

CHAPTER VI

RURAL DWELLINGS AND

HOUSE TYPES

- 1. EVOLUTION OF RURAL DWELLINGS**
- 2. MORPHOLOGY OF RURAL DWELLINGS**
- 3. HOUSE TYPES AND THEIR DISTRIBUTION**

The dwellings are the representative of the human imprint upon the physical landscape, showing the people's traditional as well as modern achievements pertaining to a changing scene, thus depicting of the complex structure of man-environmental relationship through various dimensions, as Brunhes has also advocated that the houses are the products of cultural traditions and natural conditions.¹

The term 'rural dwelling' includes not only the residential houses ranging from the humblest huts of the poor to the most elaborate and massive city mansions, but all other human structures such as schools, factories, warehouses, Churches, Mosques, Temples etc.² A house may be defined as the structure or part of the structure, inhabited or vacant, a shop or a shop cum-dwelling or a place of business, workshop, school, etc. with a separate entrance. A house is used by man as a resting place to recoup his lost energy and also to protect himself from the vagaries of weather and wild animals.

Agglomeration of houses marks the origin of settlements and reflects the nature of the region, since their character is related to the environment and the cultural heritage of the people.³ Since the dawn of human civilization, physico-cultural and socioeconomic

-
1. Brunhes, Jean, *Human Geography*, Chicago: Rand McNally (1920), p. 74.
 2. Finch, V.C. and G.T. Trewartha, *Elements of Geography. Physical and Cultural*, New York, (1946), p. 553.
 3. Dickens' S.N. and Pitts, F.R., '*Introduction to Human Geography*', New York, (1963) P. 199.

factors played significant role in determining the character and composition of rural dwellings. It is the best manifestation of the environment, which may be seen in layout, plan, nature of building materials, and morphology. As such, a peasant's house is of great geographical interest since it is a reflection of the direct influence of the environment. Peasant's dwellings are rather simple in their structure and layout. Geographical factors in combination with socioeconomic factors produce an architecture in which style plays little or no role. The peasant, with most meagre resources at his disposal constructs a simple structure, using locally available building materials. Therefore, it is obvious that rural dwellings reflect the cultural heritage, functional needs and positive and negative aspects of non-cultural environment.

The study area is a uniform plain, there exist diversities at micro-level in physico-cultural and socioeconomic conditions. Similarly, variations in religious rituals and caste structure are also found throughout the region. These factors determine the form, layout, architectural design and building material of the rural dwelling in the region.

Rural house types in the District clearly indicate the influence of physical environment as well as cultural, on the form, function and structure of houses. For example, available building material points to the micro regional characteristics of geology, soil and vegetal cover. The size and height of the houses and use of

different materials indicates the economic condition of the people. The climatic elements, particularly, temperature, wind direction, and rainfall, influence the orientation and structure of rural dwellings. Flat mud roofs, a salient feature of the rural houses of the District, distinguish these houses from those in other parts of the Rajasthan. This type of roofs effectively keeps off internal heat, and if well laid, may last upto years under normal conditions. Climate remains the main consideration of the people while building their houses facing the east instead of the west. The former are better ventilated and receives sunrays of early morning, while the latter are subjected to the scorching after-noon sun, as well as westerly dust storms in the summer season. An open courtyard is an inseparable feature of rural houses because it provides ample sunshine and heat to the inhabitants during the winter and a comparatively cool place for sleeping during summer nights. Different mode of activities of the people result in differences in the structure, styles, sizes and plans of the houses of tradesmen, blacksmiths, carpenters and shopkeepers etc. Similarly institutions such as schools banks, hospitals, post offices, panchayat buildings etc. are desinged to meet their specific needs.

