A CRITICAL STUDY ON HERITAGE CONSERVATION: MUZIRIS, KERALA

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Abstract:

Historic assets create a focal point that people can relate to their past and are familiar with – giving a sense of place. Our built heritage represents the very best of our past. It also provides a huge resource that can play an important role in the future of our towns, cities and rural areas in terms of the stimulus provided to regeneration and the promotion of sustainable development. Evidence from across the country demonstrates that 'Heritage Works' is a valuable asset that has an important role to play as a catalyst for regeneration, redevelopment, rehabilitation, revitalization. Working with heritage assets brings a unique set of issues to the development process, such as understanding the special conservation, planning, funding and construction matters associated with them. The process also requires specialist knowledge, where expertise in any of these areas is lacking, projects can fail. The study has concentrated on listing buildings, as these heritage assets are most commonly associated with regeneration projects. Heritage assets are a key component of sustainable development. The re-use of such assets can be used to boost local economies, attract investment, highlight local distinctiveness and add value to neighbouring properties.

Index Terms **- Heritage; Conservation; Critical study; Muziris; Paliam Nalukettu**

I. AIM OF THE STUDY:

The aim of the study is to focus on the key concepts of Historic significance, Historic integrity and Historic context. The main purpose is to document the existing historic assets in a way to elevate the historic importance to the public and make them to understand the importance of sense of a place for protecting and preserving India's living, built, and natural heritage.

II. INTRODUCTION

In India, the first instance of conservation was when Emperor Ashoka ordered to conserve wildlife in the 3rd century BC. Then in the 14th century AD, Firuz Shah Tughlaq ordered to protect ancient buildings. Later, during the British Rule, the "Bengal Regulation (XIX)" was passed in 1810, and the "Madras Regulation (VII)" was passed in 1817. These regulations vested the government with the power to intervene whenever the public buildings were under threat of misuse. Then in 1863, Act XX was passed which authorised the government to "prevent injury to and preserve buildings remarkable for their antiquity or for their historical or architectural value". However, many historic structures were destroyed by the government (pre independence) itself in Shahjahanabad. The Archaeological Survey of India (ASI) was established in 1861 to initiate legal provision to protect the historical structures all over India. The "Ancient Monuments Preservation Act (VII)" was passed in 1904 which provided effective preservation and authority over the monuments, and in 1905 for the first time, 20 historic structures in Delhi were ordered to be protected. At the time of independence, 151 buildings and complexes in Delhi were protected by the central ASI. The State Department of Archaeology was set up in 1978 in Delhi, but it lacks the power to acquire or protect buildings, and merely looks after some monuments de-notified by ASI. In 1984, Indian National Trust for

Art and Cultural Heritage (INTACH) was founded to stimulate awareness for conservation of cultural heritage among the people.

III. SELECTED AREA FOR THE STUDY: MUZIRIS, KERALA

IV. HISTORY:

The story of Muziris starts from early 3000 BC when Babylonians, Assyrians and Egyptians came to the Malabar Coast in search for the spices. Later these Middle-East groups were joined by Arabs and Phoenicians. And gradually Muziris in Kodungallur entered into the cartography of World trade map. Then onwards Muziris holds the key to a good chunk of Kerala's ancient history now the ancient trade route.

