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REPORT ON HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS IN INDIA

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HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

A. HOUSE TYPES

THE CENTRAL AND MOST important fact in the traditional Indian house, whether in village or in town, is *not* the house but the courtyard (*Angan* or *Uthan*). The courtyard is where most of a family's life is lived and the house is where property is secured and shelter sought from the rigours of the weather. The courtyard is for living, the house or room mainly for storage and retiring. The centre of a family's life is not the roofed enclosures but the roofless courtyard where the sun pours into dry and disinfect the rain pours into wash, drain and fill the water vessels, the wind blows in to cool and heal.

It does not take anyone acquainted with our rural sanitation and public health arrangements more than a moment to realise that the sun does more than anything else to preserve life against germs, pestilence and epidemics in India. Without the sun doing it everyday, natural immunity would have had an unequal fight, and the nation would have had a much heavier load of inanition, malnutrition, mortality and morbidity. Thanks to the courtyard the average Indian of either sex is subjected to several hours of sunbathing everyday. There seems little doubt that it is this appreciation, however instinctive and unconscious, that makes the courtyard the central fact of domestic architecture throughout the country. Even in the cold and wet highland regions of Jammu and Kashmir, Punjab, Himachal Pradesh, Uttar Pradesh, West Bengal, Sikkim, North-East Frontier Agency and Nagaland, the courtyard is indispensable although it is frequently inducted into the house by the construction of the porch or the overhanging verandah thus reducing the extent of the courtyard itself. It is only in the Thar or desert area of Rajasthan (Marwar: Jaisalmer, Bikaner, Jodhpur) that the courtyard contracts into small rectangular sun-wells inside the stone houses, a trait which runs right up to Chandni Chowk in Delhi in the east, the Chowk areas in Amritsar and Lahore in the north, and Bhuj in Kutch in the south-west.

Domestic architecture in rural areas is thus mainly determined by (i) the commanding position occupied by the courtyard or quadrangle, (ii) the need to safeguard livestock and draft cattle, the harvest, the household god and the kitchen, and (iii) by the availability of local material for wall and roof. Considerations of privacy, decency, elbow room and sufficiency of covered living area come only when these basic requirements have been fulfilled. The scale of building and size of rooms are of course determined by the nature of the raw material used and its stress and load bearing capacity.

The most elementary form of rural house consists of a single room set in some open space surrounded by vegetation which gives it seclusion and privacy within the community. The structure may have either a round or rectangular plinth or floor area with a single slope or double slope or high round conical roof. The grain, poultry, and livestock (goat, sheep or pig), kitchen are all housed in different portions or compartments made of waist-high partitions, within the single-roomed house. But most of the household chores are undertaken in the courtyard.

Settlements containing such houses are mainly engaged in hoe or *jhum* cultivation and do not keep much draft cattle. But if any family has any draft animal it is housed in an open shed in full view of the front door or frequently inside the single-room itself.

The next stage comes when a covered verandah is placed in front of the single-roomed house. This verandah is open on three sides and amounts to an opening out of the house on to the courtyard or an encroachment of the courtyard into the house. In such an event much of the household activity is transferred on to the verandah and shared between it and the open courtyard. The house itself is now more pronouncedly used for storage, protection and cooking [Sketches 1 and 2]

One comes across an important variation at this point in certain communities which are at the crossroads of settled and shifting cultivation. In the village settlements of such communities the central lane or avenue or space of the village is used as a large, common courtyard by all households of the village for private as well as community purposes : keeping the heavy implements, bullock carts, locating the community grain stores and sinking the village well and using the frontage of each hut as a private courtyard individually maintained, swept and layed by each household. In those areas where tribes engage in feuds such a village is easily converted into a fortress by throwing a stockade around it complete with palisade, moat and stout gates. In fishing villages the strand fronting the sea usually forms an open ended courtyard [Sketch 3]. If such a village is lucky to receive a school it is usually placed at the farther end of the village.

As one will readily appreciate such an arrangement of a common village courtyard enclosed by huts with their individual courtyards abutting on the common one is possible only in a homogeneous community which has no thought of high or low or pollution. This form continues with obvious refinements into the multicaste linear settlements in Orissa, Andhra and Kathiawar and the highly sophisticated 'pols' of Ahmedabad city, of which an account will be found in the Gujarat section. For example, the linear village appears with dramatic suddenness on the Trunk Road in Ganjam almost as soon as one crosses the border of Puri District from the east toward the west.

Next comes the stage when a householder can afford more than one hut. This happens mostly in areas of settled cultivation. Where the land has been traditionally free from depredations and bandit attacks, the householder goes in for separate structures. Where it has been historically subjected to raids and banditry, the interior of the house is segmented into two or three parts around a central courtyard.

In areas historically free from banditry domestic architecture of more than one hut to a household takes an open aspect. If the house is composed of two huts they are usually placed at right angles to each other and enclosed by a fenced rectangular courtyard, the huts forming one corner of the fenced rectangle. This type prevails mainly in the west and east coasts of the peninsula and southern India which is free from dry hot dusty winds [Sketch 4].

Kerala, Orissa, Bengal, Assam, Tripura and Manipur present variants of the two-hut-and-courtyard arrangement. The right angle arrangement of the two huts enclosed by a courtyard is often replaced by the two huts being placed parallel to and facing each other, the bigger hut facing east to get the first sun and the smaller hut facing west to house the cattle and be under constant watch from the bigger hut opposite [Sketch 5]. There is usually no fencing in either arrangement in Orissa, Bengal, Assam, Tripura and Manipur in the two-hut-and-compound house, a close line of fruit trees and shrubs serving for a fence and privacy. The other area where the house surrounded by its own garden and enclosure or fence holds supreme sway is Kerala. This distinctive feature of Malabar, Cochin and Travancore is very forcefully and dramatically borne in upon a traveller as he arrives at Kanjikode on the Coimbatore-Palghat highway in the centre of the Palghat gap. Settlements on the eastern half of the highway passing through Kanjikode are of the Tamilnad type while those on the western half are of the Kerala type.

The reader will be quick to appreciate that the right-angle or parallel arrangement at once opens up the possibility of two courtyards : one inner and another outer. Both are very much retained in the same homestead in the whole of eastern India, east of Puri, the Mahanadi basin in Chhattisgarh, Sahabad, Gaya and Patna in South Bihar.

In this entire tract covering much of Orissa, Bihar, Bengal, Assam, Tripura and Manipur, the parallel arrangement of two huts is quickly reinforced by the addition of a third and a fourth to complete the inner rectangle. The following is the classical arrangement in Rarh of West Bengal.

1. Main living hut on high plinth with a low caving verandah called big room or *Bara Ghar*. It usually has 2 rooms. The valuables and utensils are kept in the master's room.
2. Lumber room or tool-room for keeping the implements of husbandry. It is a smaller hut than (1) and on lower plinth and has a verandah which is called the *dhenkisala* or *dhenki* house (*dhenki*—rice husking pedal).
3. Kitchen or ***paksala*** or ***ranna ghar***.
4. Cattle-shed or *gosala* or *goal*. This is open and overlooks the inner courtyard.
5. The granary or *gola* or *marai* (grain store).
6. Straw stack or straw rick or *palui*.
7. Refuse pit or manure pit or *sarkunda*.
8. Washing tank or *pukur*.
9. Entrance to house. Entrant usually faces east when entering.
10. Fruit trees surrounding the house.

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Thus, a person sitting on the verandah of *Bara Ghar* can keep an eye on all property and on every movement in the house. In the thickly populated, tightly nucleated villages, however, the outer courtyard or garden disappears but the internal arrangement as depicted above survives [Sketch 6].

In both the Brahmaputra and Surma Valleys of Assam as well as in Cooch Behar and Jalpaiguri of West Bengal there is frequently a greater degree of elaboration inasmuch as there is a sizable garden to the west of the *Bara Ghar* as well as to the east of the pond. In such an arrangement there is often only a strip of land on the north and the south hemmed by a row of arecanut trees [Sketch 7].

In the great Andhra country (with the exception of the high-wind coastal tract of Krishna and West and East Godavari) the outer courtyard merges with the central yard and thoroughfare of the village but within each house there is a longitudinal alternation of room and courtyard as in Sketch 8.

Thus each house which is well flanked by houses with common walls on either side has practically three courtyards : (1) the village common or central courtyard; (2) the first courtyard between the cattle-shed and the main room which is used for storage of implements, grain and straw; and (3) the second or enclosed backyard which contains the well, the family orchard and washing place. This architecture commences from Ganjam in the east and obtains throughout Telengana and parts of Rayalaseema and proceeds up the Wainganga and Pench Valleys to the outer limits of Nagpur and Chanda in the north and Rajnandgaon and Durg in the north-east.

The idea of multiple concentric courtyards or a nest of courtyards one fitting within another is developed to its logical perfection in the temple architecture of south India, particularly in Kerala. The innermost structure in a Kerala temple is the sanctum or Sri Kovil which is surrounded by five successive boundaries called the Panchaprakaras (or five walls) [Sketch 9].

1. The antharamandalam or inner girdle.
2. The anthahara or Nalampalam or intermediate garland.
3. The Madhyahara or Vilakkumadam. The middle garland or hall of lamps.
4. The Bahyahara representing the Belivattam. The outer garland.
5. The Maryada. The dignity or outer wall.

In the houses of men of substance throughout the Malayalam-Tamil-Telugu-and Kannada country, even among the Panchalas who migrated from the south as far up as Nagpur, an arrangement similar to temple architecture obtains in domestic architecture so that it is difficult to say which preceded which. Also with the difference that the intermediate courtyards are eliminated and rooms are constructed in series one in front of the other in telescopic fashion [Sketch 10].

The doorways are placed in the dead centre, all in a line so that a person seated near the door in the innermost room (usually the strong room or master's room) can keep an eye on and control all movement in the house. The courtyard is placed outside the house and so are such things as the cattle-shed, grain store, etc. But the kitchen is housed in one of the inner rooms with the corner of the household god in it.

In tracts subjected in former times to periodic raids and banditry great attention was paid to securing and fortifying the courtyard the centrepiece of a house. A significant variant is the *nalukettu* in the Nair tharawad. The Nair was a warrior caste and it was formerly compulsory for

every adult Nair male to render military service to the king. There would be times when all able-bodied men would leave, leaving the women and children in charge of an old uncle. Security was therefore of the essence and the tharawad grew into an elaborate secure structure with ample provision for the sun and rain to pour into different sections through the *nalukettu* [Sketch 11].

The *nalukettu* was thus a diminutive courtyard or quadrangle open to the sky often with a paved pit below ground level with deep walled covered verandahs going right round it. There would be a *nalukettu* in each section of the tharawad.

The simplified *nalukettu*—The open rectangular quadrangle in the centre surrounded by a deep walled and cover verandah running right round it—serves as the seminal pattern in the entire Deccan peninsula, including the whole of Madras, Mysore, Telengana Region of Andhra Pradesh and Maharashtra. In the poorer houses in both Maidan, Malnad and Karnataka, the prevailing design (called Thottimane) is of a rectangular walled enclosure with the four roofs of tile sloping inwards to leave a central rectangular opening. The four sides are broad and raised within and form all the living, storage, cooking and cattle space. This kind of 'roomless' house is extensively to be seen in Dharwar and the maidan districts of Mysore and in the Marathawada districts of Maharashtra. In the less indigent houses there is a single row of separate rooms usually along the western wall behind the western verandah housing the kitchen, the bedroom and the store. The walls and plinth are of stone and the doors are substantial [Sketch 12].

Each house has a high plinth and stone walls, stone being plentifully available in this great lava tract. In the main Desh tract of Maharashtra (the Western Ghats districts), Marathawada, Vidarbha, Mahakoshal, the village site having been small and fortified against raids in former times and still being extremely crowded, houses used to and still have sometimes common walls and often common roof so that an entire village from the air looks like a veritable beehive with the little sun-wells and converging slopes of roofs in the courtyard looking like cells. But the great bulk of the homesteads are of course free standing and separated from one another. This type or tightly nucleated geometrically regular clusters extend right up to Durg and Bilaspur in the east and to Kathiawar in the west and bears an extraordinary resemblance to the Mohanjodaro, Harappa and Lothal excavations in the west, Nagarjunasagar, Konda in the south and Nalanda in the east. The geometric regularity was imparted by the use of dressed and undressed stone which imposed its unit scale on the structure itself in stone tracts and in the case of Mohanjodaro or Lothal by the size and shape of the brick used. That this type of domestic architecture leading to a beehive pattern of neighbourhoods in towns and whole hamlets or villages travelled as far up as the western Siwaliks is only too clear from the extraordinarily layered, almost subterranean domestic architecture one sees for example, in Mohalla Chowgan Slathian in the heart of Jammu city. This tightly packed "neighbourhood" architecture, which makes an entire hamlet look from the air like a single complex with innumerable rooms, secret corridors and cunning passageways, a kind of Chinese magic cabinet. It will be recalled that what one has already noticed in Andhra country is a linear rendering of this complex rectangular structure where the pials or covered front verandahs of houses joined wall to wall and roof to roof are in one long straight line, the rooms and courtyards too, being lined up at the back in series.

This 'neighbourhood' architecture, by means of which an entire village looks like a giant loosely jointed Nair tharawad, flourishes in the plains of western Mysore, the whole of Maharashtra, Gujarat Plains and Kathiawar, travels up the Malwa tract, crosses the Trans-Jamuna Alluvial Veneer, and pervades the entire Jamuna-Ganga Doab from Etawah to Allahabad. It extends to south Bihar but suddenly stops short at the arc formed by Shaharsa, Monghyr, Gaya and Shahabad. This entire tract is low rainfall area (by the standards of the coastal areas), has continental extremes of heat and dust, and is comparatively unharassed by the shifting courses of streams and rivers. Water supply is mainly obtained from wells sunk in the courtyard itself of each house, that is, by anyone who can afford to sink a well. If one brings himself to imagine the present city of Varanasi being slowly re-excavated from under the earth, he would probably be not a little surprised to find its domestic architecture and layered, subterranean structures particularly in the old

area adjoining the river front, very similar to Mohanjodaro's. Varanasi is the oldest living city and so domestic architecture and village settlements in the entire tract just described may be a very ancient tradition indeed.

In the whole of Madras the prevailing domestic architecture is also the centrally situated open-to the sky quadrangle with the sloping roofs converging from the four directions; a deep wide inner verandah running around it, fortified by a line of rooms around this verandah. An interesting and essential item is the Kudam, which is a doorless recess adjoining the inner verandah and facing the open quadrangle. This Kudam is always placed to the right as one enters the inside of the house [Sketch 13].

A very ingenuous adaptation of the courtyard in multi-storeyed houses is the distributed uncovered terrace on each floor in many parts of Rajasthan, perfect examples of which are to be found in Udaipur, Jodhpur, Ajmer and Jaipur. This was achieved by distributing the terraces on each floor in a large, multi-storeyed house, usually a palace, by means of which the open terrace on the top-but-one storey would look like a private terrace, another on the top-but-two storey would look like a high rectangular opening and so on, until the ground level courtyard would look like a sun-well from the top [Sketch 14].

1. Courtyard at ground level seen from the top.
2. Courtyard at top-but-three storey seen from the top.
3. Courtyard at top-but-two storey seen from the top.
4. Courtyard at top-but-one storey seen from the top.

This device, it will be recalled is chiefly seen in the Udaipur and Amber palaces of Rajasthan and also in Agra Fort.

This type of distributed terrace and sun-well plan was possible in a really large palace covering several acres at a time. It was found necessary to abridge it to a series of sun-wells when it came to the question of building smaller multi-storeyed houses. The dry, desert climate and the extremes of temperature, which discouraged exposure and made household drying no great problem even in the shade, led to diminutive sun-wells in the large Rajasthan cities, in Delhi, up to as far north as Amritsar and Lahore. One can still see hundreds of buildings in Chandni Chowk in Delhi where the sun-wells are five or six storeys deep and no more than 10 feet square, surrounded on each floor by a narrow railed verandah culttered up with the daily chores of cooking, dressing of food, sunning of pickels, drying of clothes, and so on.

In large mansions these sun-wells expand into courts. The most magnificent examples of courts are to be found in the Datia Palace in Datia, in Fatehpur Sikri and the North and South Blocks of New Delhi Secretariat which are only too palpably modelled on Datia Palace as the original.

The sun-well or the court, as the circumstances permitted, lent itself very well to the requirements of the *purdah* in Muslim times. In the east the inner court was called the Chowk-milan and travelled as far as Bengal where it readily found a responding chord. The four disjointed huts on four sides of the courtyard joined up at the corners and formed a closed courtyard.

In the Himalayan north, the courtyard is largely let into the house with the help of the overhanging verandah or porch. The house in its turn splits itself into the verandah as it does into the courtyard in the plains.

It will be appreciated that it is only the comparatively affluent that can afford to have an enclosed and secured courtyard within the house, because building round a courtyard is dictated not only by sufficiency of means but the need to assure security, privacy, protection from dust storms and to keep the water supply reasonably safe. It is the urge for security and quick intercommunication in times of danger, the paucity of village sites and the need to cut down building expense that led to an extensive architecture based on common walls and common roofs. And it was also the need for protection against accidental village or kitchen fire, coupled with the paucity of straw in non-rice tracts, that led to the adoption of potter's tile in sloping roofs in high and medium rainfall areas and of flat mud roof in dry areas. The sudden dramatic change in the course of less than a quarter of an hour of flight in a slow plane from the flat mud roof in the beehive structures in the

dry west to the potter's tile roof beehive in the west-east in the transitional zone of Fatehpur District in the Jamuna-Ganga Doab is very instinctive. Thus it is money and means or the lack of them and the question of common security that bring the courtyard inside the house or keep it out. Further, it is whether the courtyard should be within or without that determines the architecture. When the courtyard is within the house, the roofs are usually flat or ridged with two slopes. When the courtyard is outside the house, the roof may be, according to means, single sloped (*Ek-chala*), two sloped (*Do-chala*), four sloped (*Char-chala*), eight sloped (*At-chala*) and even twelve sloped (*Bara-chala*) [*Sketch* 15].

The location of the courtyard again is inseparable from the questions of privacy and security. Thus in peaceful areas where privacy is prized the courtyard is invariably in the centre as in Bengal, Assam, Punjab and western Uttar Pradesh. Where security depends or has depended in the past on the community as a whole there is a tendency to place the courtyard in front in addition to a separate enclosed courtyard or quadrangle at the centre of the house as in the whole of Madhya Pradesh, Gujarat, southern and western Rajasthan, parts of Maharashtra, Kerala and Telengana. In areas traditionally free from lawlessness a courtyard was considered safe even at the back of the house as in parts of Mysore and all of Tamilnad.

The tables and the thematic and pictorial maps delineate how local materials determine the shape of the actual structure in each geographical area and what additional reinforcements are required for the roofs and walls. The account for each State gives the details.

An acquaintance with Indian domestic architecture will immediately emphasise the impression of a closed pattern so far as the hut or house itself is concerned. This closed pattern persists surprisingly enough even as far north as peasant houses in Japan. In recent times Japan has been hailed as having evolved the quintessence of the open type of architecture where nature is let into the house and the house steps out to nature. But it is overlooked that this type of architecture in Japan obtains mostly in public buildings and the mansions of the rich whose inmates do not have to work ten hours out in the open every day with the sun, rain and dust beating on their backs. The Japanese peasant who grows rice lives within a closed house, even if his house should be within a stone's throw of Kyoto, architecturally the world's most enthralling city, and this house is almost as dark, secure, compact and even secretive as a Deccan peasant's house.

The basic things that need protection in any peasant home anywhere in the world is the draft cattle and livestock which are the peasant's main wealth and working capital, the grain store, the hearth and the household god. The household god is generally housed near the hearth, so that he will not be forgotten and will be the first to be offered food in a symbolic way when it is cooked. The grain, if it is rice and therefore bulky, has to be stored in a waterproof and mothproof grain store outside the house but in full view of everybody. If it is millet or wheat it is stored in stout *Kothis* or earthenware vessels or constructions inside the house close to the hearth. The cattle and livestock must always be in full view of the master when he is resting. As he lives about sixteen hours out of twenty-four in the open a man can do without much opening or ventilation in his room. In fact he needs the opposite thing: natural darkness which lends privacy inside which is otherwise too bare to afford privacy and decency for man and wife. Besides, he needs the kitchen smoke to form a coating around the wood, bamboo and thatch to protect them from moths and weavils.

This little account would be incomplete without a word of orientation. Elaborate tests and rituals still prevail in most parts of the country on the selection of a good site. There are propitious days on which the foundation should be laid and the first construction begin. There are also general rules regulating the direction a house must face to take the best ventilation. This matter of capturing the prevailing breeze in spring and summer and shutting out the wind in winter is of the utmost importance in urban housing, where modern housing colonies oddly enough neglect this vital consideration to build uncomfortable but superficially attractive complexes.

In traditional rural housing, however, the sun is more important than ventilation, except in the *baithak* where men congregate for gossip. The house is therefore usually oriented to the sun and not the prevailing breeze in spring and summer, although some consideration is paid to the latter. The main living room must invariably face due east so that the brightening eastern sky and the

first rays of the sun may wake up the head of the household and hurry him to his field. The main living room faces the east as much, to get the beneficent morning sun, which serves as a morning alarm, as to avoid the afternoon sun which is said to be scorching and unhealthy. There is the other desire of course to catch the south breeze through windows giving on the south of the main living room and the eastern breeze in the covered verandah which invariably forms part of it. The *Baithak* must invariably face the prevailing breeze in spring and summer and allow for cross ventilation. The cow-shed must be so situated, whenever space permits, that its floor gets the rays of the westering sun to dry up well and get rid of its odour.

