Context

Built, Living and Natural







Vol X Issue 1 *Spring/Summer 2013*

Journal of the Development and Research Organisation for Nature, Arts and Heritage

.....Sustainable, environmentally sensitive

.....Draws on the contemporary

It is our aim to actively promote sustainable development through conservation, utilisation of traditional practices and modern technologies, knowledge sharing and mutual interaction. The organisation is presently working towards the documentation, conservation and development of the built heritage, ecology and environment, communities, arts, crafts and education.

Share a vision for a better quality of life without foregoing strengths of the traditional

.....Highly motivated professionals

Dronah publishes a bi-annual refereed journal titled "Context: Built, Living and Natural", which records and evaluates the documentation and conservation methods for built and natural heritage, and simultaneously highlights people's role in the process by recording community activities. Interested subscribers, kindly download the subscription form from our website.

.....An Interdisciplinary organisation

Dronah

Registered Office:
A-258, South City-1, Gurgaon 122001, Haryana, Tel: (0124) 2381067 / 4082081,
Fax: (0124) 4269081, dronah@gmail.com, Website: www.dronah.org

Contents

Printed and published by DRONAH
A-258, South City - I, Gurgaon-122 001
Tel: 0124-4082081,2381067, Fax: 0124-4269081
Email: context8@gmail.com
Website: http://www.dronah.org

ISSN No : 0973-502X

Vol X Issue 1 Spring/Summer 2013

About the Volume

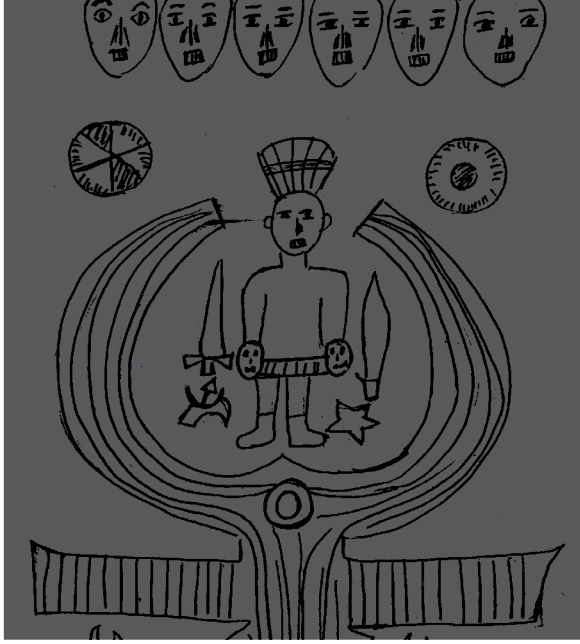
This issue of Context has a special focus on documentation, presenting a diverse range of articles in the initial section, ranging from history of traditional materials like brick in India to prevalent indigenous building practices and sacred sites.

The introductory article by Neeta Das reflects the use of bricks deriving from past knowledge and wisdom and an adaptive trait towards the current changing conditions. Kaushik Modi and Inderjit Singh Marwah record some of the tribal building practices and rituals in Gujarat and Nagaland, indicating the growing concern for use of these traditional knowledge systems in the present scenario. Sacred sites are an essential part of the cultural landscapes spread across India. Documentation of Chamunda Devi Temple in Himachal by Harveen Bhandari and concerns for visitor management at pilgrim sites of India by Mugdha Yelkar, present an interesting discourse on sacred heritage and its sustainable management. Mugdha also brings forth the dichotomies between the type of visitors and their approaches towards the sacred sites.

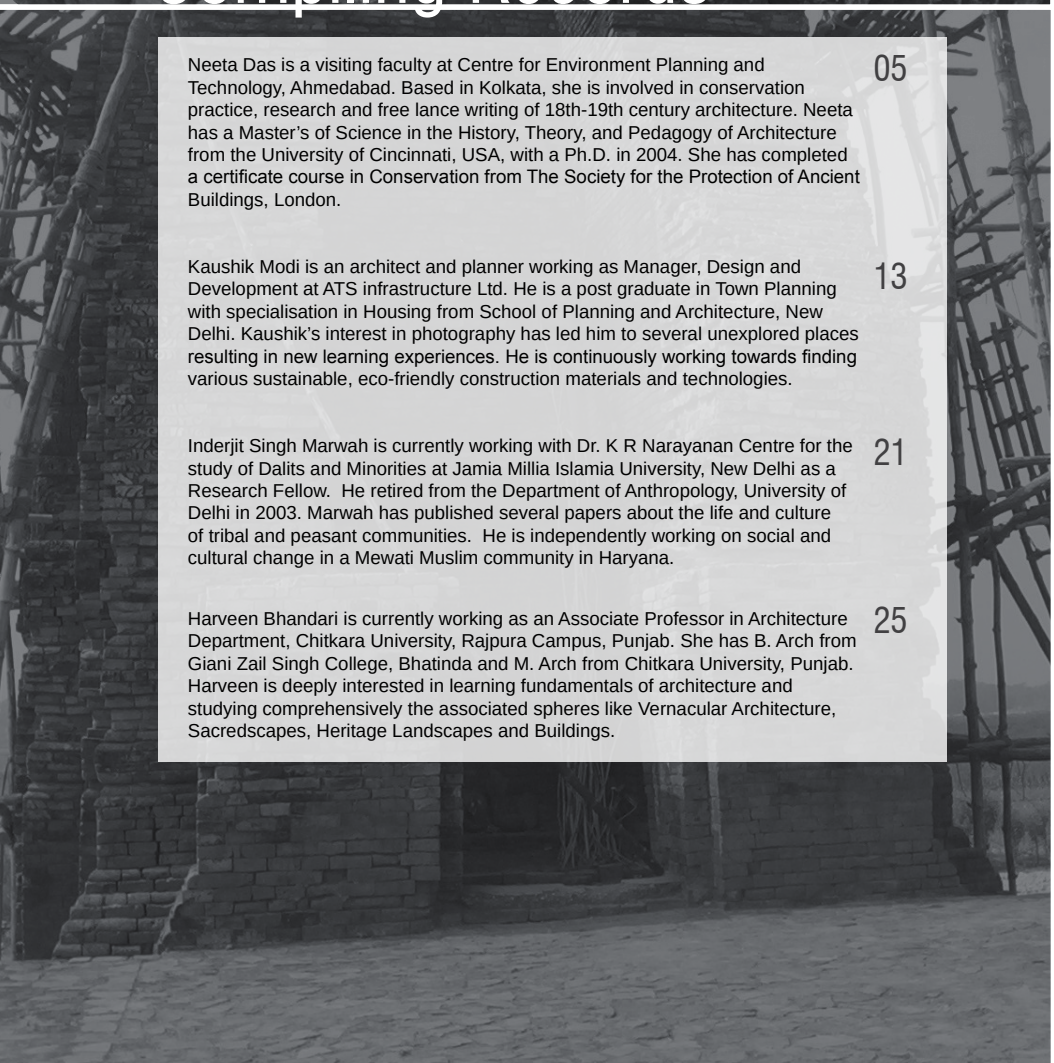
Methods and approaches to deal with conservation and protection of our built heritage, in the form of private havelis in Haryana, entire urban settlements in small towns like Chandernagore or even megacities like Delhi are presented in articles by Jyoti Pandey Sharma, Aishwarya Tipnis and Ashok Kumar Jain. These articles enumerate various ways of sustaining heritage including use of traditional materials to ensuring adequate planning and protection at urban level. Aditya Kumar points out the importance of community involvement and consideration of slums while strategising urban development policies. He showcases initiatives in South Africa, suggesting an approach that is equally relevant in the Indian context. Mariyam Zakiah and Anne Feenstra offer a sustainable solution, as they talk about involvement of local communities in devising space heating techniques in East Sikkim.

Through the heritage album section we visit the rich inheritance of Bharatpur with a blend of Braj folk tradition and royal grandeur of the Jat Maharajas.

- Editorial Team



Compiling Records



Brickwork used in the shikhara

Brick Temples of the Gupta Period

NEETA DAS

Brick is one of the oldest building materials across the world. The mud brick was invented between 10,000 BC and 8,000 BC, while moulded brick was developed later in Mesopotamia about 5000 BC. However, the most significant landmark was the invention of the fired brick in 3500 BC. It was this that enabled the construction of permanent structures in areas where it had been previously impossible.

In India, the use of brick can been found as early as the Indus Valley cities. They continued to be used by Buddhist and Hindu builders. Prior to the Gupta period, approximately 320-550 AD, temples were generally made of timber or other perishable materials. The full potential of using brick was explored for the first time during the Gupta period. In Uttar Pradesh (UP), one can find several brick temples like the Bhitargaon temple in Kanpur district and Bhitari in Ghazipur district belonging to this period. Many more scattered examples can also be found in the Gangetic plains. This trend continued up to the ninth century. These examples give an idea of the development of brick and brick construction techniques prior to the advent of Muslims in India with their arcuated systems.

Detail of brickwork on top of the shikhara at Astika Baba Temple

The potential of using rock, dressed stone and brick was explored for the first time during the Gupta period. It was characterised by a more reasoned application of structural principles. Mahendravarman's[1] inscription in the Mamallapuram monoliths states that traditional architects erected religious structures in brick, timber, metal, mortar and plaster (Saran & Singh 1994). Along with monoliths, ashlar stone and timber as well as dry stone masonry was the order of the Gupta period. However, in UP, one can find several groups of brick temples of this period, for example, the Bhitargaon temple in Kanpur district.

The tradition of manufacturing all types of bricks flourished after the Gupta period. These bricks were of different shapes and sizes; the large sized bricks were used to cover drains, the pitted or honeycombed bricks were used for sockets or pivots of doors, bricks of sizes larger than those used in the walls were used for flooring, L-shaped bricks were used for corners and the wedged shaped bricks were needed for rounding. The bricks could be laid flat, on edge, or even obliquely, depending on their use. Bricks began to be moulded according to the requirements of decoration and detailing. Thus, the possibilities of creating artistic expressions entirely in bricks were explored. The artistic uniqueness of the Gupta period in structures excelled over all preceding examples (Misra 1997). During this period both mud mortar and lime mortar was used.

Most of the early temples had a flat roof with stone slabs, or were barrel vaulted. A pyramidal *shikhara* (rising tower in the Hindu temple architecture of North India) started developing slowly that was built in gradually receding tiers. The Bhitargaon temple shows an innovation of an arch at the entrance, termed by Alexander Cunningham, the Director General of Archaeological Survey of India in 1871, as a 'voussoir arch'. The basic principle of the stability of a true arch is that the units forming it hold themselves by mutual pressure and the entire arch maintains its equilibrium

Proportional systems of bricks mentioned in the Vedic period and in the post-Vedic period

Ancient and pre-historic brick	**Width (mm)**	**Length (mm)**	**Height (mm)**	**Proportion**
	139.7	279.4	63.5	1: 2 : ½
Largest (drains)	266.7	514.35	88.9	1 : 2 : 1/3
Great bath	129.54	260.35	55.88	1 : 2 : 0.43
Great bath	130.81	279.4	57.15	1 : 2 : 0.43
Bricks mentioned in Vedas	1 *angula* = 25.4 mm			
Mansara	177.8	222.25/ 355.6	88.9/ 177.8	1: 1.25: 1/2 to 1; 1: 2 : ½ to 1
Largest	762	952.5/ 1524	381/ 762	
Mayamata	101.6	203.2	50.8	1:2: 1/3 to 1/4
	203.2	406.4	101.6	1:2: 1/3 to 1/4
Rajavallabha				
Superior	254	406.4	83.82	1: 1.6 : 1/3
Average	228.6	381	76.2	1 : 1.67 : 1/3
Inferior	177.8	355.6	58.42	1 : 2 : 1/3
Bricks in the post-Vedic period				
	355.6	635	127	1: 1.78 : 0.36
	368.3	546.1	82.55	1 : 1.67 : 0.2
	304.8	508	69.85	1 : 1.67 : 0.23
Bricks of the Gupta period	**Width (mm)**	**Length (mm)**	**Height (mm)**	**Proportion**
	228.6	457.2	76.2	1 : 2 : 1/3
	266.7	444.5	76.2	1 : 1.67 : 1/3
	203.2	330.2	50.8	1 : 1.67 : 1/4
Bhitari	228.6	482.6	69.85	1 : 2.1 : 1/3
Bhitargaon (measured)	228.6	406.4	50.8	1 : 1.78 : 1/4
Bricks of ninth century				
Nasirabad (measured)	165.1	317.5	63.5	1 : 1.92 : 1/3
Bricks after the Muslim invasion				
Qadian, Punjab (measured)	101.6	152.4	38.1	1 : 1.5 : 1/3
Lucknow (measured)	101.6	127	19.05	1 : 1.25 : 1/5
Murshidabad, West Bengal (measured)	114.3	165.1 (Broken)	31.75	1 : 1.4 : 1/4
	101.6	139.7 (Broken)	25.4	1 : 1.38 : 1/4
	76.2	114.3	19.05	1 : 1.5 : 1/4
	63.5	88.9	12.7	1 : 1.4 : 1/5
Bricks of 19th century				
La Martiniere, Lucknow (measured)	152.4	292.1	50.8	1 : 1.9 : 1/3
Wheeler's Entrenchment, East India Company, Kanpur (measured)	152.4	292.1	76.2	1 : 1.9 : 1/2
20th century	114.3	228.6	76.2	1 : 2 : 1/3

Source: Based on the research by the author from primary and secondary sources

by getting a counter thrust from the springing points. In a corbelled arch the structure does not behave as a single unit, but all its individual members are subject to gravity. Due to the controversial understanding of the structural behaviour of arches, in the absence of a key stone and the placement of the brick voussoirs, scholars have termed it a 'Hindu' arch. The *garbhagriha* (inner shrine within a temple) was covered by a corbelled dome or vault on a polygonal plan. Successive horizontal layers were laid with slight corbelling, progressively narrowing the interior space until the opening at the top became so small that it could be covered by a single slab of stone or bricks. The *shikhara* would have an internal hollow chamber above the roof, a technique that was used to lessen the weight of the superstructure.

Another similar group of brick temples at Bhitari, district Ghazipur, on the UP and Bihar border, might have been plastered with a special plaster rich in lime. Broken bricks have also been used. Some walls of the temple are nearly one metre thick. During Gupta period, foundations of well baked bricks were made on sand packed bases. Bricks were also used as flooring. During this period, brick laying mostly followed running stretchers, but sometimes, courses of alternate headers and stretchers were also laid. The exterior portions of the buildings were often decorated by using special types of bricks. The cornices were rounded by skilful use of chamfered bricks.

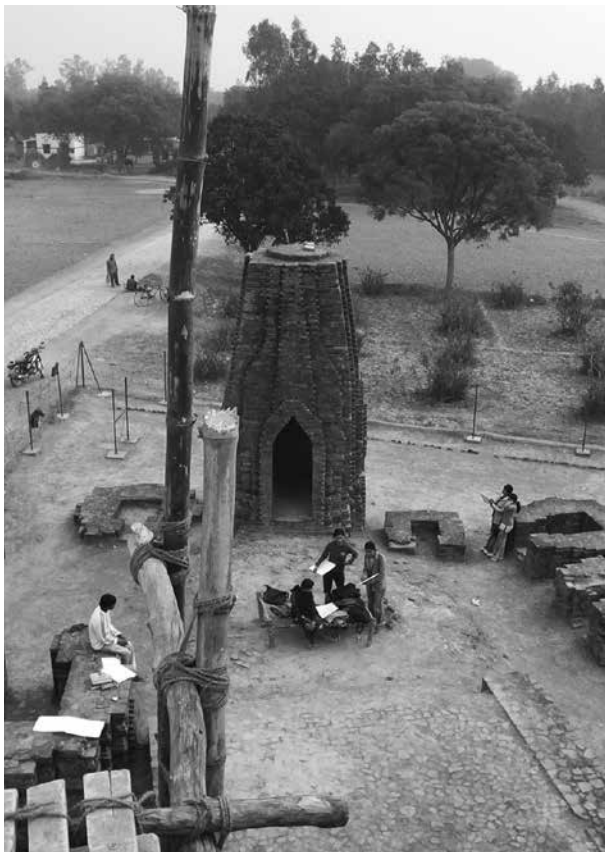
Up to the eighth century, bricks varied from 76 millimetres long to a maximum of 610 millimetres. However, the commonly used sizes were between 250 millimetres to 457 millimetres long, with variable widths and five to eight millimetres thick. Large bricks up to 150 millimetres long have been recorded, but are rare. It is possible to find the details of the composition of the lime plaster used during the Gupta period.[2] They obtained these lime from lime stones or *kankar* limes (Saran & Singh 1994).

In Nasirabad, district Sitapur of UP, two groups of temples, Kalpa Devi and Astika Baba, are located close to each other. There are remains of as many as six temples nearby in this complex. All these temples have been constructed in brick around the ninth century. They exemplify the construction system of temples of the Gupta period. The clay around these temples are good for producing bricks because there are several brick kilns located here that produce standard bricks commonly used today.

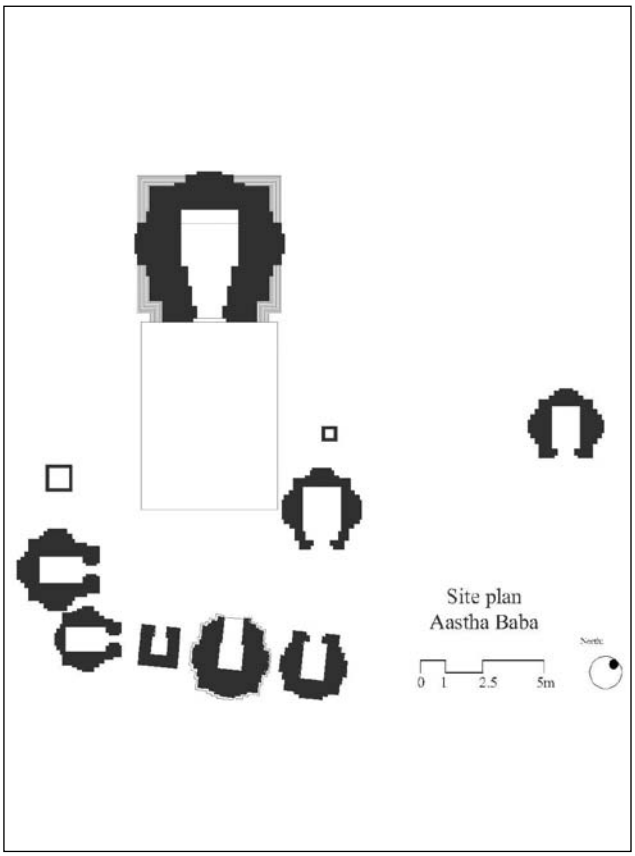
An interesting feature to note in these temples is the variety of shapes and sizes of bricks used as described in historical texts such as Vastu Vidya. The Vedic texts mention conditions like the gender of the deity, the caste of the client, and quality of construction while deciding the size of the bricks to be used. So bricks would be made taking these factors into consideration. Secondly, the basic measurement of construction, the *angula*, was described as being the middle phalanx of the middle finger of the officiating priest. This too has three variations, small, medium and large. Finally, different texts give different proportions for the bricks. These three criteria together have presented a wide range of brick shapes and sizes. Nevertheless, upon measuring and noting various brick sizes, the proportion of brick seems to be more or less constant. It generally is 1:2:1/3 or 1/4, where one is the width, two is the length, and the thickness is one third or one fourth of the width, as is the case here at Nasirabad.

However, brick sizes themselves vary considerably. Both the big and small temple in Astika Baba complex have one hundred brick layers, but because the brick sizes used in both are different, the temples are of different sizes. The large temple has bigger bricks as compared to the smaller temple. It may be assumed that the difference may be because of the gender of the presiding deity. The brick sizes do not match with the even and odd theory of the texts where the female bricks are even numbered and male bricks are odd numbered. This difference may have potentially arisen if the officiating priest had an abnormal phalanx size! The average size of the middle phalanx of the middle finger of an Indian male is approximately 25.4 millimetres. Some variation may also be attributed to the mortar sizes that vary from 19 millimetres to 12.7 millimetres. The composition of this mortar that is primarily out of lime can be ascertained only after detailed analysis.

The structural system of these temples is neither arcuated nor trabeated but relies on gravity as the basis of the design of walls, openings, and *shikhara*s. Unlike modern masonry, the walls are extremely thick and not based on structural necessity, but on the proportion of the *grabhagriha.* The header or width of the brick is visible on the face of the wall, while the stretcher or longer sides are used at corners to provide the overlap for bonding. The outer and inner face of the wall has good quality bricks while the inside has been filled with broken bricks and plaster. Although the wall shows a bonding similar to modern brickwork but it does not function the same way structurally. The laying of the

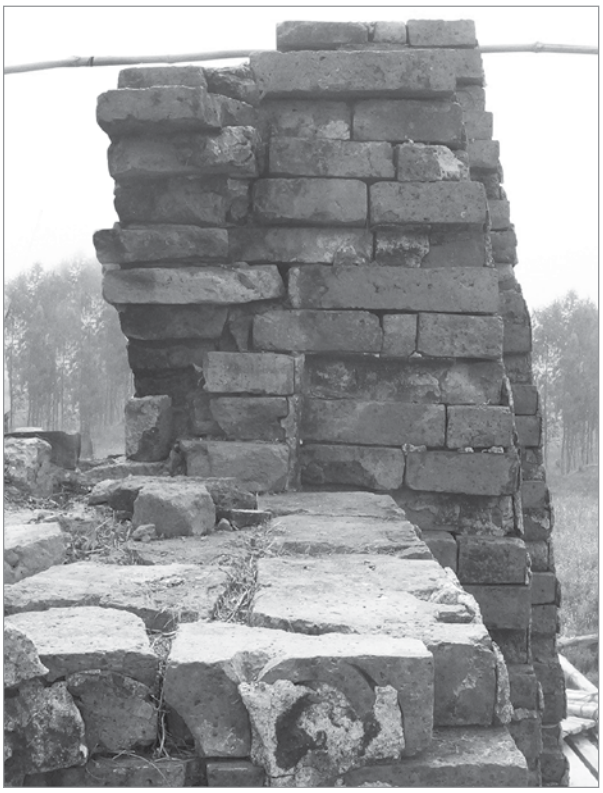


Astika Baba group of temples



Site plan of Nasirabad group of temples

Kalpa Devi group of temples



Individual courses of brickwork using different orientations of brick laying

The use of specially shaped bricks for ornamentation

bricks on the façade is related to the surface articulation and decoration.

Openings and niches are made by bricks corbelled to a third of their thickness and size. The *shikhara* has a very interesting construction technique. Primarily it has two parts; an inner roof for the *garbhagriha* and the outer one proportionate to the temple form as a whole. Between both the roofs is a cavity visible from the *garbhagriha*, probably due to lack of any way of closing the same. The inner and outer roof is made by corbelling[4] the bricks. The corbels are half to a third of the thickness of the brick. A gentle slope is achieved by placing several layers of one-third corbel bricks on top of corbels equal to half thickness. The parabolic shape of the temple is also achieved with corbels on both the faces of the temple. The slope is very gentle so as not to disturb the centre of gravity of the wall.

The decoration on the other face of the temple is integrated right from the brick making stage to the plastering stage. The pattern on the temples is based on the horizontal and vertical layering of the brickwork. Bricks are recessed or extruded to a minimum of the brick thickness to a maximum of one third of the length of the brick to produce a pattern. Along with this system, chiselled, and moulded bricks have been used for corners, bends, and designs. A similar system is used for the vertical plane, where the whole surface is divided into multiple planes, simply by recessing bricks back and forth. The basic planning, however, dictates the brickwork.

All the floral patterns engraved on the surface of the temple could not have been carved in-situ. It seems more probable that these were done on the ground. Sun dried bricks of one vertical plane would be spread out on the floor, side face up. The master craftsmen would then draw out the pattern on the same. The bricks would be accordingly carved, baked, and be prepared for use. Signs of scooping can be seen in the bricks which support this theory but no other textual material is available. After installation, the bricks were plastered rendering the pattern visible. The temples may have been brightly coloured.

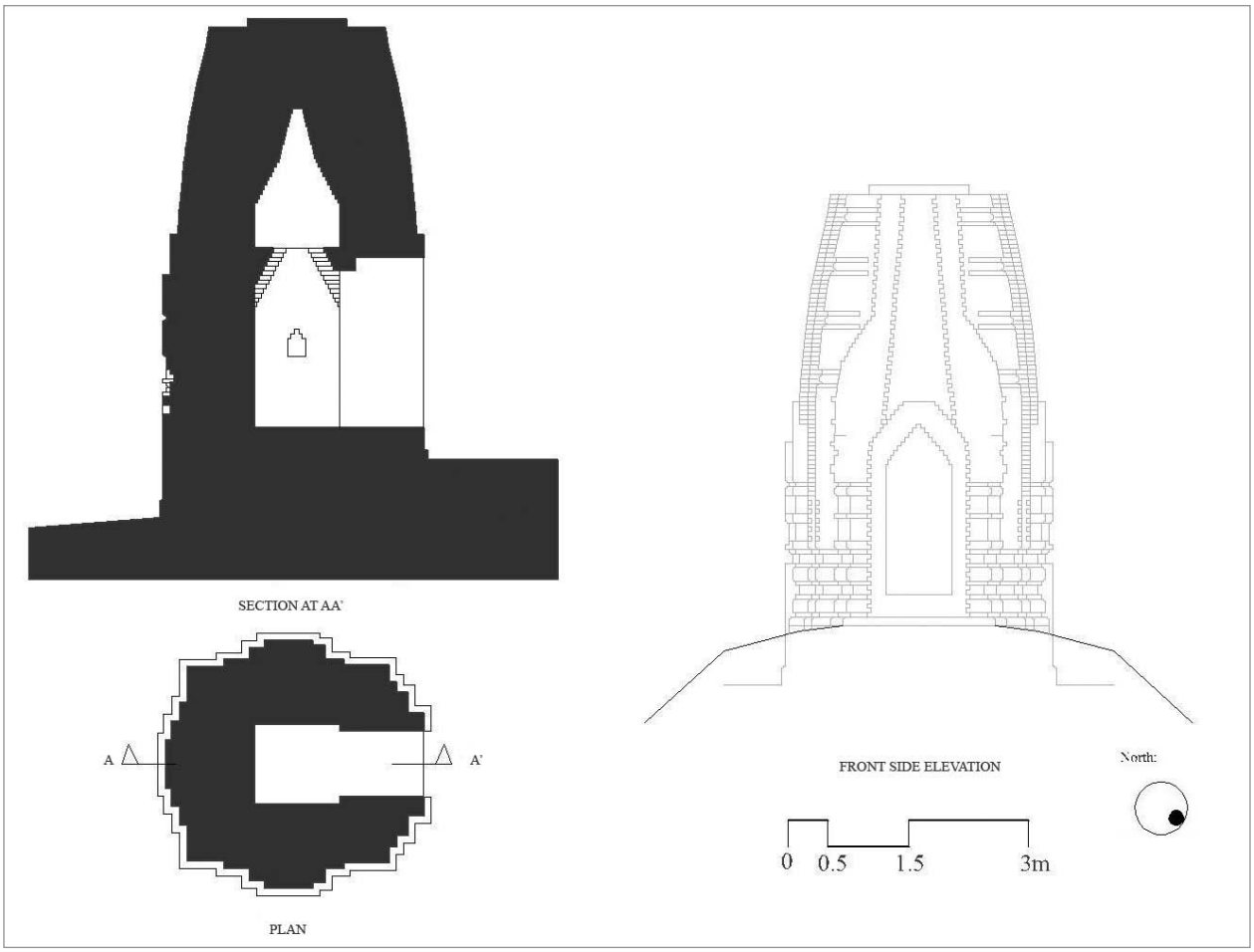
The final product indicates more stress towards the solidity of the structure and intricacy of workmanship. The temple seems more of an outcome of a highly developed craft and teamwork rather than a structural genius. If one considers a brick to be a daughter of the Earth and the temple fashioned after a mound or the

Mount Meru [5]; then these brick temples symbolise this concept, added to which, is the rich vibrancy of life portrayed on the surface.

From the 11th century onwards, due to the Islamic influence brought by the Muslim rulers, the brick buildings took over a new face. The bricks were now thin but still handmade, almost the size of a palm or even smaller. They were nearly the same size as the mortar thickness or even thinner, and used almost as an aggregate for a lime concrete. The Islamic builders used this concrete to produce their buildings with the arcuated technology that they imported with them. Henceforth, brick buildings were made with arches, domes, and vaults unlike the pre-existing Hindu system of massing and corbelling.

After the advent of the Muslims there was a steady decline in the construction of temples in general and decorative brickwork in particular. However, this craft re-surfaced in the 18th century in Bengal where one sees the most exquisite examples of brick temples. Unlike

Corbelling techniques used in construction of a garbha griha



Astika Baba small temple

Remnants of decorative plasterwork

Patterns scooped in bricks

the older brick temples which had a corbelled system of construction, the Bengal temples relied more on the new Islamic arcuated system of construction with thinner bricks. Also the later Bengal temples were exuberantly decorated with terracotta tiles instead of being plastered. The Muslim rulers in Bengal had perfected this art in their ornate brick mosques at Gaur in the 15th and 16th centuries. These terracotta temples present a very strong tradition of brickwork in India and can be said to be the high point of this as a decorative craft. They also present the revival of temple buildings in India after several centuries. Today, the brick is viewed as a modest building material and its use shows little of the imagination demonstrated during the Gupta period. With the widespread use of reinforced concrete framed construction within the country, brick is used primarily as an infill material. It is therefore imperative to document and study historic brick structures within India to better understand the full potential of brick as a construction material.

Acknowledgements

All photographs are by the author and the measured drawings are by her students of Babu Banarasi Das National Institute of Technology and Management (BBDNITM), Lucknow studied and made for a grant by Professor Adam Hardy.

Bibliographic references

- Chakrabarti, V 1999, *Indian Architectural Theory*, Oxford University Press, Delhi.
- Misra, TN 1997, *Ancient Indian Bricks and Brick Remains*, Harman Publishing House, New Delhi.
- Saran, S & Singh, R 1994, *History of Science and Technology during the Gupta period*, Prachi Prakashan, New Delhi.

Notes

1 Mahendravarman I was a Pallava king who ruled the northern regions of what forms present-day Tamil Nadu in India in the early seventh century. He was the son of Simhavishnu, who defeated the Kalabhras and re-established the Pallava kingdom.

2 The rough lime plaster has one part sand and three part lime (1:4) whereas the finishing coat of lime plaster has only six percent of sand in it. Only very fine and medium size grains less than 1.5 millimetres were used in the preparation of the plaster. Presence of Manganese Oxide contents show that dolomite lime stone CaMg $(CO_3)_2$ was used which develops very low shrinkage and has better plasticity. Studies also indicate that the percentage of lime was reduced during the Gupta period from the earlier Sunga and Kushan period.

3 Vastu Vidya or the ancient Indian knowledge of architecture is as old as the Vedas that belong to the period 1500-1000 BC. Its first textual evidence is in the Rig Veda. The rituals associated with architecture are also described in the later Vedas, Sutras, Shastra and Puranas. Vastu Vidya has two streams, the Nagara and the Dravida schools, which became distinct only after the sixth century AD and show much borrowing from each. The earliest texts of Mansara were written in 450-550 AD during the Gupta period. Detailed description about the type, size, and construction methods of brick is mentioned in these texts as is the system of measurement and portioning of temples (Chakrabarti 1999).

4 In architecture a corbel or console is a structural piece of stone, wood or metal jutting from a wall to carry a superincumbent weight, a type of bracket. A corbel is a solid piece of material in the wall, whereas a console is a piece applied to the structure. The technique of corbelling, where rows of corbels deeply keyed inside a wall support a projecting wall or parapet, has been used since Neolithic times.

5 Mount Meru, also called Sumeru that is the 'excellent Meru' and Mahameru that is 'great Meru', is a sacred mountain in Hindu, Jain as well as Buddhist cosmology and is considered to be the centre of all the physical, metaphysical and spiritual universes. It is also the abode of Lord Brahma and the Demi-Gods.

Walls constructed in bamboo and roofs using Mangalore tiles

Settlement Patterns of the Rathwa Community, Gujarat

KAUSHIK MODI

INTRODUCTION

From time immemorial the forests, hills, mountains and river valleys of India have been populated by tribal communities. Among these, the third largest tribal group in India, the Bhils are found mainly in central India. The Bhils who occupy the *rath* (hills or plateaus) are called Rathias or Rathwas in Gujarat. Unfortunately, majority of the mainstream population has failed to realise the dynamic value of tribal cultures in India, as hitherto they have been stereotypically viewed as primitive and uncivilised people. While they have been granted political rights, the reality is that the majority are socially and economically marginalised.

The Rathwa tribe has a distinct social, cultural and political setup. Their settlement patterns are based on certain principles related to their beliefs, rituals and social norms and are greatly influenced by factors such as climate, topography, locally available materials and construction skills that developed over a period of time. After remaining isolated for a long time, these tribes have adapted to different developmental activities initiated by the government such as industrialisation and provision of employment opportunities, leading to a change in the socio-economic characteristics, culture and lifestyle that is directly or indirectly reflected in their housing patterns. Hence, there is a need to study tribal housing to identify the upcoming changes with associated problems as well as potential to formulate guidelines for their future.