1. EVOLUTION OF RURAL DWELLINGS

Historical and archeological evidence clearly reveals that rural dwellings in the study area go back to 1500 BC. This is borne out by the legend and folklore of the area, by the presence of

a large number of mounds, and more convincingly, by the archeological excavations in different parts of the District. The present form of rural dwellings is the outcome of thousands of years of cultural and economic progress in the study area. It is known that settled life began with the Neolithic age. It is generally believed that the earliest form of human dwelling was the cave.¹ Then people started living in man-made dwellings, i.e., thatched huts, along the tributaries of major rivers or near other water bodies, The shape of the huts, in all probability, must have been circular or oval. It is presumed that the prehistoric men, taking their clue from shady trees like the banyan, constructed their first circular huts constituting of reed, twigs, tree leaves etc. in the forest of the region to lead a more sedentary life.² These types of houses are still seen along the rivers of the District. In due course, these huts were clustered together and the whole settlement was protected with fencing of tree trunks and bamboo etc. Some of these huts were arranged in rectangular or square shape. Thereafter, as a result of the development of economy and improvement of skills, an addition of courtyard was made to each of them, which provided protection for the cattle besides, having

-
1. Relgan, L. 'The Origin Vernacular Architecture' in cultural and environment ed. 1 Foster, London, (1963). p. 373.
 2. Tiwari, R.C., "Settlement System in Rural India: A case study of the lower Ganga Yamuna Doab, Allahabad Geographical Society, Allahabad (1980), p. 248.

other functions.¹ Brown bricks and stones were the predominant building materials during the Buddhist period.² Archaeological remains of the Gupta and the Harsha Vardhana period suggest that the arts flourished in the District.³ During the ascendancy of the Moes, Kols and Bhars, a change took place in the pattern of the dwellings of the region. Their houses were generally made of clay and wood with circular and rectangular structures using reeds or thatching grasses to construct conical roofs on wooden poles.⁴ During the Mughal period most of the tombs, mosques and buildings built by the rulers show magnificent blending of Indian and Persian architecture in the District. The Jama Masjid of Bharatpur may be Cited as an example.

Similarly, during the British period, new types of building materials like cement, brick, lime and Iron-bars gained wide popularity, especially in construction of government building. But the rural dwellings were deprived of such material. Only the mansions of the affluent people like Zamindars, Jagirdars and public buildings used this material. In post-independence period, certain changed in the structure and plan of the rural dwellings

-
1. Havel, E.B., 'Ancient and Medieval Architecture of India, London (1915), p. 12.
 2. Atkison, E.T., Statistical, Descriptive and Historical Account of the North Western Province of India, Vol. 2, Mecrut Division, pt. 1, Allahabad (1 875), p. 517.
 3. Ray Chaudhuri, H.C. '*Political History of Ancient India*', (Sixth ed.) pp. 112-113.
 4. Siddiqui, J.M. *Aligarh District. A Historical Survey*, Aligarh, (1981), pp. 22-25.

have taken place due to improvement in the socio-economic conditions of the people. Burnt brick, cement, mortar, iron bars, stone slabs which were earlier used only by affluent people or in public buildings, are now being used even by the people belonging to the middle group in the District. The majority of the rural houses in the region continue to be built with available local material like mud, wood, thatching grass, etc.

2. MORPHOLOGY OF RURAL DWELLINGS

The physico-cultural and socio-economic factors of the region have caused variations in building materials, ground plan architectural styles, size and shape of the dwellings. However, certain features of rural houses such as courtyard, verandah and raised platform have been found to be common in most of the north Indian rural dwellings.¹

1.1 Courtyard

Courtyard is the most distinguish feature of the traditional Indian rural houses. This courtyard locally known as *angan* - a rectangular open space, north south oblong is surrounded usually on four, three or two sides by rooms and the remaining sides by walls (Fig. ...). The main entrance of the house is generally located in the fourth wall, which is built only for the privacy of the *angan* of the house. The courtyards in the houses of upper and middle

1. Misra Ashoka, 'House type in India', *The Illustrated Weekly of India*, November 10, 1968, p. 26.

class people are used for maintaining family privacy, while poor people consider it as the best source of relief from congested accommodation and a place where they can keep their cattle and agricultural implements. It compensates the lack of sun light in the ill ventilated compact rooms of the dwellings and is also used for sleeping purposes of female members as well as for various indoor works i.e., sunbasking during the winters, drying, grinding, threshing, cooking and various social and religious activities.

The courtyard represents rectangular open space of diverse site, size, shape, situation, function and surroundings depending upon the need, available space or only the whim of the occupants. Its situation and layout are also an indication of status of the occupants. The most common occurrence of the courtyard is in the backside, where it is surrounded by an inner verandah, attached to the main or by the wall of these rooms, and an outer wall, rarely having a door fond in modern type of dwellings.