There seem to be no discernible religious or traditional injunctions as between one community and another regarding orientation.

B. VILLAGE SETTLEMENT PATTERNS

IT WOULD BE AS right as not to claim that the four basic settlement patterns—the dispersed cluster, the linear cluster, the tightly nucleated rectangular or shapeless cluster and the isolated household—have strong regional distributions. The four pattern do indeed enjoy regional exclusiveness to a certain extent but they interpenetrate in many areas other than border zones, the greatest tract of interpenetration being Madhya Pradesh on which the main regions seem to converge, and run into each other in a complicated tangle.

Apart from age-old social mores and hierarchies regulating the Indian village community, the broad determining features of rural settlement patterns seem to be four. First, the terrain and waterpoint; secondly, the needs of cultivation; thirdly, the needs of security and defence; and fourthly, the interrelationships and hierarchy of castes and the strength of the *jajmani* system. It is one or other or a combination of several or all that gives a village its distinctive settlement pattern. This also explains how in the same natural zone one may come across one or several or all the types.

The isolated homestead may be expected in undulating terrain, where waterpoints are frequent, fertility is low and either hoe or shifting cultivation obtains, so that each family can without difficulty establish itself in the centre of sloping land, which provides its own drainage and prevents water-logging. Such hilly terrain is usually wooded and provides natural defence against isolated attacks. Houses are usually placed atop hillocks or knolls and the space between houses which go up and down is shared between them. Waterpoints are frequently to be found in the valleys. Such villages, consisting of isolated homesteads are, therefore, to be found mostly in those hilly undulating tribal forest areas which conduct hoe or shifting cultivation and gather forest produce, have given up clan feuds and periodic raids, and in places have been taken to terraced cultivation in independent lots.

The main tracts of isolated homesteads are natuarlly the settled hill regions free from turmoil in western Sikkim, Kurseong subdivision of Darjeeling (West Bengal), Palamau (Bihar), Surguja, Raigarh, parts of Sidhi and Shahdol, Balaghat and Mandla (Madhya Pradesh); the western and hilly northern areas of Orissa; the Uttarkhand districts of Uttar Pradesh, the Doda, Anantnag and Udhampur districts of Jammu and Kashmir, the Bhil areas of Mewar and Bagar in Rajasthan, Jhabua and Dhar of Madhya Pradesh and part of the two Nimar districts. In the Peninsula proper one gets the isolated homesteads in the wooded source regions of the Krishna and Bhima rivers, the Nilgiris, the Malnad districts of Mysore and the highland areas of Kerala [Sketch 16].

But as one will readily concede on a moment's reflection the isolated homestead atop hillocks and knolls is to much of a luxury in this densely populated land and this phenomenon in its unalloyed state is to be found only in a very few areas. In most places the isolated homestead is intermixed with dispersed clusters of usually 2 to 5 households and even 10 which make for convenient economic units in shifting cultivation, pasturing, irrigation and terracing in terraced cultivation. In fact the isolated homestead is to be found in few areas indeed, and the dispersed cluster is more the rule as in the hill districts of Assam, Uttar Pradesh, Himachal Pradesh, Punjab, the upland districts of the Aravallis, Mewar and Bagar of Rajasthan, Jhabua, Dhar, the Nimars, the Mahadeo Hills of Central Provinces the hilly districts of Orissa, the

Nilgiris, the Konkan Karnataka Transition, the Malnad, and the highland areas of Kerala, the Nallamalais and Velikondas of Andhra Pradesh [Sketch 17].

The next and more considerable settlement is the linear cluster, in which a village is arranged in a ribbon in two parallel rows of houses facing each other across a wide thoroughfare which is used as the village common or courtyard to house the community's grain, straw and grass stacks, agricultural implements, carts and even animals.

Such a linear settlement is clearly dictated by the needs of economic organisation in agriculture, sanitation, pooling of human and mechanical resources, harvest, social and cultural cohesion, water sources, security and defence. In valley areas like Manipur or Balaghat, Mandla or Raigarh of Madhya Pradesh these linear settlements are situated along a stream, which protects one flank, while the other flank is protected by the rising slope [Sketch 18].

In plain areas as in Ganjam, Andhra, Bastar and those part of the Gond country in Chhattisgarh and the north-western and north-eastern Orissa hill tracts where neither defence against human raids nor security from wild animals is much of a problem, the linear cluster takes a shape that has already been described in the section on house types. In tribal tracts each village of linear settlement is occupied by a single community but in the non-tribal tracts of Orissa and Andhra where this settlement is shared by a number of castes, usually headed by the brahmans whose section forms the agrahara (front garland) or the head of the settlement. Almost always the castes are held in a tight bond of *jajmani* or allocated service-and-return arrangement to the village temple to which belongs most of the immoveable property in land. The linear settlement is much in evidence in the brahman Sasan or grant villages of Orissa and the Andhra territory where the temple grants are numerous. The castes begin by being more attached to one another by contracts of a religious nature to render service to the temple than by temporal or secular ones unto one another, which of course develop with time as a matter of course. Religous and secular *Jajmani* coalesce which helps to hold tight the linear settlement pattern in Orissa and Andhra.

The non-tribal linear settlement is also extensively found in Gujarat but here it takes the form of parallel lines, often paired face to face alternately flanked by back to back. The high point of sophistication of the linear settlement occurs in the Pol, where a closed face to face linear settlement is crowned at each end by gates. But linear settlements as in Gujarat, even when they occur in rural areas, are a distinctly urban pattern of parallel communication arteries intersected at right angles by cross-roads. They have the regular and conscious geometry of urban neighbourhoods and not the organic linear development of a village. The linear settlement,—row upon row of long, segmented structures,—is the standard architectural type in the industrial areas of Bombay, Madras and many southern cities and is no doubt an adaptation of the traditional *cheri* in urban *bustees*.

In tribal areas, the linear settlement occurs in a valley or plain where raids and fighting have become a thing of the past. Very seldom is a ridge preferred in such areas except where the valley itself is subject to severe run-off during the heavy rains. Such linear unfortified ridge settlements are found mainly in the hill districts of Assam, Sikkim, Darjeeling, parts of Manipur, Uttar Pradesh, Punjab, coastal Karnataka districts of North and South Satara, the Malabar district of Cannanore and the highland districts of Kerala. Each of these areas is subject to heavy rainfall, so that the valleys used to be ridden with malaria in the past. In the Gond country, fortifications and stockades are still to be seen and elaborate arrangements are made to secure the water points.

In tribal areas still subject to feuds and raids from neighbours, as in Nagaland or parts of Manipur, the fortified linear settlement on the top of a high ridge is the invariable rule. The flanks of the ridge are usually steep. Here, too, elaborate care is taken to protect the water points—springs or water falls—as well as the passage to them. The standard settlement, which is well stockaded at the flanks and back and protected with stout gates at the front, is divided into two or three segments in linear series each called a Khel. Each segment has a central long courtyard or common faced by huts on either side. Wherever houses are on stilts the front uncovered platform or porch faces the courtyard at an angle. Each Khel is protected by a separate

gateway and fortification. The homogeneity of the linear settlement is emphasised by the presence of only one Morung or dormitory for unmarried young men and another for unmarried young women in the whole village. Most warlike tribes engage in shifting or *jhum* cultivation, but the Angamis are brilliant exceptions and have carefully tended terraces which often decend down the entire hillside in all directions and have elaborate irrigation arrangements improvised with the help of deep channels and bamboo pipes.

In the Kangra Hills, Kulu and Manali and again in Jammu and Kashmir, settlement and cultivation occur alternately down the vertical flutings or ribs of a hillside, each rib or fluting called a *Phati* being marked by water courses on either side. The settlement gives the appearance of an upward pointing triangle, thicker at the base and it is sometimes difficult to class it either as an isolated cluster or a linear settlement. The small rivers and canals of Assam, Tripura, East Bengal, West Bengal and Orissa also make for linear settlements on both banks, facing each other, the canal or small river itself providing 'the courtyard' or thoroughfare as it were as well as the waterpoint. So persistent is this pattern, determined no doubt by the necessity to claim as much of the waterfront as possible, that it travels across the whole of deltaic Burma, across Thailand and on to Viet Nam. The linear settlement also assumes dendritic patterns along the courses of dead and dying rivers, beautiful examples of which are to be found in Tripura, Murshidabad, Nadia, Jessore, 24-Parganas and Howrah of West Bengal, Balasore of Orissa, the Desh districts of Maharashtra; Thanjavur, Ramanathapuram and Tirunelveli in Madras and also in the Ladakh plateaus.

Another ubiquitous example of the linear settlement is the fishing villages, especially those which put out to sea in country craft, rafts or catamarans as also in estuaries or along big rivers.

The only areas, other than Andhra, where the strong influence of caste makes for linear settlements are Kerala and the South Coromandel coast. The South Coromandel coast is strung with linear *cheris* and villages of upper castes and so is the coast of Kerala, although in the latter the orchard around each house in the line sometimes gives it the appearance of an isolated homestead. In both areas there are numerous temple villages as in Andhra, and each caste is tied by *jajmani* responsibilities to the temple.

The great eastern valleys and deltas—the Brahmaputra, the Surma, Manipur, Tripura, Bengal and Orissa—are conditioned by the need to keep the house and village settlement above the flood level. Being a vast rice and jute plain with monotonous levels which also requires that the water be embanked and stored in the fields, the village settlements have to be raised above the usual flood level. Earth has to be found for raising the homestead land and this is done by digging a pond. Since the weather is moist and humid, long and large mud walls or walls made of vegetative matter do not last long, nor do long and large roofs of straw against the heavy rainfall and high winds. Besides a sufficiency of drying and activity area for domestic chores has to be provided. The pond, the raised site, the limitations imposed by the weather and the housebuilding materials make for the four-square homestead structure around a courtyard and a tightly nucleated village with the cultivated fields arranged radially all around.

This tightly nucleated village in Eastern India is very seldom a shapeless agglomerate although the need for raising the homestead area by earth work militates against a very regular, rectangular settlement pattern. But it is almost always a rough rectangle criss-crossed with regular *alis* and *galis*, crossing each other roughly at right angles. The best and oldest segments are of course occupied by the upper castes and defined as *paras*. The *ali* as in Mahratta territory—the word is probably borrowed—is the narrow lane which passes between houses of the same caste facing each other. The *gali* or wider lane is the thoroughfare which divides settlements of two castes, and the *para* or neighbourhood is often made up of not one but more than one caste. This central nucleus, almost always a rough pond-pitted square or rectangle, is however allowed to lose its sharpness of definition by haphazard clusters of ill-built huts of the lesser supporting castes at the fringes of the village which lends a certain misleading shapelessness to the village of the eastern deltas and valleys. But anyone who has observed the settlement patterns from the air or examined aerial photographs cannot fail to be struck by the regular rectangular layout of the Bengal, Tripura, Assam and coastal Orissa village.

We may now examine the circumstances that invariably attend a tightly nucleated rectangular village. The tightly nucleated rectangular village or at least the village core is mainly to be found in the rice areas, like Assam, Tripura, Bengal, coastal Orissa, the Seonath-Mahanadi basin in Raipur-Bilaspur (Madhya Pradesh), the Palar, Ponnaiyar, Cauvery, Coleroon, Vaigai and Tambraparni basins of Madras. It is found in the entire tank irrigated tracts of the south : the Maidan districts of Mysore; the Rayalaseema districts of Andhra Pradesh and the Kongunad or upland districts of Madras. In short, the tightly nucleated village is invariably found in fertile, plain, well-watered country, where for considerations of economy and maximisation of effort the fields are arranged radially around a village. It is also found in the entire Maharashtra country where fortification was the usual rule for each village until recent times and the settlement area or *gaothan* is usually severely limited and crowded. The fourth large tract in which the four-square planned rectangular village occurs is the canal-irrigated tracts of Ganganagar (Rajasthan) and the Punjab districts. The recent settlements in the Hariana tract, Ambala Division, Hoshiarpur and Delhi are all regular, mostly rectangular and sometimes radial.

We may now draw several conclusions from the above geographical distribution of rectangular or well-shaped village settlements. In Maharashtra country the regular rectangular shape is primarily imposed by the cellular structure of the settlement and the extreme congestion and smallness of the settlement area dictated in former times by the needs of defence and fortification. In each village several castes, attached to one another *jajmani* arrangements, made for orderly settlements in the *ali, gali* and *bol* patterns and the thoroughfares also served, as in Bengal, for drainage. With the withering away of deference needs Maharashtra villages are now slowly sprawling into shapelessness through the erection of structures for housing tenants at will on land around the village site.

In the three remaining areas the rectangular settlement seems to be associated with large streets or stretches of natural or artificial water and the need of a variety of castes and communities to live together, the lands being agriculturally hospitable and irrigated and it being incumbent on peasants to have their fields radially arranged around their village. These villages have of course invariably small hamlets or dispersed clusters around them, either close to the core village or a little away, which tends to lend them a certain shapelessness. But regular and exclusive wells or water-points, still solemnly regulated by the unwritten laws of pollution, do not fail to impose an orderly pattern. The regular and rectangular core village is sharply defined by the prevalence of flat, mould-tiled roofs surrounded by the thatched roofs of the poorer and less acceptable castes and communities. Fine examples of this archetype are to be found throughout Tamilnad and the Maidan tracts of Mysore, but especially Tamilnad. Here every village is laid out in a rectangle, and is criss-crossed at right angles with almost geometric precision. The core village is tiled and substantially build but the outer fringes consist of tight cluster, of thatched huts. Some of the really large villages give the impression from the air of a large luxury yacht brought up at the rear by bumboats and fishing smacks, or of a rhino surrounded by tick birds.

The great home of the shapeless but tightly nucleated village is the dry continental regions, enlivened by a mixture of plain and upland country. In this great tract the agricultural fields are ranged all round a village and, because drainage is no great problem, but the dust, sun and lack of water are, the tightly nucleated village tends to swell outwards through ill-defined extensions. In Punjab, the Rajasthan uplands and the great Pindari country of outlawry in northern and western Madhya Pradesh, and in western Uttar Pradesh the requirements of defence demanded tight nucleation which was helped by the absence of pollution by sight. Most of the ancient villages in this great tract, which still enjoy a low population density, originally began by being regular and rectangular in shape. But if caste continues to dominate, this great tract may, with increase in population density, as in Uttar Pradesh and Bihar, develop into an amalgam of tightly nucleated villages and dispersed clusters, that is, a proliferation of hamlets around the main village.

For, it is difficult to find any other satisfactory explanation of the prolixity of hamlets as satellites to the main village or the curious feature of tight nucleation interlaced with dispersed clustering that one comes across in central and eastern Uttar Pradesh, North Bihar, Monghyr and Bhagalpur. The multiple explanation of this phenomenon

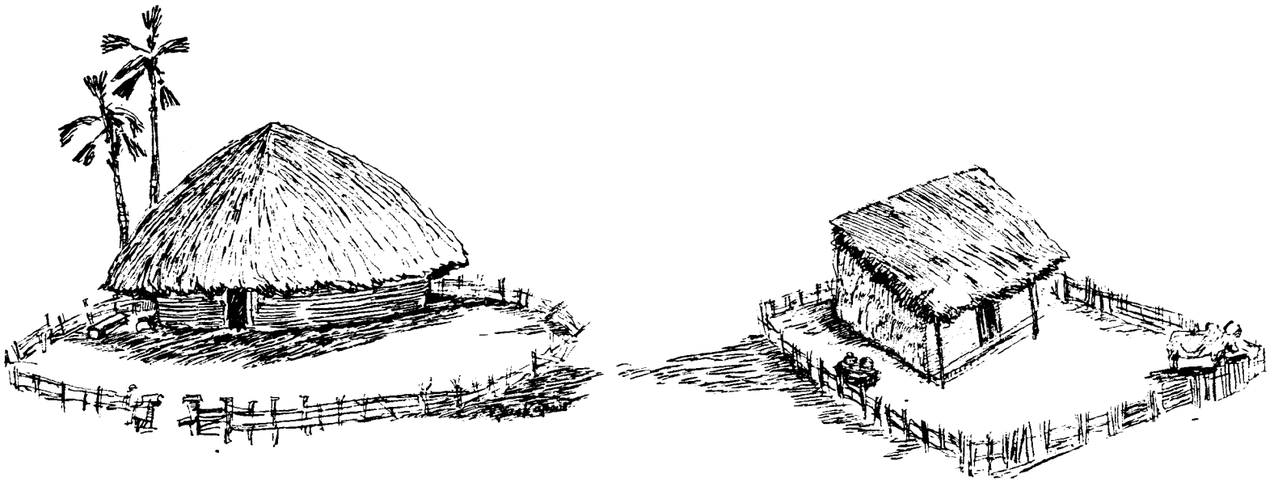
seems to be (i) the need of tight nucleation of the principal castes in the main settlement with the fields arranged around it, (ii) the need to settle tenants and serving castes within call, (iii) the need to disperse settlements to command the available waterpoints and irrigation sources.

Two common orientations of villages are observed on flat terrain where village water supply is dependant on artificial tanks or bunds. In villages originally founded by Muslims, the tanks and bunds are invariably oriented east-west, that is, the longer arms are stretched that way and villages arranged around them. In villages founded by Hindus, the tanks or bunds invariably stretch north-south with the settlement around them.

Thus the prevalent forms represent various stages of social and economic organisation and resource mobilisation. The isolated homestead, the dispersed cluster and the linear cluster, particularly when they are associated with tribal populations, represent certain elementary forms of social organisation and resource mobilisation. The tightly nucleated village, whether rectangular or shapeless, usually makes more complex forms of resource organisation and social mobilisation, *jajmani* or mutual interdependence and exploitation. Since, except for certain purely tribal tracts, India is no longer strictly homogeneous over large stretches in respect of social organisation and resource mobilisation, different layouts, naturally enough, interpenetrate but it is curious how nature, instead of being subdued by man, still imposes itself very effectively on human settlement patterns.

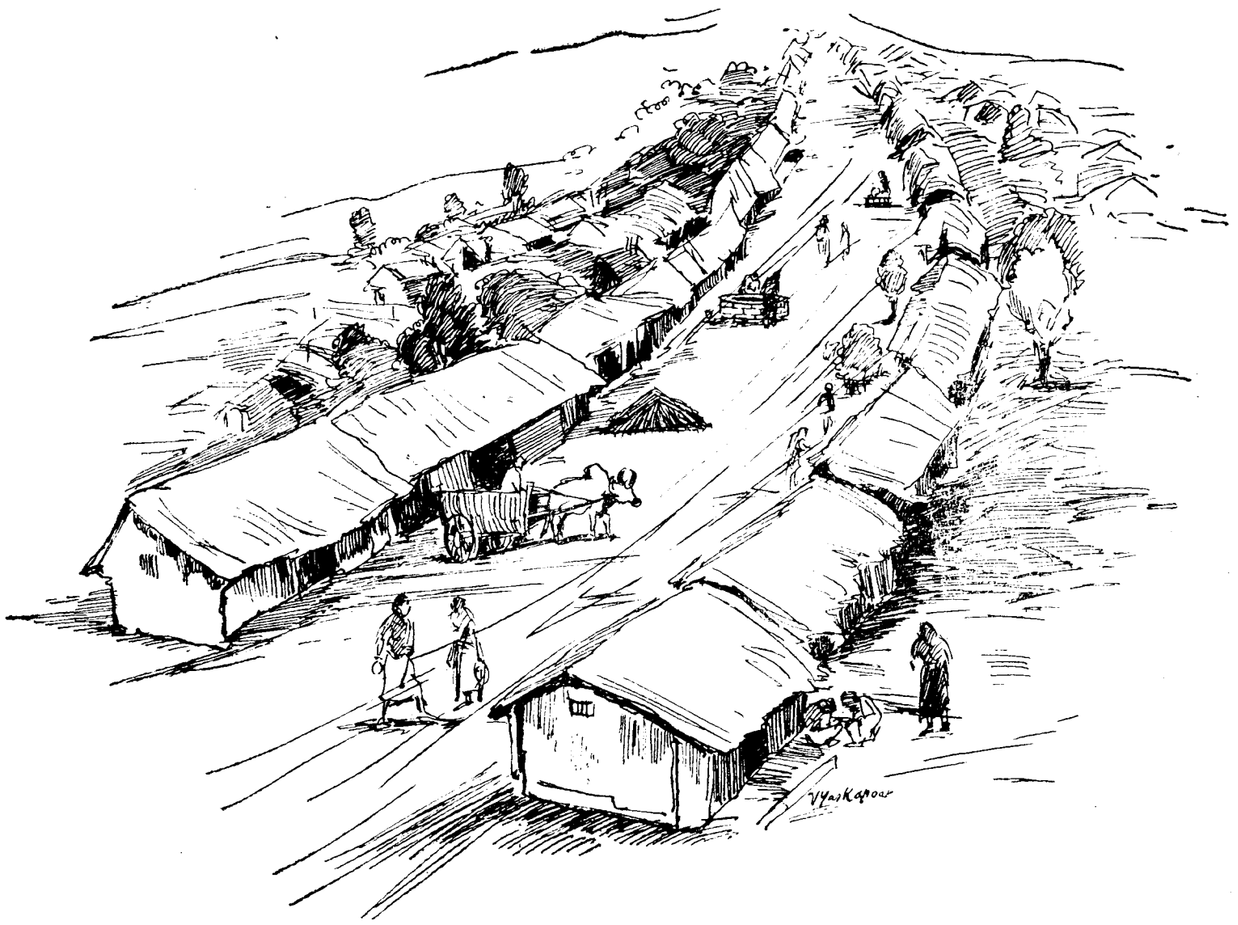
It is a matter of no small satisfaction that it is for the first time that the Census of India has been able to undertake this very detailed survey of house types, settlement patterns and building materials. It has been augmented by a wealth of visual documentation and analysis and thanks to my colleagues is now 'vast in scope and rich in instruction'.

