ENHANCING THE LANDSCAPE EXPERIENCES IN THE PILGRIMAGE ROUTES: CASE OF VAISHNO DEVI PILGRIMAGE

MASTER OF LANDSCAPE ARCHITECTURE

Idha Sharma
2014MLA016

SCHOOL OF PLANNING AND ARCHITECTURE, BHOPAL
NEELBAD ROAD, BHAURI, BHOPAL – 462030

MAY 2016

ENHANCING THE LANDSCAPE EXPERIENCES IN THE PILGRIMAGE ROUTES: CASE OF VAISHNO DEVI PILGRIMAGE

A DESIGN THESIS

Submitted
in partial fulfillment of the requirements for
the award of the degree of

MASTER OF LANDSCAPE ARCHITECTURE

By

Idha Sharma
2014MLA016

Under the Guidance of
Thesis Committee

SCHOOL OF PLANNING AND ARCHITECTURE, BHOPAL
NEELBAD ROAD, BHAURI, BHOPAL – 462030

MAY 2016

Declaration

I Idha Sharma , Scholar No. 2014MLA016 hereby declare that the thesis entitled 'Enhancing The Landscape Experiences In The Pilgrimage Routes: Case Of Vaishno Devi Pilgrimage' submitted by me in partial fulfillment for the award of Master of Landscape Architecture, in School of Planning and Architecture Bhopal, India, is a record of bonafide work carried out by me. The matter embodied in this thesis has not been submitted to any other University or Institute for the award of any degree or diploma.

25-05-2016   Idha Sharma

Certificate

This is to certify that the declaration of Idha Sharma is true to the best of my knowledge and that the student has worked for one semester in preparing this thesis.

RECOMMENDED

Thesis Committee

ACCEPTED

Ar. Savita Raje   Dr. Rachna Khare

Professor and Coordinator   Head Department of

Master of Landscape Architecture   Architecture

<u>ACKNOWLEDGEMENT</u>

I would like take an opportunity to thank my friends and colleagues Rahul Khandelwal, Virat Bhute, Balaji Chari V, Rick De and Dishant Bhatia for their guidance and support.

I am thankful to my family, particularly my father and mother, Ajay Sharma & Neelam Sharma , who have patiently supported me throughout my life and were involved in my thesis data collection as well and helped me out with anything that I've ever needed.

I am grateful to my brother and sister in law, Prashant & Apurva, for always being there for me and supporting me in my endeavors.

I would also wish to extend my appreciation to those who could not be mentioned here but played their role in some way or the other.

Lastly I would like to thank my Late Grandparents and the God Almighty for showering their choicest blessing upon me, without which I won't have reached where I am today.

<div align="right">Idha Sharma</div>

ABSTRACT

A Pilgrimage is a journey or search of moral or spiritual significance, a journey to a shrine or a place of importance to a person's beliefs and faith.

Usually the places of pilgrimages help in connecting with the divine. They are serene, secluded environments which help in connecting with the divine. These places are generally rivers, mountains, sacred groves, forests, etc.

It is not only the divine, but the place as well which help in the purification of soul and being at peace to one self. The outer environment plays an equally important role. This can be defined by Biophilia. 'Biophilia' is the term coined by Edward O. Wilson to describe what he believes is humanity's innate affinity for the natural world. People find trees that are climbable and have a broad, umbrella-like canopy more attractive than trees without these characteristics. They would rather look at water, green vegetation, or flowers than built structures of glass and concrete.

The thesis is to enhance the landscape experiences in the pilgrimage route of Vaishno Devi Pilgrimage, which is falling into the trap of modernization and losing its traditional character of the Pilgrimage Route.

The studies involve not only the studies of the visible landscape layers but also the layers which are beneath and are as important part of landscape as the visible ones. The thesis shall propose design interventions using factors like sitting, sound, light and borrowed landscapes. The elements like the Tangible and intangible heritage shall be revived. The intent is to restore and revive the cultural route of the Vaishno Devi Pilgrimage, which has changed manifold during the course of time.

The proposals shall be to create like environments, using vernacular materials. The planting chosen is foliage, fruiting and flowering. Foliage shall give a feeling of enclosure, fruiting shall invite birds and help create sense of hearing and flowering shall enhance the sense of smell. This shall in terms help in elevating the senses and help in connecting with both the outer and inner world.

Contents:

Copyright@SPA Bhopal

List Of Figures:

List Of Tables:

List Of Plates:

List Of Maps:

introduction

"Life is a pilgrimage, but sometimes it takes a pilgrimage to discover life."

- Matthew Kelly
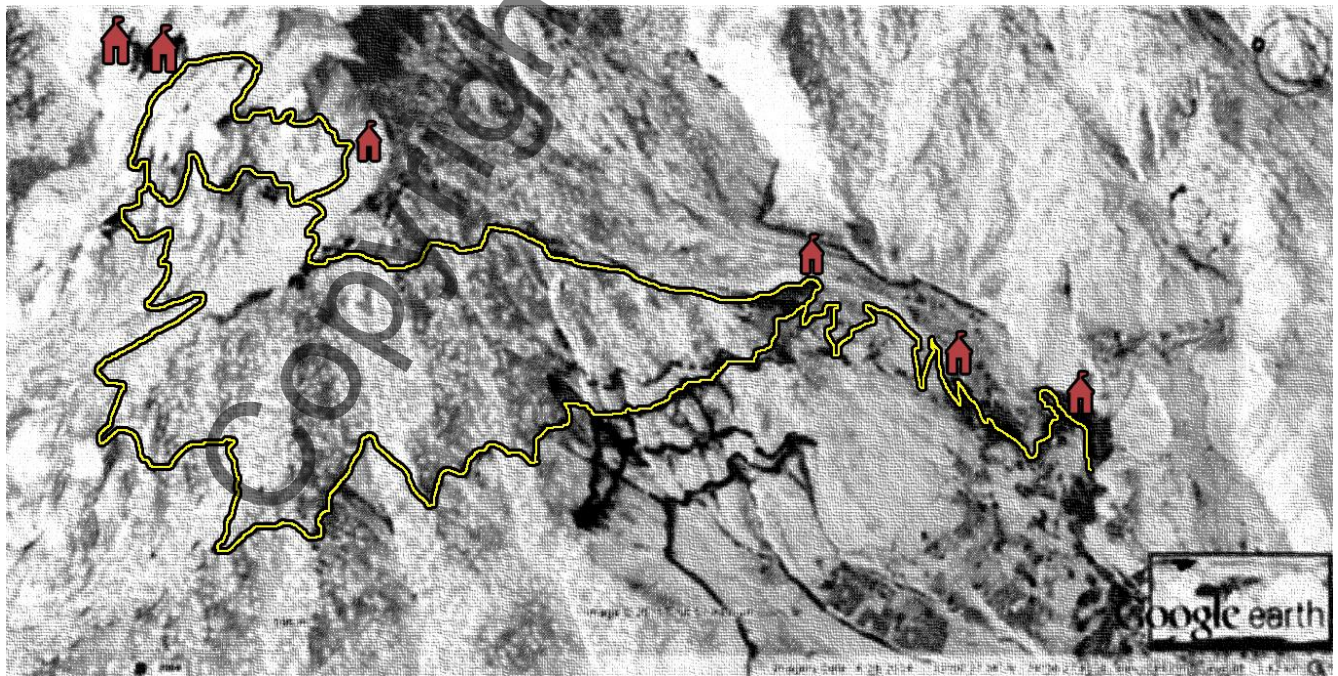
1. Introduction:

1.1 Background:

A Pilgrimage is a journey or search of moral or spiritual significance, a journey to a shrine or a place of importance to a person's beliefs and faith. At times it can be a place of spiritual importance as- a place of birth or death of founders/saints; a place of the connection with the divine; places where miracles are performed and witnessed and locations where deity is said to live. These places have both tangible and intangible heritage in the form of temples and shrines with their own spiritual benefits, such as - to be healed; have questions answered and achieve spiritual benefits. The person making this journey is called a Pilgrim.

As a common human experience, pilgrimage has been proposed as Jungian archetype by Wallace Clift and Jean Dalby Clift.

1.2 Site Introduction:

1.2.1 The Vaishno Devi Pilgrimage : The site is located on Trikuta Hills, where the holy caves are nested, in Katra town, in the Reasi district of the state of Jammu and Kashmir in India. Katra, the base camp of the Shrine is located in the foothills of the Trikuta Mountains, about 42 km from the city of Jammu, and 35km from Udhampur. It is the second largest Pilgrimage Shrine after Tirupati in terms of number of devotees and income generation. The main Shrine is located at an altitude of 5200 feet and a distance of approximately 14 km from Katra.

Katra can be reached through the nearest railway station at Katra, through bus from NH144A and by air, from nearest airport in Jammu, the winter capital of the state.

1.2.2 Timeline: The caves were discovered by Pandit Shridhar, 700 years ago, who resided in Hansali village, 2 kms from Katra. The Shrine was looked after by his family, the baridaars and the kings.

Later, in 1986, a Board was made and today, the Pilgrimage is taken care of by the board itself- Shri Mata Vaishno Devi Shrine Board.

Every day, on an average, 30-35 thousands pilgrims visit the Shrine.

1.2.3 Modes of Pilgrimage: Majorly, pilgrims prefer to complete the journey by trekking, but for people with health issues, other sources are also available, like human palanquin- *palaki*, ponies & helicopter. In the year 2015-2016, only 3.65% people opted for Heli services.

Figure 1. 1 Location of Pilgrimage Route and Shrine on Trikuta Hills

1.3 Aims & Objectives:

1.3.1 Aim: To Enhance the Landscape Experiences in the Pilgrimage
Routes: Case of Vaishno Devi Pilgrimage.

1.3.2 Objectives:
1. To understand the significance of cultural and pilgrimage routes.
2. To understand Vaishno Devi Pilgrimage as a Cultural Route, its natural settings in the past, changes during the course of time and present conditions.
3. To identify the tangible and intangible elements associated with the route.
4. To identify the agents responsible for degradation and their impact.
5. To identify the critical areas in the route where Landscape Design Interventions can be established.
6. To propose Design Interventions in the identified areas, in order to revive and create memorable landscapes.

1.4 Methodology:

Objective 1	To understand the significance of cultural and pilgrimage routes .
Methodology	➢ Read the literature on routes in history and mythology and understand their physical and cultural significance. ➢ To understand the role of tangible and intangible heritage and elements in defining the route.

Objective 2	To understand Vaishno Devi Pilgrimage as a Cultural Route, its natural settings in the past, changes during the course of time and present conditions
Methodology	➢ Understand the significance of Vaishno Devi Pilgrimage Route and changes in the route with time. ➢ Topographical study and mapping of Trikuta hills - Geology, Hydrology, Geomorphology, Slope, Physiography

Objective 3	To identify the tangible and intangible elements associated with the route.
Methodology	➢ Read the history & mythology related to the route in literature and folklores. ➢ To understand and revive the imagined landscapes.

Objective 4	To identify the agents responsible for degradation and their impact.
Methodology	➢ Identify the causes of degradation and their possible impact on the route. ➢ Propose methods to minimize the effects of degradation.

Objective 5	To identify the critical areas in the route where Landscape Design Interventions can be established.
Methodology	➢ To analyze and find areas that could help in connecting and reviving the cultural significance. ➢ Areas which offer the scope to revive the intangible elements.

Objective 6	To propose Design Interventions in the identified areas in the route, in order to revive and create memorable landscapes.
Methodology	➢ To propose design interventions using factors like sitting, sound, light and borrowed landscapes. ➢ To propose measures to prevent degradation.

1.5 Expected Outcome:

1.5.1 To understand the changing picture of pilgrimage route into a commercialized tourist destination and how the interaction of people with the surroundings has changed, so as to revive the traditional pilgrimage routes.

1.5.2 To understand how excessive pressure on the ecology because of human intervention can degrade the environment and propose measure to tackle the same.

1.5.3 To understand how the routes which have been paved over with modern materials fit into its significance and propose design interventions to integrate the historicity and sanctity of route.

literature study

"Faith is not the clinging to the shrine but an endless pilgrimage of the heart."

- Abraham Joshua Hesche

2. Literature Review

2.1 Introduction:

Pilgrimage characteristics are defined by their location, which are generally calm and serene environments, situated in secluded areas, like thick forests, high in mountains. The movement of pilgrims creates personal and universal maps of the ritual spaces, involving vast amount of territory and geometries influenced by the local topography, resulting in evolution and maturity of the Pilgrimage, in the form of Pilgrimage Routes.

The Cave   The Mountain   The River   The Tree

The Temple   The Path   The Garden Grove   The Stone Arrangement
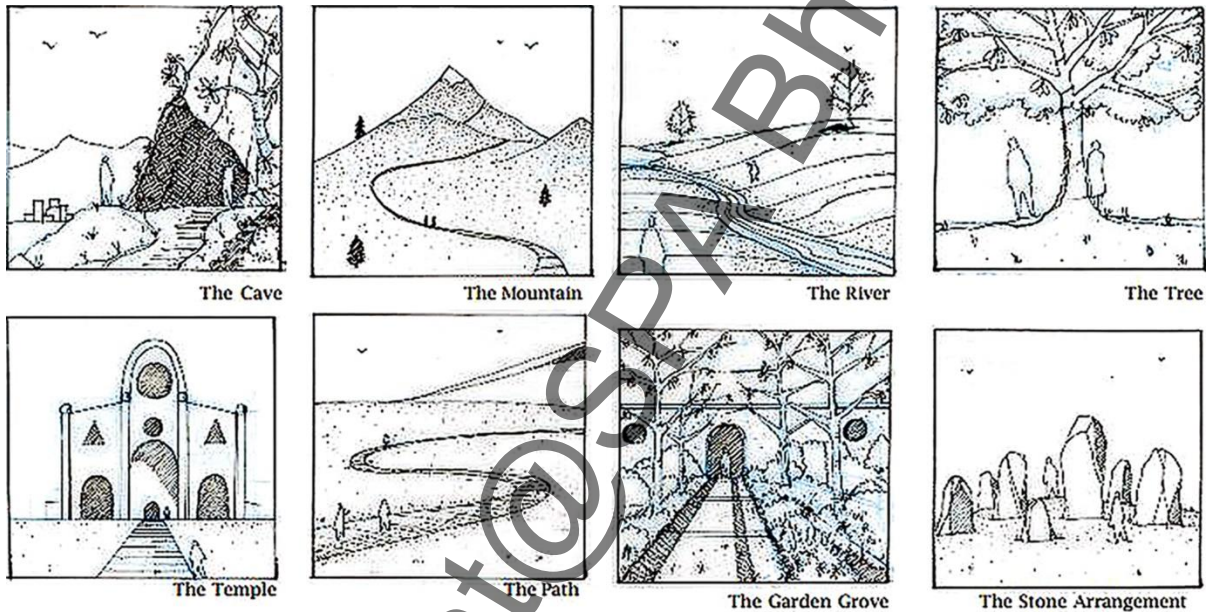
Figure 2. 1 Concept of Pilgrimage

2.2.1 Idea of Pilgrimage Across Globe:

Jewish Sacred Space: Jews were particularly influenced by their geographical self-identification as a mountain people, developing the concept of vertical sacredness, in the form of sacred mountains. But when temple was built, mountains where replaced as sacred places. And when temple was destroyed, their concept shifted to Torah.

Christianity and Sacred Spaces: They believed in the idea of specific locations that were associated with important individuals and their places of teaching, healings and martyrdom.

Islam: They have sentimental and historical attachment to certain geographical locales. Mecca being one of the most important pilgrimage.

<u>Hinduism:</u> The Hindu's admiration for mountains is evident in the architectural arrangement of Hindu temples, which take over mountain forms. Hindus also worshipped sacred groves, seas and lakes, and, especially, rivers. The Hindu concept of *tirtha* is interesting: the word means literally a bridge, or crossing to the "other shore," or sacred world— essentially a pilgrimage.