Demographic Profile of the Rathwa Community

Total Population in this country	6,16,000
Population of Rathwas in Gujarat	5,56,000
Total numberof villages in Gujarat where Rathwa community lives	127
Male Population	51%
Female Population	49%
Male literacy ratio	76%
Female literacy ratio	62%
Average Literacy ratio	69%
Religion:	
Hinduism	99.85%
Christian	0.10%
Islam	0.01%
Ethnic Religions	0.04%
Language:	
Gujarati	1,72,600
Rathwi	3,83,400
House hold size	5.8 to 6.5

Source: Census of India 2001

RATHWA COMMUNITY

The Rathwas are a Hindu tribe found in Gujarat, India. They are also known as Rathwa Kolis. Dhebariya, Kohaliya, Moti Nat and Nan Nat are the major sub-groups of the Rathwa community. The tribe is known for its Pithora paintings and Chuum Jhum, a famous tribal dance form. The Rathwa derive their name from the word *rathbistar* (an inhabitant of a forest or hilly region). They are said to have immigrated from Madhya Pradesh during the Middle Ages and are now found in the *taluka*s (district) of Chhota Udaipur, Jabugam and Nasvadi in Baroda District. They speak their own dialect of Gujarati, known as Rathwi.

The community is endogamous[1] and consist of a number of exogamous clans, the main ones being the Baka, Fadia, Hamania, Kothari, Mahania and Thebaria. They are mostly small and medium sized farmers. Many Rathwa are landless agriculture labourers, working on the lands of the Patidar community. The community follow their own folk religion that has now been heavily influenced by Hinduism. Their customs are similar to other tribal communities of the region

Front veranda

such as the Patanwadia, who are sub-group of the larger Koli community, and get their name from the city of Patan, in Mehsana District.

In Chhota Udaipur Taluka there are villages that have most of the Rathwa settlements for example Ambala, Ambali, Baroj, Gabadia, Ganthia, Kanalwa, Kawant, Malajo, Punyavant, Raipur and Sursi. All these villages are located at an average distance of five to ten kilometres from each other and are basically small, scattered settlements.

Religious traditions of the Rathwa community

Badvo or a shaman is the chief religious practitioner who directs all religious activities and holds a formidable influence over all socio-economic matters of the village. In cases of disease, theft, sterility of women or cows or buffaloes or goats, failure of monsoon and such calamities, the *badvo* is consulted. He is a diviner and an interpreter of supernatural phenomena. In the absence of *pujaro* (priest of the temple) the *badvo* also manages religious sacrifices and weddings.

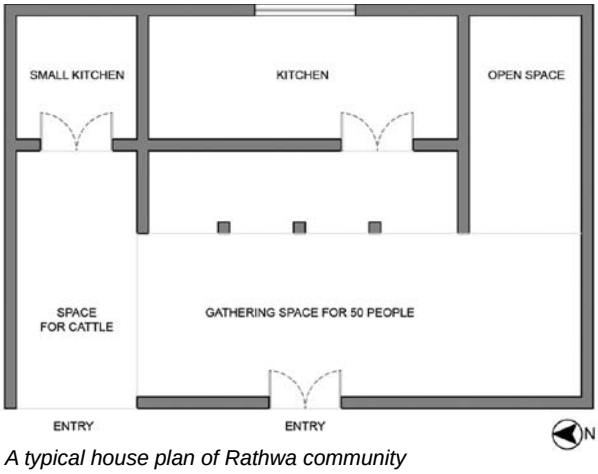
In addition to the spirits of the ancestors, the Rathwas believe in many gods such as Gamdev (village god), Himodi (the goddess of village territory), Khetarpal (field deity), Phithoro (god of food grains), Ind and Hadhol (Pithoro's assistants), Bhehato (protector of buffaloes), Babo Tundvo and Ai Tundvi (two hills of the same names considered gods). The sun and moon are held as supreme powers.

Traditional occupational patterns and evolution

Rathwas traditionally depend on the forest for agricultural land, wild animals for prey and wood for fuel and house building. They are also engaged in the collection and gathering of forest products. For supplementing their income, the tribes rear buffaloes, bullocks, cows, fowl and goats. Over the years, the primary mode of occupation of the community has shifted towards agriculture. However, under the *Forest Conservation Act1980* the conversion of forest land for non-forest purposes has been restricted, but the 'National Forest Policy of 1988' gave special recognition to the symbiotic relationship between tribal groups and forest areas. As a result, 87% of the population is dependent on agriculture for their livelihood. However, the Rathwas still use crude systems that limits productivity.

One of the most important socio-economic activities within the community is the *haat* or local market where every area has its own fixed day for the market. For example in Chhota Udaipur the *haat* is held on Saturday where handmade as well as factory items ranging from clothes, cosmetics to arrows and clayware are sold.

Place for water pots



A typical house plan of Rathwa community

SETTLEMENT PATTERNS

The Rathwa community members build their houses in fields or on hillocks where they live in nuclear families instead of large joint families. A Rathwa village consists of a cluster of several houses or as few as two houses inhabited by one family. These houses are inhabited by members of a common clan and are spread over an area of four to five kilometres. Most Rathwa villages are surrounded by hills. A Rathwa village has an open

ground in front of their village popularly known as *gondhro* which is used for village festivals, welcoming the bridegroom's party in a wedding and above all, for the village cattle to graze and rest. Their village boundary is called *him* that according to the belief of the tribe is protected by its guardian deity called Himodito whom clay tigers are offered.

Housing morphology

The socio-economic condition of the family of the Rathwa tribe defines the size and type of Rathwa house. The house is usually located near a field and is surrounded by a strong fence. The surrounding area near the house is generally covered with trees and fields. Generally the houses are *kuchcha* (dried brick or mud, used as a material) in nature. Cattle are kept inside the house in a separate space**.**

An average Rathwa house is of rectangular shape. It always faces east. The general layout consists of two rooms, a kitchen for daily use, small kitchen for use at the time of worship and a semi-open space. At the entrance of the house, there is an open veranda used

Wooden pillar carved with chain like pattern

A typical Rathwa house

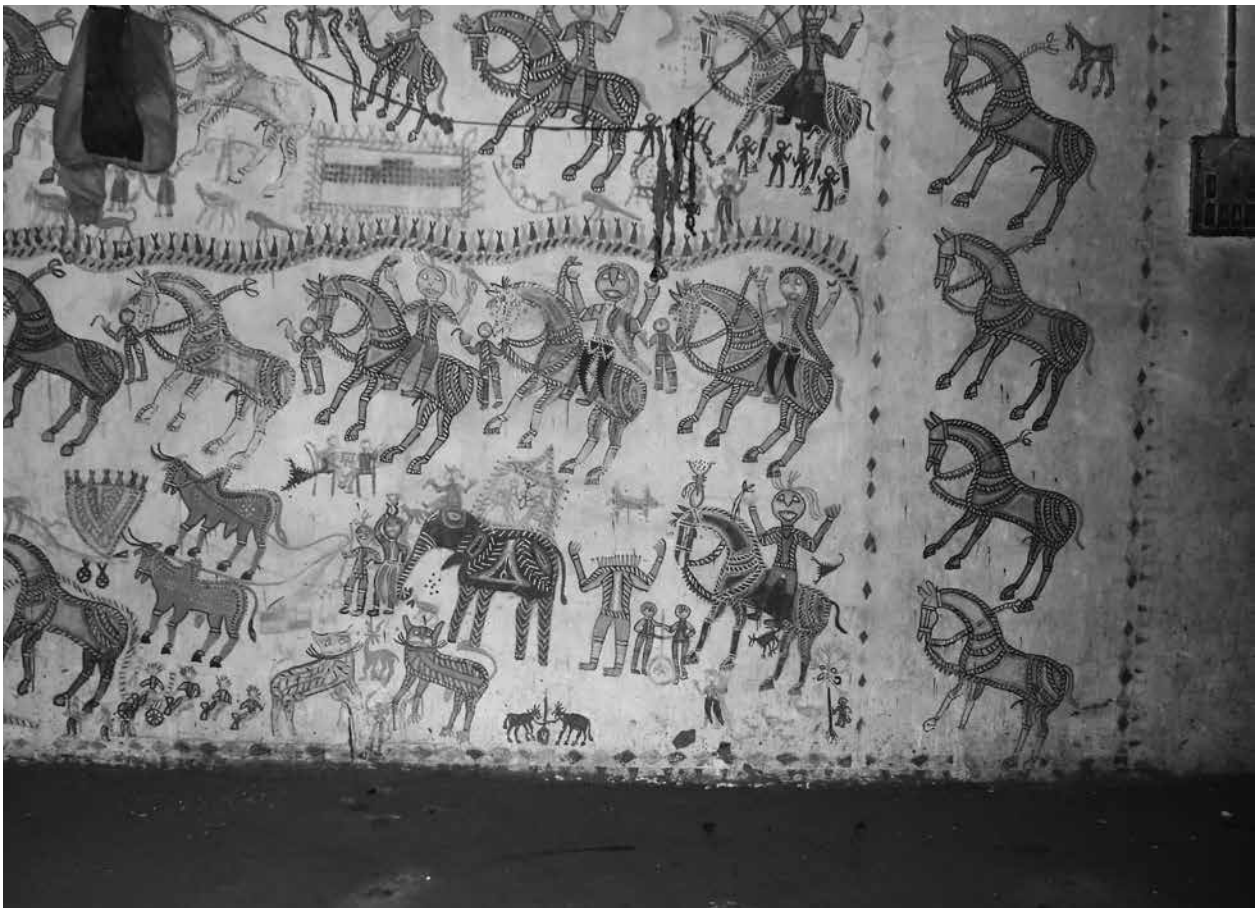
for large gatherings. There is no provision for a bathing space inside the house. An enclosed bathing space is provided in front of the house near the space for cattle shed. There is also a separate space for water pots in the entrance veranda of the house.

Construction material and technology

Walls are generally made of bricks without mortar joints, stones or bamboo sticks or bamboo leaves. These are not plastered on the external facades. However, some of the interior walls are plastered with cow dung. Roofs are made of palm leaves, corrugated sheets or Mangalore tiles. The roof is inclined where the lowest end of the roof is almost one metre high from the ground and is supported from the centre by wooden pillars. The floor is plastered with mud and cow dung every six months or to prepare the house for a celebration.

Pithora paintings

The internal walls of the house are painted with Pithora paintings. The Pithora paintings can be traced to cave paintings and are an ancient tradition, characteristic of the Rathwa community. Subjects such as fields, trees, farms, wildlife, birds, sun and moon are present in their relative positions in a map along with people and their ancestors. Pithora painting has various connotations. One meaning attached to the Pithora paintings is the idea of a map. Legends ascribe its origins in the 11th century, when Bharuch was a centre for traders from the North. The roads connecting Bharuch and nearby areas were difficult and even dangerous, so the tribes created a new profession for themselves-escorting Indian and foreign traders through this region in exchange for silver coins. To ensure that the area remained mysterious and their livelihood stayed safe, the leader of the tribe made a map full of codes. Thus, the seven hills became represented by seven horses and the mouth of river Narmada by two tigers. The leader also ordered the escorts to make the same painting in their houses. The people who showed loyalty by painting the map at their home came to be known as Rathwas, while those who disagreed, were called Talavis. The Rathwas then got rights to climb and dwell atop the seven hills. This practice went on till 1812 AD when the British rulers put a stop to it. Then the act of



Pithora painting on the wall

making Pithora painting became a ritual and Pithora became the god of Rathwa tribe. Recently, elements such as railway tracks, aeroplanes, and computers feature in the paintings, thus making Pithora paintings a real description of the world of Rathwa tribe.

The first wall of the house is considered to be the appropriate place for a Pithora. A Pithora is generally spread across three wall surfaces, so the first wall and two walls around it are prepared for the painting. The walls to be painted are first plastered with mud and cow dung by the unmarried girls of the household. The community members spend a huge amount of money on the painting and the ceremony and people who have Pithora painting in their homes are highly respected. The Pithora artists are called *lakhara*s and the one who keeps an account of all the work is called a *jhokhara*.

The one who performs the ritual of painting on walls is *badvo*, the head priest. These *lakhara*s are otherwise farmers. Only males from the tribe are allowed to learn the art. He is included in the group and starts learning the art by doing simple jobs like filling up colours. Slowly with the guidance of his seniors he develops his talent. Women are not allowed to practice this art form.

ISSUES

Impact of urbanisation

Urbanisation and industrialisation brought many non-tribal communities in the tribal areas for service, works, trade, business and construction work. From different parts of the country non-tribal people came and settled in the urban and industrial cities located near tribal areas. The tribal communities came in contact with non-tribal communities and adopted cultural traits of non-tribal communities. This had adverse effect on their food habits, culture and behavioural patterns and indigenous knowledge.

Industrialisation led to breaking up of joint families that were earlier essential for agriculture. Also, men folk from the villages come to work in the industrial towns, this also led to social disintegration of tribal families, lineage and clans.

In Chhota Udaipur Taluka the discovery of fluorspar/ dolomite deposits below the ground has led to the growth of factories and mines. The trenches left after quarrying are defined as 'water reservoirs' by project officers. Once mined, the land cannot be reused for any other purpose. There is no facility for irrigation at present although water shed is being constructed now to tap rainwater.

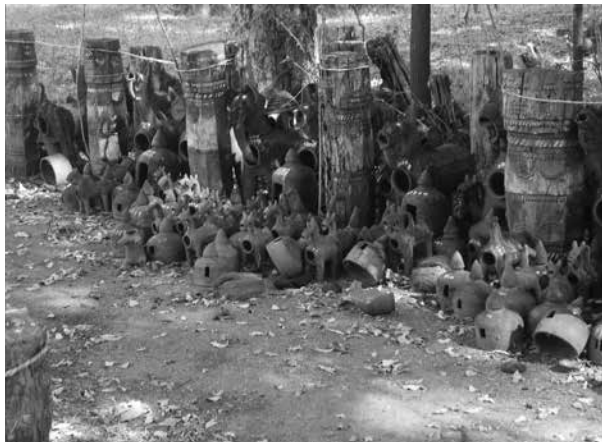
The economy of tribal people revolves around the forest. Although the forest policy mentions local needs, the investment policy is attuned to the economic needs of the wider society.

Roads are stated to be for the economic development of the tribal but their main effect seems to be stimulation of commodity production. This has led to an increase of commercial centres in tribal districts.

Issues at settlement level

- A number of Non-Government Organisations (NGOs) undertake projects in the villages. However

Painting inside one of the walls of a traditional house



Toys made from clay by nayak

Nayak family making pots

as attitudinal changes have not been tackled the visible rewards are few. The villages of Sursi, Baroj and Ambala have been provided with constructed latrines that remain unused or are used for storage of crops. Due to scattered patterns of settlements it becomes difficult to provide the basic infrastructure facilities such as water supply, access roads and drainage systems.

- Prevailing attitudes towards health and sanitation ensure that most tribal people have no separate cattle sheds, sanitary latrines or proper drainage. The provided *gobar* (animal dung) gas plants also remain unused due to misconceptions regarding their usage.
- The health of the tribes especially those that are without forest resources or land remain poor with higher female morbidity. This is due to poor nutrition, anaemia, frequent pregnancies and physically challenging lifestyles such as heavy agricultural work, collecting water and firewood.
- The lack of higher education and supportive infrastructure means that technical posts in the tribal area are occupied by non-adivasis[2]. Most tribal youth prefer to get instant money through labour and during the dry season, migration is at its peak. The past three decades have recorded changes in occupation due to migration. The number of cultivators has dropped in favour of migratory work including agricultural labour, bonded labour, industries and construction work.

THE WAY FORWARD

There is a need for recognition of this tribe since it is on the edge of losing its culture and identity and the various housing and art traditions that it celebrates. Government support in terms of education, health awareness, provision of basic facilities and infrastructure is required as the dwindling population of such tribes would also mean losing various art practices such as Pithora paintings, pottery and other aspects of their lifestyle. The rich repository of traditional knowledge of the tribe is an invaluable resource that needs to be conserved for future generations.

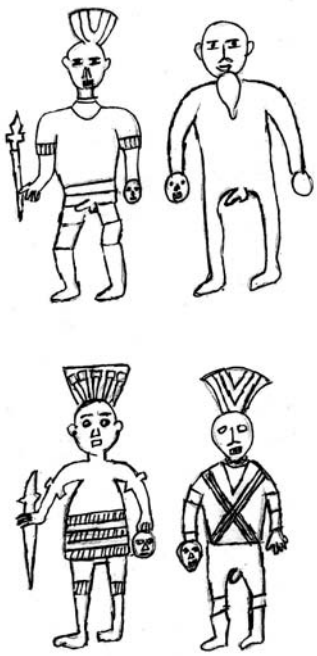
Bibliographic references

- Gaatha 2012, Gaatha, Ahmedabad, viewed March, 2013, <http://gaatha.com>.
- Gujarat Tourism 2010, Government of Gujarat, Gandhinagar, viewed March, 2013, <http://www.gujarattourism.com>.
- Jain, J 1984, *Painted myths of creation: art and ritual of an Indian tribe*, Lalit Kala Academy, New Dehi.
- Jim Patton Photography 2013, SmugMug, California, viewed March, 2013, <www.jimpattonphotography.com>.
- Joshua Project 2012, U.S. Center for World Mission, Pasadena, viewed March, 2013, <www.joshuaproject.net>.
- Lal, RB 1984, *Emerging Tribal Situations in Gujarat*, Tribal Research and Training Institute, Ahmedabad.
- Lal, RB 1980, *Sons of the Aravallis,* Tribal Research and Training Institute, Ahmedabad.
- Mohan, U 1999, *Aliens in Their Own Land: Triban Identity and Alienation Among the Rathwa*, Diploma Thesis, Unpublished, National Institute of Design, Ahmedabad.
- Mohanty, PK 2006, *Encyclopedia of Scheduled tribe in India*, Isha Books, Delhi.
- Rathwa 2013, World News Inc., viewed March, 2013,<wn.com/rathwa>.
- Tribhuwan, RD & Finkenauer M 2003, *Threads Together,* Discovery publishing House, Delhi.
- Tribhuwan, RD 2005, *Triban Housing Issues,* Discovery Publishing House, New Delhi.
- World in Print 2013, Media Storehoues, England, viewed March, 2013, <http://www.worldinprint.com>.

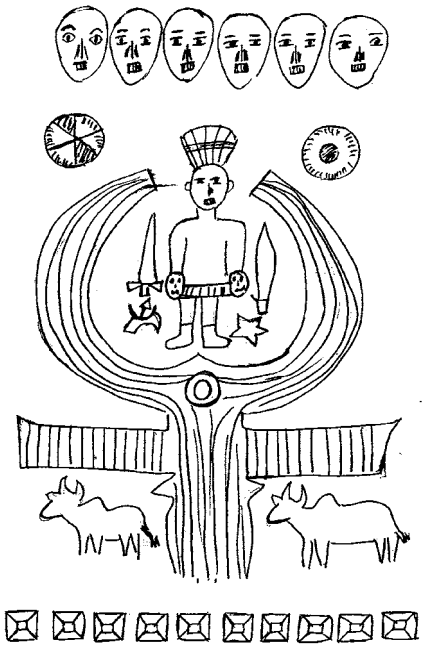
Notes

[1] characterised by the custom of marrying only within the limits of a clan or tribe.

[2] Adivasi is an umbrella term for a heterogeneous set of ethnic and tribal groups claimed to be the aboriginal population of India. They comprise a substantial indigenous minority of the population of India.



Traditional warrior figures carved on the gate



A sketch of the engravings on the gateway

Village Gates in Nagaland

INDERJIT SINGH MARWAH

INTRODUCTION

The State of Nagaland is situated in the North eastern part of India and is primarily inhabited by the Nagas, who are subdivided into a number of independent tribes. For a Naga, the world comprises of the hills, the neighbouring villages, the clan and all the tribal and sub-tribal groups living in Nagaland and the adjoining areas of Arunachal Pradesh, Burma and Manipur. Nagas have an amorphous sense of common racial and ethnic identity which is in the process of being constructed. They look upon themselves as an independent political entity. Some Nagas even go to the extent of calling themselves a nation, as opposed to all non-Nagas. While members of each Naga subgroup speak a distinct dialect, broadly a mixture of Assamese and Naga dialects called Nagamese, they have adopted English a common language for communicating with each other.

Material culture of a community is the finished or unfinished product carved out of the materials and resources existing in its habitat. It is an embodiment of the mentally perceived design, wherein ideas are transformed to material level and the preparation of the objects leads to a sifting and modification of the ideas. The relation between material and thought designs can be conceived on the lines of the relation between theory and praxis. Theory guides practice and on the other hand, it develops when put into action.

Material culture is not secularised and routinised in simple societies such as that of the Nagas, but is intimately connected with ideas, beliefs and values of social life. Magico-religious rituals may accompany the making of material object in such societies. In simple societies the construction of these objects may be undertaken by the household members and the quasi-and part time specialists. It involves the entire community with a clear division of roles and responsibilities. The construction of village gates is a reflection of the material culture of the Nagas, representing the production of material objects through social organisation in a simple society.

THE NAGA VILLAGE: SOCIAL AND PHYSICAL DIMENSIONS

A Naga village generally consists of two or more than two spatial subdivisions, known as *khel*s that are distinct functional, economic and social units. People living in a *khel* belong to a common lineage known as *putsano* and sub-lineage known as *sanyo*. Members of a *putsano* and *sanyo* do not marry among themselves. Spatial segregation of the *khel*s, their differences in terms of *putsano*s and *sanyo*s, stiff stockade, deep ditches having bamboo spikes, fortified walls, massive fences and huge gates make a *khel* an independent physical unit of a village. Typically, a large *khel* has more gates than its smaller counterparts. Each *khel* has a minimum of two gates, an upper gate which leads towards the settlement and a lower one which leads towards the fields.

The village Jotsoma where the ethnographic field work was conducted has four *khel*s. The village is inhabited by the Angami Naga tribe. The gate is referred to as kharu in Angami-language. Khel I has three gates, Khel II named Khwuma has two gates, Khel III named Tsuyama has two gates and Khel IV named Tholoma has three gates. Khel I has the smallest number of households whereas Khel IV has the largest number of households. It was observed that the people of Khel I look at their gates with great deal of reverence compared to those in Khel IV. This disparity can be understood by studying inter-*khel* variations resulting from location, unequal development, modernisation, openness and practical rationality. In Khel IV, the gates have not been repaired or replaced over the last several decades, whereas in Khel I the gates are in very good condition. The people in Khel I, II and III still remember many ceremonies that are integral to the construction of the gates, whereas people of Khel IV have consciously forgotten them. This reflects a greater degree of change in the life of Khel IV in comparison to the other *khel*s. Other differences between Khel I and IV are the styles of dressing and appearance as well as traditional rituals and religious practices. While the people of Khel I are more traditional in their outlook, those of Khel IV show a marked departure. Traditional spiritual worship or a form of shamanism is still going strong in Khel I, whereas Christian priests play a significant role in the social life of the people of Khel IV. Thus, the two *khel*s present a contrasting situation in the social and cultural sense.

SYMBOLISM OF THE VILLAGE GATE

A *khel* gate is not simply a massive plank of wood, prepared from the bole of a tree, but carries on it an ordered arrangement of certain motifs. These motifs remain the same for all the Angami villages. There exists a basic pattern of these motifs in other Naga villages. Varying in size, most gates are elaborately and elegantly designed, while some appear to be poorly

A distant view of the village Jotsoma

An old man sitting with his rice beer at Tehuba, Nagaland

View of a traditionally decorated house

A village gate and the pathway

Dancers in their traditional attire

Local villagers in Jotsoma

carved. Several recurring motifs were observed through a comparative study of ten gates of Jatsoma *khel*s. On top of the main door, there is a row of heads called *rütosü*. These heads are believed to be of enemies. The Jotsoma gates have between four and six heads. Rarely does the number exceed six, since the number seven in Angami society is believed to be unlucky (Hutton 1969). Each head has cotton balls in ears and mouth and possesses six or seven teeth.

After the row of heads, there are two circular motifs opposed to each other on two sides of the gate. One on the right symbolises the sun while the other, the moon. These symbols represent the traditional Angami belief that they are male and female, husband and wife respectively (Hutton 1969). The bulk of the gate consists of a *mithan* (type of wild buffalo) head, depicted as having two concentric circles in the centre without properly formed eyes. Enclosed within the *mithan* horns is a Naga warrior, depicted as a great head hunter. His dress depicts the cultural representation of the members of the *khel*. In some gates more than one warrior are shown. The size of this representation may vary. Descriptions of some typical warriors highlight certain aspects of the *khel* structure. Some Naga weapons such as spears and javelins are also drawn inside the horns. With time, the traditional weapons have been replaced with modern ones.

The base of the *mithan* head is accompanied by two ubiquitous patterns. One of these patterns comprises of a linear pattern, while the other is a row of long protruding symbols.

GATE CONSTRUCTION

New gates are built when the old one is damaged. The replacement of a damaged gate is of high priority to the *khel*. Erection of a new gate generally takes place in the month of February or March, on the second day after the full moon. The final installation of a gate generally takes up to three months. The process of the construction begins with the selection of an appropriate tree. A quasi group of *khel* members consisting of righteous people who have performed 'four great social gennas'[1] (Hutton 1969), other elders and two young boys who have never had sexual intercourse are entrusted with the task of selecting a tree. A gate measuring on an average two to three metres in length, about one metre in breadth and 178 millimetres to 254 millimetres in thickness is made from a plank of just one bole. The tree must be of good physical specifications, but that alone is not enough to qualify its selection. Additional supernatural sanction is needed, which is conveyed through the medium of dreams.

Young celibate boys who are part of the tree selection team are required to dream that night. If the dreams are unfavourable, the tree is rejected. Before felling the trees the celibates carry out a brief ritual, after which the tree is felled and shaped into a plank. At this stage rudimentary motifs are also carved into the plank. The new gate is a replica of the one it replaces. The process of installing a new gate is a collective process with no assigned leader. Rudimentary tools such as an adze or a *dao* (a weapon used among the hill tribes occupying the foothills of the eastern Himalayas) are used. Women

are not allowed to visit the site at any time during this process. The workers at the site of construction do not visit the village and also prepare their own food, thus maintaining a physical as well as symbolic distance from the community. When the gate is prepared to be installed at the *khel* site, the date of its dragging is decided and announced to the members of other *khel*s.

The gate pulling ceremony is an occasion to foster relationships within the community. Prior to the gate being installed formally, the newly constructed gate is dragged up to the *khel*. After a series of rituals, ropes are tied to two holes drilled in the lower part of the gate. Men adorned in ceremonial dress hold the ropes and proceed to pull it towards the *khel* gateway awaiting its installation. The draggers sing songs and are dressed in warrior costumes. They are arranged in the order of their ranks, people of the highest rank are at the head of the lines of draggers, followed by others of lower ranks. This ceremonial custom generally begins at noon. Feasting and merry-making goes on in the village for the next two days and nights. On the third afternoon, the gate is made to stand with its carved portion facing towards the outside of the *khel*. Immediately after this, visitors are asked to leave the *khel.* Once the exit of all guests is ascertained, young men fasten the door to its frame with strong creepers by which time all the *khel* members must be inside the *khel* boundary. For the third time, the newly fastened gate receives blessings from the *khel* priests. After this ceremony, the gate is closed for the night. The following morning, it is opened by the person who lives next to it and the *khel* returns to the normal status with its routine restored.

The old gate that was replaced is generally kept behind the wooden frame. Touching it is forbidden, for the fear of nefarious spirits that are believed to cause illness to the offender if offended.

CHANGING SCENARIO

In Jotsoma it was in 1976 that a gate of Khel I was replaced. Since then no gate has been either replaced or repaired and according to the people, there is poor chance of any gate being replaced in the future.

The function of a gate was of fortification thus protecting a *khel* from its enemies. At latent symbolic level it reinforces solidarity of a *khel*. In the earlier days when head hunting was prevalent and unity between different *khel*s, villages and tribes was not an easy affair, a gate and its functionaries exercised surveillance on the entire *khel*. Historically, entry points to the *khel*s were through these gates, but now new passages and routes have come up and passing in and out through a gate has lost its sacrosanct value. With the addition of open networks and the increase in geographical mobility, the *khel* requires new avenues of creating solidarity.

Bibliographic references

- Hutton, J H 1969, The Angami Nagas, Oxford University Press, Bombay.

Notes

[1] Angami religious life centres on a series of 11 gennas that are magico-religious ceremonies accompanied by behavioral restrictions binding upon community and/or Individual, performed during the year. These are connected with agricultural events that affect the life of the community. Gennas of less frequent occurrence include those for war dancing, inter-clan visitation and preparation of a new village door.

Sacred Landscape
A documentation of the Chamunda Devi Temple Complex, Himachal Pradesh

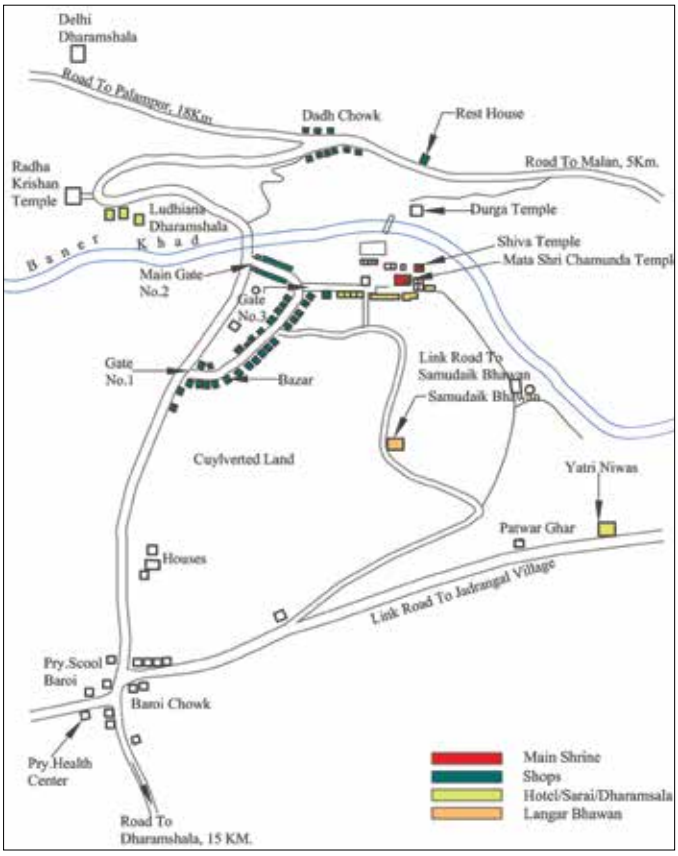
HARVEEN BHANDARI

INTRODUCTION

Chamunda, a fearsome aspect of *devi*[1] represents tantric goddesses believed to be attendants of the Hindu warrior goddess Durga. She is closely associated with goddesses Chandi, Kali or Parvati. Chamunda is an indigenous goddess originally worshipped by the tribes of the Vindhya Mountains in central India. Her fierce nature is attributed to her association with Vedic Rudra (Shiva) identified with the Hindu god of fire, Agni. Depictions of Chamunda show her adorned by ornaments of bones, skulls, serpents and scorpions that are symbols of disease and death.There are a total of six Chamunda temples in India.[2] One of these temples lies in Chamunda town in the Kangra district of Himachal Pradesh. Chamunda town is located at 32^{o} 10' N and 77^{o} 56' E in the sub Himalayan or outer Shivalik zone and its topography is well defined by a series of almost parallel hill ranges that rise in height towards the North-East. The town is historically known as Rudra Chamunda.

THE SACRED LANDSCAPE

A site is considered sacred because of diverse reasons such as being sources of 'healing' water and vegetation and as places of contact with spiritual powers or as sites



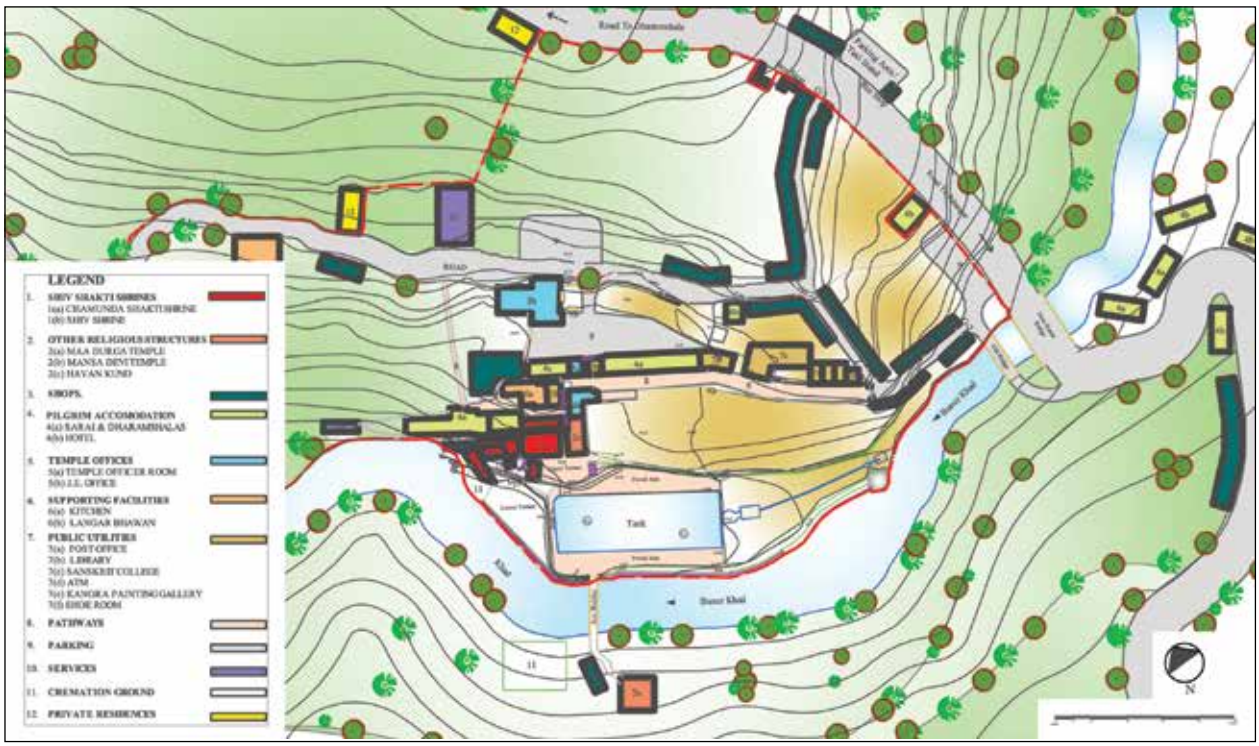
The Temple and its surroundings (Image not to be scaled)

of revelation and transformation. *Shaktipeetha*s are sacred landscapes that are sacred not only because of being the location for a temple alone but due to many other factors such as its geography, associated natural landscape formations such as visually important volcanic peaks, caves with 'holy' springs and ancient groves of trees. *Shaktipeetha*s are believed to possess special healing powers. Adding to their holiness are associated mythological legends, tales and festivals held annually.

