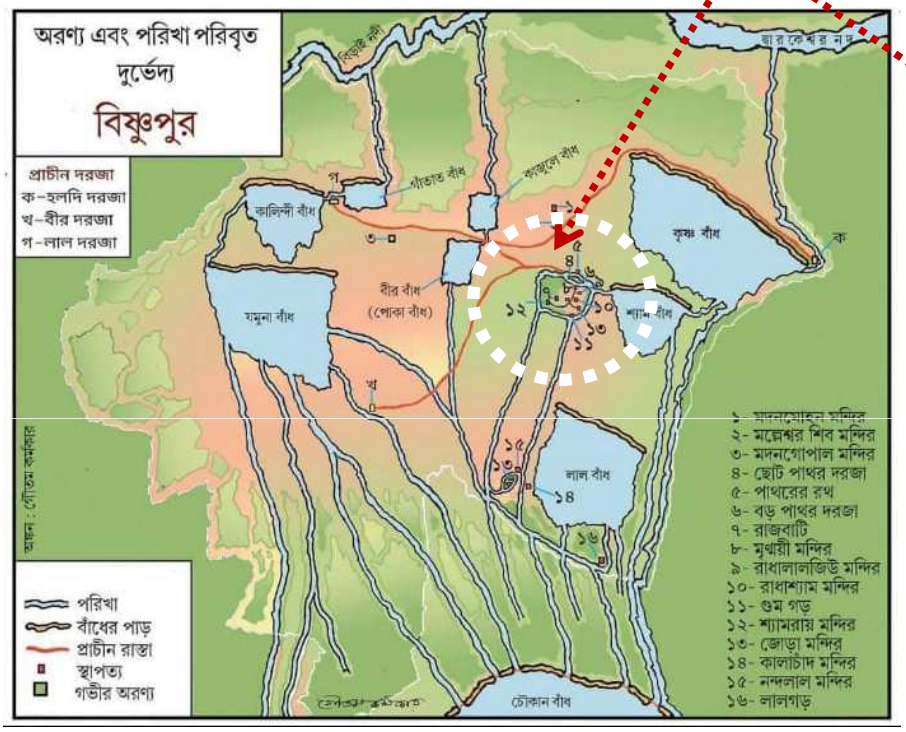
- It was known as **Ban Bishnupur** since it was surrounded by dense forests.

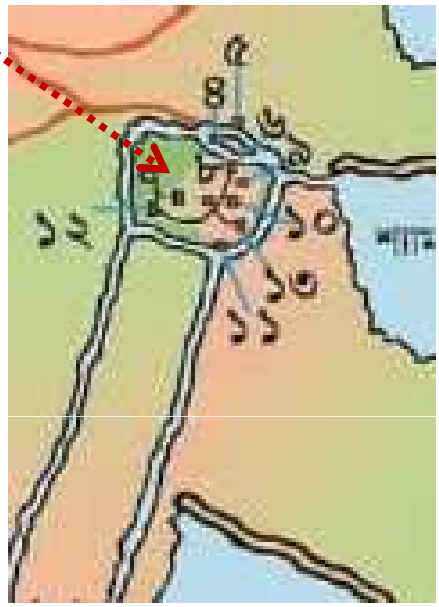
- Some of the Moats still exists but most of it is non existent due to unplanned urbanisation.



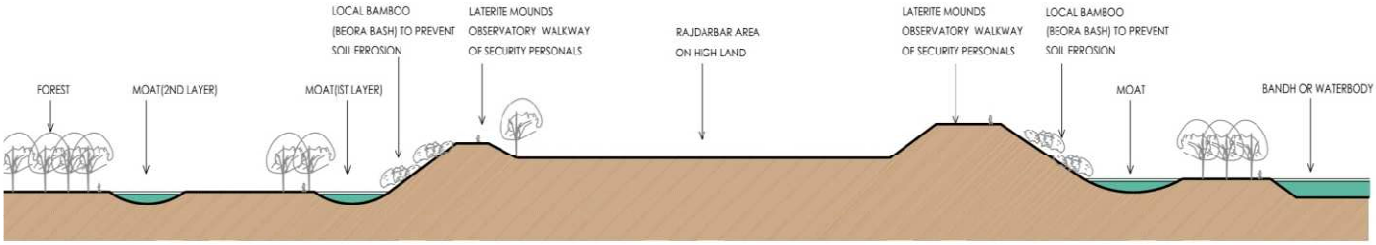
Artists impression of Gar Darwaja area.
Drawn by :- Goutam Karmakar

Rajdarbar area





Concept of **Ban Bishnupur**
Drawn by :- Goutam Karmakar
(Historian & Resident of Bishnupur.)



Conceptual section thro' old Bishnupur town

HERITAGE OF BISHNUPUR- CULTURAL HERITAGE

Bishnupur not only famous for its wonderful medieval terracotta temples and glorious past but also for other cultural tradition such as terracotta art, Baluchari Sari, a distinct musical Gharana, the distinctive art of making Dashabatar and Naqsh tash, articles of conch cells, Coconut shell carving, bell metal craft, Lantern etc.

Art & Craft

- **Baluchari**
- **Handloom**
- **Terracotta**
- **Conch Shell**
- **Brass & bell metal**
- **Lantern making**
- **Dashabatar Tash**

- **Classical Music**

Different Art & Crafts of Bishnupur

Different Art & Crafts of Bishnupur

CASE APPLICATION

4.2

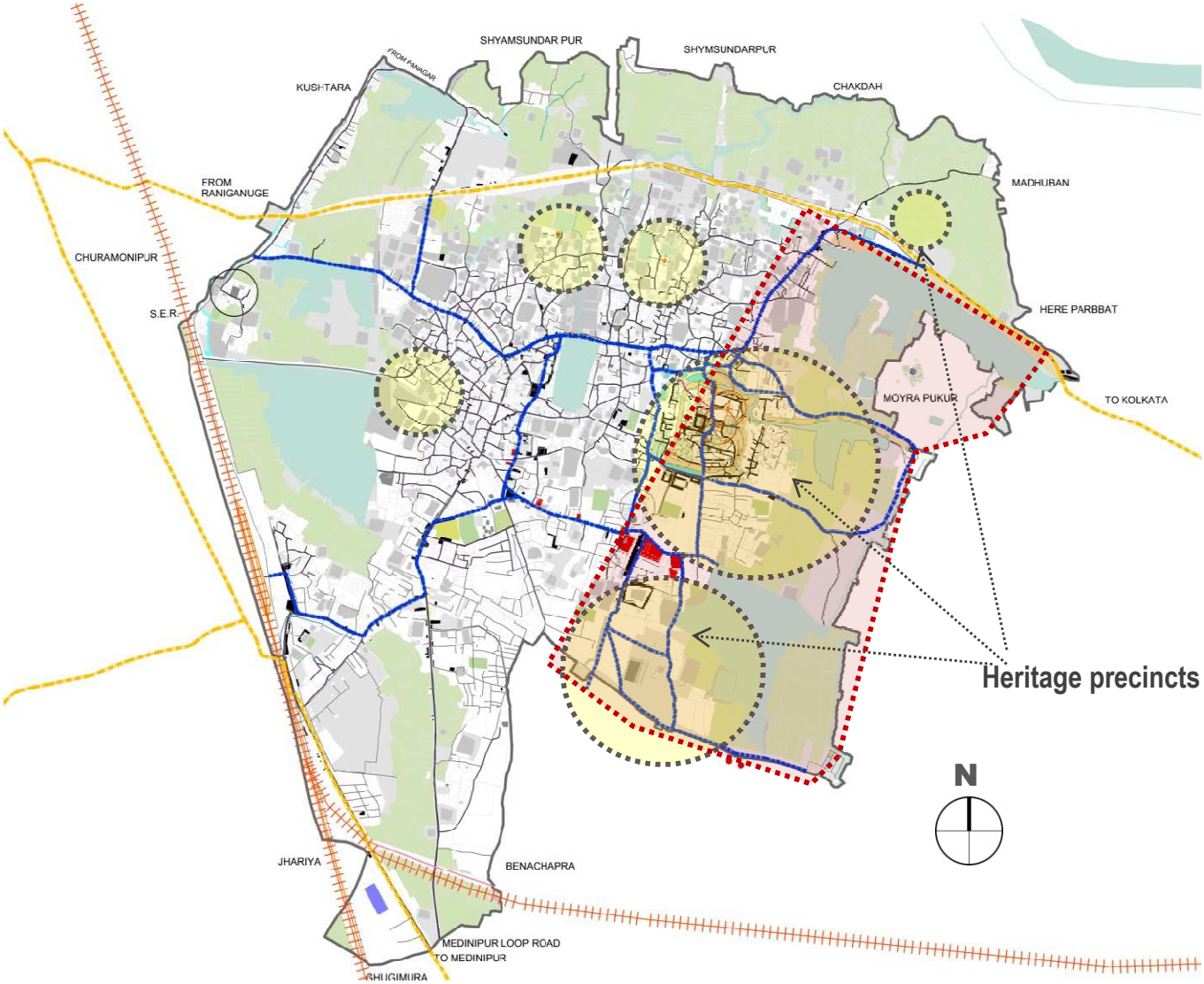
AREA LEVEL SURVEY.