<u>Buddhism:</u> There are four sacred mountains in the Chinese Buddhist tradition; each has sacred force associated with the earth itself, known as dragon current. Dragon currents of two kinds, yin and yang; mountains embody yang, or male, and yin river, or female.

<u>2.2.2 ICOMOS Charter on Cultural Routes:</u> The International Scientific Committee on Cultural Routes (CIIC) on 4th October'2008 says 'Cultural Routes represent interaction, dynamic, and evolving processes of human intercultural links that reflect the rich diversity of the contributions of different peoples to cultural heritage.

These cultural routes are also associated with Pilgrimage as Pilgrimage Cultural Routes.

Christianity
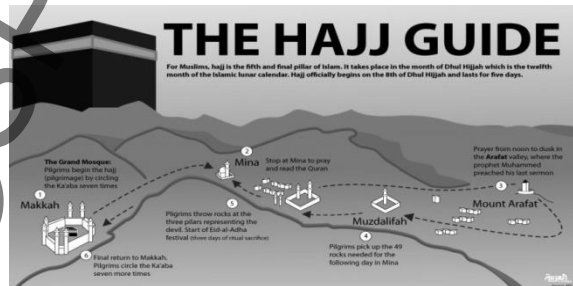
Hajj, Islam

Mount Kailash, Hinduism

Buddhism

Plate 2. 1 Pilgrimage Across Globe

<u>2.3 Pilgrimage in India:</u>
According to the ancient narration of the Rig Veda, dated ca 13th century BCE, the notion of tirtha (sacredscape) symbolises at least four connotations in ancient Hindu literature:
(i) a route going to a place where one can receive manifestive power;
(ii) the bank of a river where one can take holy dip as rite of purification;

(iii) a sacred site where lies the power of manifestation; and

(iv) the religious territory which became sacred due to divine activities and work of gods.

The first major Hindu treatment of tirthyatra is in the Tirthayatra Parva of Mahabharata, where Pandavas, during their forest sojourn, undertake a circuit of many tirthas.

On their pilgrimage they visit the various tirthas of river, mountains and forest.

The validity of the statement is proved correct by the number of temples and shrines built by them across India.

Also, the first mention of Goddess is in Mahabharata.This was mentioned by Arjun when he prayed to Mother Goddess on advise of Krishna he said "Jambookatak Chityaishu Nityam Sannihitalaye". This means prayer to Shakti who resides in the mountains of Jamboo.
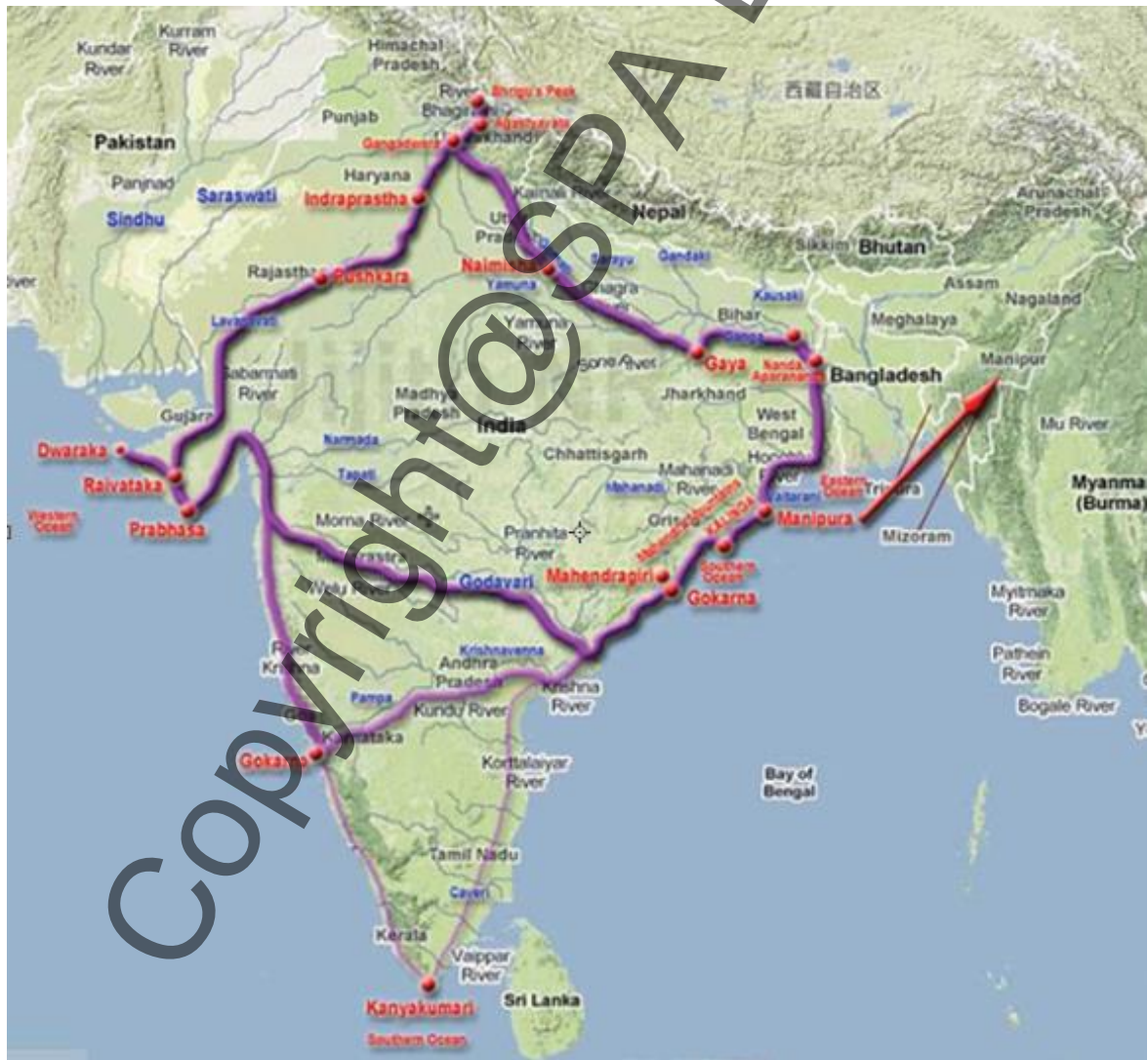
Figure 2. 2 Pandava's Pilgrimage Sites in India

India is a vast country. Religious Tourism is growing at an exponential rate. Nearly 87% of travelers have undertaken a pilgrimage or traveled for religious reasons, at least once in their lives. While 57% people travel annually for Pilgrimage. People from North go to South, from East to West, majorly for Pilgrimage, connecting India with the Sacred Geography of rivers and mountains.

The most visited Shrines in India include Tirupati, Shirdi, Vaishno Devi, Golden Temple & Ajmer Sharif Dargah.

2.4 The Elements of the Pilgrimage Routes:

A pilgrimage consists of certain elements and rituals which help complete the pilgrimage. It is these elements which differentiate the pilgrimage route from any other route. Like certain pilgrimage starts with a bath, hence a sacred water body is present on the onset of the pilgrimage.

Similarly the presence of the sacred symbols or elements related to mythology and history, help one bind to the pilgrimage.
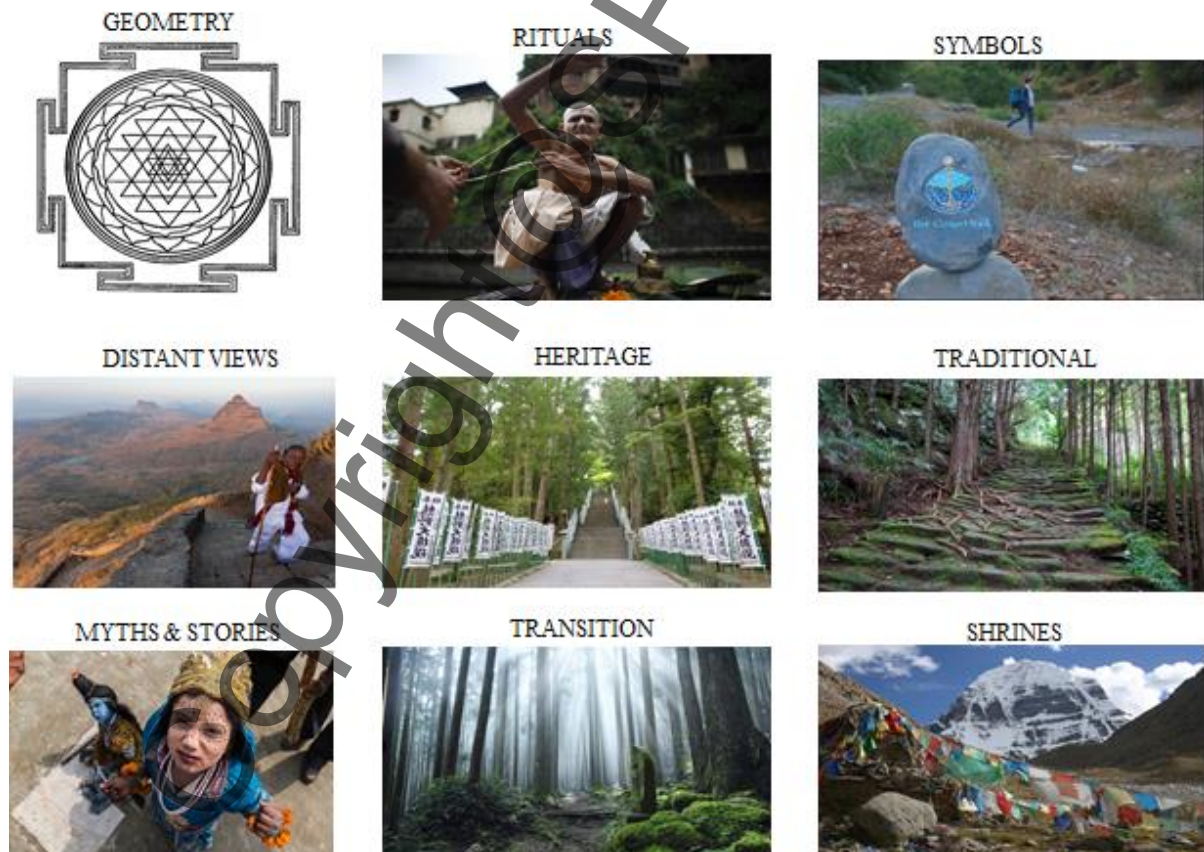
Plate 2. 2 Elements of the Pilgrimage Routes

2.5 Landscape and Pilgrimage:

Landscape is a complex phenomenon which evolves continuously through time and space. It is a reflection of both natural processes and cultural changes throughout time. Landscapes can be a product of either only natural processes (natural landscapes) or human intervention on natural ecosystems (cultural landscapes).

The Pilgrimage Route is an example of cultural landscapes, which evolved and developed with the interventions, with the passage of time. But the rapid urbanization and development processes, change has become an inevitable outcome for our landscapes in global scale. Unfortunately, landscape change often occurs in negative ways, with the loss of diversity and identity.

The cultural significance of the Pilgrimage Routes and Shrines is declining with modernization. A pilgrim go to pilgrimage for the purification of soul, it is both an inner and outer journey. Here the role of the pilgrim's perception and its effects on spatial behavior and attitudes is very important.

2.6 Landscape Experiences:

If environments are shaped by people, people are inspired and shaped by their environments as well. Knox and Marston (2003) points out that "different cultural identities and status categories influence the ways in which people experience and understand their environments".

For a pilgrim, both inner and outer journey are important. The outer journey is defined by the spatial information, which is received through many of our senses : seeing, hearing, smelling and feeling and sight, while sight is assumed to be the most valued sense. More than 80% of our sensory input is through sight (Porteous, 1996).

For Enhancing the Landscape Experiences in the Pilgrimage Routes, it is important to understand all the aspects of cultural landscapes, which involves the Natural Systems of the Route, its location, topography, vegetation, water courses and features ; the Spatial Relationships including the circulation or the *parikrama*, the views and vistas and the historical and mythological references associated with the Pilgrimage.

It also include the built structures in the form of site furnishings, materials, hardscapes and the softscapes.
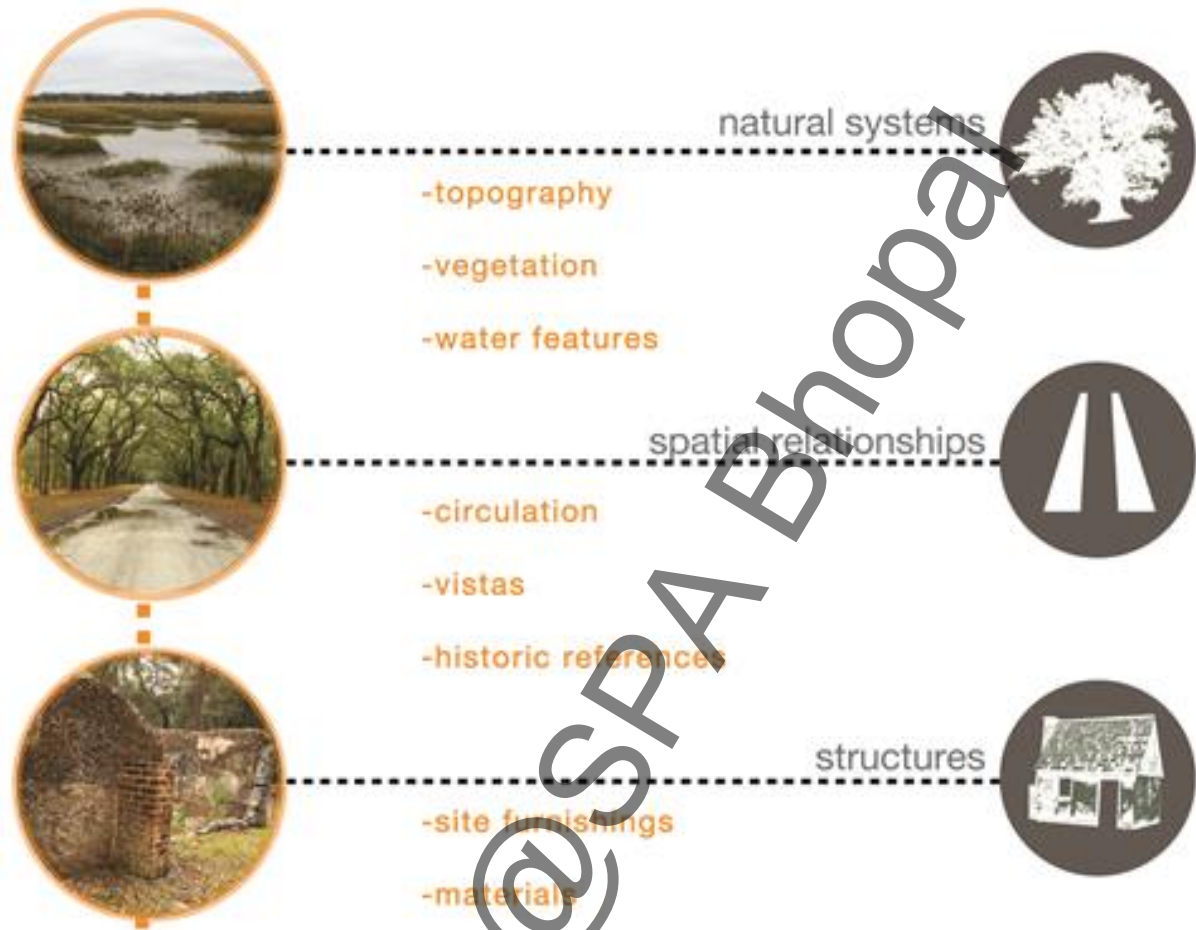
Figure 2. 3 Landscape Design Features In Cultural Landscapes

2.7 Idea Of Pilgrimage In Hindu Culture: Literature Review

2.7.1 Holy Places And Pilgrimage In India: Emerging Trends And Bibliography- By Rana P.B. Singh

According to Rana, in the Hindu tradition, a pilgrimage journey is a sacramental process which has two aspects.