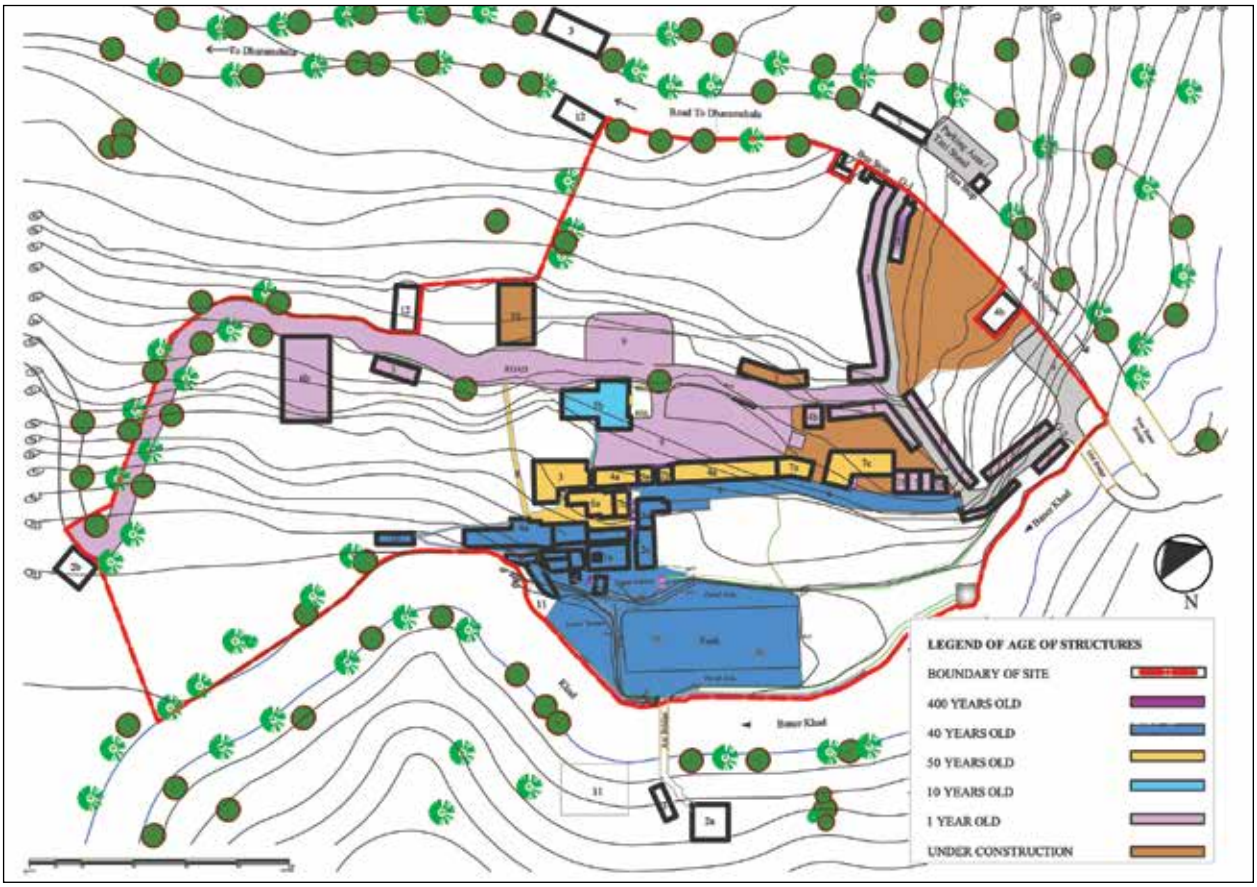
The three basic phenomena of Hindu pilgrimage; journey, circulation and sacred experiences form a cyclic frame known as a 'pilgrimage mandala' where the desire to meet the divine drives one to take a journey and return home to share the sacred experiences with others. Pilgrimage is an age old phenomenon at Shaktipeetha Chamunda Devi which is blessed with natural, physical and socio-cultural attributes that contribute to it being a sacred landscape.

The Temple as a shaktipeetha

The Chamunda Devi Temple is an important *shaktipeetha* of Himachal Pradesh. The



The Temple site layout



Map showing age of structures

*shaktipeetha*s refer to holy places of cosmic power consecrated to the Goddess Sati (Shiva's first wife), the female principle of Hinduism and the main deity of the Shakta sect.[3]According to varying religious textual accounts, these *shaktipeetha*s are 18, 51, 52 or 108 in number, spread across Bangladesh, India, Pakistan and Sri Lanka.The number is attributed to mythological references that describe these temples as the places where different organs of Sati's body had fallen to become hallowed ground. According to Hindu mythology, when Sati's body was cut into pieces by Lord Vishnu with his *chakra* (discus), the trunk of Sati had fallen where the Chamunda Devi temple is located presently. Owing to the presence of Chamunda and Nandikeswar (Lord Shiva) shrines, the temple is also called Chamunda Nandikeshwardham.

Natural attributes

- *The Himalayas:*In Hinduism, these have been personified as the god Himavat (father of Shiva's consort, Parvati). The whole region is considered the realm of Shiva offering ideal locales for meditation. Shiva–Shakti worship is one of the important rituals of worship in these areas. In the Indian subconscious, most of the spiritual energies emanate from the Himalayas since many sacred centres are located here and countless legends are associated with these mountain ranges.

Various components of the Temple

Highly Sacred Components	**Non Sacred Components**
• Devi Shakti or Chamunda Shrine	• Official areas like offices, temple officer room & residence, enquiry office, booking counter
• Lord Shiva Shrine	• *Sarais* for pilgrims, *langar* hall
Medium Sanctity Components	• A library with a sale counter
• The cremation ground	• A Sanskrit college
• Baner Khad/River Banganga	• Dispensary, post office, ATM, shoe deposit room
• Kund or Sanjay Ghat	• Kangra painting gallery
• Hawan Kund	• Public toilets/Sulabh Shauchalya
• Satsang hall	

- *The Banganga:* It is an important tributary of the Beas River and flows through the rear of the temple. People take a dip in the holy waters, read and recite spiritual readings. Locally known as Baner Khad after the neighbouring village of Baner, the Banganga is believed to have medicinal properties that heal skin diseases.
- *The floating rock:* At the back of the temple is a cave like scoop under which a stone *lingam* (phallic symbol of Lord Shiva) is placed. This rock appears to float mid-air and is associated with an interesting legend of a fight between Lord Shiva and Shakti. Shakti threw a huge boulder at Shiva that he managed to control hence this rock is revered as a symbol of Shiva's power. The false walls around this rock were built approximately 35 years ago.

Religious attributes of the temple

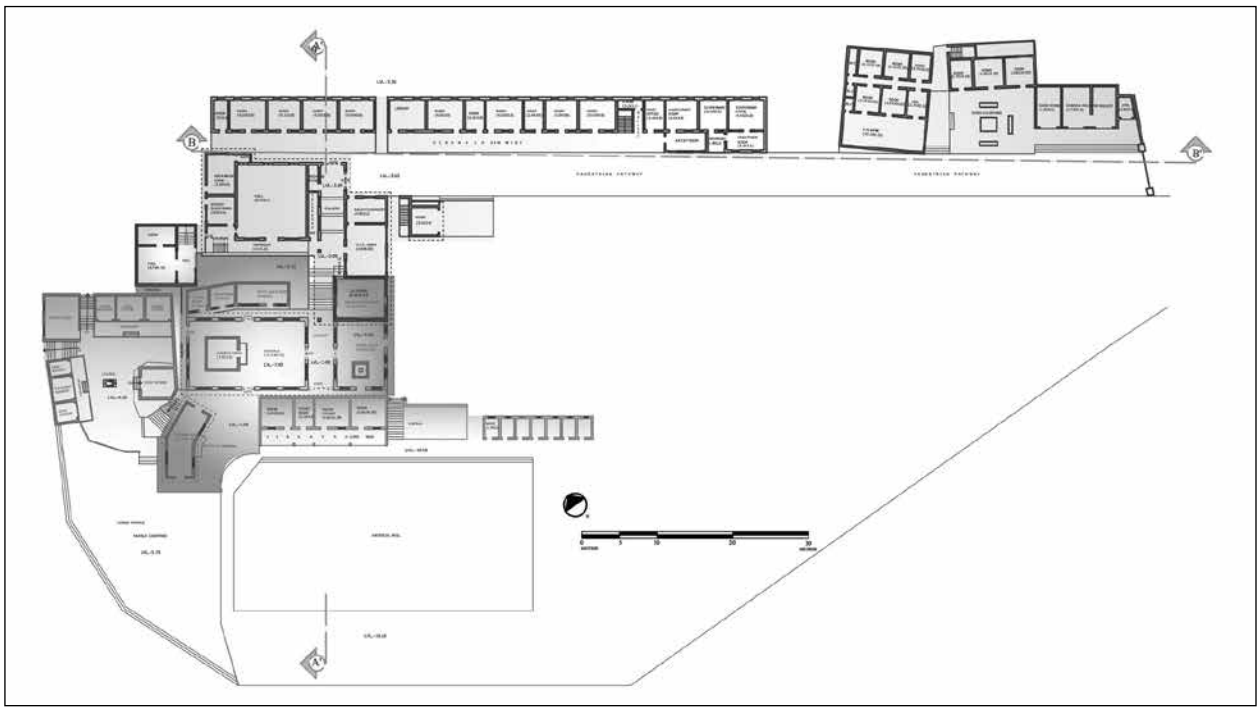
- *Shiva and Shakti shrines:* These are the two oldest shrines in the complex. Since the deities of Shiva and Shakti are seen simultaneously at the same place, Shiva as the destroyer God and Shakti as the goddess of power, this shrine has special religious significance.The Shakti shrine houses the goddess in a wrathful form. The idol is completely concealed under a red cloth with only the face visible to devotees. The Shiva shrine portrays Shiva's form of death and destruction.
- *The sacred cremation ground:* A feature unique to this temple complex is the cremation ground placed within the site as witness to Lord Shiva's promise to the goddess that she would obtain 365 dead bodies a year to satisfy her hunger.[4] This cremation ground caters to 22 neighbouring villages and is very sacred to locals who come here to worship their ancestors.
- *The sacred kund- Sanjay Ghat:* The temple complex houses a *kund* (tank) that devotees use for a sacred dip. The temple was renovated after Mrs. Indira Gandhi's (ex-prime minister of India) visit.[5] Marble flooring was laid and sculptures of idols were installed in and around the tank that later began to be known as Sanjay Ghat.
- *The significant geography:* The Himalayan backdrop with surrounding spectacular vistas provide immense serenity and tranquillity as the pilgrims undertake a circuitous route taken to reach there and the natural locales around the area inculcate a feeling of peace and calmness. Interwoven mythological legends[6], the local stories and age old beliefs all enhance the sanctity of these locations.
- *Special prayer:* During Navaratras[7] 64 priests sit and recite the *mantra*s (Vedic hymns) from 'Shat Chandi path', a religious text believed to make any impossible task possible, and special prayers are performed within the temple complex. Many devotees visit the complex specifically for attending these ceremonies.
- *The original 700 year old temple:* The original temple Aadi Himani Chamunda located at the top of the hill, 3200 metres from sea level, is not very well known. It lies in Chander Bhan Nagar opposite the magnificent peak, Gauri Mukhat, approached by climbing a circuitous 20 kilometre route, with no road, flights of stairs, resting places or other facilities.The temple was relocated to its present location around 400 years ago by a royal priest. According to folklore, the goddess Chamunda directed him to dig her idol and install it in a new location that was easily approachable, the place the temple stands today. Adi Chamunda is now lying in a state of neglect.There is neither any power supply nor any drinking water facilities. Presently the temple is opened for visits only in June and July since it remains covered with snow for the entire year (*The Tribune* Oct. 1, 2008).

PHYSICAL FORM AND SETTING

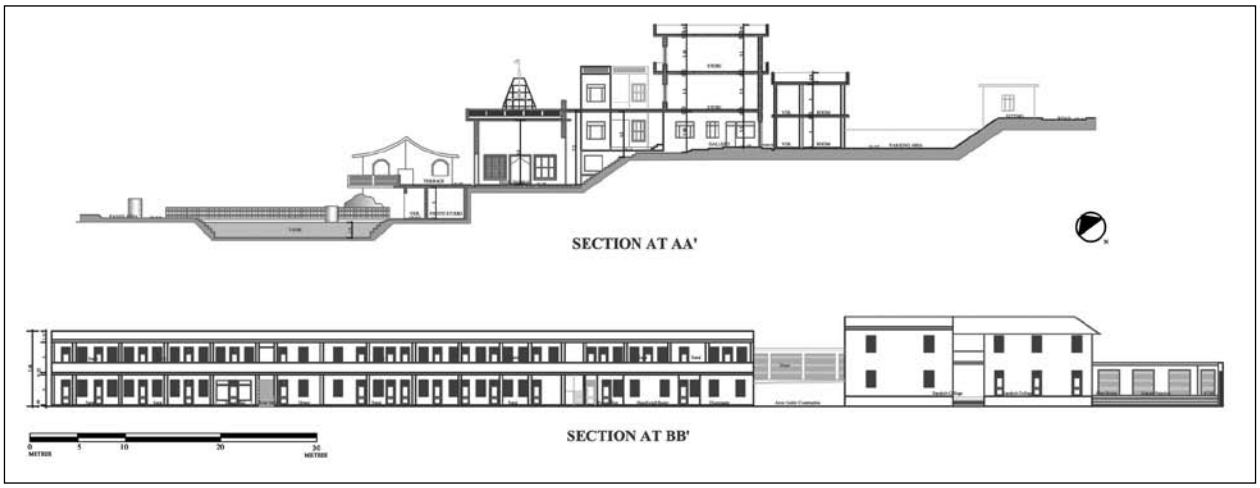
Surroundings and layout

Himachal Pradesh is known as *devbhumi* (land of gods and goddesses) because it has over 3,342 temples. The site enjoys the magical backdrop of Himalayas, easy access to the Banganga and a huge area of 49,455 square metres with a built up area of only 10.3% offering scenic views. The site is contoured and the topography allows for surprises and pleasant experiences at every turn.

The temple lies on Dharamshala Palampur highway, easily accessible from the local bus stand. Baner Khad Pul, a new bridge, links the town to the temple. It is surrounded by a cluster of *dharamshala*s (hospice or a lodging for travellers), *sarai*s (a place for accommodation of travellers) and is well connected to nearby villages. The site is an irregular shaped site, facing the highway on one side and approached by two gates from the highway.The site is contoured, with contours gradually rising towards North, especially North-East and North-West at the rate of one metre. Towards the rear side, there is a third entry gate used by villagers to carry the deceased for final rites to the cremation ground. The site has lot of open area in the form of green spaces and additionally, it has vast open passive areas lying vacant for years. The various components of the temple have been categorised based on the level of sanctity or the order of worship. The



The Temple plan



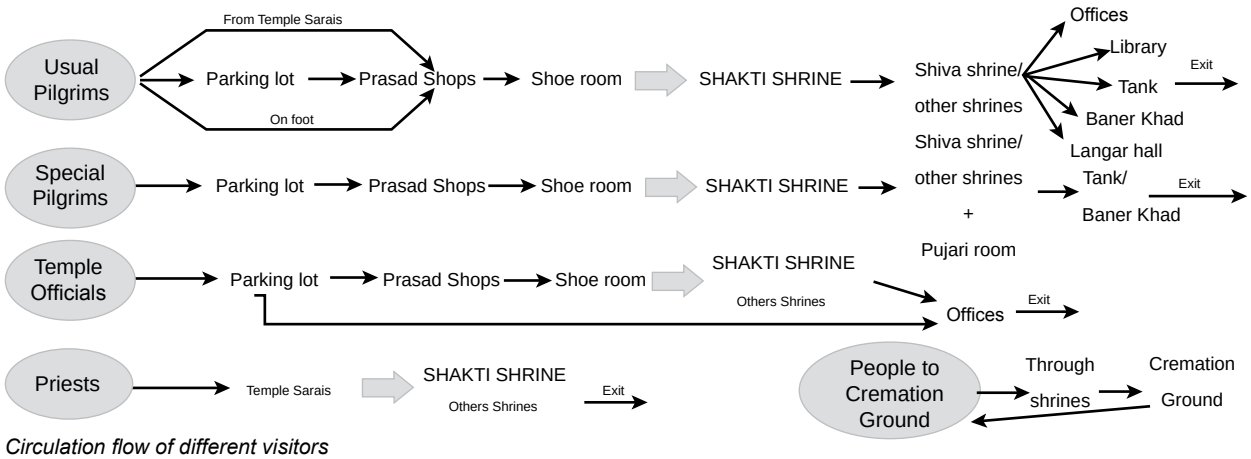
Sections through the temple

pilgrims first visit the main shrines and then other areas. The non-sacred areas are supporting areas required for functioning of the temple including a book sale counter, a dispensary, a library, offices and a Sanskrit college which organises free classes.

The temple complex is planned at three levels. The access level houses pilgrim rooms, a multipurpose hall, and office areas. The intermediate level houses the Shakti shrine, other shrines, *yagyashala* (room where priests perform rituals), *matashaiya* (room intended as a quasi-bedroom for the Goddess) while the lower floor has Shiva shrine, other shrines and shops. From the lowest floor, one has to go further down some steps to access the tank and the Baner Khad.

PILGRIMAGE TRENDS AND ACTIVITY PATTERN

The temple is a part of a pilgrimage circuit of five famous Shakti temples in the Himachal area that pilgrims usually follow during Navratras. The other four temples in circuit are Naina Devi, Chintpurni Devi, Jwalaji and Bajreshwari Devi. People in large numbers visit the temple during Navratras and on special occasions.



Circulation flow of different visitors

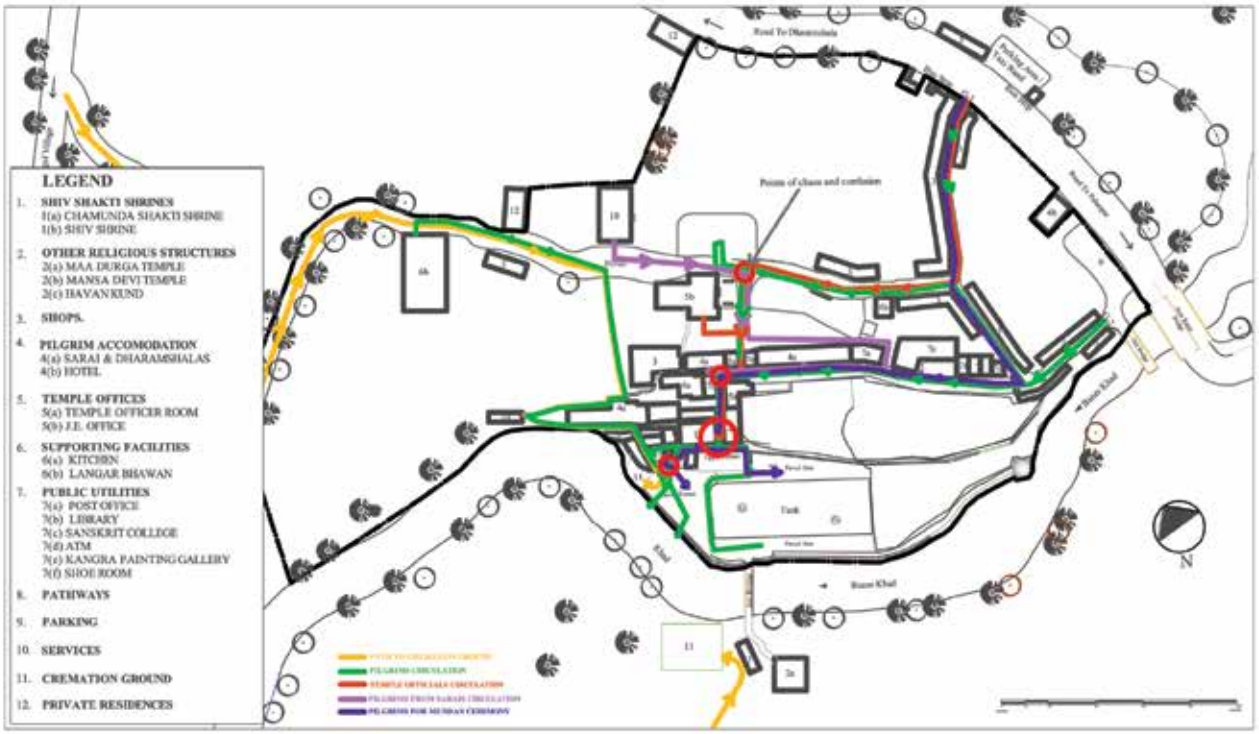
Pilgrims inflow in the temple as recorded in May 2011:

- Average pilgrims/day: 32,000-35,000 during peak period.
- Average pilgrims/day: 3,000-5,000 weekdays and 5,000-8,000 on Sundays in lean period.
- Average pilgrims/day in winters: 1,000-2,000; reduces because the weather is very cold.

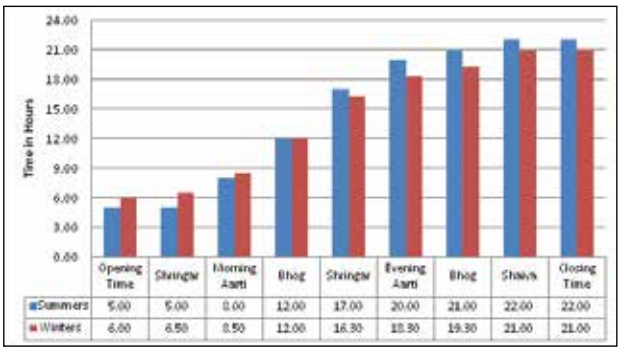
The months from August to November have major influx of pilgrims due to a number of festivals while May to July is a lean period.
Common visitor types include:

- Generic pilgrims.
- Pilgrims with a specific intent such as *mundan.* ceremony, a ritual in which a child receives his/her first haircut or other special prayers.
- Temple officials.
- Temple priests.
- People performing last rites for the deceased.

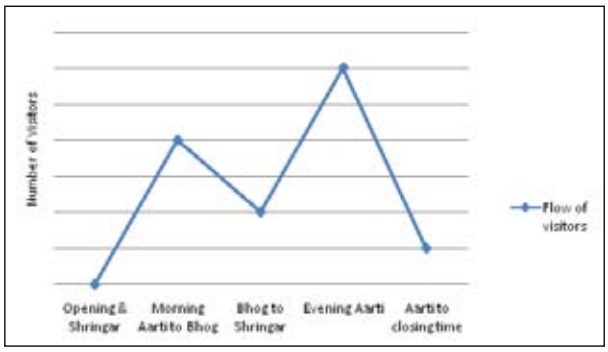
The only clearly defined circulation spine is from the entrance gates to the Shakti shrine and then to Shiva shrine. After that there is no defined movement pattern that often leads to visitors missing important areas.



Plan showing movement pattern of different visitors



Daily rituals of Temple



Daily flow of visitors during non-festive season

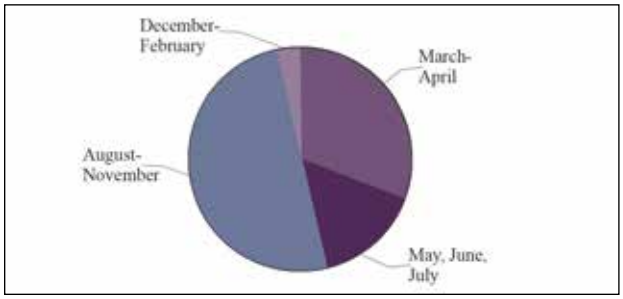


Chart showing pilgrim flow during the year 2011

List of festivals celebrated in the Temple

S. No.	Festival	Months of Celebration
1	Chaitra Navaratra	*March/April*
2	Shravan Navaratra, Janmashtami	*August /September*
3	Ashwin Navaratra	*October*
4	Dussehra	*October*
5	Diwali	*October/November*

Main entrance to the Shrine

There is no segregation of various types of pedestrian movement and vehicular movement since cars are allowed inside the complex which leads to chaos, confusion and traffic jams during the festive season. The daily rituals of the temple start early morning and finish late evening:

- *Snan:* ritual bath of deity, twice a day.
- *Darshan sindoor:* dressing up the idol and adorning with red powder and accessories.
- *Aarti:* morning and evening prayer and *bhog* where deity is offered *prasad* (religious offering in both Hinduism and Sikhism that is later consumed by worshippers) twice a day.
- *Shaiya:* Deity is taken to *shaiya* (rest room) for rest on her *palaki* (bed) and temple is closed.

Also these rituals show the influx of pilgrims during the different times of a day.

ISSUES AT THE SITE

Physical level

The shops are laid out in a haphazard fashion along the main movement spine from the two gates. Temporary structures block the views from the site and the lack of planned parking and vehicular movement creates chaos on the site regularly. The new buildings including the pilgrim accommodation, dispensary, post office, Sanskrit college all have been placed next to the main circulation spine and lack any architectural character displaying a motley group of traditional, modern and vernacular features. The new structures such as hotels, lodges and toilet blocks are highly insensitive to site surroundings and tend to dominate them in shrine. The main entrance to shrines is decorated with bright colours and an idol of Goddess Chamunda while other structures are dull in white, blue or cream colour. There are open drains along roads, wild vegetation and huge areas of vacant land. The main gold *shikhara* (pyramidal roof) of the temple was enclosed in glass some years back owing to a theft of gold from it.

Vacant land opposite main entrance to shrines

The pyramidal roof of temple enclosed in glass cage

Sacred tank now used for boating

The sacred tank is also being used for boating and recreational purposes. The cremation ground has no separate entry. People carry their deceased through the Shiva shrine to the cremation ground.

Socio-cultural level

There is a lack of infrastructure facilities to accommodate the huge number of pilgrims and a lack of interactive spaces to divert crowds during the festive season for effective crowd management.

The religious area fails to create any visual impact since there is an absence of any spiritual environment. There is no provision within the complex which serves to enrich the pilgrim experience. The lack of awareness among local people, temple officials and town authorities regarding sacred heritage and the lack of initiatives to preserve this cultural heritage further dilutes its sanctity. In order to generate some ambience, a few idols have been placed at various locations in the temple complex, but there is no order to this either.

CONCLUSION

What is so special about these temples? Why do thousands of devotees go on pilgrimage to these *shaktipeetha*s each year? Hindu pilgrimage is not just a custom or an act to purify the soul but is a journey with belief in legends, the expectation of miracles and narratives marking places as the locus of sacred journeys. Significant religious figures manifesting the presence of a sacred being and the capacity of sites, places and routes to provide frameworks enabling pilgrims to articulate important messages and themes combine to form a sacred landscape.

There is an immediate need to preserve these examples across India and certainly within the temple complex of Chamunda Devi. Devising strategies to redevelop the temple complex in terms of planning, circulation and built form are needed to enhance and uplift the sacred environment and enrich the pilgrim experience by helping complete their pilgrimage cycle. There is a need to promote sacredness at the highly revered *shaktipeetha*s and generate awareness regarding this heritage as such sacred places are sites where myths date to antiquity. These are places that shaped entire cultures and kingdoms.

Acknowledgement

Special thanks to the Divisional Town Planning Office, Dharamshala Town and Country Planning Department, Himachal Pradesh for all original maps and Shamsher Singh, Junior Engineer, Chamunda Temple for various facts and figures that helped in the research.

Bibliographic references

- Aggarwal, BK 2004, *Shri Chamunda Nandikeshwar Dham Itihaas Aur Parichay*, Kangra
- *District Gazetteer Kangra District 1924-25*, Kangra Cultural Society, Dharamshala
- Mitra, Swati 2007, *The Temples of Himachal*, Eicher Goodearth Limited, New Delhi.
- Singh, Rana PB 2011, 'The emerging trends and bibliography' in R Singh, *Holy Places and Pilgrimages: Essays on India*, Shubhi Publications, New Delhi.
- Shinde, Kiran A 2011, 'Sacred Performances, Sacred Landscapes: Connection and Cacophony' in R Singh, *Holy Places and Pilgrimages: Essays on India*, Shubhi Publications, New Delhi.
- Singh, Rana PB & Singh, Ravi S 2010, 'Sacred Places of Goddesses in India: Spatiality and Symbolism', in R Singh (ed.), *Sacred Geography of Goddesses in South Asia:Essays in memory of David Kinsley,* pp. 45-78, Cambridge Scholars Publishing, UK.
- Sopher, David E 2011, 'The Message of Place in Hindu Pilgrimage: A Geographical Viewpoint' in R Singh, *Holy Places and Pilgrimages: Essays on India*, Shubhi Publications, New Delhi.

Notes

1 The Great Goddess, known in India as Devi, has many guises. She is 'Ma' the gentle and approachable mother. As Jaganmata, or Mother of the universe, she assumes cosmic proportions, destroying evil and addressing herself to the creation and dissolution of the worlds. She is worshiped by thousands of names that often reflect local customs and legends.

2 Chamunda temple, Kangra; Kichakeshwari Temple, Orissa; Charchika Temple, Bhubaneswar; Chamundeshwari Temple, Mysore; Chamunda temple in Mehrangarh Fort, Jodhpur and two located on the hills of Chotila and Panera, Gujarat.

3 Shakta (*Sanskrit*: 'doctrine of power') the spiritual tradition followed by those who worship the Supreme as the Divine Mother-Shakti or Devi-in her many forms, both gentle and fierce. Shakta is one of the four primary sects of Hinduism.

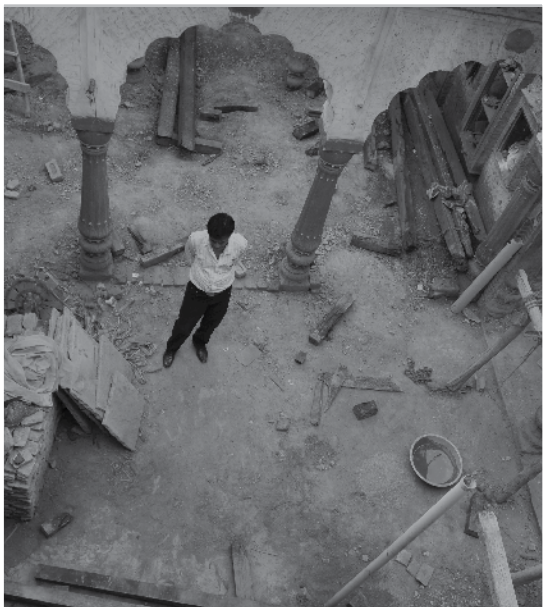
4 There was a fierce battle between Lord Shiva and Mahamayi (a wrathful form of Durga), to stop the *bali* (sacrifice) everyday which she took and so Lord Shiva promised that 365 dead bodies a year will reach the place to satisfy her hunger and so cremation ground was built.

5 It is said that Prime Minister Late Mrs. Indira Gandhi visited the temple after her son Sanjay Gandhi's death to seek the blessings of the Goddess.

6 Chamunda emerged as 'Chandika Jayasundara' from an eyebrow of goddess Kaushiki. She killed the demons Chanda and Munda and was bestowed with the title of 'Chamunda'. According to another legend the Goddess was enshrined as Chief Goddess with the title of *rudra* (fierce) in the battle between demon Jalandhra and Lord Shiva which made this place famous as '*Rudra* Chamunda'.

7 Navratri is a festival dedicated to the worship of the Hindu deity Durga. The word Navaratri literally means nine nights in Sanskrit, *nava* meaning nine and *ratri* meaning nights. During these nine nights and ten days, nine forms of Shakti/Devi are worshipped.

Methods and Approaches



Conserving a Village Haveli
Mehandipur-Daboda Kalan in Haryana

JYOTI PANDEY SHARMA

ABSTRACT

The haveli is one of the most common traditional built forms used as a dwelling place in large parts of the Indian subcontinent since pre-colonial times. Even as havelis are increasingly being acknowledged today as cultural assets, the large corpus of surviving havelis in the country continues to encounter sentiments ranging from apathy and neglect to vandalism and destruction. The case of a modest haveli in a Haryana village exemplifies built heritage conservation, positioning the haveli as an asset for the entire village community. This haveli can be regarded as a role model for the reassertion of the worth of village havelis, whose collective contribution as cultural heritage sites cannot be underestimated, making a strong case for their safekeeping for the future.

Jyoti Pandey Sharma is an Associate Professor in Architecture at Deenbandhu Chhotu Ram University of Science and Technology, Murthal, Haryana and a University Grants Commission Associate at Indian Institute of Advanced Study, Shimla. She is involved in built heritage and cultural landscape issues notably those of the Indian Subcontinent's legacy of Islamic and Colonial urbanism. She has been a Summer Fellow at Dumbarton Oaks Research Library and Collections, Harvard University, USA.