SELECTION OF AREA

- Eastern part of Bishnupur with its vast reserve of built & natural heritage is an ideal place for development.
- The proposed area with the presence of 3 bandhs , Krishnabandh, Shyam Bandh & Lalbandh, with its unique terrain & close proximity to forest & temple precincts would be an interesting area for sustainable tourism development.
- All these three bandhs are connected by a streamlet , overflow goes to the streamlet &finally it goes to the Darakeswar river.

DELINEATION

- The area is delineated by Krishnabandh at the northen side, it also the edge with Kolkata Bishnupur hishway.Southren side is delineated by approach road of Lalgarh Park. Eastren side has the existing moat which surrounds Rajdarbar area. Westren side by the natural stremlet connecting bandhs & also forest area.



AREA LEVEL SURVEY

LANDFORM

- Bishnupur has an unique landform with its ululating red soil terrain, forests, water bodies. Etc.
- The history of hydrology is quite fascinating

Analysis;-

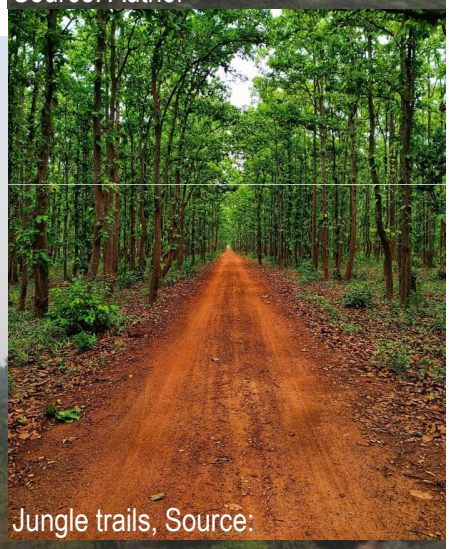
- The natural heritage have not been taken into account for sustainable tourism development.
- Unplanned & uncontrolled urban growth destroying natural heritage.
- Bishnupur does not have an waste management system. Most of the waste goes to Shyam bandh

Canal & Joypur jungle,Source: Nilanjan Basu

Shyam bandh, Source: Author

Basudevpur Airstrip amidst forest , Source: Author

Streamlet connecting water bodies. Source: Author


Jungle trails, Source:

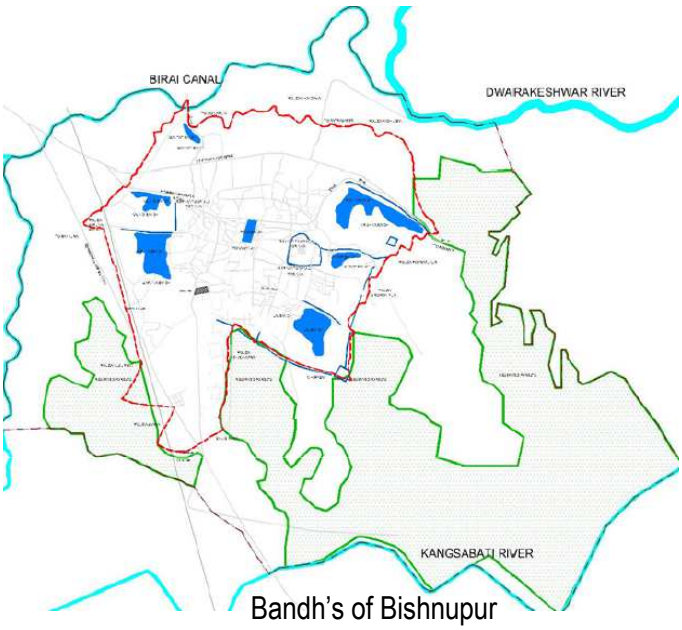
Undulating red soil terrain with patches of green. Source : Author

Some visuals of Bishnupur and surroundings showcasing natural terrain.

AREA LEVEL SURVEY : LANDFORM

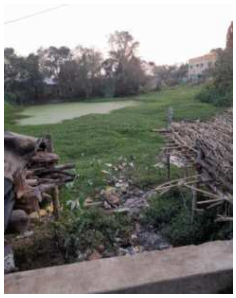
Hydrology of Bishnupur

- Bishnuput has **7 bandhs** or water bodies built by Malla Rajas.
- All the bandhs exept Lalbandh are **lying neglected.**
- Bandhs are **interconnected by natural streamlets** which eventually take the water to **Darakeswar & Birai river.**
- **High embankments** were built on lower side which retains water, only the **overflow** goes to the streamlet.
- Once Bishnupur was surrounded by layers of moat or parikhas as a protection barrier.Many of the parikhas are non-existant right now due to unplanned urban growth, however some of the parikhas still exits.

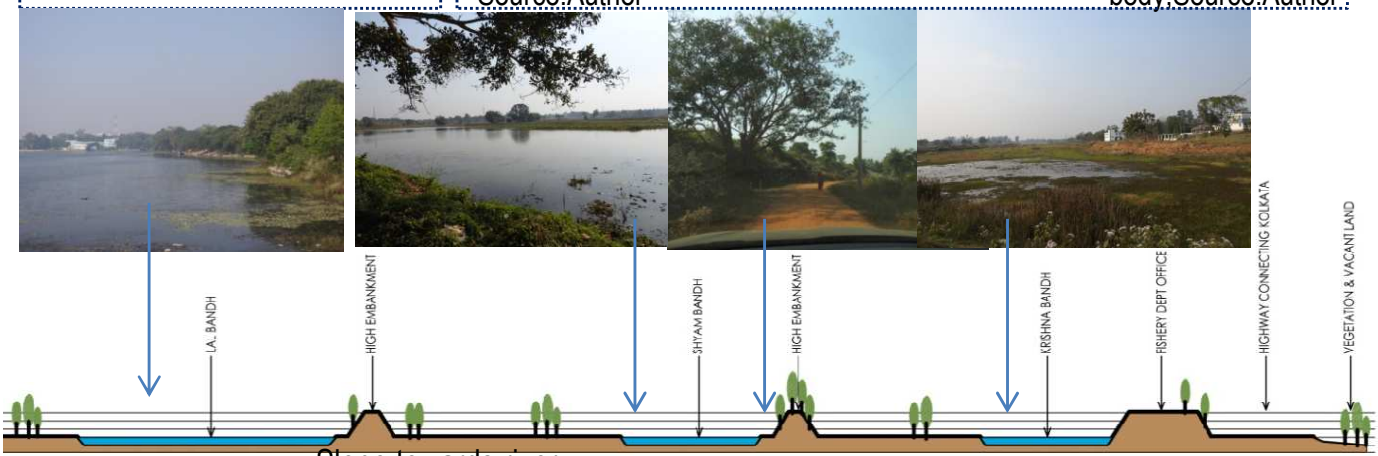


Bandh's of Bishnupur

1. **Lalbandh – 60 Acres**
2. **Shyam bandh- 18 Acres**
3. **Krishna bandh- 79 Acres**
4. **Poka bandh- 16 Acres**
5. **Kalindi bandh- 30 Acres**
6. **Jamuna bandh- 39 Acres**
7. **Gatait bandh- 10 Acres**


Poorly mentioned moat as dumping ground, Source:Author

Waste water going straight to the water body,Source:Author



Slope towards river
Bandhs connected by a streamlet

Analysis

- Water bodies are not well mentioned, people dumping waste on it, water pollution increases at the time of rituals, no vigilance from authority.
- Absence of a waste management responsible for water body pollution.
- Moats are lying as backyard without any designated use. Some of the moats are getting filled up for unplanned urbanization.

Inferences :-

- Natural heritages should be conserved & can be taken into account for prospective tourism development plan in a sustainable manner.
- Adaptive reuse of moats can be thought of.
- Proper waste management scheme should be started to protect natural heritage.