Sketch - I

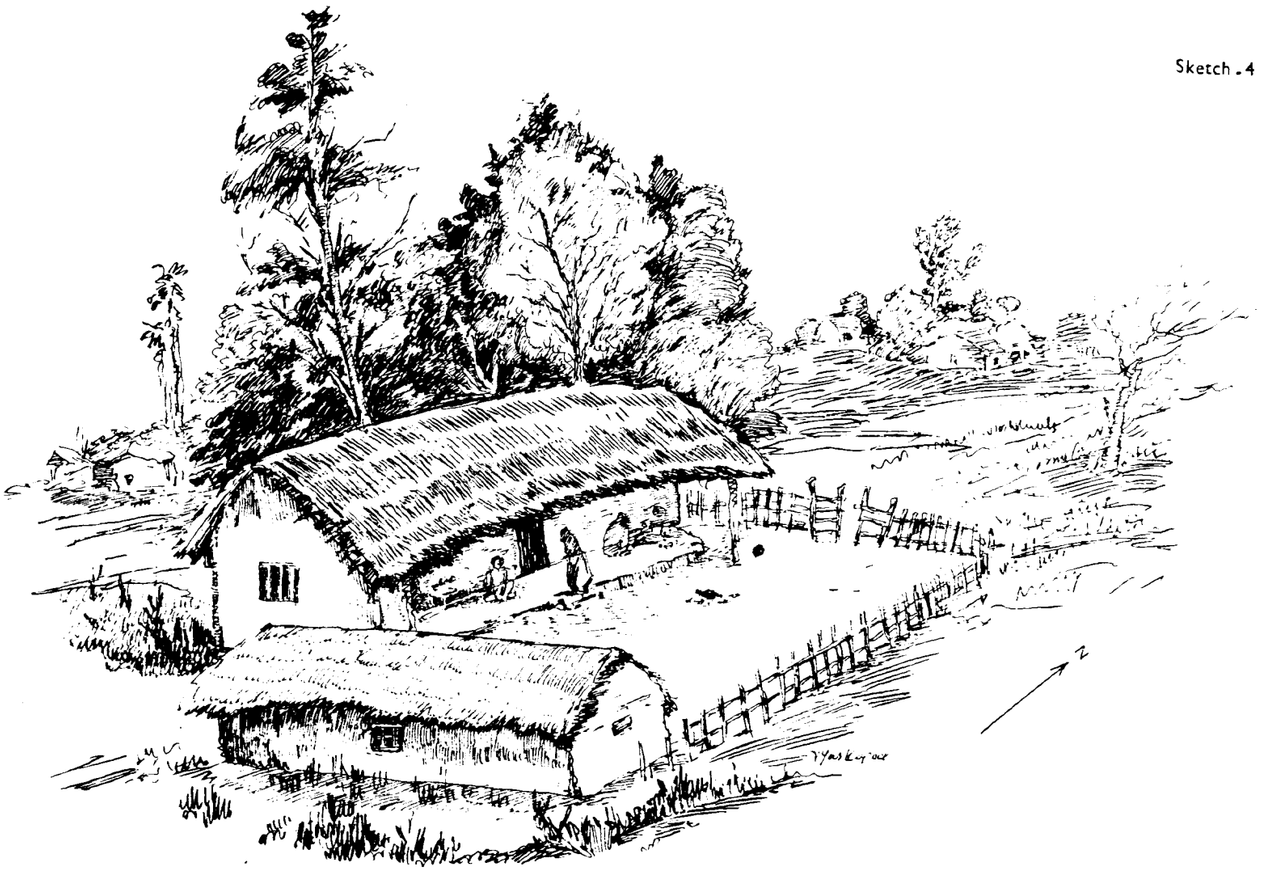


Sketch . 2

Sketch - 3

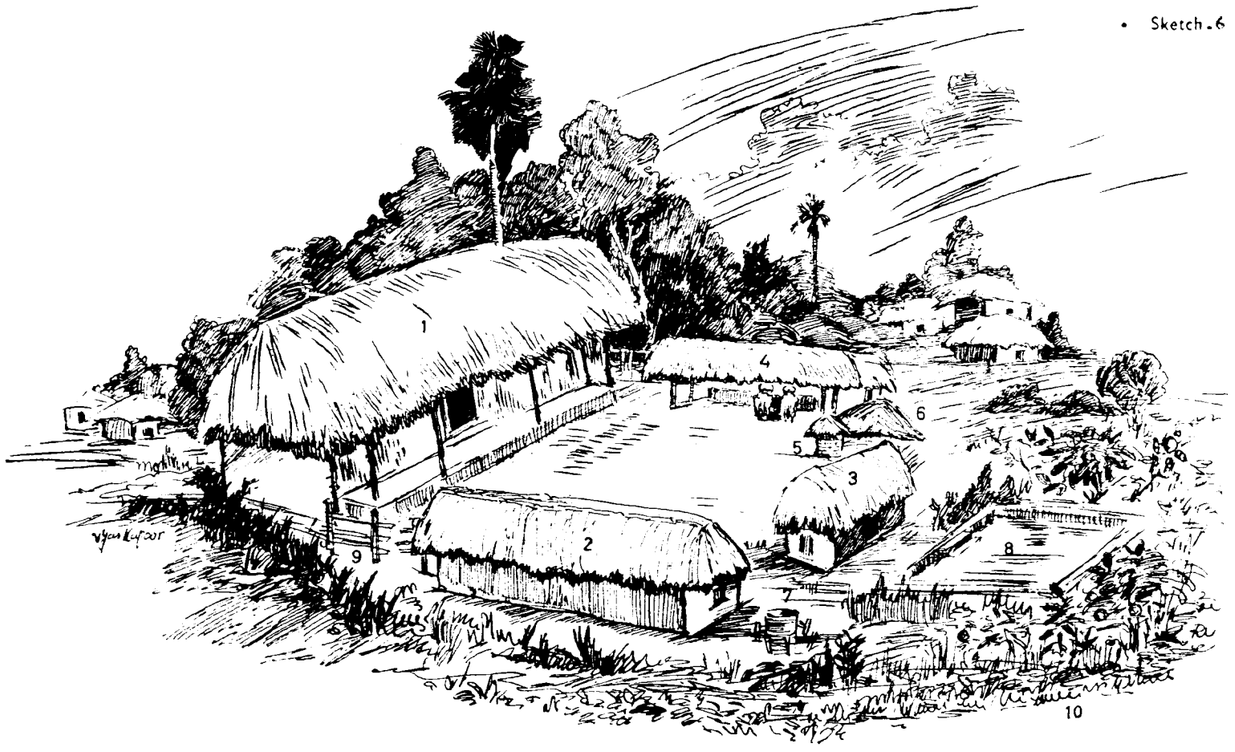


Sketch . 4

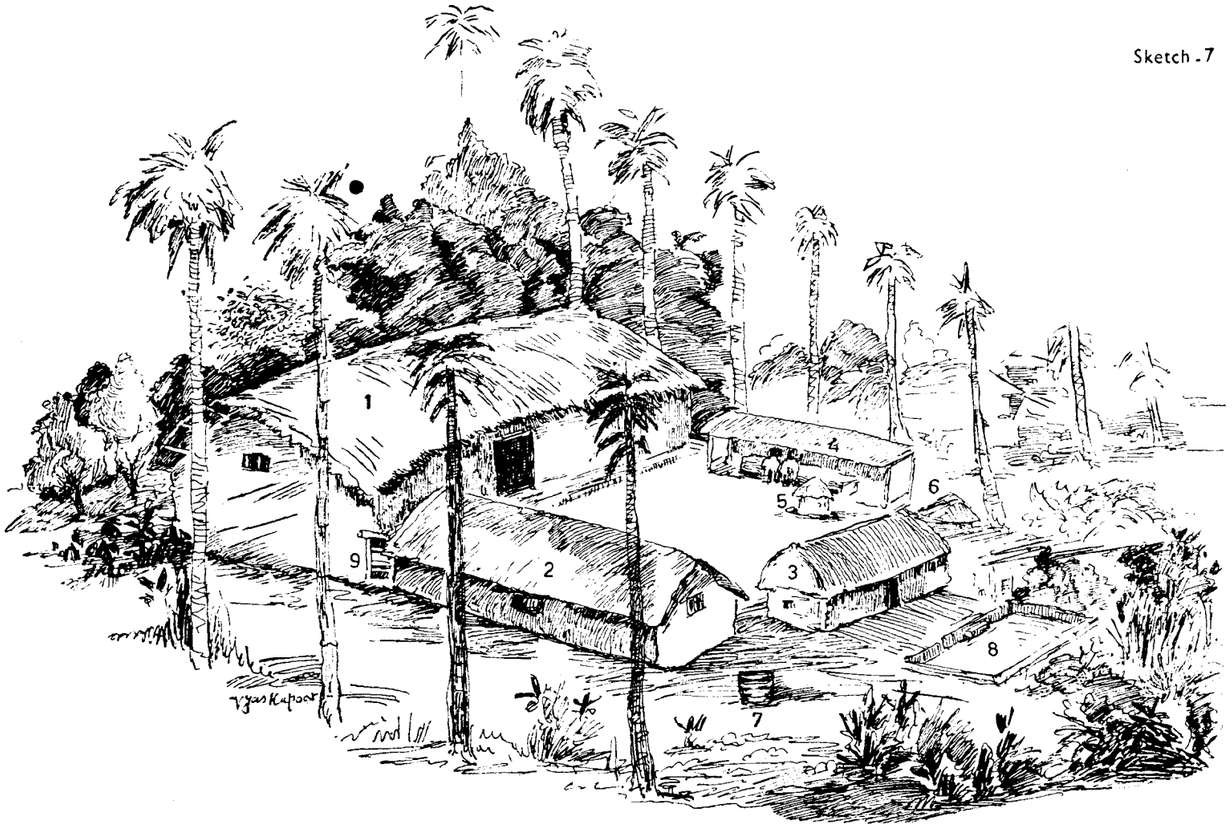


Sketch . 5

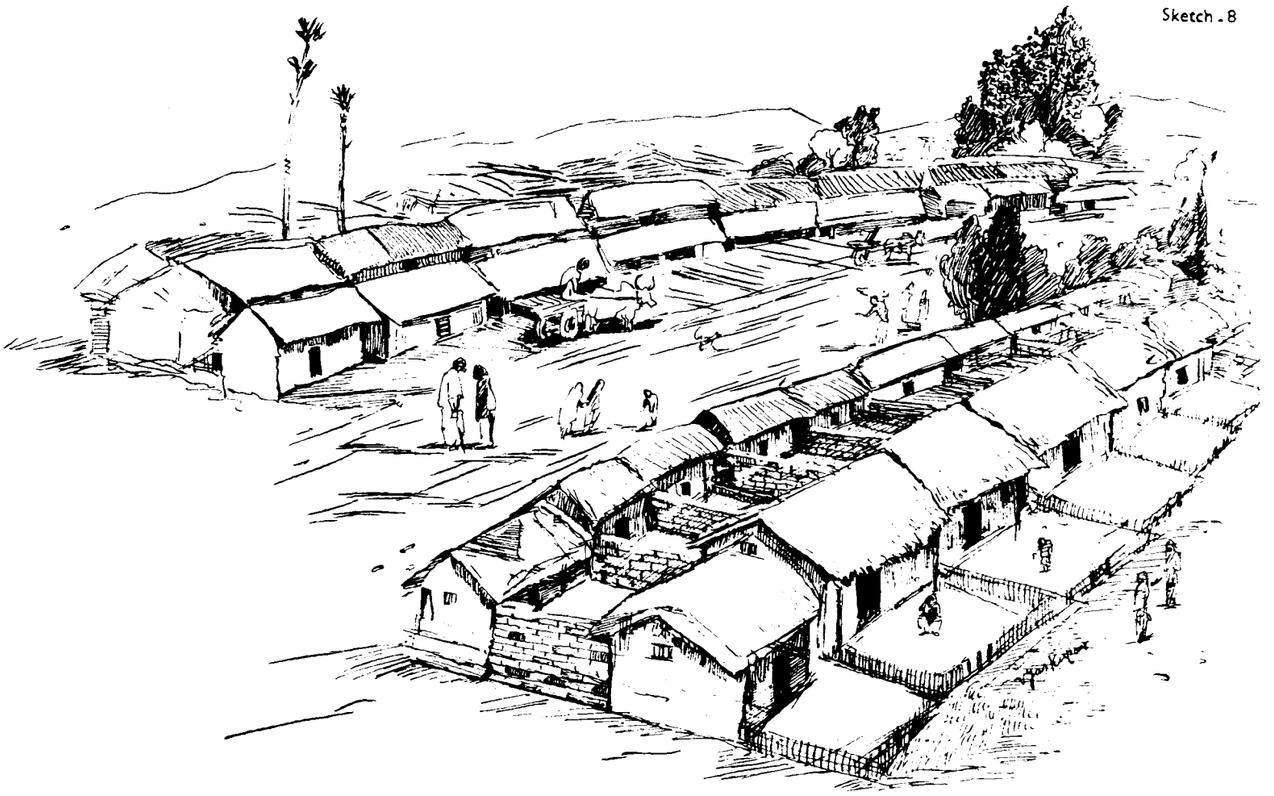
Sketch - 6



Sketch - 7



Sketch - 8



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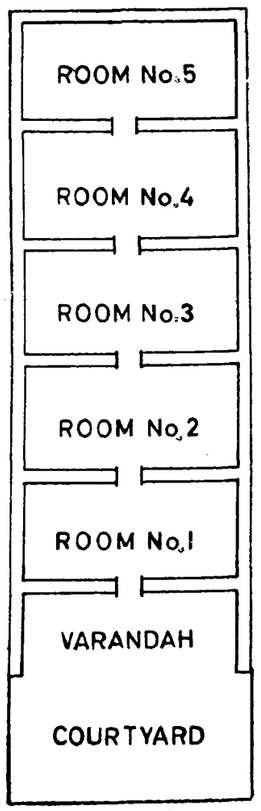

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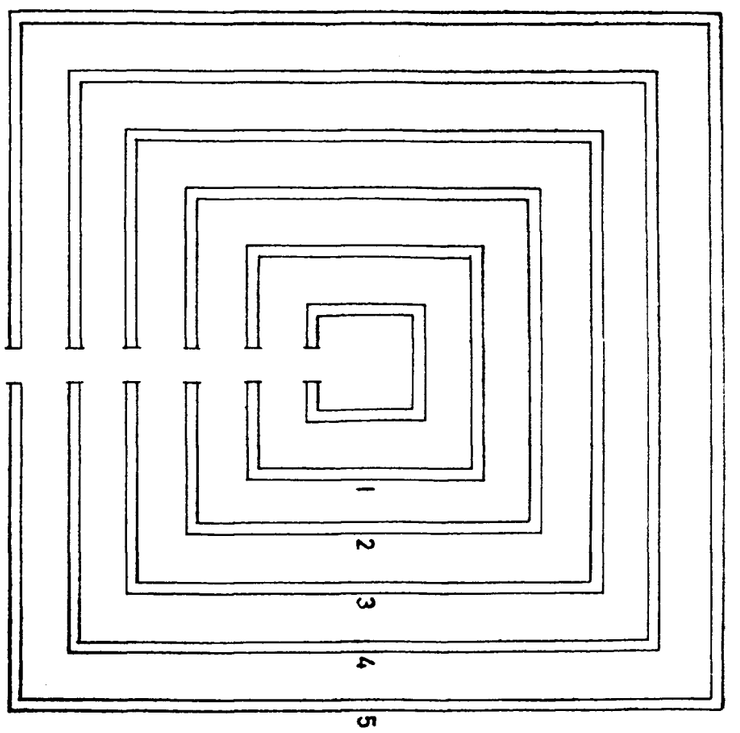
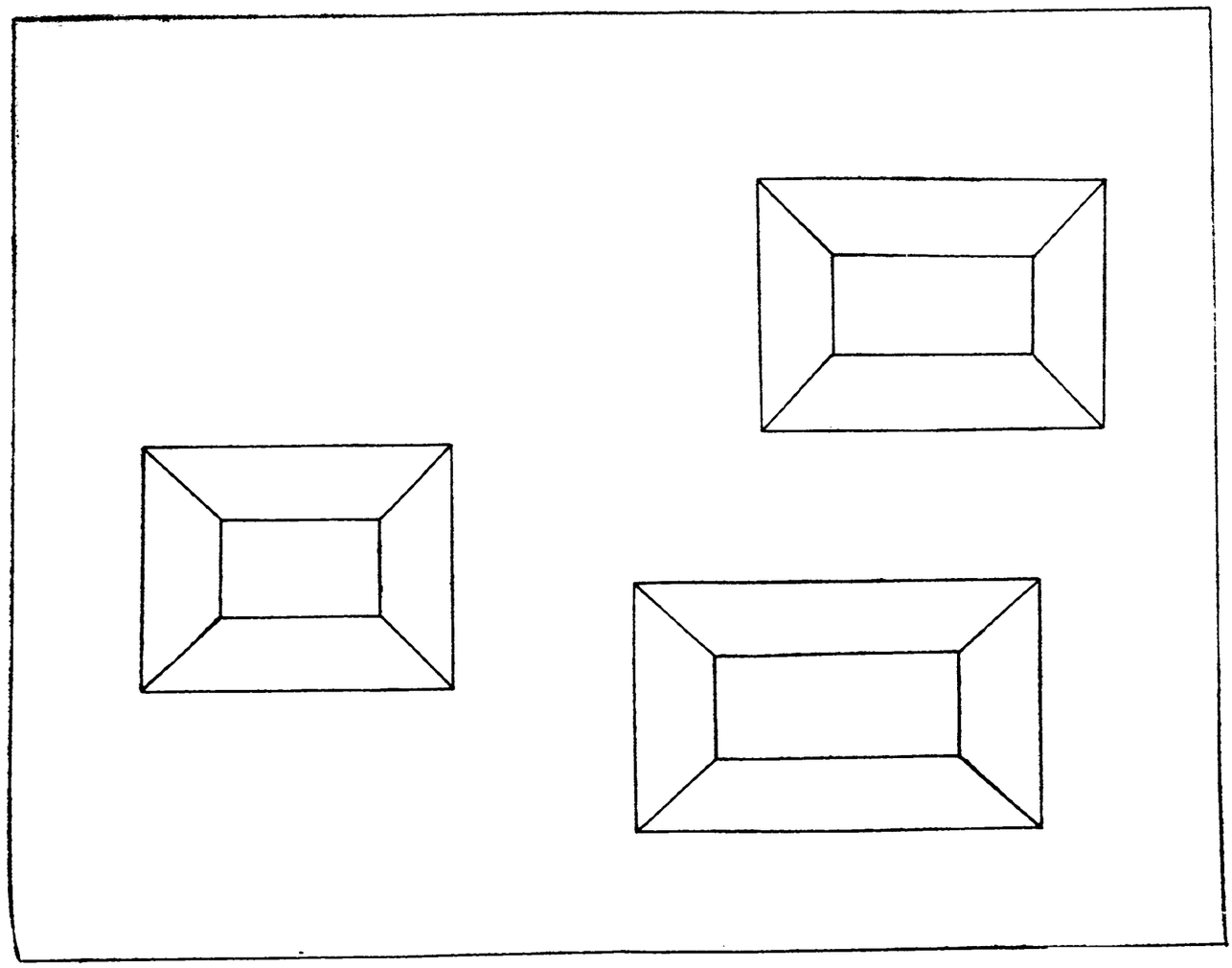
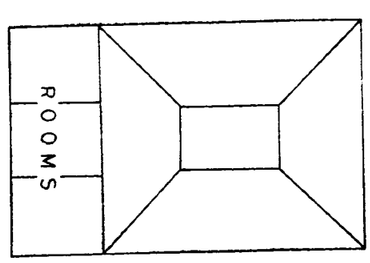


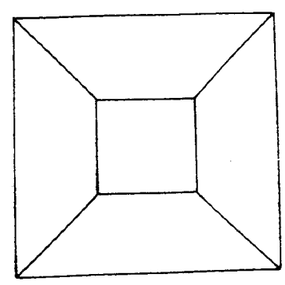
Sketch - 11

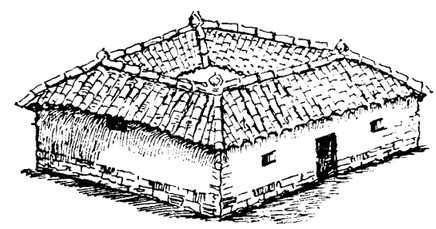
[Thematic view from the Top]