V. MUZIRIS IN MYTHOLOGY:

Muziris was a port city, among the earliest of its kind in the world. Spice City to the ancient reporters, Muziris was also known as Murachipattanam.
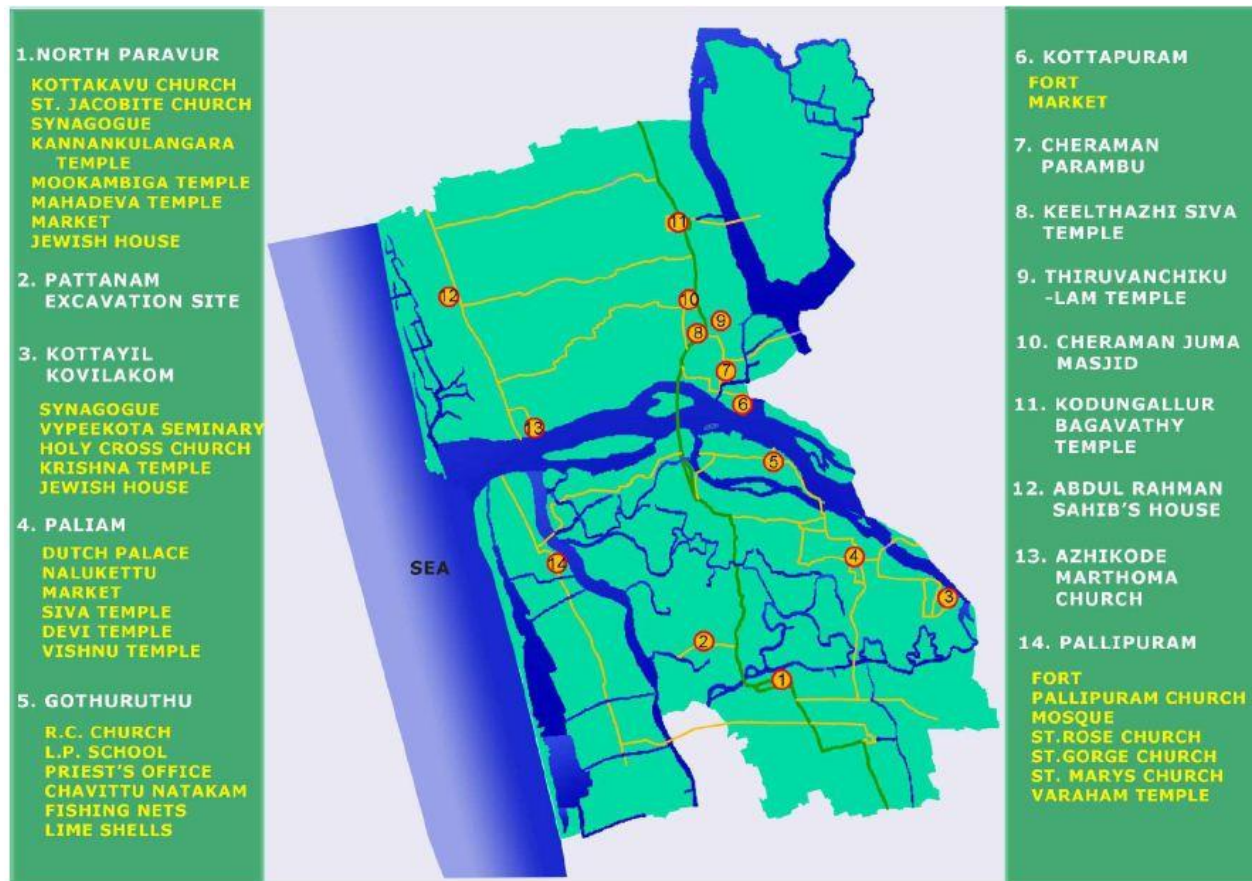

Figure: 1 –map showing muzuris heritage landmarks

VI. FROM THE HISTORIC EVIDENCES:

When Kerala established itself as a major center for spice, it was the ancient port of Muziris that emerged as its hub. Sangam literature describes Roman ships coming to Muziris laden with gold to be exchanged for pepper. According to the first century annals of Pliny, the Elder and the author of Periplus of the Erythrean Sea, Muziris could be reached in 14 days' time from the Red Sea ports in Egyptian coast purely depending on the monsoon winds. However, tragedy struck in 1341, when the profile of the water bodies in the Periyar River basin on the Malabar Coast underwent a major transformation - and Muziris dropped off the map due to flood and earthquake. However, the remnants of the port and its erstwhile glory still remain as reminders of an eventful past. They are being conserved and preserved for future generations through one of India's largest conservation projects - the Muziris Heritage Project. Supplementing the Muziris heritage sites are 21 museums and other landmarks that aim to educate people about 2000 years of Kerala history.

VII. MUZIRIS PRESENT:

The Muziris Heritage Project is one of the biggest conservation projects in India, where the state and the central governments have come together to conserve a rich culture that is as old as 3000 years or more. This region forms a part of the heritage tourism circuit between North Paravur in Ernakulam and Kodungallur in Thrissur. Shrines, forts, palaces, seminaries, cemeteries, boatyards and markets spread over the municipality

of North Paravur to the municipality of Kodungallur will be preserved accordingly. Various performing arts that represent the non-physical aspect of the Muziris region are also under the process of conservation. In the initial phase of the project, four of the 27 museums have been opened to the public- the Paliam Nalukettu, Paliam Dutch Palace, the Chendamangalam Jewish synagogue and the Paravur Jewish synagogue. Two archaeological sites, Pattanam and Kottappuram where archaeological excavations and explorations are being undertaken will also be in focus. Many artifacts of interest have been unearthed at various sites in North Paravur-Kodungallur region of Kerala, through excavations as part of the Muziris Heritage Project .Utensils, clothes, coins, agricultural tools and inscriptions on plates or papyrus, along with folklore makes us to understand the lives of the people of that time.