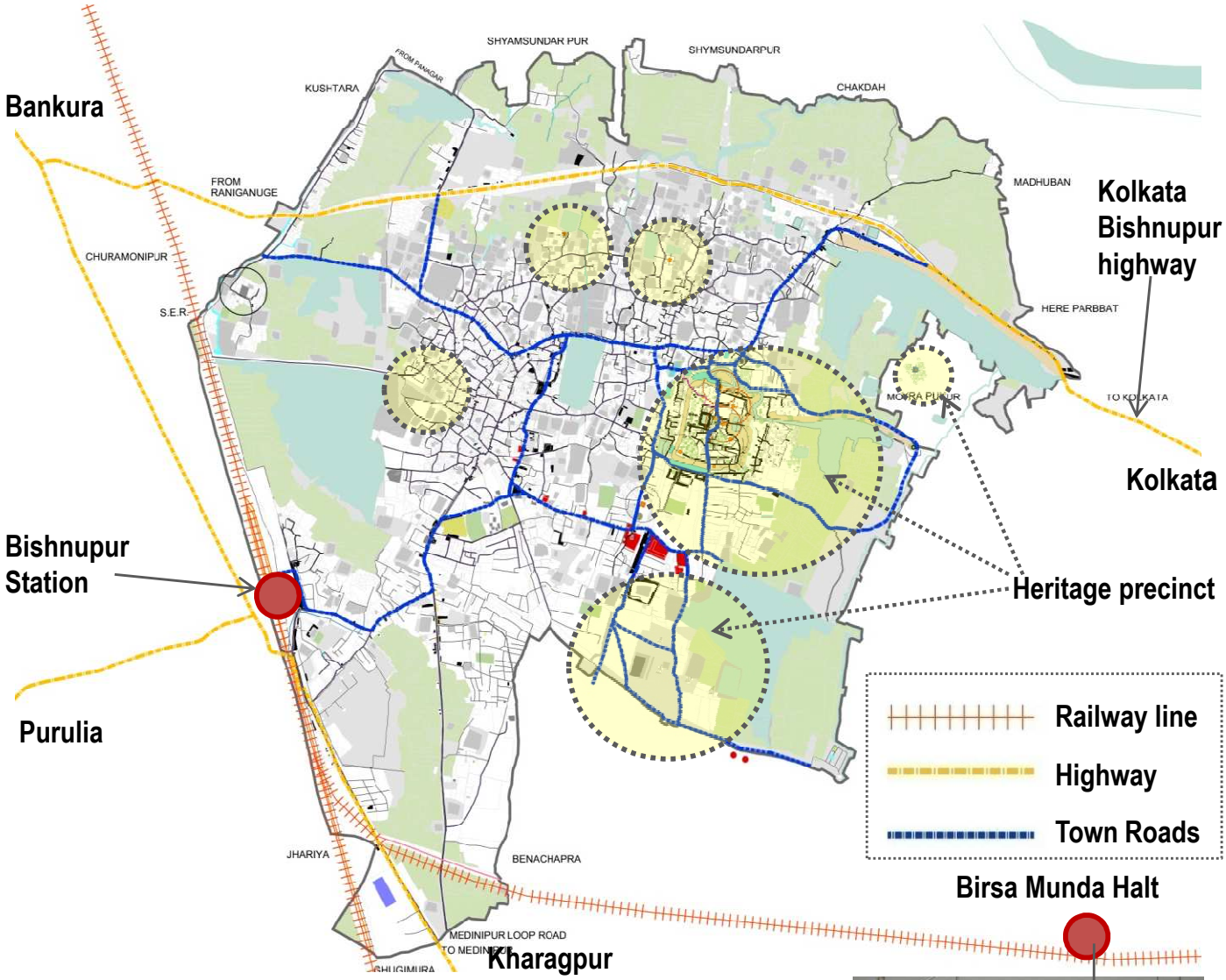
MOVEMENT

CONNECTIVITY

Bishnupur is reasonably well connected via roads. Due to its importance as a tourism destination, it is basically connected to almost all major places of Bengal.

Bishnupur is well-connected by rail to the rest of the country via Kharagpur and Bankura. Express and mail trains do ply between Kolkata and Bishnupur on a regular basis.

Nearest International Airport is at Dumdum, Kolkata (Netaji Subhash International airport) which is 170 km away on road



Approach road to Bishnupur through forest area.

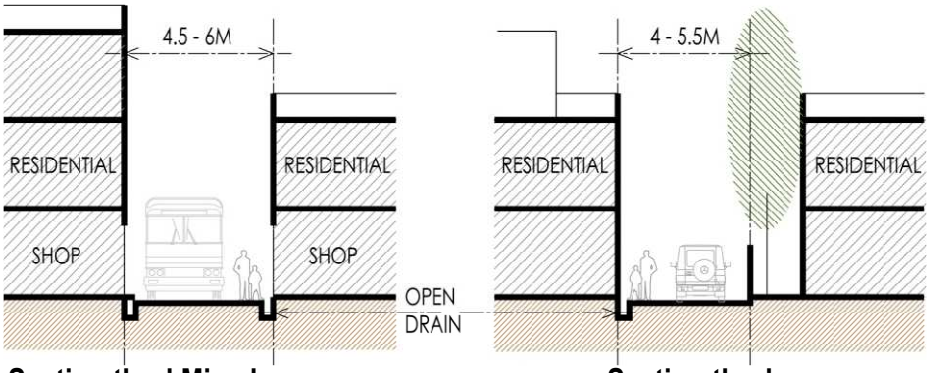
Entrance to Bishnupur near Krishnabandh

Railway line on elephant corridor in core forest area

MOVEMENT

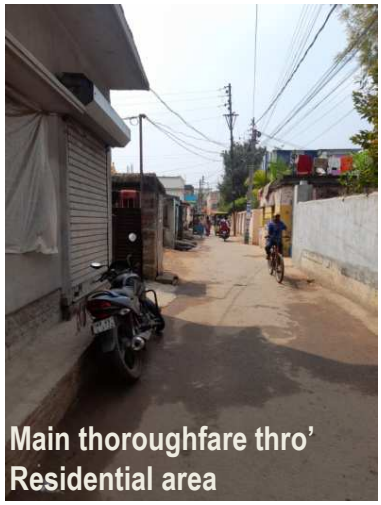
TOWN AREA

- Though the approach highways are wide enough, all the connecting roads to the heritage precincts are narrow. Roads are so narrow that two big vehicles can not cross. Road side parking also causes congestion.
- Roads generally has open drain on both side which not only unsafe, unhygienic and eyesore also.
- No separate pedestrian ways are there , buildings are right on the road edge.
- No planned parking spaces are there causing extreme traffic jam during peak tourist season.
- Authority had to restrict traffic by creating no entry zone towards heritage precincts during peak season, specially during Bishnupur Mela



Section thro' Mixed use area

Section thro' Residential area



Congestion at peak tourist periods.
Source : Author

Source : Author

Analysis

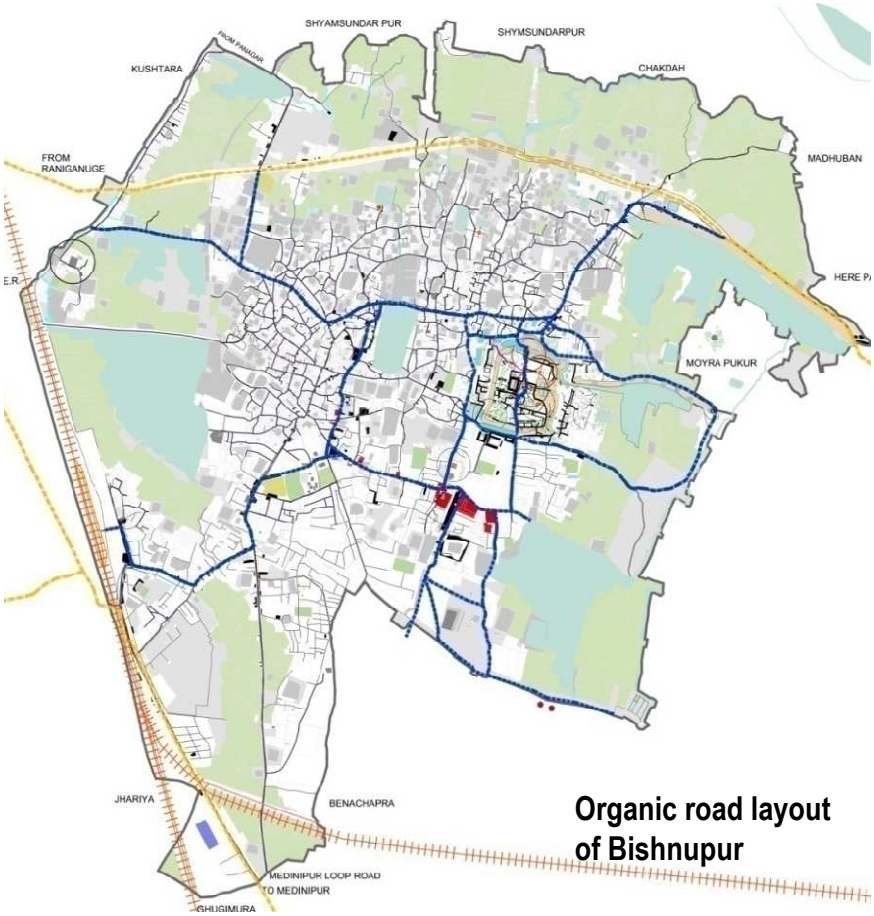
- Roads are insufficient to meet the increasing number of vehicles, no separate zones for pedestrians.
- No proper parking areas, Roadside parking & unplanned parking zones create chaos at peak tourist period.
- Increased number of traffic also causes serious air pollution.

Inference;-

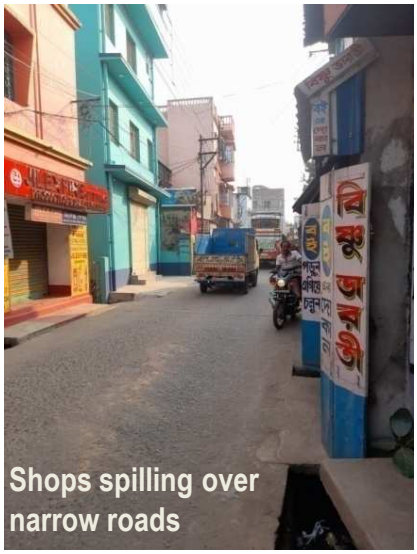
- Need for proper connectivity for the heritage precincts with wider roads and separate area for pedestrians .
- Some new road and gradation of roads may be introduced.
- Need for well organised parking spaces.