Sketch - 12







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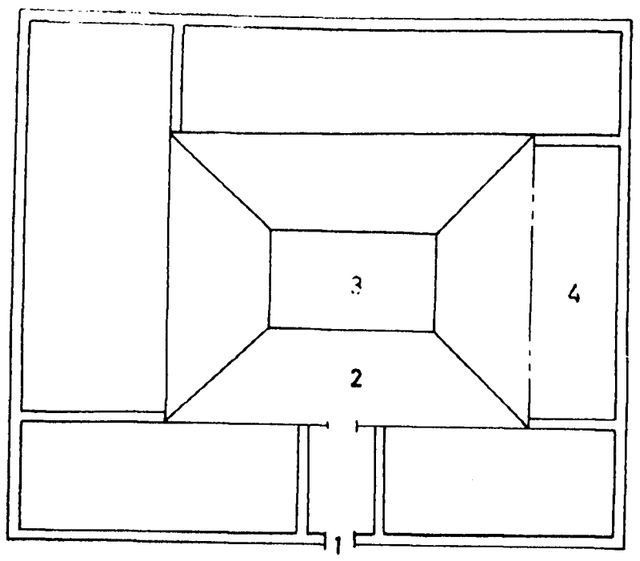
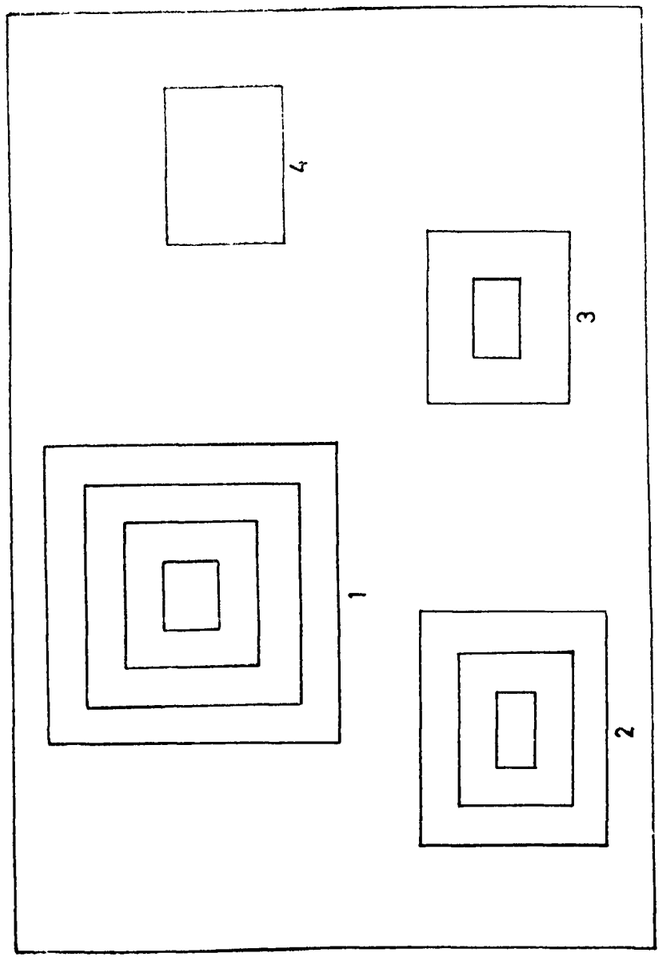


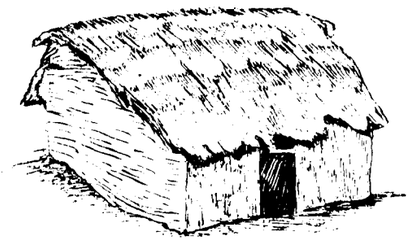
1. Entrance
2. Covered verandah around open to the sky quadrangle
3. Open to the sky quadrangle
4. Kudam

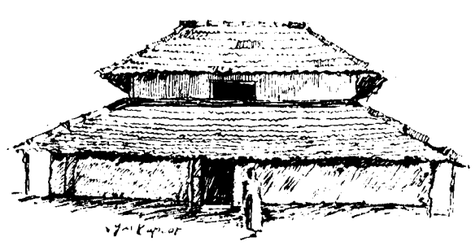
Sketch - 14



[Thematic view from the Top]

Sketch - 15





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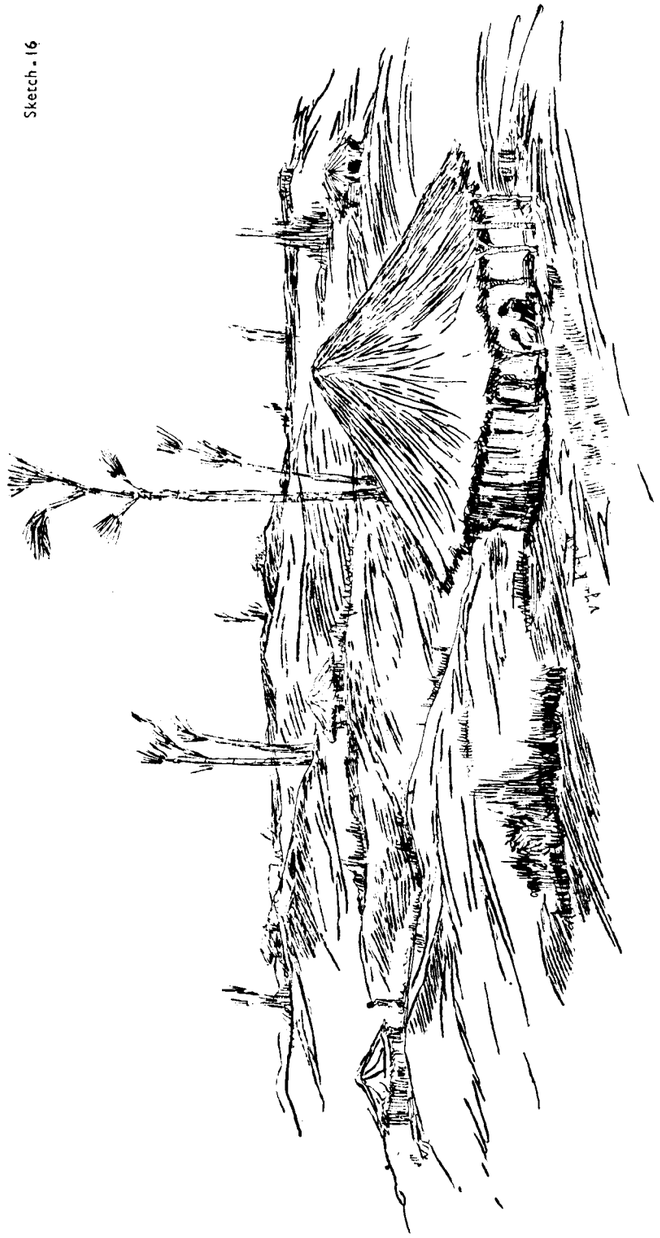
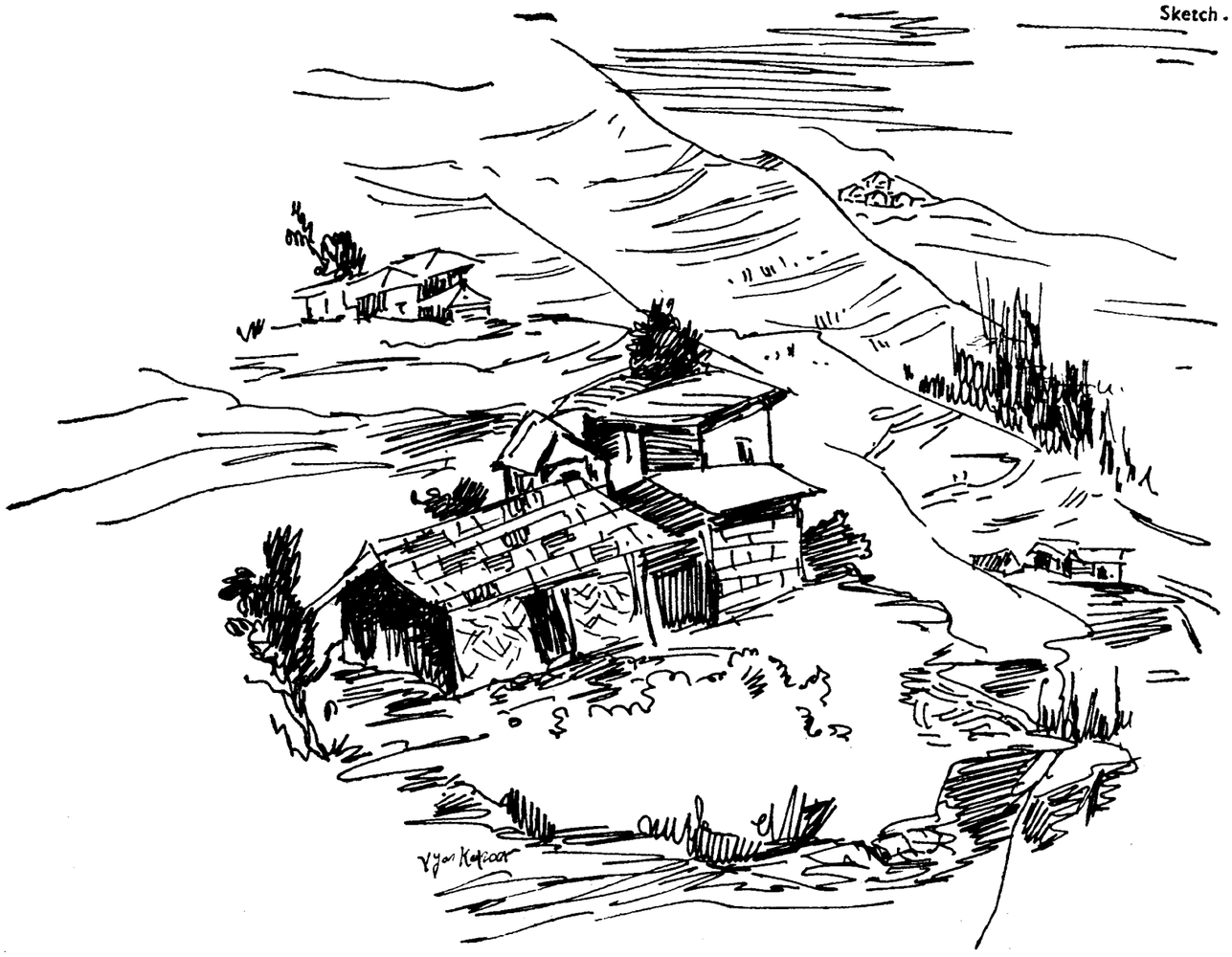
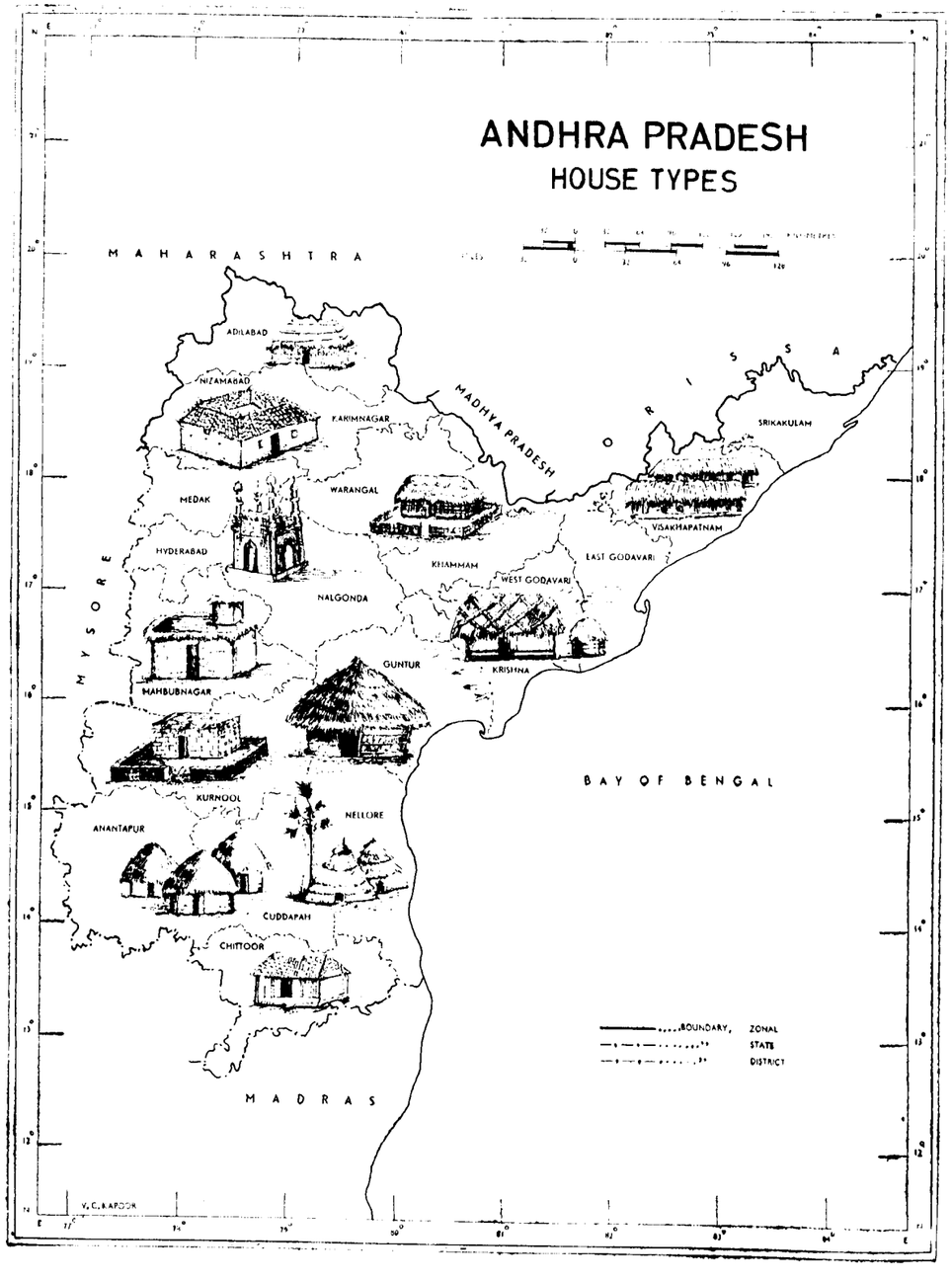
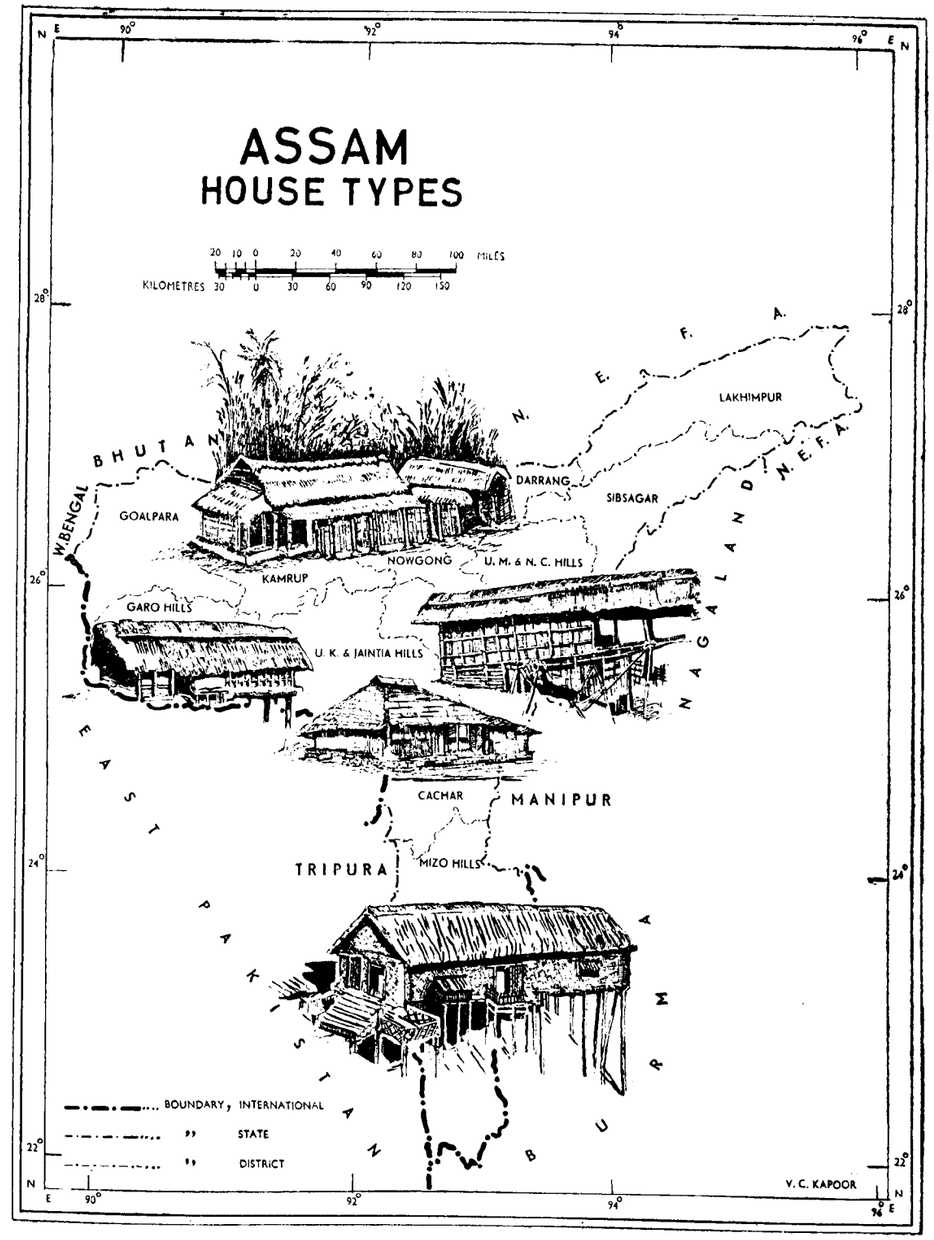


Sketch . 17

Sketch . 18




ANDHRA PRADESH
HOUSE TYPES
MAHARASHTRA
MADHYA PRADESH
ORISSA
MYSORE
MADRAS
BAY OF BENGAL
ADILABAD
NIZAMABAD
KARIMNAGAR
WARANGAL
MEDAK
HYDERABAD
NALGONDA
KHAMMAM
WEST GODAVARI
EAST GODAVARI
VISAKHAPATNAM
SRIKAKULAM
GUNTUR
KRISHNA
MAHBUBNAGAR
KURNOOL
NELLORE
ANANTAPUR
CUDDAPAH
CHITTOOR
BOUNDARY, ZONAL
" STATE
" DISTRICT
V. C. KAPOOR


