

The major part of the Indian desert falls within the state of Rajasthan, where it is known as the Thar Desert. Parts of Kutch in Gujarat state also have desert-like areas though their characteristics differ due to the presence of salinity in the Kutch region. The area under this study starts from Ganganagar, the northern-most district of Rajasthan and covers areas around Bikaner, Jaisalemer, Barmer and Kutch. Most of the desert area lies between 22° to 28° north latitude and 69° to 76° east longitude. Parts of it extend into Pakistan. These are large areas, but they sustain a very small population. For instance, Jaisalemer is the largest district in the state and the second largest in the country, yet it is the least populated district in the state.



A village view

The arid climates of the area and the scorching heat, the uncomfortable hot winds and erratic rainfalls have combined to make the area very sparsely populated. Apart from occasional rock outcrops, and plain of dry clay, the desert is characterized by sand dunes with patches of prickly grass and such brushy plants as can grow in this hostile environment.

“And yet even this desert is not quite barren for there are occasional valleys like those of Jaisalmer, Bikaner, Kolayat, Phalodia, etc. These valleys attract a certain amount of subsoil water collecting in big tanks, which make the existence of trade towns and old fortresses possible.



Cattle rearing in village

Depression between the sand dunes temporarily collects the rain of occasional thunderstorms, thus enabling some acacias and shrubs to grow. Wells, hundreds of meters deep, reach water strata beneath the rock plateau to supply sufficient water for needs of camel breeders.”



Village housing and life

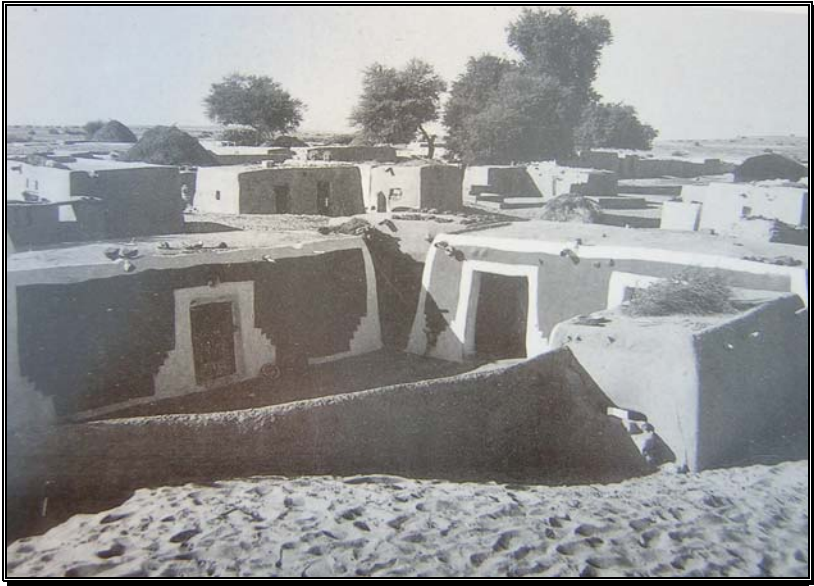
Some evidence has been found to suggest that the major part of this area was, at one time, a sea. This can be deduced from the dried up profiles of rivers, banks and ghats. Some of this can also be seen at Ludharva near Jaisalmer. However, in most parts of the desert there are no rivers or other forms of flowing water. Small wells and natural depression collecting rainwater are the only sources of water for the people.

“In ancient times, the desert cradled what is known as the Harappa civilization. The genesis of the desert is ascribed to the drying up of the rivers that once flowed through this tract. It has been created by the north-easterly winds, which blow from the direction of the Arabian sea and the Rann of Kutch. These winds sweep across the desert landscape for nearly eight months in the year, carrying with them a considerable bulk of sand particles. With no moisture or vegetation to hold the soil, even moderate winds gain momentum as they travel, ultimately turning into powerful sandblasts.

They play upon smooth rocks, dislodge pebbles and etch cliff-faces into varying shapes. Whenever they encounter an obstacle, they deposit their full sand-content to build a sand dune. Sand dunes form a peculiar feature of the desert landscape, frequently rising to height of 90 meters.”



