Semester II

GEO-A-CC-2-03-TH-Human Geography

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Topic:Rural House Types in India

Introduction:

Individual dwelling is the basic unit of settlements. It is more than a shelter, because it expresses both the physical and economic conditions of the area. A man in his rural settlement builds his house by using the building materials available in his own locality. Therefore, a rural house is an indication of the regions geology, soil and vegetation. A rural house expresses the climate through the slope of the roof and the materials used. The availability of materials depends on the type of climate and soil. India is a vast country having a large variety of soil and climate. The economic conditions also differ from one class of people to another. Ethnic and other sociocultural factors also bear upon the various aspects of rural dwellings. Many climatic and religious beliefs have also influenced the orientation of the houses. In many parts of « the country the houses never face west. The influence of castes was traditionally so great that the intermingling of residential houses of upper and lower castes was never allowed. The scheduled castes are mostly assigned an isolated area on the outskirts of the main settlements. Every village in India shows contrasts between the houses of the upper and lower classes. In spite of some well marked common characteristics, the rural houses in India vary widely. The variations in building materials are areal. The variations in ground plan, structural size, architectural design, accommodation and uses relate to physical environment and ethnic composition of the population. As the characteristics of physical environment acquire areal pattern of distribution, the differences in rural houses are natural.

House Types in Andhra Pradesh: House types in Andhra Pradesh vary from one district to another according to the physical and cultural conditions of the place. The state has coastal/, deltaic and plain areas. Two types of population lives here, namely the tribal and non-tribal. Tribals are highly concentrated in Rayalaseema and Telangana districts and build their houses according to their own needs and resources. House types are influenced by the climatic condition and the availability of building materials in the locality .

House Types in the North-Eastern Region: The North-Eastern region covers a vast tract of land with profound diversity in physical relief and climatic features. The building technology of the region has been developed by the ingenuity of the rural people through their age old experiences and has been handed down in the form of cultural heritage to successive generations. Topographically the region can be divided into two main divisions: viz., (i) Hills, and (ii) Valley plains. Houses in hills are mostly located at the foot hills or on table lands. All the villages are not close to each other. Since water and cultivable lands are the main require- 202 ments of the tribals, their villages are located near hill streams and arable hill slopes or tops. Most of the houses have rectangular ground plan and two sloping roofs. The houses are raised above the ground. The houses in the valley are different, because of the geographical advantages of the area. They occupy vast stretches of land and vast paddy fields demarcate the village boundary. The villages are located near to each other (3 to 5 km from each other). Houses in the plains are constructed with well defined boundaries, generally bamboo and shrubs grow along the family compounds. In 'Manipur a temple is constructed in front of the house of a Brahmin. The houses in the

plain have earthen plinth and do not face west. The houses having urban influences have brick foundation, brick walls and corrugated iron sheet roofs, such type of houses belong to the rich. For common man's houses bamboo and wood are used in plentiful.

House Types in Gujarat: Most of the rural population in Gujarat depends on agriculture. The land does not generate much income which indicates a subsistance kind of agriculture. Widespread poverty of the rural people puts restriction to the interaction with outside world. Most of the soils in the west are saline and are subject to erosion. This makes the land unproductive. Hence the houses in most of the villages are of poor quality. In Gujarat, the houses have common walls and their plinths are not raised much above the ground. There are many types of houses. The walls are made of burnt bricks with mud mortar, grasses leaves and wood. The rich people's houses have wood work done on solid wood. The roofs are made of country tiles. Most of the houses have doors at the centre. There is a separate door to the stable. The ventilation is insufficient. The houses of the scheduled castes are of poor quality and are located in the outskirt of the village boundary. 206 Their houses are small, thatched with grass or palm leaves. The walls are made of mud or spolit bamboo smeared with mud. A bamboo partition splits the rooms into two compartments. The houses of the Bhils need special mention. Their houses are made of wood. The entire structure is of wood including walls and roofs of the houses. The houses generally have a well, tubewell or a tank built in the house itself. The tanks collect rainwater which is used for rest of the year for drinking purposes. The coastal Saurashtra has developed in a different manner. In Dwarka tourism has generated small cluster of houses and shops near the temple. The marine environment is different. On way to Dwarka near Okha, wind mills are set up to generate power. The average wind velocity is nearly 20 to 25 kms/hour and at times it becomes 45 kms per hour when it is at its maximum. All along the coastline, the shallow waters of the sea are covered with country boats. Deeper waters have motor boats or trawlers to catch fish. Pishes caught are sent to foreign markets after being salted and dried. Local markets are also wide due to its nearness to Bombay. The modern boats come from Kerala, Mangalore, Valsad etc. One such type of fishing village is Roopenbandar. Roopenbandar is only 1 km away from Dwarka, and has a thriving economy based on fishing. The traders and fishermen come from various parts of India in proper season. Fishing is not done in the rainy season. The warm current which runs about 3 kms parallel to the coast helps in catching more fish. The housing pattern in this fishing village is peculiar. All the structures are temporary and are inhabited only during a part of the year when fishing is done. The local fishermen have their houses at Dwarka. Most of the houses are crude hutments having coconut thatch. New huts have jute thatched slanting roofs. These are highly inflammable. This village settlement caught fire in October 1986. Because the economy of the village was badly affected, new constructions are of very poor quality. The village has about 150 people mostly men. Very few females could be seen around, because they are left behind in their home towns. The salt water of the sea is unfit for drinking purposes. Therefore, drinking water is brought from Dwarka, along with other items of daily use.