PATTERN

- **Organic development** with narrow & **irregular road pattern.**
- Settlements developed on the **higher strata** of table land.
- Many of the **parikhas or moats** have been filled up for **new urban growths**.
- Residences came up **too close** to the **heritage structures.**



Organic road layout of Bishnupur



Shops spilling over narrow roads

Roadside parking causing problem

1 & 2

- **Buildings on filled up Parikha or Water channel.**
- **Buildings too close to monuments , violating thr ASI norms**

Analysis

- Narrow roads with shops spilling onto it.
- Encroachment on road side.
- New constructions too close to heritage structures.

Inference :-

- Nodes & roads to be regularised & widened as much as possible.

ACTIVITY

Events to promote tourism

- " **Bishnupur Mela'** and "**Poramatir Haat"** are initiatives by West Bengal government.

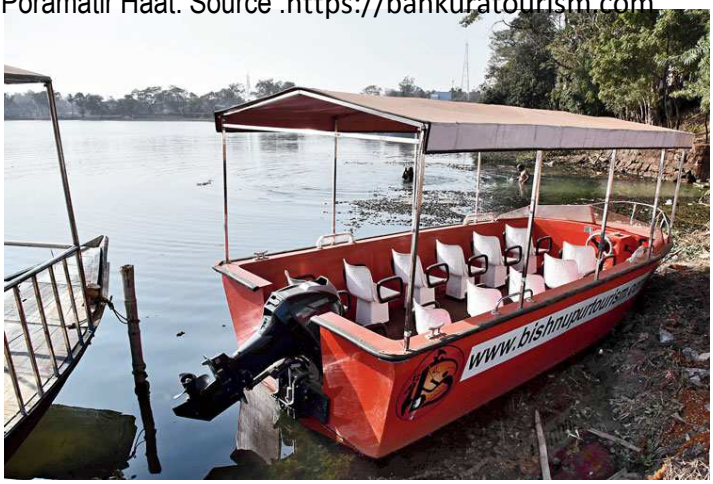
The festival aims to create new opportunities to promote the rich cultural and architectural heritage, traditions.

Rituals and Festivals

- **Tusu Parab**
- **Makar Sankranti**
- **Gazaan**
- **Rabonkata**

Bishnupur Mela. Source : https://bishnupurmela.com/

Poramatir Haat. Source :https://bankuratourism.com



Analysis

- Bishnupur does not have a permanent & proper mela ground.

- **For the last 5 years Govt is organising the Mela in a school premises.**

- **Overcrowding in mela causing traffic jams all over the town, so authority has to restrict traffic at the periphery of town causing lots of inconvenience for everybody.**

Inference:-

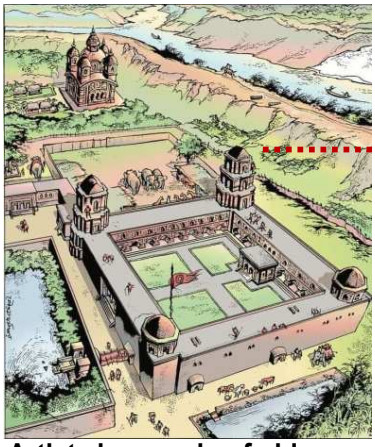
- **Bishnupur needs a proper & permanent mela ground with all facilities**
- **Strict regulations should be incorporated to protect heritage properties during festivals & events**

SPACE

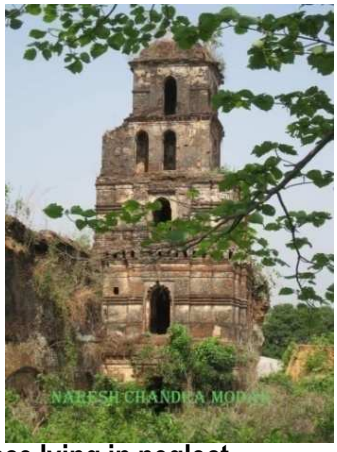
- For the last 5 years the Government is organising **Bishnupur Mela** at **School & College premises.**
- **Poramatir haat** is another popular weekly public event which has a **dedicated space** near Kalachand Temple.
- Core town area has some **"Mela" or community structure** With some open spaces which organises communuty Events.

Bishnupur Mela. Source : https://bishnupurmela.com/

Water body side space. Source : Author



Artists impression f old Rajdarbar area.
Source : Goutam Karmakar



Hawa mahal & surroundings- an old public space lying in neglect
Source : N.Modok

Small comminity spaces around old mandir of Thakurdalan. Source : Author

Analysis

- Bishnupur does not have a permanent & proper mela ground.
- Core area has dearth of open spaces.

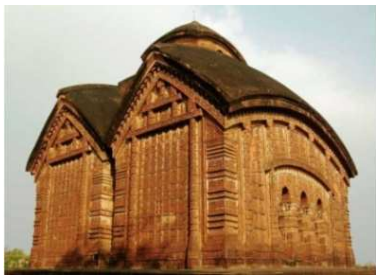
Inferences:-

- Bishnupur needs a permanent mela ground with all facilities.
- Old Public spaces and barren lareas can be revived and made part of tourism plan.

FORM

- The local vernacular architecture is simple sloped roof like double-roofed or four-roofed structure made of mud and thatch.
- The evolution of form is from Vernacular to Historical monuments.
- Do-chala,Crar-chala forms of mud houses influenced the temple architecture.
- Monuments are Human scaled- like our own houses.
- Local Resources used, like Terracotta or Laterite

Vernacular form of Bishnupur residentials



Monumental form- derived from vernacular

Analysis

- New constructions are without any character & sometime built to close to the heritage structure.

Inferences:-

- There should be a regulation regarding the building forms & heights especially surrounding the heritage zone.

SURVEY

Mode of Survey - Interview

Interviewee:

Prominent Government Officials e.g

- Sub-divisional Magistrate & Sub-divisional Officer
- IC, Bishnupur PS.
- Prominent personalities of Bishnupur

Government is thinking of a Tourist Facilitation Centre with following facilities,

- Bus Parking Area, so that tourist groups travelling in buses can park their buses their & entry of tourist buses can be restricted to the core town area.
- Car parking Area.
- Cooking facilities for tourist groups travelling in bus.
- Toilets & other facilities.
- However no specific site is fixed for that.
- Govt is thinking of some tent accommodation inside Lalgarh Park.

- IC ,Bishnupur Town confirmed that vehicular restrictions imposed in some town roads during pick tourist seasons with prior notices.

- There is no proposal for road widening or new road in and around Bishnupur Municipal area.

All of them are keen on

- Development of tourism in and around Bishnupur.
- Any revival scheme of Parikha's & Rajdarber area lying in neglect.

CONCLUSIONS

Landform

- **Natural heritage** can be taken into account for prospective tourism development in a **sustainable** manner
- Proper **waste management scheme** should be started

Movement

- Roads to be widened with separate area for **pedestrians . Gradation** of roads may be introduced.
- **New road** to be proposed to **reduce congestion.**

Pattern

- Nodes & roads to be **regularised & widened** as much as possible.
- Bishnupur needs a **proper & permanent mela ground** with all facilities

Activity

- **Strict regulations** should be incorporated to protect heritage properties during **festivals & events**
- Old Public spaces should be revived and made part of tourism plan.

Form

- There should be a **regulation** regarding the **building forms & heights** especially surrounding the heritage zone.