1.2 Verandah

Another notable feature of rural dwelling in the roofed or thatched verandah. Males use the outer verandah, in front of one side of main door, mainly, for sitting, receiving guests, keeping fodder, poultry and goats in poor houses and for sleeping purposes. Especially in rainy season sometimes it is also converted into shop for selling small items of daily need. It is also used as a work place by village craftsmen like carpenters, blacksmiths and

BHARATPUR DISTRICT MORPHOLOGY OF RURAL HOUSES

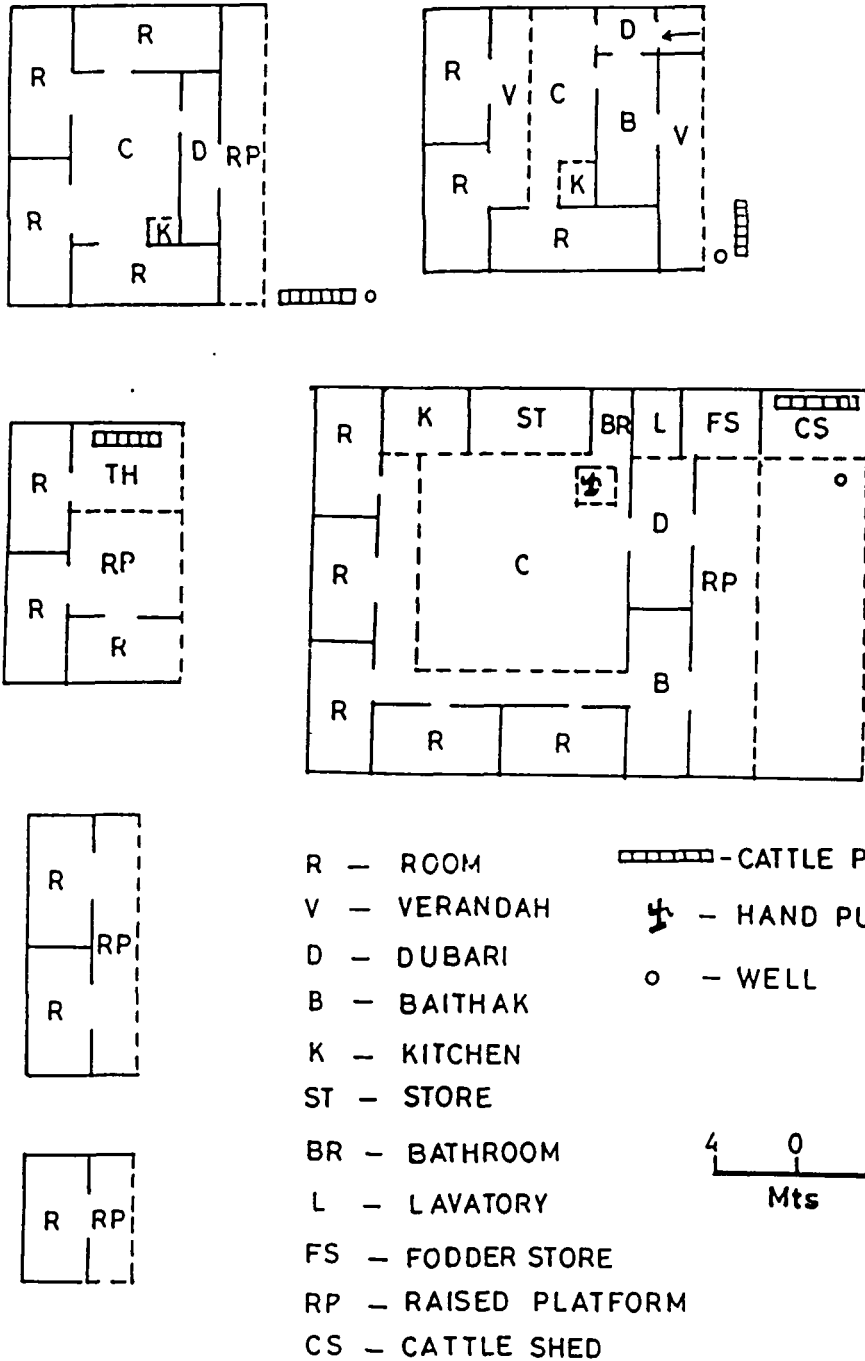


Fig.6.1

weavers. The inner verandah extends over the entire length of the courtyard on one, two or three sides. These verandahs are well supported by walls of mud or burnt or unburnt bricks or wooden pillars. Some verandahs have kitchen, others, a store place for implements and some cattle folds. Their presence provides light to the inner rooms, protect walls from rain showers, keeps floor inside dry and enables fair approach to the rooms during rains and also to cattle for feeding and milking. Mostly, the well to do dwelling's verandah has a Jhoola.¹ It also serves the purpose of sitting, sleeping, chattering and gossiping.

1.3 Raised Platform

A raised platform or chabutra in front of the main entrance is an integral part of the rural houses of the area. It is corrupted in the village parlance to chauntra. The males use it as a meeting place in the evening. Since this platform faces a lane or street the women belonging to the upper and middle class families rarely use it because they are supposed to remain secluded from the male members outside. However, the women of the weaker section of the society do not have such a restriction imposed upon them and therefore both men and women from the poorer classes use it for different purposes. The chabutra is connected to a dubari (entrance room), which runs from the main entrance to the inner

1. Jhoola (Wooden rectangular plank, tied with strings on four corners, hanging by wooden beams, put transversely on walls or poles).

courtyard. It has a simple or stylish wooden door, depending upon the status of the residents.

An interesting associated feature of rural habitation is the place outside the houses, where the droppings or the cowdung are collected, dried, and heaped into a miniature hut shaped structure called bitorah. They are covered with straw or plastered with liquid dung mixed with straw to preserve them from rains. It is the daily duty of the village women to form dung cakes of different shapes and piled them up after drying them. These bitorah are generally found on the outskirts of a settlement. Another notable feature is burji.