House Types in Punjab and Haryana: Most of the houses in Punjab and Haryana are changing and have shown signs of urban life. The streets in many villages are being paved. Better drains are constructed to carry off the refuse water. In many villages the supply of drinking water is through taps. The spread of machine based crafts has also taken place due to electrification of the villages. In these States, public institutions such as schools, dispensaries, post and telegraph offices, panchayat ghars and community centres are on the increase. All these changes in the village environment are due to the growing consciousness of the people for modern living. The education has brought changes in the attitudes of the people towards 209 - modern facilities, which has helped in changing the rural house types. In most of the villages of these two States, change in the building materials from mud, grass etc. to burnt bricks cement, concrete and iron has changed the design of the houses. Brick kilns are common features in

these two States and use of burnt bricks is increasing fast. As compared to the old large houses having small number of rooms, new constructions have more number of rooms per household. Now most of the houses have moderate size of rooms. It is expected that in future this trend will continue. Because of exposure of the people to modern living. Now separate store and kitchens are being constructed. Cattles are being separated from the living quarters of the family. In -recent decades, the improvements in roads, and linking up of villages with highways have stimulated the use of more durable building materials. The degree of changes brought in the villages depend on'the nearness of the village to the urban centres. Remoteness has been the cause of slow transformation in many villages. For example, Mahsa Tibba village in Ambala district has experienced very little modifications. The village is backward in every respect where tradition still holds sway so far as the living condition of the people is concerned. However, the use of furniture such as chairs, table and almirahs and also glass tumblers and hurricane lamps indicate that life, is not absolutely static. Hand 'Chakkis' are 210 also being discarded which is an indication of an urge of the people to have modern living. As elsewhere, the traditional custom of storing foodgrains for a number of years has been given up recently. The recent development of efficient transportation system to link this village with other areas has enabled the people to send their surplus production in the market. In case of shortage of food, now it can be brought from other areas. Frequent contacts with other areas have brought new ideas which are expected to continue in transforming the life pattern of the people. The houses in this village can be divided into four different categories: i. The houses of the retired sepoy, ii. The houses of the affluent people of the village such as the head of the village, the merchants and other rich people, iii. The houses of tenant farmer, and iv. The houses of casual labourer. The sepoy's house is generally of one room. A part of the room is used for keeping the cattle. In some houses the cattle is separated from the family by putting a partition. The soldiers after serving in different wars have come back to their villages with a broader outlook, and have got some fresh ideas. With their savings they have constructed 211 pucca houses. The houses have insect proof floors, ventilators in walls and quite a few of them have separate kitchen with chimneys. A retired soldier's house generally consists of a very large room, a back courtyard, and a kitchen with chimney. The large room has a partition. The room is nearly 10 mts long and 5 mts wide. The house has a neat look. The roof is flat . The courtyard at the back is used for all functions, such as drying of grains, bathing and keeping the animals. The courtyard has staircase for going to the roof. The houses where the kitchen is not separately constructed, the space under the staircase is used for cooking.

House Types in Himachal Pradesh: In Himachal Pradesh, the houses are built haphazardly. Both stone and woods are used in alternate layers. No mud mortar is used. Most of the houses are of two storeys, some with small room in between the two storeys locally known as 'pand'. Pand is only 4% m high and has only one opening for light. The family retires to this in winter months because of cold weather. The gabled roof is laid over a structure of wooden beams. The covering material is slate. Such a type of house is common in Mahesh district. In Chamba, the houses are built on hill slopes without any planning. The doors of the houses are of wooden planks which can be removed and are used as shutters to close or open them. The roofs are flat or gabled which are made of stone and mud. The main entrance of the house faces east or west. The rooms are divided by putting, wooden partition. Flat roofs are used for making hay. The housing pattern of Muslim gujars and Brahaman Gaddis are slightly different from each other. The Gaddis have separate cow-sheds while the Gujjars have separate room for cows under the same roof. The houses in some of the Mandi villages are built on a rocky spur near their fields. Most of the houses are double storied. The ground floor is used for the cattle and the upper floor for residential purposes. There is no bathroom. The houses are built by using mud, timber and stone. The walls are made of stone with beams of wood at regular intervals. The roofs are of slate. The thickness of the walls varies from 40 cms to 50 cms. Old houses have poor ventilation. Most of the