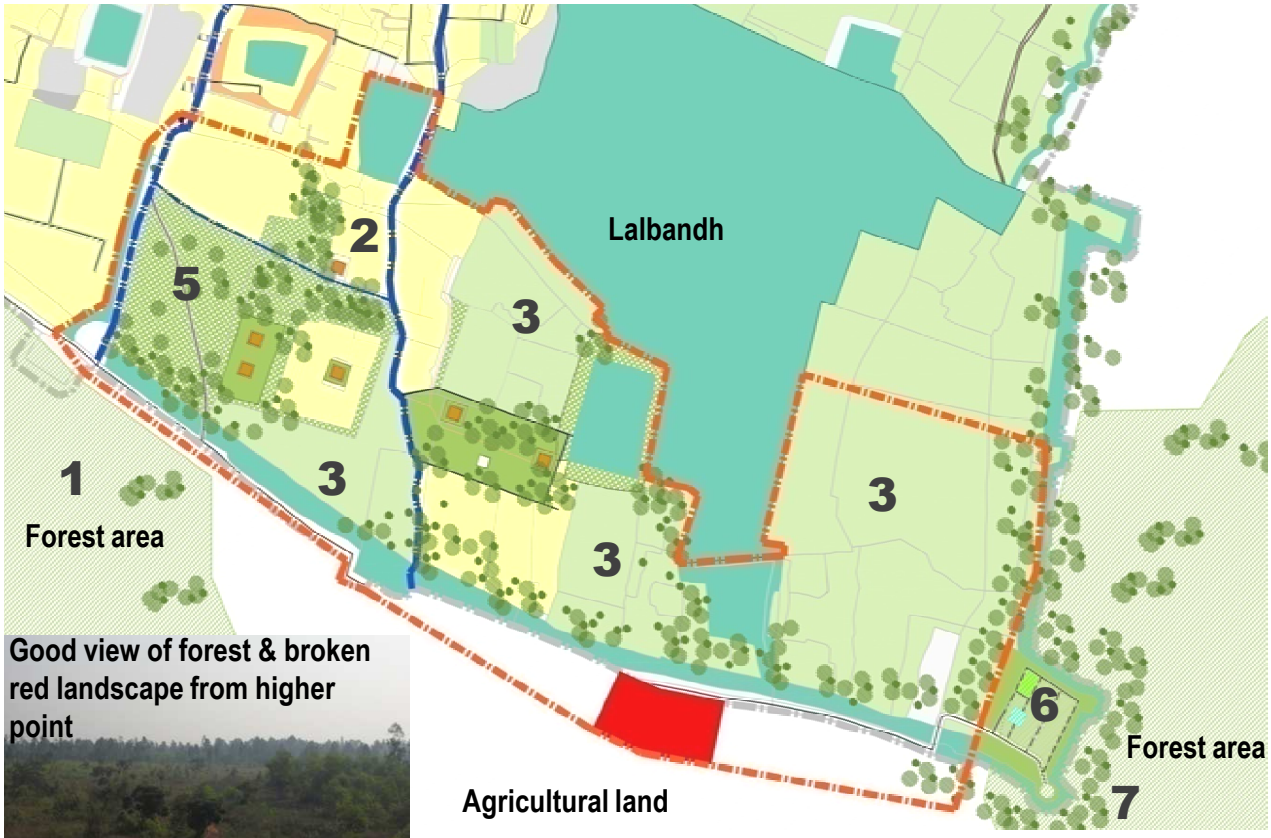
CASE APPLICATION

4.2

ZONAL LEVEL SURVEY.

ZONE - I

- South side of Lalbandh with some heritage structures.
- Open areas are mostly agricultural land with some hutments.
- Forest is near by, can have a good view from high vintage point.
- Good accessibility, but roads are narrow. Parking problem
- Existence of ASI office

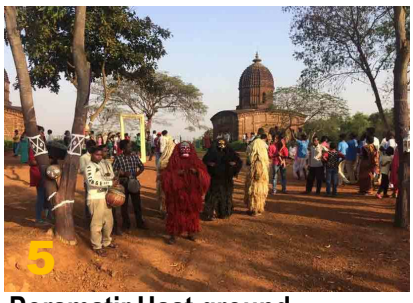


Good view of forest & broken red landscape from higher point

2 Nandalal temple & adjacent ground .

3 Agricultural land with patches of green & some hutments

4 Cluster of temples well protected by ASI

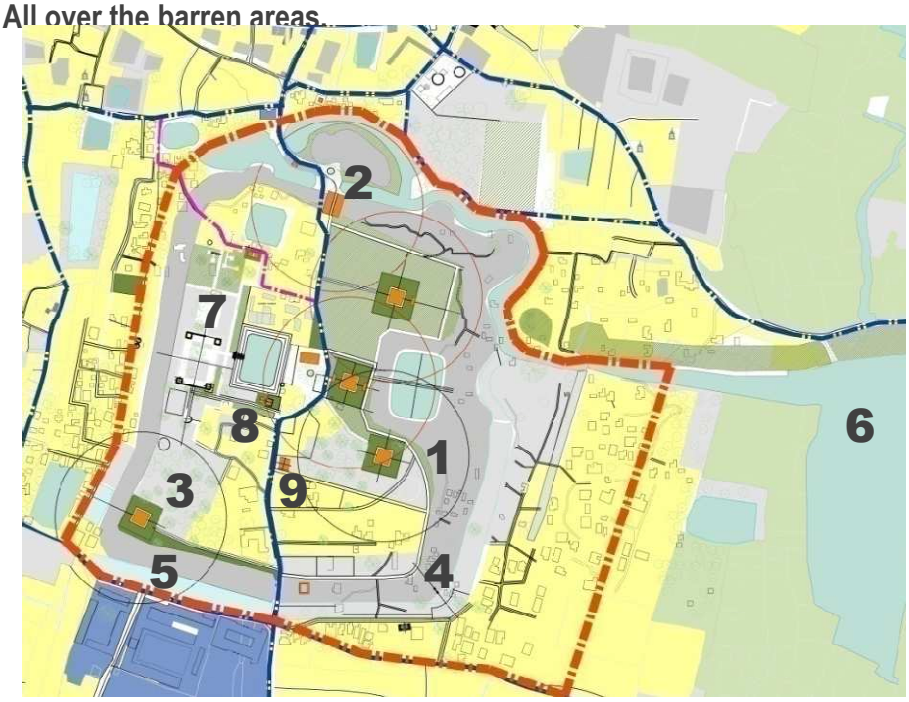

5 Poramatir Haat ground, Have parking issuses

6 Lalgarh Park-not very popular among tousts because of accessibility

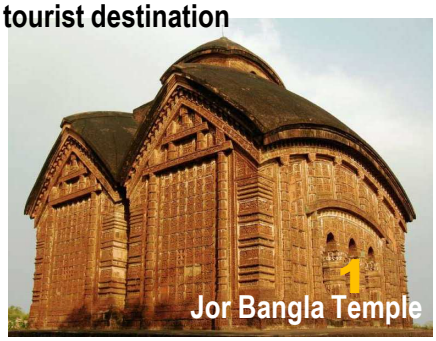
7 Echo park of forest department- now abandoned, can be revived

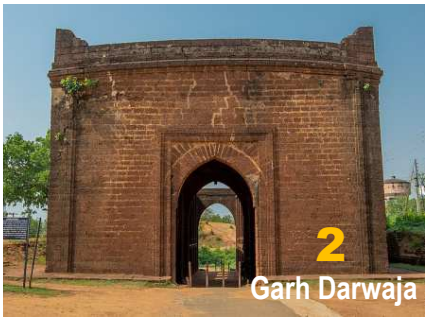
ZONE - II

- Presence of several popular heritage structure , few other structures are lying neglected.
- Presence of historical moat and laterite mound around rajdarbar area which was the protection layer in old days.
- Lots of vacant barren land all around, some are disputed.
- Presence of Shyambandh , good view.
- Good accessibility, but roads are narrow, no organized parking spaces
- Disadvantage- Residential areas in between.Lots of encroachment All over the barren areas.



Existing monuments – Popular tourist destination

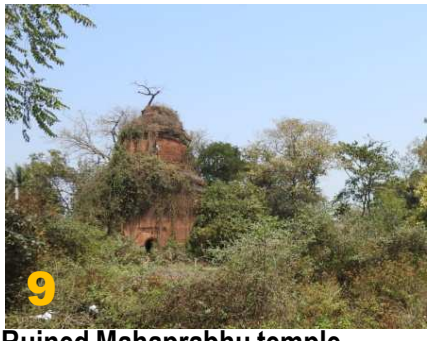




Neglected Heritages

Hawa Mahal

Pair of Deul temple



Ruined Mahaprabhu temple

CASE APPLICATION

4.4

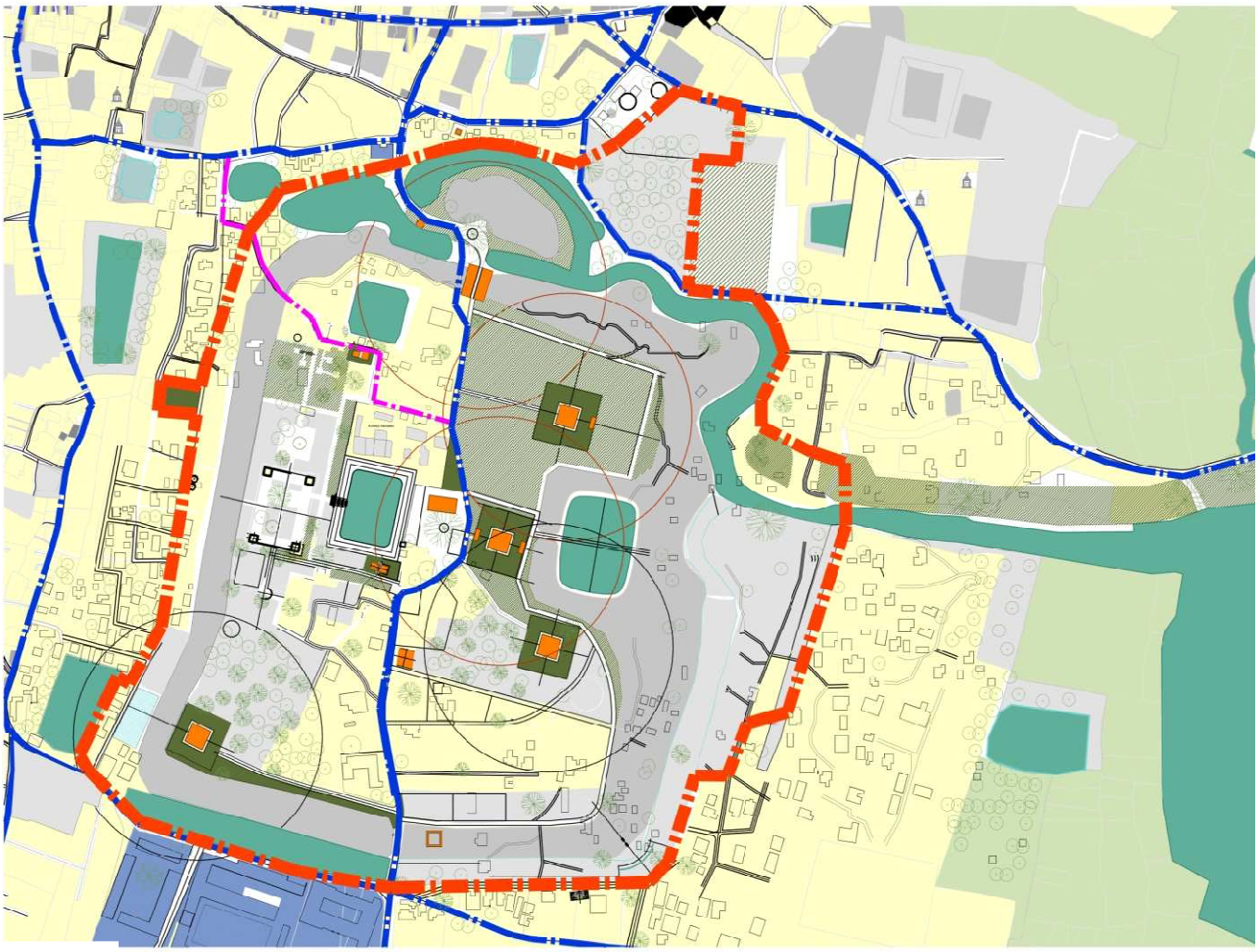
SITE LEVEL SURVEY.

