

ARCHITECTURE + DESIGN

A JOURNAL FOR THE INDIAN ARCHITECT VOL. IV NO. 1 NOV - DEC 1987 P. 35

DESIGN

ANANT D RAJE
Building on Tradition

Calcutta's New Market
Mandawa Tourist Village

Building Types: SOS Villages

Tourist Village at Mandawa

Revathi Kamath

During the session on 'Alternative Building Materials' at the seminar Architecture + Design held on 'The Architect and the Built Environment', Revathi Kamath presented one of the projects designed by her and Vasant Kamath which they had planned to build with sun-dried bricks, stones and thatch. Initially convinced of the feasibility of using sun-dried bricks for walls, their client backed out at the last moment and insisted on using partially burnt country bricks instead. Although the latter does not compare well with sun-dried bricks in its performance, the client was more comfortable using it. Mud was used in the construction of all the external platforms and other elements, as well as in the plastering of the buildings.

This project is designed to create the atmosphere and incorporate the images, forms and spaces of a village in the Shekhawati region of Rajasthan. The facility caters essentially to the middle and upper class international tourist looking for the 'rural Indian experience', but without its accompanying 'poverty', 'squalor' and 'flies'. The architecture therefore assumes surrealistic qualities.

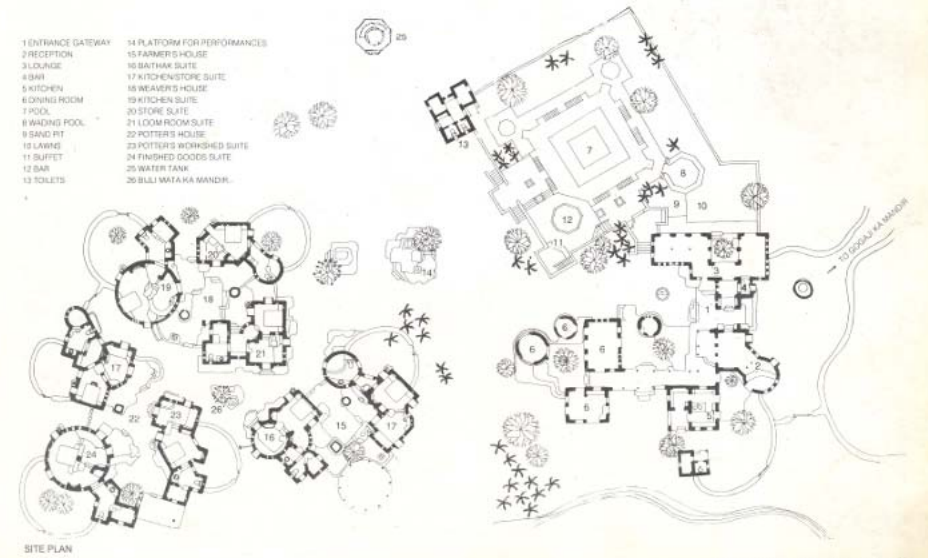
The suites are designed to represent the homes of the village farmer, potter and weaver, incorporating the spaces, the objects of daily use and the tools of craft in a manner that the tourist can use, experience and comprehend.