houses are constructed by the family members employing one or two carpenters. The houses in Sirmur are of different types, because these are constructed on plain ground. These are constructed in rows of three or four with some space in between. The houses are rectangular in shape, and in most of the cases have two rooms and a verandah. There are three types of houses: (i) Pucca house with carrugated iron sheet roofs, (ii) Pucca house with Chhapar and (iii) Kutcha house with 1Chhapar'. The roofs of the houses having corrugated iron sheets are flat while with. 'Chhapar' are slanting. The 'Chhapar' is, made of 'Khar' grass tied to bamboo frame. This type of roof is nearly 24 to 30 cms thick. The 'Chhapar' are very cheap. The thatch grass is replaced after every three to four years. The timber is obtained from simbal and mango trees. Cow dung mixed with clay is applied on walls and floor. Makol a white clay is used for white washing. The houses in Kinnaur district are made of stones, timber, local bushes, and bhojpatras. Stone and timber is used for walls and bushes and bhojpatra for roofing purpose. The foundation of the house is nearly 90 cms deep and is filled with stones. Due to slope there is no plinth. The ground floor is used for cattle. The houses are either rectangular or square and face south. The doors and the front part of the house is made of wooden superstructure of 4-6 cms thick planks. The main door lies in the centre. During winter, the snow is immediately shoveled down from the roofs, as soon as it stops snowing to avoid leakage and roof collapse due to heavy weight of the accumulated snow. The bathrooms are uncommon. On the whole, the residential pattern in the mountainous region is different in Himachal Pradesh. Most of the areas are unsuitable for cultivation. Large tracts of land are covered with dense forests. In many places, the soils are too poor to support dense population. Hamlets and isolated homesteads are found wherever there is small piece of flat land.

House Types in Jammu and Kashmir: The State of Jammu and Kashmir is an agglomeration of diverse physical characteristics. A large variety of houses are constructed depending upon the natural condition of the areas. Broadly speaking, they are of four main types-

- i. Mud or Burnt Brick Walled Houses: These type of houses have thatched or tiled roofs. Their predominance is in Kathua and Miranagar Tehsil of Kathua district and Shehra Tehsil of Poonch district. The rainfall in this region is 122 cms and temperature recorded is 45.7 c in summer. The area lies in the sub-, montane region of the western Himalaya.
- ii. Stone-walled Houses: Stone walled houses are found at Ramnagar Tehsil of Udhampur, Bashohli Tehsil of Poonch, and some other areas of Udhampur and Doda. The area where such type of houses are found is known as outer hills. In its north lies Pir Panjal and in the south is Siwalik. The area experiences heavy snow and rain.
- iii. Burnt or Unburnt' Brick Houses: Such type of houses are found in the Jhelum Valley and also in the flat areas extending into its enclaves and smaller valleys formed by small rivulets. The average rainfall is 80 cms and temperature ranges between 34°c in July to 9°c in January. It is bounded by Pir Panjal in the south and Central Himalaya in the north-east and north. Clay is easily available for manufacture of bricks. The majority of the houses are mud 224 or lime plastered. The traditional houses have roofs of thin planks of wood covered with 15 cms thick mud plaster. Now-a-days, shingle or corrugated iron sheets are used for roofing purposes.
- iv. Stone Walled Houses: The area of stone walled houses is concentrated in the Indus valley. It has its origin in Mansarovar in Tibet. Its boundary in the south is in the control range of the Himalaya and is bounded by Karakaram mountain in the north. Leh has practically no rainfall and temperature in winter goes as low as -18 °c centigrades. The dwellings are far apart from each other and are made of stone. Besides economic backwardness, inaccessibility also account for the use of stone. Wood is scarce and therefore extremely expensive.

House Types in Kerala: The people in Kerala select the sites for their dwellings on the margin of a fertile valley with rice fields in front of their doors. Each house, even the humblest of all, stands in its little compound or garden which is thickly planted with coconut palms, jack trees, botel nut, and pepper trees. The communal clustering of houses is rare. Only the Anglo-Indians, Tamil Brahmins, Konkanis and Muslims are the communities in which clustering of houses can be seen. On the basis of materials used and plinth area, the number of rooms and living facilities, the houses of this State can be broadly divided into four categories-

- i. Traditional Houses: These are made of woodenwalls and thatched or tiled roofs. These are known as Nalukettu.
- ii. Modern Houses: These houses consist of a drawing room, a dining room, bed rooms with attached bath and a separate kitchen and store. The houses have tiled roofs. The walls are plastered with lime or cement. The windows have iron bars. These houses have wooden ceilings. Almost all the houses of this type have electricity and water from pipes.
- iii. Houses of Laterite: These houses belong to the middle income people. They have the superstructure made of laterite blocks and walls are plastered with lime and sand and in few cases with lime and red laterite soil. Few houses have cement floors, while the majority of the houses have floor of beaten earth coated with cow-dung and charcoal. These houses have verandahs at the front and back. The ground plan of the houses is rentangular. The roofs are slanting. The wooden frame of roof is either of tiles or of thatch.
- iv. Houses of Cadjan Leaves and Bamboo: These houses belong to the very poor. The plinth area varies from 30 to 60 sq m and are raised above the ground by constructing a platform of mud or laterite stone. These are round huts made in almost all parts of Kerala. The walls of such houses 226 are made of plaited cadjan leaves and the roofs rest on bamboo pillars. These are one room houses. In case of some tribal hills, the houses are made of beaten bamboo walls. The floor is also of bamboo and roofs are thatched. To ensure safety from wild animals, in some areas the houses are constructed at sufficient height from the ground level on the branches of the tree. The houses of hill tribes have few variations. The houses of the Kurumans are constructed on rectangular basement with two or three steps. The total height is 3 to 5m. The walls of the houses are of mud or clay or sometimes of unburnt bricks. The roofs are of jungle wood and bamboo which is thatched with straw except for one door which may be on any side, the house has no other means of ventilation.