ASSAM
HOUSE TYPES
MILES
KILOMETRES
BHUTAN
W. BENGAL
N. E. F. A.
LAKHIMPUR
DARRANG
SIBSAGAR
GOALPARA
KAMRUP
NOWGONG
U. M. & N. C. HILLS
GARO HILLS
U. K. & JAINTIA HILLS
NAGALAND
EAST PAKISTAN
BURMA
CACHAR
MANIPUR
TRIPURA
MIZO HILLS
BOUNDARY, INTERNATIONAL
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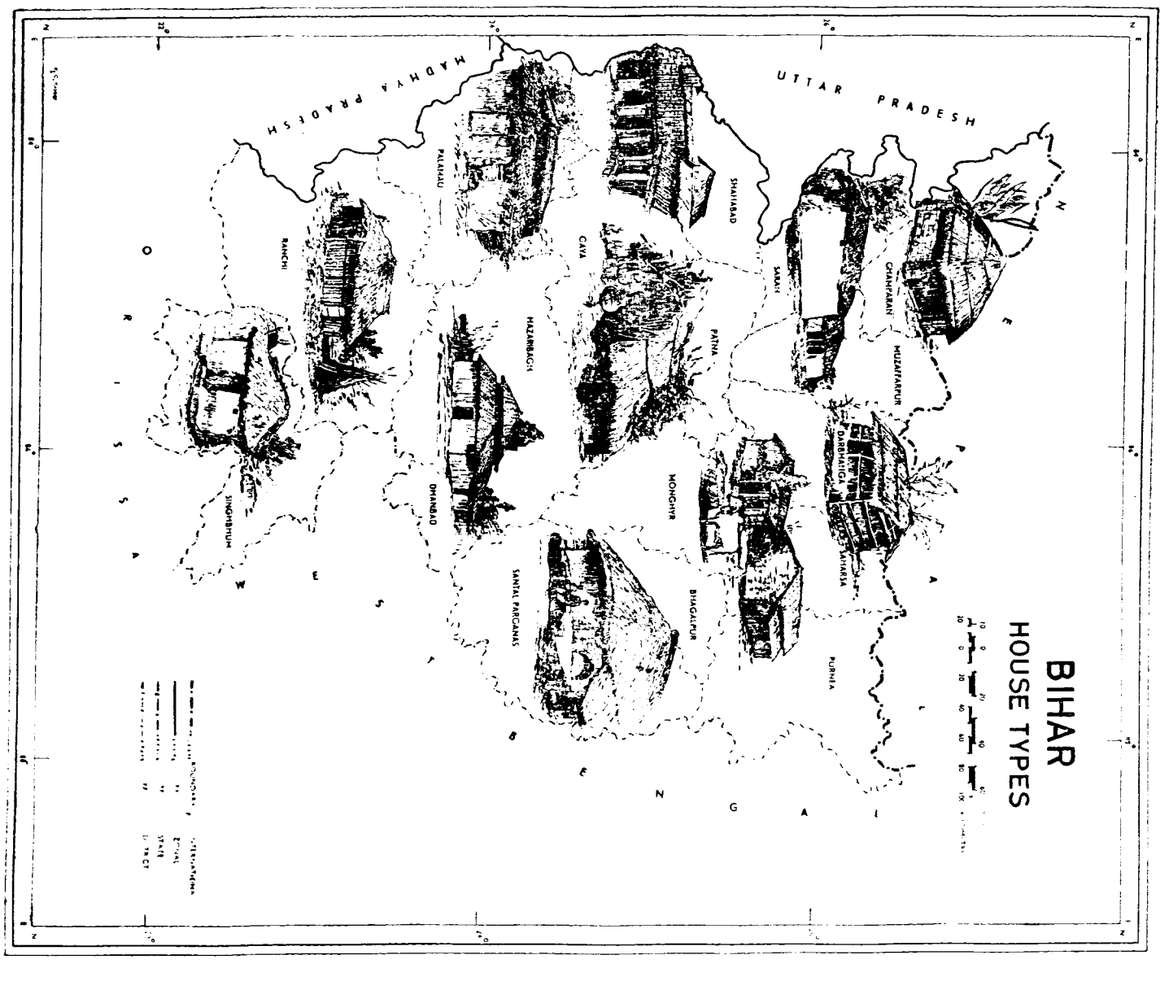
BIHAR
HOUSE TYPES
UTTAR PRADESH
MADHYA PRADESH
CHAMPARAN
MUZAFFARPUR
DARBHANGA
SARAN
SHAHABAD
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GAYA
HAZARIBAGH
PALAMAU
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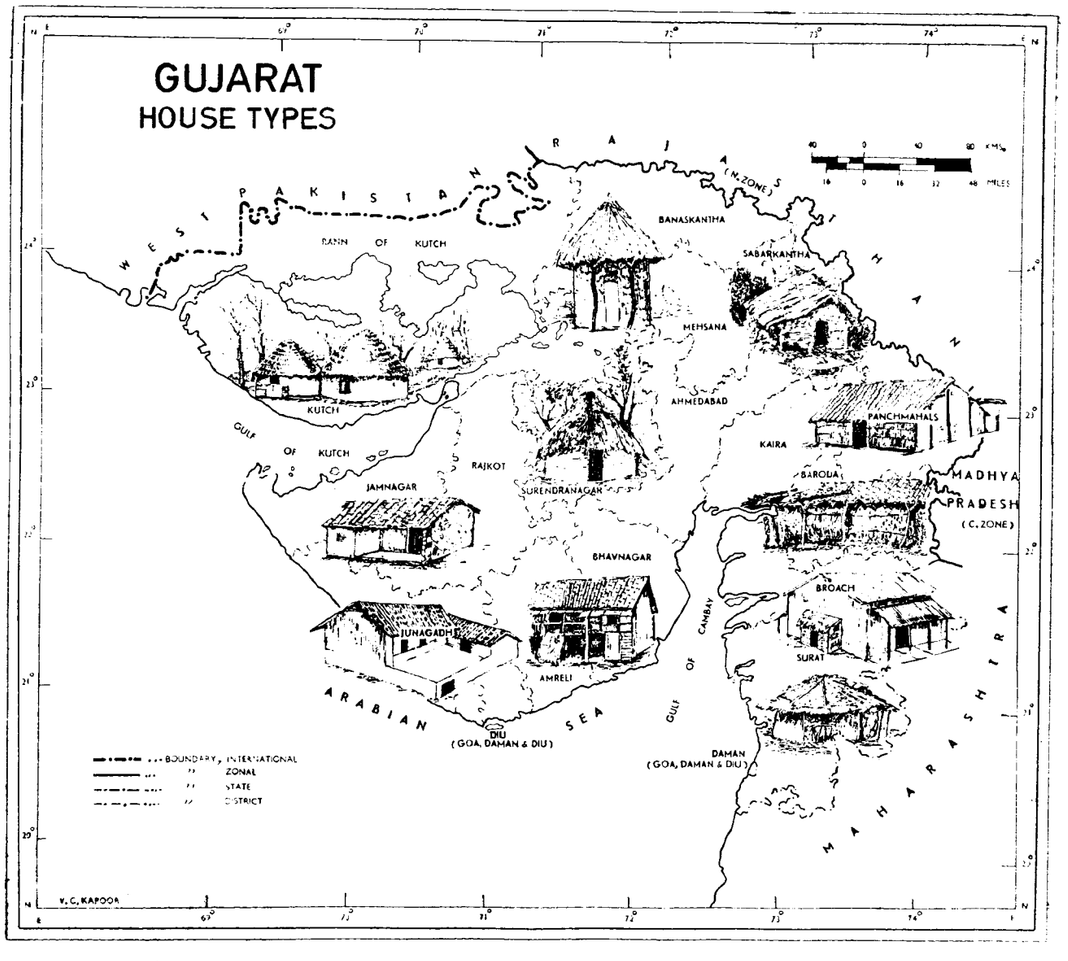
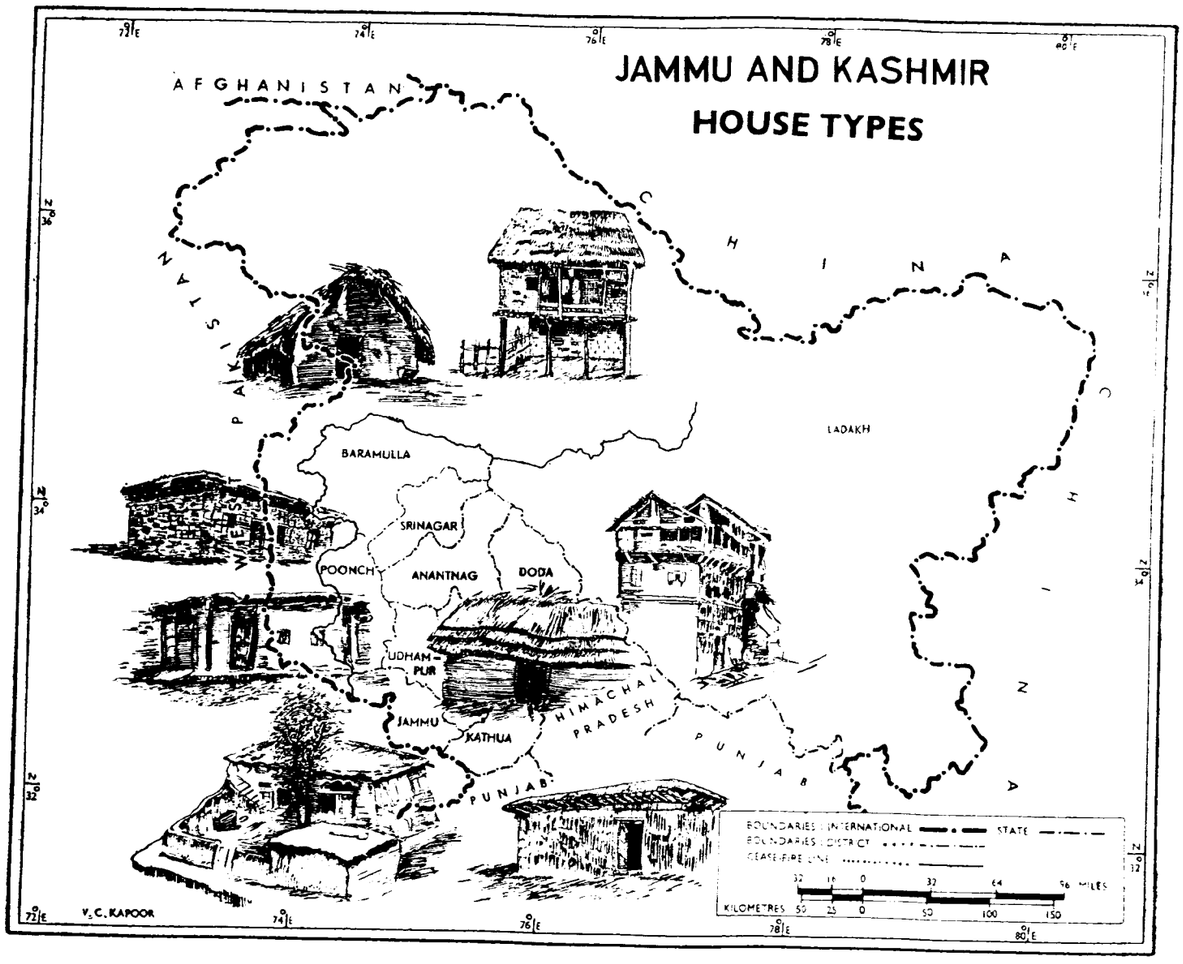
MONGHYR
BHAGALPUR
SAHARSA
PURNIA
ORISSA
BENGAL


GUJARAT
HOUSE TYPES
WEST PAKISTAN
RANN OF KUTCH
KUTCH
GULF OF KUTCH
RAJASTHAN (N. ZONE)
BANASKANTHA
SABARKANTHA
MEHSANA
AHMEDABAD
PANCHMAHALS
KAIRA
BARODA
MADHYA PRADESH (C. ZONE)
RAJKOT
JAMNAGAR
SURENDRANAGAR
BHAVNAGAR
JUNAGADH
AMRELI
BROACH
SURAT
GULF OF CAMBAY
ARABIAN SEA
DIU (GOA, DAMAN & DIU)
DAMAN (GOA, DAMAN & DIU)
MAHARASHTRA
BOUNDARY, INTERNATIONAL
" ZONAL
" STATE
" DISTRICT
V. C. KAPOOR


JAMMU AND KASHMIR
HOUSE TYPES
AFGHANISTAN
PAKISTAN
CHINA
LADAKH
BARAMULLA
SRINAGAR
POONCH
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DODA
UDHAMPUR
JAMMU
KATHUA
HIMACHAL PRADESH
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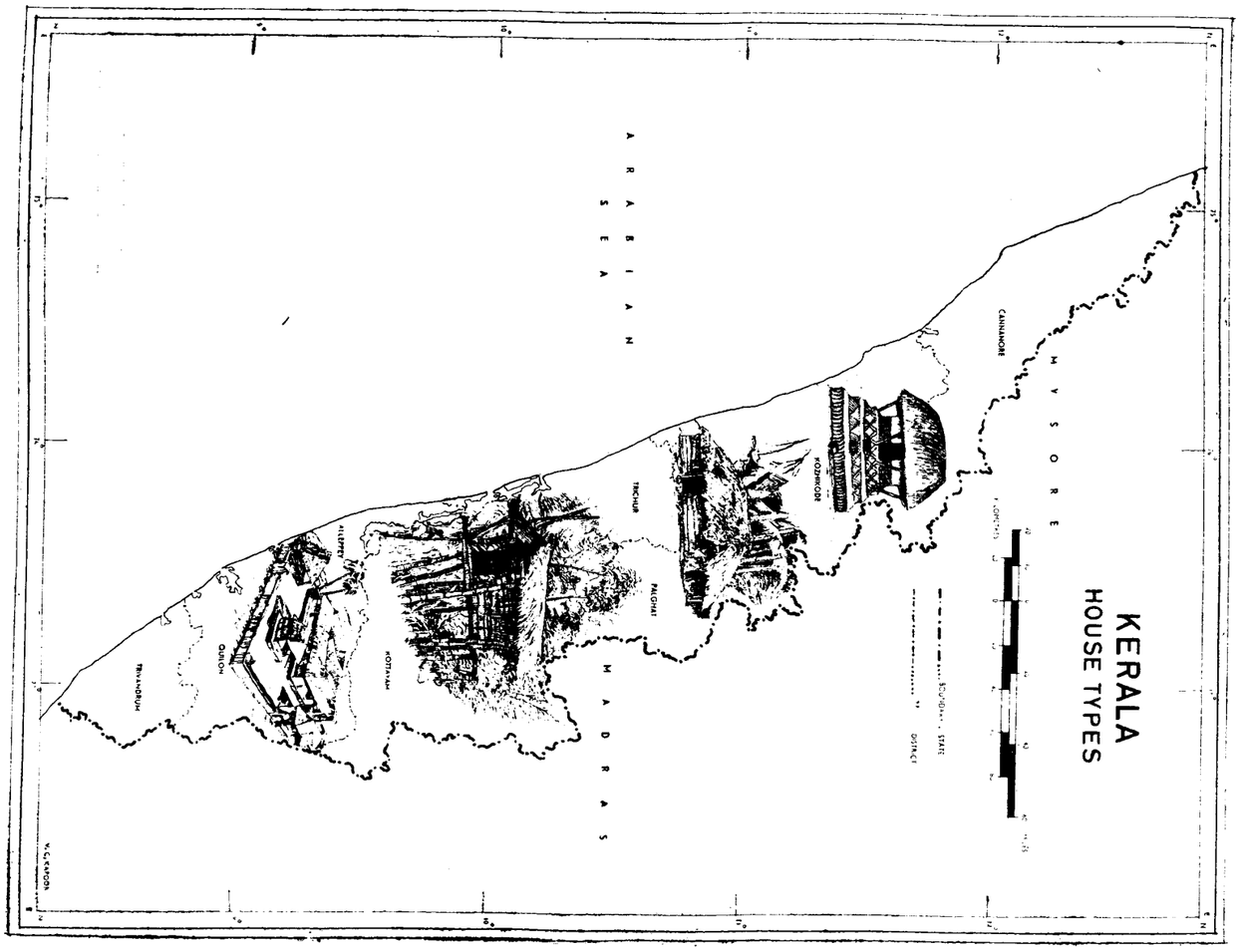
BOUNDARIES : INTERNATIONAL
STATE
BOUNDARIES : DISTRICT
CEASE-FIRE LINE
MILES
KILOMETRES
V. C. KAPOOR


KERALA
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CANNANORE
KOZHIKODE
TRICHUR
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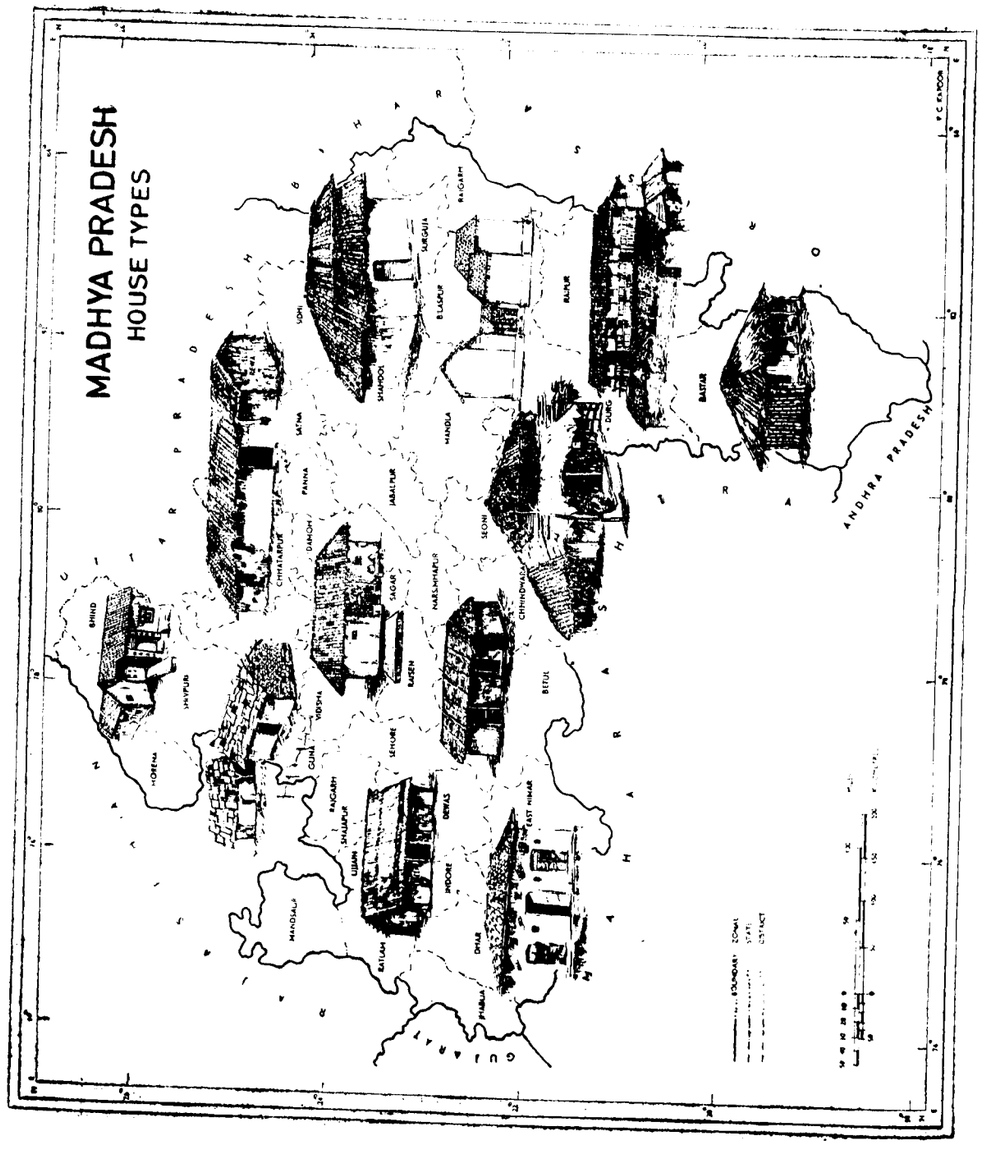
ARABIAN SEA
MADRAS
STATE
DISTRICT
V. C. KAPOOR