INTRODUCTION

The haveli is a traditional built form type that was used as a dwelling place in large parts of the Indian subcontinent since pre-colonial times. The word is believed to be of Arabic origin, loosely meaning a mansion and in the Subcontinent it came to be associated as a residence of the elite and the wealthy. Among the earliest references to havelis are from the era of Muslim, notably Mughal, occupation of the Subcontinent. Several accounts, both indigenous and foreign remark on the presence of this built

form type across the built landscape of cities, towns and the countryside. James Forbes (1834), travelling in Mughal India in late 18th century as a writer for the East India Company compared havelis to the palaces of European nobility and declared the former to be much larger in size. Indigenous descriptions were also along the same lines with eulogistic prose being employed by writers to describe havelis particularly those belonging to the elite. While elite havelis were generally seen as worthy subjects of encomium, their more modest versions that came up in large numbers across smaller settlements including villages, regarded the former as models worthy of emulation. Havelis have been a subject of both general interest and scholarly research in architecture with those in urban areas tending to attract the limelight (Pramar 1989; Verma & Shankar 1992; Tillotson 1994; Goel 2003; Jain 2004). Further they can also serve as popular places of tourist attraction both for the general visitor and the heritage tourist. It is the more modest versions of the haveli found scattered across the landscape that remain ignored both on the scholarship front and a place of visitor interest.

A haveli owned by the Dalal family in village Mehandipur-Daboda Kalan, Jhajjar District of Haryana reflects a unique positioning. This haveli is significant, not simply on account of its historic importance as well as architectural value, but also due to the current owner's desire for its restoration. The Dalal Haveli presents itself as an exemplary case of built heritage conservation, one that is worthy of emulation by the many owners of the equally innumerable havelis not only in Haryana but the northern region of the country at large, thus collectively constituting an impressive corpus of built heritage.

THE HAVELI AS A BUILT FORM TYPE

As a built form it is possible to reconstruct the typical haveli based on contemporary accounts, cartographic sources and most importantly by surveying surviving remains found across the Subcontinent. A typical haveli comprised a walled enclosure pierced by a gateway and was an inward looking, sheltered domain. Spatial progression from the entrance followed a sequence of increasing privacy levels from the outside to the inside. Prime spatial delineation was gender specific with *mardana* (area for males) and *zenana* (area for women) supported by a host of ancillary functions like stores, kitchen and servant quarters (Tillotson 1994). Spatial transition was determined via courtyards called *aangan*, *chowk* or *sahn* that constituted a multi functional all season realm. It was the courtyard that held various spaces together with the term *chowkbandi* (held together with a *chowk*) signifying its importance. Often the number of courtyards in a haveli signified its identity with *ek-chowkiya* referring to haveli with a single courtyard, *do-chowkiya* to two courtyards and so on, suggesting the more the courtyards, the greater was the haveli's significance. Access to apartments from the courtyard was via an arched vestibule called the *dalan* that was an extension of the rooms and also used as a multi-functional space.

Nature was introduced through the creation of a small garden, referred to as a *baghichi* or a water pool and fountain or else simply through plantation notably the *tulsi chaubara* (the planter to hold the scared Tulsi plant and used as an object of worship) found in most Hindu households.

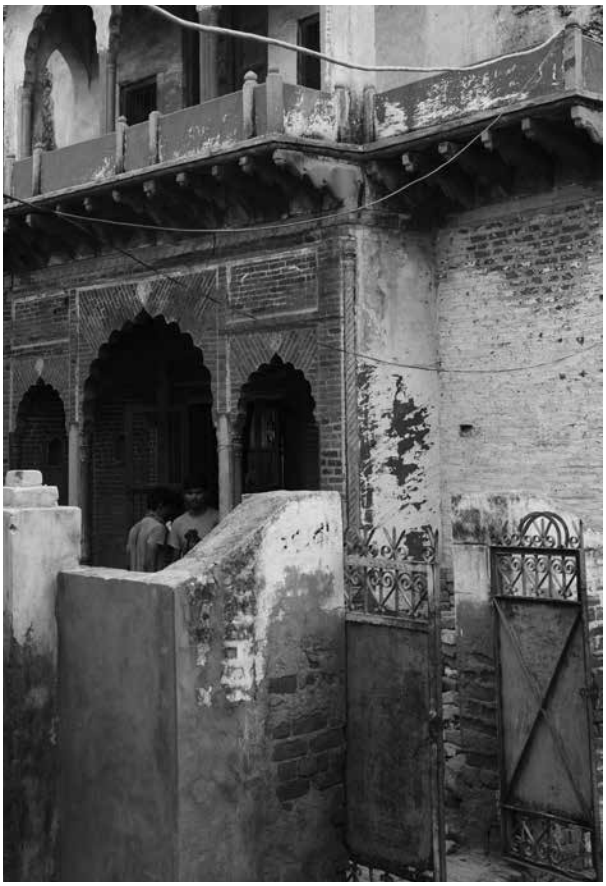
The typical haveli responded to the street via a number of architectural elements namely a grand arched niche framing the entrance doorway, flanking platforms for seating, overhanging *chhajja* (eaves) supported on brackets and small arched alcoves sunk in the façade called *aala*s. Similarly, *jharokha*s (aedicular projections supported on columns and screened with a screen) and balconies abetted interaction with the outside world. Following colonisation of the Subcontinent, new materials and architectural elements besides novel spatial norms were introduced leading to the haveli's transformation (Hosagrahar 2001, 2005; Sharma 2005). The following account of the street view in Delhi by an early 19th century traveller could well be taken as an archetype:

> …houses are of various styles of architecture, partaking occasionally of the prevailing fashions of the west. Grecian piazzas, porticos and pediments are not infrequently found fronting the dwellings of Moslem or Hindoos (Anon as cited in King 1976).

Incorporation of European design elements marked progressiveness with havelis evolving from simply appropriating facade articulation elements to borrowing spatial layouts influenced by European living. As plot sizes shrunk, space was arranged in levels accessed by staircase leading from the courtyard. The impact of European lifestyle was manifested via introduction of novel spaces like reception room, drawing room and bedrooms, all furnished with furniture and spatial accessories sourced from Europe. Further, materials of industrial origin namely reinforced cement concrete, steel girders and columns, corrugated galvanised iron sheets and ceramic tiles were used in construction.

ABOUT THE HAVELI

Havelis are among the most commonly built form types found across the state of Haryana in urban as well as rural areas. These range from large and ornate ones belonging to the elite and located in urban areas to modest ones built in the villages by local landowners. Despite comprising a sizeable number of the state's corpus of built heritage, most havelis in Haryana suffer from problems like abandonment by the original owner, encroachment by illegal occupants and severe fragmentation into shabby tenements, to list a few pervasive problems. Interest in havelis as a subject of academic discourse is also found wanting, with little scholarly work focusing on havelis in Haryana[1]. Further, the potential that havelis can offer as sites of heritage tourism also lies unexplored, thus accelerating their decay as owners tend to regard these buildings not as assets but as liabilities. The number of cases where havelis have been razed to the ground to raise new buildings is growing. This has prompted some initiatives towards safeguarding the havelis, namely, by listing them as heritage as has been undertaken under the aegis of the Haryana State Chapter of INTACH, while the State Government's Department of Archaeology also proposes to document these structures with a view to raise awareness about these.[2] Indeed, lack of awareness about the havelis in the state is perhaps one of the major reasons for their current condition. It is



A view of Dalal Haveli as visible from the street

Dalans skirting the chowk and leading towards the inner rooms

A view of the Dalal Haveli's central courtyard or chowk

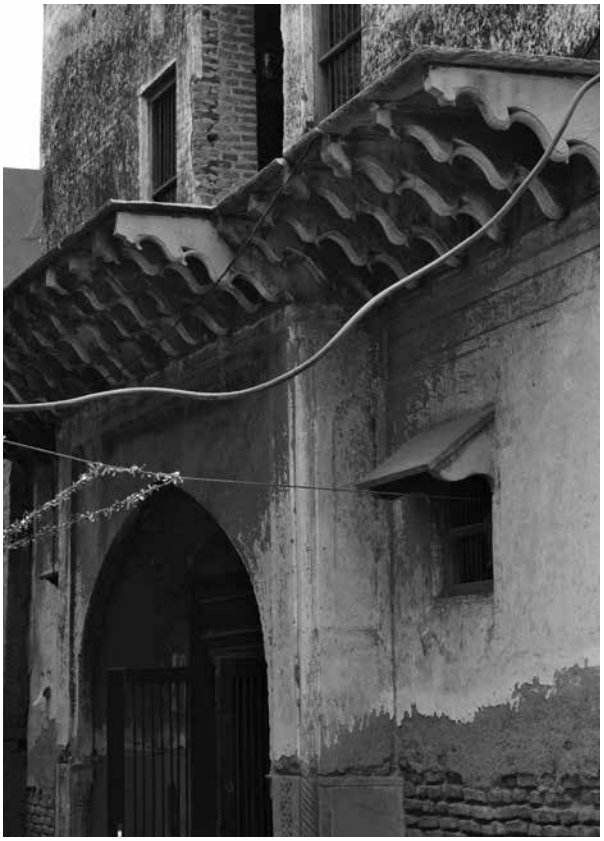
necessary that all stakeholders namely haveli owners, civic bodies, residents of the settlement in general and tourists become aware that Haryana, like the neighbouring state of Rajasthan, also has a rich cultural asset by way of havelis both as sites that are amenable to a new use and as places of tourist interest.

The haveli being considered in this article is located in village Mehandipur-Daboda Kalan in Jhajjar district of Haryana.[3] The village is located in close proximity to Bahadurgarh town in the district whose origin can be dated to the 18th century. Mehandipur-Daboda Kalan, unlike other villages in the state that have been transformed owing to rapid urbanisation, still retains its rural character. It is demographically dominated by Jats[4], of which the majority belongs to the Dalal *gotra*, a caste sub-group among the Jats. The haveli belongs to a prominent Dalal family of the village.[5] The oral history of the Dalal family traces the origin of the family to two brothers, Chaudhary Thana Ram and Chaudhary Bahadar, the latter having two sons, Tirkha Ram and Turti Ram. The current ownership of the haveli rests with the fourth generation of Turti Ram's family whose grandson, Chaudhary Rampat, is said to have built it around the year 1860-1865 making it the first permanent house in Mehandipur-Daboda Kalan. The house was named after Chaudhary Rampat's son, Roop Chand and was called Roop Chand ki Haveli. He is credited with having built a number of *piyao*s (road side drinking water facilities for travellers) of which one still survives in the village. He was blessed with five sons and one daughter, the former being Hari Ram, Kanhaiya Lal, Hardwari Lal, Banwari Lal and Jai Lal. Each of the five sons owned a haveli, all located in the village. The one under consideration here was jointly owned by Chaudhary Jai Lal and two sons of Chaudhary Hardwari Lal, namely Raghubir Singh and (late) Dilbagh Singh, while the others built within a walled enclosure at some distance from the former. The family owned 900 *bhiga*s or approximately 1.45 square kilometres of land and was for all intents and purposes the first family of the village. According to the current patriarch of the Dalal family, Chaudhary Ram Singh, colonial land records showed the family heading the list of villagers residing in the settlement. Further, Chaudhary Bahadar donated 100 *bhiga*s or 0.16 square kilometres of land to Pandit families of the village as *daan* (charity) enabling them to settle in Mehandipur village, while 700 *bigha*s or 1.13 square kilometres were distributed among his seven nephews, sons of his brother Chaudhary Thana Ram. Currently, Chaudhary Ram Singh, the Dalal family patriarch who has been residing in the village since the last six decades is managing the family's collective land holding with the assistance of his sons.[6]

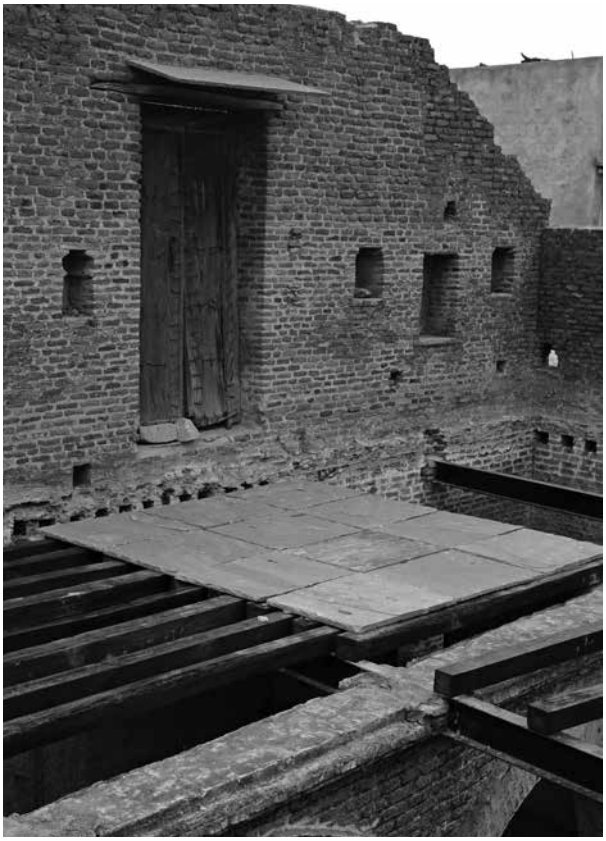
According to Chaudhary Ram Singh, the Dalal Haveli is believed to have been built in the late 19th century

and has been dated back to 1861-65.[7] In keeping with its rural setting, the haveli was a modest dwelling built to cater to the family's residential needs. The plot footprint was small in comparison to havelis built in urban centres. A gateway, that has been replaced by a contemporary version, opened from the street into an equally modest forecourt, fragmented over the years into an even smaller space. The main door of the *haveli*, the *darwaza*, had a central arched opening in exposed Lakhori brick and supporting baluster like columns in red sandstone. Flanking it were two smaller arches framing platforms for seating. Small *aala*s in the wall provided utilitarian space besides relieving the monotony of the brickwork of the wall. The monotony of the façade was further broken by a balcony projection of the upper level also articulated as a three arch façade with a doorway in the centre flanked by arched window openings. Barring the entrance, the rest of the structure presented a formidable exterior that shut out the outside world.

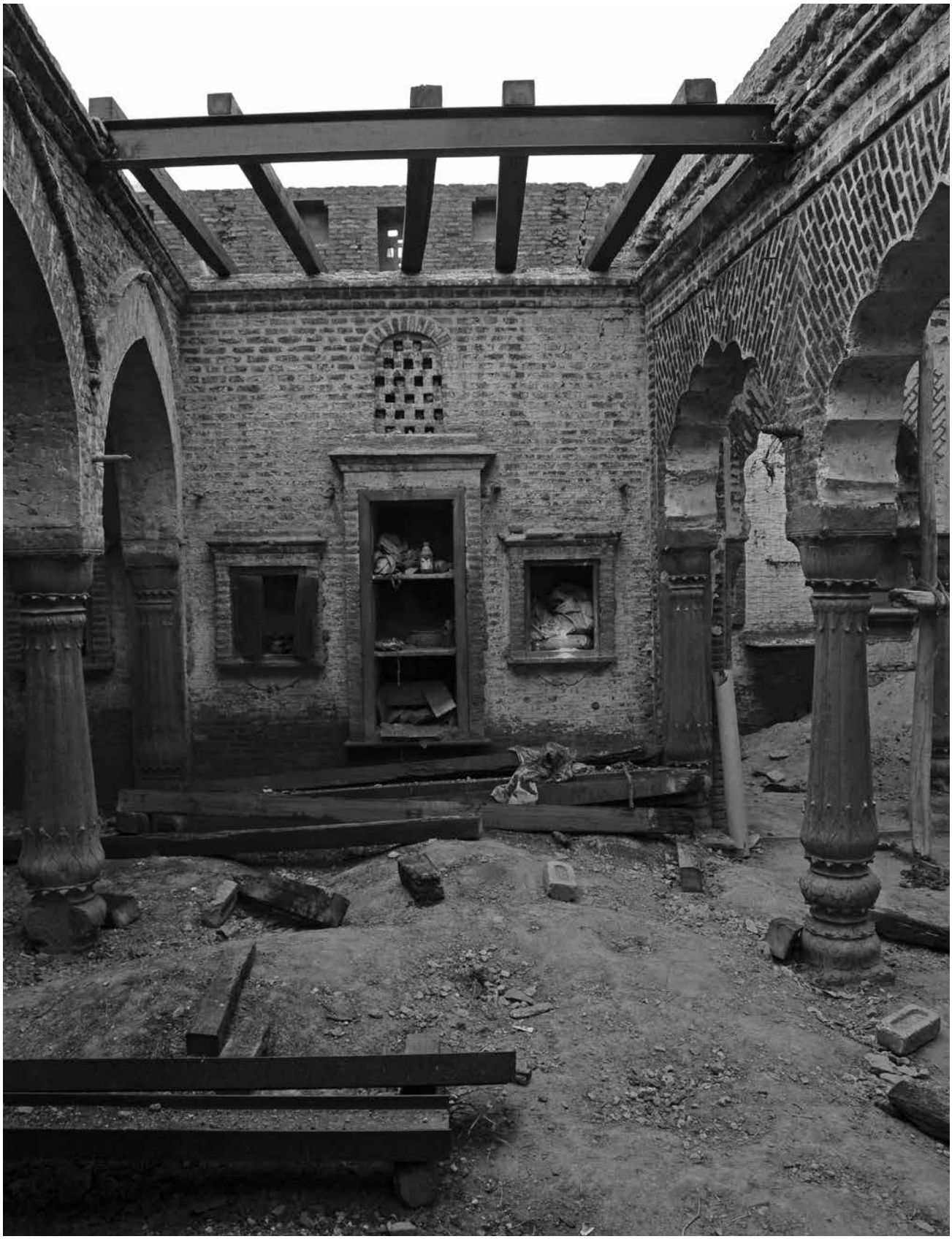
Internally, the spatial arrangement was *chowkbandiya* that centred on a single courtyard, the *chowk*, rather modest in scale in keeping with the rest of the house. *Dalan*s opened into the courtyard on three sides and were semi-private in nature while opening further into rooms tucked away in the inner folds of the house that were more private spaces. Rooms did not open into the courtyard directly and were accessed either via *dalan*s or other rooms. The spatial transition from the courtyard to *dalan*s and further to rooms was through triple multi-cusped arched openings in brick supported on red sandstone baluster like columns that allowed spaces to be screened off with temporary screens if desired. *Aala*s as well as cupboard spaces were sunk into walls for storage. The projecting balcony and a few windows were the only means of interacting with the outside world as the entire spatial disposition tended to be inward looking focusing on the courtyard. The haveli also had a space reserved for the exclusive use of the men of the household, called the *baithak* (comparable to the *mardana* in a typical haveli) where they entertained guests or conducted their business. Solely a male domain, it was physically detached from the main haveli standing across the village street but was linked to it via a doorway at the first floor level that opened into a passage built in the airspace of the street leading to the first floor terrace of the haveli, a usual practice in traditional settlements. Externally, the façade of the *baithak* was articulated in the same



Haveli baithak built across the street



The doorway which originally linked the haveli to the baithak



Construction elements used in the haveli

manner as that of the haveli, the only difference being that the former was finished in plaster and not in exposed brick. Internally, the *baithak* was a hall like space, rather poorly lit with a staircase leading to the first floor from where a door opened into the street passage, the connection being lost over the years. With the *baithak* having being sold some years ago, it no longer forms part of the haveli and is now a separate residence under new ownership[8].

The haveli was built in Lakhori brick laid in lime mortar with the brickwork left exposed. The support system was a combination of load bearing brick masonry walls, post and lintel construction and arches namely multi-cusped, segmental and pointed in brick resting on carved stone baluster like columns, while beams and joists were in timber. Stone *chhajja*s, supported by stone brackets, extended the roofline. The roof comprised timber beams supporting timber joists with courses of brickwork topped with mud *phuska* (terracing) and finished in lime concrete. The roof of the first floor *dalan* was partly covered with galvanised iron (GI) sheets.

The flooring varied from *khadanja* (brick on edge), lime concrete, mud, to sandstone as well as relatively new materials like modular brick and plain cement concrete, indicative of later repair, additions and alterations. Ornamentation, much deteriorated today, was largely by way of wall paintings in rooms depicted as a floral frieze at the ceiling level and some animal and human representations below the frieze besides columns, brackets and wall panels particularly at the entrance, all in carved sandstone depicting floral patterns and flutes.

CONDITION OF THE HAVELI

The Dalal family continued to occupy the haveli until recent times making alterations to the haveli along the way till it moved out about a decade ago. As the family home remained unoccupied, it began to show signs of decay. While the external shell remained relatively unharmed, the interior suffered on account of years of neglect. The brickwork suffered from seepage, mortar loss and breakage. The timber members of the roof gave way, leading to roof collapse in some rooms while in other places there was water seepage and vegetation growth. The GI roofing was dilapidated and posed a threat of breakage. Some arches also indicated cracks while many *chhajja* stones and brackets were missing. Further, the flooring suffered from wear and tear with bricks loosening on account of mortar loss and material deterioration of other flooring materials in general. The ornamental features both wall paintings and carvings had also deteriorated.

Deterioration of old buildings including havelis following their abandonment by owners is hardly a rare occurrence in the contemporary context. What makes the case of the Dalal Haveli remarkable is the family's initiative to conserve the old haveli. While conservation of havelis is by no means a unique practice, it has remained confined largely to havelis in urban areas with the structure being put to reuse with re-adaptation as heritage hotels being most popular. The Dalal Haveli not only has an immediate associational value for the family but also for the village at large by virtue of its historicity. It is these attributes of the haveli that led the current owner to the hiring of the services of an architectural conservation professional to undertake conservation work.[9]

THE CONSERVATION PROCESS

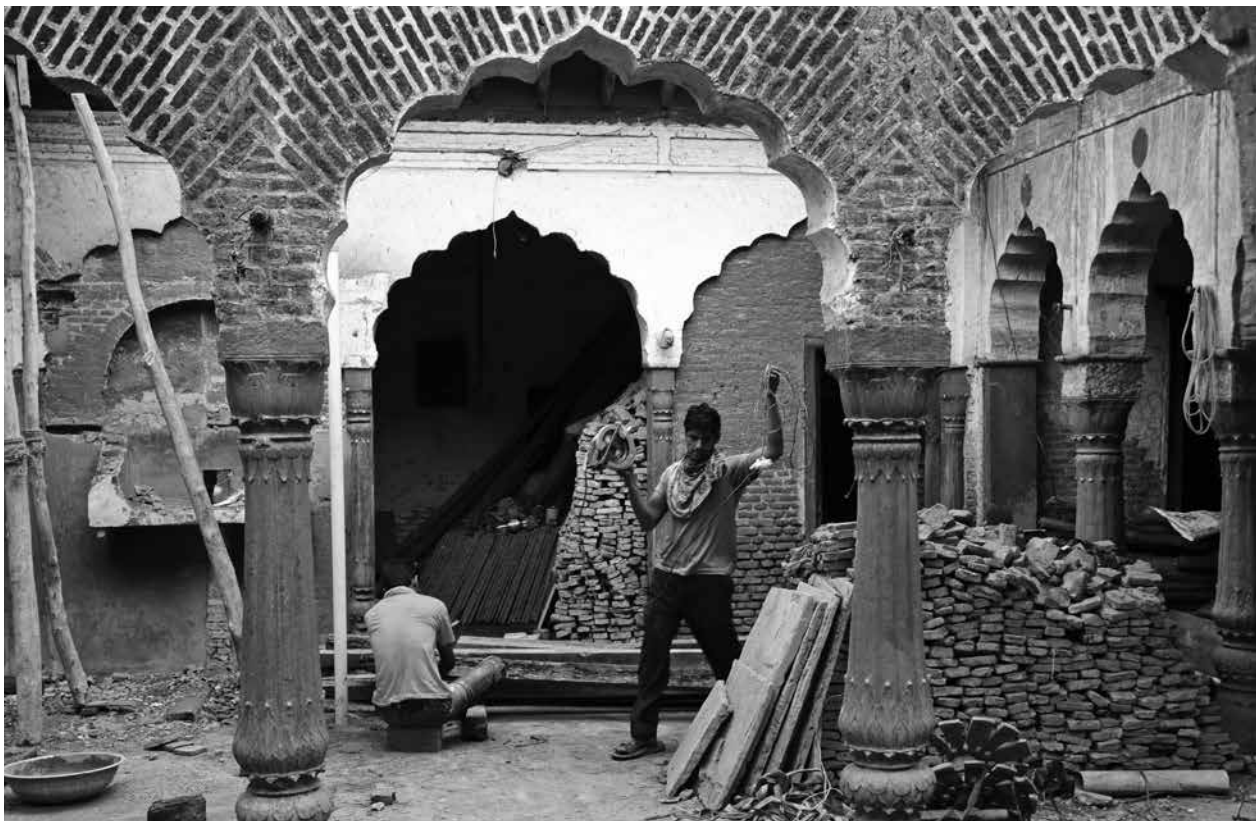
Certainly a first in the case of a village haveli, the work has been commissioned to The Lime Centre, a conservation practice based in Delhi that initiated the project in 2012 with work having recently completedcurrently on the site.[10] The conservation work was undertaken in conformity with globally accepted norms as outlined in UNESCO's Charters with the intent to extend the life of the haveli without compromising on its cultural significance.[11] Work was initiated with the detailed examination of the site to appreciate its significance in terms of historical, associational and architectural value. Further, detailed documentation was undertaken that was followed by condition mapping where the problem areas in the structure were identified and a proposal for the necessary conservation intervention was suggested. The entire information, both textual and graphic, was collated into a detailed project report (Rai 2012). [12]

Conservation work was mindful of globally accepted conservation principles notably respecting the historic fabric that calls for adopting traditional methods and materials for conservation and introduction of more contemporary materials and techniques sympathetically and only wherever necessary. The haveli exterior has been retained in brick with interventions like cleaning, replacing of materials and elements undertaken only where necessary with replacements being matched to the original as closely as possible. Likewise the haveli interior has also received interventions in the form of replacement of collapsed roofs with steel

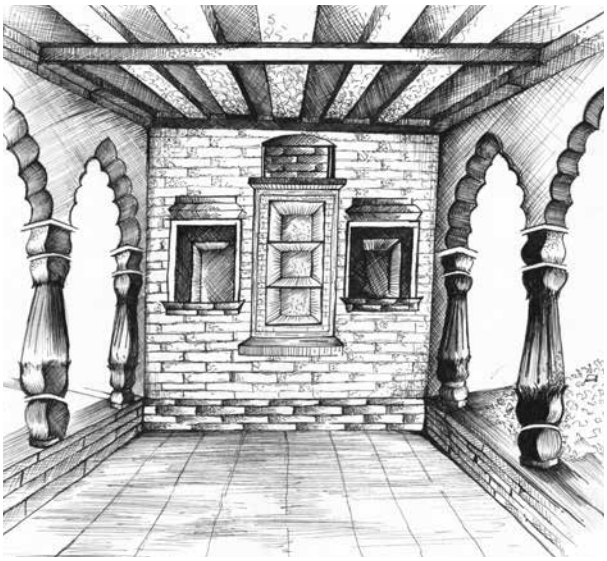
girders instead of timber ones with sandstone panels resting on timber joists. The salt deposits on the brick walls were removed and the walls were restored. The original flooring was repaired in some areas while new flooring materials were introduced in some areas. New interventions proposed in the haveli include the provision of a kitchen and a toilet with separate space for a water closet and a bath. Two existing rooms have been converted into these facilities. Further two skylights have been proposed to admit light into previously dimly lit spaces.

The condition of the haveli prior to conservation. The roof had collapsed completely and the chhajjas and brackets were damaged as well

The question that comes to mind is, 'after conservation, what?' The current owners do not intend to move back to reside in their ancestral property but instead are considering an appropriate reuse strategy for the conserved haveli. Adaptive reuse of old buildings has been long regarded as one of the most effective ways of prolonging their life with arguments being made to not just conserve grand old buildings, but also those that are ordinary and relatively low value ones (Cantacuzino 1989). Sentiment for old buildings apart, adaptive reuse also confers social, economic, environmental and professional viability to the act of heritage conservation. Readapted old buildings are increasingly being recognised as constituting a cultural capital that impacts the life of the community associated with it. Furthermore, successful adaptive reuse entails retention of the building's heritage value while adding a contemporary layer that will add a new set of values for the future. The conserved Dalal Haveli will be put to the service of the village community at large thereby contributing to the quality of life of the residents. Indeed the haveli's spatial organisation particularly following the introduction of a kitchen and a toilet has made amenable to reuse. It is being envisaged that the restored haveli will serve as a library cum reading room for the local community encouraging the village



Ongoing conservation work in the haveli



A sketch of haveli interiors showing the dalan
Source: Anuj Kharb, Department of Architecture, Deenbandhu Chhotu Ram University of Science and Technology

residents and also those from the nearby villages as well to frequent it as a knowledge centre. A public space dedicated to learning will certainly add value to Mehandipur-Daboda Kalan and encourage other villages to carry forward this culture of reading. Further it is also hoped that the haveli will also attract the attention of those with an interest in historic buildings to visit the site as a place of interest.[13]

CONCLUSION

The conservation of the Dalal Haveli is certainly a rather unique attempt on the following accounts, first for recognising the worth of the old haveli as a cultural asset to be preserved for posterity; second for offering it for adaptive reuse as a community space rather than for personal use and finally, for recognising the significant role the site can play in educating the public about heritage conservation. Indeed, the conservation and rehabilitation of the Dalal Haveli will go a long way to ensure that the building's physical fabric will be safe-guarded, its spatial realm put to a worthwhile use as public realm and its cultural worth revealed. It is also hoped that this exercise in architectural conservation, its modesty notwithstanding, will also set an example for others both in Mehandipur-Daboda Kalan and elsewhere.

Acknowledgement

The Author would like to thank the Vice Chancellor, Deenbandhu Chhotu Ram University of Science and Technology, Murthal; Shri. H S Chahal, for bringing to her notice, the Dalal Haveli and urging her to take it up as a subject of examination, with site visits being facilitated by the University.

Bibliographic references

- Cantacuzino, Sherban 1989, *Re-architecture: old buildings/new uses*, Abbeville Press, New York.
- Forbes, James 1834, *Oriental Memoirs: A Narrative of Seventeen Years Residence in India*, Vol. II, 2nd Edition, Richard Bentley, London.
- Goel, Vijay 2003, *Delhi:The Emperor's City - Rediscovering Chandni Chowk and Its Environs*, Lustre Press, Delhi.
- Hosagrahar, Jyoti 2001, 'Mansions to Margins: Modernity and the Domestic Landscapes of Historic Delhi, 1847-1910', *Journal of the Society of Architectural Historians*,Vol. 60, No. 1, pp. 26-45.
- Hosagrahar, Jyoti 2005, *Indigenous Modernities: Negotiating Architecture and Urbanism*, Routledge, New York.
- Jain, Shikha 2004, *Havelis: A Living Tradition of Rajasthan*, Shubhi Publications, Gurgaon.
- Khan, Dargah Quli 1989, *Muraqqe-e Dehli: The Mughal Capital in Muhammad Shah's time*, Deputy Publications, Delhi.
- King, Anthony D 1976, *Colonial Urban Development: Culture, Social Power & Environment*, Routledge & Kegan Paul, London.
- Pramar, VS 1989, *Haveli: Wooden houses and mansions of Gujarat*, Mapin, Ahmedabad.
- Rai, Gurmeet S, *et al.* 2012, *Haveli at village Mehendipur, Bahadurgarh, Haryana*, Project Report, Unpublished, The Lime Centre, Delhi.
- Rathee, CR 2011, 'Heritage Havelis of Haryana', *Times of India Publication*, viewed March, 2013 <http://lite.epaper.timesofindia.com/mobile.aspx?article=yes&pageid=64&sectid=edid=&edlabel=CAP&mydateHid=05-02-2011&pubname=Times+of+India+-+Delhi&edname=&articleid=Ar06401&publabel=TOI >.
- Sharma, Jyoti P 2005, *Colonial Intervention and Urban Transformation: A Case Study of Shahjahanabad / Old Delhi*, Doctoral Thesis, Unpublished, De Montfort University, Leicester, UK.
- Tillotson, Sarah 1994, *Indian Mansions: A Social History of the Haveli*, Oleander Press, Cambridge.
- Varma, Pavan K & Shankar, S 1992, *Mansions at Dusk - The Havelis of Old Delhi*, Spantech Publications, Delhi.

Notes

1 Professor Ranjit Singh's work published in the 1970s on the built heritage of Haryana that included *havelis*, *baolis* and *chattris* among others is one of the few scholarly works to have been undertaken.

2 For the work being undertaken by the Haryana State Chapter of INTACH, see <http://intach-haryana.org/>.

3 Mehandipur and Daboda Kalan are two villages adjacent to each other each with its own separate Panchayat but with a shared ancestry hence commonly referred to as Mehandipur-Daboda Kalan. Both are similar in terms of demographic makeup and share a very cordial relationship with each other.

[4] The Jats are an ethnic community of South Asia that has traditionally either practiced agriculture or provided military service. The Dalals have been landowning Zamindaars, holding large acreages that were under cultivation besides also working as grain sellers and moneylenders.

[5] The account of the Dalal family has been provided by the following members of the family: Chaudhary Ram Singh, the family patriarch; Dr. Surender Kumar Dalal, Retired Additional Commissioner, Government of India and Shri. Ranjiv Singh Dalal, Retired I.P.S. and Director General of Police, Haryana and current Director General, Haryana Institute of Public Administration for which the Author remairns grateful. Thanks are also due to Shri. Kailash Dalal, member of the extended Dalal family for facilitating visits to the site.