It is a spatial symbol of the progressive participation of a person in the realm of spiritual sphere (say faithscape); and also it theoretically establishes, actually and psychically, a two-way relationship between a pilgrim and divine being (God) — thus forming a spiritual concern. This tradition is similar to the Catholic tradition (Rudhyar 1983: 238).

According to the ancient narration of the Rig Veda, dated ca 13th century BCE, the notion of *tirtha* (sacredscape) symbolizes at least four connotations in ancient Hindu

literature:
(i) a route going to a place where one can receive manifested power;
(ii) the bank of a river where one can take holy dip as rite of purification;
(iii) a sacred site where lies the power of manifestation; and
(iv) the religious territory which became sacred due to divine activities and work of the god/s.

In a broad perspective three groups of researches were carried out in pilgrimage studies:

(a) the *ritual-spatial* context of sacred places at various levels of social organization — individual, family, society, and cultural group — and in different contexts and ways;

(b) the growth of *meanings and feelings* attached to sacred places, taking history as a means to elucidate the sequence of their existence, continuity and maintenance; and
(c) a *typology of sacred places* in terms of contrasts, similarities and degrees of manifested powers (cf. Lawrence 1992 : 228-229).
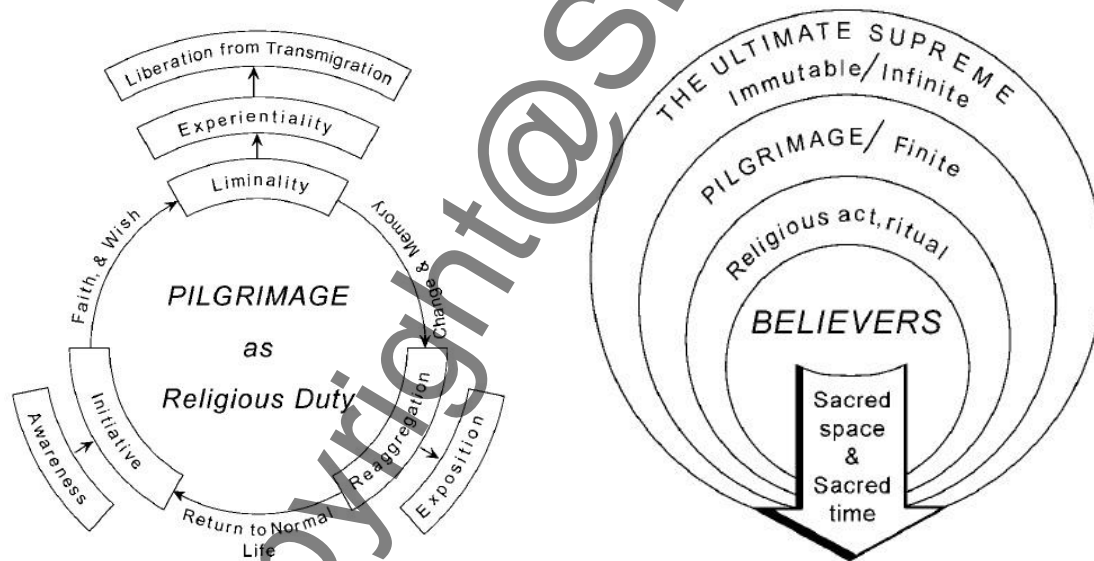
Figure 2. 4 Pilgrimage as Religious Duty

On the basis of the emerging literature, eleven broad focal themes are categorized that cover the wide spectrum of pilgrimage studies, viz.:

-*Pilgrimage Studies*: theories, emerging trends, sources of studies.

-*Conceptual Frame*: Sacrality and spiritual quest, environmental interaction.

-*Cosmic Purview and Sacred Ecology*: Sacred geometry, cosmic and pilgrimage mandala, archetypal view.

-*Historical Outline*: Origin and growth of sacredscapes, patronage and process.

-*Travel Genre*: Distance, cost, motivation, circulation, seasonality, density, mode.

-*Typology and Hierarchy*: Sacredscapes-pilgrimage- pilgrims —varieties, networks and linkages.

-*Sacred Time*: Auspiciousness and astronomy, calendars, time geometry.

-*Sacred Rituals*: Ritualization process — functions and meanings, festivities, economics, organizations.

-*Sacred Functionaries*: Followers, records, relationship, multi-religious performances, role and impacts.

-*Sacred Systems*: Organizations-sects, cults, traditions, cross-cultural contexts.

-*Heritage Preservation*: Sites and monuments, environmental ethics, ecological order, peace and feelings, awareness, perspectives and plans

2.7.2 India : A Sacred Geography – By Diana L. Eck

The author describes Hindu traditions of ritual and reverence is linked to places like Hill-tops, rock outcroppings, to headwaters and confluences of river, to pools and groves of forest, and to the boundaries of town and villages.

It is a crossing over, both internal and external, from darkness to light, from ignorance to knowledge. *Tirth* is a passage where the path one travels is more important than the goal.

The recognition of India as a sacred Landscape, woven together north & south, east & west, by the paths of Pilgrims, has created a powerful sense of India as Mother India, clearly signifying the interaction & unification among different regions of India.

It is not going to the *tirtha* which is transforming but going there and being there. *Tirthayatra* is rite, place is the power.

These are the places where barriers does not exist, be it caste, religion, region or any other.

2.7.3 Landscapes In India: Forms And Meanings By Amita Sinha

She explains the landscapes in India as a representation of cultural identity, mirror social order and inspire built forms. Traditional design principles offer an excellent example of how the artificial chasm between building and landscape design, largely a creation of modernity, can be bridged.

In her studies she also puts light on the Implication for the Pilgrimage Sites, which deals with environmental conservation and restoration.

The archetypal symbols, the sacred geometries, *Vastu Purusha Mandala* and decoding the symbols.

She also describes the Prospect- Refuge Theory and the importance of Sun movement in design.

IMAGINATION   ENGAGEMENT   ALIGNMENT
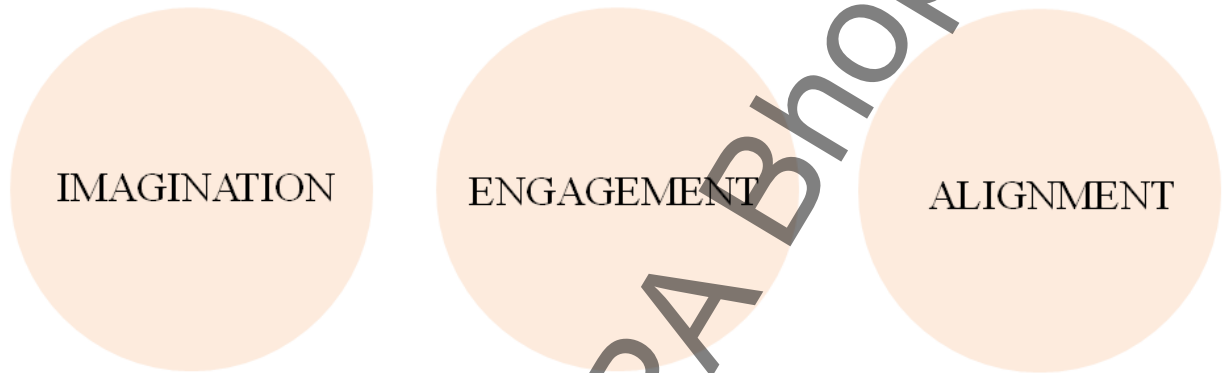
Figure 2. 5 The Concept of Imagined Landscapes

The landscape of the sacred is not so well defined today as it was earlier, it is lost somewhere. The idea of the author is to revive such landscapes as the imagined landscapes. Ones one imagine it, they are engaged with it and further aligned and associated with the landscape.

2.7.4 Hindu Shrines Of Western Himalayas By – Dr. Ashok Jerath

In his studies, Dr. Jerath studied Vaishno Devi in past and present scenarios. He through a sequence of studies described how the routes to the Shrine came into existence and became famous eventually. The role of kings in providing the pilgrims with paved paths, water points in the form of *Chhabils*, inns for resting and lighting along the path. The stories and their tangible and intangible elements related to them in the form of temples, step wells, traditional and vernacular architecture, the trees , animal sculpture, festivals and rituals associated with the shrine.

The importance of Banyan and Pipal in Hindu tradition, which can be witnessed through the intensive plantation of same in the ancient route starting from Jammu. It also tells about other plantation, like the Mango, Pine, Oaks, Poplar etc.

He also describes how the old route use to start from Jammu, as the pilgrims were mostly from Jammu and Punjab. The vehicular connectivity was not very good, hence starting journey from Jammu was the most popular option, with many other important shrines on the way, which people do not visit today.

With the improvements in construction and better connectivity, the pilgrimage today starts from Katra, the acting base camp of the pilgrimage.

The journey and the route both are decreasing with the increasing advancement.
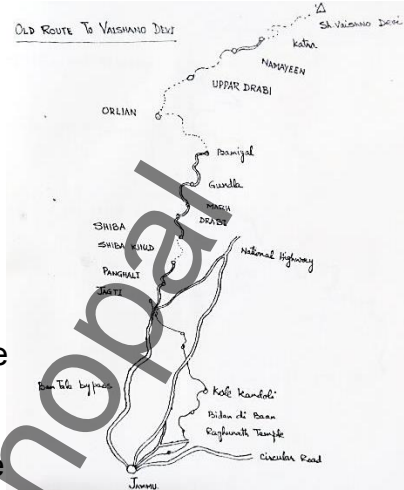
Map 2. 1 Dr. Jerath's Plan of Old Route to Shrine

2.8 Conclusion:

Different religions and sect have different idea of Sacred, but the common thing is serene, secluded environments, the faith attached with the place, which is mostly around water, in hills and forests, could be away from the city life in distant places, where a Pilgrim travel in order to find solace and the purification of soul.

Pilgrimage binds people with the traditions and rituals, with the symbols and the elements, which make these routes different from the rest.

case studies

"India has, for ages past, been a country of pilgrimages. All over the country, you find these ancient places, from Badrinath, Kedarnath and Amarnath, high up in the snowy Himalayas down to Kanyakumari in the south. What has drawn our people from the south to the north and from the north to the south in these great pilgrimages? It is the feeling of one country and one culture."

-Jawaharlal Nehru (First PM of India)

3. Case Studies:

3.1 World heritageThe Kii Mountain Range, Japan

It consists of steep mountains and valleys with elevations exceeding 1,000 meters. Its mystic nature and geography were so secluded that people regarded it as a sacred place of the gods. Consequently, the Kii Mountain Range now holds the three sacred sites:

Koyasan in the north, Yoshino-Omine in the southeast and Kumano Sanzan also to the southeast. Koyasan is known by many as the sacred place where Master Kukai first introduced Shingon Esoteric Buddhism from the Chinese Tang Dynasty. Yoshino-Omine is the area where a form of a mountain esotericism unique to Japan known as Shugendo was created. And finally the Kumano Sanzan represent the three historic Shinto shrines in Hongu, Shingu and Nachi all created to worship nature. In both historic and geographic terms, it is quite rare to see so many different sacred sites existing in this size of an area.

3.1.1 The nominated site consists of the following cultural qualities
The forested mountains
Pilgrim routes
Association with Shinto and Buddhism
Diaspora effect – the sites as models for other shrines,
temples and sacred sites
Inspiration for poets and painters
Documented use of the mountains

Plate 3. 1 The Kii Mountains Location Map , the Shrine & Route

3.1.2 Natural elements that make up the sacred mountains

In addition to many tangible cultural elements such as the buildings and compounds of the temples and shrines, many types of natural tangible elements associated with religious beliefs and activities exist on the site.

Some of them are distinctive natural objects and areas referred to below, including deep evergreen forests which cover the temple and shrine compounds, and sacred rocks and natural forests located on both sides of the pilgrimage routes. These sites where aesthetic practices are performed form outstanding cultural landscapes associated with a powerful sacredness.

Cherry trees in Yoshino-yama
Nachi waterfall and Nachi primeval forest
Koya-san Oku-no-in area
Omine Okugakemichi pilgrimage route
Kumano-sankei-michi pilgrimage route

Figure 3. 1 A Pilgrim Along the Route to Kii Mountains

Figure 3. 2 The Hyms and Sacred words on the Route

3.1.3 Intangible elements

Intangible elements, religious activities and traditional festivals held in the temples and shrine compounds are not strict components of the World Heritage Site. On the other hand, it is important to pay due attention to intangible elements, back-to-back with tangible elements. They include religious rites and distinctive lifestyles, customs and habits that reflect how the spiritual world is related to people's daily lives. In so doing, it is also important to clarify with which tangible element each of the relevant intangible elements is associated.

The sacred mountains in Japan, which are cultural landscapes borne out of the nature worship traditions of ancient Japan, have played significant roles under the influences of Buddhism, or the Shugen sect of BuddhistShinto asceticism, in the formation of the spiritual world of Japanese society. They have also been a bountiful resource for folklore and works of art. Because the cultural landscape of a sacred mountain consists of various types of components, ranging from the natural setting of the mountain itself to the

Plate 3. 2 Elements in the Pilgrimage

associated cultural elements, which are physically and/or spiritually interrelated with each other in a very complex manner, several difficulties or problems inevitably accompany their evaluation, preservation and management.

3.2 Braj Mandal

3.2.1 Location
The sacred landscape of *Braj* is associated with the god Krishna and covers 35 square miles at the juncture of three northern states—Uttar Pradesh, Rajasthan, and Haryana. The Yamuna River flows on its eastern edge and to the west are outlying spurs of the Aravalli Hills. Amidst the cultivated fields of wheat, millet, and sugarcane survive the natural landscape of forests, groves, and water bodies celebrated in myths and legends. The ancient city of Mathura is the largest urban settlement; an additional 600 hamlets and several small towns including *Vrindavan*, *Gokul*, *Nandgaon*, and *Barsana* make up the rest of the developed landscape.
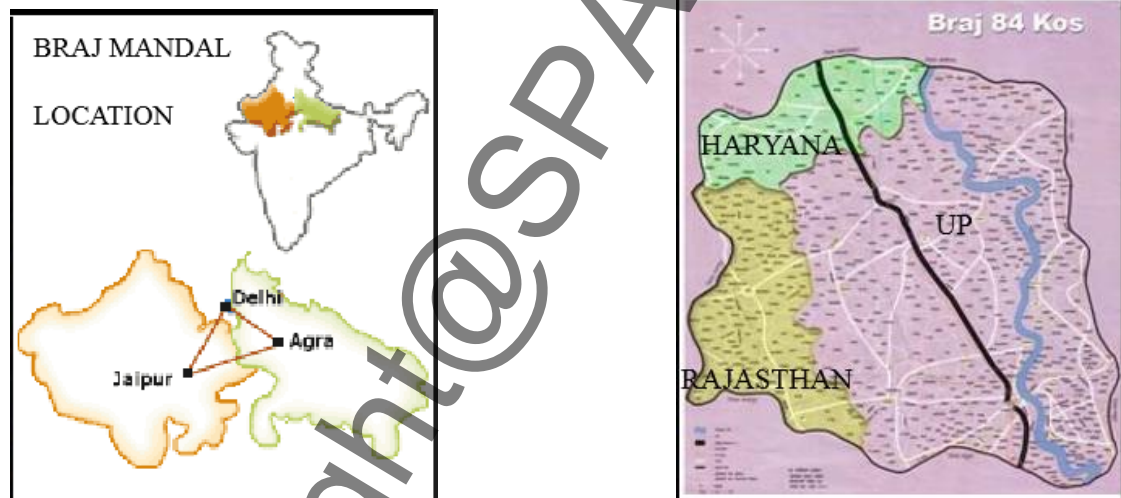
Figure 3. 3 Location: Braj Mandal

The journey consists of the circumambulatory tour of the sacred landscape through forests, groves, and ponds, as well as visits to the holy cities of Mathura and Vrindavan. Pilgrims trace the imagined *braj* mandala, popularly conceived as a lotus with its petals representing the twelve great forests surrounding Mathura where Krishna was born (Eck 2012).
Braj is derived from the Sanskrit root *vraja* meaning an enclosure of herdsmen, also as a place where cows wander, alluding to the nomadic character of the pastoral community.