Fig. 6.1 reveals clearly the morphological aspects and the nature of rural dwellings in the region. The basic unit of the rural house is the rectangular rooms, which forms, as before the full dwelling place of several poor families. The one room house has a raised platform in front of it, which is partly occupied by a covered verandah, varies in its size from 4 to 8m and 2 to 4m in length and breadth. The two-room dwelling is an extension of one more room to meet the growing need of more accommodation. Such type of dwellings form an I-shape, whereas- the three-room dwelling form L-shape where the third added room is generally used as a baithak (Parlour). The four room dwellings are generally U-shape which provides full benefits of the courtyard and the main entrance. Dwellings with five or more rooms are rectangular or square shape.

These houses generally have angan, a verandah, a kitchen and a storeroom.

3. HOUSE TYPES AND THEIR DISTRIBUTION

Variations occur in dwellings based on the available and use of building materials, which are mostly conditioned by physico-cultural and socioeconomic factors that offer the regional characteristic to the dwellings. House types of the region are classified into two main categories.

Based on building material used

Based on size and shape

3.1 Based on Building Materials

The type of rural dwellings depends largely on the availability of local building materials, the products of soil and vegetation. The rich built houses of burnt bricks, cement, concrete and iron sheets while the poor and middle peasants build mud walls and flat clayey roofs of sun dried it bricks and cover it with tiles or thatch. The basic local materials for the construction of rural houses in the District are mostly mud, wood, bamboo, sugarcane leaves and stalks of plants such as arhar etc. Because of the cheap availability of mud or clay, it is widely used in the construction of rural houses in the study area. It can easily be formed into different shapes even without the help of skilled workers and hence the houses built with such materials are simple and economical. All over the area wall generally made of mud obtained from the

village pond. The constructed mud wall is simple and proceeds in stages with damp mud making successive layers of 30 to 45 cm in height. When one layer is completed and dried, a fresh one is added over it. This process continues till required height is obtained.

Table 6.1 shows various types of wall and roof materials used rural houses of the district. It has been found 32 per cent of houses use mud and unburnt bricks as wall material. Similarly, mud and thatch roofing materials contribute 74.66 per cent of the total rural houses. On the basis of the building materials, rural house in the District may be put into the following four categories:

i. Grass, leaves, reeds and bamboo walled houses with thatched roof.