[6] Chaudhary Ram Singh who has been residing in the village since 1949 after completing his matriculation has been the village *Sarpanch* (elected head of a village) a number of times and is regarded as a generous and progressive farmer. The Author had an engaging conversation with Chaudhary Ram Singh during the course of her visit to the village in August 2012.

[7] The following architectural description of the *haveli* is based on the Author's examination of the surviving built fabric of the *haveli* that permits reconstruction of its built form.

[8] Following the division of ancestral property among the Dalal family members, the *baithak* came into the possession of Chaudhary Kanhaiya Lal whose sons subsequently sold it to another village resident.

[9] The *haveli* is currently jointly owned by the two sons of Chaudhary Hardwari Lal and family of Chaudhary Jai Lal. Shri Ranjiv Singh Dalal, son of the latter has initiated its conservation very enthusiatically. His family, notably Smt. Prem Dalal, wife of his eldest brother late Shri. Sat Parkash Dalal and his elder brother Commodore S. P. S. Dalal have evinced keen interest in this venture and have supported Shri. Ranjiv Singh Dalal in the family's collective effort towards the *haveli*'s restoration.

[10] The Lime Centre is an NGO based in Delhi that works towards offering professional consultancy and training in the use of lime in buildings and in architectural conservation. It is headed by Ms. Gurmeet S Rai and has a number of professionals from diverse backgrounds on board and has successfully undertaken a number of conservation projects.

[11] A number of Charters aiming at safeguarding cultural assets worldwide have been adopted by UNESCO. They range from conservation of monuments, sites, objects to gardens, natural landscapes, cultural landscapes and settlements as well as intangible heritage including rituals, customs and beliefs. For a detailed account of the Charters, see, <http://www.icomos.org/en/charters-and-texts>.

[12] The following account of the conservation work is based on the Author's observations following two site visits to the Haveli in August, 2012 as well as on the project report prepared by The Lime Centre, a copy of which was provided to the Author by Shri. Ranjiv Singh Dalal for which she remains grateful.

[13] A beginning has already been made in this regard as the Author and a colleague have led an under graduate architecture student group of Department of Architecture, Deenbandhu Chhotu Ram University of Science and Technology, Murthal to visit the site where a lecture was delivered by the Author on the *haveli*'s architecture and history and the students were asked to record its architectural aspects as sketches.

Shared Urban Heritage in India
The case of Chandernagore

AISHWARYA TIPNIS

ABSTRACT

Chandernagore is an erstwhile French Colony on the banks of the Hoogly in West Bengal. This sleepy town transports one back into the era bygone. Unlike Pondicherry, that had its distinct white and black quarters, the urban landscape of this French Town with a Bengali heart is defined not only by the imposing French buildings along the promenade lining the Hoogly, but also by numerous large mansion houses and estates belonging to the Bengali merchants, a mélange of the Indo-French architecture making it a unique French settlement. A physical manifestation of the dichotomy of dwelling in the past or moving on to the future, the town is dotted with crumbling mansions; a testimony to the grandeur of the Bengali merchants rapidly being replaced by insensitive builder flats. While the community wants to preserve their historic environment, the lack of funds and resources and little support from the government in the form of soft loans, tax breaks and grants, the goal of preservation becomes idealistic.

What will be the future of this fragile urban heritage? Will it succumb to development pressures and end up becoming another generic town or will it rise to the occasion and work towards its development while being sensitive to its past? Will it only be the French who will be interested in their past or will the people of Chandernagore recognise their unique Indo-French shared cultural heritage and work towards its development?

AishwaryaTipnis is a practicing Architect and Conservation Planner based in New Delhi. She has a Masters Degree in European Urban Conservation from the University of Dundee, Scotland. Her firm Aishwarya Tipnis Architects has undertaken the 'Identification of Shared Cultural Heritage: French Heritage' in India with a focus on Chandernagore for the Embassy of France in India, French Heritage in India Society and the Vielles Maison Francaise Paris.

INTRODUCTION

Chandernagore is a sleepy town, an erstwhile French colony on the banks of the Hoogly, a mere 40 kilometres from Kolkata[1]. A French town with a Bengali heart, it is a testimony to the confluence of both cultures, a mélange of Indo-European expression superbly manifested in it quaint meandering streets, its elegant promenade and homes planned around courtyards with European looking facades with intricate stucco detailing. Established as a centre for learning, French ideals of liberty, equality and fraternity were widely accepted here and thus it became the home ground for freedom fighters and revolutionaries such as Rashbehari Bose, Motilal Roy, Kanailal Dutta. Eminent Bengali merchants such as Durgacharan Rakshit set up institutions such as Ecole Durga, for education of girls in addition to other educational institutes in both French and Bengali medium of instruction. Chandernagore was a very intellectually and architecturally prosperous and progressive town in the early 19th century.

Popularly known as *Petit France en Inde* (Little France in India), it is the finest example of the physical manifestation of the confluence of Indian and French cultures. It is neither an intact French colonial settlement defined by imposing public buildings nor a completely indigenous Indian settlement. It is representative of the shared cultural heritage, where French and Indian cultures have intermingled to form an Indo-European expression of a way of life reflected in the houses of the native population. This is reflected not only in the tangible built fabric of town houses, mansions and urban design of the town but also in the development of ideas such as educational awakening, emancipation of women, co-existence of Hinduism and Christianity, and the development of democratic ideals of equality, liberty and fraternity. The intangible heritage of Chandernagore includes the incorporation of French language in the everyday life of the natives, shops such as the Das Bakery that still sells French bread, art work such as the special Chandernagore lighting in festivals like the Jagadhhatri Puja that effortlessly blend the French icons like the Eiffel Tower into the local religious iconography.

HISTORICAL BACKGROUND

Chandernagore is the anglicised name of the town Chandanagar. It is believed that the name of the town has originated from *chandan* or sandalwood that was grown and traded here, or from c*handra* or moon due to the crescent shaped quay formed by the river at this place (Crawford 1902). It was the first trading post on the eastern bank of the Hoogly, set up by the French in 1696. It grew to a prosperous trading town under the governance of Joseph Francois Dupleix and was the second most important French settlement in India after Pondicherry, now Puducherry.[2] In 1757 after the Battle of Plassey, Chandernagore was captured and plundered by the British. It was returned to the French in 1765, after the Treaty of Paris but continued to decline and was eventually overshadowed by the British settlement at Calcutta for the next two centuries. After Indian independence in 1947, Chandernagore was declared a free city and its citizens voted in favour of joining the Indian Republic and merged with the State of West Bengal in 1954 (Chakraborty 2004).

Similar to other colonial French settlements, Chandernagore was planned on a grid iron pattern, with broad tree lined avenues opening on to the quay with modest buildings aligned along the street much like Pondicherry and Senegal. Chandernagore was designed as a trading town and not a military establishment, native Bengali merchants were invited to trade and settle in the city and added to its prosperity. The urban fabric of Chandernagore is a physical manifestation of the confluence of French and Bengali cultures, Bengali merchants Indranarayan Choudhury, Harihar Sett and Durgacharan Rakshit played important roles in the administration and development of the town. Most of the houses retained their Indian planning around courtyards and chose to employ European aesthetics in the architectural expressions of the buildings. Chandernagore has played a very significant role in the development of revolutionary thoughts and activities against the British. Rashbehari Bose, Kanialal Dutt, Motilal Roy and Charu Charan Roy took refuge here and several of the revolutionary activities were planned at the Prabartak Sangha. However, post-independence the town has slowly slipped into oblivion with no strong economic generators and now functions as a suburb of metropolitan Kolkata.

THE BUILT HERITAGE OF CHANDERNAGORE

The French influence on the built heritage can be seen at three different levels; first being at an urban level, the second at building level including various typologies such as forts and palaces, public buildings, defence or military structures, infrastructure, residential, educational institutions, urban artefacts, memorials and statues. The third tier includes influence on the interior

A view of the Strand Road with the Sacred Heart Cathedral in the background

design of spaces, including design of furniture, tapestry, soft furnishings paintings and frescoes, statues and other artefacts.

Urban design and planning

The urban design of the city was similar to most French settlements with an orthogonal network of streets with public buildings aligned along the waterfront with a generous public promenade dating back to the later part of the 19th century. The Barabazaar Road was designed as the North-South axis of the town parallel to the Grand Trunk (GT) Road terminating at the Post Office in the North and anchored by the Sacred Heart Cathedral in the South with the grand houses of the rich merchants lined either side of the street. The Strand Road now known as the Chandernagar Road was designed along the waterfront with prominent buildings such as the St Joseph's Convent, Palace de Dupleix or Institute de Chandernagore, Chandernagore College, Sub-divisional Court that was earlier the Thistle Hotel as well as the Chandernagore Clock Tower and Jail. The Sacred Heart Church is connected to the waterfront at Jora Ghat by a wide tree lined avenue called the SC Rakshit Road in the East-West direction. Beyond the Ville Blance or White Town, lay the estates of the rich Bengali merchants and *zamindar*s (feudal landlords), each estate characterised by a large mansion house, an individual water body or *pukhur* and large plantations.

The Strand

The Strand is defined by single storeyed buildings in French colonial style set in large compounds punctuated by the Sacred Heart Cathedral and the Clock Tower of the Jail Complex. The most important elements of this streetscape are the *ghat*s (a series of steps leading down to a body of water) that act as entry gates to the visitors from the river. The width of the street and its promenade with its large trees add to the feeling of openness and this is the only available public open space for the town.

The Ville Blance or White Town

Most of the Ville Blance in Chandernagore has been altered extensively, mostly by piecemeal redevelopment or a deliberate subservient nationalist intention for removal of all remnants of the French rule

Image showing Strand lined with the promenade along the waterfront and fronted with public buildings such as the Jail, Church and Sub Divisional Court

after independence. Although there are no intact French pockets or a well-defined French Town similar to Puducherry, there are scattered examples of surviving fabric that could string together an image of what a street in the Ville Blance was like, before 1948. The best example is the street leading from the Sacred Heart Cathedral to the GT Road. This street is characterised by a continuous wall to wall construction along the street, with partial or full street frontage and in some cases punctuated by grand gateways. The street facades are usually plain and austere, enhancing the effect of the straight and perpendicular grid plan of the Ville Blance, characterised by the use of stucco pilasters, decorative cornice bands, timber louvered screens and shutters for the windows as well as parapets defined by terracotta urns and stucco figurines.

Doyal Manzil is the perfect example of a French house designed on the principle of a *hotel particulier* (grand townhouse) albeit in a severe state of deterioration. The house is aligned along the street edge and the main entry is through a grand arched gateway that leads into the patio. The northern wing is designed as a terrace on the first floor while the southern and western wings are characterised by the use of a deep veranda overlooking the patio acting as the main access corridor to all the rooms in the house.

The Barabazar Road was one of the most fashionable streets in Chandernagore, anchored by the Church at one end and the post-office on the other; on either side of this wide avenue were houses of the rich French merchants. The streetscape was defined by contiguous line of garden walls, with decorative cast iron grilles punctuated by a grand entrance gate with decorative masonry pillars. These typical French houses were similar in design to the ones in Puducherry, usually symmetrical in design, built around a courtyard with a veranda opening on to the front garden accessed by a series of steps.

The GT Road is the most important street in Chandernagore and acts as a spine, separating the Ville Blance, White Town and the Ville Noir, Black Town. It strings various architectural ensembles along it from zones of high commercial activity to large mansions. The GT Road is marked by the Liberty Gate, announcing the beginning of the French territory and characterised by mixed use urban prototypes of the townhouse. The street facade usually has commercial establishments or small shops opening on to the street and residential accommodation on the first floor. It is characterised by a projecting balcony sometimes the entire length of the facade on the first floor, held up by decorative timber or cast iron columns with timber

A view of the once grand staircase of Doyal Manzil, one of the oldest surviving French houses which is on way to demolition due to lack of protection

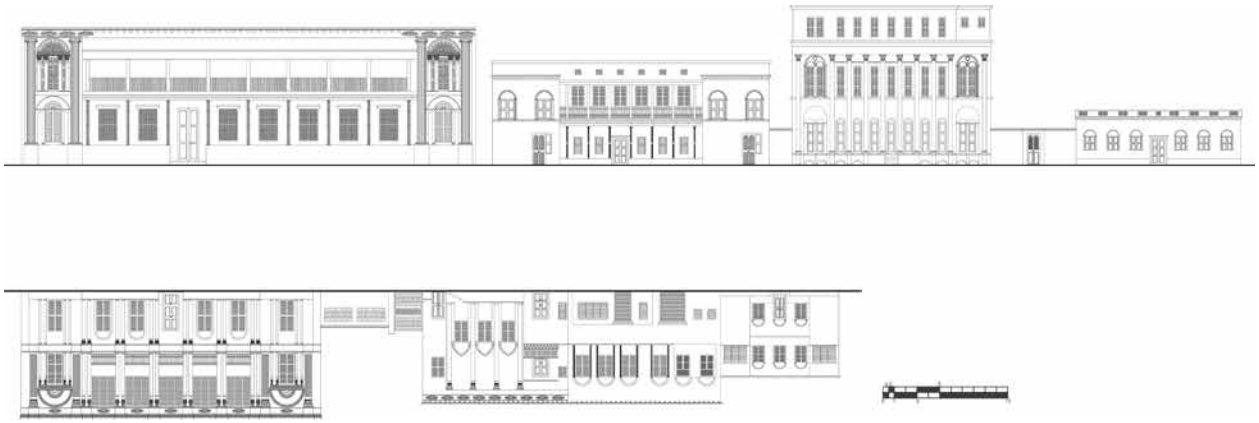
Image showing remnants of cast iron grilles and garden of the Mondol Bari, Gondolpara

Image showing the mixed use development with shops below and residences on top along the GT Road

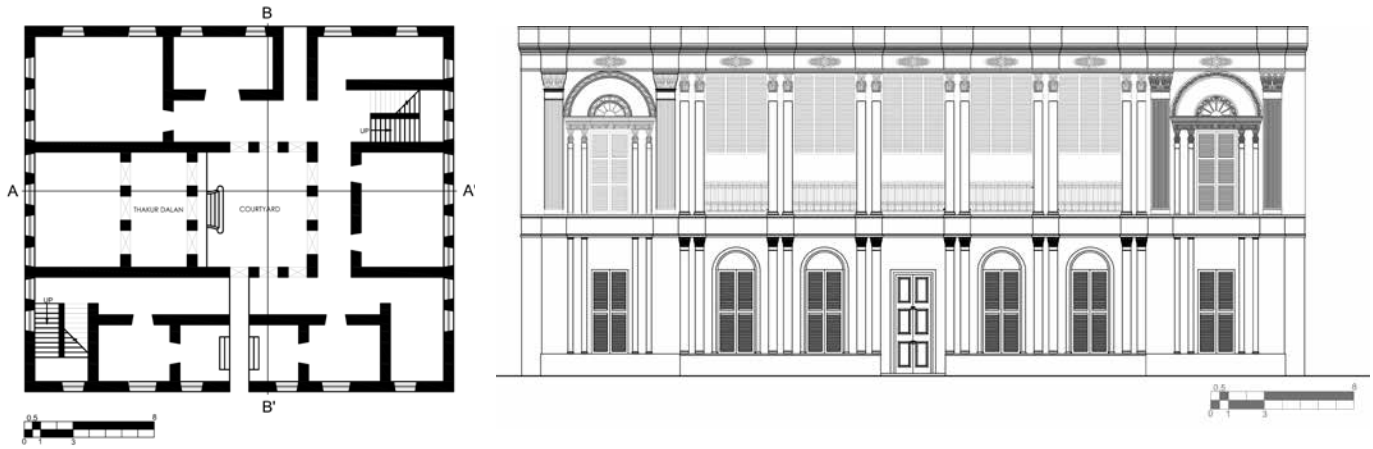
louvered screens and decorative cast iron grilles, topped with a sloping timber slated roof.

The Indo French neighbourhoods

Beyond the Ville Blance lay the estates of the rich Bengali *zamindar*s that further developed into *pada*s (streets) for the different communities. The study indicated that there were several streets in Chandernagore in the Ville Noir that demonstrated a confluence of the Indian and French styles in their planning and architectural expression, the most intact being Dey Pada. The street is narrow and defined by two to three storeyed buildings on either side of the street. The buildings are usually two storeyed inward looking structures designed around a central courtyard. The street facades are divided into bays by stucco pilasters, and often decorated with an ornate cornice. The prominent houses display the use of decorative stucco plaster or terracotta carvings around architraves and openings such as the Gopal Bhavan or Dey Bari. Most have recessed verandas on the first floor, in some cases there may be a projecting timber balcony as well. The openings are large, generally semi-circular or segmental arched and fitted with timber louvered shutters, the verandas as well as balconies are also fitted with timber louvered screens to cut down the heat from the harsh sun.



Documentation of Dey pada, an Indo-French neighbourhood



Plan and schematic section of Gopal Bhavan, Dey Pada

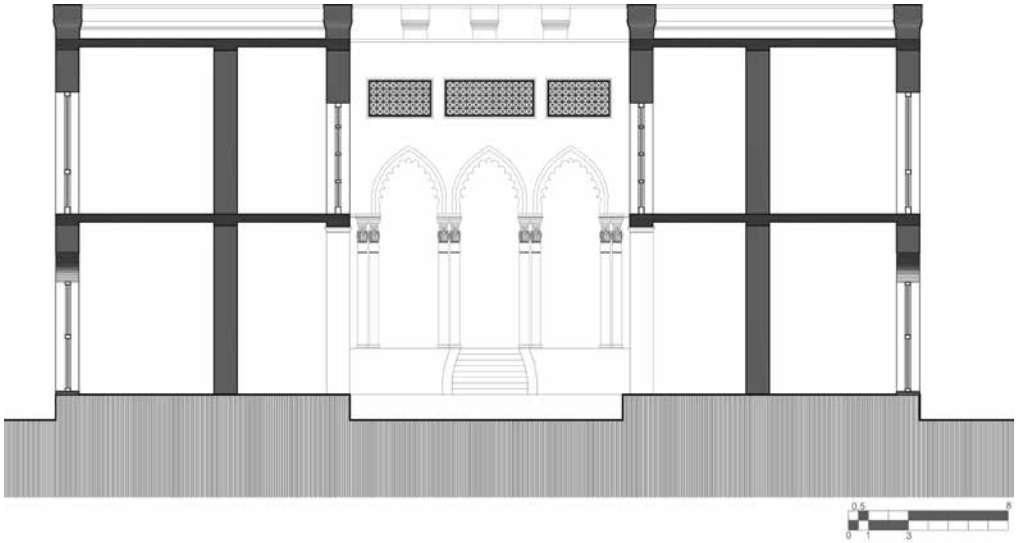


Image showing confluence of the Indo French Style, the architectural expression for the Thakurdalan uses Indian detailing like multi-foliated arches and embellishments while the other three facades employ the use of European elements like Tuscan columns and decorative cornice bands

THE CHALLENGES

In rapidly changing times, Chandernagore finds itself at the crossroads of dwelling in its French past 65 years after independence or marching ahead with times to embrace the 'new'India. While architects and historians in India and France romanticise about Chandernagore's glory, architecture and historic milieu and how life used to be, the average citizen of the town is primarily interested in a clean and safe neighbourhood with basic amenities such as electricity, water and sanitation provided to them. The town today is dotted with crumbling buildings that were the erstwhile palaces of the elite Bengali merchants, dying their natural death due to the inability of the occupants to maintain them. Most of these plagued by problems of family disputes, lack of resources for maintenance and want for smaller efficient houses are rapidly giving way to utilitarian builder apartments. A classic example of this is Doyal Manzil, once a grand French house; is on its way to being razed to the ground to make way for flats.

Chandernagore is under tremendous pressure of redevelopment, owing to its location and proximity to Kolkata. With no economic drivers or industry, the town is grappled with issues of poverty, illiteracy, health and safety, sanitation and population burden. The physical fabric of the town is crumbling with years of neglect and lack of maintenance, given the low income socio-economic profile of the community. There is a lack of awareness amongst the community for the value of their built fabric and with growing property prices, there is a tremendous pressure on the landlords to dispose their properties for a handsome sum of money and make way for multi-storeyed apartment blocks.

THE WAY FORWARD

Cultural heritage continually reinvents itself to be relevant to every generation and is an irreplaceable resource that merits appreciation and careful preservation to be passed on to the future generations. In a country like India where poverty, illiteracy and infrastructure development are priorities, heritage conservation remains an elitist dream. Chandernagore is representative of the future of all historic settlements in India, that have no economic driver for regeneration, yet their proximity to larger urban centres makes them vulnerable to redevelopment.

There have been efforts since the 1980s to identify and preserve this unique shared cultural legacy by various non-government institutions such as the Indian National Trust for Arts and Cultural Heritage (INTACH). The Archaeological Survey of India (ASI) has listed the Place of Francois Dupleix or the Institut de Chandernagore as a monument of national importance. Five other buildings along the Strand are protected under the West Bengal Heritage Commission. The French interest in the preservation of this shared cultural legacy led to the preparation of an inventory of buildings of heritage value as well as an urban area appraisal for the town in 2011-2012. The heritage area assessment of Chandernagore highlights the fact that the built heritage of Chandernagore is not defined by individual monumental buildings but is an ensemble of modest residential buildings. There is a lack of local level protection in the form of designation of the areas as heritage precincts or streetscapes that allows buildings of heritage value to be demolished or redeveloped causing irreplaceable damage to the character and appearance of the area. It must however be reiterated that support of the local and state government and the active participation of the community is critical for the successful implementation of this plan.

Activists groups and organisations are working towards engaging with the idea of heritage tourism as a successful tool for economic generation of historic settlements for the revival of Chandernagore along with its neighbouring erstwhile European settlements of Bandel, Barrackpore, Chinsurah and Srerampore

Challenges
- Dereliction and degradation of the built fabric due to lack of repair and maintenance.
- Impoverishment and lack of employment opportunities within the town.
- Poor levels of hygiene, sanitation and lack of basic infrastructure of water supply, drainage *etc.* in the town.
- Lack of appreciation of ecology and connection with the river, garbage is thrown along the river side and in the *pukhur*s.
- Artists and creative industries are isolated and the local economy is supported by limited small businesses and a single industrial unit at Gondolpara.

Opportunities
- Strong cultural identity, unique blend of Indo-European architecture.
- Tangible and intangible heritage of high significance.
- Unique ecological relationship with the river, connection with other European settlements such as Serampore (Danish), Chinsurah(Dutch), Bandel (Portuguese), Barrackpore (British) and Kolkata by the river
- Cultural tourism opportunities bringing together the tangible and intangible aspects such as terracotta work, Chandernagore lighting, stucco work as well as cultural activities such as the Jagatdhattri Puja.

Image showing the mélange of European proportions and Indian detailing in a window at Dey Pada

representing the Portuguese, British, Dutch and Danish respectively along the banks of the Hoogly is a unique cultural landscape still retaining its old world charm and this little Europe on the Ganges. Non-government organisations such as French Heritage in India Society, Vielles Maison Francaise (VMF) Paris and Human & Heritage Charitable Trust (H & HCT) Chandernagore are working towards the restoration of the French Cemetery at Chandernagore.

Taking a cue from other historic cities all over the world, a sustainable urban conservation strategy has to firstly address the issues that are responsible for the decline of the historic settlements; these issues are generally related to lack of economic activity, lack of infrastructure and social problems. The primary objective would be to firstly to protect, conserve, restore and rehabilitate the built heritage of Chandernagore and to restore the public open spaces. It is pertinent to encourage the community to participate in the protection, conservation and promotion of the heritage of Chandernagore through the development of sustainable cultural tourism. Enumerated ahead are the strategies that need to be adopted for the achievement of the above mentioned objectives.

- *Notification of heritage buildings and precincts*: The historic area assessment has established that the largest threat to the historic fabric from Chandernagore is from piecemeal redevelopment. It is important the other buildings of value as identified be protected at a local level by the Municipal Corporation of Chandernagore and area with a concentration of the historic fabric and ecology be protected as a heritage precinct. A local level Heritage Cell should be set up within the Municipal Corporation to review all proposals for redevelopment, repair and maintenance of the heritage buildings and scrutinise development within the heritage precinct. The protection of the area as a precinct will allow greater control on the development within the area to ensure that any redevelopment does not disrupt the skyline, massing or special character of the area.
- *Framing development guidelines*: It is critical to develop byelaws as well as conservation and sustainable development guidelines for Chandernagorethat aim to enhance the character and appearance of the area. The guidelines should provide details on repair and restoration of the historic fabric as well as provide guidance for infill

Dereliction and dilapidation in the Doyal Manzil, one of the oldest French houses in Chandernagore

Image showing deteriorating condition of the once grand mansions

development, massing, scale proportion keeping in mind key views and vistas. It is recommended that a comprehensive conservation and sustainable development master plan be prepared as a collaborative exercise Municipal Corporation, local community, professionals and interest groups.

- *Improvement of the living conditions of the locals*: The purpose of any revitalisation programme should be to upgrade the existing infrastructure such as water supply, drainage, sewage, health and safety and aim at providing better living standards to the local population. It should include the rehabilitation and restoration of the historic houses to contemporary living standards. It is important that a socio-economic survey of the community is undertaken to understand the needs and aspirations of the community and to develop a development plan that is in keeping with the same.
- *Development of a maintenance and rehabilitation manual*: A rapid audit of the area has indicated that most of the buildings in the historic core are in a poor condition, further the scale and nature of problems need to be addressed and quantified. It is critical that the local practitioners are encouraged to use the correct materials and systems of repair to ensure the further survival of the buildings and to ensure that character of the buildings is not eroded by improper repair. It has been established by the assessment that some of the buildings have not been maintained or repaired in the last 60 years and are in an urgent need of action. It is recommended that a practical guidance for maintenance and rehabilitation is produced that advises owners and occupiers of historic property on basic issues such as rain water goods repair, roof repair, lime plaster repair and repair of doors and windows.
- *Funding for repair and restoration of historic buildings*: The historic area assessment of the site highlighted the issue of the socio-economic profile of the residents, owners and occupiers of the historic buildings, most of them being lower middle class working population and thus not in a position to afford the restoration and repairs of their buildings. It is understood that if funds in the form of grants, soft loans or tax benefits are not made available, the project will be unsuccessful.

- *Reuse and recycling of historic materials***:** The reuse and recycling of historic materials is one of the key polices of sustainable development. The survey indicated that there are several buildings that are dilapidated or are being demolished. It is recommended that the salvage from these buildings such as doors, windows, fanlights, stained glass and railings be made available in a 'salvage shop' that could be reused for restoration, renovations and alterations to the historic buildings. The local carpenters and other craftsmen should be encouraged to work in tandem with the 'salvage shop' to help produce more of these designs for other such restoration projects.
- *Education and awareness of the local community***:** The historic area assessment of Chandernagore has revealed that most of the properties of heritage value are in private ownership and this it is important to encourage community participation and undertake programmes of education, upkeep and awareness buildings about the heritage buildings of Chandernagore amongst the owners and occupiers of this heritage.
- *Sustainable cultural tourism***:** If well planned, and managed in a sustainable manner, the tourism industry can generate important benefits in the living conditions of the community, generating employment and opportunity. It has the potential to bring about positive consolidation of image and appreciation of the town and attract investment.
- *Cultural tourism and living tradition, the Jagatdhatri Puja:* The Jagatdhatri Puja is by far the largest social occasion that brings together people from the region into Chandernagore and presents itself as an opportunity to develop sustainable tourism opportunities around the living tradition of the town. Some of the main pujas are held at the *rajbari*s or mansion houses of the Bengali elite and therefore the maintenance, repair and upkeep of these mansions could be planned as a collective exercise, with advice from a trained conservation professional, using the correct materials and techniques.

CONCLUSION

With local government support and proactive planning involving active community participation, Chandernagore can become a pioneering solution to India's vast living colonial heritage. The aim of urban conservation is not to freeze a settlement in time or to treat it as an open air museum depicting life in the 19th century, but to sensitively address the problems for today and mitigate with the forces of change to ensure that new development is in keeping with the character and appearance of the historic area.

Bibliographic references

- Crawford, DG 1902, *A brief History of the Hughli District*, Bengal Secretariat, Kolkata.
- Chakraborty, K 2004, *Chandernagore*, Das Printers, Kolkata.
- Mukhopadhyay A & Chakroborty K 2003, *Discover Chandernagore*, Kumar, Chandernagore.
- Sengupta, G 2003, 'Hoogly-The Common Emporium' in P Pal & E Haqueed, *Bengal Sites & Sight*, vol. 54, no. 3, Marg Publication, Mumbai.

Notes

[1] The name of the city was officially changed from Calcutta to Kolkata in 2003.

[2] The name officially changed from Pondicherry to Puducherry in 2006.

Ancestral Claims and Rights to Sacred Heritage Sites

MUGDHA YELKAR

ABSTRACT

Sacred sites are increasingly becoming sites of 'visitor attraction'. This gives rise to dichotomies within the type of visitors and their approaches towards sacred sites. The preservation of such sites, without restricting the use of sacred rituals and ceremonies, has become an issue of utmost importance. There are various associations and range of activities carried out at these sites. Along with conflicts regarding their management, there are actions and religious rituals that defy the cause of preserving the sanctity of the place. By exploring the implications on management and sustainability of sacred sites, it is suggested that the rights of local communities in the form of ancestral claims should not be ignored. Rather, a common ground should be explored leading to a shared respect and enjoyment of sacred sites.

Mugdha Yelkar is a lecturer at Marathwada Mandal College of Architecture, Pune. Realising the scope and potential of development of heritage sites in India, she got a master's degree in Heritage Management from Newcastle University, UK. Her experince in working with an NGO in Delhi, inspired her to set up a Design Consultancy firm at Pune. As the Director of Symbiotic Infracons, Mugdha is pursuing educational and outreach activities with respect to historic sites in Pune.

DEFINING SACRED SITES

The concept of what is considered to be sacred and how a site comes to be recognised as sacred, involves studying the variety of 'interest groups', their approaches towards sacred sites and the uses of these sites. A place can be recognised as sacred because of the beliefs of the local population of that place. Most popular places that are recognised

A devotee taking a holy dip at the Golden Temple, Amritsar
Source: Abhijit Kothale

as sacred sites are associated with religious structures. This can be observed especially in a country like India, where temples are considered to be blessed by gods of numerous faiths and beliefs. Similar sentiments are shared all over the world in different forms: temples for Hindus, churches for Christians, mosques for Muslims and *gurudwara*s (Sikh house of worship) for Sikhs. Connecting mythology to beliefs that are strongly accepted even today, the temples, mosques, churches and pilgrimage to these sites become physical manifestation of a journey undertaken by an individual for great moral significance. At times, the spiritual quest is also a journey to multiple places of common beliefs, namely 12 Jyotirlingam.[1] Apart from these, places are also sometimes designated as sacred on the basis of the personal spiritual experience felt by individuals, of feeling stronger ties with divine and supernatural powers, without the existence of any rituals or physical acts as such, for instance, Buddhist sites at Sanchi, Bodhgaya, the Kanchenjunga peak in Himalayas and numerous other places in India.

Among all these varieties, the one common universal perception of a place considered sacred, regardless of being in active use or not, is that they continue to be significant symbols of past. These are perceived as vibrant and live places having a strong and deep connection to the living as well as the dead, where connections can be made with supernatural entities (Hubert 1994, Blain & Wallis 2003).

Hindus call the sacred places to which they travel as *tirtha*s and the action of going on a pilgrimage as *tirtha-yatra*. There is a trend of creation of sacred places due to the religious rituals and ceremonies being carried out there over a period of time. The sanctity of such places is established and reinforced by religious activities taking place sometimes even for centuries. In India, such places known as *tirtha* gain significance because of the belief that a god, goddess or holy spirit exists there or is still taking up residence. Vrindavan, located on the banks of the Yamuna River in the state of Uttar Pradesh in north India is one such place. The town is an ancient forest where the Hindu god Krishna, an incarnation of Lord Vishnu, is believed to have spent his childhood and presently hosts hundreds of temples dedicated to Krishna's worship. Certain places are identified as sacrosanct where saints and individuals who spend their lives spreading faith through spiritual practices have resided. Even after their death, followers continue to consider the places to be sacred and visit for spiritual peace.

It is a firm belief among the natives of almost all places that each and every natural part of the world is powerful as well as sacred, hence many a times these places are also linked with natural landscapes such as mountains, rivers and stones. The river Ganga in India is believed to be sacred as a place of birth as well as death, where people from all over the country come to have a bath or just come in to have physical contact with the water from the river, for attaining absolution. The banks of Ganga in the town of Varanasi is considered one of the most sacred in all India since it has the distinction of being one of the seven holy cities of India[2], one of the 12 Jyotirlinga of Shiva and also a *shaktipeetha* (holy place of cosmic power, place of worship consecrated to the Goddess Sati, the main deity of the Shakta sect). Even the remaining ashes of the dead are brought to Ganga waters in the belief that Lord Shiva's power will wash away all the sins from the living as well as dead.

FROM SACRED SITES TO VISITOR ATTRACTIONS

The contestation around sacred sites begins from its scope and definition to the associated activities or beliefs that contribute to its religious significance. For many indigenous communities, the performing of religious rituals is a vital part of defining their own identity (Maffesoli 1996, Letcher 2001). Thus, communities should not be restricted from accessing their religious sites and neither from using it for its

original purpose. However, currently pilgrimage sites are also popular tourist destinations. Hence, the tourism impact on the social, cultural and economic aspects also cannot be denied. Kuban (1978 cited in Orbasli 2001) asserts that the impact may be negative or positive, but in either case it is impossible to deny its existence. Since this aspect cannot be ignored it should be put to constructive use for the benefit of the place or community. The non-natives who choose to be a part of these sacred sites also hold an attachment to it and the expectations from these visitors have to be acknowledged by the site management.