MADHYA PRADESH
HOUSE TYPES
UTTAR PRADESH
BIHAR
ORISSA
ANDHRA PRADESH
GUJARAT
BHIND
JHANSI
HOSHANGABAD
SATNA
PANNA
DAMOH
CHHATARPUR
JABALPUR
SAGAR
NARSINGHPUR
SEONI
CHHINDWARA
SHAHDOL
SURGUJA
BILASPUR
RAIGARH
RAIPUR
DURG
BASTAR
BETUL
EAST NIMAR
DEWAS
INDORE
DHAR
JHABUA
RATLAM
UJJAIN
SHAJAPUR
RAJGARH
GUNA
SEHORE
RAISEN
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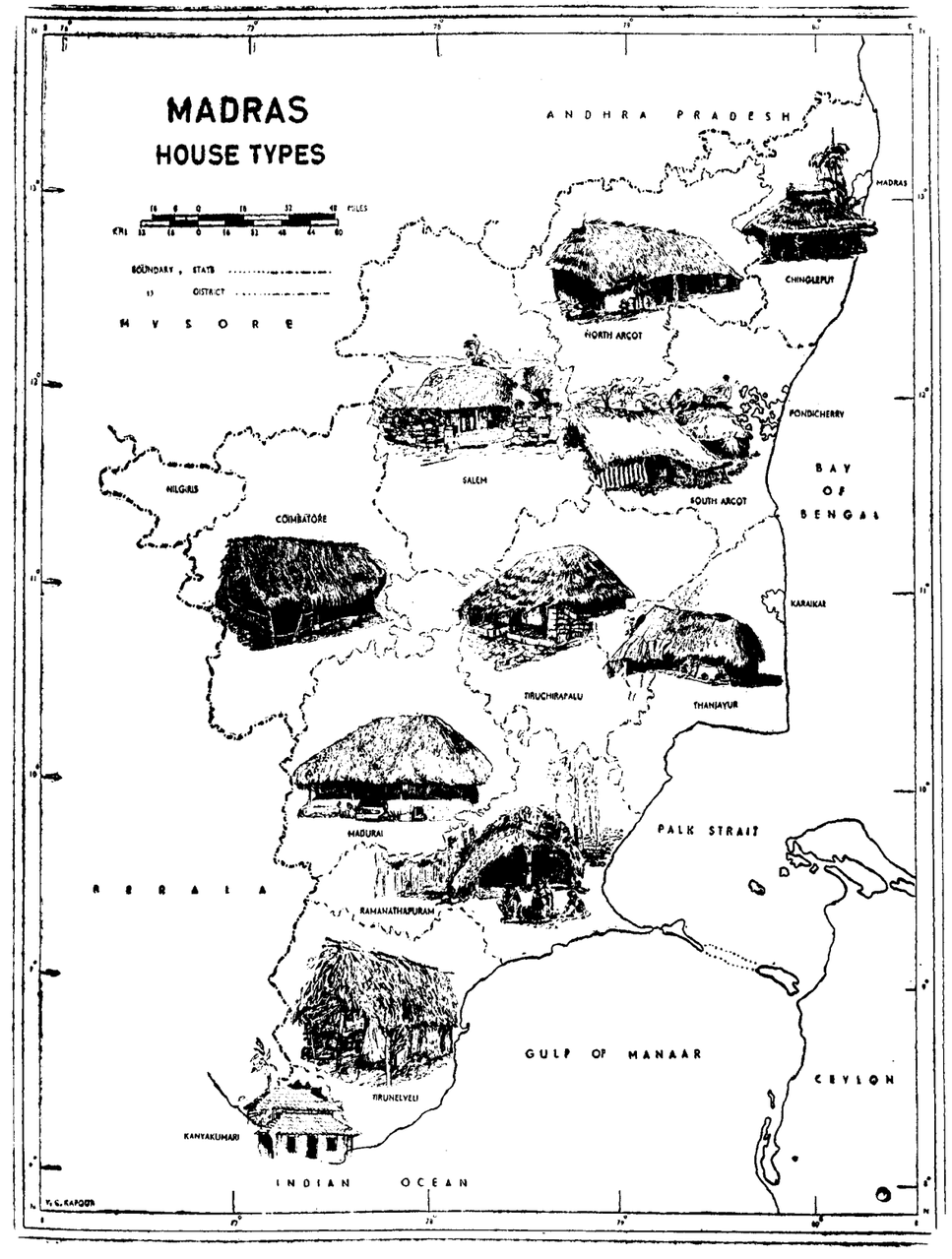
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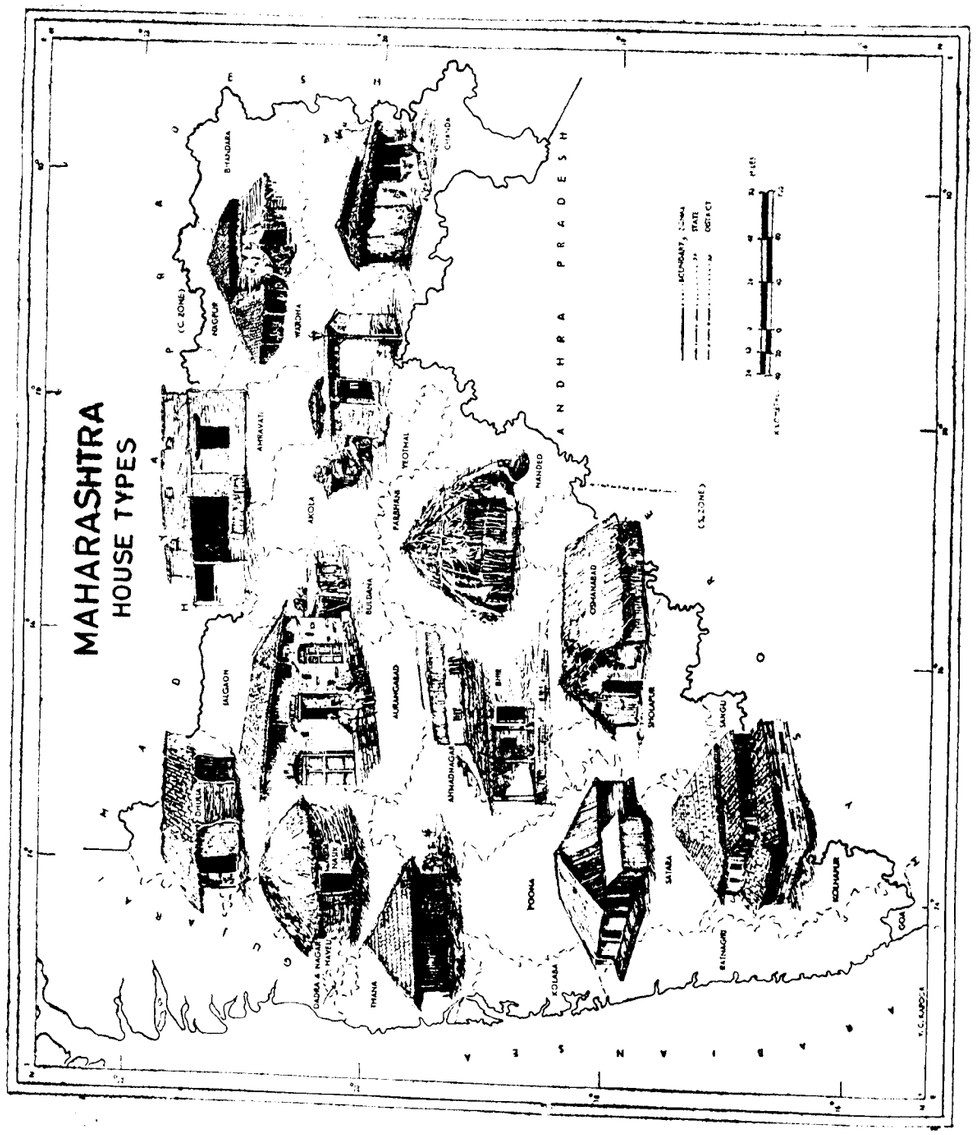
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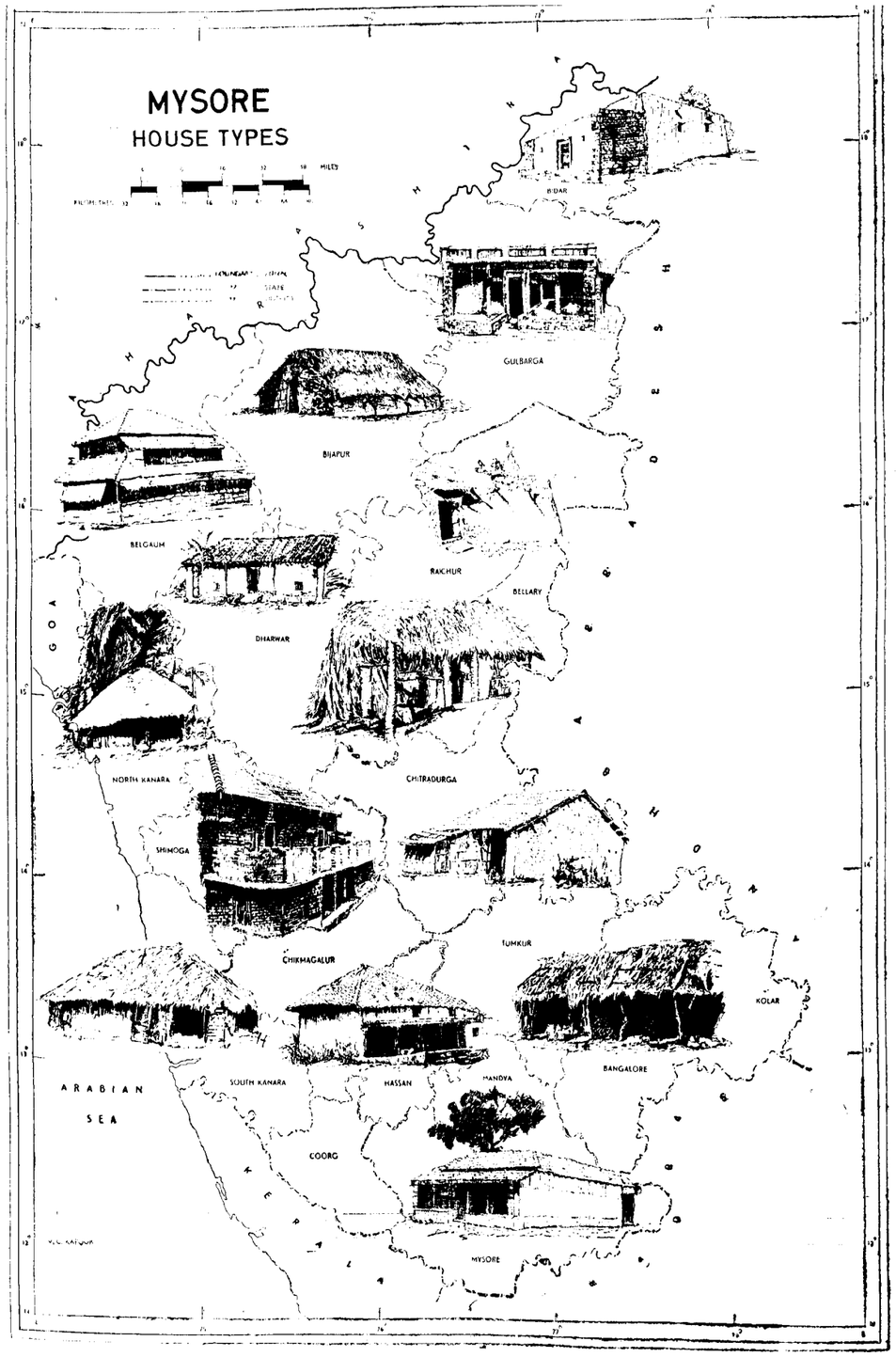
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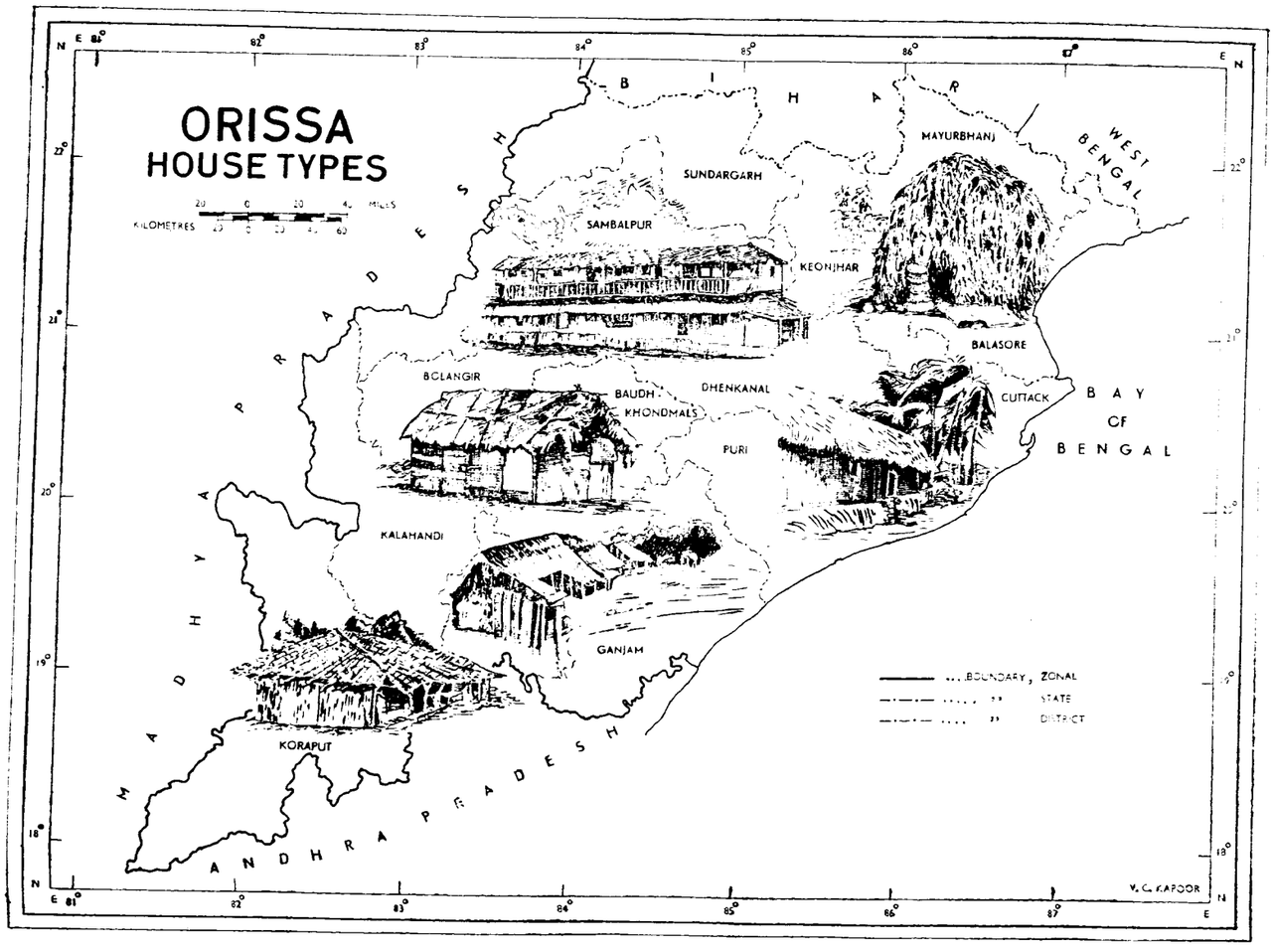
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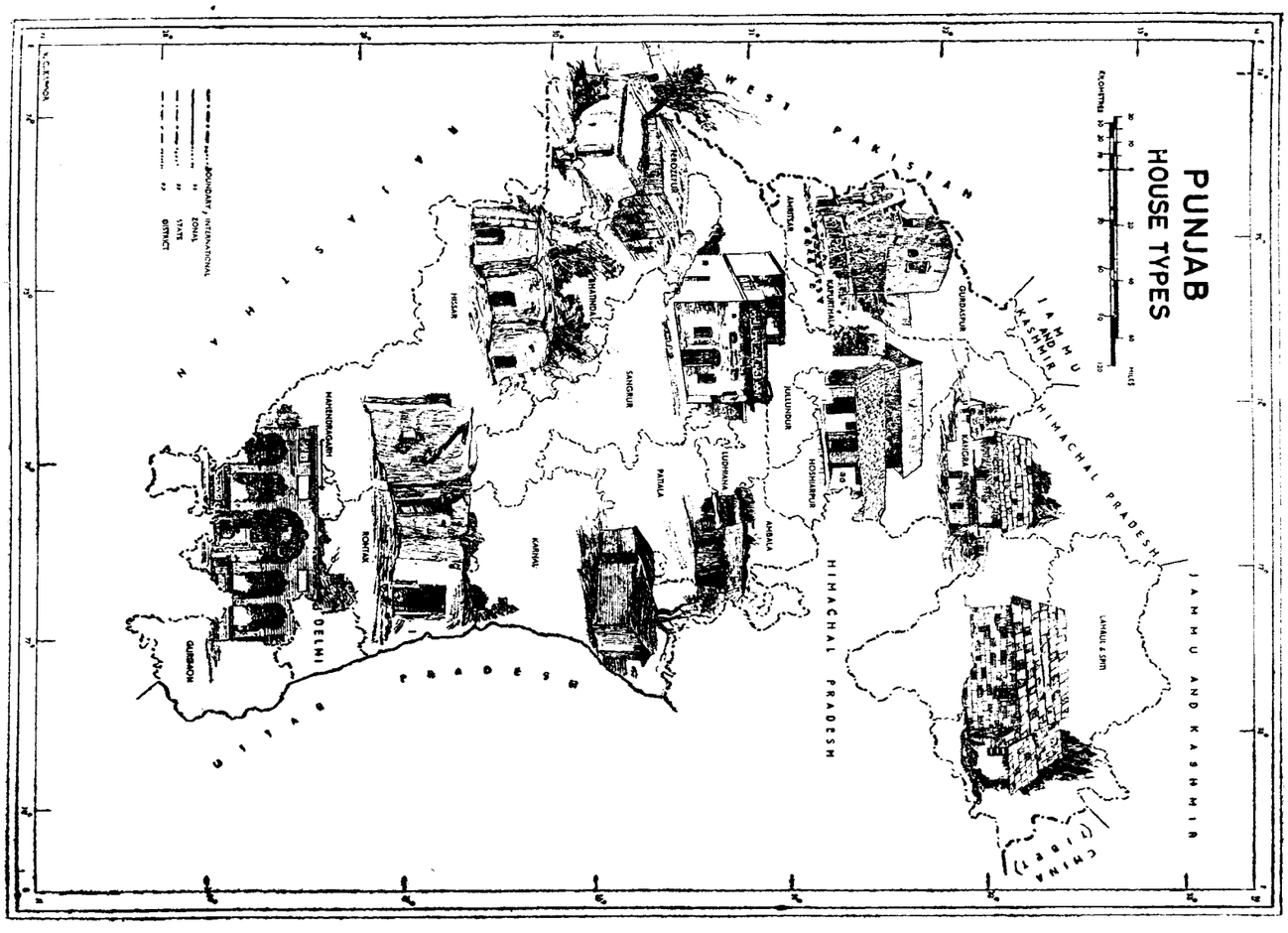
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KANGRA
LAHAUL & SPITI
AMRITSAR
KAPURTHALA
JALLUNDUR
HOSHIARPUR
AMBALA
LUDHIANA
FIROZPUR
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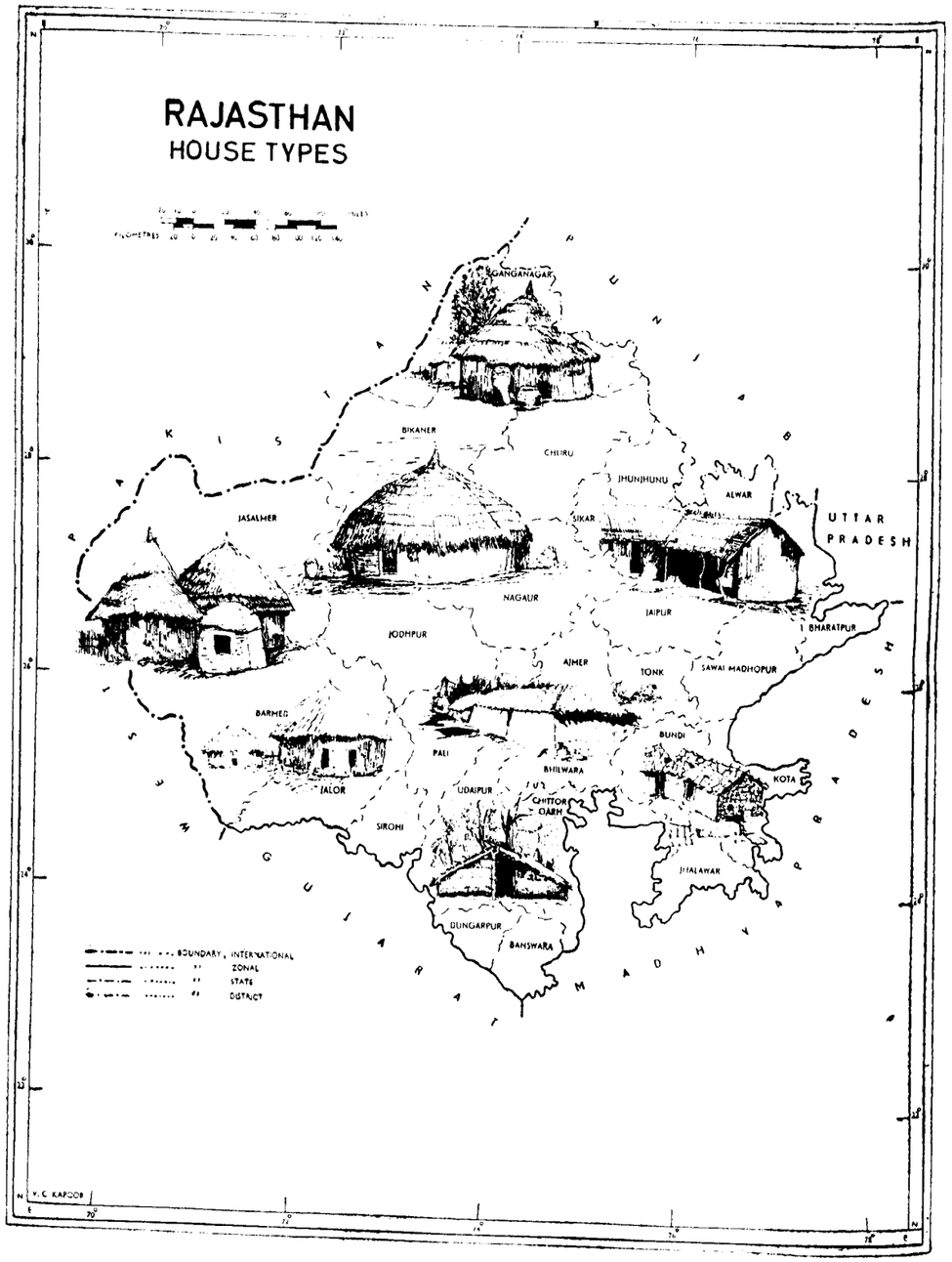
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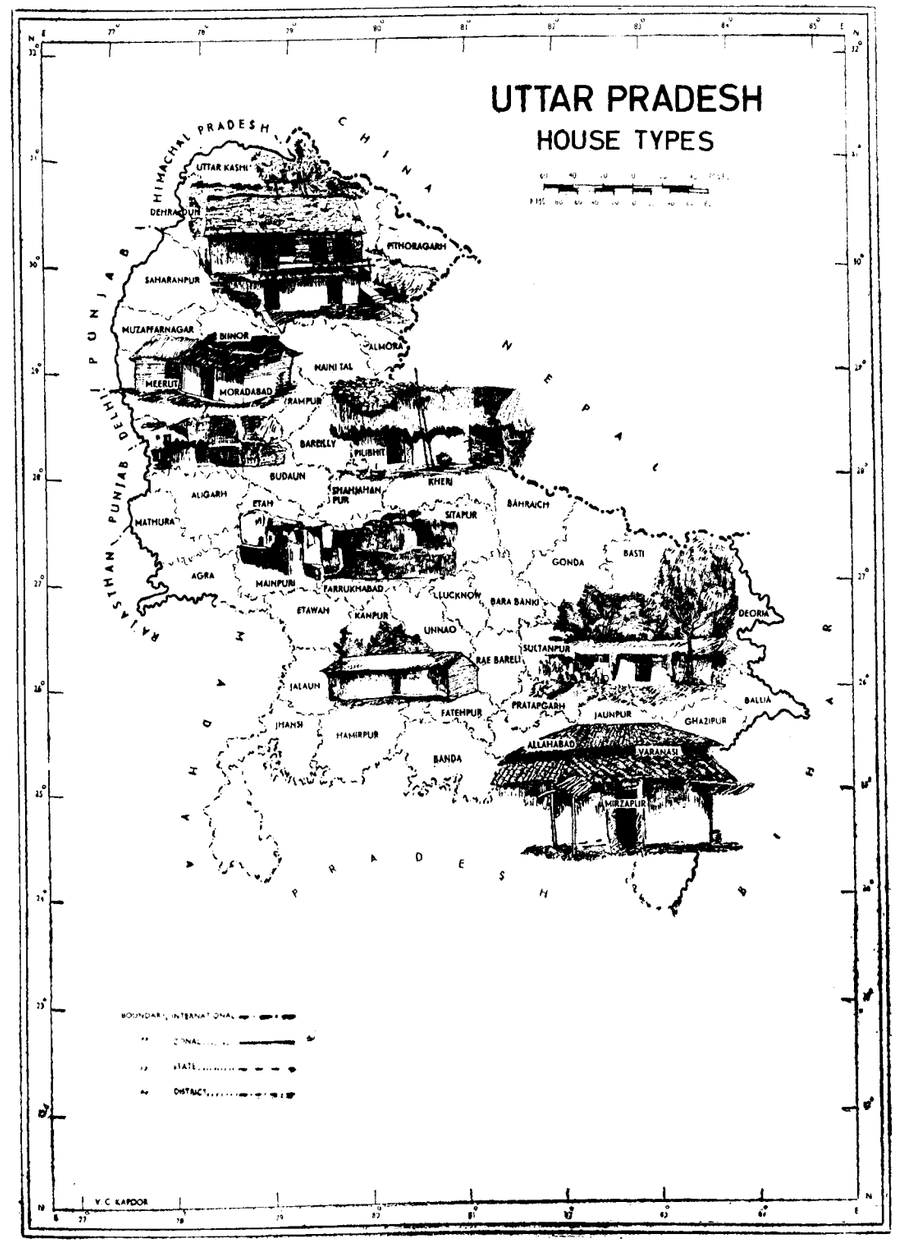
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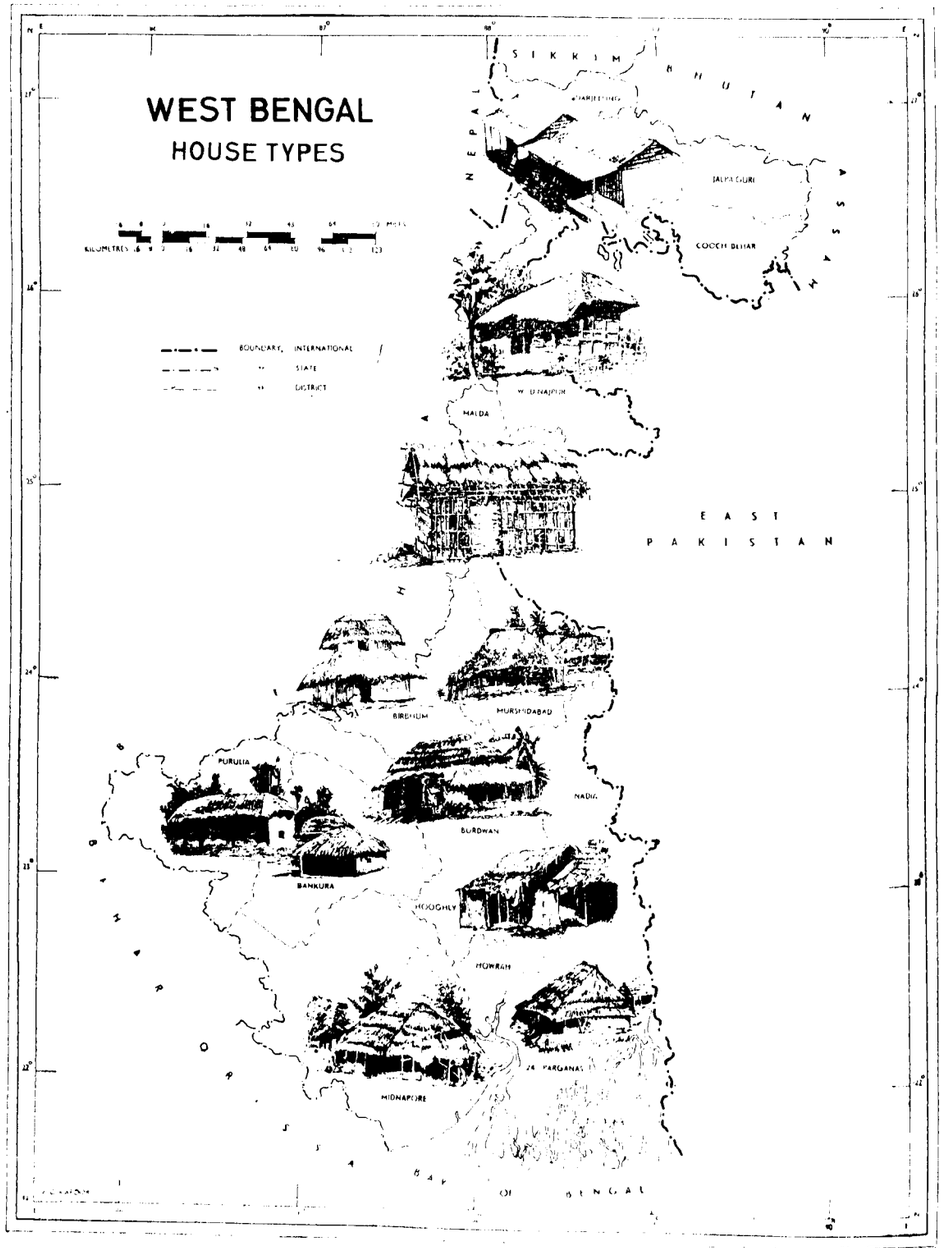
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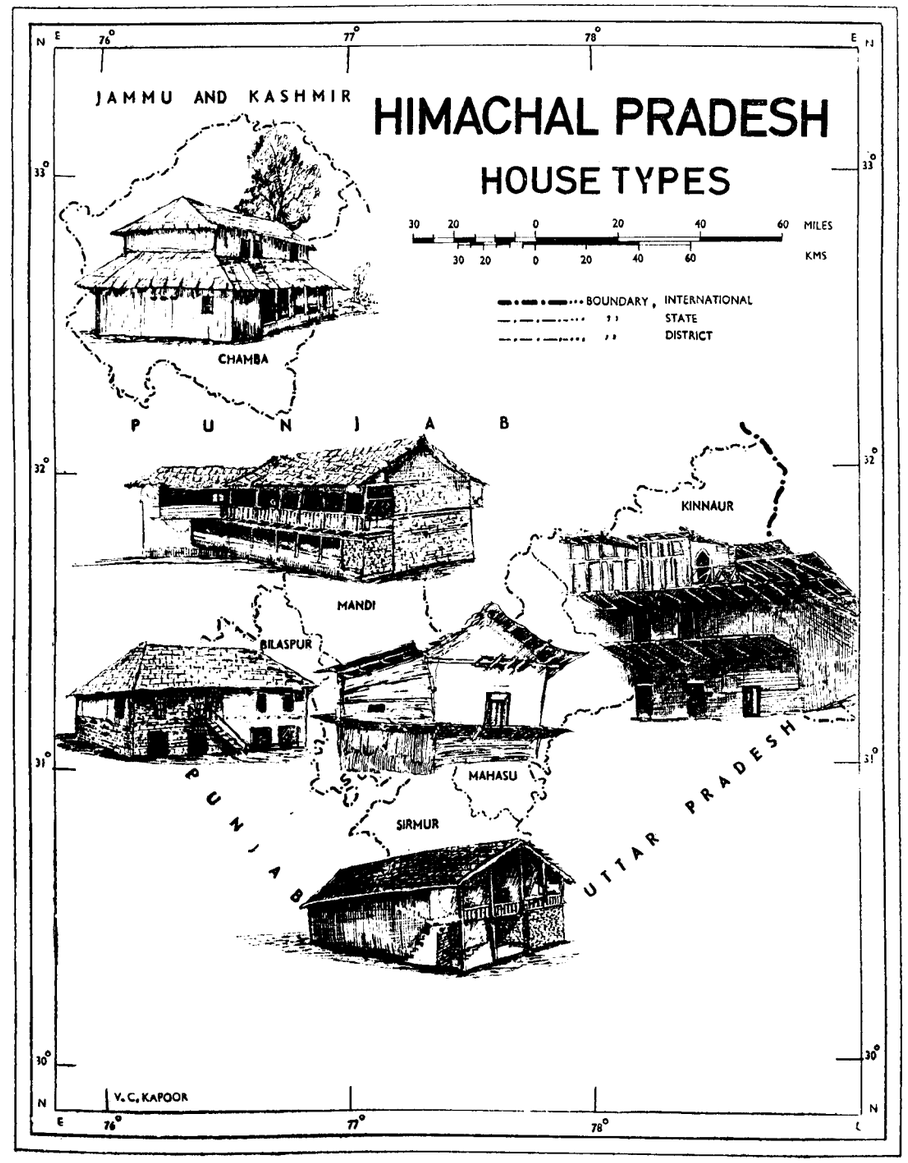
JAMMU AND KASHMIR
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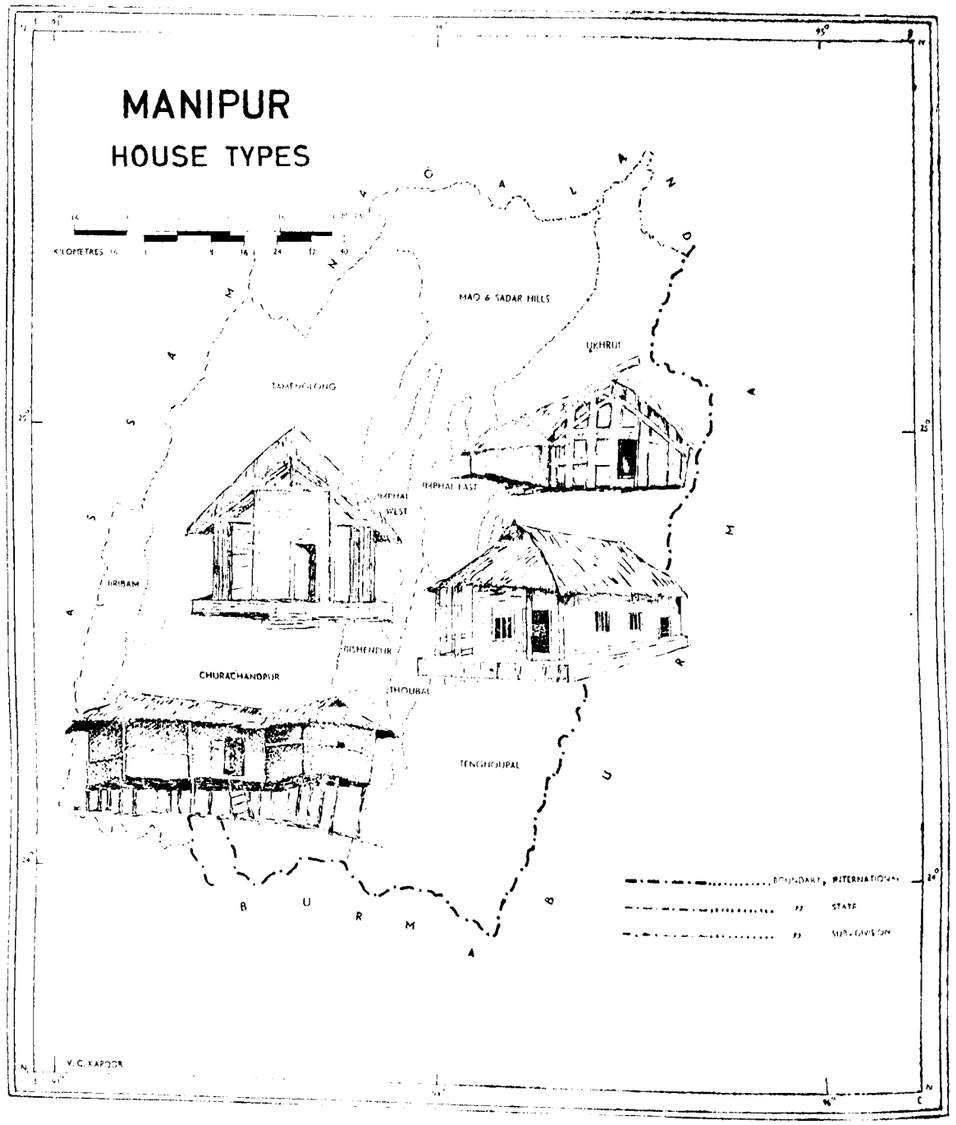
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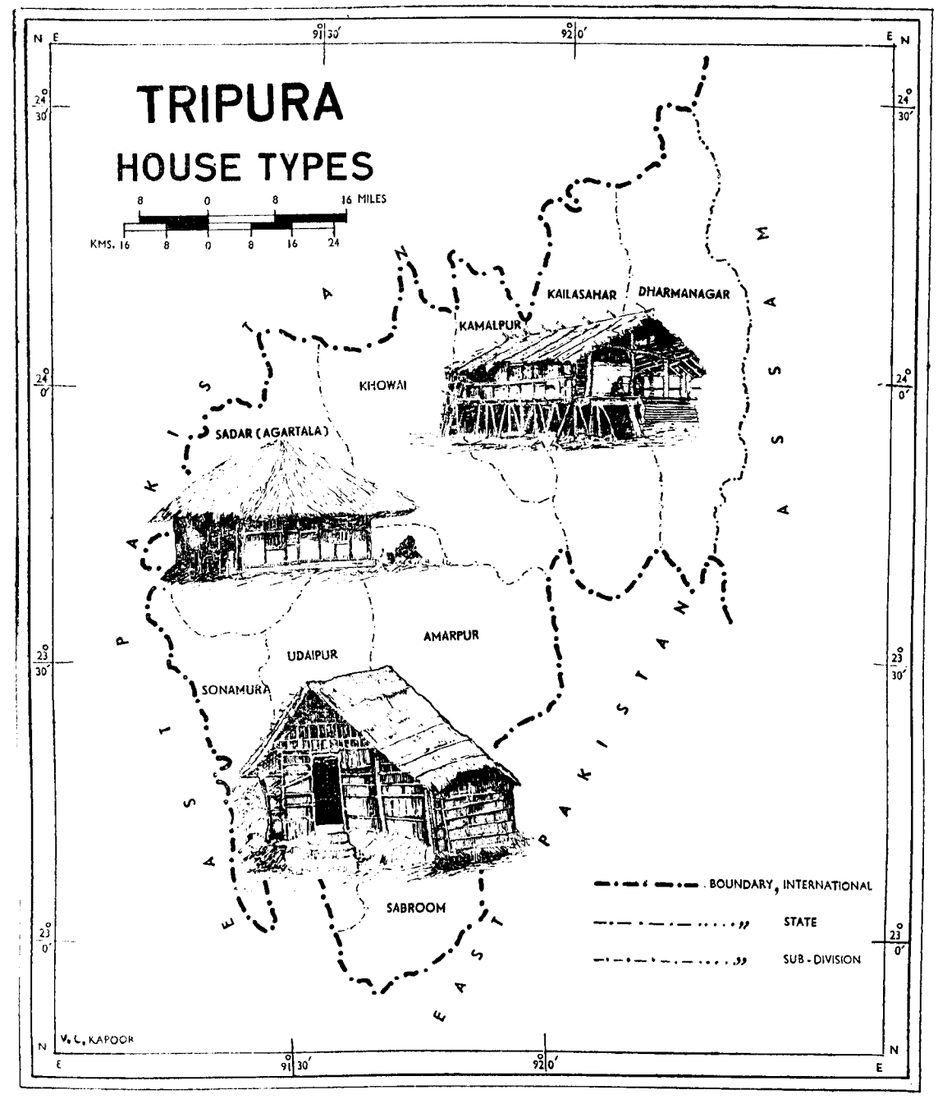
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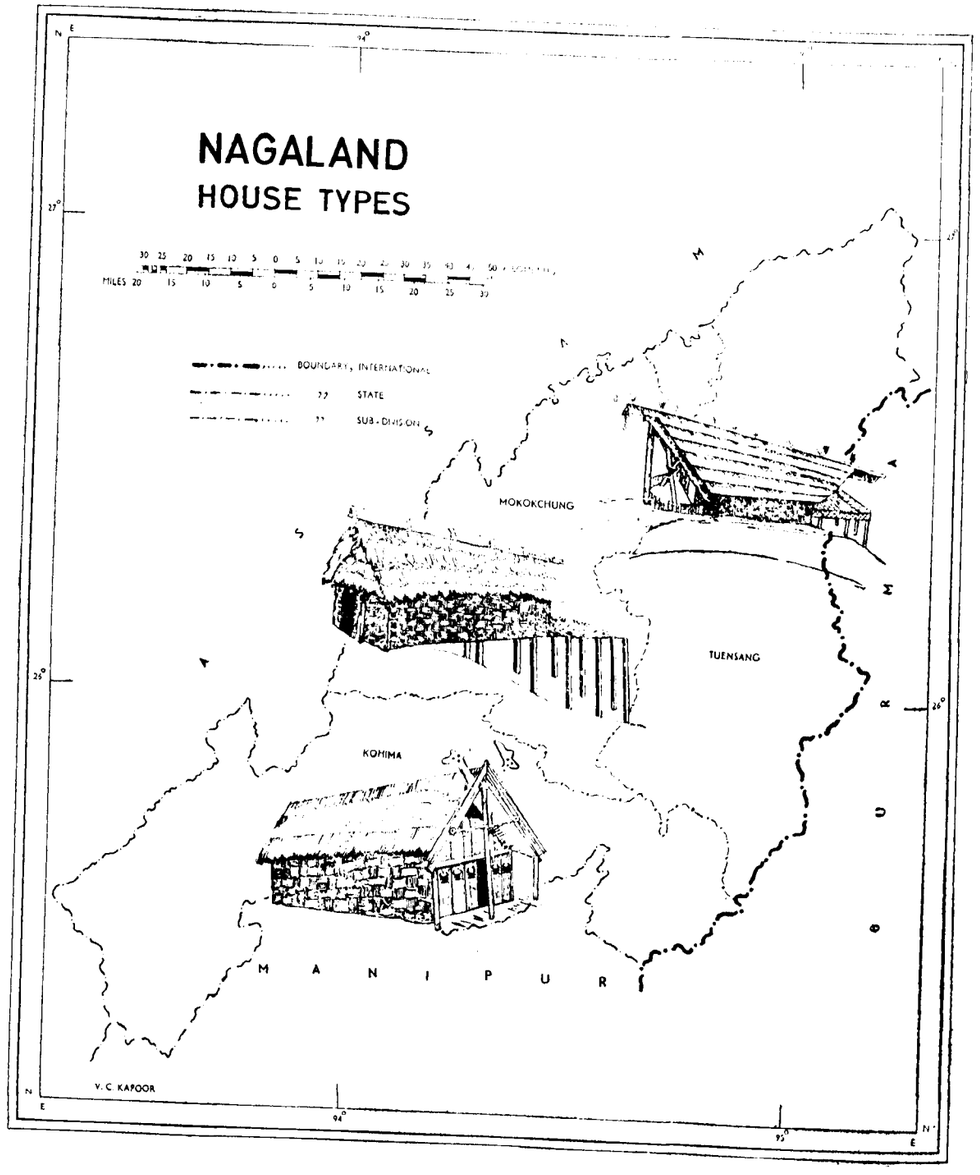