3.2.2 *Govardhan* Hill
Near Mathura, is the *Govardhan* hill. The natural features of *Govardhan* Hill—its forest cover, flora and fauna, site hydrology—and its land use patterns that create a mosaic of fields, groves, and villages clustered tightly around tanks, are mapped.

The complex web of paths and trails with the main circumambulatory route around the Hill are traced and the visual and haptic experience of movement is represented in collages.

The planning and design proposals of *Govardhan* Hill are made to present it as a protected and managed heritage landscape zone. Certain measures are taken by the administration and the NGO called *Braj* Foundation in order to restore the landscapes of the past for today and tomorrow.

The measures include:

• For kund restoration it is necessary to do watershed assessment with slope analysis and map the hydrological regime with precipitation, surface run-offs, and evaporation rates

• For the listing, protection, and preservation of historic buildings, their visual documentation and measured drawings should be done

• For the listing and conservation of sacred sthalis, kunds, and vans, they should be first comprehensively documented

• For upgrading the visitor facilities, surveys of the number of pilgrims, their peak time visits, and requirements of lodging/camping are essential

• For involving local residents in the tourist economy and their participation in maintenance of public spaces, it is necessary to survey their socio-economic status, education level and skill.

Plate 3. 3 The Character of the Route

Govardhan literally meaning 'increaser of cattle' was originally a site for cattle worship by the local tribes, who feasted and circumambulated it with their cows during festivals. Myths can be divided into three categories: a) Krishna's lifting of the Hill and his veneration as Giriraj, b) of Govardhan Hill itself and c) Krishna's play with Radha and the gopis.

Janmashtami (Krishna's birthday) celebrated in the month of Shravan (August-September) The festival of Diwali in the months of OctoberNovember , ed to the devotees as mahaprasad. The festival of cows, Gopashtami is celebrated on the

eight day of Kartik (November December) when they are bathed, decorated, worshipped, and fed.
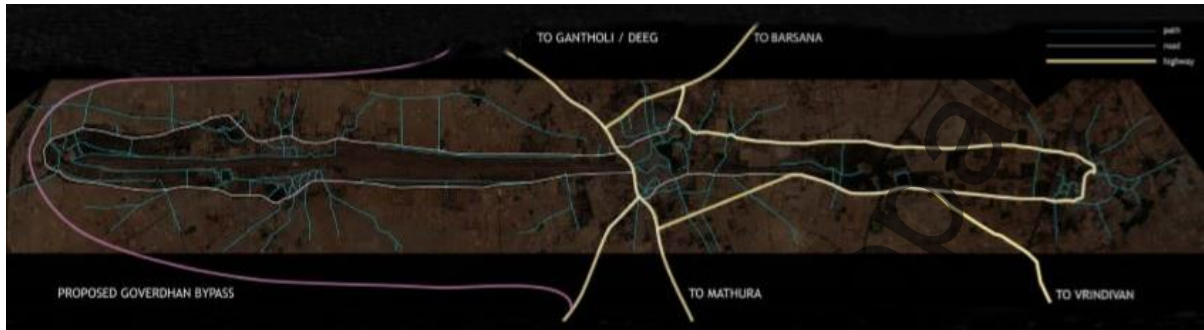
Figure 3. 4 Circulation Network – Govardhan

The circulation network is hierarchical ranging from broad state highways, major road around Govardhan, narrow town streets, to tiny village lanes.

Figure 3. 5 Core & Buffer Zones
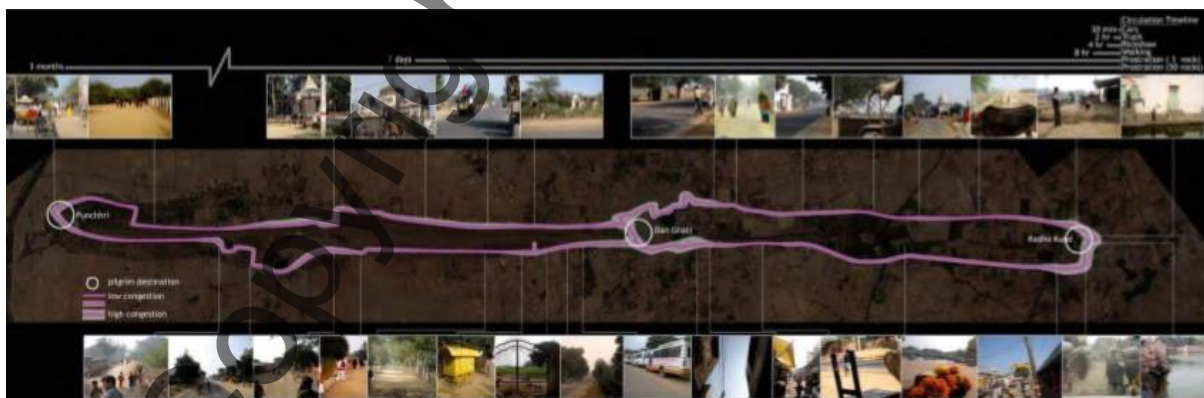
Figure 3. 6 Pilgrimage Route

Govardhan Hill is actually a long, low ridge, part of the Aravalli mountain range, rising not more than 100 feet above the surrounding plain.

Pilgrimage to *Govardhan* essentially is *parikrama* or circumambulatio n of the Hill, widely regarded as the most sacred natural feature in all of Braj.
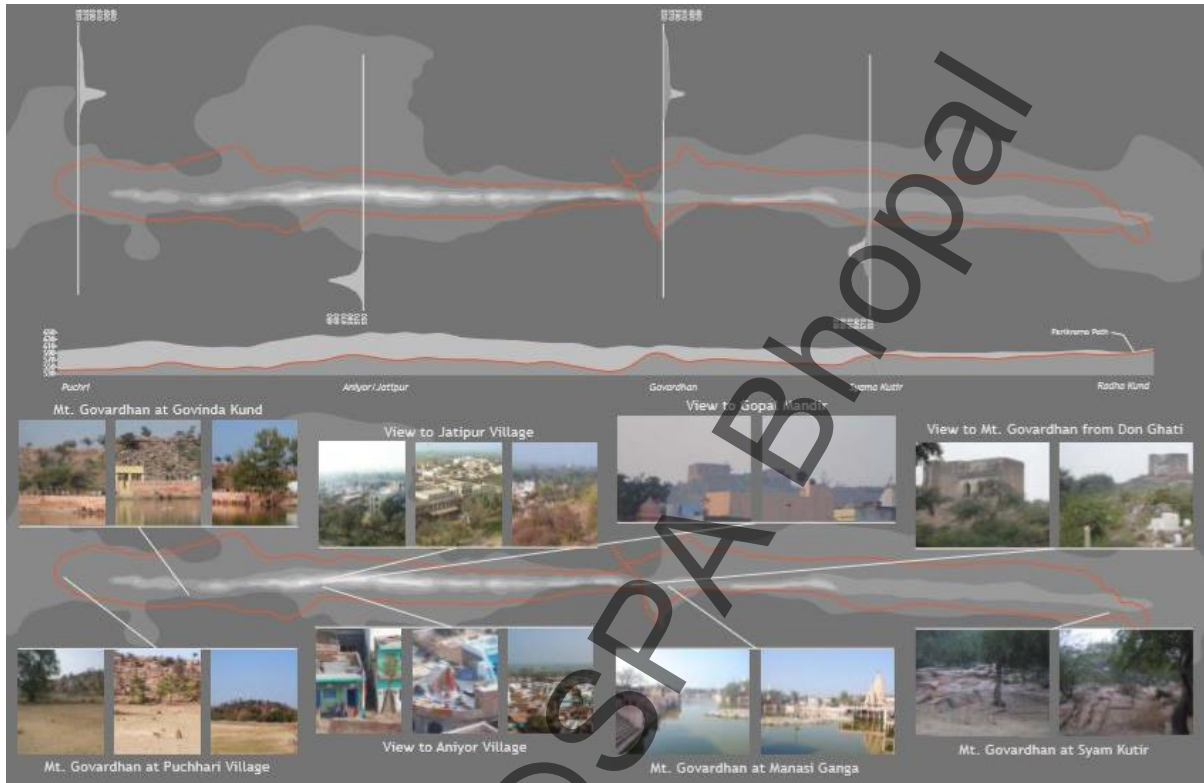
Figure 3. 7 Topography & Viewsheds

Figure 3. 8 Sections

Figure 3. 9 Site Context

The region around the hill mostly comprise of Settlements, few Heritage Structure, Agricultural fields, Forests , Groves and Kunds.

3.3 Inferences

Tirth- Yatra is converted to 'sacred sight- seeing tour'. The traditional version has been dwarfed by the increasing characteristics of tourism. The improvements in accessibility and availability of transport has actually abolished the 'journey' itself, there is only point of departure and that of arrival. The religious dimension is still very strong, but modernization has changed the Pilgrimage to Religious Tourism.

The study focuses on how pilgrimage sites are expanding, a quantification of environmental impacts is required. Certain laws need to be enforced to check the unplanned planning and haphazard growth in the pilgrimage sites, which further leads to environmental deterioration and excessive pressure on the natural resources.

Policy- making in religious tourism is suggested. Agencies need to controls and manages inbound tourist influx.

Pilgrimage routes must to provide the basic resources for religious travel, with minimal environmental impacts.

Restoration, and conservation of sacred sites.

Pilgrim Governance and Environmental Sustainability

Waste Management

site introduction

"Life is a pilgrimage. The wise man does not rest by the roadside inns. He marches direct to the illimitable domain of eternal bliss, his ultimate destination".

                                                                -Swami Sivananda

4. Site Introduction:

4.1 Location:

India's northern most state, Jammu & Kashmir, comprises three regions, Jammu, Kashmir and Ladakh, each distinguished by a distinct culture and landscape. In Jammu, also known as 'the City Of Temples' the culture and landscape reflect each other, as soaring temple *shikharas* echo the beauty of the surrounding *Pir Panjal* range, suffusing the air with spirituality.

The site is located at 32059'N latitude and 74o55'E longitude on *Trikuta* Hills, where the holy caves are nested, in Katra town, in the Reasi district of the state of Jammu and Kashmir in India. Katra, the base camp of the Shrine is located in the foothills of the Trikuta Mountains, about 42 km from the city of Jammu, and 35 km from Udhampur.
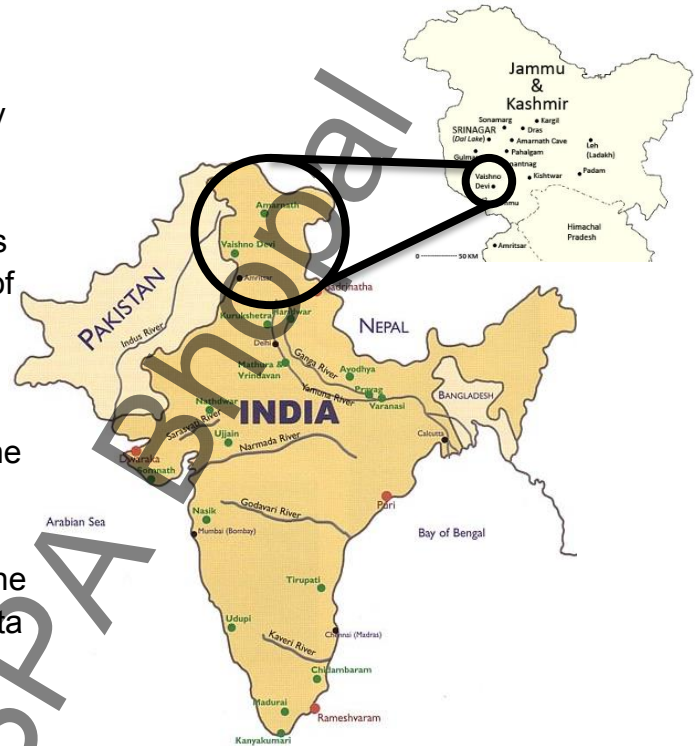
Figure 4. 1 Location Map

It is the second largest Pilgrimage Shrine after Tirupati in terms of number of devotees and income generation. The main Shrine is located at an altitude of 5200 feet and a distance of approximately 14 kilometers from Katra. Katra can be reached through the nearest railway station at Katra, through bus from NH144A and by air from the nearest airport in Jammu, the winter capital of the state.

4.2 Reference In Mythology:

According to a Hindu epic, *Vaishno Devi* was born in the south of India in the home of Ratnakar Sagar & named *Trikuta*. She went penance on the seashore. Trikuta prayed to Lord Vishnu in the form of Rama. Pleased with her devotion , Lord Rama gave her name *Vaishnavi* (devotee of lord rama (Maha Vishnu). Shree Rama asked Trikuta to meditate in the cave found in the Trikuta Range of Manik Mountains, situated in Northern India.Lord Ram gave her a bow and arrows, army of monkeys and a lion for her protection, Maa decided to observe the 'Navratra' for the Victory of Shree Rama against Ravana.

Hence one reads the Ramayana during the 9 days of Navratra, in remembrance of the above connection.

Another story is of Bhairav Nath. He followed the Goddess in the form of a Divine girl

to Trikuta Hills. For 9 months Bhairav Nath was searching for the mystic girl in the mountains, whom he believed was an incarnation of the Mother Goddess. While running away from Bhairav, Devi shot an arrow into the Earth from which water gushed out. The resultant river is known as *Banganga*. The banks of the river, known as *Charan Paduka*, are marked by Devi's foot imprints, which remains intact till date. Vaishno Devi then took shelter in a cave known as *Garbh Joon* near *Adhkuwari* where she meditated for 9 months attaining spiritual wisdom and powers. The manifestation of the Mother Goddess took place at the mouth of the Holy cave at *Bhawan*. The Goddess then beheaded Bhairav with such sheer force, that his skull fell at a place known as Bhairav Ghati, 2.5 km from the Holy Cave.

Today, for the pilgrimage the same route is taken by the pilgrims which was taken by the Goddess herself.

Figure 4. 2 The reference in mythology

4.3 Festivals & Rituals:
The type of ritual practices performed in the pilgrimage:
The ritual Bath, Mundan ceremonies, Sankh/ Crop offering during Navaratas, Kanjak/ Kanya Pujan

Navratra Festival   Sankh / Crop   Kanya Pujan   Ritual Bath   Mundan Ceremony

Figure 4. 3 Festivals & Rituals

4.4 The Pilgrimage Route:
The route is a trek of 13kms. and is divided into two parts. The first part of the trek up to Adkuwari is roughly half way at a distance of 7 km from Banganga starting check post. At Adkuwari the road to the Bhawan bifurcates into two. One road goes via Adkuwari while the second one goes via Himkoti.
The horses are allowed to continue on the Adkuwari trail, but are not allowed to go

via the Himkoti road. At the Himkoti road, electric rickshaws are available for senior citizens, people with disability and those with medical conditions.