4.4 : SITE LEVEL SURVEY

DELINEATION OF SITE

- In all the for sides it is delineated by moat & adjacent vacant spaces.
- Specifically in the southern side there is moat and adjacent road, next to that is K.G Engg Institute or residential area.
- In the eastren side after the moat there are some vacant spaces, we included those spaces inside the boundary.
- In the westren side again old moat location is the boundary , but some vacant area next to that also considered for development, lots of encroachment is there on the moat area.
- In the northen side existing moat and adcacent vacant area next to playground is considered as boundary.

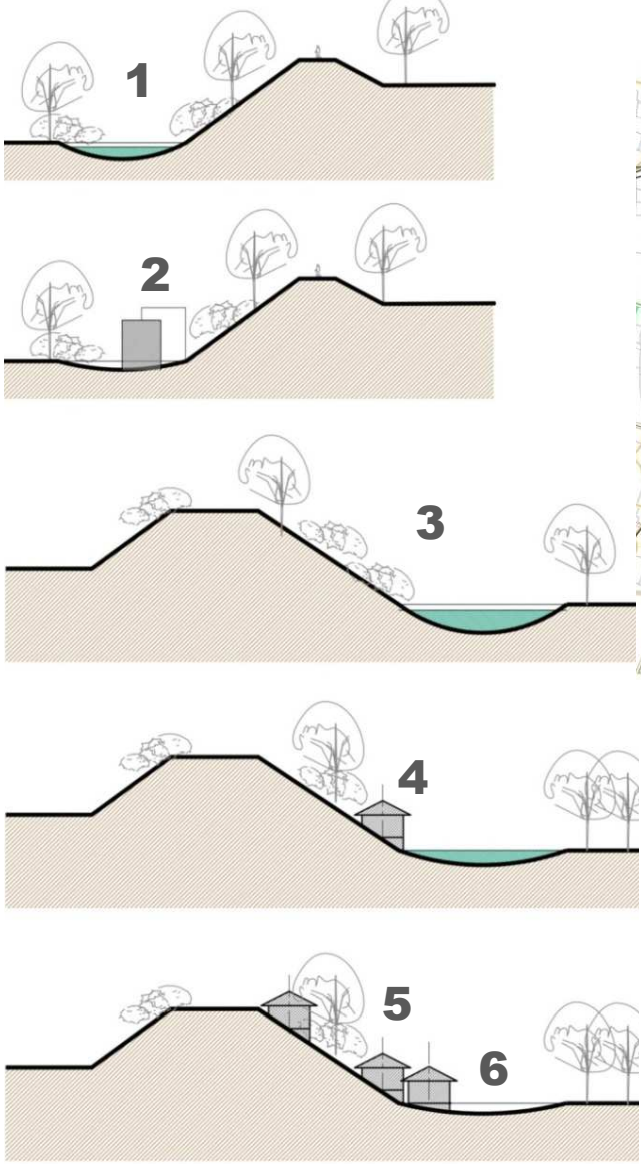
Total Plot Area : 273600 Sq.M =



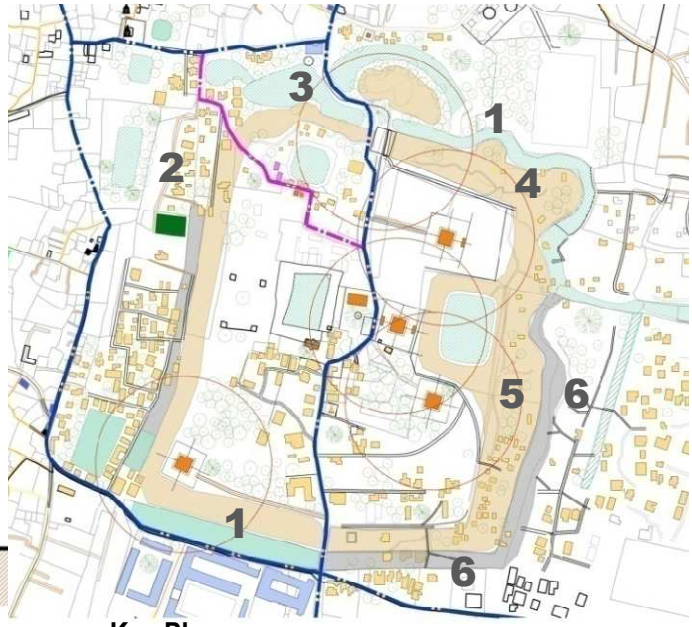
SITE LEVEL SURVEY

LANDFORM

- Site is surrounded by Moat & Mound all around which used to act as a protection barrier in those old days.
- Many part of moat and mounds are encroached now and lying in neglect.
- Mounds are full of weeds now in many parts, existance of some big trees.



Existing condition of moat & mound around Rajdarbar area



Key Plan

1. Exists as shallow water body without any maintenance. Used by residents for livelihood.

2. Unplanned urbanization on low land of parikha.

3. Water body without maintenance.

4. Few Encroachment on slopped area of laterite mound.

5. Considerable encroachment on sloped area.

6. Low land, as backyard dumping ground

Analysis

- Moats are lying in neglect, people dumping waste on it, no vigilance from authority.
- Moats are lying as backyard without any designated use. Some part of the moats are getting filled up for unplanned urbanization.

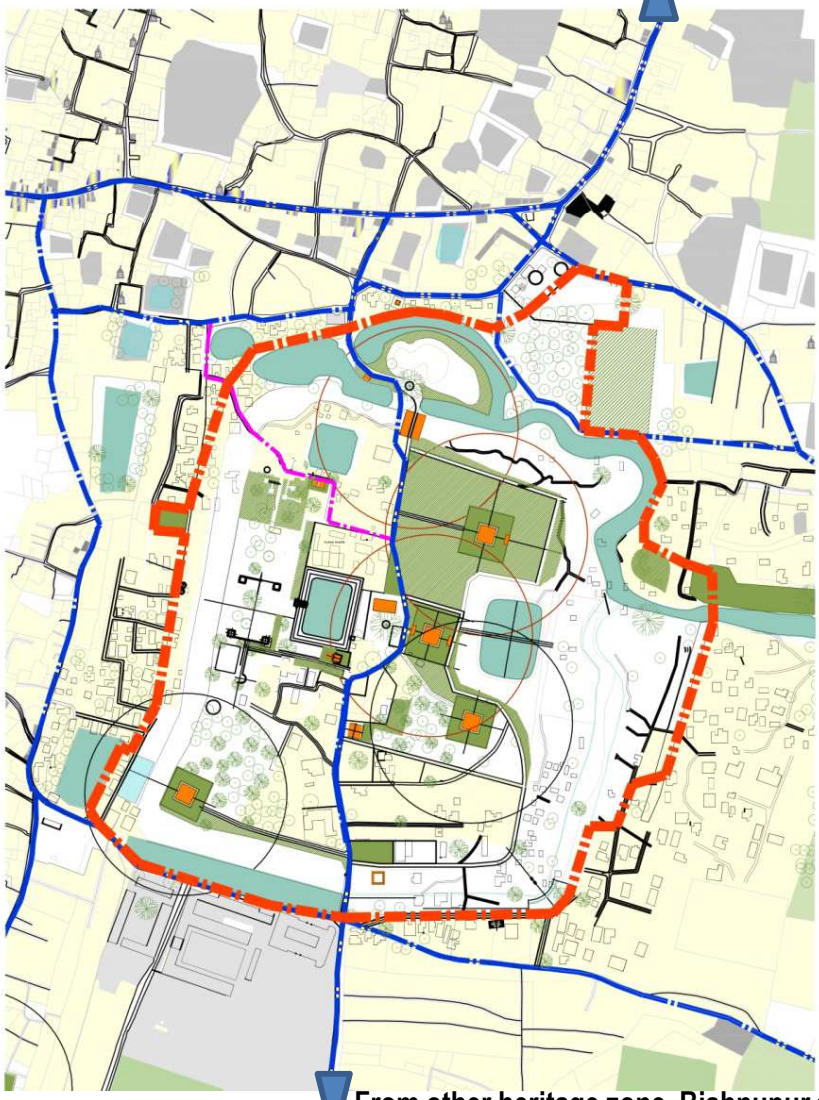
Inferences :-

- Moats and moundsshould be conserved & can be taken into account for prospective tourism development plan in a sustainable manner.