Studies on religious tourism reveal a growing trend that the intention to visit a sacred site is no longer restricted solely for the purpose of pilgrimage. Festivals to celebrate mythological or auspicious events are held on a large scale and are attended by devotees in hundreds and thousands. The most common intention is obviously to engage in individual or group religious activities like prayers or other traditional rituals such as seen at the Kumbh Mela in India. It is a riverside festival held every 12 years along the banks of Allahabad at the confluence of the Ganga, Yamuna and Saraswati rivers; Nashik on the Godavari river, Ujjain on the Sipra river and Haridwar on the banks of the River Ganga.

Traditionally this festival is for saints and spiritual people who come in thousands and immerse themselves in the river for a ceremonial bath at the most auspicious day and hour. The bath is considered to cleanse both body and soul and help attain salvation. But apart from the saints, there are millions who attempt to take a bath in the river. The pressure of such huge crowds on a small site is fraught with problems, including large scale stampedes leading to loss of human life and the long term impact on the natural resources of the site itself. Some people come to observe the rituals from a distance; whereas in recent times people have also started visiting purely for entertainment and as a fashionable statement. Still others come for commercial purposes given the large numbers of visitors to the site. This is a natural progression of sacred sites into 'visitor attractions' which facilitates tourism activities, thus bringing about a variety even in the functions or uses of these sites.

ISSUES DUE TO SHIFTING FOCUS OF VISITORS

Messerli and Ives (1997) in their book on study of mountains of the world as a global priority also emphasise the negative impact on the site due to inconsideration of the tourist coming in great numbers

The ritual of Holi, believed to have originated during the life of Lord Krishna, continues in Vrindavan today
Source: Abhijit Kothale

to the Kanchenjunga peak in Himalayas. Many a times, the activities of visitors interfere with the traditional rituals and ceremonies being performed, which leads to the destruction of the primary essence of the place. To avoid this situation, they advocate the need to limit tourism aspects by adapting it in such a way so as to respect the sanctity of the mountain. The religious and secular government of the Himalayan kingdom of Bhutan implemented a strategy of granting only a restricted number of tourist visas at a high daily fee, thus retaining the income from tourism and on the other hand maintaining a strict control over the number of visitors. Another aspect that the government stressed on was a strict control against encroachment or misuse of the sacred sites.

It is observed that the nature of visit in present day is not confined to that of a pilgrimage, thus the people being unaware of the customs and traditions tend to intrude into the sanctity of the place (Shackley 2001). This kind of inappropriate behaviour has the power to change or destroy the local culture of the place of the tourist. Conversely if the local people have the absolute control and rights over their site, they tend to completely restrict the flow and random activities of travellers and tourists (Ryan 1991:150 cited Dyer, Aberdeen *et al*. 2003).

The common argument of religious pilgrims is objecting strongly to the disturbance caused by the tourists in massive numbers, since they take the attention away from the actual religious spirit of the place. Digance (2010), after a study on the pilgrimage at contested sites, proposed the theory that main point of contestation over a sacred site is regarding an unrestricted access to the site and the freedom to make use of it as desired. The diversity of the meanings associated with a place leads to claims of access and ownership from each of them. Thus, the act of sacred sites becoming visitor attractions creates an intense conflict amongst the interest groups involved: the pilgrims, tourists, casual visitors, new age travellers, academic scholars and other interested attendees.

DEVELOPING A COMMON PLATFORM

The multiplicity of users for a particular site also creates disputes. In his study of issues of contested

A Shiv devotee at Mahakumbh, Prayag (Allahbad) dons a symbolic third eye after his holy bath
Source: Abhijit Kothale

rights and heritage management of the site of Columbia river, Daehnke (2007) uses the term 'strange multiplicity of voices' that demand recognition for themselves, for their identity and the rights to places which define their identity. An understanding of these differences of opinion is necessary for formulating a common platform which would contribute to better management and sustainability of the places.

Management issues should not be treated as science but rather as combined efforts of mutually benefiting partnerships and cooperation between the divergent interests without giving higher importance to any one of them (Wylie 2005). Tully (1995) explores this theory in depth by recommending three requirements of these negotiations, namely-that it should begin with accepting the differences, that everyone should talk in their terms and language while other give them an opportunity to do so and, lastly, to form a intercultural understanding for the benefit of all involved.

A successful example of such understanding is seen at Kangchenjunga in India. A mountaineering team wanted to make the first ascent to the peak of the sacred mountain, but the natives of India, Nepal and Sikkim felt that this would diminish the spiritual quality of the peak and also offend the deity at Kangchenjunga leading to disaster. This conflict was solved by a common understanding that the expedition would terminate before the peak such that the climbers enjoy the sense of achievement of having overcome the difficult task and at the same time the people were assured of the sanctity of the peak being safeguarded (Bernbaum 1990 cited in Messerli and Ives).

A young child dressed as Bholenath, one of the many forms of Lord Shiva. Source: Abhijit Kothale

Blain and Wallis (2001a) proposed some recommendations for the better management of events and rituals with reference to their observations. First and foremost, one was to respect the diversity identified. The interactions between people and the monument or site should be researched in depth; this study should be used for constructive interpretation. Also if possible, the visitors should be provided with the history and importance of the sacred monument. Innovative ways should be explored to include everyone in the proceedings so that they treat the place, the structures as well as the spirit of the place with genuine respect.

CONCLUSION

Increasing tourism to religious places has resulted in making the visits by non-pilgrims a very integral part of sacred sites. In such a scenario, one should bear in mind the local engagement with the site in the form of performing rituals or ceremonies. These activities are an essential element of constructing not only the community's identity by also the identity of the site. At the same time the site may hold the significance of observing a religious experience without actually getting involved in the rituals. Thus, rather than putting up restrictions by one interest group on the other, it is of utmost importance that all the people claiming an attachment to an particular sacred site should get together and acknowledge the significance that each one holds for the site. The fact to be respected is that the sanctity of a place is not a physical entity. It is a very elusive and spiritual quality that is felt very personally by each and every person associating oneself with the place.

The most essential challenge for management of sacred sites is to successfully preserve the original fabric of the place while at the same time providing a fulfilling experience for the visitors as well. To sum up, it can be suggested that the main issues to be addressed when managing sacred sites are those of restricted versus

Pilgrims taking a dip in the holy waters at Kumbh Mela.
Source: Abhijit Kothale

unrestricted access; power struggle for ownership rights; discouraging damage to site occurring due to religious ceremonies and rituals while providing a unique and an enjoyable experience for the tourist visitors of the traditional character of the place at the same time. Further research and engagement is required to find a solution to these issues that may be specific to each sacred site and its stakeholders.

Bibliographic references

- Bernbaum, E 1997, 'Sacred Mountains of the world',in B Messerli & JD Ives (eds.), *Mountains of the world: A global priority.* Parthenon, London.
- Biswas, S 2013, *India's Kumbh Mela festival holds most auspicious day*, media release, February 2013, BBC News, Allahabad, viewed March 2013, < http://www.bbc.co.uk/news/world-asia-india-21395425>.
- Carmichael, DL, Hubert, J, Reeves B & Schanche A (eds.) 1994, *Sacred Sites, Sacred Places, One World Archaeology*, Routledge, London.
- Daehnke, JD 2007, 'A strange multiplicity' of voices: Heritage stewardship, contested sites and colonial legacies on the Columbia River*', Journal of Social Archaeology,* vol. 7, no. 2, 250–275, viewed March, 2013, SAGE journals, SAGE Publications.
- Dyer, P, Aberdeen, L & Schuler S 2003, 'Tourism impacts on an Australian indigenous community: a Djabugay case study', *Tourism Management*, vol. 24, no. 1, pp. 83 - 95.
- Gesler, W 1996, 'Lourdes: Healing in a Place of Pilgrimage' *Health & Place*, vol. 2, no. 2, pp. 95-105.
- Granoff, P & Shinohara, K (eds.) 2004, *Pilgrims, Patrons, and Place: Localizing Sanctity in Asian Religions*, UBC Press, Vancouver.
- Kuban, D 2000, 'Conservation of the historical environment for cultural survival', in A Orbasli (ed.), *Tourist in Historic Towns: Urban Conservation and Heritage Management*, Taylor and Francis Group, London.
- Letcher, A 2001, 'The Scouring of the Shire: Fairies, Trolls and Pixies in Eco-Protest Culture', *Folklore*, vol. 112, no. 2, pp. 147-161.
- Maffesoli, M 1996, *The Time of the Tribes: The Decline of Individualism in Mass Society*, Sage Publications, London.
- McGregor, J 2005, 'The social life of ruins: sites of memory and the politics of a Zimbabwean Periphery', *Journal of Historical Geography*, vol. 31, no. 2, pp. 316-337.
- Mazumdar, S & Mazumdar, S 1993, 'Sacred space and place attachment', *Journal of Environmental Psychology*, vol. 13, no. 3, pp. 231–242.
- Mazumdar, S & Mazumdar, S 2004, 'Religion and place attachment: A study of sacred Places', *Journal of Environmental Psychology*, vol. 24, no. 3, pp. 385-397.
- Ryan, C 1991, *Recreational tourism: A social science perspective*, Routledge, London.
- Tully, J 1995, *Strange Multiplicity: Constitutionalism in an Age of Diversity*, Cambridge University Press, Cambridge.
- Warner, SR & Wittner, JG (eds.) 1998, *Gatherings in Diaspora: Religious Communities and the new Immigration*, Temple University Press, Philadelphia.
- Wylie, A 2005, 'The Promise and Perils of an Ethic of Stewardship', in L. Meskell and P. Pels (eds.), *Embedding Ethics*, Berg, Oxford.

Notes

1 A Jyotirlinga or Jyotirling or Jyotirlingam is a shrine where Lord Shiva, an aspect of God in Hinduism is worshipped in the form of a Jyotirlingam or "Lingam of light." There are twelve traditional Jyotirlinga shrines in India.

2 Saptapuri is the name given to the seven sacred cities associated with Hinduism in India. These seven holy cities are also referred as Sapta Moksha Puris and Seven Tirthas. The general belief is that by visiting these cities one escapes from endless cycle of births and deaths and attains 'moksha.'. The sacred cities in the Saptapuri are Kashi, Kanchipuram, Haridwar, Ayodhya, Ujjain, Mathura, Dwarka.

Leveraging Transformation
Conserving Delhi's heritage

ASHOK KUMAR JAIN

ABSTRACT

Delhi is a city with a unique and complex history. Its cultural resources are manifested in its rich heritage; historic cities, villages, monuments and waterways, besides a variety of arts, music, literature, crafts and festivals. The conservation of Delhi's built heritage needs a comprehensive and integrated approach. In a city as complex as Delhi, it is pertinent to actively involve local communities and create meaningful partnerships in the conservation process. Key issues such as the local economy, employment and property values need to be kept in mind during the conservation process. In order to address these issues, various planning tools such as incentive floor area ratios, transferable development rights, adaptive reuse and mixed land use may be adopted successfully.

Ashok Kumar Jain as Commissioner (Planning) worked on Master Plan for Delhi-2021, National Urban Housing and Habitat Policy, National Urban Transport Policy. He was a member of the Advisory Board of the UN-Habitat. He is a fellow of the Indian National Trust for Culture and Heritage and is a visiting faculty at School of Planning and Architecture, Delhi.

INTRODUCTION

The built heritage of Delhi is an irreplaceable cultural resource and an integral part of life for its citizens. These heritage resources include successive civilisations, cities and villages that came up over the

millennia; historic buildings, complexes and gardens, water-works, engineering structures, the remains of fortified citadels, places for worship and for the deceased and so on.

The historiography of Delhi reveals a complex socio-political process of urban growth that is manifested in its cultural and natural heritage. Delhi's strategic location has played a key role in establishing its relative importance within its regional context. Situated on the banks of the perennial River Yamuna, in the fertile Doab region and along historic trading routes, Delhi grew as a prosperous political and trading centre. Throughout its history, Delhi has been notable for its architecture and urban planning. Shahjahanabad, the Mughal capital, built by Shahjahan in 1648, is considered to be one of the most beautiful and graceful cities in the Subcontinent. The 20th century Lutyens' Delhi or New Delhi, a pleasant garden city with wide avenues and boulevards, large bungalows, low rise development, is acknowledged by the World Monument Fund (2002) as the 'most beautifully designed urban form in India'. Conserving this unique legacy as a source of national pride, therefore, becomes an important agenda for the national capital.

LISTING AND GRADING OF HERITAGE STRUCTURES

Surveys and documentation undertaken for the city of Delhi list 1,208 historical buildings, of which the Archaeological Survey of India (ASI) has declared 174 monuments as protected. In addition, the built heritage of Delhi also includes zones, areas, settlements and parks that need to be protected and conserved. Some of these areas have been identified as 'heritage zones' in the Master Plan for Delhi 2021 notified in the Gazette of India on February 7, 2007. These include:

- Shahjahanabad
- Lutyens' Bungalow Zone
- Nizamuddin and Humayun's Tomb
- Mehrauli.
- Vijay Mandal, Begumpur, Sarai Shahji, Lal Gumbad
- Chirag Delhi

The following areas have been designated as 'archaeological parks':

- Mehrauli Archaeological Park
- Tughlaqabad Archaeological Park
- Sultan Garhi Archaeological Park

Conservation processes under the ASI are governed by the *Ancient Monuments and Archaeological Sites and Remains Act, 1958*. The Act physically protects the ancient monuments usually more than 100 years old and notified as being of national importance. However, this Act does not cover the heritage zones, precincts and districts. The '1959 Ancient Monuments and Archaeological Sites and Remains Rules' were the first attempt to delineate buffer zones around historic structures. Accordingly, an area up to 100 metres from the protected limits of a monument is declared as a 'prohibited' area and further 200 metres from protected limit of the monument as 'regulated' area in which construction is only allowed after permission from the ASI. Recently, the National Monument Authority (NMA) has been constituted as a regulatory body for grant of heritage clearances. However, ASI and NMA with limited powers and resources find it difficult to control the unauthorised constructions and encroachments in the protected and regulated zones. The monument-centric approach and lack of jurisdiction of the ASI also restrict the adoption of more comprehensive area based conservation approach.

Besides the monuments notified by the ASI, over 1034 historic listed properties, six heritage zones, three archaeological parks and 360 villages have been identified by INTACH. INTACH and the Delhi Development Authority (DDA) have surveyed these in consultation with the concerned local bodies. The list of such properties along with ownership details, zone-wise maps and digitised location plans are put forward for public objections and suggestions. Thereafter the 'list' is notified in the gazette or newspapers by the concerned local authority. Such structures are generally categorised into three grades, Grade I, II or III, based on their significance.

CONSERVATION STRATEGIES

As a broad concept, the approach towards conservation should emerge from the historic importance, age and context. Depending on the significance of the graded structures, different approaches towards their conservation are prioritised. These range from preservation to reconstruction. A brief description of each approach and its applicability for graded structures has been listed below.

Preservation

In general, all Grade I heritage buildings or precincts should be preserved and protected with absolutely minimum changes and strictly in conformity with the original. Generally, such buildings include notified and protected monuments and historic buildings. The

Grading of Heritage Building/Precincts

Grade-I	Grade-II	Grade-III
(A) Definition Heritage Grade-I comprises buildings and precincts of national or historic importance, embodying excelle nce in architectural style, design, technology and material usage and/ or aesthetics; they may be associated with a great historic event, personality, movement or institution. They have been and are the prime landmarks of the region. All natural sites shall fall within Grade-I.	Heritage Grade-II (A&B) comprises of buildings and precincts of regional or local importance possessing special architectural or aesthetic merit, or cultural or historical significance though of a lower scale than Heritage Grade-I. They are local landmarks, which contribute to the image and identity of the region. They may be the work of master craftsmen or may be models of proportion and ornamentation or designed to suit a particular climate.	Heritage Grade-III comprises building and precincts of importance for townscape; that evoke architectural, aesthetic, or sociological interest through not as much as in Heritage Grade-II. These contribute to determine the character of the locality and can be representative of lifestyle of a particular community or region and may also be distinguished by setting , or special character of the façade and uniformity of height, width and scale.
(B) Objective: Heritage Grade-I richly deserves careful preservation.	Heritage Grade-II deserves intelligent conservation.	Heritage Grade-II deserves intelligent conservation (though on a lesser scale than Grade-II and special protection to unique features and attributes).
(C) Scope for Changes: No interventions be permitted either on exterior or interior of the heritage building or natural features unless it is necessary in the interest of strengthening and prolonging the life of the buildings/or precincts or any part or features thereof. For this purpose, absolutely essential and minimum changes would be allowed and they must be in conformity with the original.	Grade-II(A): Internal changes and adaptive re-use may by and large be allowed but subject to strict scrutiny. Care would be taken to ensure the conservation of all special aspects for which it is included in Heritage Grade-II. Grade-II(B): In addition to the above, extension or additional building in the same plot or compound could in certain circumstances, be allowed provided that the extension / additional building is in harmony with (and does not detract from) the existing heritage building(s) or precincts especially in terms of height and façade.	Internal changes and adaptive re-use may by and large be allowed. Changes can include extensions and additional buildings in the same plot or compound. However, any changes should be such that they are in harmony with and should be such that they do not detract from the existing heritage building/precinct.
(D) Procedure: Development permission for the changes would be given on the advice of the Heritage Conservation Committee.	Development permission for the changes would be given on the advice of the Heritage Conservation Committee.	Development permission for changes would be given on the advice of the Heritage Conservation Committee.
(E) Vistas / Surrounding Development: All development in areas surrounding Heritage Grade-I shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade-I.	All development in areas surrounding Heritage Grade-II shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade-II.	All development in areas surrounding Heritage Grade-III shall be regulated and controlled, ensuring that it does not mar the grandeur of, or view from Heritage Grade-III.

Source: MoUD Gazette Notification dated 9-2-2004

existing condition of historic buildings and its features is evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material should match the old in composition, design, colour and texture.

Rehabilitation

As a general principle, a Grade II building or precinct may be rehabilitated as long as it requires minimal changes to its distinctive materials, features, spaces and spatial relationships. Such buildings are generally occupied and are in public use such as Old Secretariat, Delhi University Vice-regal House and various college buildings. New additions, exterior alterations or new construction should not destroy historic materials, features and spatial relationships that characterise the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion and

massing to protect the integrity of the property and its environment. New additions and adjacent or new construction should be undertaken in such a manner that its essential form, integrity and environment are not impaired.

Restoration

As a general rule, a Grade III heritage building or precinct may be restored to its original state or be given a new use that reflects the property's restoration period. Such buildings are generally occupied and are in private use, such as *dharmshala*s (hospice or lodging for travellers), *haveli*s (mansion), *katra*s (a roadside inn) and traditional markets that are facing deterioration and need retrofitting and restoration. Deteriorated features should be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature should match the old in design, colour, texture and materials. Replacement of missing features should be substantiated by documentary and physical evidence.

Reconstruction

Reconstruction is considered only for the heritage buildings or precincts facing extinction and in most cases not recommended for structures of Grade I and Grade II importance. It should depict non-surviving portions of a property based on documentary and physical evidence to permit accurate reconstruction with minimal conjecture.

PLANNING MANDATE

The Delhi Master Plan 2021 formulated by DDA includes the conservation of heritage as an important task to be undertaken and identifies various heritage zones and archaeological parks. It defines 'heritage zone' as 'an area which has a concentration, linkages and continuity of buildings, structures or complexes united historically or aesthetically by physical development'. An archaeological park has been identified as 'an area distinguishable by heritage resources and land related to such resources, which has the potential to become an interpretive and educational resource for the public in addition to the value as a tourist attraction'. The Master Plan mandates the preparation of 'heritage management plans' for the conservation and improvement of these heritage complexes and zones. It also provides a legal shield to listed heritage buildings, zones, parks and precincts. According to the planning frameworks, the scope of heritage conservation and management has expanded beyond singular monuments to being area based. It identifies a historic zone, district or settlement for conservation as a whole and is no longer limited to archaeological monuments. The planning approach reflects a growing awareness among planners and administrators that heritage has mythological, iconic and symbolic values, manifested in its cultural and structural pluralism, arts and literature, music and performing arts, crafts, industry and customs and festivals. As such, the conservation of heritage is a holistic process of strategic management, planning, implementation, monitoring and evaluation.

Conservation zone management

A conservation zone has a range of heritage resources; housing, physical infrastructure, transport networks, listed and protected buildings, natural heritage, parks, open space and water bodies. For instance, Red Fort in Shahjahanabad or Salim Garh cannot be isolated from the Yamuna riverfront. Humayun's Tomb is part of a greater ensemble of heritage that includes the Charbagh, Nizamuddin Basti and Arab-ki-Sarai. Similarly, the Rashtrapati Bhavan cannot be isolated from the Mughal Gardens and Vijay Chowk. The tree studded boulevards and avenues are part of the overall experience of Lutyens' Delhi. Thus, the listing and identification of heritage resources needs to encompass all such components that form the basis of a heritage management plan. Information collected from inventories and secondary sources should be comprehensive, open ended and geo-referenced in digital-spatial data format. It should be searchable through query formulations, for example, lists of residences with locations of a particular conservation zone giving their ownership status, heritage values and structural condition. This needs to be done through raising awareness, education and encouraging active community participation. Heritage management plans and regulations will be effective only with a heritage aware community.

In the absence of appropriate specifications for conservation works and materials, general specifications are often adopted. There is a need to work out specific guidelines and specifications of materials for conservation, repair and maintenance of heritage structures. The specifications, guidelines and controls should be differentiated and applied according to the historicity, age, structural condition and significance of the heritage resource. Accordingly, conservation zone management involves the preparation of following:

- Specifications for conservation works, including structures, roads, parks and utilities

- Manuals on structure, repairs, crafts, workmanship and materials
- Manual for maintenance
- Architectural control guidelines and building bye laws for heritage zones.

Outline of a Heritage Management Plan

The preparation of a heritage management plan is based on detail documentation, surveys and mapping of the heritage resources. It follows a sequential and systematic study as given below:

- Surveys, documentation, listing and grading
- Layered maps and visuals of historic evolution
- Heritage maps and chronology of historic cities, villages and settlements
- Delineation of zones on detailed maps based on the study of secondary sources
- Analysis and inventory of local issues and priorities
- Guideline for overall conservation and management, along with working drawings, details, specifications, estimates, architectural and building controls or regulations
- Environment management plan
- Infrastructure management plan
- Mobility plan
- Heritage legislation or rules, regulations and bye-laws
- Financial plan and action programme
- Documentation and knowledge management
- Monitoring, evaluation and feedback

Heritage area revitalisation

For the revitalisation of historic cities, villages and zones, some broad guidelines include the following:

- A comprehensive approach integrating conservation with improvement of the community in term of livelihoods, incomes, education, health, recreation, culture and security.
- Refurbishment standards for the restoration of areas and buildings of historic and cultural significance.
- Traffic improvements, pedestrianisation and street furniture to increase public use and improve mobility and public convenience.
- Reintegration of historic centres into mainstream activity involves a clear definition of functional requirements.
- Improved environmental standards.
- Regulation and control over hoardings, signage, advertisements.
- Community participation and cultural revival, local festivals and performing arts.

To make conservation and urban regeneration sustainable and self-supporting, community or Non Governmental Organisation (NGO) involvement is necessary. Thus, it is essential to provide incentives to heritage building owners. The project approach should be bankable in order to mobilise private sector investments. This would also help to leverage the process of urban conservation by private or through community investments.

It is pertinent to create partnerships among the stakeholders and actors who have an interest in the conservation areas. Private investments can be attracted through tax incentives. Technical assistance to heritage conservation projects can be provided by the local bodies or NGOs and professional institutes. Accordingly, procedures will have to be evolved for effective participation of NGOs, cooperative, community and private sector. A key challenge is to train and build capacity of specialised conservation professionals, including skilled craftspeople. The work of restoration, rehabilitation, repair and maintenance of heritage buildings should not be left to general contractors and workers.

Often the Development Plans prescribe the Floor Area Ratio (FAR) for inner cities and traditional zones that is generally much less than the existing. As the FAR corresponds to property value, its reduction can be a major disincentive for conservation, resulting in unauthorised reconstruction and conversions of land use. It is necessary not only to allow minimum existing FAR and ground coverage, but also to give an incentive FAR and retain property value by way of planning tools such as Transferable Development Rights (TDR), adaptive reuse and mixed land use. TDR can be applied to privately owned premises that are listed monuments located in prime locations.

For the buildings affected by heritage restrictions, including buildings falling in 100 metre and 300 metre radii prohibited and restricted heritage zones, entitled FAR can be granted either in-situ by enhanced ground coverage and adaptive reuse or in a receiving plot within the zone by way of development control regulations. As far as possible, TDR should be granted in the same locality or area having similar property value. The owner can be given a choice to avail land, TDR Certificate, FAR or cash compensation or a mix of the three options. Ahmedabad, Bangalore and Hyderabad have successfully used the tool of TDR for their road widening projects or public transport corridors. However, this approach is yet to be used for heritage conservation.

Empowerment partnerships

Government level	*Local authority*	*Community level*
Remove regulatory barriers	Invest state resources/funds	Involve the entire community
Simplify programme	Decentralise	Plan comprehensively
Coordinate programmes	Devolve and decontrol	Leverage private resources
Invest broad resources	Coordinate programmes and agencies Simplify procedures and approval	Streamline planning, monitoring and implementation process, ensure accountability

To encourage owners of listed or notified heritage properties and monuments to invest in the conservation, they can be offered alternative plots of land for development to compensate for the loss of development potential in a heritage property. Waivers of building bye-laws for protection of heritage may include set-backs, marginal open spaces and height. This demands a clear framework and comprehensive plans for heritage zones emerging from ground level experience.

The owners and occupants of heritage buildings or zones may be allowed adaptive reuse and 'remunerative' activities that are not hazardous to conservation and environment. Home improvement loans can be given for maintenance of old buildings as has been tried in Mumbai for repair of *chawl*s (a large building divided into many separate tenements, offering cheap, basic accommodation to labourers). This helps in proper maintenance of traditional housing stock without the need to shift the population and save such properties from becoming real estate commodity. The local body may take up from its own budget infrastructure upgradation schemes for inner city or heritage zones and dilapidated old areas.

PARTNERSHIPS FOR CONSERVATION

Special norms and specifications need to be developed for each zone, in order to conserve traditional urban areas and heritage. Some of these can be mandatory, while others can be semi-legal by way of administrative or government orders or by way of approved plans and schemes such as urban heritage guidelines, architectural controls, redevelopment specifications, building standards, maintenance guidelines and controls for hoardings, advertisements and signage.
A para-legal provision can be 'empowerment zone partnerships' and 'community enterprise promotion' for urban regeneration among various types of partnerships. The concept of empowerment zone partnership requires deregulation, devolution, coordination, allocations and leveraging at the levels of government, local authority and community.

FINANCES FOR CONSERVATION

Multiplicity of organisations, lack of finances and non-preparation or non-implementation of heritage management plans have been the main reasons for backlogs in conservation goals. Currently, the funds earmarked for conservation of heritage resources are woefully inadequate and mechanisms are required whereby innovative funding could be generated for conservation and management of heritage resources. The mobilisation of adequate resources for effective conservation and heritage management should be linked with processes of economic regeneration. The incentives for conservation could be given in the following manner:

- By direct financial grant to the owner of the heritage resource by the central or state government.
- Providing the building owner access to credit, tax relief, property tax exemption, land use relaxation and other concessions.
- Cross-subsidies for maintenance of listed heritage buildings or settlements, villages or natural heritage.
- Development rights incentives, such as adaptive reuse, TDR for heritage buildings and accommodation reservation.
- Allocation of state or local body budget for upgrading of infrastructure, restoration and maintenance of heritage and provision of essential utilities and community facilities.
- Public Private Partnerships (PPPs).

Encouragement should be given to the locals in conservation and rehabilitation activities and in formulation of partnerships. The PPP model in heritage conservation and management can mobilise the corporate organisations, NGOs, charities, residents' welfare associations and public sector undertakings.

CONCLUSION

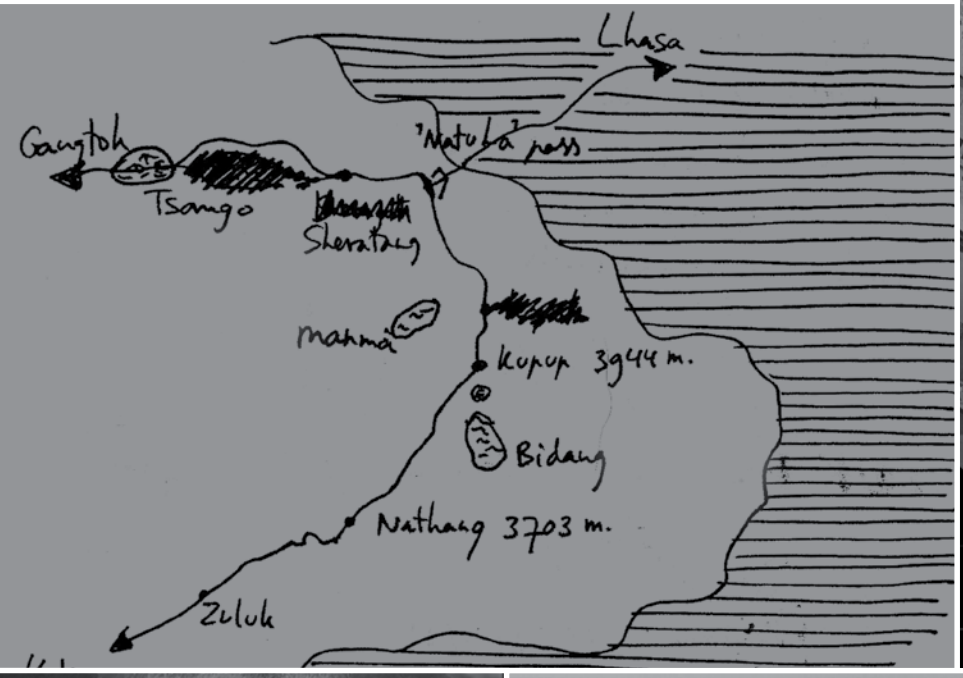
The purpose and significance of conservation is its relationship with the people and livelihoods. In addition to being a priceless historic resource, Delhi's built heritage has the potential to boost local

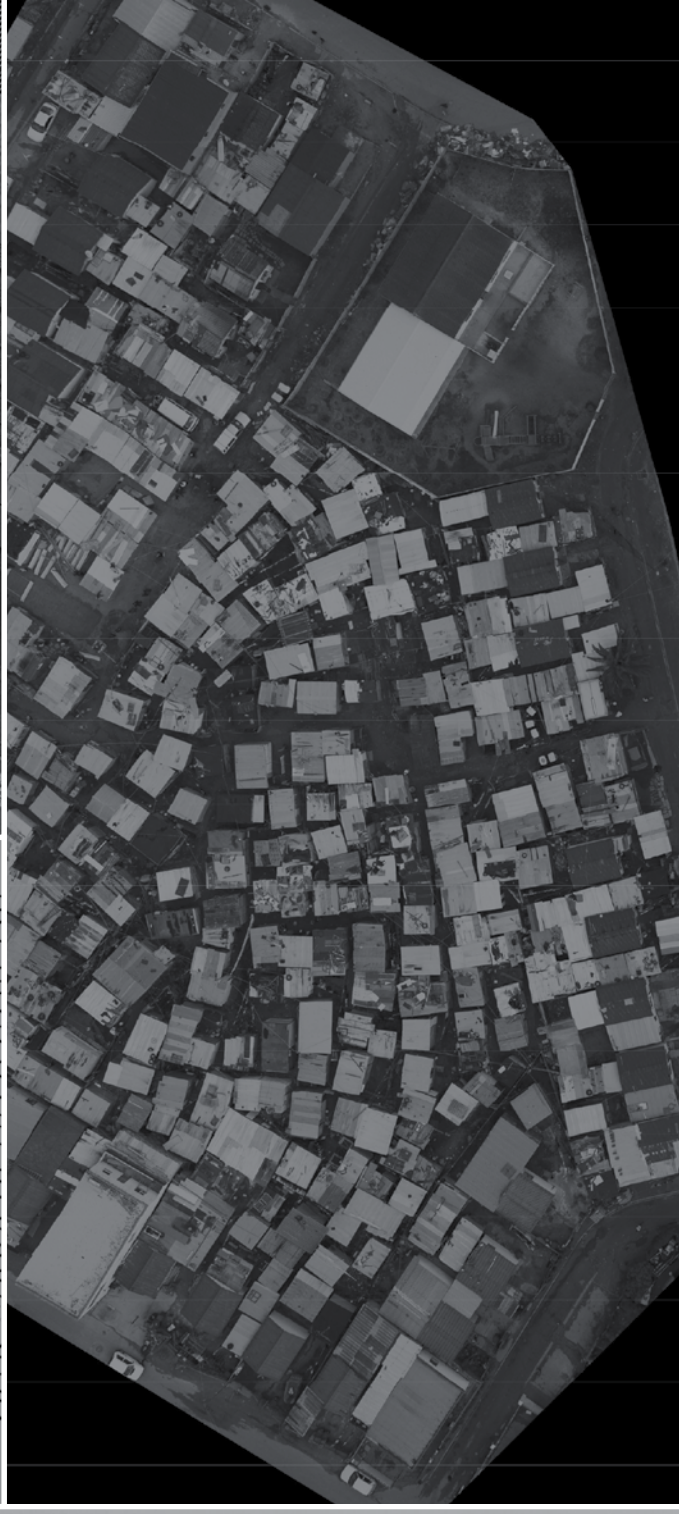
economic practices, generate long term employment and offer opportunities for urban planning, renewal and development. However, to realise the full potential of this resource, new and innovative approaches to conservation need to be explored. Planning tools such as incentive FAR and TDR that are so far being used for transport development and urban expansion could be adapted for conservation. Issues of funding could be addressed through innovative approaches such as PPP models, cross-subsidisation and public sector undertakings. The mobilisation of adequate resources for effective conservation and heritage management should be linked with processes of economic regeneration. The unique legacy of Delhi is a source of national pride, thus its long term conservation should become an important agenda for the national capital.