4.5 Development Of Route:

The role of king in managing the tangible and intangible elements related to them in the form of temples, step wells, traditional and vernacular architecture, the trees , animal sculpture, festivals and rituals associated with the shrine.
The importance of Banyan and *Pipal* in Hindu tradition, which can be witnessed through the intensive plantation of same in the ancient route starting from Jammu. It also tells about other plantation, like the Mango, Pine, Oaks, Poplar etc.

4.6 Pilgrims Statistics:

Since the establishment of the Shrine Board, there has been a continuous increase in the Pilgrims number. On an average, 30-35 thousand pilgrims visit the Shrine daily, which goes up to 1 lac during *Navrata* Festival. The highest number of pilgrim visiting Shrine is in the month of June and lowest in the month of February. Analysis of the breakup of the tourists in the last decade, shows that almost 90% to 95% of the tourist arrivals in Jammu & Kashmir is because of *Vaishno Devi* shrine.

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
50.57	44.32	54	61	62.52	69.5	74.17	67.92	82.35	87.49	101.1	104.9	93.24	78.03
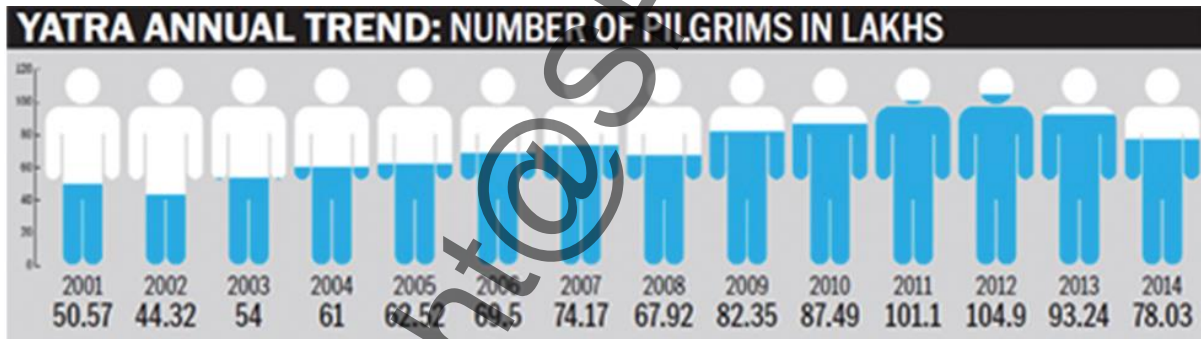
Figure 4. 4 Yatra Annual Trend- No. in Lakhs

4.7 Mode of Pilgrimage: Majorly, pilgrims prefer to complete the journey by trekking, but for people with health issues, other sources are also available, like human palanquin- *palaki*, ponies & helicopter. In the year 2015-2016, only 3.65% people opted for Heli services.

4.8 Timeline:

The caves were discovered by *Pandit Shridhar*, 700 years ago, who resided in Hansali village, 2 kms from Katra. The Shrine was looked after by his family, the *baridaars* and the kings. Later, in 1986, a Board was made and today, the Pilgrimage is taken care of by the board itself-Shri Mata Vaishno Devi Shrine Board.

Plate 4. 1 Modes of Pilgrimage

TIMELINE:

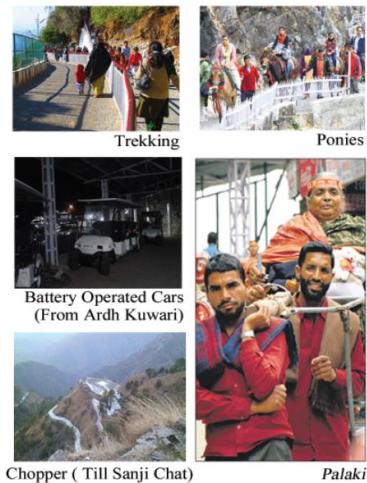| TRIKUTA HILLS- WHERE CAVES ARE NESTED	RIGVEDA- 1 MILLION YEAR OLD	EXISTANCE OF HILLS	
PANDIT SHRIDHAR	700 YEARS AGO 1300 AD	DISCOVERED CAVES & PINDIES	
RAJA KIRPAL OF BAHU	1660 AD	MADE PATH (KACCHA) TO THE SHRINE	
MIAN DIDO	1810 AD	REPAIRING THE ROUTE	
MAHARAJA RANBIR SINGH	1870 AD	MADE PACCA PATH- DECLARED OPEN	
DHARAMARTH TRUST & BARIDAARS	NOV 1884	CONSTRUCTED INNS, WATER POINTS CALLED CHHABILS	
SHRI MATA VAISHNO DEVI SHRINE BOARD	30TH AUG 1986	OVERTAKEN BY THE BOARD AND STILL UNDER THEM	

Table 4. 1 Timeline Vaishno Devi

S. No	Destinations	M	F	Total
1.	Uttar Pradesh	8.40	16.99	14.27
2.	Delhi	6.30	14.64	12.00
3.	Maharashtra	12.61	7.81	9.33
4.	Jammu &Kashmir	7.15	3.91	4.93
5.	Karanataka	7.15	4.49	5.33
6.	Punjab	8.40	6.05	6.80
7.	Madhya Pradesh	5.88	8.98	8.00
8.	West Bengal	4.20	4.69	4.53
9.	Bihar	14.28	9.77	11.20
10.	Rajasthan	3.36	3.91	3.73
11.	Andhra Pradesh	2.10	1.76	1.87
12.	Haryana	1.68	1.76	1.73
13.	Gujarat	2.10	2.34	2.27
14.	Assam	0.84	0.98	0.93
15.	Manipur	0.84	0.59	0.67
16.	Sikkim	0.42	0.39	0.40
17.	Orissa	0.84	0.39	0.54
18.	Tamil Nadu	0.84	0.78	0.80
19.	Goa	1.26	0.39	0.67
20.	Chattisgarh	7.15	6.45	6.67
21.	Uttranchal	4.20	2.93	3.33
	Total	100	100	100

Table 4. 2 Proportion of Pilgrims from different states of India coming to Vaishno Devi

4.9 Character of Route:

Figure 4. 6 Darshani Darwaza
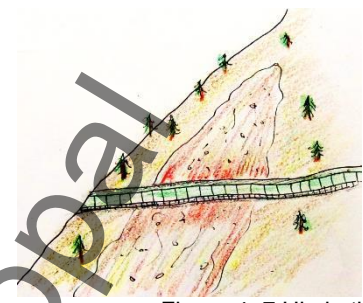

Figure 4. 5 Purana Daroor

Figure 4. 7 Himkoti
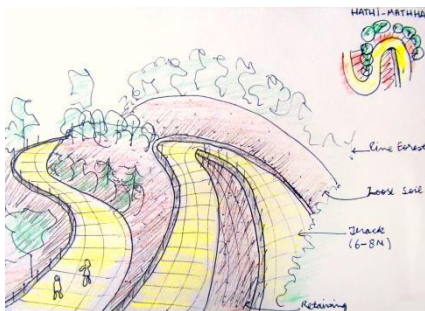
Figure 4. 8 Hathi Matha

Figure 4. 9 Bhairo Ghati
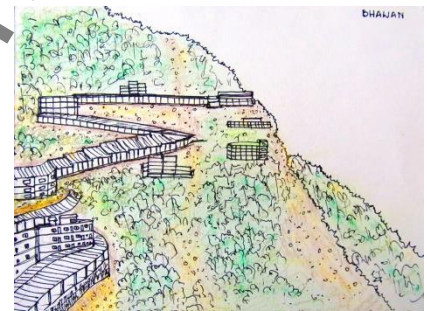
Figure 4. 10 Bhawan

The pilgrimage starts at *Darshani Darwaza*. It is the gateway to the pilgrimage; one can see the *Trikuta* hills and the route that follows from this point.
River *Banganga* flows along one side of the route. The slopes are gentle.
The river water is used for drinking and irrigation purposes.
Next, the route follows to the only residential area, which is *Purana Daroor*.
It has the character of shops and houses, along the route. The slopes are moderate.
Agriculture is also practiced by the villagers apart from selling goods to the pilgrims.
After *Purana Daroor*, the route reaches a junction area, which diverts the main route towards *Adhkuwari* & *Himkoti*.
Himkoti is the alternate route & has steep slopes. Due to the construction the area has become prone to landslides.
Adhkuwari is a plateau in the pilgrimage. It has caves and temples of mythological importance.
From *Adhkuwari*, one proceeds to *Hathi Matha*, named so because of the slopes which are like that of the trunk of an elephant.
Sanji Chat is used as a helipad.
Finally one reaches *Bhawan*, nested in the hills with steep slopes & at an elevation of 2000 mts & above.
Bhairo Ghati is a is the last stoppage in the shrine & located at highest altitude. It

gives great panoramic views of the *Shivalik* ranges.

DARSHANI DARWAZA

PURANA DAROOR

HATHI MATHA

BANGANGA

ADHKUWARI

SANJI CHAT

CHARAN PADUKA

HIMKOTI

BHAWAN
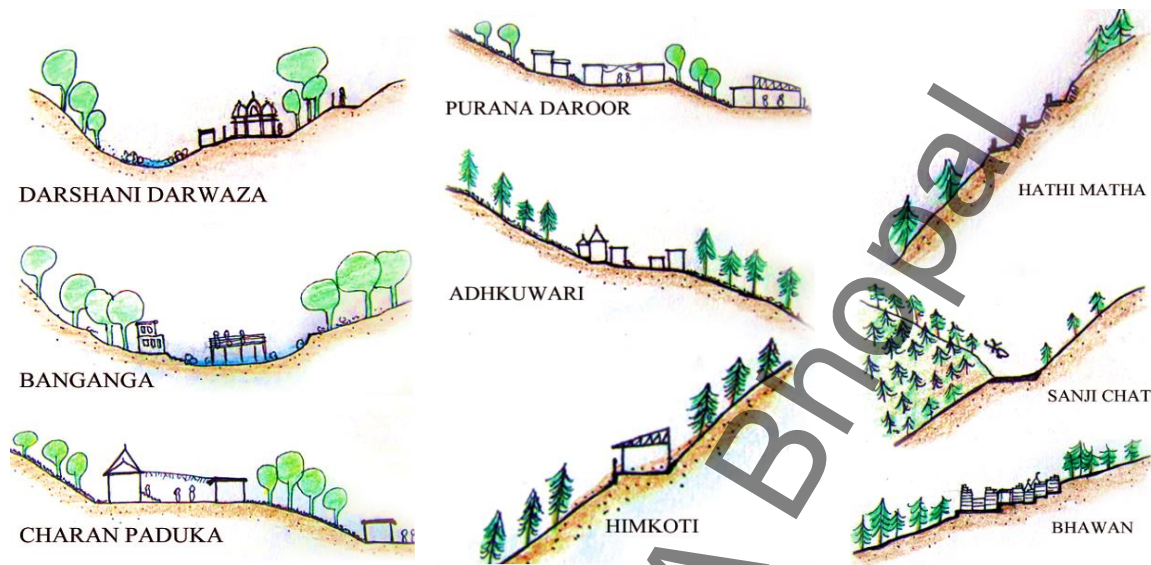
Plate 4. 2 Sections

4.10 Tourist Impact:

The pilgrimage tourism is of course not free from negative impacts. It also leads to increased expenses of a town as it requires cleaning, garbage collection, water disposal , lighting, marketing and promotion. The tremendous rush of the pilgrims has also impacted the ecology of the region, which includes natural and man-made disasters like the land sliding, forest fires, loss of ecological habitats and decrease in the water levels of *Banganga* river, which flow through these mountains.

site analysis

"Pilgrimages involve pilgrims making journeys to shrines and other sacred scenes that are of importance to a person's faith. At the shrines, they ask for healing and other personal questions."

-Diana L. Eck

5. Site Analysis:

5.1 Site Documentation:

5.1.1 Visual Character of Route:

SITE:
The Soil is shallow , well drained, coarse- loamy. This soil mostly support seasonal grasses.
The area has two perennial streams, Banganga and Pae Nallah.

The region is comprised of loose bed of rocks which is prone to landslides and erosion.
A vegetation cover is required to hold the soil.

Plate 5. 1 Visual Character of Route

5.1. 2 Native & Existing Vegetation:
1. Greivia optiva
2. Mallotus philippensis
3. Leania grandis
4. Dalbergia sisso
5. Bauhinia variegata
6. Albizza lebbeck
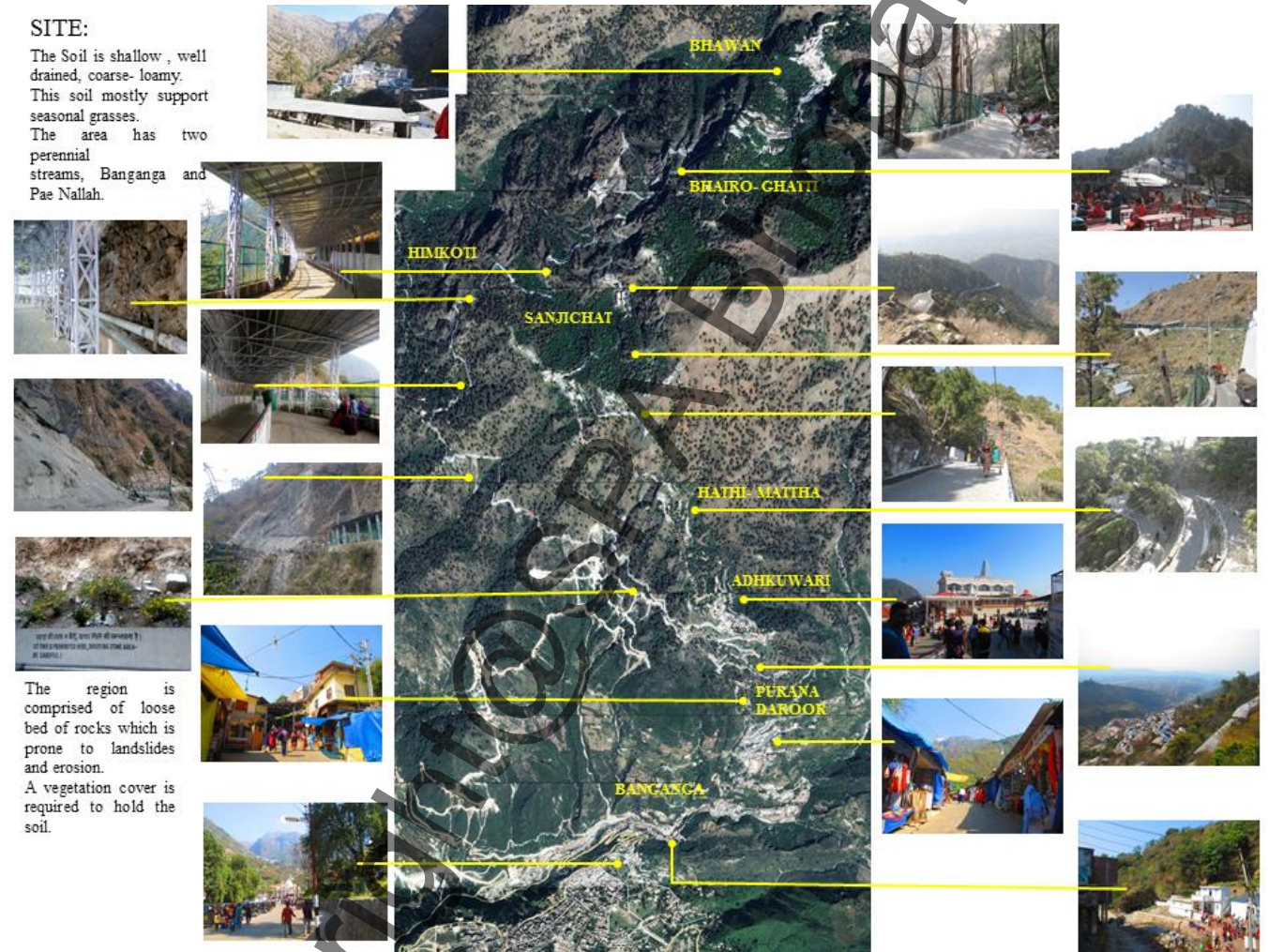7. Ficus auriculata

Figure 5. 1 Trees at Banganga

8. Ficus palmata
9. Bombax cieba
10. Dendrocalamus strictus
11. Acacia modesta
12. Beautia monosperma
13. Erthina indicia
14. Emblica officenalis
15. Terminalia billarica
16. Pyrus pasia
17. Bauhinia purpurea
18. Bauhinia vahlii

19. Floconrtia romanchi
20. Casearia tomentosa
21. Zentho xylumarmtum
22. Pistacia inteqerrima
23. Ficus racemosa
24. Fluegga virosa
25. Ehretia laevis
26. Cassia fistula
27. Syzygium cumini
28. Melia azedarach

29. Delonix regia
30. Callistemon citrinus
31. Tactona grandis
32. Anthocephalus cadamba
33. Pemma latifolia
34. Tonna sarrata
35. Terminalia arjuna
36. Aesculus indica

37. Ficus virens

38. Pinus roxibegia
39. Pinus wachyala
40. Derbergia salifolia
41. Lemon grass
42. Agave
43. Allium rubellum
44. Morris

Figure 5. 2 Trees at Purana Daroor

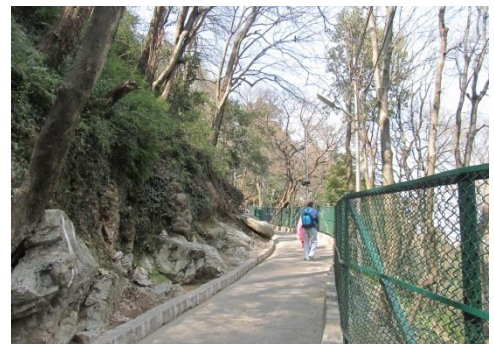Figure 5. 3 Trees at Himkoti

Figure 5. 4 Trees at Bhawan

Figure 5. 5 Tree at Bhairo Ghati

5.1. 3 Climate:

The climate varies along the whole stretch of the route. The route experiences rainfall till Himkoti, and snowfall from Sanji Chatt onwards.