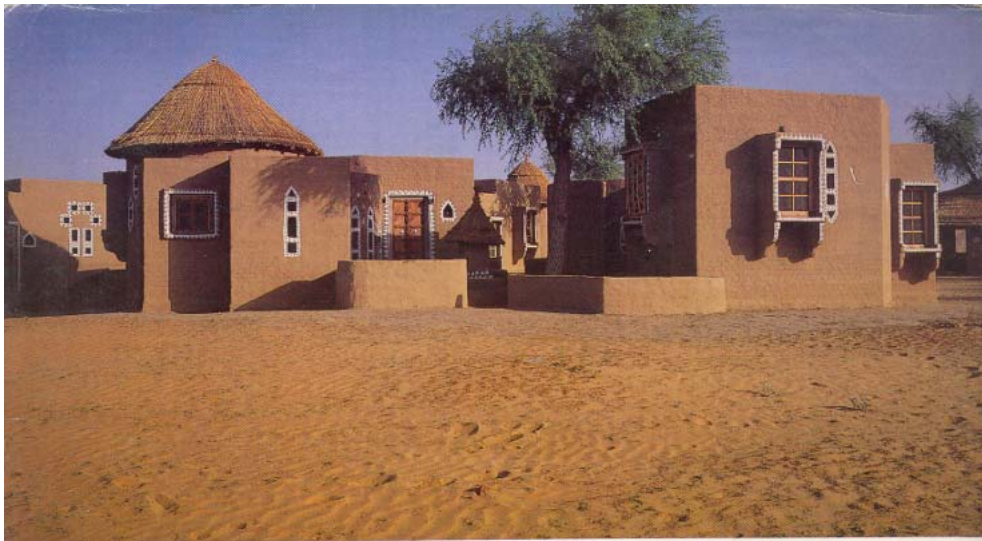
The architectural forms and elements have emerged from the juxtaposition of the requirements of two distinct and divergent lifestyles: meeting the needs and standards of comfort of the Western tourist and, at the same time, creating an indigenous and contextual setting for folk

artisans and performers to display and market their skills and earn a livelihood in an environment that is akin to their own habitat. The building of the project involved the local masons, carpenters, lathe workers, stone craftsmen and, most significant of all, the skills of the rural women in both the execution and the finishing of the buildings.

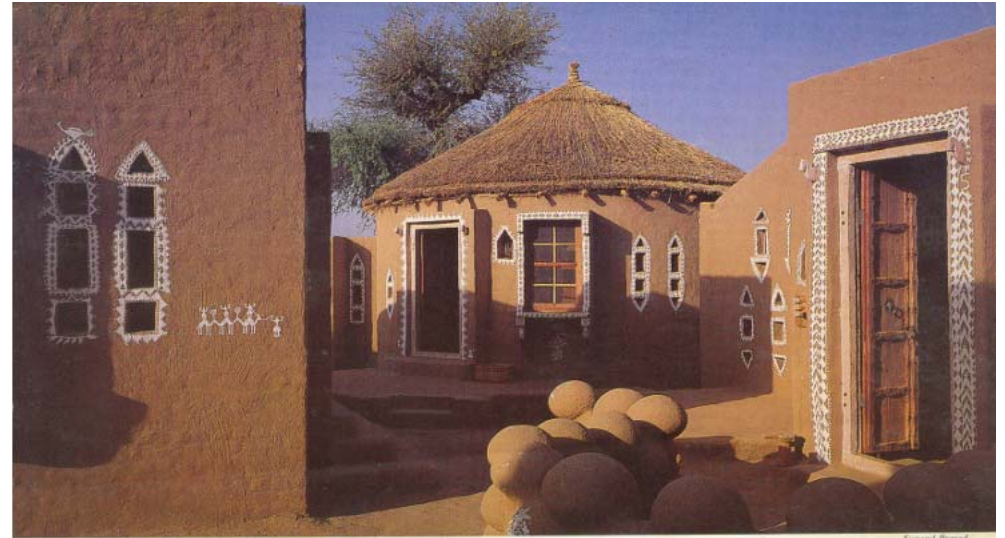
Since there was no contractor, it was possible for us to work together with the crafts persons and be directly involved with the evolution of details at the site. The building forms, materials, the indigenous cooling systems, including the *khas tatti* window units, and all other elements were consciously kept low-tech, low-cost and appropriate.

The most important point we have attempted to make through this project is that the creation of a sophisticated environment is not directly proportional to the money spent on it.