House Types in Madhya Pradesh: The locational pattern of villages and the houses types in the tribal areas are somewhat different from those occurring elsewhere. In this State, compact village settlement is practically absent in tribal areas. Small scattered hamlets are more common. The main tribal districts of this State are of three types, namely:

- i. Areas Settled by Bhils: Such areas are in the western and south western zone consisting of Jhabua, West Nimar, Dhar district and Sailana Tehsil of Ratlam district.
- ii. Areas Settled by Mixed Gonds: These areas liein the central belt comprising of the southeastern part of Harsud Tehsil of the East Nimar district Betul, Chhindwara, Seoni (excepting the southern part of these districts), southern tip of Narsimhapur, parts of Durg, Mandla, Shahdol, Sidhi, Surguja, northern parts of Bilaspur and northern half of Rajgarh.
- iii. Areas Settled by Gonds: This area comprises of Bastar, parts of Raipur district, Sanjari Balod Tahsil and southern part of Durg Tehsil of Durg district.

In this State, all the tribal houses belong to two categories viz., (i) Rectangular plan with horizontal roof and (ii) Rectangular ground plan with inclined roof. The houses with rectangular plan and horizontal roof are found in areas where stone specially the slate and sandstone slabs for roofing are easily available. In some areas thin sandstone slabs are also available for roofing purposes.

Completely flat roofed houses are rare in this State. Most of the stone houses have slightly inclined roofs. This inclination is only on one side. The areas where such type of houses are found are Morena, Bhind, Datia, Shivpuri, parts of Guna, Ratlam and Dhar districts. Parts of Mandsaur and some villages in Sagar district also fall in this category. The circular plan is afforded by some castes who have migrated from Andhra, then Orissa and finally in Madhya 228 Pradesh. Such type of houses are not permanent. The common man's houses other than the tribes are basically made of mud walls and tile roofs. The very poor have thatched roofs. The tribals, however, prefer bamboo for walls and grass or tiles for roofs. Bamboo is converted into mats and is used for the construction of walls. The bamboo walls are used as partition in the room when the family size increases. The wall does not touch the ceiling because it is only 6 to 7 m high. Villages in the forested and waste land areas are small.

House Types in Maharashtra: House types in Maharashtra depend upon the climatic conditions and availability of building materials. The financial condition of the owners determine the choice of building materials used. In the areas of heavy rainfall most of the houses are made of mud, grasses, leaves, reeds and bamboo and have thatched slanting roofs. The roofs of some of the houses have tiles. In coastal districts, the houses have raised plinths made of stone and mud. The houses generally have square ground plans. The roofs rest on wooden poles. In Ratnagiri district, the wellto — do people use laterite stone for walls. Each house has its own compound containing fruit and flower trees.

House Types in Karnataka: The houses in this State can be divided into two main groups. These groups are based on the nature of the ground plan and the roof type. These are:

- (i) Rectangular house plan with flat roofs; and
- (ii) Rectangular house plan with sloping roofs.

The first type of houses are found in the areas having 232 less than 60 cms of rainfall. In these areas the villages are normally located on the banks of rivers and streams or near the ponds. For the construction of such type of houses, the materials used are according to the economic condition of the owners. The persons with limited means use twigs, reeds and bamboo matting. They add leaves in order to prevent the earth from falling through the interstices of the reed mats. The surface is then plastered with mud. Nearly 75 per cent of dwellings are of this type. Rich people use stone slabs for roofing in the areas where stone is available.

The second type of houses have rectangular ground plan and sloping roofs. Here the terrain is uneven. The houses are in or near the cultivated fields and are known by the name of the household. The villages are small with small number of houses and people. The houses of the scheduled caste live in a remote corner of the village. The temples are generally centrally located so that people from each area can reach easily.