There is a complete difference in the weather at the beginning of the pilgrimage and the destination, which can be seen through the change in the type of vegetation, from deciduous to Pine and Oak.

Location	Distance from Katra (in Km)	Altitudes (in mts)	Temperature °C			
			Winter		Summer	
			Min.	Min.	Min.	Min.
Katra	00.0	762	03	15	20	40
Banganga	01.0	854				
Adhkunwari	06.0	1464	01	14.5	16	33
Himkoti	8.5	1561				
Sanjichatt	9.5	1890				
Bhawan	13.0	1586	- 02	13	15	30
Bharon	14.5	2018	- 03	11	12	26

Table 5. 1 Climatic Data

5.1. 4 Visual Analysis:

BORROWED LANDSCAPES   DEBRIS FLOW- SCARS ON LANDSCAPE   STREE FURNITURE- STEEL BENCHES   STRUCTURES- TIN SHED TO FOR SNOWAND RAIN PROTECTION   PAVING- CONCRETE PAVERS

Plate 5. 2 Visual Anaylsis

The site offers amazing panorama of the *Shivalik* and *Pir Panjal* Mountain Ranges. It also offers the view of Katra Town, Reasi Town and Chenab River.

The site furnishing and structures is that of steel, the pavers are concrete pavers throughout the whole length of the route.

5.2 Site Analysis:
The site is a stretch of 13 kilometers. For the analysis, the route part of the Trikuta Hills is taken, which is the ridge to ridge distance from Banganga to Bhairo Ghati.

The catchment area of Banganga is also considered for the analysis, including the ridges and valleys analysis for the whole site. The ridge area and valley area are also marked for the whole stretch of the route.

The analysis involves the study of the landscape layers in the form of lithology, geomorphology, geohydrology, landuse, slope analysis, topography, catchment area of the river Banganga, the spatial relationship of the route.
A base map is developed based on these visible layers.

Map 5. 1 Geomorphology
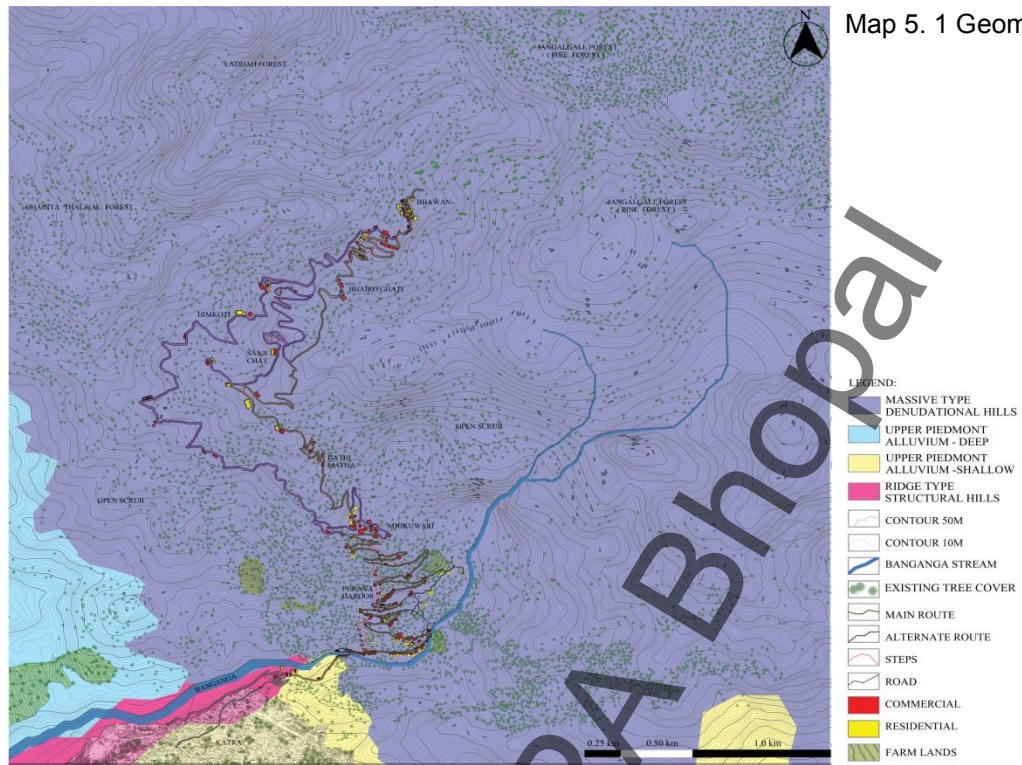
Type: Massive type denudation hills
Inference: Wearing away of soil cover further leads to depletion of forest

Map 5. 2 Groundwater Potential
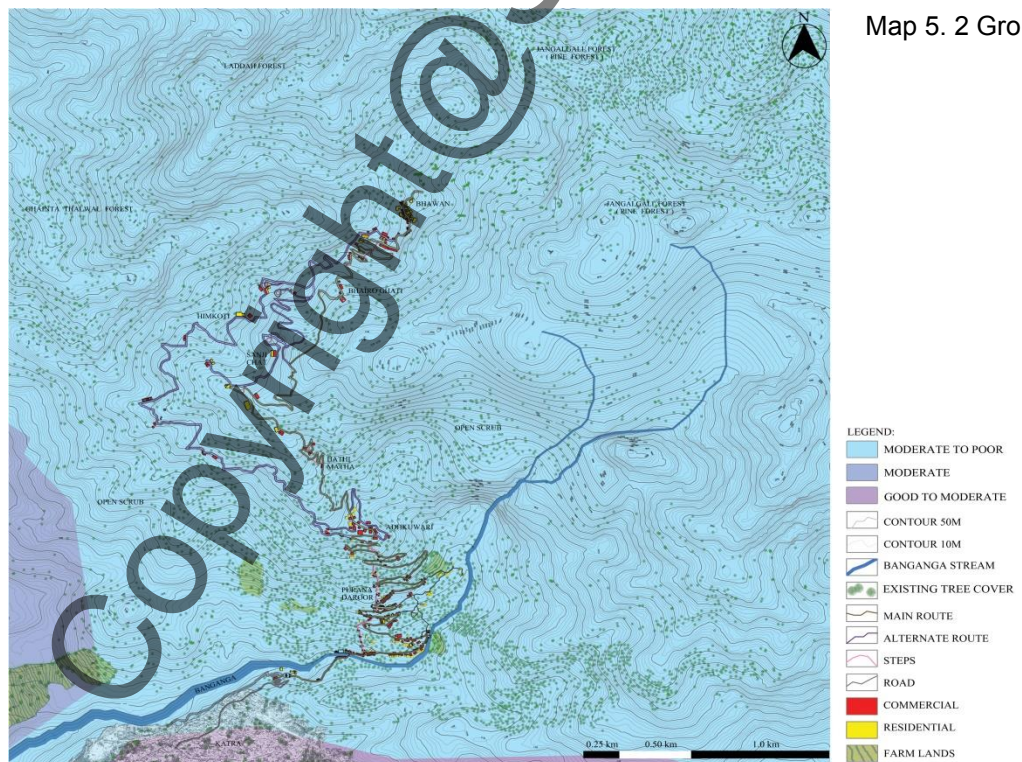
Type: Moderate to poor
Inference: Water does not percolate, flow away with top soil

Map 5. 3 Lithology
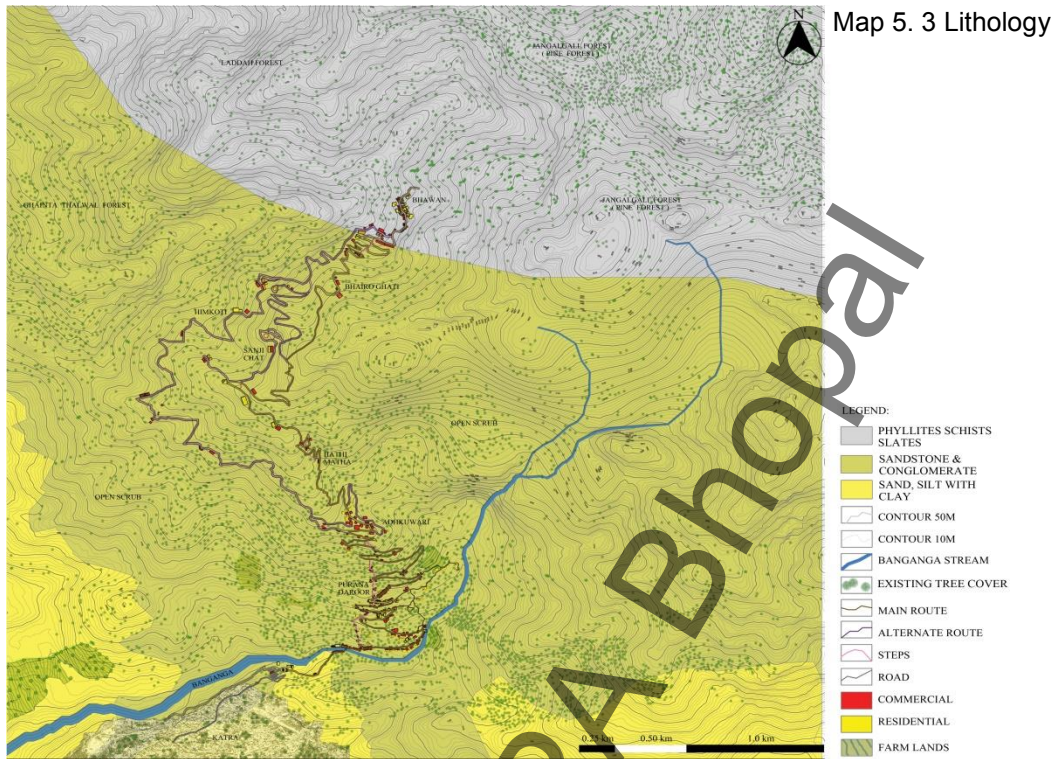
Type: Sandstone and conglomerate
Inference: High water percolation capacity. Erodes soil at high rate.

Map 5. 4 Landuse
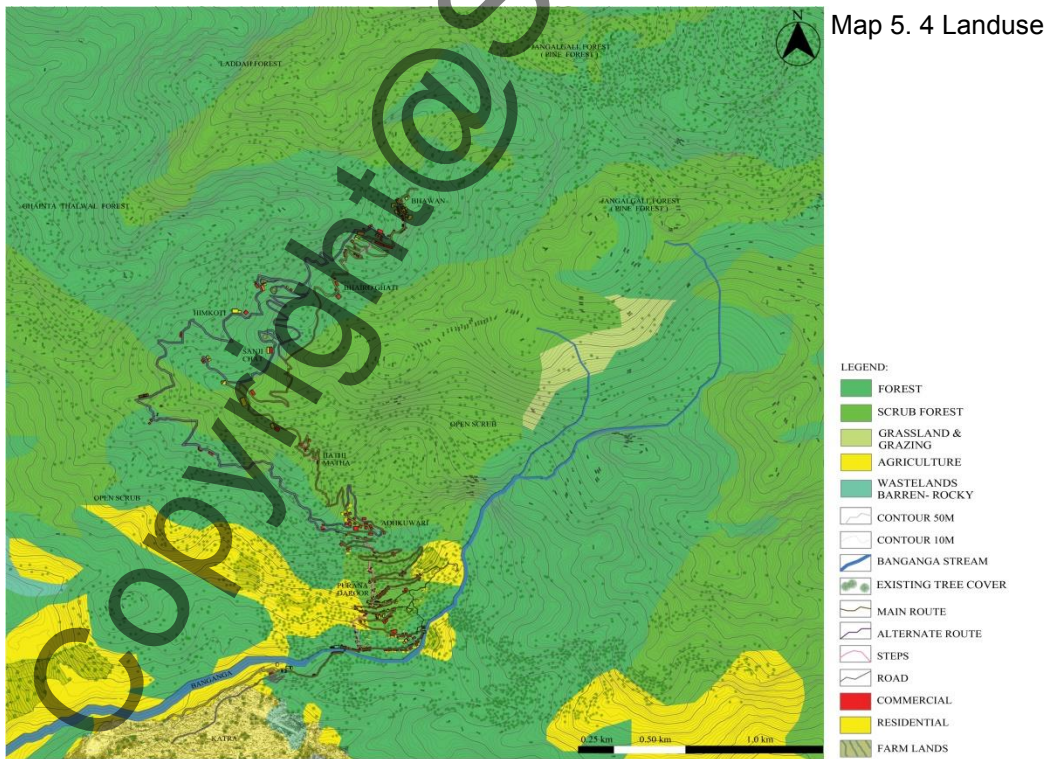
Type: Forest (Pine & Oak) , scrub lands
Inference: Loss of soil cover reduces the forest size. Forest and ground cover depletion further causes erosion.

Map 5. 5 Topography

Type: Old route- 1758-2055 m, New route- 1461-1758m
Inference: Old route is at higher altitude & receives snowfall.