Bibliographic references

- Aga Khan Trust for Culture 2011, *Historic Cities Program*, Prestel, New Delhi.
- Brett Crowther, MR 2013, 'The Significance of Delhi' in AK Jain, *Dillinama, The Cities of Delhi*, Synergy Books, New Delhi.
- Butler, ASG 1950, *The Architecture of Sir Edwin Lutyens*, vol. 3, Country Life, London.
- Delhi Development Authority, 2005, *Expert Sub-group report on Conservation of Delhi's Built Heritage*, Unpublished, New Delhi.
- Delhi Town Planning Committee 1913, *Final Report on Town Planning of New Imperial Delhi*, CPWD, New Delhi.
- Greenberg, A 1969, *Lutyens' Architecture Restudied*, Perspecta, Cannecticut.
- Government of India 2007, *Master Plan for Delhi 2021*, Government of India, New Delhi.
- INTACH 1999*, Listing of Heritage Buildings in Delhi*, INTACH New Delhi.
- Jain, AK 2011, *Lutyens' Delhi*, Bookwell, New Delhi.
- Jain, AK 1994*, The Cities of Delhi*, South Asia Books, New Delhi.
- Ministry of Urban Development, , 2011, *Jawaharlal Nehru National Urban Renewal Mission (JNNURM) Toolkit*, Government of India New Delhi, February, 2013, <http://jnnurm.nic.in/toolkits-report-primers.html>.
- Volwahsen, Andreas 2002, *Imperial Delhi: the British capital of the Indian empire*, Prestel, Munich.

Sustainable Solutions





Power to the People
Cape Town, South Africa

ADITYA KUMAR

ABSTRACT

The rapid rise in cities and urban areas is accompanied by another rising statistic, that of citywide protests and self organised community activism. The premise of many of these protests is largely housing for the poor and basic services in slums. The undercurrent of many such protests is inequality, fractured relationships with the state and dissatisfaction with urban governance. These protests are broadly demanding 'right to the city' and seeking to strengthen urban citizenship.

In South Africa, through well refined and highly progressive pro-poor policies, the State is attempting to become a frontrunner in poverty alleviation and is demonstrating its commitment to the millennium development goals. However, after almost 20 years in a post-apartheid South Africa, the pro-poor policies have deepened poverty and reinforced the fractured relationship with the state. In South Africa pro-poor and rights based policies from the State have created an environment of new forms of civil action. Such forms of civil society have a deeply reflexive relationship with the state, subsequently redefining the understanding of the city. As other countries in the global south, particularly India, embark on centralised policies around slums, they can learn from 'people centred development' in South Africa.

Aditya Kumar is an architect and planner from India currently working in informal settlements of Southern Africa. He is the Deputy Director and National Technical Coordinator for the nongovernmental organisation Community Organisation Resource Centre, South Africa. He has been recently shortlisted for the 2013 cycle of Aga Khan Award for Architecture. He was also Project Manager for earthquake rehabilitation projects in Gujarat, India and worked on affordable housing and large planning projects in America.

INTRODUCTION

The historic image of Nelson Mandela walking out of prison is etched in history books. On his release speech in Cape Town, Mandela proclaimed the onset of South African democracy by raising his fists; inciting the crowds by saying '*amandla!*' (power) and the people responded '*awethu*' (to us). Such events, amongst several others, sent a strong message to the South African people- 'power to us, the people'. Since 1994, South Africa has redefined itself around diminishing its racial divide and deep inequality within the country. Apartheid style planning had spatially divided its cities, with mostly affluent white minority neighbourhoods and black, Indian and coloured majority living in city peripheries, townships and slums. Following the first election in South Africa, the constitution took a firm stance against inequality and this style of planning. Perhaps the most critical recognition of the need to redress this inequality was the provision of 'housing as a fundamental right under the constitution'. This national policy mandates the state to provide 'free subsidised housing' for the poor. The belief was that security of tenure and housing will provide the necessary platform for the poor to work their way up or the wealth to trickle down. Coupled with this free subsidised housing, the South African government also made provision for welfare grants to support disadvantaged people such as the disabled, old and unemployed. After almost 20 years of independence, the impact of such state centred housing delivery is visible in current statistics. Slums have grown from 400 nationally to a staggering 2,700 during this period. The housing backlog for the poor in 1994 was 2.3 million households, but today there are almost 2.1 million households (National Upgrade Support Programme 2011)[1]. Thus, despite the state delivering numerous houses to the poor, it hasn't dramatically shifted the balance of inequality. There are more slums and more people living in slums since 1994.

IMPACT OF SUBSIDISED FREE HOUSING DELIVERY MODEL

The free housing delivery model has had a deep socio-political impact on communities (Huchzermeyer 2003). Firstly, this delivery model, willingly or otherwise, has depoliticised the developmental agenda. This specifically refers to the fact that most of the subsidised housing projects delivered by the state have been far removed from city centres, thus reinforcing apartheid planning. Further, this delivery of housing has completely eliminated the debate around land issues, in particular, strategic parcels of land that are privately owned close to the city centre. Depoliticising the issue of land has made housing into a 'delivery' mechanism, managed and run by large external consultants or contractors (Charlton & Kihato 2006).

Secondly, this delivery model has strengthened the South African neo-liberal agenda (Bond 2010). Infrastructure and developmental investments continue to be determined largely by the private sector. The so-called free housing hasn't been successful in shifting key investments from city centres to peripheries, townships and low-income housing. It has thus reinforced the structured economy where the poor are secluded on the periphery with very limited access to employment zones.

Thirdly, state subsidised 'free house' has created an unrealistic expectation that is leveraged by politicians to gain votes. However, these targets are completely unrealistic. Just within the City of Cape Town (2009) there is a 400,000 housing backlog, and within the current funding it will take almost 60 years to provide housing to these families. This doesn't account for any in-migration, growth of families or cost for purchasing developable land. Finally, at a household level, the free subsidised housing has delinked the essence of building one's own home through toil and sweat into a 'commodity' that can be traded or exchanged.

Although families are not allowed to sell these assets for a period of seven years, research has shown that most people are selling their free houses and moving back to the slum. The capitalisation of individucal houses has further exacerbated the slum growth and encouraged under the table transactions. Additionally, this has made housing an individual struggle rather than a communal one and has weakened collective action.

Have these centralised and top-down policies completely crippled civil society? What happened to 'power to the people'? The state's centralised policies have reinforced a strong rights based movement in South Africa. In community meetings across South Africa one hears the same retort: 'The government promised me a house.' This 'rights based' mentality trickles down to all forms of welfare systems or services within slums. On a recent exchange by a Ugandan delegation to a slum in Cape Town, the delegates enquired about vandalism of taps and community action to fix the taps. The response from the leader of the settlement was that 'we call the municipality to fix it.' Such dependency on the state

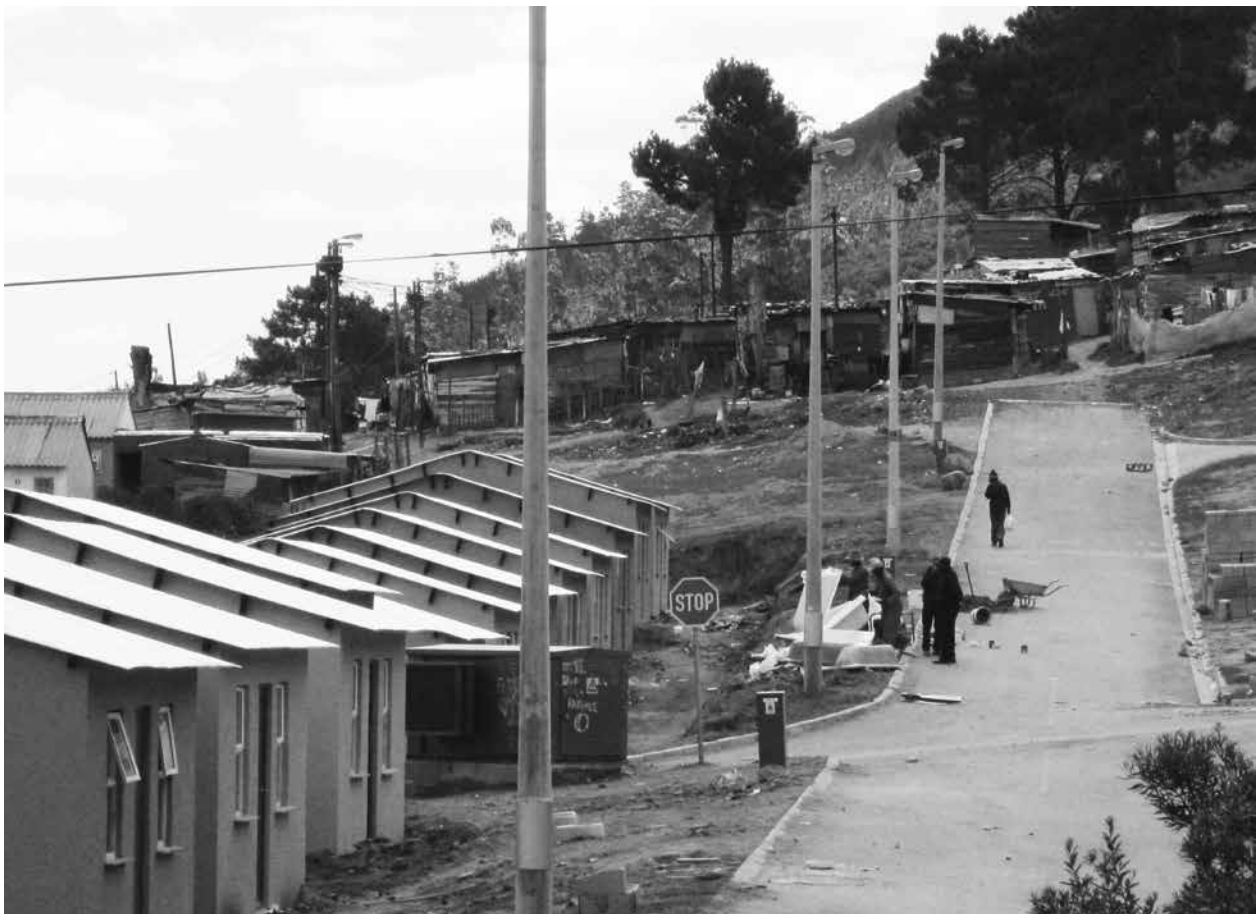
is unimaginable in other African nations, where local government, rarely partake in the provision or maintenance of slum services. Local media reports regularly on what is called 'service delivery protests'. Such a protest usually involves hundreds of people burning tires, vandalising streets, littering and sloganeering. According to NUSP (2011), nationally there were roughly two protests a month in 1994, but today there are almost two protests per week.

These protests are not merely indicators of state subsidised housing failure, but an indicator of a deep resentment and frustration amongst the people. People are demanding basic services like water, sanitation, electricity and waste management. There is clearly a big disconnect between the 'housing delivery model' and the demands for basic services by communities. But what is emerging is not just a 'hybrid'of existing typologies of civil society (Ley 2011) but also a 'strategically reflexive' relationship between society and government wherein they find avenues to cooperate with one hand and protest with the other. While it is desirable that social movement should not be co-opted by state but be an independent agent (De Souza 2006) it is evident that both are deeply interconnected and almost strategising around a 'chessboard'.

In the case of Cape Town the local government has taken two significant institutional shifts in responding to civil society pressures. As a reflex, two significant civil society organisations from Cape Town have blurred their mandate around their relationship with state. On one hand they have demonstrated rights based advocacy, on the other they have formed strategic partnerships with the state.

ROLE OF LOCAL GOVERNMENT

The motto of city of Cape Town is 'The city works for you'. Today official figures estimate that there are over 230 slums in Cape Town and almost 400,000 people on the waiting list for state subsidised housing. The growth of slums and shortage of developable land has resulted in a very confrontational relationship between the city and communities. Given this relationship, in 2009 the city of Cape Town reacted to these protests with two



State subsidised housing, rubber stamped with the background of a large slum in Langrug, Stellenbosch, Western Cape

key institutional shifts - creating a law enforcement unit called Anti Land Invasion Unit (ALIU) and an 'Informal Settlements unit'. The City of cape Town (2009), during a press release said:

> The main role of the ALIU will be to monitor and patrol vacant land, enforce the rule of law with respect to illegal occupation of land and illegal shack building, and provide backup to housing officers during evictions, relocations and the demolition of illegal structures.

The creation of ALIU is a measure to prevent further occupation of City land. This announcement is linked to the realisation that 'land suitable and available for development' is very limited within the urban edge as per City of Cape Town Spatial Development Framework (2012)[2]. Given the high rate of in-migration and settlement proliferation, the protection of state land is a high priority from an economic and environmental perspective. Evidently, the scarcity of land has obvious implications for a range of developmental agendas, both within the private sector and state subsidised housing. Dating back to 1999, the approach of the Municipal Masterplan, called Integrated Development Plan has been ' a two-pronged approach: proactive planning that looks towards development direction and the second being land management usually controlled by the private sector' (City of Cape Town SDF 1999).

In other words, the underlying theme of the city development within Cape Town and metropolitan area has been effective land management. However, this ambition of effective land management has been largely crippled by the 230 slums[3] that are, in some cases, occupying this 'suitable and available for development' land. Any further proliferation of informal settlements will only deepen the crisis. The creation of the ALIU unit is highly controversial as they demolish any renovated or extended shack, even as old as 22 years, without any prior notice or information causing huge inconvenience to people (*The New Age* November 14, 2011). An 'X' painted on a shack often used by the city is referred to as a warning that the structure is illegal followed by tearing down of the shack the next day (Signalfire 2011). Kylie Hatton[4], Spokesperson City of Cape Town, in response to the civil society reaction through the local media says:

> When they expand the site with more structures illegally, it creates density, with too many people, which has a major impact on developing and upgrading the area in order to make it a more viable community.

The underlying message of ALIU led evictions reads, 'big brother is watching' fear and hostility and an attempt to discourage in-migration. Zero tolerance towards land invasion means that the ALIU can operate with impunity-evict, control, monitor and at times, manipulate.

Parallel to this law enforcement arm, Cape Town became the first local government in South Africa to introduce a dedicated Informal Settlements Management (ISM) department. The mandate of this department is to address the delivery of basic services in the short term, exploring long-term solutions around tenure security and housing. This department was primarily formed to implement a citywide slum upgrading programme. This was a clear recognition that the issue of slums sits at the intersection of two key city government directorates: Housing and Planning. It has streamlined the responsibility and accountability of slums to these two departments.

Ironically, the creation of these departments has deepened conflict between the community and the city, while at the same offered new opportunities to partner. The ALIU and ISM are small pieces of much larger urban development puzzle that involves issues of land, infrastructure delivery, economy, in-migration, health, environment and inequalities within the city. Instead the creation of these units as part of a larger apparatus that 'selects' who and where people reside within the city. How have these institutional shifts reflected in civil society? In what ways have communities 'politicised' the debate around land and developmental through service delivery?

RESPONSE OF CIVIL SOCIETY ORGANISATIONS

Based on the unrealistic timeline of housing delivery in Cape Town, the developmental agenda is undergoing a massive shift from 'housing delivery' to 'basic services'. Communities demanding basic services are largely informing this shift in mindset. Communities have used the shifts at the city's institutional level, to appropriate delivery of basic services in-situ on the same land that people are currently residing. This in-situ provision of services has put a stake in the ground for the people 'demanding basic services' and reinforcing their 'right to land'. Communities, it has been observed, are now in a better position to choose housing in-situ, rather than another piece of land outside the city periphery where they are far removed

High density, flooding and lack of services in Mashini Wam, typical of South African slums

from basic amenities such as livelihoods, schools and hospitals. In many ways, this has increased the bargaining power of communities with the city. In 2008, the emergence of two new community based organisations, Social Justice Coalition (SJC) and Informal Settlement Network (ISN) is having precisely this impact. These organisations are placed at opposite ends of the spectrum, the former being a lobbying and advocacy organisation, while the other promoting strategic partnerships with the state. But in practice, both organisations transgress their mandates, to demand 'rights', while partnering with the city to deliver better services. In many ways, both organisations are critically arguing that improving basic services is a means to an end towards a more equitable city development agenda.

Social Justice Coalition

SJC has demonstrated clever protest tactics that stretched and blurred the rights based approach. Instead of using conventional tactics of street protests, the organisation uses creative activism to lobby for dignified life in slums. Long queues at the city centre toilets, at affluent neighbourhoods, organising public lectures in slums and petitions signed by thousands of people are some of the strategies used by this rights based organisation. SJC's tactics have clearly politicised the 'service delivery agenda', where they have held Cape Town accountable for areas such as basic sanitation, water, crime mitigation, street lighting and janitorial services through their 'Clean and safe sanitation campaign', launched in 2010, SJC lobbied for community managed janitorial services. This would

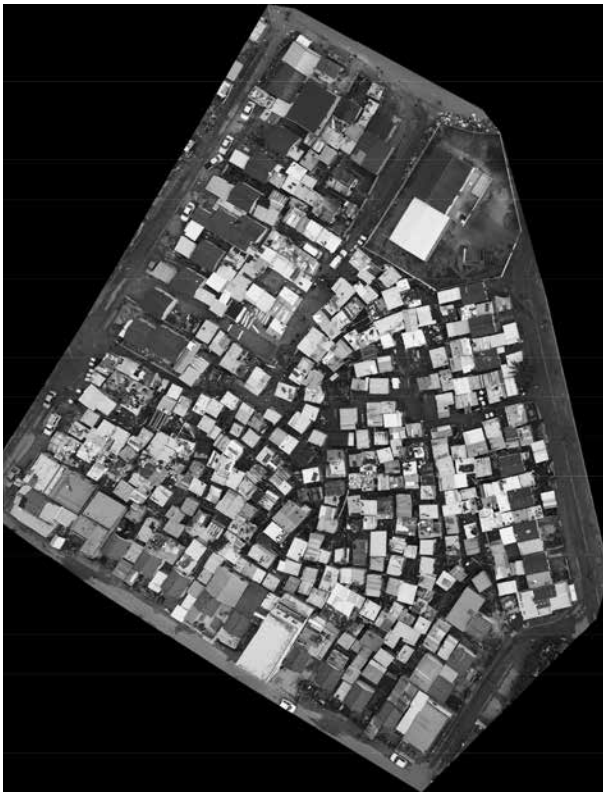
allow for at least 500 members from the community to maintain their communal toilets. The city government under a programme called the 'Extended Public works programme' would pay members for their services.

This janitorial service has dramatically shifted the power relations between SJC, community and the City. While on the one hand, SJC continues to lobby and advocate for accountability at levels of government, on the other it instils greater responsibility in local communities to take 'control'. The clear intention of such measures is to foster a sense of ownership of communal toilets, and to their surroundings. Currently SJC is launching a 'Campaign for Safe Communities', which looks at uniting police service, government departments and communities to decrease violence and crime. The use of such campaigns and janitorial services is a means to upgrade poor communities higher on the food chain to decision making seat.

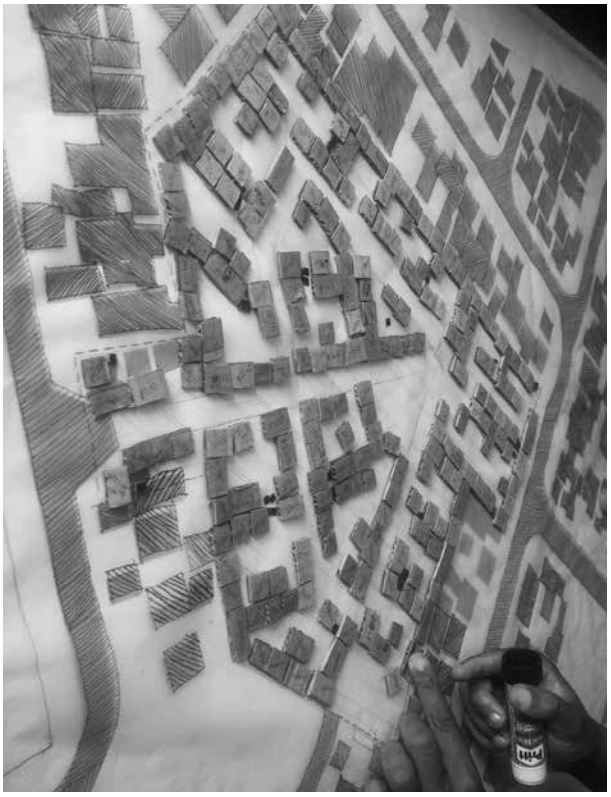
Informal Settlement Network

Parallel to the formation of SJC, was the formation of another grassroots movement called the Informal Settlement Network (ISN) in 2008. Unlike SJC's overarching mandate to be a rights based organisation, the ISN mandate clearly promotes partnerships.

One of the core pillars of the ISN has been the provision of basic services in partnership with local government. Since 2010, the ISN has been working with the city of Cape Town on a number of slums, particularly around community organisation and participation. The first partnership project between the ISN and Cape Town was the re-blocking or rearrangement of shacks or shelters to open up access streets and improve fire safety of Sheffield Road. A community of 167 shacks sited on road reserve had no developmental plans, either for services or housing. Through the support of the ISN, the settlement was re-blocked; enhancing the provision of basic services and in-situ development. The community of Sheffield Road has been central in this process; designing, managing and implementing it through the support of other NGOs. The land, per the city, was an impediment to development, has now been unlocked to the benefit of the community. This process was used as a tool by the ISN to roll out subsequent in-situ upgrading projects that have shifted the focus of development to the land that people occupy today. The broader intention of the ISN is to legitimise the 'right' of the people to inhabit land close to facilities such as livelihoods, schools and hospitals. This agenda has also pushed the city of Cape Town to carefully examine the link between land and



Aerial image of Mashini Wam slum before re-blocking



Community proposed in-situ layout for Mashini Wam, opening access streets and courtyards without changing densities

basic services. The city is now in favour of servicing at least 22 other settlements through the re-blocking process. In 2012, ISN and city of Cape Town embarked on another re-blocking project for a settlement called Mshini Wam. While the project started in a similar manner, where the city was unable to deliver services due to the high density within the slum, the community action through ISN networking has deepened.

The community of Mshini Wam used ISN as a network to learn both the positives and mistakes made on implementing a re-blocking project. Besides, the Mshini Wam community enumerating, measuring, mapping and designing their own settlement; they also contributed 20% to upgrading of shelters. Financial contribution has dramatically increased the community ownership, and has given the confidence to negotiate tenure security for all the families. Through its partnership model, the ISN has politicised the issue of land, where the sacrosanct control of the City can be relinquished. In 2012, ISN signed a memorandum of understanding with the City of Cape Town, around slum upgrading. The departure from state housing programme to community driven slum upgrading has been a significant contribution of the ISN. But while this social movement clearly promotes partnering with the state, it simultaneously practiced conventional protests to stop evictions in Marlboro, Johannesburg (SDI South African Alliance 2012)[5]. Roughly 2,000 slum dwellers marched to the provincial office demanding a stop to evictions. The lobbying and advocacy didn't stop at Johannesburg, but was also raised at international events like the World Urban Forum, 2012. After four months of legal proceedings, the constitutional court ruled in favour of the evicted families and instructed the city of Johannesburg to provide sites and material for the 141 evicted families (SDI South African Alliance 2012). ISN's reaction to evictions has been in the form of classical rights based approach: protests, marching on the streets and demanding the state to take action.

CONCLUSION

SJC and ISN have shifted the city of Cape Town focus from housing to delivery or maintenance of basic services. By putting the community at the centre of development, it has shifted the power balance from state delivered housing to settlement wide upgrading. Indirectly both organisations, through clever strategies, have put land and in-situ development in the centre of discussion with the state. However, while both

Community construction team, working on site to open up streets and courtyards to allow city of Cape Town to provide services

organisations have brought forth land and community, rather than individual, centred approach to slum upgrading, it still has not been able to tilt the balance of large public and private investment. The development paradigm in Cape Town continues to be largely determined by the rich and the powerful, rather than the urban poor. These initiatives continue to strengthen urban poor platform, it is still some time before the poor can stake a claim over developable land close to the city centre.

As governments around the world, particularly in the global South, look to tackle the issue of slums, there is a need to look beyond the ostensibly smoothly functioning cities. As city government go on with their everyday management, communities are constantly strategising. This is, perhaps, a critical lesson that India can learn from South African counterparts. The introduction of a centralised policy like the Rajiv Awas Yojna is likely to have a profound impact on land and in-situ slum development (Ministry of Housing and Urban poverty alleviation 2012). The dream of 'a slum free India', will only be realised if the state governments don't look to just 'deliver' for the sake of 'delivery' but truly listen closely to needs of the local communities. One thing is certain though, whether in South Africa or India, poverty will be tackled through the 'power of the people'.

Acknowledgement

All the images for Mashini Wam are taken from Community Organisation Resource Centre (CORC), South Africa.

Bibliographic references

- Bond, P 2010, 'South Africa's bubble meets boiling urban social protest', *Monthly Review*, vol. 62, no. 2, viewed March, 2013, Monthly Review, Monthly Review, Monthly Review.
- Charlton, S & Kihato, C 2006, 'Reaching the poor? An analysis of the influences on the evolution of South Africa's housing programme' in U Pillay, R Tomlinson & J Du Toit (eds.), *Democracy and Delivery: Urban policy in South Africa'*, HSRC Press, Cape Town.
- De souza, ML 2006, 'Together with the state, despite the state, against the state: Social movements as critical planning agents', *City: analysis of urban trends, culture, theory, policy, action*, vol.10, no. 3, pp. 327-342.
- Huchzermeyer, M 2003, 'A legacy of Control? The capital subsidy for housing and informal settlement intervention in South Africa', *International Journal of Urban and Regional Research,* vol. 27.3, pp. 591-612.
- Indian Ministry of Housing and Urban poverty alleviation 2013, Indian Ministry of Housing and Urban poverty alleviation, New Delhi, viewed March, 2013<http://mhupa.gov.in/ray/Ray_index.htm>.
- Ley, A 2011, *Housing as Governance: Interfaces Between Local Government and Civil Society Organisations in Cape Town, South Africa*, Lit Verlag, Berlin.
- National Upgrading Support Programme 2013, National Department of Human Settlements, South Africa, viewed March, 2013, <http://www.upgradingsupport.org>.
- SDI South African Alliance 2012, Cape Town, Durban, Johannesburg, viewed March, 2013, <http://sasdialliance.org.za>.
- Signalfire 2013, Signalfire South Africa, viewed March, 2013, <http://www.signalfire.org/>.
- Spatial Development Framework 2012, *Statutory report*, City of Cape Town, Cape Town Social Justice Coalition, Social Justice Coalition, Cape Town, viewed March, 2013, <http://www.sjc.org.za>.

Notes

1 The National Upgrading Support Programme (NUSP) was designed to support the National Department of Human Settlement (NDHS) in its implementation of the Upgrading Informal Settlements Programme (UISP) with the objective of eventually upgrading all informal settlements in the country.

2 Spatial Development Framework (SDF). Spatial planning is about anticipating long-term change, the pressures and opportunities that emerge from it and articulating a logical and flexible development path for a more sustainable and equitable future. The Cape Town Spatial Development Framework and associated District Plans achieve that by establishing guidelines about how and where Cape Town should grow in the future. These spatial plans guide new investment, give effect to the principles and priorities of the city's development strategies, and identify priority areas for strategic intervention.

3 Latest figures estimate a much higher number.

4 As quoted in Signalfire, Nov. 3, 2011. Signalfire is a blogpost where blogs are posted for informational purposes only.

5 Sasdialliance-the South African Alliance of community organisations and support NGOs affiliated to Shack / Slum Dwellers International (SDI) has pioneered people-centred development initiatives by and of the poor since 1991.

Space Heating Improvement in East Sikkim

MARIYAM ZAKIAH AND ANNE FEENSTRA

ABSTRACT

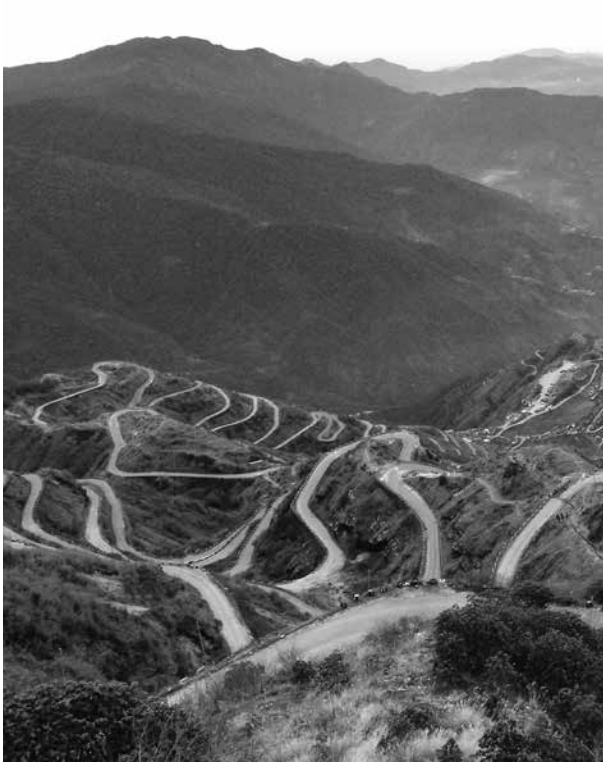
Much of the flora and fauna in East Sikkim is under threat mainly due to habitat loss and fragmentation. World Wide Fund for Nature (WWF) India asked 'arch i platform' to find innovative and sustainable solutions to resolve the conflict between man and the environment in this region of East Sikkim. After an initial field visit, the village of Gnathang was selected. The existing houses are in poor shape with leaking roofs, no thermal insulation and therefore burning bamboo and firewood for heating up the house is inevitable. The design strategy proposed was to look at various ways to reuse the existing solid waste and improve the comfort in the existing houses.

INTRODUCTION

Sikkim is one of the four states in India where the endangered Red Panda is found. WWF India conducted intensive studies on the Red Panda at the Pangolakha Wildlife Sanctuary and Barsey Rhododendron Sanctuary to assess its habitat and population status. Due to loss of nesting trees and bamboo, the Red Panda population has declined, estimated to be about 300 in 2011.[1] Sikkim is a landlocked Indian state located in the Himalayan Mountains. The State borders Nepal to the West, China's Tibet Autonomous Region to the North and East,

Mariyam Zakiah is deeply involved in community based grass root architecture. She is a graduate architect from Jamia Millia Islamia, Delhi and has been working with Anne Feenstra at arch i platform since 2011. Mariyam is head of several projects including the Space Heating Improvement project with WWF in Sikkim East, has organised several community workshops to improve the existing houses. She went on exchange programme to Faculty of Architecture, University of Erfurt, Germany, on the basis of merit.

Anne Feenstra is currently teaching at the Tribhuwan University, Kathmandu. He has completed his Masters in Architecture from Delft University, Netherlands, and has been practicing architecture in the European continent and with William Alsop architects, London. Anne has established independent design practice and has won The Global Award for Sustainable Architecture 2012 by LOCUS foundation, Paris.



The Jelep La Pass

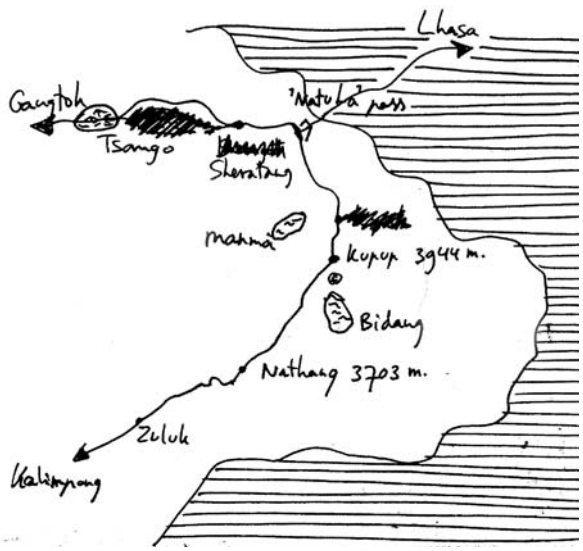
and Bhutan to the South-East. The Indian state of West Bengal lies to the south. Sikkim is the least populous state in India and the second smallest state after Goa in total area, it is nonetheless geographically diverse due to its location in the Himalayas; the climate ranges from subtropical to high alpine and Kangchenjunga, the world's third highest peak, is located on Sikkim's border with Nepal.

The long and winding road offers ever changing panoramas of Kangchenjunga and patches of high altitude lakes that merge with the massive mountains. Near army camps in Sikkim, one can see the *jawan*s (soldiers) marching towards the 'mobile point' in order to speak to their families, while occasional clusters of houses form hamlets along the road. Most of the shops sell 'imported' goods from China, though local alcoholic beverages and instant noodles are consumed extensively. WWF had previously installed solar water heaters, in some villages of East Sikkim, in order to reduce the consumption of fuel wood. The village of Gnathang located at an altitude of more than 3600 metres above mean sea level is one such village where this project was undertaken and implemented.