House Types in Uttar Pradesh: House types in Uttar Pradesh differ from place to place depending upon the location of the village and the economic condition of the owners. The size, height and standard of comfort indicate the economic condition of the peasant. The average large and spacious house of the Doab speaks of a relatively better economic condition of its occupants, in contrast to the shabby dwellings of the rest of non-Himalayan portion of this State. Humble dwellings show the poverty of the average peasant. In non-Himalayan parts, owing to the hot climate the 'angan' is an essential part of the dwelling. Most of the indoor work is done by the female members in this 'angan'. In almost all parts of non-Himalayan Uttar Pradesh (except the Hilly trans-Jamuna tracts), the building material used for walls is clay, mud-derived from the village pond. The absence of forests in the Ganga plains is obvious and is responsible for lack of availability of timber for construction of houses. There are three main types of

rural houses in the Ganga Plain of Uttar Pradesh. These are based on the economic differences of the people. The first type of houses are large, two storied and often masonry made of durable building materials. These type of houses belong to landlords, banias and other rich people. The second category of houses usually belong to the average peasant. By its ground plan, size and structure it is the most numerous type in any part of Uttar Pradesh. Lastly the dwelling of the poorest class which consists of a single room hut thatched with grasses. Most of the houses in UP have square or rectangular ground plan. The. rainfall decreases from east to west and north to south. So does the slope of the roof of rural dwellings in this state. A gradual change from the high-pitched tiled roof in the wet east to flat-tiled roofs of the drier west can be easily noticed. Through the building materials used in the regional characteristics of geology, soil and vegetation are well observed. Lack of ventilation is common. In lower Ganga plains, due to the light friable soils, recurrence of floods, waterlogging and humid air; mud houses are highly unsuitable. In the Himalayan part of this State, the rural houses are double storied and are known as 'dopura makan'. The houses have four rooms two on the ground floor and two on the first floor. The usual size of the rooms is 14 by 28 mt. Each room has separate door. The upper floor is used by the family while the ground floor is used for cattle. In the Himalayan part the topography of the area expresses itself through the form of dwellings. Lack of level ground has 241 limited ground dimension of the dwellings which is compensated by double storied structures. The geological formation of the areas provide ample material for stone walls and slate roofs. Slate and limestone quarries occur almost everywhere. The absence of courtyard in the Himalayan house is partly due to lack of level land. Moreover, the cooler climate obliterates the necessity of passing much of their time in the open space provided by the 'Angan'.

House Types in West Bengal: An ordinary West Bengal village is hidden behind the trees. From a distance, Bengal villages look like a groove of trees having houses not in a particular row. They look like a cluster of houses separated from each other. In the Darjeeling hill, the houses are strung up along either sides of the main road which is often a narrow path meant for mule. The poverty of the family is evident from the type of the houses. The villages generally consist of small groups of houses scattered throughout the agricultural fields - the main crops being jute and rice. Small clusters are common everywhere except for the market villages which are located near the rivers. The secluded and detached homesteads are the peculiarity of this State. The houses are usually surrounded by a belt of fruit trees such as coconut, banana, mango, jack fruit or bamboo. Now-a-days, a large number of small villages 242 can be seen along the railway tract. The village assumes almost uniform aspect all over the West Bengal except for the Santals. They afford a strongly contrasting choice of sites. They select the highest and drier spot for their villages. They construct houses with an enclosure having a dwelling house, a granary, a cow and pigeon house and a piggery. Although the villages in Bengal have some uniformity of pattern, yet the houses tend to differ in many respects. In hilly parts like Darjeeling the houses are divided into various parts like the cowshed, kitchen, and bed rooms etc. The roofs are of tin. In Cooch-Behar, the people live in thatched or tin roofed houses with walls of mat or grass and earthen floor. In Jalpaiguri, the houses are raised on bamboo posts or on sal posts. There are four to five huts made around a quadrangle. Each hut is used for different purposes such as cooking, storing of grains, sleeping etc. All the huts have only one door. The well-to-do have houses made on wooden posts having wooden doors. Well-to-do families have extra room for the guests and a room for puja known as Thakur-Ghar. The houses in the plains are different and are usually made of thick mud walls and thatched roofs with a bamboo frame. The construction work is mainly done by the owner and his family. The walls of the houses are made thick to keep the inside of the house cool and comfortable in all the weathers 243 Each house is a unit composed of baithak, courtyard, bedrooms, kitchen and cattle shed. The entire household is very neatly plastered with mud and a layer of cow-dung. The size of the villages varies from 150 to 200 houses all over in the plains. The Delta part in West Bengal, however, has a different type of

settlement pattern. They have frame of bamboo which is set up on the floor, keeping it raised above the ground to afford protection from inundation. In some places the walls are covered with mud while at other places plaited grass or matting of bamboo are used instead of mud. Sometimes they are covered with clay and cow-dung. The roofs are slanting, with gable-ends closed. Very rarely the gable ends are left open for-ventilation. The houses very near to the river beds are light and are meant to provide shelter. The property is removed as soon as the river water rises to endanger their lives and huts. It is because of this that the walls and roof of the houses, are made light. The roofs of the houses vary according to the type of materials used. They are of three types:

- (1) Pucca houses having flat roofs of brick and masonry.
- (2) Kutcha houses thatched with straw and
- (3) Khapra a house with tiled roofs.