VIII. MUZIRIS IN ANCIENT LITERATURE AND MANUSCRIPTS:

Tracing back to the history of Muziris is not an easy task. Ancient literature provides some vital clues in this regard. Early Tamil literature known as Sangam Literature and the Greco-Roman accounts are clear in linking this port town with the early Cheras.Present Chendamangalam, in the Muziris heritage region, and the original name of which was Jayanthamangalam, named after the Pandyan King Jayanthan, supports the view that Pandyan sway extended up to Periyar in the 7th century AD. The fact that 10 out of 13 important Vaishnavite temples of Malanadu were situated south of river Periyar in the 9th century indicates the Pandyan influence in the region during the time of Jatila Parantaka (765-815) who claimed to be a Parama Vaishnava. Part of Malabar, south of Kerala, was under the sway of the Pandyans of Madura. In the first century AD, Pliny has recorded that Neacinda in the Pamba valley was in the domain of the Pandyans.Musiri was subjected to attacks from the pirates of Nitrias. And the attack of the Nitrians must be in reprisal to the conquest of Musiri by the Chera King. And the Tamil literature Agom 2 says that Utian Cheral was the first Chera king whose territory is said to have extended up to the Western sea.

The Muziris heritage utilizes at a global level the possibilities of a region, which lost its glory centuries ago. Muziris is an ancient port town in little Kerala still holds a kind of beauty that is filled with history and culture. And through the project, we get ready to travel back in time for centuries. The old port town dishes out to us along with history and culture, are the remnants of its past glory, still observable in features like place-names, architecture, diet etc.

The Muziris Heritage reinstates the historical and cultural significance of the legendary port of Muziris. The region is dotted with numerous monuments of a bygone era that conjure up a vast and vivid past.

IX. PROJECT:1 - PALIAM NALUKETTU:

Kerala is witnessing an interesting trend in home architecture: the return of the traditional 'Nalukettu'. It has architectural roots from Buddhism which once prevailed in the area. Temple architecture was incorporated into domestic and public buildings.

The history of the Nalukettu style of architecture is an interesting one.

Nalukettu architecture is basically a rectangular shaped structure, wherein four halls are joined together with an inner courtyard called 'Nadumuttam' which faces the open sky.

The four halls on the sides are named:
  ➢ Vadakkini (Northern block), Kizhakkini (Eastern block),
  ➢ Thekkini (Southern block) and Padinjatti (Western block).

Nalukettu also consists of a basement storage room called "Nilavara".Many believe that this form of architecture have been inspired from the "Pagodas" of South Asia and Aryan Culture.

The union of four blocks is vital in Nalukettu.

The open courtyard to which these four blocks faces is also very important when its considered in terms of dimensional ratios and size.

Location:

--Paliam Nalukettu is located in the village of chendamangalamnear paravur in ernakulam district.

--It is a typical self contained Malayali house has been converted into Kerala Lifestyle Museum featuring a choicest collection of articles.

Figure: 2 - façade of nalukettu palace

--It was built to house the female members of the paliyam family around 450 years old.

--It is typical kerala style house with a central courtyard (nadumuttam) and rooms placed on all four sides of it.

Figure: 3

- map of nalukettu palace

Orientation:

- Naalukettu faces south- direct sunlight from late morning to early afternoon
- It's a single structure within a compound wall
- At the time of construction it was an isolated area which allowed free circulation of wind and air without any obstruction
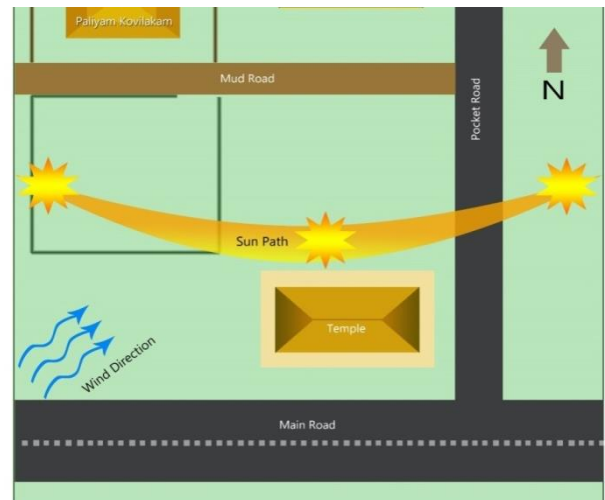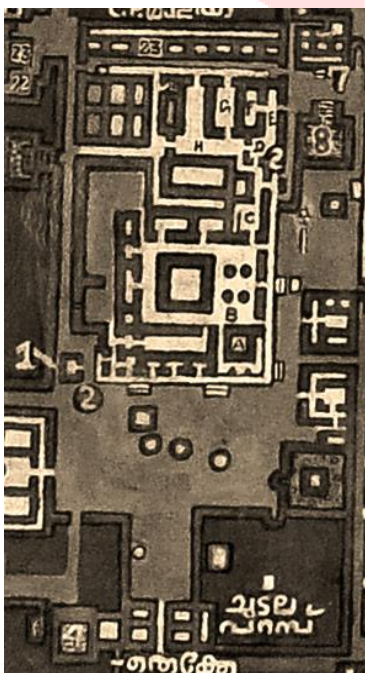- Very few trees around, almost barren.

Type of Structure: Two Storied Structure.


Figure: 4 –site plan

PALIAM NALUKETTU:

Paliam Nalukettu's are the traditional homesteads (tharavads) where several generations of a matrilineal joint family lived together. Nalukettu consists of a main house along with a few satellite houses. Portico, Inner Hall, Kitchen and four blocks - Northern, Southern, Eastern and Western - constitute the different parts of a traditional Nalukettu. The design and construction pattern are closely linked to the life cycle of women in the family, their rituals, beliefs and celebrations. Nalukettu was occupied by the women of Paliam Noble family who followed matrilineal system. This structure is also an epitome of the traditional housing architecture of Kerala. Nalukettu museum presents to the visitor, the architectural model of Nalukettu and various social-cultural and economic practices from the feudal era. This classical structure was built by the elder member of the family in the year 1786, for the women and minor boys of Paliam. It has a big courtyard at the centre with rooms surrounding it and Purathalam, where the members gathered to chat and for recreational

activities. There used to be a common dining hall and a common kitchen as all the members lived and dined together, under the protection of Valiachan. The boys, when they became majors, had separate bachelor living quarters and after their marriage, the administration provided them houses. This style of 'community living'

continued till the partition of the joint family. The last members left the Nalukettu after the family partition deed, and so the building is no longer occupied.
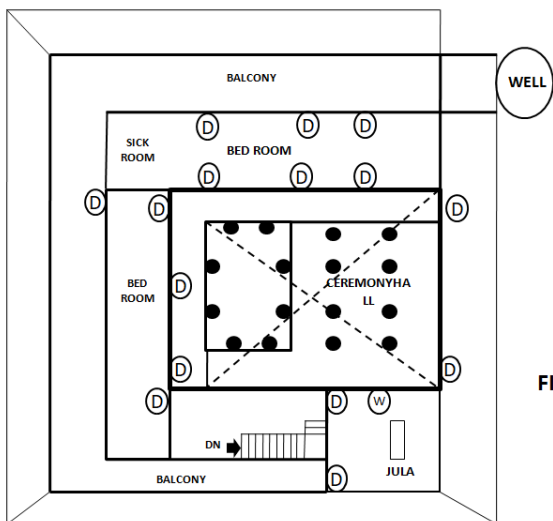
Figure: 4 - layout of nalukettu palace
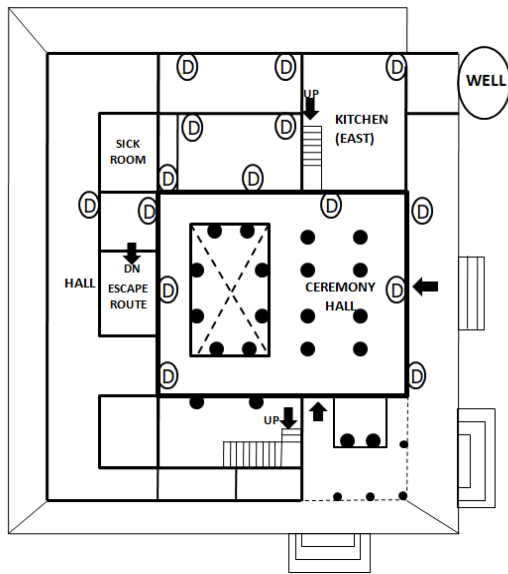
Ground Floor Consists of:
- Kitchen
- Kizhakkini
- Thekkini
- Delivery Rooms
- Ara and Hidden Basement