These are the common types of rural houses of the poor people. The quality of thatch used totally depends on the availability of local vegetation and crops. Poor people and usually low caste people find it cheaper and more convenient to make thatched roofs of phuns, kans or leaves by fastening them with moist branches of arhar or strings in a rectangular framework of bamboo. This readymade cover is placed over ridgepoles of logs or

Table 6.1

DISTRIBUTION OF HOUSE HOLDS BY PREDOMINANT MATERIALS OF THE ROOFS AND WALL

Material of wall	Total House holds	Materials of Roof								Concrete RBC/RCC	Stone	All other materials and materials not stated
		Grass, Leaves, Reeds, Thatches, wood, mud, unburnt bricks or Bamboo	Tiles, slate, Shingle	Corrugated iron, zinc or other metal sheets	Asbestos cement sheets	Brick, stone and lime						
All materials	100.0	74.66	3.81	0.46	0.41	14.69	0.76	1.27	3.93			
Grass leaves Reeds or Bamboo	3.60	3.48	--	0.01	0.002	--	--	--	2.91			
Mud	7.69	5.96	1.64	0.015	--	--	--	--	0.08			
Un-burnt bricks	24.31	23.49	0.26	0.05	0.014	0.115	--	0.01	0.36			
Wood	0.09	0.063	0.003	0.003	0.007	--	--	--	0.013			
Burnt Bricks	63.39	41.52	1.67	0.35	0.37	1.45	0.45	1.22	3.33			
GI sheets or other metal sheets	0.08	0.05	--	0.005	--	0.016	0.003	0.003	0.005			
Stone	0.52	0.04	0.14	0.008	0.01	0.003	0.30	0.02	0.003			
Cement concrete	0.17	0.04	0.005	0.007	0.003	0.08	0.007	0.02	0.008			
All other materials and materials not states	0.13	0.003	0.096	--	--	0.002	--	0.002	0.03			

bamboo. Such kind of houses account for about 3.5 per cent of the total number of rural dwellings of the District.

ii. Mud and unburnt brick walled houses with thatched and mud roof

Most of the rural people especially the cultivators and agricultural labourers live in these types of houses. Mud walls are constructed with unsorted clay or unburnt bricks and have mud roofs. Chappar, in front of the main entrance is a typical feature all over the region. The poor man's house generally has only one multipurpose room where there is no separate place for cooking, receiving guests or keeping the cattle during the winter night. Such types of dwellings are found all over the study area and constitute 29.5 per cent of the total number of rural dwellings.

iii. Burnt brick walled houses with thatched and mud roofs

The burnt brick walled houses with thatched roofs cover about 41.5 per cent of the total rural houses. These types of dwellings are found all over the study area. These roofs are cheaper than brick or stone roofs. The roof may be over hanging on one or both sides, having very gentle slope. These roofs are made by spreading a thick layer of mud over a network straw or pieces of wood or stalks of arhar, which rest upon closely spaced wooden beams or crooked branches of local trees such as mango and neem etc. Sometimes tiles are also used in the construction of roofs also

the other building material. These tiles manufactured by village potters and also baked in the ordinary firewood. These tiles are placed systematically on a framework of wood obtained from local trees, which rests on the gat of the wall supported by transversely fixed beams. Because of these tiles the roof become more durable in the long run.

iv. Burnt brick walled houses with burnt bricks, stone and lime roofs.

These types of houses are called pucca houses. The brick houses are increasingly in number day by day in the area and it shows the prosperity and higher socioeconomic status of the people residing in a pucca house all the four walls and a brick roof have identical appearance all over the area. Brick stairs are also provided in such houses. These houses provide several advantages such as cleanliness a better utilization of space. The roof is used for sleeping purposes during the summer and for drying grains in the sunshine. Although such houses are unevenly distributed all over the area, they are more in number in rural service centres. These are mainly single storeyed houses consisting of brick walls and pucca roofs. The height of their ceilings is usually between 3 and 4 metre. These houses have separate facilities of latrine bathrooms, kitchens and stairs. Such types of houses account nearly 1.45 per cent of the total number of rural dwellings of the District.

v. Burnt brick walled houses with concrete RBC/RCC roofs

Such kind of houses cover about 1.22 per cent of the total number of rural dwellings of the District. Nowadays such a house is a symbol of social prestige. The number of these houses is increasing day by day.