The thatched roofs may be ekchala, duchala, and chauchala means, houses with one, two or four thatches. The climatic conditions prevailing in the area make it necessary for them to put a heavy thatch on the roof. The rainfall in this region is so heavy that unless a very heavy thatch is put, water is likely to leak through. In this state, the sleeping 244 apartment is known as sobar-ghar. Kitchen is known as rannaghar, and the cattle shed is gowal-ghar. The house has threshing place. The thatch varies from 10 cms to 20 cms., in thickness. The thatch rests on a frame made of sal poles, or bamboos which is supported on rough timber poles. The poor sleeps on the floor while the rich have 'taktaposh' made of wood. Bamboo cane is used for making of baskets. Poor man have very little furniture. The brass lota, a kalsi and few thalas are all the crockeries which the poor men possess. There is no drainage system in the villages of Bengal because the rainwater from the residential areas falls into the nearby ponds and agricultural fields. The internal roads are mostly kutcha. A mud road is generally provided between two rows of houses. Corrugated iron sheets, cement, etc. are used for rich people's home in some villages and are brought by trucks or by carts from outside. In some villages burnt bricks are also being made. But this is a recent development and is confined to very few villages. In villages the scheduled castes, and muslims are settled away from the Hindus. They live in very simple houses. More recently, the housing wing of the State Government took up a. village for implementation of the government plans, to improve the housing condition of the landless labourers.

House Types in Laccadive, Minicoy and Amindivi Islands: The pattern of distribution of houses is same in all the islands except Minicoy where the houses are arranged in linear pattern on two sides of footpath. On other islands, the houses are scattered uniformly. The inhabitants of all the islands are predominantly muslims, The structural pattern of the residential houses of the natives found in all islands are more or less same. All have four sloped houses with rectangular ground plan. The rich people give tall fencing of about 6 m high made of plaited coconut leaves, around their houses. 247 For the construction of walls corals are cut into required size and used. Their plinths and walls are plastered with cement. Most of the houses of this type have roofs of tiles or asbestos sheets. Rafters are made of the trunk of coconut tree. Timber used is brought from outside. Such type of houses belong to the rich people. The roofs of the houses are low and rooms are not properly ventilated. Each house has a spacious front room, which opens into a corridor. On another side of the corridor, bed rooms, kitchen and store are constructed. Kitchen is generally spacious and has two sections, one is used for cooking and the other for storing. Economically backward people live in small huts having walls of plaited carjan leaves. The roofs of such houses are of thatch. The houses never face west because of the hazards of rain and wind which sweeps the island during monsoons. In addition to the residential houses, there are religious institutes and commercial establishments all over. Each mosque has a tank and a grave yard. The commercial establishments are interspersed with the residential houses. The buildings look like the residential houses. All mosques look alike and are rectangular in shape. They have sloping roofs on four sides which are made of tiles. Small mosques have thatched roofs. The water level is about 6 m below

the surface. Numerous wells are dug, for drinking water and separate ponds are found here and there for males and females. 248 Wells are found all over the islands.

House Types in Chotanagpur: The entire Chotanagpur, except the North Koel valley, receives a rainfall of more than 100 cm to 150 cm. Therefore, the roofs in this region are characterized by a higher pitch. Straw is the most widely used thatching material which is taken from paddy. The size, elevation, standard, comfort and architectural designs depend upon the economic classes. The lowest economic class is represented by the Birhors, Birjia, Korba and Pahariyas who build the most rudimentary type of houses. The second type belong to the landless labourers, scheduled castes, and other service classes. Their houses are generally one room structures. The third category belong to the well-to-do people having land. They are better type of houses having two to three rooms in average - some of these houses have five rooms. The fourth category of houses belong to the ex-zamindars, moneylenders, business class known as Sahus and Banias and the village chief. The houses of these people are larger, roomier, stronger and better finished. Ethnic factors bear upon the various aspects of rural dwellings. Non-tribal houses are better and convey a sense of superiority. Generally, the rooms are well-ventilated and there is often a space between the wall and the roof which allows a passage for air. 249 The walls of Chotanagpur houses whether made of mud, or logs are lower than those of the plains. The height vary from 2 to 2.5 m and seldom above 3 m. The heavier precipitation necessitates, a higher pitch. Torrential rains with strong winds strike against the walls. The entrance is narrow which looks like oblong hole. Mud is the most predominant wall material in the nontribal areas. In south-western part of Ranchi, 99 per cent of the houses are of mud walls. In the Damodar valley, burnt bricks are significantly used for construction of walls of the houses. In Dhahbad district, 31 per cent of the rural houses have brick walled houses. Vegetational substances such as leaves, grasses, bamboo and timber are used for walls of the houses in" Deoghar, Rajmahal hills, southern Singhbhum. Rajmahal has 20 per cent houses of vegetation materials.' The use of stone as building material is unknown to the people of Chotanagpur. Another characteristic which is of universal nature is- the plentiful use of timber and wood. Even in such houses where the walls are made of mud, roof is supported by numerous vertical poles. In almost all the houses of the districts of Hazaribagh, Ranchi and Palamau, the superstructures including roofs rest on wooden poles which together makes wooden frame for the houses. The villages in the reserved forests usually get the supply of iron and asbestos sheets from the Forest Departments for building purposes. Corrugated iron and asbestos sheets are manufactured at Jamshedpur and Jhinkpani. Being a local product the sheets are available at cheaper rates. Four categories of roofing materials are popular in their respective areas. Tiles and thatch are popular in the western and eastern parts respectively. The brick and lime and corrugated iron or asbestos sheets are most preponderant in various combinations in other parts of the plateau. Thus the variations in building materials are areal. The houses differ in their ground plan, structural designs and architectural beauty. These differences are mainly due to the physical environments and ethnic composition of her population. The ethnic characteristics of the houses attribute, variety to the rural houses in Chotanagpur. Most of the western part of the State is dry. In the north and north-east are the fertile lands. In the south and south-east is the plateau which is full of hills and forests, traversed by rivers, such as Chambal, Banas, and Banganga. The wide valleys of the rivers have good fertile soils. The geographical setting has definite bearing on the 251 natural vegetation of the area. Stunt vegetation and shrubby bushes are very common in the areas of scanty rainfall. The slightly better rainfall areas have Babul and Khejra in abundance. The plain and plateau regions of the State where rainfall is plenty, there are good forests. The Vindhyan formations have endowed this State with a variety of building stones. The store deposits of the state range from red and fawn coloured sand-stones. Alwar and Ajaibgarh series provide slabs and free stones in large quantities. The geographical setting of the State has strong impact on the house types. The materials available for constructions vary from one place to another according to the geographical environments. The financial