Figure: 5 – ground floor plan

First Floor consists of:
- The four private bedrooms which are just separated using wooden boards
- Vallyamma is considered to be the most superior and hence her room is the largest of all which is again in the first floor.
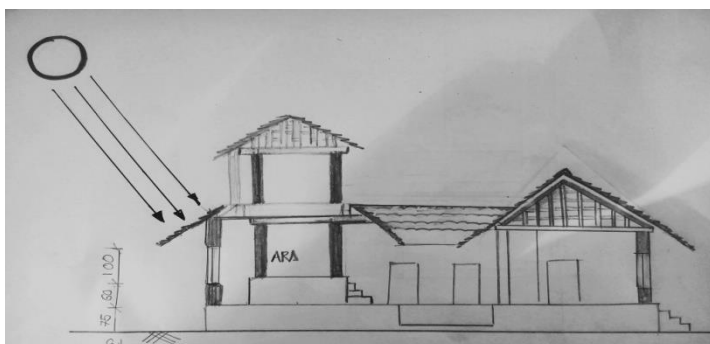
Figure: 6 – first floor plan

- Plinth height= 2'4"
- Verandah height= 1'9"
- Since paravur was a flood prone area this plinth height protected from the floods to an extend protection from insects and other organisms protection against dampness

Figure: 7 – section

X. ARCHITECTURAL FEATURES:

- The Nalukettu is a typical self-contained Malayali house, a quadrangle building consisting of four blocks, with a rectangular courtyard in the centre known as the "nadumittam".
- The western block or "padinjattini" is divided into three rooms the middle one of which is the private strong room or "ara" where all the valuables and house hold deities are kept.
- The north east block or "vadakkini" is divided into two parts, the kitchen and the dining room.
- The other rooms in the north quarter houses general rooms.
- The whole or the middle portions of the eastern and southern blocks"kizhakkini and tekkini" are open halls where guests are received;
- The same on the upper floors consist of bedrooms for the women, where they are met by their husbands occasionally in the night.
- Every structure faces the sunlight, and in some well designed naalukettu, there is excellent ventilation. Temperatures, even in the heat of summer, are markedly lower within the naalukettu.
- Base model is normally square, rectangular, circular plain shapes with ribbed roof evolved from functional consideration.
- Long, steep sloping roof which make the building look low rise.
- Gable windows were used which provided for air circulation and thermal control.
- Detached buildings
- Passive method of climate control
- Plinth height is usually 1'-6" (450 mm).
- Extension of roof after base is 2'-6" to 3'-0" (750 to 900 mm) acting as a rain shade
- Sothern wall in thekkinipura and western wall of vadakkinipura are 24cms thicker than other walls
- Rooms: North-Treasury; NE-Prayer room; East-Bathroom; SE-Kitchen;
           South-Bedroom; SW-Armory; NW-Cowshed; West-Drawing room
- The building materials like red bricks, mud and woods used in Nalukettu were also locally available.
- Walls- made of laterite with sand filling and lime plastering. Walls were 30cm thick which provided insulation and kept the interiors cool
- Columns: entirely made out of timber
- Karna Sutras (small windows): Ventilation: The nalukett incorporates the principle of karnasutra, an opening in the form of a small hole is provide in the south west and north east corners. This allows the passage of air, light and magnetic flux diagonally through the house. For Perfect air circulation inside; Placed below 5'0"
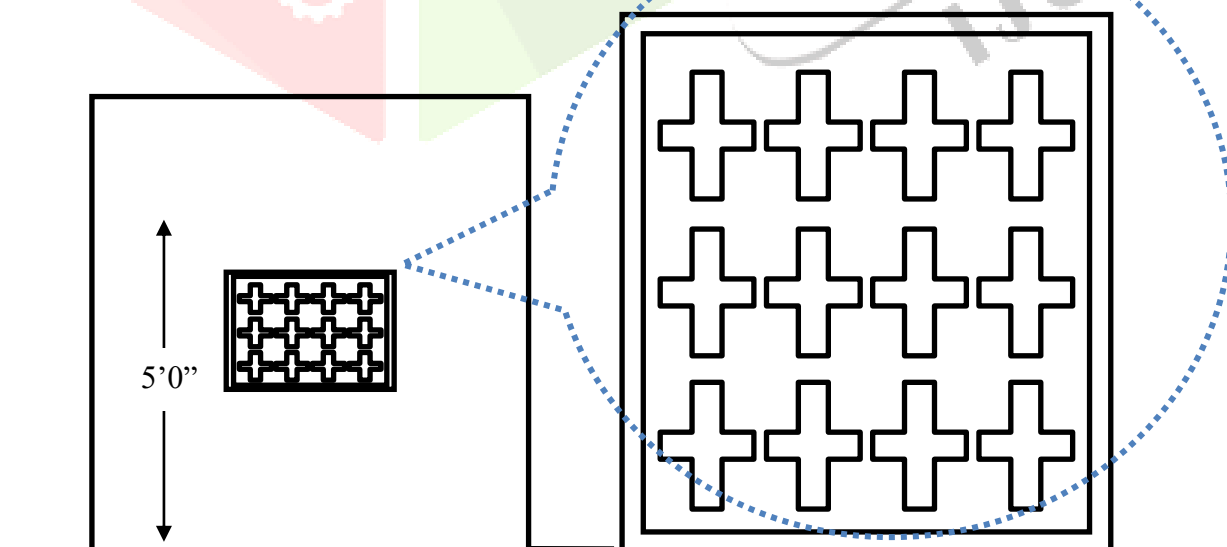