The villages of Banni and Pachcham are actually small hamlets of cattle herders-the Maldharis. The size of each settlement depends on the local availability of water and grassland. The cattle herders move within Banni with their cattle along allocated areas where grass and water are available. Often a hamlet comprises an extended family, since the Muslim Maldharis are endogamous and have a tradition of marriage between first cousins. In a larger village, there may be two or their closely related extended families, each living as a group in a separate cluster. A cluster of Meghvals, lower-caste Hindus, can also be found in such villages. These people provide the necessary service and maintain the craft traditions of weaving, leatherwork, carpentry and pottery.



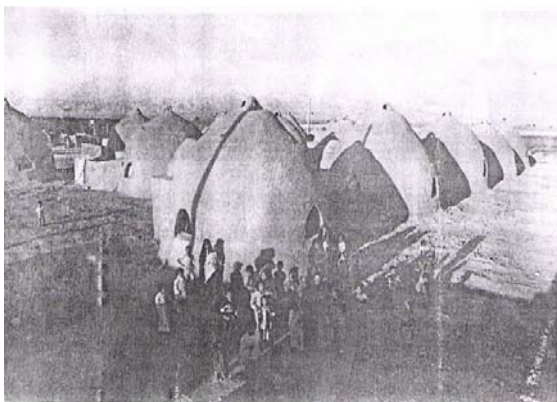


APPLICATIONS

Chapter – 7

It's many uses

We are now so used to believing in the supremacy of modern orthodox architecture of the last 50 years that we overlook how traditional communities resolved, without any modern materials, all the architectural problems encountered previously. Mud architecture usually conjures up condescending images of ‘primitive huts’ and ‘distant squalor’, but if we look beyond such bigotry the reality looks very different. Firstly, dwellings built in mud throughout the world demonstrate a unique richness of design, technical ingenuity and subtle creativity. Secondly, this material has been used not only in houses, but in a great range of public and private buildings that reflect the grandeur and sophistication of urban and rural communities –mosques, churches, temples, granaries, warehouses, ramparts, citadels, arena monumental gates and palaces- all have been built in this most simple of materials.



Mud architecture the world over

Traditional architecture in unbaked mud is found not only in the distant cultures of India. It is universal. Today we still find mud constructions in almost every country of the world: a kaleidoscopic variety of forms that has evolved over the centuries to suit innumerable cultures and climates from the arid semi-deserts of the south to the cold, rainy countries of the north. There is a continuous tradition of it from Scandinavia to South Africa, that passes through England, Germany, France, Spain and Italy, the maghreb, the Sahara and west, east and central Africa. Similar forms of architecture thrive in north and Latin America, Middle East, Asia and Australia. This simple material has proved astonishingly adaptable, and is still perfectly well suited to the technical and cultural needs of different urban and rural communities.

The Modernity of Tradition

As we approach the end of our flying visit to the mud architecture of about 30 countries, we can see that this form of building is far from being a thing of the past. Not only do a third of our contemporaries still live in mud buildings, but traditional methods show every shine of being the most effective and realistic way we shall discover of resolving current world-wide problems of housing.



We have now shown that the barrier between traditional and modernity in domain is artificial, and that to break it down we must undo the work of those who, half a century ago, sought to erase our past and plunge us into an era of amnesia and cultural intolerance; who imposed on us their stereotyped schemes for ‘progress at any price’ claiming they were suitable anywhere and everywhere, and whom we have shown to be no less than the cultural imperialists of the International style’.

But the solution is not to gaze nostalgically at traditions and to claim they can be adopted just as we find them. Cultural traditions are not frozen in time; they are constantly reviewed, reinterpreted and renewed in order to create a vital link between history and locale. Certain architects of the modern era have tried to forge this connection, in direct response to the needs of their own, and our, time. It is these pioneers whom we shall now consider, in order to complete this summary of traditions and to see how mud construction is being called to a new destiny.



Weaved roof

AESTHETICS