Sunand Prasad



Sunand Prasad

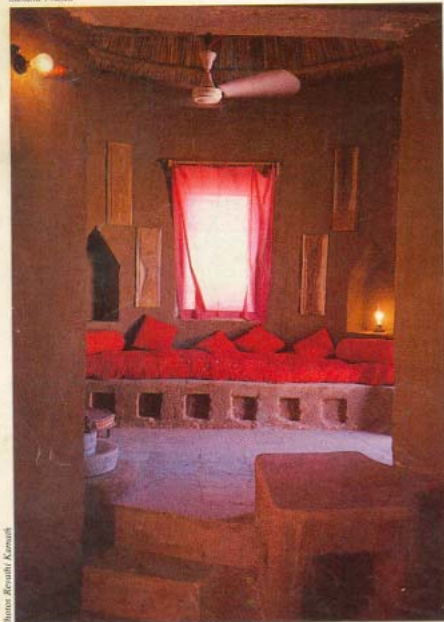
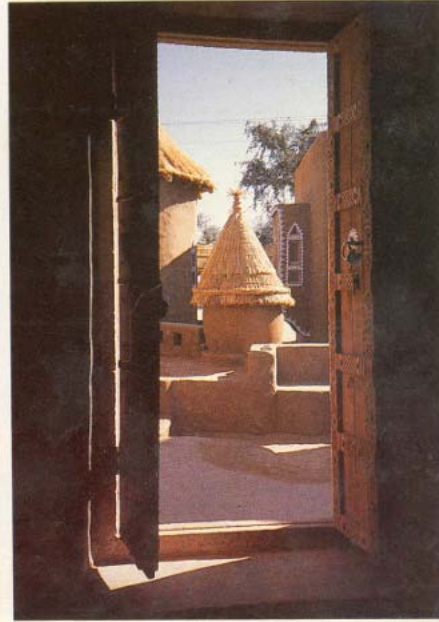


Photo: Revathi Karamil



When we talk of building in mud, I don't know why we term it as an 'alternative' building material because traditionally most houses, not only in India but all over the world, have been and are being built with mud. I think it is the conventional architect today who is doing the 'alternative' building... the natural way is to build with mud, stone, timber, thatch and so-called bio-materials. I really don't see why we have to justify the use of these natural materials technologically.

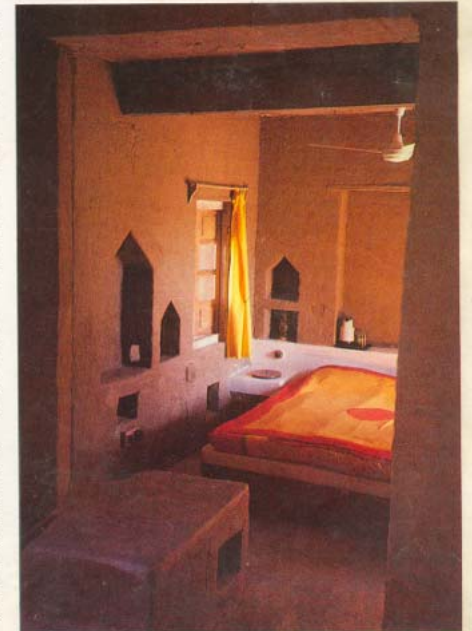
I work with these materials because they are beautiful and powerful. That to me is justification enough. It is most wonderful to know that when a building has outlived its life, it can return to the earth. When you work with mud and hand plaster the walls, it is like forming an external skin; it is as if every bit of the building embodies the human spirit, the cyclic care of the building being a part of the act of living.

I do not 'see' mud architecture as a symbol of poverty, nor would I like to use mud to express images of high technology, as some architects are attempting to do. I see potential in its use as a material to continue the tradition of architectural skills that exist and thereby ensure a continuity of traditional aesthetic sensibilities and knowledge.

Mandawa is in Rajasthan, about 250 km from Delhi. Some time ago, the Rajah of Mandawa came to us with a proposal to build a tourist complex. He brought along a Canadian catalogue and showed us pictures of a holiday resort that he wanted us to replicate. We accepted the job, but rejected his proposal, and set about convincing him of the importance of drawing on the indigenous architecture of the area for the project. We also convinced him that building in mud would not only be cheap, but also the most appropriate way, both climatically and aesthetically.