resources determine the layout of the houses. Social factors to play a very significant role in determining the type of house to be constructed

House Types in Rajasthan: Rajasthan is a land of palaces and citadels. The picture post cards have a large variety of magnificient buildings. Dwellings of the poor are entirely different from what is 252 depicted on the picture post cards. Dwellings of the poor in this tate show a wide range of dwellings having a large variety of style and layout as well as the materials used. The materials used and the designs depend on the local geographical factors and the availability of the materials. The settlements in this State are in the areas where drinking water is available. The hilly and forested areas are settled by tribes who construct their houses in isolated hamlets. Only in the large villages there is a system of lanes and by-lanes. Most of the villages have shapeless clusters of houses with irregular streets. In Rajasthan, different kinds of building materials are used for the construction of rural houses. Their spatial distribution depends on the geographical environment of the area. Therefore, it becomes very important to know the physiographic units of the State. The Aravallis are the oldest mountain chain of India and extends over a length of 670 km running in north easterly and south-westerly direction. The only rainfed stream is the 'Luni' which rises in the Aravallis in south-west of Ajmer and is lost in the salt water marshes of the Runn of Kutch. The water in the lower region becomes progressively saline. The villages become deserted when the water dries up and becomes undrinkable. The walls are of mud mixed with pieces of grass. Such houses belong to the poor in the arid region of the State. Mud and straw are used to 253 fill up the gaps in between the wooden frame. Walls are mostly of mud mixed with straw. Such type of houses have slanting thatched roofs. Grass, leaves, reed and bamboo are used for thatching the roofs. Beams are acquired from the trees like Babul (Acacia Arabica), Khejri (Prosopis Spicigera Linn), Neem (Dal Bergiasiss) and Beri (Zizyphus Jujuba). Such type of houses are found in Barmer, Ganganagar, Bikaner, Churu and Jaiselmer. In some districts, nearly 67 per cent of the rural houses are of these materials. The Luni Basin provides enough mud for construction of mud houses. Sundried bricks and crudely baked country tile houses are also made in some areas which give a better look. Such type of houses belong to slightly well-off people of the village. Sandstones of Barmer and Jodhpur, Jurassic limestones of Jaiselmer, limestones of Upper and Lower Vindhyan system and a large variety of building stones of Jalor, Jodhpur and Nagpur are being used for the construction of rural houses. Stone slabs from the Aravallis are used for roofing. The use of stone gives a massive appearance to the rural houses. These houses have rectangular layout and have flat roofs. Burnt Bricks and Tiles are important building materials in the eastern and north-eastern parts of the state, because lime is abundantly available from Vindhyan rocks. Rajgarh is important for houses made of burnt brick walls and tiled roofs. Such houses are durable. They have rectangular ground plan with gabled roofs. Such type expresses the 254 prosperity of the rural landscape and are occupied by the people of Upper Classes. In recent years, industrial materials such as corrugated iron and metal sheets, asbestos sheets as roofing materials are gaining importance in some districts.

House Types in Tamil Nadu: Segregation of lower castes like Pallas, Parayas or Chakkilias referred to as the 'Cheris' has been followed for ages. The Brahmins are found in significant numbers, who live in segregated portion of the village known as 'Agraham'. Now 'Agraham' has become a rarity. They live with other high caste non-Brahmins. In spite of the fact that untouchability is dying away, the closer living of high caste Hindus and the interior castes has still not started taking place. As in any other areas, the house types vary according to the climatic conditions, type of terrain economic condition and the available building materials. The climatic conditions in Nilgiri district and Kodaikanal Taluk of Madurai district are different from what are the conditions in the rest of the area in this State. The houses in Tamil Nadu are of three types —

- (1) Thatched huts,
- (2) Small and medium sized tiled houses and
- (3) Large tiled houses having terrace.