MOVEMENT

- The site is approached by vehicular road from both north and south.
- One Vehicular road running right through the site carries also nheavy traffic like tractors.
- This vehicular road running through the laterite mound next to Gardarwaja damaging its shape.
- No organised parking, people & toirists park at road side

To Kolkata Bishnupur highway



From other heritage zone, Bishnupur station
From tourist accommodation area,

Vehicular road damaging laterite mound

Heavy traffic through heritage precinct

Roadside parking

Analysis

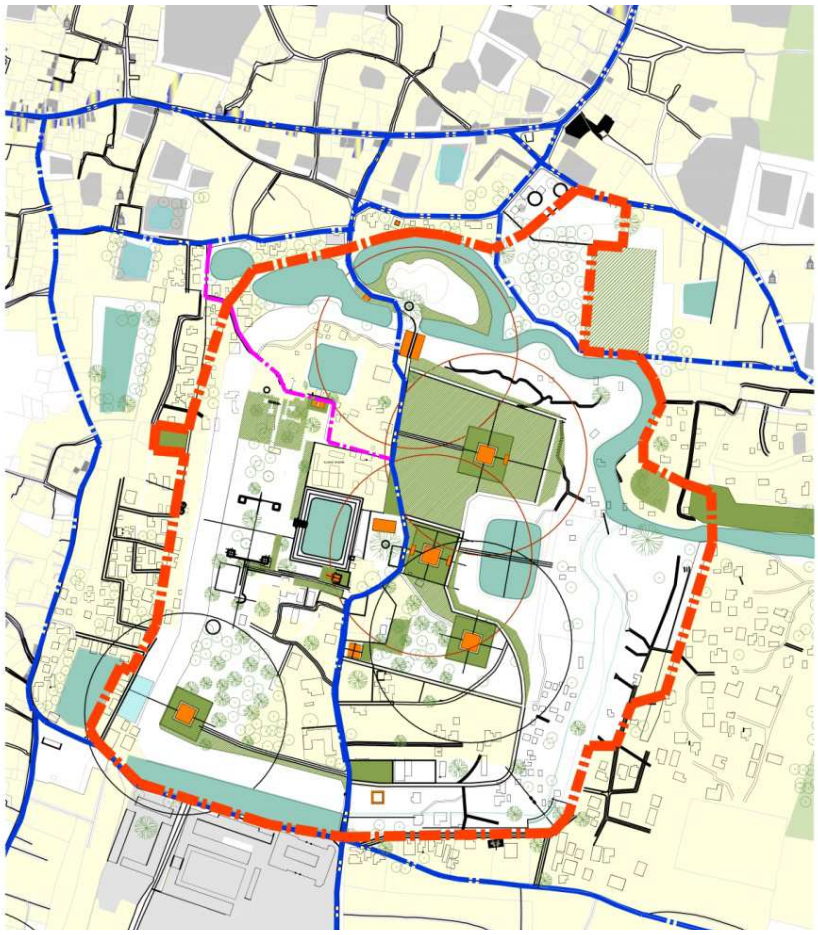
- Approach roads from both north and south are narrow , are insufficient to meet the increasing number of vehicles, no separate zones for pedestrians. also does not have any organised parking space.
- Vehicular road running right through the site causing air pollution which affecting monuments. Also vehicular activity inside heritage zone hinders safe and free movement around heritage structures.
- All the heritage structures are not properly & planfully connected.
- Roadside parking & unplanned parking zones create chaos at peak tourist period.

Inference;-

- Need for proper connectivity for the heritage precincts with wider roads and separate area for pedestrians .
- Need to restrict traffic inside the heritage precinct for an environment friendly development. Alternative vehicular roads can be thought of.
- Need for organised parking area near entrance to the zone.

PATTERN & FORM

- Area is organically developed and not properly planned.
- Many structures within 100 m radius of ASI protected monuments.
- Encroachments in the form of hutments over the mounds.
- Unorganised craft outlets near the temples.



Plan showing organically developed layout of the area.

Park boundary blocking view of monument.
Source : Author

Unorganised craft outlets.
Source : Author

Unorganised craft outlets.
Source : Author

Structures close to monuments.Source : Author

Analysis;-

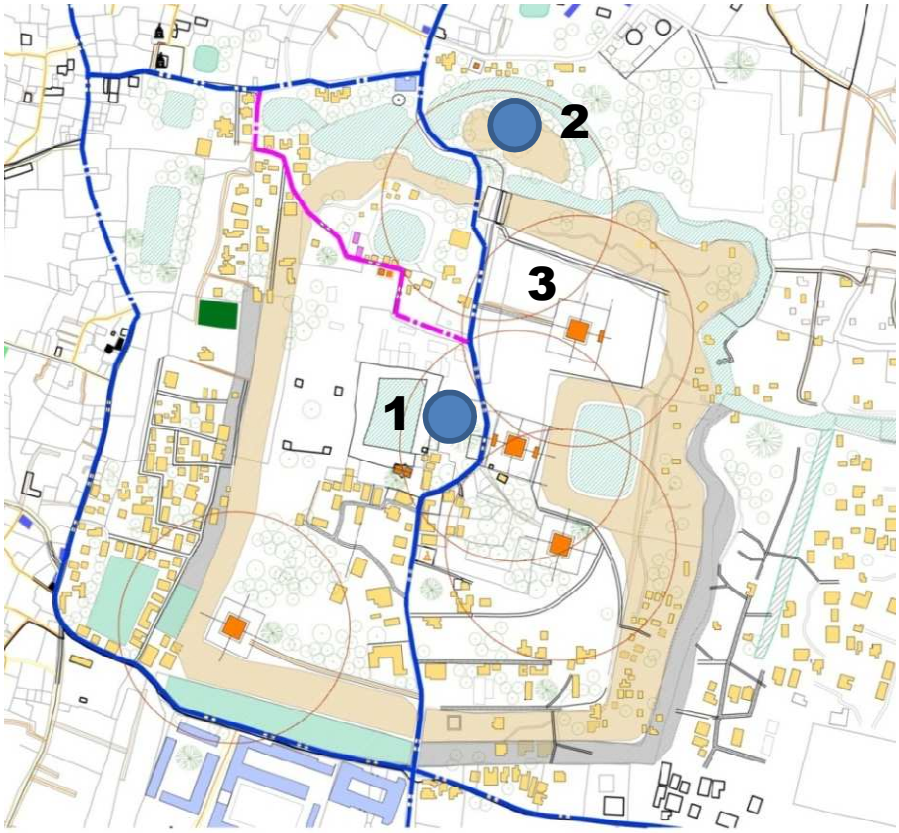
- The view of monuments are obstructed by various unplanned structures for example by high boundary wall off Gardarwaja park or informal commercial settlements.
- The temples in use are well maintained but there are other historic structures lie neglected and uncared for.
- Typically the built form of the town is not obtrusive in scale with the monuments.

Inference:-

- Stricter heritage controls in terms of street frontages and heights need to be put in place to promote homogeneity and lack of incongruence in new developments.
- Restoration work is much needed to all the historical landmarks to bring back its identity and heritage value.
- Need for replanning of road layout to have better view and interconnectivity. Roads can be regularised.

ACTIVITY

▪ Other than tourism two regular activities happen here, one is annual cannon fire event which is attended by large number of people. The second one is regular worship at Mrinmoyee temple. Durga Puja at this tenple is the oldest puja in Bishnupur and attended by large no of people.



Analysis

▪ A large number of people attends the annual activity of cannon fire causing damages to the heritage precinct.
▪ Devotees visits Mrinmoyee temple all around the year .
▪ The area lacks proper toilet facilities or refreshment area.
▪ Informal shopping areas are not organised.

Inferences :-

▪ Vacant unused areas can be taken into account as activity zone for prospective tourism development plan in a sustainable manner.
▪ Sticker vigilance is needed during festival time or peak tourist season.