Figure: 8 – wall elevation showing karna sutras - detail

- Flooring: Surkhi flooring-cool interiors;egg plastering: making the floor smooth and shiny; the delivery room had tiles laid which was imported during that time from foreign countries; Floors were made in three different levels- the ara and thekkini were raised to a height of 1'4" and the basement below the ara.
- Courtyard: It plays a very important role in controlling the temperature within the house.

- Verandas on all four sides that lead to various rooms. Moreover, since ladies were not allowed to go outside, therefore this was their only place for interaction.

Figure: 9 – passive cooling in the courtyard

- Windows: provided at a height of 1'9"from the floor upto a height of 5'2". They are made of timber frame and timber panels; the overhangs extend so as to limit the direct entry of sunrays through the windows
- Roof: Traditional pitched roof with a slope of 45 degree supported over timber frames covered with traditional roofing clay tiles; the pitched slope enables the easy drain of rainwater; extended over the verandah at a length of 1m which protects the walls from direct heat and rains
- Machu: Similar to a false ceiling provided beneath the roof, which is made of timber. It creates a layer of air between the ceiling and the roof which act as an insulator that prevents the conduction of exterior heat through the roof. Ventilations are provide between machu and the rooms.
- Poomukham: It is the welcoming space of the house. It has a raised platform for gatherings; the sloping roofs are clearly visible here.

Figure: 10 – poomukham

- The first floor had wooden jallies below the windowsill around that opened to the courtyard. Even the ara and secret passage in the basement were also provided with ventilation.There were no windows provided for the private bedrooms.
- Vallyamma's Room: It is the largest room in the house. It has glass windows which increases heat compared to the other rooms. Jallies are provided below the windows for air circulation.
- Timber panelling done on all four walls

Figure: 11 – vallyamma's room

Figure: 12 –thekkini

Figure: 13 – kizhakkini

Figure: 14 - nilavara.

Figure: 15 – first floor corridor

XI. ANALYSIS:

Temperature:

- Materials used helped in reducing the temperature.
- Overhangs were provided at a considerable length which prevented the direct exposure of walls to sunlight.
- Provision of machu.
- Courtyard.
- Thick walls.

Wind:

- The bedrooms were provided in the south west and west directions which made maximum utilization of natural wind.
- Karnasuthra that runs from south west to north east.
- Kitchen was placed in the north east direction so that the wind would flow out of the kitchen.

Rain:

- Pitched roofs and eave boards helped in the drainage of rain water.
- Overhangs protected walls from coming into direct contact with rain.

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