3.2 Based on Size and Shape

The size and shape of a dwelling reflects the economic status of the householders. Its size varies from a large Haveli to a single room hut. It is observed during the field surveys that one or two room houses inhabited by poor, middle class people lived in three rooms dwellings the rural rich lived in houses having five or more rooms.

Table 6.2 reveals clearly that one or two rooms dwellings together constitute the highest percentage (63.03 per cent) providing shelter (59.41 per cent) of the population. In such type of houses men and cattle share the same room. These rooms are easy and cheap to construct and unhygienic because the same room is used for cooking, sleeping and keeping cattle together. The three or four room dwelling account 26.21 per cent of houses provides accommodation to 28.38 percent of the total rural population. Five and six room dwellings account for near 10.7 per cent of the total number of rural houses and accommodate 12.1 per cent of the total rural people of the District.

Table 6.2

Classification of the Rural House According to the Number of Rooms and Rural Population Living in Various Types of Houses

Type of house	Percentage of the total number of houses	Percent of the total rural population living
One-room	31.13	27.18
Two-room	31.95	32.24
Three-room	16.67	17.84
Four-room	9.54	10.55
Five-room	4.53	5.10
With Six or more rooms	6.18	7.09
Total	100.00	100.00

Source: Compiled from District Census Handbook Bharatpur (1991)

The number of arrangement of rooms brings about the general shape of houses. The houses having one or two rooms are I-shaped. L-shape is found in three room dwellings. U-shape dwellings, consisting of three limbs usually have three or four rooms. Five or more room houses are rectangular, in shape. In the District majority of people live in two rooms dwelling.

The house is not merely a shelter but it forms part of cultural heritage and hence is influenced by the cultural environment of which forms part. So the socioeconomic status of the owner has a direct bearing upon the shape and size of the rural dwelling. Field studies reveal that there is a marked- contrast between the houses of the well to do and the rest of the villagers.

The masonry houses generally belong to the Brahmins. Jats and business class who have a major share in the village land and have accumulated wealth. The rest of the communities live in mud houses. The large masonry houses are well planned with separate facilities of kitchens, bathrooms, storerooms, cattle sheds, fodder stores, chaupals or baithakas. Middle class people usually live houses with 3-5 rooms of burnt or sun-dried brick walls and mud, tiled or stone slab roofs. They have outer and inner verandah, courtyards, cattle sheds etc. Mostly agrarian castes like Gujars, Lodh, Kumher, Meos etc. live in such dwellings. The poor people like chamar, pasis, Koris, Dhemars, Bhangis etc. live in small houses with one or two rooms. The so-called 'untouchables' invariably occupy the worst and relatively isolated locations. These houses are mainly of mud and thatch. The front verandahs in such houses are multifunctional in nature, used as kitchen, parlour and cattle shed. Smaller size of families and lack of purdah system enable them to live in small houses. A person sitting on the verandah can keep an eye on all property and every movement in the house. Pig rearing is common among Pasis and Chamars who build their pigsties adjacent to their houses. This is the most polluted part of the village.

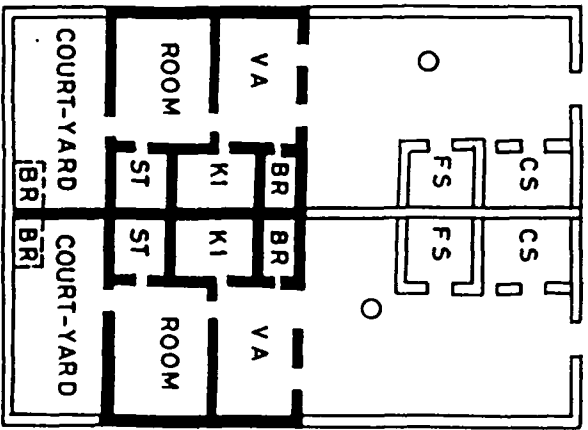
It has been clearly observed during the field survey that rural housing condition is far from satisfactory. Although the government has made efforts to develop and improve them since