FEASIBILITY ASSESSMENT AND UNDERSTANDING THE CONTEXT

In December 2010, arch i platform[2] prepared a detailed feasibility assessment report based on desk and field research. The first step was preparing a base document, building upon fact, figures and previous documentation from secondary sources The second stage was field visits to the villages of Gnathang and Dzuluk. An extensive study of the physical and social aspects of the villages was carried out with field recordings and observations of the local community. Research of locally and commonly available construction material was also undertaken at this stage. Possible ways of improvements and interventions within the existing houses were discussed with the local community in village meetings.

Panorama of Village Gnathang



Jelep La, the life line of East Sikkim

Physical features

Gnathang is a small village flanked by mountains on all sides and a meandering stream passing through it. It is the highest inhabited region within the Jelep La Pass.[3] The climate of this region is cold and humid, with temperatures going as low as 15^0 C in peak winters. High wind speeds add to the chill factor. The months from May to October are relatively warm. The village has about 20 to 30 permanent houses, a war memorial commemorating the British soldiers of occupied Gnathang in the 1890's, an army base camp, a beautiful Buddhist monastery and a Vishnu temple. Colourful *darcho* (prayer flags) are used to represent the religious beliefs of the locals.

Socio-economic factors

A few of the residents are yak herders, though agriculture is not very common at this high altitude. Some of the old families are engaged in trade with the neighbouring countries. The village's proximity to the Elephant Lake and Sunrise Point has promoted it on the eco-tourism circuit along Jelep La, most frequented in October when the valley blossoms with flowering rhododendron and magnolias. Majority of the village residents work with the Border Road Organisation (BRO), earning around ₹ 8000 per month. Since basic facilities such as schools and hospitals are absent, most local families have admitted their kids to schools in the neighbouring towns of Padamchen and Gangtok.

The village is abuzz with activities early each morning. Men and women, young and old travel to work in a big BRO truck. The elderly women and young mothers with their infants strapped to their backs can be seen doing household chores or chatting with each other. On an average, a household spends 15 days in collecting firewood with a few households found to be spending as many as 25 days. Spending two to six hours a day in fuel wood collection had become the norm. Since most people worked six days a week, they would collect fuel wood on weekends or buy fuel wood from other villages, spending about ₹ 2500 to 3000 per month on fuel wood.

Identification of issues

With the increase in migrant workers, there has been an increase in temporary shelters, use of natural resources and rampant destruction of the forests for fuel wood.

The process

The old and permanent houses of the village presently lie in a dilapidated state. The unavailability of skilled labour, construction material and money are some of the reasons for the present condition of the houses. Jelep La has been recently opened for tourists, and the tourism industry is in full bloom that has led to an increase in the usage of natural resources furthermore. At this point it is vital to demonstrate the principles of sustainable architecture, passive design strategies, thermal comfort and insulation by building a prototype in this part of East Sikkim.

The most important issue that needed to be addressed was improving the thermal comfort of existing residences, in order to reduce consumption of fuel wood for space heating. One of the possible solutions was modification and improvement of the existing *bukhari* (a type of space heater from North India and Pakistan) with the help of experts and organisations working in this field to improve the efficiency and reduce black carbon emission. Based on this, WWF-India asked 'arch i platform' to work on the space heating improvement of the existing houses with village Gnathang as the test site.

STUDY AND DESIGN PROCESS

This design approach was participatory and inclusive, or an 'open design process', where listening and sharing of ideas between the architects and the community was an imperative. Community workshops were organised with the people of the village to explain the need for space heating improvement, reduction of fuel wood consumption, conservation and sustainable development that responded sensitively to the fragile environment. To select houses for the existing houses improvement, a community meeting was organised with participation of arch i platform, WWF-India and the people of the village. With the consensus of the community, three families volunteered to participate in the series of workshops. These three main stakeholders were Lobsang Gyatso, Gyatso Bhutia and Chamba Sherpa. Based on a comprehensive study, village buildings were categorised according to the material and period of construction. Most of the old buildings, belonging to the 1900's are built of 400-600 millimetres thick stone masonry. The houses built during the 1980's are timber framed and planks of 75 millimetres thickness. The modified version of this type is timber framed filled with reeds and plastered with cement, approximately 75 millimetres thick; this type of construction is seen in the 2000's. The temporary houses have been built using metal sheets and scrap with an approximate wall thickness of less than 50 millimetres.

During a thermal comfort study of these structures it was found that the internal temperature variation between a stone masonry and timber framed building with wooden planks is approximately three to five degrees centigrade because of the variation in thermal mass of the walls. Thermal mass acts as a thermal battery. In winters thermal mass can store the heat from the sun to release it at night, helping the house stay warm. Thermal mass is not a substitute for insulation. It stores and re-radiates heat. Insulation stops heat flowing into or out of the building. A high thermal mass material is not generally a good thermal insulator. The concept of insulation is unknown to the local people. The method of construction of the three selected houses

was similar. Due to easy access to timber from the forests in the lower altitude areas, Silver Oak timber is the generally accepted building material. All the houses are constructed on a raised platform of about 450 to 600 millimetres. The external wall is timber framed with wooden planks; the floor is leveled with earth and covered with wooden planks. The ceiling is constructed using wooden planks and is at a low height, about 2,300 to 2,800 millimetres from the floor level. The external roof has a timber truss, covered with metal sheet. The attic is used as a storage space. The windows are timber framed with five millimetres glass panes. The houses generally have a double door system, with a smaller door to keep the pets and children from venturing out. The size of house varies depending on the family size. The internal temperature during daytime is usually comfortable, owing to passive heat gain from the sun. However, the internal temperature after sunset is unmanageable without the *bukhari*, all the household activities taking place around it. The locals generally end their day a few hours after sunset and the *bukhari* is also extinguished. Within a short span of time, the internal temperature inside the house dips and it gets as cold as the exterior. In the mornings one can see dew formation, since the relative humidity can be as high as 75%. With the chilly winds blowing at a high speed, the slightest of gaps can make the internal temperature fall considerably.

On critically examining and analysing the existing houses, the external and internal wall, roof, ceiling, windows and doors were identified as the major areas that needed immediate attention and interventions. The wooden planks in the external walls and ceilings had developed gaps, due to seasonal expansion and contraction. The internal warm air would escape out of gaps between the shutter and frame of windows and doors and the holes in the roof formed due to constant wear and tear. A solution matrix for the different houses, identifying the problems and possible solutions for the major components of the houses was developed in detail by arch i.

Addition of insulation to the various components of the existing houses was the main principle behind the design for improved space heating. The presence of army base camps along Jelep La, is a great source of potential recyclable waste like tetrapaks, glass and plastic bottles, cardboard and rubber tubes that are good sources of insulation. Based on the design solutions a poster was designed by arch i to communicate the basic idea to the stakeholders.

WORKSHOPS ORGANISED FOR IMPROVING SPACE HEATING

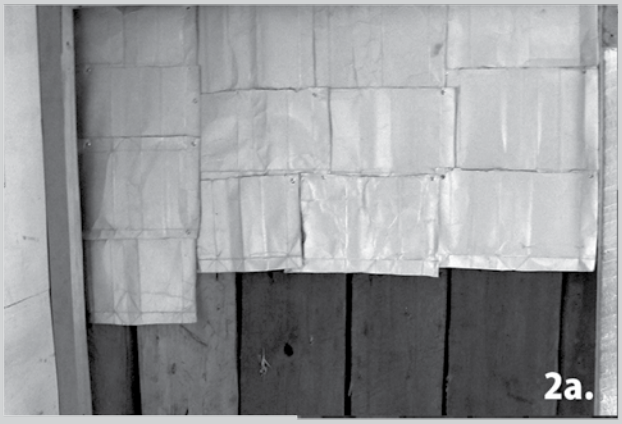
The workshops were organised by WWF-Sikkim and arch i during the months of December 2011 and April 2012. Based on the calculations, each household was asked to collect recyclable waste like bottles, food and drink cartons, rucksacks and rubber tubes for the demonstration workshops. The first workshop was conducted before the onset of winters, to test out the building during the extreme winter conditions. During the first phase, the roof, ceiling, doors and windows were retrofitted. After the initial success of the first workshop, in the second phase the external and internal walls and flooring were improved. The process and interventions were precisely described in a step-by-step guide poster. The workshops actively engaged the

Space Heating in East Sikkim

Step by Step Guide

Red panda (*Ailurus fulgens*) is the State Animal of Sikkim, and is listed as a Vulnerable species in the IUCN Red List. Habitat degradation due to extraction of firewood poses a major threat to the red panda population in the wild. As an alternative to firewood, there are more sustainable methods to heat a building, some of which are illustrated here. These simple methods show how using easy to learn techniques and waste material available abundantly you can insulate your house to keep it warmer and retain the warmth for longer in the cold season, and thereby reduce firewood usage.

WALLS: INTERNAL AND EXTERNAL



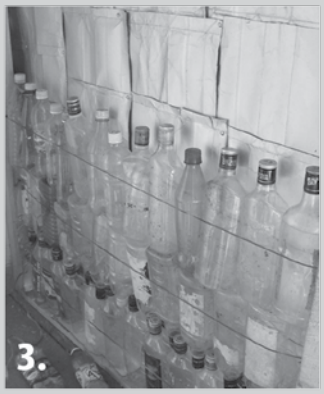
1. Collect waste tetrapacks. Open and flatten them and then wash them well. Clean and dry completely.

2. Pin the flattened tetrapacks to the inside of the external walls of the house.

3. With a string, line up sealed, empty, cleaned and dried waste bottles along the wall over the tetrapacks. Place the bottles in opposite direction in each consecutive row.

4. In case plastic bottles are unavailable, the wall can also be lined up with waste cardboard.

5. Pin another layer of tetrapacks on a plywood and nail it to the wooden framework to cover and complete the wall



Initiated by

WWF

Space Heating Improvement East Sikkim

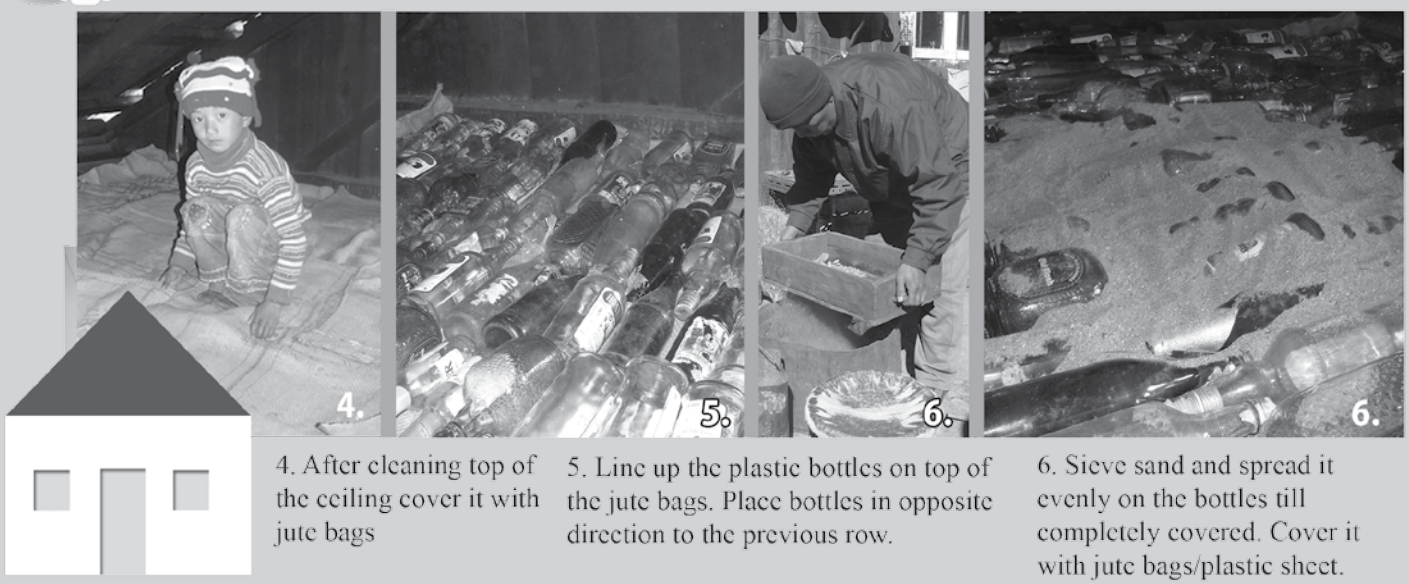
Designed by

archi exploring design

1. Collect waste plastic bottles and thoroughly wash and dry them.

2. Seal the bottles with bottle caps or polythene bags.

3. Seal the metal roof. Also seal timber ceiling by closing any air gaps, using plywood strips.



4. After cleaning top of the ceiling cover it with jute bags

5. Line up the plastic bottles on top of the jute bags. Place bottles in opposite direction to the previous row.

6. Sieve sand and spread it evenly on the bottles till completely covered. Cover it with jute bags/plastic sheet.

ROOF AND CEILING
DOOR AND WINDOWS

1. Close all air gaps in doors & windows, where feasible, using waste tyre tubes cut in appropriate shape. 2. Hang thick curtains on the inside of doors and windows. In case thick cloth is not available, use double curtains to trap air.

3. Make double shutters for windows by adding an external shutter to existing windows. 4. On existing doors, half shutter can be added. At the foot of the external shutter of the door a threshold *(chowkhat)* can be added.

Members of the community who participated at the workshop

house owners, local carpenters and masons for capacity building. The step-by-step space heating improvement posters were distributed by WWF-Sikkim in other villages on their request for a demonstration workshop. These posters acted as an education tool to create awareness and communicate the idea of space heating improvement.

ACHIEVEMENTS

The process has been received well in the village and also in the other villages along the Jelep La. Local people have starting improving their houses using these simple techniques. WWF-India is monitoring the improvement of thermal comfort and reduction in fuel wood consumption in the selected houses. With more houses adopting the space heating improvement methods, it is anticipated that in the coming years, the consumption of fuel wood would come down and eventually help in conserving the Red Panda habitat and the serene mountains. In addition to the improvement to the existing houses, the Forest Department requested arch i platform to demonstrate that in higher altitudes it is far better to work with responsible and sustainable starting points while creating a small new building.

Bibliographic references

- WWF-India 2011, *Annual Report 2011*,WWF-India, Delhi.
- Sudhakar, K & Gusain, PS 1991, *Rural Energy Planning in Sikkim*, Vikas Publishing House, New Delhi.

Notes

[1] World Wide Fund for Nature-India, started as wildlife conservation. It has grown into a network, involved in diverse activities in the field of nature protection ranging from education and capacity building, field projects in biodiversity, enviro-legal action, policy studies and advocacy.

[2] arch i platform was established as a non-profit Foundation in 2009 by Mr. Anne Feenstra, a Dutch architect, with four young architects from the School of Planning and Architecture, where he is also a visiting faculty, to look at architecture and design from a different perspective. Over the years arch i and NEWAFiR, Anne Feenstra's practice in Afghanistan, have designed and executed several projects in different parts of India, Afghanistan and The Netherlands.

[3] Jelep La, a high mountain pass between India and Tibet in East Sikkim District of Sikkim, is the only life line connecting the 32 villages of Sikkim East. It is often referred to as the Old Silk Route to Lhasa.

Bharatpur: Rediscovering the historic landscape

Urvashi Srivastava

There is much more to the city of Bharatpur and its environs than is popularly known. The city, located at the eastern edge of Rajasthan has inherited a rich past. Political, religious, social and geographical forces endowed the city with unique cultural wealth. The city is an amalgam of Braj folk tradition and royal grandeur of the Jat Maharajas and was a node of power and culture in northern India in the post-Mughal era. Several generations of Jat rulers shaped its historic built environment. The city is a repository of history. High quality architectural buildings and traditional spaces add richness to an otherwise monotonous contemporary urban environment. Some of the intricately carved stone buildings in the city are splendid specimens of Jat architecture and are reminders of the high levels of artistic perfection achieved in the buildings of the

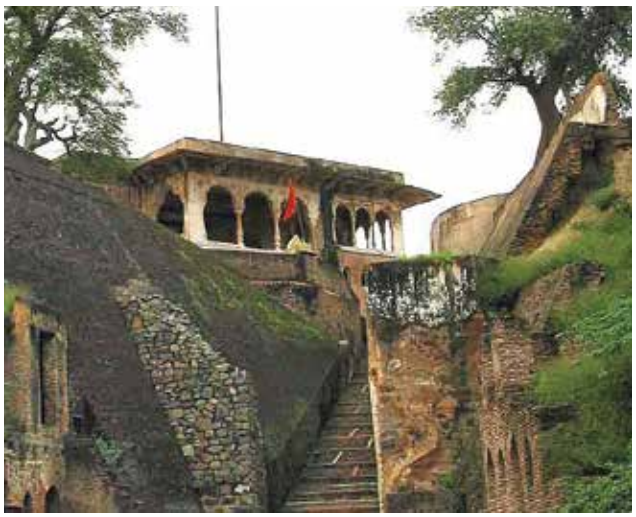
Gateways guarding the entrance to the walled city

An entrance gate to Lohagarh Fort

Mahal Khas inside Lohagarh

noted Mughal Emperor Shahjahan. However, the built heritage of the city has so far gone unrecognised, overshadowed by the presence of Keoladeo Ghana National Park and the palace-garden complex of Deeg in the vicinity.

Lupin Human Welfare Research Foundation (LHWRF) with the support of Centre for Advancement of Traditional Building Technology and Skills (CATTS) set upon itself the task of creating awareness about the rich architectural heritage of Bharatpur and mobilising popular opinion for heritage centred development in the city. A detailed survey of the city was undertaken to map its built heritage. The mapping exercise of the entire city revealed various layers of the city's historic past as well as architectural wealth and brought to light important evidences of the life and times gone by. A wide variety of built heritage components such as palaces, mansions, bazaars, bastions, *chhatri*s (elevated, dome-shaped pavilions), *dharamshala*s (hospice or a



Royal pavilions on Jawahar Burj inside Lohagarh

Town Hall located inside Lohagarh

A palace structure inside Lohagarh, the renowned fort at Bharatpur, built by the Jat rulers

Entrance gateway to a traditional mohalla or neighbourhood

Jama Masjid, a symbol of catholicity of Jat Rulers

lodging for travellers), fort, fortification walls, *ghat*s (a series of steps leading down to a body of water, particularly a holy river), *haveli*s (mansions), *kachahari* (law courts), mosques, shops, tanks, temples and wells were identified. In addition, a number of ruins in the form of remnants of old structures dating from different time periods were documented. The field exercise helped in mapping the historic character of the city, the nature of the built heritage assets, their spread, and significance, status of use, condition, ownership and protection. The heritage mapping exercise sprung a surprise to not only a lay visitor to the city but also some of the residents of the city in the sheer expanse and scope of its built heritage.

The outcomes of the detailed survey of the city have been compiled in the form of a book 'Bharatpur: Built Heritage Resource Mapping and an exhibition titled Bharatpur: Unsung Ingenuity, Valour and Splendour'. Both the exhibition and the book celebrate the hitherto unknown dimension of the history and culture of Bharatpur and showcase the invaluable built heritage assets defining the rich character of the city.

Recently published compilation of built heritage of Bharatpur

The book besides giving an account of the historic context of Bharatpur has an inventory of 353 heritage properties including buildings, structures and open spaces listed in the city along with detail maps of the city, giving precise location of each heritage property. With this mapping in place, Bharatpur may be compared to any of the other celebrated heritage cities in Rajasthan. The significance of some of the heritage assets is comparable to the best of Mughal architecture which together with the experiments under the Jat rulers often gave art forms and assets unique to Bharatpur.

The documentation also gives an exhaustive analysis of the built heritage resources in the city spread over an area of approximately 22 square kilometres. It is expected that this initiative would be of great help to the local authorities in planning

The grand Lakshman Mandir in the city

One of the several chhatris or memorials that dot the city

future interventions for conservation and management of heritage assets. The findings of the heritage mapping exercise would be beneficial for policy makers in formulating guidelines and regulations for protection, preservation, future utilisation and development of heritage resources. Formulation of effective heritage legislation could help accord legal protection to the unprotected heritage properties. Valorisation of these heritage resources would help in retaining and restoring the collective cultural memory of the inhabitants as well as promote community identity and pride. Interpretation and presentation of the precious heritage resources would assist in revitalising vital links with the past and in the future these heritage resources can be harnessed to promote heritage based tourism in the city.

This initiative is of critical importance in the light of the fact that over the years the historic built environment of Bharatpur has undergone rapid transformation and the trend still continues. First of its kind, it is a small step towards the achievement of the larger objective of conservation of built heritage of Bharatpur and marks the beginning of a new era of conservation and heritage based development in the city. The book and the exhibition documenting the rich heritage of Bharatpur intend to initiate a dialogue, participation and collaborative action aimed at revitalising and

'Bharatpur: Unsung Ingenuity, Valour and Splendour', an exhibition showcasing the documentation of heritage in Bharatpur

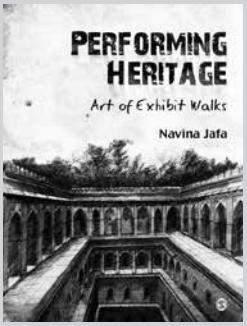
regenerating the historic core of the city. This is a humble attempt at understanding the city in order to give Bharatpur its rightful place not only on the cultural map of Rajasthan but also at the national level.

Urvashi Srivatava is the Director of Centre for Advancement of Traditional Building Technology and Skills, New Delhi. As an architect and heritage conservation expert, she has more than a decade of experience of working in Indian historic cities. Urvashi has worked extensively in several historic cities, towns and villages of Rajasthan and has special interest in interdisciplinary approaches towards the study of the historic built environment.

Book Review

Performing Heritage: Art of Exhibit Walks
by Naveena Jafa

MOE CHIBA



Performing Heritage
-Art of Exhibit Walks
Naveena Jafa
Publisher: SAGE Publications Pvt. Ltd
No. of Pages: 256 pages
ISBN: 9788132106999

Known to international and academic circles of Delhi as an eloquent advocate and practitioner of heritage education, Navina Jafa is one of the rare professionals who presents heritage to the public in an engaging manner through her guided heritage walks. Her book,'Performing Heritage- Art of Exhibit Walks', is a reflection on the heritage walk as a field that combines academic work with a highly accomplished form of performing art, narrated through examples of Navina's professional experience. With extensive guidance on the techniques of designing and executing heritage walks, the book is also a perfect guide for those who aspire to formulate their own versions of the heritage walk.

Unlike museums or cultural festivals that recreate cultural scenery in an artificially fabricated context, heritage walks intend to bring the audience directly into the context, or what the author terms as 'culturalscape', where tradition and culture are actively practiced. In doing so, heritage walks can efficiently unfold to the audience, living heritage in its multiple facets, linking the tangible and intangible through the story of local communities.

A specialised version of the guided tour, heritage walks are becoming more and more popular as an efficient tool for raising public awareness about heritage as much as tourism activity. And yet, despite its growing popularity, conducting heritage walks is one activity that is yet to be taken seriously as a professional occupation. The general misconception is that it is something that can be easily improvised and implemented. Thus, one can witness the profusion of sub-par pseudo 'heritage walks' in the tourism market, which, in most cases are a short version of conventional site visit undertaken with a tour guide.

Navina Jafa argues that a heritage walk could be a form of highly accomplished creative enterprise, the development and execution of which is the work of a multi-skilled professional. According to her, the very technique of walking tours requires the guide to be a researcher and academician as much as a good communicator, performer and storyteller. He or she should be also a good theatre producer and stage manager, packaging a set of academic knowledge in the form of an attractive product that would provide to the audience a 'perfect special moment' during the time of walk.

Academician, researcher and accomplished dancer at the same time, Navina Jafa is perhaps one of the few gifted persons with these multiple skills. There is an exhaustive amount of research that is needed to curate a single heritage walk. For instance, in preparing a walk on the 'Courtesan culture of Old Delhi', her research has led to detailed study on various topics ranging from their social organisation, methods of learning classical performing arts, association with poetry and poets, alliance with power elites of the city and their neighborhoods. As secondary material on the courtesan culture was extremely scarce, Navina resolved to undertake an intensive field survey in every corner of Old Delhi including its red light district. Navina deftly narrates history and legends associated with heritage sites from multiple perspectives to capture the attention of the audience. Using the backdrop of Old Delhi, the heritage walks Navina has designed include: 'A Walk of Five Senses in Old Delhi' highlighting the ritualistic observations in the month of Ramadan, 'Lifestyle of Old Delhi' explaining the link between the architectural space and peoples' lifestyle. On another occasion, Navina elaborates on the themes of 'Monsoon Retreats of Mughals and Early British', 'Madarsas and Lambaras- Culture of Shia Muslims in Delhi; or 'Legal system of Mughals'. The plethora of Heritage Walks Navina unfolds is endless and mesmerising. Her presentation of history is both exciting and authentic.

Moe Chiba is a Programme Specialist and Head of the Culture Unit of UNESCO New Delhi Office for Bhutan, India, Maldives and Sri Lanka. She is the coordinator of Intangible Cultural Heritage, Cultural Industries and Heritage Tourism programmes. Moe has been exploring the possibility of introducing culture based development for rural India.

Events and Conferences

■ **INTERNATIONAL CONFERENCE 2013 ON SHARING OUR NATURAL AND CULTURAL HERITAGE: INTERPRETATION CAN MAKE US CITIZENS OF THE WORLD**
Dates: June 15-18, 2013
Location: Sigtuna, Sweden
The conference aims to explore the ways in which interpretation of cultural and natural heritage can develop a shared sense of belonging, ownership, responsibility and mutual understanding. It will debate on topics such as how skilled interpretation of a place or site; natural or cultural can reinforce civic values and encourage engagement by local people as well as by visitors from further away, how interpretation can help people to broaden awareness of their own and of other communities and how interpreters can promote more inclusive approaches and foster understanding of different (and even 'conflicting') heritage and cultures.
Organised by: Interpret Europe-European Association for Heritage Interpretation.
Website: <http://www.interpret-europe.net/top/whats-on/events/international-conference-2013.html>

■ **THE SUBSTANCE OF SACRED PLACE: AN INTERDISCIPLINARY WORKSHOP ON LOCATIVE MATERIALITY**
Date: June 20-21, 2013
Location: Kunsthistorisches Institut, Max-Planck-Institute, Florence, Italy
The conference aims to explore the material and tactile dimensions of locative sacrality across religious traditions apart from the earlier focus on pilgrimage and sacred centers, either as theoretical constructions or as concrete places such as Jerusalem, Mecca or Benares. It also focusses on the sense of place communicable through physical means and relationship between the tangible world and its representation
Organised by: Columbia University and Kunsthistorisches Institut in Florenz Max-Planck-Institute
Contact: Laura Veneskey (lv2308@columbia.edu) or Annette Hoffmann (hoffmann@khi.fi.it)
Website: <http://arthist.net/archive/4111>

■ **23RD GENERAL CONFERENCE OF THE INTERNATIONAL COUNCIL OF MUSEUMS**
Date: August 10-17, 2013
Location: Barra da Tijuca, Rio de Janeiro, Brazil
The conference aims for cooperation between museums and professional exchange, distribution of knowledge and increase of public participation in museums, professional training for museums on several levels, practice and promotion of professional ethics in museums, updating of professional standards in museums and preservation of cultural heritage and the fight against illicit traffic in cultural goods.
Organised by: International Council of Museums (ICOM) and ICOM Brazil
Contact: contato@icomrio2013.org.br
Website: <http://www.icomrio2013.org.br/>

■ **8TH INTERNATIONAL TRAINING PROGRAMME ON DISASTER RISK MANAGEMENT OF CULTURAL HERITAGE**
Date: September 7-21, 2013
Place: Kyoto, Kobe, Tohoku (Japan)
Detail: The year's training programme focusses on policies and planning measures for mitigating risks to cultural heritage from multiple hazards such as earthquakes, floods, landslides and fires, especially in rapidly urbanising context of developing countries. Special techniques for mitigating risks from earthquakes and fires will also be highlighted besides policies, planning and design interventions for long term restoration and rehabilitation of cultural heritage following disaster through a special workshop in the area affected by the Great East Japan Disaster in 2011.
Organised by: Institute of Disaster Mitigation for Urban Cultural Heritage, Ritsumeikan University, UNESCO World Heritage Centre, ICCROM and ICOMOS.
Website: <http://www.rits-dmuch.jp/en/project/itc_background.html?PHPSESSID=p1o6qp20k3qp2hgamu4oq1kmk7>

■ **INTERNATIONAL CONFERENCE ON FILLING THE GAPS: WORLD HERITAGE AND THE 20TH CENTURY**
Date: October 3-4, 2013
Location: Chandigarh, India
The objective of this two day conference is to promote an understanding of the significance twentieth-century heritage, not only of its physical and visual attributes, but also its historical, cultural and social dimensions. The conference also aims to examine the scope and the challenges of managing this recent heritage within the framework of the World Heritage regime. The use of the ICOMOS ISC20C Madrid Document, 'Approaches for the Conservation of Twentieth Century Architectural Heritage as Practical Guidance for Managing Change and Intervention' would be a parallel focus.
Organised by: ICOMOS-India, ICOMOS International Scientific Committee on 20th Century Heritage (ISC20C), Chitkara School of Planning and Architecture (CSPA) and the World Heritage Institute for Training and Research in Asia Pacific (WHITRAP).
Contact: Kiran Joshi, Rohit Jigyasu (worldheritage20c.sub@gmail.com)
Website: <http://www.icomos-isc20c.org/id15.html>

■ **INTERNATIONAL CONFERENCE ON PATTERNS OF EARLY ASIAN URBANISM**
Date: November 11–13, 2013
Location: National Museum of Antiquities, Rapenburg 28, Leiden, Netherlands
The conference aims to examine Asian pre-modern cities through three major thematic strands, covering a wide geographic expanse throughout Asia (from Pakistan to Japan) and a time depth of cultural development across five millennia (from the Bronze Age through 14th century Angkor to 18th century East Asia). The conference will provide a multi-disciplinary forum and we invite participation from the fields of archaeology, economy, geography, history, historical anthropology, philology, sociology, as well as modern urban planning and urban morphology.
Organised by: The International Institute for Asian Studies, Leiden University's Faculty of Archaeology and the Archaeology Unit of the Institute of Southeast Asian Studies, Singapore.
Contact: Martina van den Haak (m.c.van.den.haak@iias.nl)
Website: <http://bit.ly/12rzwZp>

■ **INTERNATIONAL CONFERENCE BUILT HERITAGE 2013 'MONITORING CONSERVATION MANAGEMENT'**
Date: November 18-20, 2013
Location: Milan, Italy
Detail: This conference brings together university researchers, professionals and policy makers to illustrate and discuss the most pressing issues concerning the conservation of archaeological, architectural and urban landscapes. In particular, the main goal of the conference is to discuss multi-disciplinary researches on complex cultural heritage sites, ranging from archaeological ruins, historical architecture and centres.
Organised by: Politecnico di Milano, Italy
Contact: Dr. Maria Licia Zuzzaro, bh2013@polimi.it, +3902.2399.2232
Website: <http://www.bh2013.polimi.it>


Traditional Livelihoods and Community Centred Urban Development
RAKHI MEHRA, MUKTA NAIK AND GREG RANDOLPH
ABSTRACT
While policy discussions around urban housing frequently engage with questions of land ownership, sanitation, space and infrastructure, the intimate relationship between a community's built environment and the livelihoods that sustain it is rarely considered. A community driven design project undertaken by micro Home Solutions and Mahila Housing Self Employed Women's Association Trust in the Sundernagari Basti of East Delhi revealed that livelihoods must be placed at the centre
Rakhi Mehra is cofounder of micro Home Solutions, an interdisciplinary social enterprise.
Context
Built, Living and Natural
Vol X Issue 1 Spring/Summer 2013
Journal of the Development and Research Organisation for Nature, Arts and Heritage
visit us at www.dronah.org
ready to build the capacity of other women in Ladakh. The expertise and confidence of these women has been built over the years with training provided by SLC, the Department of Tourism and Department of Wildlife. Each homestay also has a feedback form that guests are urged to fill for suggestions that would help improve these homestays.
INCENTIVES FOR CONSERVATION: THEMBANG, ARUNACHAL PRADESH
If located close to an area of conservation value, the homestay initiatives also contribute to the protection of
the site. Take the example of Thembang in Arunachal Pradesh. Thembang is a village in the West Kameng district of Arunachal Pradesh. At an altitude of 2,300 metres, this village offers a breathtaking view of the Dirang River and is surrounded by magnificent mountains. Still untouched by urbanisation, Thembang provides an ideal opportunity of experiencing the traditional lifestyle of the indigenous Monpa community. For naturalists the area offers a range of diversity that includes rare orchids, the Red Panda, Musk Deer, Himalayan Black Bear and birds such as the Blood Pheasant, the Monal Pheasant and the Tragopan. Recognising the biodiversity significance of this area, WWF India has worked with the community here to declare part of the community owned forests as a Community Conserved Area (CCA) where strict rules of conservation are adhered to. WWF India also supports nine homestays here. The homestays have given the communities an alternate source of livelihood, and also an incentive to conserve the biodiversity within the CCA. This biodiversity will continue to survive only if the community protects it.
The homestay at Rumbak, Ladakh

Dronah is an interdisciplinary organisation constituted by highly motivated professionals from various fields who share a vision for a better quality of life – one that is sustainable, environmentally sensitive and draws on the contemporary without foregoing the strengths of the traditional. It is our aim to actively promote sustainable development through conservation, utilisation of traditional practices and modern technologies, knowledge sharing and mutual interaction. The organisation is focussed on conservation and development of the built heritage, environment; and art and crafts with the involvement of local community, in addition to being engaged in documentation and educational activities.

₹ 350 / USD 25
Cover image credit: Abhijit Kothale, Aishwarya Tipnis, arch i platform and Inderjit Singh Marwah