Map 5. 6 Slope Analysis

Type: Slope percentage- old route: 8-12%, considered sloping new
route: 12-20% Moderate steep to steep
Inference: steep slope is more prone to erosion.
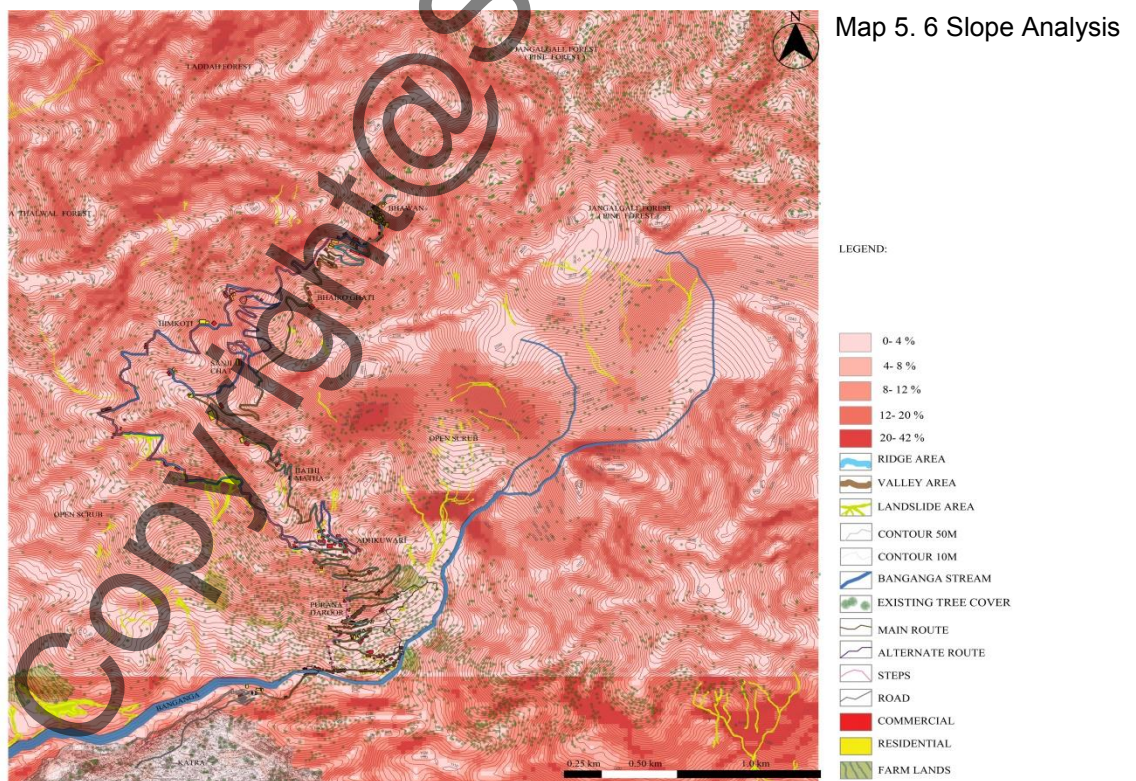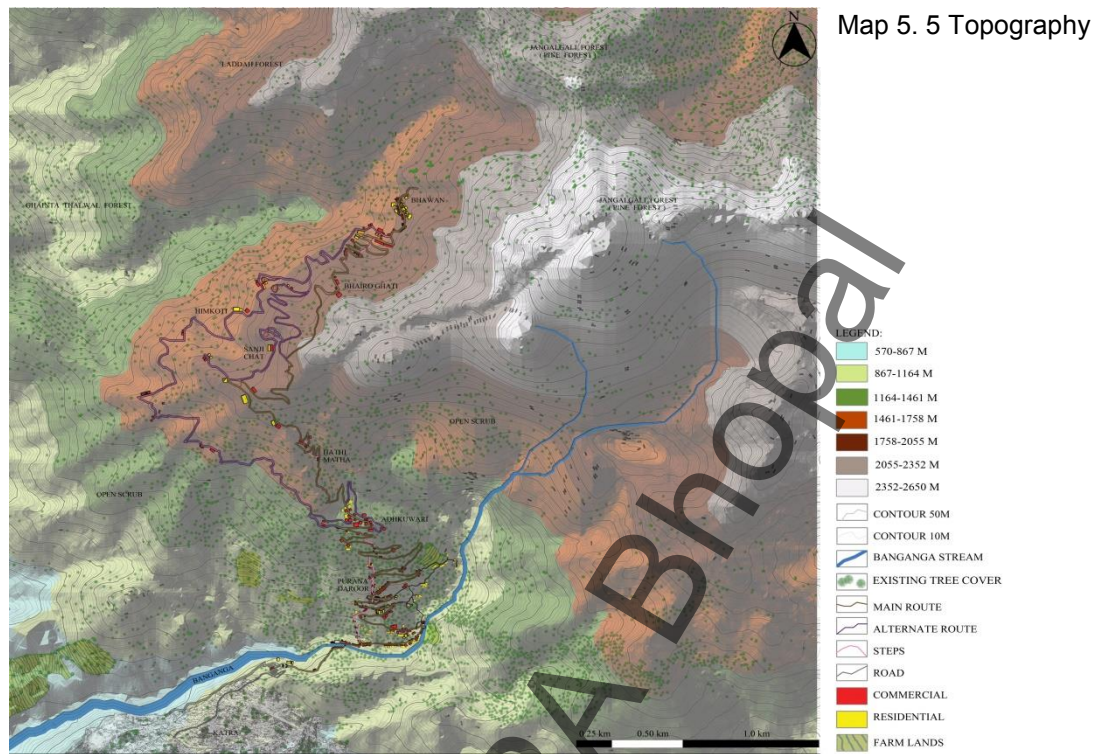
Map 5. 7 Catchment Area-Banganga
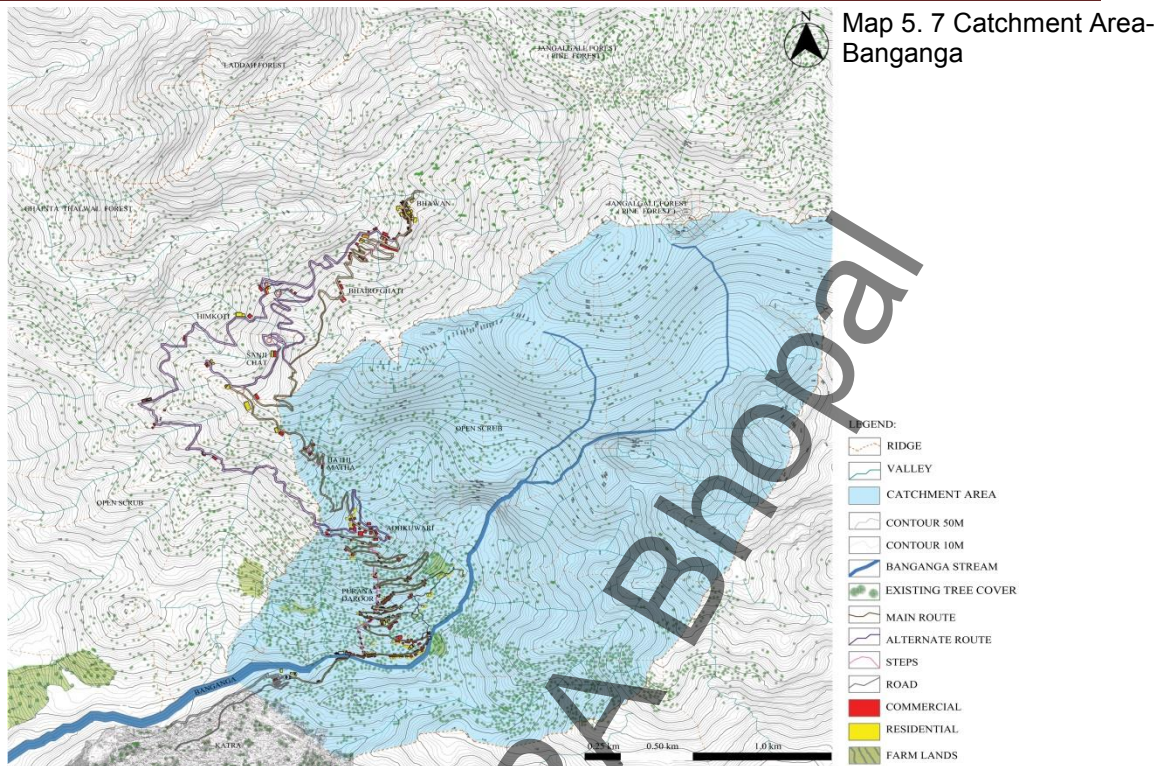
The catchment area of banganga river mostly falls under main route.the garbage from shops, pony dung, debris flow & boulders becomepart of the catchment area of the river.

Map 5. 8 Spatial Relationship

The route acts as the circulation for the pilgrimage. It is the same route from which one goes up and come back down. It is not a circumbulation or *Padakshina*, but a more or less a linear *tirth yatra*.

The route gives many views at different areas.

Also in the route there are many historically important areas, which find reference in Mythological stories and need to be preserved.
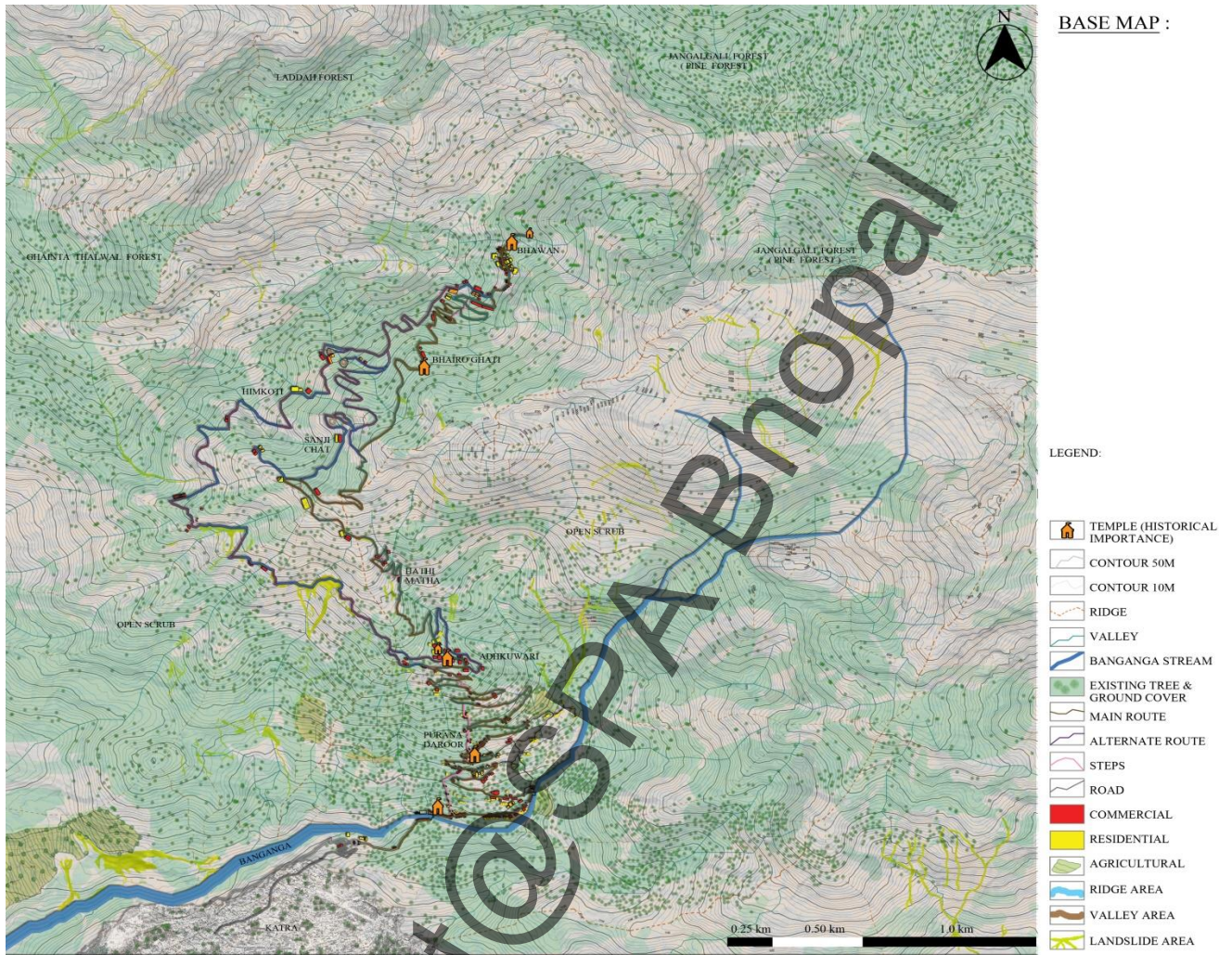
Map 5. 9 Base Map

5.3 Conclusion:

Steep slopes and denudation hills causes soil erosion, in the form of debris flow, which further leads to shallow soil cover.

Shallow soil cover is unable to retain forest.

The rock structure is limestone.

Limestone is brittle and it is difficult to cut the rock, as it tends to break.

Any cutting for the construction causes loosening of rock strata in the region, making it more prone to erosion.

Also the rock does not allow water percolation, hence low ground water.

design

"As I make my slow pilgrimage through the world, a certain sense of beautiful mystery seems to gather and grow."
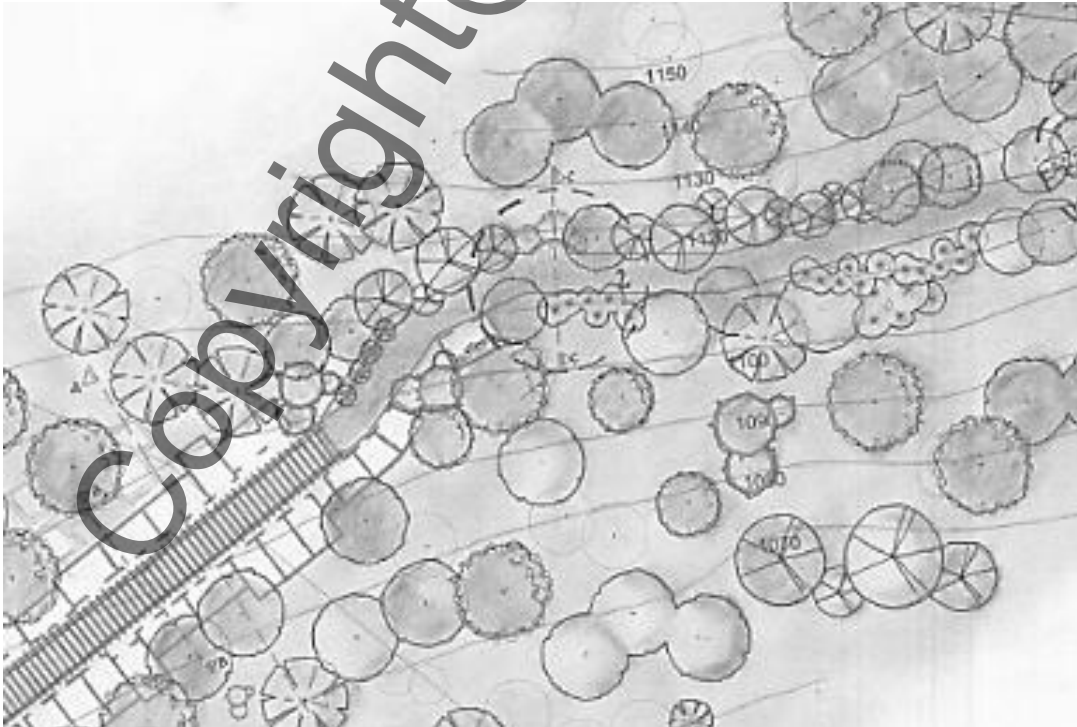
- A. C. Benson

6. Design:

The intervention is at two levels- Design and Management

6.1 : Design Concept:

The design involves the use of sacred geometries, sacred trees and vernacular mode of pavers and street furniture.

The area taken for design intervention is *Purana Daroor*. This is the village with shops along the route and houses at the rear side of the shops.

When one walk on the route in this area, it seem like any other street, but a pilgrimage route.

An important temple, *Charan Paduka*, with historic and mythological importance, also falls in the same area.

The idea is to blend the area more with the nature and the sacred.