ANDHRA PRADESH

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Natural regions

Andhra Pradesh may be divided into the following broad natural regions: (1) The Agency tracts of coastal districts of Srikakulam, Visakhapatnam, East and West Godavari, (2) The plains of north coastal districts of Srikakulam and Visakhapatnam, (3) Delta districts of East and West Godavari, Krishna, Guntur and Nellore, (4) Rayalaseema districts of Chittoor, Cuddapah, Anantapur and Kurnool, (5) Plains of Telangana districts and (6) the Tribal area of Telangana Districts.

THE AGENCY TRACTS OF COASTAL DISTRICTS, TRIBAL AREAS OF TELANGANA AND RAYALASEEMA DISTRICTS

GENERAL

Village location

2. The main factors influencing the location of a village in this region are natural derivatives from the topography which greatly condition the habitat, material culture and means of livelihood of the villagers. Apart from the cultural tradition of the ethnic groups inhabiting this region, such common basic requirements of life like water and an economic resource base determine a site suitable for habitation. A perennial brook which at least supplies the drinking water for men and animals and presence of even land or hill slope forests unencumbered by the Reserve Forest boundaries of the Forest Administration seem to be the two basic determining factors for siting of a tribal village. If the hill stream is large and perennial enough and irrigates the flat land on its bank, the same terrain is preferred. Initially when a tribal family lives in such a fairly propitious environment for settled cultivation, a search for such convenient sites begins. Even while settling in such a village it happens that a tribal puts up a resting hut or shed temporarily in his far removed agricultural field for cultivation, inter-cultural and harvesting purposes during the busy agricultural season. Even then one-time visit to the house in the village either by the husband or wife to look after poultry or pigs or cattle or small children becomes a necessity. As he slowly develops the suitable plot of land by intensive reclamation and land development works like terracing, making out irrigation channels from the nearby hill stream he develops an attachment to the area and familiarity with the surroundings and thinks of building a permanent house for himself. When he settles down, this poineer cultivator encourages and invites some of his kinsmen who take to either *podu* cultivation or settled cultivation depending on the terrain, feasibility for land reclamation subject to the Reserve Forest boundary of the Government. Thus a nucleus of houses develops to make a tribal village. As against these conditions which help to form a tribal village such natural calamities like loss of working man power due to death or separation, loss of animal power due to cattle disease or wild animal attack force the tribal cultivator to give up settled agriculture. He switches over to *podu* or *Jhum* cultivation his basic from of cultivation which is strenuous but lies within his power and resources. If a suitable *podu* cultivation site is available in the same village he may switch over to it but if he can not secure one he goes over to another village where he can secure a site for shifting

cultivation. Sometimes, if he is widowed or unmarried or separated from his wife, he may elope with a woman of the same village or some other village and settle himself in another village which gives him shelter and approval to his new marital union. Thus while the core of a tribal village is founded by one or two families which continue to have an initial advantage of acquiring suitable sites of land for cultivation, enjoying a sort of social credit, the subsequent migrants stick to the place if they acquire suitable sites.