1. Mrinmoyee temple – open to public all over the year.
Source : Author

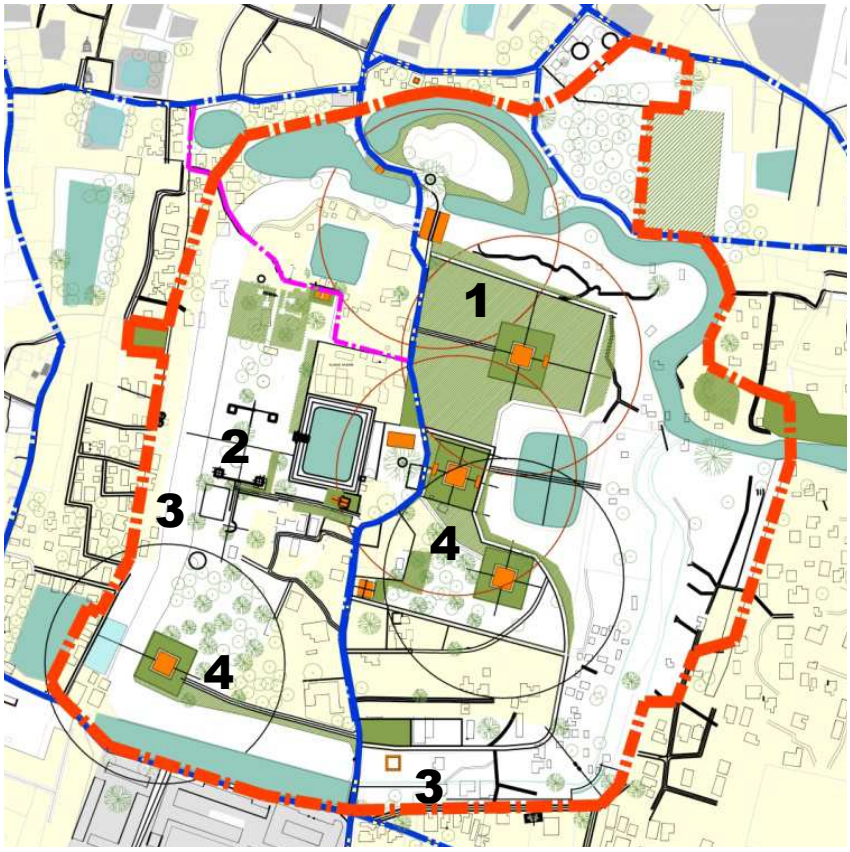
2. Annual event- Cannon fire on Astami, open to public

3. People relax at Gardarwaja park

https://www.top-rated.online/cities/Vishnupur/place/p/4882835/GARDARJA+PARK

SPACE

- There is one public park near Gardarwaja being used by both tourists and residents of Bishnupur.
- Lots of spaces all around the Rajdarbar area is lying vacant or unused. Some are disputed property.
- Encroachment is a common phenomenan for these vacant areas.



1. Gardarwaja Park. Source : Author

2. Unused vacant spaces around Hawa Mahal. Source : Author

3. Unused moat and mound areas. Source : Author

4. Unorganised encroached informal commercial areas. Source : Author

Analysis

- Gardarwaja park is not well mentained.
- Thyere are lots of vacant spaces around Hawa mahal & surroundings lying unused or underused.
- Lack of peoples surveillance often calls for antisocial activities.
- Vacant spaces of Moats are becoming dumping ground .
- Unorganised settlements are coming up due to lack of surveillance from authority and proper planning

Inferences:-

- Need for proper design intervention to accommodate this unused spaces into tourism development plan.
- Moat area can be reclaimed by different public usages in a sustainable manner.
- Stricter controls need to be put in to mentain the public areas specially during festival time or peak tourist season.

CONCLUTION

Landform

- Moats and mounds should be conserved & can be taken into account for prospective tourism development plan in a sustainable manner.

Movement

- Need for proper connectivity for the heritage precincts with wider roads and separate area for pedestrians .
- Need to restrict traffic inside the heritage precinct for an environment friendly development. Alternative vehicular roads can be thought of.
- Need for organised parking area near entrance to the zone.

Pattern

- Stricter heritage controls in terms of street frontages and heights need to be put in to promote homogeneity and lack of incongruence in new developments.

Form

- Restoration work is much needed to all the historical landmarks to bring back its identity and heritage value.
- Need for replanning of road layout to have better view and interconnectivity. Roads can be regularised.

Activity

- Vacant unused areas can be taken into account as activity zone for prospective tourism development plan in a sustainable manner.
- Sticker vigilance is needed during festival time or peak tourist season.

Space

- Need for proper design intervention to accommodate this unused spaces into tourism development plan.
- Moat area can be reclaimed by different public usages in a sustainable manner.
- Stricter controls need to be put in to mentain the public areas specially during festival time or peak tourist season.

DESIGN GUIDELINES

Landform

- To conserve moat & mound ,to be taken into account for prospective tourism development plan in a sustainable manner.
- To reclaim moat and mound area , to be used as public spaces in a sustainable manner.
- To use dry moats as public park keeping a n water channel for rainy season.

Movement

- To create proper connectivity for the heritage precincts with wider roads and separate area for pedestrians .
- To trestrict traffic inside the heritage precinct for an environment friendly development. .To introduce echo friendly mode of transport

To encourage pedestrian movement, To introduce echo friendly walkways.

- To introduce alternative vehicular roads to combat the restriction of traffic inside the heritage precinct.
- To create proper parking areas.

Pattern

- To regularize Internal road layout with proper signage.
- To take advantage of monument view as much as possible.
- To organise Informal shopping outlets in a ninviting and inclusive pattern.

DESIGN GUIDELINES

Form

- To have stricter heritage controls in terms of built forms, street frontages and heights to promote homogeneity and lack of incongruence in new developments.
- To introduce built form camouflaging nature following all A.S.I rules and regulations.
- To propose Restoration work for all the historical landmarks to bring back its identity and heritage value and finally to incorporate them in tourism development proposal.
- To remove unplanned built form close to the monuments.

Activity

- To make the best usage of activities in the informal and formal open spaces to give a new identity.
- To control the development of unorganised buildings in open spaces to maximize the usability.

Space

- To make the best usage of open spaces in a sustainable manner and to use them as promoter of tourism.
- To reclaim the moat and mound area and to introduce sustainable public areas around them.
- To take advantage of existing vegetations in a sustainable way.

05

DESIGN IMPLEMENTATION

DESIGN CONCEPT

Area Level :

- Creating **good accessibility** to the heritage precincts with wider and regenerated roads.
- Creating a **tourist facilitation centre** with good accessibility to the highways.
- **Conservation and revitalization** of the existing ecology of the area. An opportunity to promote public awareness for environmental responsibility and ecological conservation.
- Creating an **eco heritage trail** connecting all heritages and interesting landforms

Site Level :

- Creating an **Archaeological park** at the heritage precincts of Rajdarbar area.
- Creating an **eco-friendly** neighbourhood amidst the dense urban fabric that will be a self sustainable development.
- **Restrict** traffic within the precinct. Only **Eco-friendly mode of transport** to be used within the campus. Creating road layout with legibility and vista view.
- Creating **alternative** road network .
-
- Creating **public spaces** in all vacant spaces all around the moat.
- **Reclamation of Moat & Mound** around Rajdarbar area, regenerating with **public spaces.**
- Removal of encroachments from restricted & sensitive area, opening up **views**.
- Adaptive re use of **Hawa Mahal ,** to be regenerated as an O.A.T to organise **Light & Sound Show .**
- Neglected & ruined monuments to be included as **Tourist attraction point**.
- **Low height** built form, **camouflaging with nature** to be provided for proposed public facilities.

06

CONCLUSION

CONCLUSIONS

ISSUES

- Unplanned Urbanisation- Urbanization is a common and inevitable occurrence everywhere. But an unplanned one is potential for loss of historical areas that are the heritage value to people WHICH Bishnupur is facing. The identification, conservation, and management of historic areas should be to plan properly to focus on physical characteristics as well as sociocultural and economic values.
- Enhancement of the tourism Industry of the region- Tourism is now considered as an industry of worldwide significance. Bishnupur with its rich architectural and cultural diversity, coupled with the wealth of natural elements is an interesting tourist destinations. But the tourism was never planned and potential of Bishnupur was never fully utilised.
- Lack of integration of Cultural & Natural heritage into tourism plan.- The cultural & natural heritage resources have not been taken into account. The artisan communities have not been made a part of the tourism.

CONTRIBUTION

- Historic town with its heritage value has a significant role in understanding history and culture. To assess the present , it is important to know the past of the places and events that have affected and that continue to affect our collective thinking. As communities lose more traditional forms of economic developments , tourism can be a catalyst to revamp local economies.
- Developing a place as heritage city is itself a challenge for the governments and its residents both. Without disturbing their piece or natural way of life , there are lots of effort required to emerge a heritage town. The present study is to determine the role of government and community involvement in developing a heritage town. The study examine all the socio cultural and economic factors affecting the life of inhabitants.
- The aim is to highlight community's involvement and signify it as a major aspect of sustainable tourism development of any place. So the study focuses on the interest and involvement of local inhabitants towards tourist arrival, their viewpoint and support to revitalize the originality of the place. The local culture is also a major supportive issue for developing heritage cities. The study present a overall perspective of inhabitants and tourists about the heritage tourism development in small towns like Bishnupur in India.

FUTURE SCOPE

- The future agenda for cultural heritage management relies on an all inclusive approach that embraces transition and change. O the one hand, heritage in the urban context comprises object s and processes that are valued by people and there-fore the management of such heritage should cover objects and processes, as well as the human factor. On the other hand, the future of heritage management is expected to become increasingly more about transition management : integrative, and gradually working towards common ambitions through innovation, integration, and co-evolution. When conservation is defined as transition management, it is put in a wider perspective of current and future needs of socioeconomic and urban management, and common objectives can be strived for, which will be likely to benefit the redevelopment and the heritage property.

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