independence, these efforts have made very little impact due to meager resources and ineffective organization. In most of the villages majority of houses are one to three room unit built of mud, unburnt brick and thatch. They are constructed in such a way that allows little ventilation. The dwelling complexes have narrow meandering lanes and are overcrowded. The villagers pay little heed to the principles of maintenance of good health and sanitary conditions in the village lanes and bye lanes. Heaps of cattle dung is accumulated at odd places, which breed mosquitoes and other insects. The rubbish in the houses is thrown on the streets. Children are also allowed to defecate close to their houses, which makes the atmosphere foul and insanitary. Due to the lack of proper drainage system small and big pits full of contaminated water overflowed here and there. The stagnant water in the pits invites mosquitoes, which poses health hazard. The cost of maintenance of mud houses is greater than what is required for masonry houses. The mud houses are more comfortable in summer and winter as they are cooler in summer and warmer in winter. But in the rainy season the masonry houses are decidedly at an advantage. In mud structure the rainwater trickle down and the floors become damp.

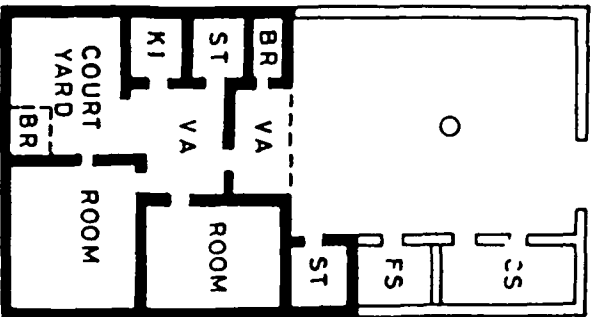
The few well-to-do cultivators and other rich people in the village may possess extremely good pucca houses, but their living conditions are not always good. For instance, they may have good

HOUSE PLANS

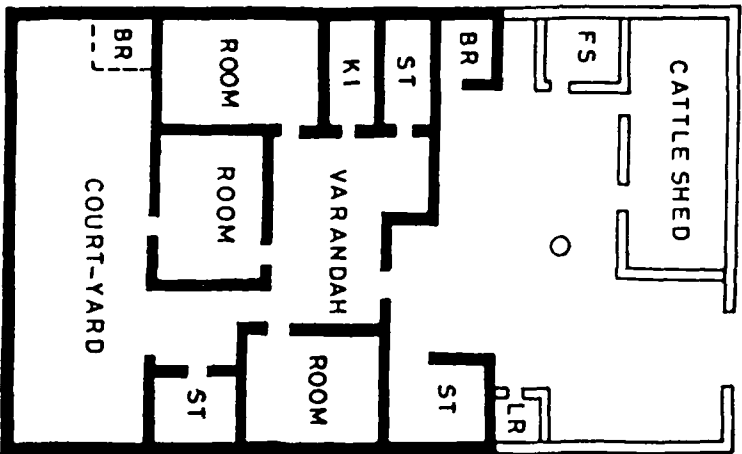
A - ONE ROOM



B - TWO ROOM



C - THREE ROOM



KI — KITCHEN ST — STORE CS — CATTLE SHED
 VA — VARANDAH LR — LATRINE ROOM O — OPEN SPACE
 BR — BATH ROOM FS — FODDER STORE

SOURCE : BASED ON NATIONAL BUILDING ORGANIZATION, 1961

0 5 Mts

Fig. 6.2
275

new baithaks, but their women live and cook in old unventilated havelis. Although the havelis, as the nest of family life, needs most improvement, the survey revealed that the villagers tend to invest their wealth in construction of impressive baithaks, the equivalent of the city dweller's drawing room and guest room.

The village sites are already densely built up and fully occupied, and therefore they do not provide any scope for planned physical growth of the village. But in order to improve the housing condition of the villages the houses should be simple in design and locally available building material ought to be used in their construction.

Such a design suggested by the National Housing Board for the poor and middle-income group, has been given in Fig. 6.2. It is a design for single roomed houses, suitable for low-income group (Fig. 6.2A). It provides a multipurpose verandah and a courtyard. The two roomed house plans, as shown in Fig. 6.2B, is suitable for medium low-income groups of people. The special feature of this type of house is the maintenance of the privacy of the women-folk, Fig. 6.2C represents the structure of a three roomed house for people of high-income class. It consists of three rooms, a kitchen, a store and a bath. Provision has also been made for a separate cattle shed and a fodder store.