The forms are inspired from the sacred geometry of *Durga Yantra.*

It has 17 triangles enclosed within 3 circles. The 8 petal denote the eight arms of the goddess.

The symbol is used at certain nodes in the form of paver pattern.

Figure 6. 1 Sacred Trees

Figure 6. 2 Durga Yantra
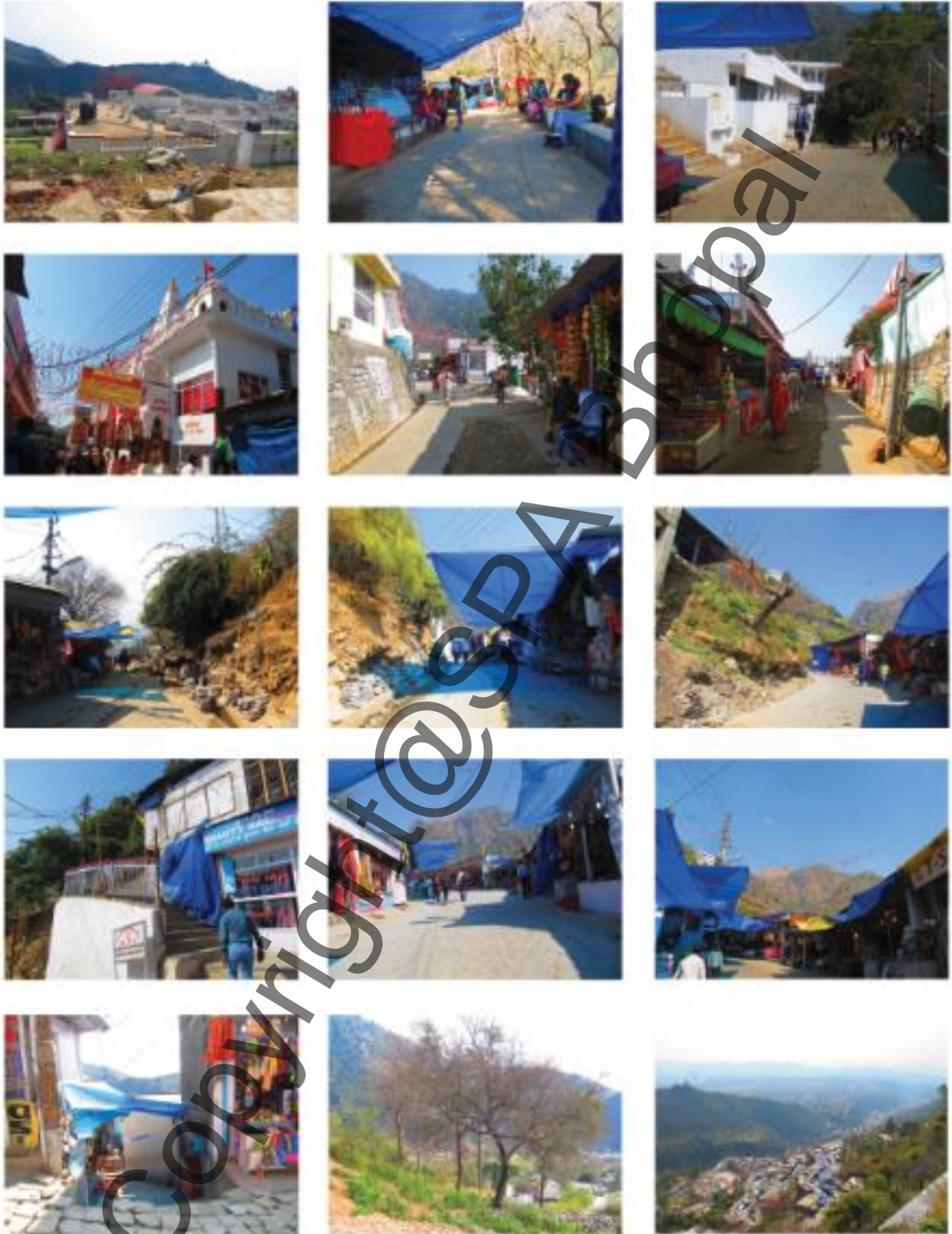
Plate 6. 1 Area of Intervention
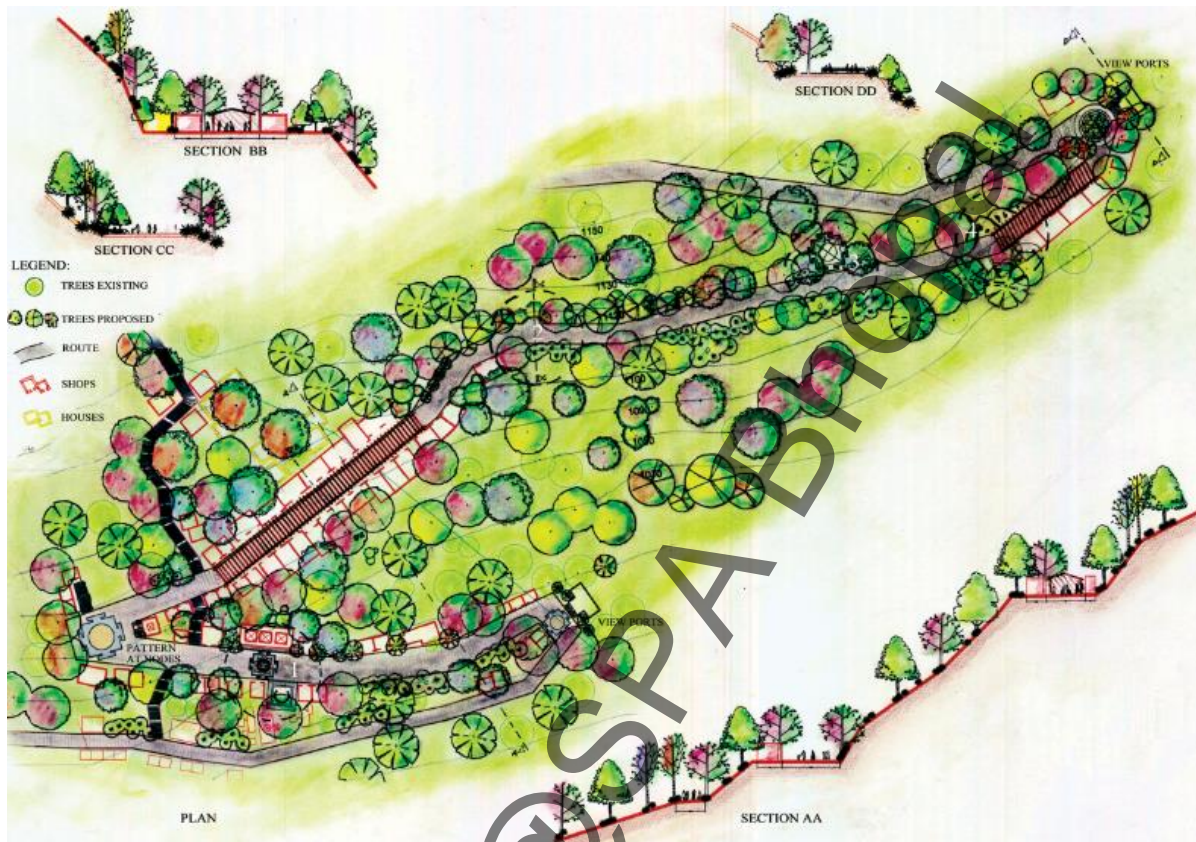
Figure 6. 3 Design Intervention

The design provides spaces which are public, yet enclosed. Here the theory of biophilia, that is tendency to stay in closer vicinity with nature applies.
The idea is to enhance the experiences, through sight, smell, sitting, hearing, the positive sensory experiences.

6.2 Planting & Materials:
The planting concept is the use of sacred trees and trees to elevate sensory emotions.
Foliage
Fruiting
Flowering
Foliage to create the sense of enclosure.
Fruiting to invite birds, further enhancing the sense of hearing.
The flowering to enhance the sense of smell.
Also species which are endangered in the region are suggested for planting.

Slate stone pavers to replace the concrete pavers.

Slate is a vernacular material and is easily available in the region.

Also it would not only help in creating a natural look, but shall help in ground water recharge. The water during precipitation flows through the track, filling it with water, as the current paving material does not allow water to seep in the soil.

Slate has a porosity ratio of between 0.4% – 5%

The porosity is responsible for permeability, the more the pores in the structure, the higher the permeability. This further defines the absorption. A stone's level of porosity and permeability will determine how absorbent it is.

The unpolished stone is best suitable, both for permeability and fiction control.

The binding material can either be sand or soil.

6.3 Management Proposals:

6.3.1 Erosion:

The alternate route is more prone to landslides, being new construction.

The reason is precipitation, both in the form of snow and rain.

Also since the soil depth is very shallow here, being a mix of sandstone and conglomerate, which has high water percolation capacity and erodes at high rate.

To control soil erosion, slopes need to be stabilized. The proposal is to help bind the soil and increase the soil depth. This can be done with the help of geotextile fabric. The fabric can be installed in the problem area. It shall not only hold back the soil, but eventually help in afforestation as well.

The result can be seen through years. The fabric used is biodegradable, hence shall degrade with time and allow grasses to grow.

This would further help in binding the soil, the decay shall eventually increase soil depth. After grasses and achieved soil depth, tress can easily grow.

Year	Location	Injured	Casualties
August, 2004	Dabbamore, 2 kilometer from Katra	3	11
12 March, 2007	New track from Adh Kuwari to the cave shrine	10	4
22 September, 2009	Saanji Chhat	--	1
27 February, 2010	Hathi Matha	--	2
13, Feb 2011	New track from Adh Kuwari to the cave shrine	3	3
9 January, 2012	New track from Adh Kuwari to the cave shrine	7	
30 December, 2012	New track from Adh Kuwari to the cave shrine	--	1
12 Jun 2013	Panchi Morh in Sanjichat area	--	1
17 Aug 2014	New track from Adh Kuwari to the cave shrine	7	--
Sep 4, 2014	Adhkuwari	3	--
13 July, 2015	New track from Adh Kuwari to the cave shrine	--	--
March 13, 2016	Near Bhawan	--	1

Table 6. 1 Landslide Timeline

6.3.2 Solid Waste Management:

Every day on an average 35 thousand pilgrims visit the holy shrine.

The amount of waste produced due to activities on the route is approx. 26 tones / day. The best practice to handle waste is to prevent it and if not then to recycle the same. Recycling refers to the collection, separation, processing, or use of materials that would otherwise become solid waste.

The materials that can be recycled are plastics, metals, paper, glass, rubber, rags, leather, etc. The recovery of the materials will reduce the need to use natural resources directly and may reduce emissions from extraction and processing of raw materials. On the other hand, there could be environmental or health effects from reprocessing materials which have been taken out of the waste stream.

Waste types	Waste generation for different zones in KGs				
	Banganga	Ardhkuwari	Sanjichat	Bhavan	Total
Mule dung	9197	5876	1578	3262	19913
Bhojnalaya waste		2004	611	2858	5168
Other waste	268	433		276	1282
Total	9465	8313	2189	6396	26363

Table 6. 2 Waste Generation

The route has Over 100 toilet blocks with over 600 seats.
These can be converted to bio toilets and the biogas produced can be used in the route itself.

The pony dung on the route lies as it is and is transported by the activities on the route. The dry dung is also responsible for the ignition of forest fires on the route. It can be collected at the junction areas and used as manure.

conclusion

"There is a need for understanding of the mute ecology, physical and cultural settings, set in time and people waiting to be understood by those who can read it…"

- Ian Mc. Harg

7. Conclusion:

India is a land of pilgrimages. Travel for religious purposes has been there from the most ancient times. Holy Rivers, Sacred Shrines and Shakti *peeths* are worshipped and visited in great numbers every year.

Vaishno Devi is one such shrine, visited in great numbers every day.

The thesis involves the study of Vaishno Devi Pilgrimage Route , its changes during the course of time, the natural settings , the threats and challenges faced as a Cultural Route and also to give certain design and management proposals for the same.

The proposals involve spaces in the route to provide with opportunities to walk, sit, stay and stand.

To see, to listen and to talk.

To play, recreate, rest and relax.

The use of sacred trees and sacred geometry is followed in the whole stretch of the route, where ever applicable.

Mostly the nodal areas have a change in the paving pattern in the form of patterns developed from the elements of the sacred geometry, like the circles, triangles and such similar shapes.

Management proposals for Erosion Control and Solid Waste Management are also specified.

The change in the traditional pilgrimage into religious tourism, demeaning the importance and benefits of pilgrimage need to be revived, through the imagined landscapes and by the use of elements of past.

The views and vistas, the historical references and connection of people with the nature, plays a vital role in Pilgrimage. It is not only the connection with the divine which purifies the soul, but the connection with nature which help in revival of the soul, aptly verified by the Biophilia hypothesis.

Considering the same, the proposals are to create a grove like environment, using vernacular materials. The planting chosen is foliage, fruiting and flowering. Foliage shall give a feeling of enclosure, fruiting shall invite birds and help create sense of hearing and flowering shall enhance the sense of smell.

Bibliography:

(14, Feb 2011). 3 injured in Vaishnodevi landslide. FnF Correspontent.

Chaudary, P. (2012). Heritage and Cultural Routes: An Anthology : Global Cultural Routes. Shubhi Publications.

Clift, J. D. (2004). The Archetype of Pilgrimage: Outer Action With Inner Meaning. Wipf & Stock Pub.

Eck, D. L. (2012). India: A Sacred Geography. Harmony Books.

Eck, D. L. (2012). India: A Sacred Geography. Harmony Books.

Flowers Of India. (n.d.). Retrieved from Flowers in Ancient India: http://www.flowersofindia.net/mythology.html

Georgana Foster, R. S. (2010). Vaishno Devi, the Most Famous Goddess Shrine in the Siwāliks. University of Nebraska - Lincoln.

Gupta, P. (. (2015, February 10). Dailyexcelsior. Retrieved from Shrinking forests of Jammu and Kashmir: http://www.dailyexcelsior.com/shrinking-forests-jammu-kashmir/

International Programme on Landslides. (n.d.). Retrieved from International Constorium on Landsclides: http://iclhq.org/Asia.htm

Jerath, D. A. (n.d.). Hindu Shrines of Western Himalayas. Association of Litteerateurs, Folkorists & Artist.

Kumari Savita, D. R. (16 July, 2012). An ethnobotanical survey of medicinal plants used by Gujjar Community of Trikuta Hills in Jammu and Kashmir, India . Journal of Medicinal Plants Research , 2111-2121.

Patel, D. R. (2014, Janurary). Study of various plants species useful in each nakshatra for human society. International Journal of Scientific and Research Publications.

Shinde, K. (2008). Religious Tourism: Exploring a New Form of Sacred Journey in North India. In J. Cochrane, Asian Tourism: Growth And Change (pp. 245-258). Elsevier.

Shinde, K. (2011). Sacred Landscape, Sacred Performances: Connection and Cacophony. In R. P. Singh, Holy Places and Pilgrimages: Essays on India (pp. 127-146). Shubhi Publications.

Singh, R. P. (2011). Holy Places and Pilgrimages in India: Emerging Trends & Bibliography. New Delhi: Shubhi Publication.

Sinha, A. (2006). Landscapes in India: Forms and Meanings. University Press of Colorado.

Sinha, A. (2014). The Sacred Landscape of Braj, India Imagined, Enacted, and Reclaimed. Landscape Journal.

Sinha, A. (n.d.). GOVARDHAN HILL IN BRAJ, INDIA- IMAGINED ENACTED RECLAIMED. Department of Landscape Architecture College of Fine and Applied Arts Unversity of Illinois at Urbana-Champaign, USA and Braj Foundation, Vrindavan, India.