Thatched Huts: These type of dwellings are in majority and are universal in their distribution. Such type of houses belong to the poorer section of the rural population consisting of small land holders, the agricultural labourers, artisans etc. Most of those are single room huts. There is an open verandah in the front which is covered by the projection of the roof. The raised platforms of mud in the front part, of the houses locally called as Thinnais are common. These platforms are nearly 0.5 m above the ground. The entrance of the huts is low which is nearly 1% m. The walls are of mud and roofs of pamyra and plaited coconut leaves. The thatched roof is supported on a bamboo frame. The flooring is also made of mud and is coated with a thick layer of cow-dung mixture.

Small and Medium Sized Houses Tiled Houses: These type of houses belong to middle income group. These are generally two-roomed or three roomed structures. There is an open verandah in front of the house. There is a proper kitchen and a store room which lies in the rear. The walls of the houses are made of burnt bricks and are plastered with 'Chunam' and red soil. For roofing country made riles are more common. Mangalore tiles are an exception. The doors and windows are made with local wood. There is some open space either in the front or back of the house which is used for the cattle. The houses are not properly ventilated and are usually having only one or two windows for security reasons. Large Houses: These houses are owned by the affluent section of the village society. They have a number of living rooms and an inner courtyard in the midst of the house. The rooms have covered verandahs in the front which open to the courtyard. Their ground plan is mostly square Very rarely it is rectangular. The walls of the houses are made of burnt bricks and cement mortar. The foundation is of granite, stone. In big tiled houses, the roof usually consists of Mangalore tiles. The frame of the roof is made of timber rafter. The floor is of cement. Such type of houses are owned by the rich people such as moneylender, landlords and merchants. The small landlords and merchants, however, use country made tiles for the roofs.

Ground Plans: Large houses in Tamil Nadu have rectangular ground plan. In the tribal areas, circular ground plan and conical roofs can be seen. These are exception to the general pattern of the houses. In thatched huts, the roof normally consists of 2 inclined planes which meet at a ridge at the top. In tiled houses, the roofs have 4 slopes. front slopes are broader than the side ones.

House Types in Delhi: The villages in Delhi have grown spontaneously with time according to the physical and cultural aspects of their respective regions. Residential Structures Like other villages of India., the villages in the Delhi Union Territory lack planning, and have haphazard alignments. Only a few villages like Sultanpur and Bankner have planned layout. The structures are constructed with proper organization. The habitations look like shapeless clusters of houses along irregular lanes and bylanes. The tendency of most of the villagers to acquire more land from the streets has resulted in encroachment into lanes and by lanes. The internal street and road system looks like a network of narrow zig-zag gali or alleys. The. villages are inhabited by people belonging to various castes and religion. Each village is usually dominated by one or two castes because of their better economic conditions. It is therefore, common to refer to a village as a Jat village or a Brahmin village. In many villages, 261 there is spatial segregation according to their position in their social ladder. This has resulted in caste clusters in the villages which are located separately isolated from each other. Though there is certain amount of social planning, it is difficult to remove these physical segregations. The improvements in the lanes and by lanes of the old part of the villages are not satisfactory. The government rules imposed recently, however, have helped to some extent, in the improvement of plight of the poor and the tenant farmers of the villages. Building Materials Both the Kutcha and Pucca houses dominate the villages of Delhi. Semi-pucca houses are also common. The difference in the use of

building materials in various physical tracts are due to difference in their availability and the physical character of the area of their locality. Pucca stone houses are constructed in the hilly tract, of the Union Territory. It is because stone is abundantly available at cheaper rates. The poor uses mud. In some areas burnt bricks are used because brick kilns are found near the village. The well-to do use brick and cement while the poor use mud and bricks. But the mud and thatched houses in Delhi Union Territory are relatively few. One can hardly come across such kutcha houses. Size of Houses The structures of all the houses in Delhi villages have one to three rooms. Very few houses have more than three rooms. Such type of large houses belong to the rich farmers or to other affluent people of the village.' Very well-todo people such as head of the village have four to five rooms in average. Such type of houses give urban look. The materials used for their constructions are of superior quality and reflect the urban living styles. The designs and skill used display wealth, social status and urban taste of the owner. It can be called as a modern village of India. With a very high percentage of literacy rate (75 per cent), good transportation and communication system, the village people are very much aware of the developments that are taking place in the adjoining areas around them and in the country as a whole. The house types (nearly 90 per cent pucca and 10 per cent semi-pucca) indicate a trend towards formation of modern society. The occupation structure also indicate high percentage of people engaged in non-agricultural persuits. The farmers of this village are well acquainted with modern inputs like irrigation, HYV seeds, pesticides etc. which they purchase from Narela and nearby towns. Many farmers have given their land on rent while they themselves are engaged in non-agricultural occupations. These are indicators of their modern living more or less synonymous to urban areas. But the greatest constraint is the unplanned growth of this village with its narrow lanes, lack of sanitation etc. The village requires proper designing, unless planned growth is ensured there will be little change in the village scene. Proper extension of village 'Abadi' area may help in new constructions in a proper and planned way. This will change the village scene to some extent.





































Some Images of Rural House Types in India