Fortunately for us, we were already aware of the architectural traditions of the rural areas of Shekhawati, having worked with some migrants from the areas who are now living in Delhi. The project involved decoding the psychological images and memories of a home that they carried and translating these images into a series of drawings and sketches. One of the most illustrative drawings was done together with a woman who related the entire design of her village to the length of her arm, hands and fingers — her hands being the main scale of reference.

Being cognizant of the principles of spatial organization, and the images of rural Shekhawati, and conversant with an architectural vocabulary we were in a position to both design and build the project within the short time span of three months.



The site is on a large sand dune which rises upwards into a hillock on which is a shrine dedicated to Gugaji, the saint of the serpents. There was once an old settlement on the site, and a river flowing through it... maybe the Saraswati? I would love to believe that. It was almost like rebuilding the old settlement. The fact that the site was associated with ancient times was most exciting and was the main inspiration and guiding force in the evolution of the design — the plan and the spatial organization as well as the materials and the methods of construction.

The sun-dried bricks were to come from the bed of a dried out tank, adjacent to the hillock, the thatch was from the grass growing on the site itself, the stone for the foundations, sills, lintels, brackets and roofing slabs, and other built-in furniture and accessories were to come from Raghunathgarh, which was about 25 km away. The wooden lathe workers from Lakshmanagarh were to make us pegs and other small fixtures, the local village carpenters (*khatis*) were to put together and carve them, the local masons were to build the structures, and the women from the nearby villages were to hand plaster and finish the walls with mouldings, relief work, embedded mirror work, and also mould in mud elements, such as the *choolas*, platforms, grain bins (*obri*) and stores (*khota*), etc., and finally draw on the walls.

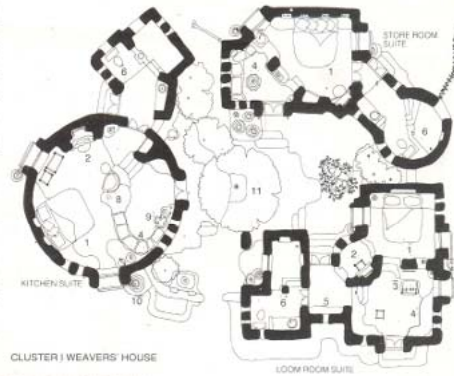
The suites are designed to be accommodated in a cluster of buildings which constitute one house and are grouped around a courtyard. The clusters then come together to form the main village street. The spatial sequence, plans and architectural elements of the clusters are based on the house forms of the weaver, potter and farmer. The plans were not mere transposition. The traditional morphology was extended to accommodate a new complexity, because a hotel suite cannot be just a loom room, dressing room and a toilet — for a Western tourist paying 'five star' rates.

We did not use a contractor for the project. The client was to organize the materials and we were to instruct the masons and co-ordinate the construction. As the buildings progressed we discovered that our 'local' masons were not really 'local' but were, in fact, Dubai returned, and had lost most of their traditional skills. We really had to, in a sense, re-train them.

The major disaster was the fact that the client chickened out of organizing the moulding of the sun-dried bricks for construction. You see, the Rajah's subjects had succeeded in their efforts to convince him of the 'folly' of building in mud and of its implicit social stigma... and so the sun-dried bricks never arrived on the site. They were replaced by very low grade, partially burnt bricks which, in spite of melting when immersed in water, were red in colour and gave the illusion of being *pucca*. And the net result was a satisfactory one. The rajah had his *pucca* buildings and we our *katcha* ones! ◆



WEAVER'S HOUSE



CLUSTER I WEAVER'S HOUSE

- 1 RED
- 2 DRESSING
- 3 LOOM
- 4 SEATING PLATFORM
- 5 LUGGAGE
- 6 TOILET
- 7 STORAGE BINS
- 8 CHAIRING PLATFORMS
- 9 CHHOLA (STOVE)
- 10 WATER POT FOR WASTE WATER
- 11 COURT



Revathi and Vasanti Karnath practise in Delhi and teach at the SPA. They have a number of low-cost projects to their credit. They are especially interested in the conservation and continuation of indigenous building traditions.