3. The location of a tribal village has also been influenced by such factors as the headquarters of a Muttadar or a convenient terrain for trade and marketing of minor forest produce and domestic requirements. These centres have a tendency to grow into a village of multi-ethnic and multi-occupational features but the actual centres of the day-to-day living for the tribals and area of production and hinter land ascends up the hills and or recedes into the interior parts as small villages in valleys or at foot hills as isolated habitation areas.

4. Why is the size of villages in tribal areas diminutive? It seems to be mainly determined by the potential of food that can be raised and the optimum organisation that can grow arround a certain potential. It seeks a natural enclave where it can be free in its total movements and evolution. Even in its contact with other agencies and institutions for marketing and credit purposes, it prefers a usurious trader-*cum*-money lender who is sympathetic, less critical and prompt in his services and yet lets him alone, to an economically less costly but empty economic functionary like a Government or semi-Governmental official who by the nature of his administrative procedure and queries may be intriguing to the tribal creating more fear and botheration.

Village layout

5. While the location of the village is influenced by the topography and some administrative considerations, the layout of the village is influenced by such sociographic factors as the scruples of caste and tribe and certain local traditions and habits.

House types

6. House types are influenced by the climatic conditions of the region and the availability of house construction materials locally. Permanancy of settlement at a particular place, traditions of a particular ethnic group and the capacity of a family to earn, save and invest their income on housing determine the house type.

CASE STUDIES

7. Some case studies illustrating the above tendencies and calling for meaningful hypothesis pertaining to location of village, layout pattern and house types, culled out from the Village Survey Monographs of Andhra Pradesh are given below.

8. 22 Villages were studied in the Agency area of coastal districts and tribal areas of Telangana and the hilly regions of Rayalaseema districts. Though these villages have been selected to represent a particular Scheduled Tribe/Caste the territorial distribution of these villages in the Agency areas of Srikakulam, Visakhapatnam and Godavari districts and tribal areas of Telangana and Rayalaseema is such that they are fairly representative of the natural division also.

KALLITI VILLAGE

Location

9. It lies on 19°—05′—37″ north latitude 83°-37′-38″ east longitude at a distance of 3 miles up the hill towards the west of Gummalakshmipuram (Elwinpeta)—Ramannaguda metalled road connecting Andhra Pradesh and Orissa States at the 9th mile stone. This is an interior tribal village in Parvatipuram taluk of Srikakulam district and is located on the top of a hill between two hill streams. The Savara tribe is the sole inhabitant of this village. Generally the Savaras build their huts at the foot of a hill or on hill slopes or tops where convenient level grounds are available close to the hill streams with the result most of the Savara villages lie concealed in jungles. Strangers often find it difficult to trace their way to these villages along the zig-zag jungle paths.

Layout pattern

10. There are some patches of arable land which are terraced by the side of the hill stream. The hill slopes of the nearby hills are cultivated in addition to the limited flat land flanking on the southern side of the hill stream. The habitation areas are spread out in three areas which are separated from each other by a distance of 1 to 2 furlongs on either side of the hill stream. They are seated away from the hill streams because of the inconvenient terrain and the fear that wild animals may frequent the water source.

11. The three habitation areas are known as Kalliti main village (9 households), Kothaguda (15 households), Anthimanuguda (8 households). Kothaguda and Anthimanuguda are located nearer to each other at a distance of about 130 yards between them while Kalliti main village is about 1½ furlongs away. In 1960, the main village Kalliti was densely populated. Due to occurrence of a large number of deaths of persons, the residents of Kalliti main village believed that there was something inherently inauspicious in the habitation area and shifted to Kothaguda and Anthimanuguda leaving behind only 9 occupied houses who have some interest in neighbouring arable land in the main village.

12. The layout of the village is in streets in each habitation area, two rows facing each other, each row of houses built in an unbroken line. If there are one or two houses, it may be either a solitary shed or two houses built one by the side of the other sharing a common side wall and an extended roof. One is struck by the rudimentary sense of village planning among Savaras as their houses are built in an orderly fashion aligned to a linear path.

House types

13. All the houses in the three habitation areas are *poorillu* (thatched roof) known in Savara language as *soong*. They are rectangular huts with walls built of mud and stone and neatly plastered with clay.

14. The house sites are selected after conducting a preliminary test which involves keeping 5 or 7 or 9 rice grains in a circle enclosing it with a leaf and leaving them alone for a night. If this rice arrangement goes undisturbed this site is selected for house construction. The width of the plinth area should be either 3 cubits or 6 cubits or 9 cubits and there is no such limit on the length. The houses invariably face either north or south. There are two entrances for a house, one in the front and other in the rear. Savara houses as already observed are in a continuous two sloped roof structures in an unbroken line. Each main living room is partitioned by a mud wall while the line of the covered verandahs (pial) in front of each house runs from one end to the other in an unbroken line except of course, where the physical terrain does not permit.

15. Small backyards are maintained separately by each house by putting up bamboo fence or by piling up stones to make a sort of a wall. They grow some vegetables like gourds etc. in the backyard.

16. The roof is made up of wooden rafters bamboo splinters, *adda* fibre and *darbha* grass. The height of the roof at the entrance in front of the house is 4′—8″ and in the rear it is 2′—9″ and in the centre it is about 12 to 15 feet. The house consists of two portions separated with a mud plastered wattle wall of about 5 feet high. The front verandah of the house is known as *gadapa* and the rear as *sarung*. The two inner portions of the house after *gadapa* are known as *diyasung* (*inillu*) and *daring digna* (*Kitchen*). The oven is constructed in the *daring digna*. It is also used for keeping their cooked food stuffs and household utensils. The *diyasung* is used for all living purposes and household work. These houses contain no windows and no ventilation except the door opening. Most of the houses have wattled frames as doors and a few of them have wooden plank doors without hinges. Locks are not used whenever they go out. The entrances are very narrow, say 3′×5′ or 3′×4′.

17. Cattle sheds are separately built. Pigs are kept in a separate sty in the rear of the house. Poultry are housed in the living room or *gadapa* itself.

18. Invariably every Savara house has a mural painting on the wall which partitions the main living room from the kitchen. Some corner in the kitchen is used to invoke and worship ancestral spirits and deities.

JERRALA VILLAGE

Location

19. This village in the interior thick forest lies at an altitude of 2,000 ft. above

mean sea level on a hill slope on 17° —56′ —26″ north latitude ond 82° —18′ —24″ east longitude in Chintapalle Taluk of Visakhapatnam district. It is about 10 miles away on the north-western side of Chintapalle, the taluk headquarters and the nearest centre for marketing and education and welfare services. The village is bounded by Baddipadasakonda (a hill about one mile away), Nittamamidipalem village (about 2 furlongs away) and Chintalapudi village (nearly a mile away) on the east, Jakarametta village and Vontadapalle village (each one mile away) in the south, Gorrelametta village, Gabbampallikonda (hills) and villages Kottur and Rasa on the west and Pulikonda (a hill) on the north. A difficult meandering foot-path through the hilly regions connects the village to Chintapalle.

Layout and residential pattern

20. According to January 1963 Village Survey the size of the village was 272 persons (126 males and 146 females) spread over 60 households all except one belonging to Bagata and Valmiki tribes. The habitation of the village can conveniently be divided into two parts viz., Valmikipeta and Padalaveedhi or Bagataveedhi lying separated by a distance of 2 furlongs seated on the opposite slopes of the hills separated by a hill stream, Peddagadda, which flows towards the west. Another hill stream—a smaller one—after flowing for some distance close to Valmikipeta in a north-westerly direction joins the Peddagadda. The lands on either side of these two hill streams wherever possible or cultivated and made into paddy fields. At some places the stream water is diverted to irrigate the paddy fields. These hill streams and the cultivated fields have created a yawning gap between Valmikipeta and Padalaveedhi and have made it difficult because of slippery paths to move about from one locality to the other during the rainy season. While Valmiki and Bagata tribals occupy separate parts of the village habitation area in a close neighbourhood to their own tribal men, the solitary Sathani Vaishnava household is situated on the extreme north of Bagataveedhi. The habitation areas in the village are not laid in any systematic manner and the houses have been built haphazardly depending upon the availability of a suitable plot of land. It is obvious from the layout of the habitations that the three communities inhabiting the village live in distinct localities one separated from the other. Since the Valmikis are considered to be lower in social status and even as untouchables the Bagatas do not allow them to reside in the vicinity of their habitat. Each habitation area has its own drinking water source in the form of dug-out-pits nearer to their own residential area by the side of the hill stream or at some nearer spot where water oozes out to form small springs. There are two prayer halls (Ramalayam and Sivalayam) in the Valmikipeta but none among the Bagatas go to them. The village deities like Jakaramma and Katamayya are worshipped in common on the outskirts of the village symbolized in stones under some trees. Crematoria and burial ground are situated as distinct sites for Bagata and Valmiki separately about a furlong apart on the bank of the Peddagadda hill stream some two furlongs away from the main habitation area in the south-west.

House types

21. This village is no exception to the general practice of the hill tribes constructing either *purillu* or *middillu* for their dwellings in the Agency area. Availability and proximity of the housing material have determined such types of houses. The mode of construction and the types of houses are one and the same among both the tribes irrespective of the economic status except that a house may be a little more spacious by an addition of one or two rooms.

22. *Purillu* (thatched huts) is the only type of house found in the village. Walls are of mud built with the locally available earth. Timber required for the house is secured free of cost from the forest. All the tribals including the other caste people living in Agency areas are allowed to take timber free from the forest for their domestic requirements. The roofing grass is obtained from the interior of the forests by the Bagatas from whom it is purchased by the Valmikis and Sathani Vaishnava at the rate of six bundles per rupee. The wood of the *neredi* tree (eugenia jambolane) and *maddi* (terminalia alata), *karaka* (terminalia chebula) *sennamgi* and *korukubusi* is preferred for beams whereas *vandanam* and *anem* wood are used for posts. The roofing supports are constructed with bamboos and long beams of *neredi, maddi, karaka, sennamgi* and *korukubusi*. The grass used for roofing is of four types viz., *darbha, puthika, bonthu* and *kopiri*. A few houses are used as residences-*cum*-cattle sheds.

Structural details

23. The roof is supported by a post of six feet high which rests on one of the cross beams, besides the central pole. Four or five beams depending on the number of rooms and the length and breadth of the homestead rest on the wall, extending from south to north, over which an *ataka* (loft) at a height of 7′ above from the ground with an opening of 4′ —6″×4′ —0″ is constructed with bamboos or thin wooden poles. It is used to preserve the corn, seed and agricultural implements.

24. Generally everyhouse will have two pials on either side of the threshold. The central portion of the house is divided into two parts namely the *mallesala* which is the main living room and the *nattillu* which is the kitchen portion. The main entrance leads one to *mallesala*. A cross wall of 5½′ in length, 3½′ in height and 6″ thickness separates *mallesala* and *nattillu*. An oven and a mud platform (*gunakuduru*) are found in *nattillu*. The Valmikis call this place *devunimoola* where the ancestors are worshipped. A bamboo *thatti* known as *joli* is hung over the oven in *nattillu*. This is used to keep condiments and also to dry corn like *chodi, sama* and paddy over the heat of the oven. A wooden plank is fixed in the north-east corner of the house known as *chitti ataka* which is used for keeping small household goods. This is found generally in all the houses. Those who do not have earthen walls cannot have this. The *peena*, an earthen platform, three feet high, one and half feet wide and 6′ to 8′ long is used for keeping cooked food and water vessels. Above this *peena*, wooden planks known as *munthala ballalu* are fixed on the wall at a height of 4′ to 5′ from the ground level, to keep cleaned brass vessels. There is a small hole in the ground in *mallesala* known as *rolu* (mortar) which is used for pounding the corn. Adjacent to that grinding stone is fixed in the main living room for powdering *chodi* (finger millet) flour.

GANDHA VILLAGE

Location

25. Located at an altitude on about 4,500′ between 18° —14′ —15″ north latitude and 82° —50′ —15″ east longitude amidst hilly forest tract at a distance of 20 miles from Araku valley which is itself 71 miles from the coastal town Visakhapatnam, Gandha village is situated on the top of a hill surrounded by still higher hills in an inaccessible interior part. It falls in Paderu taluk of Visakhapatnam district. It is bounded by Kappari konda hill on the north besides Karakavalasa and Bojjaguda villages, Sindhiputti konda (hill) on the east, Chalavapula konda (hill) on the south and Rachakonda (hill) on the west.

26. Attigummijoru, a hill stream on the west and Peddajoru hill stream on the north flow on either side of the village. Small plots of land by the side of these hill streams are irrigated and the lower gradients of the surrounding hills have been the sites for *podu* (shifting hill slope) cultivation.

27. In May, 1963 the population of the village was 91 spread over 16 households: Konda Dhora, (Scheduled Tribe) (6), Nookadhora (Scheduled Tribe) (9), Mettukamsali caste (1).

Village layout

28. The houses are scattered indifferently in an irregular cluster and each structure is independent unlike the unbroken lined houses of Kondhs, Samanthus, Savaras and Jathapus. Village deities are worshipped outside the habitation area at various places under the trees.

29. They conduct a test for the selection of the house site. The test is known as *koti* or *punji*. If the *koti* test yields favourable results the site is taken up for house construction; otherwise the test will be conducted at a different place which gives favourable results.

House types

30. The house types are *purillu* and *middillu*. But in this village only *purillu* type of houses are found. A foundation of 2 ft. depth is dug for mud walls. *Rivvas* or poles are also interlaced and then

plastered on either side with a mixture of dung and mud. The thickness of wattled wall is 8″ to 6″, whereas the thickness of mud wall ranges from one foot to 1½ feet. The height of the walls is 6′. Over these walls, four or five beams are kept to support the loft which is constructed over the cross beams with wooden rafters and bamboos. The roof is supported by two forked posts, one central pole of about 10′ —6″ from the ground level and another post of 5′ height opposite to the central pole rests on a cross wooden beam which is at a height of 6′ from the ground. The roof is covered either with date palm leaves or *gopuri* grass, which slopes down on all the four sides as each house is independent and rectangular in design. As one enters the roof, it is 4′ or 4½′ high from the ground, 7′ at the main gate and 10′ —6″ at the centre of the house. The roof is thus sloping so that it may not be blown off due to heavy gales and rain water may run off rapidly. Both wooden and bamboo door ways are provided with wooden doors which are locally prepared by each household with mango, jack and *sampenga* (michelia champaca) wood. No ventilators are provided to the houses.

31. The living portion of the house is divided into *inillu* and *gondillu* with a mud partition wall of 5′ —6″. The oven is invariably constructed in *inillu* over which a bamboo mat of 3′—6″ × 3′—6″ locally known as *joli* is hung to dry the corn and other seeds. Adjoining the oven, an earthen platform of 1′ × 1½′ × 3′ locally known as *kuduru* is used to keep the water pots and vessels containing cooked rice etc. The *gondillu* is exclusively used to keep provisions and a few important domestic utensils. Ancestors are also worshipped *gondillu* on Sankramana festival day. The *inillu* is also used for sleeping purposes. Without exception the *gondillu* is the darkest room in every house and cooking in done in *inillu* with the light of the burning fuel even in day time.

32. Houses face east or west or north but seldom south. It is a belief that some untoward incidents would occur, if the main gate of the house faces south. The length and breadth of the house among the three tribes must be equal. The measurements vary depending on the availability of the site as such and there are no fixed measurements for the house.

PULIRAMUDUGUDEM VILLAGE

Location

33. It is a tribal village in Polavaram taluk of West Godavari district. Situated at a distance of about 6 miles from the motorable road connecting Polavaram (taluk headquarters) and Eluru (district headquarters), Puliramudugudem is located on a flat surface of land 17° —14′ —47″ north latitude and 81° —25′ —52″ east longitude surrounded by cultivable fields in a small valley surrounded by hills on all sides.

Village layout

34. It is inhabited predominantly by the Koya tribe (70 households) and 17 other households distributed over eight other ethnic groups like Chakali, Christian, Golla, Kapu, Kondareddy, Mala, Mangali, Viswabrahmin and Vaisya communities, All the Koya houses are in a cluster having small lanes. A few houses are independent structures but the majority of houses are built in such a way that there is practically no space left between one house and another. There is a hill stream flowing nearby. There is a drinking water well which serves the village. An elementary school and two forest rest houses are on the outskirts of the village. The Maternity Centre and Post Office are located in the middle of village.

House types

35. All the houses in the village irrespective of ethnic group are of thatched ones. This house type is locally known as *purillu*. Other types of houses which are constructed without using wooden beams are locally known as *pakalu* (*paka*—singular). It is almost a general practice in the village to express the house type in terms of the number of beams used in house construction. For example, if a person has used three beams for the house, it is said to be *mudu dulala illu* meaning three-beamed house. Similarly if it is 4 beams, it is *nalugu dulala illu* (4 beamed house). There is no difference in the mode of construction of the above house types though it does make a difference in the total area. This type of scale imposed by the properties of the material itself persists even in modern urban structures. Excepting one or

two, all the houses have four-sloped roofs.

36. One-roomed house are predominant (85%) in number (75 households out of 87 are having one-roomed houses, 4 households each are having two-roomed and three-roomed houses and only one household is having 4 rooms).

37. The housing material used are palmyra leaves, bamboos and other locally available timber. The wall material is bamboo wattle or mud or brick. A predominant number of houses have wattled walls. Out of 85 houses 72 or 84% have bamboo wattled walls plastered with mud and sometimes with no plastering, 4 houses have walls of twigs and branches, 6 houses are mud walled and three are brick walled houses. Mud and brick walled houses have wooden doors and windows. There is no hard and fast rule that the main gate should face a particular direction. But generally north or east is preferred. But in case the main gate faces south or west, another door facing it is necessarily kept and they do not have any special significance for making such an arrangement.

38. They select the house site after conducting a test called *gummu*. The procedure in this test is to keep some rice on the site and cover it up with some leaf on that night, keep a cot and sleep for the night. If by the next day the rice is of the same quantity or has increased that becomes an acceptable site for the party. Sometimes if he gets sweet dreams while sleeping on the cot in that night, then also it is considered to be an auspicious site.

Description of a typical house

39. The plinth area of these houses is generally 24′ × 18′. The room measuring 15′ × 15′ is constructed leaving the space in the front, back and sides. Six poles, three on each side facing each other are fixed and over them three beams are placed. On these beams which are generally at a distance of 3′, a wooden plank or palmyra rafter is fixed. Two *Komaralu* (joists) are then fixed into this rafter leaving a distance of 3′ to 4′ from each other. Then a small sized flat beam is placed over the *Komaralu* and it is locally known as *patta* or *yenubadda*. Now the bamboo or other wooden rafters at a distance of about 6″ are placed on either side of the *patta* and are tied with palmyra fibre. The other ends of the rafters are kept on the rafters placed lengthwise over the poles. Over this frame palmyra leaves are thatched. The sides are covered with *thatti* walls. In the front side the rafters slope more in length than on the other sides. This serves as a roof to shelter *arugu*. On the beams over the wall bamboo laths are arranged so as to make a floor. This small upper storey is known as *ataka* (loft) and is used to keep foodgrains and other domestic articles. The hearth is located in the main room in the north-eastern corner. Just by the side of the hearth there is a small platform raised with mud over which the pots and other utensils are kept. In the same corner a bit of place on the wall is plastered with red clay in round shape and on it vermilion marks are made. This is the God's corner or *gondi*. Except the entrance door there is no other ventilator.

40. The homestead area is generally fenced with twigs of trees and in some cases bamboo *thattis* also.

BYRLUTIGUDEM VILLAGE

Location

41. Byrlutigudem is a Chenchu tribal village located as an enclosure amidst submontane forest of Nallamalis in Kurnool district lying on 15°—53′—14″ north latitude and 78°—42′—50″ east longitude. It is located by the side of the metalled road from Kurnool to Srisailam at a distance of 51 miles from Kurnool (District headquarters) and 9 miles from Atmakur (Independent Sub-taluk headquarters). Situated in a flat area at an altitude of 1,150 ft. above mean sea level in the midst of the forest, the village is bounded by villages located at a distance ranging from 1 to 6 miles. Bhavanasi river and Siddapuram tank are at a distance of about 2 furlongs. They were the main sources of water for the Chenchus. Now there are wells dug in the Chenchu habitation areas which consist of newly constructed houses for the Chenchus.

Village layout

42. The village consists of the old Chenchu habitation area which goes by the name

Byrlutigudem in the middle a new Chenchu housing colony to the west at a distance of about 2 furlongs and the school colony consisting of welfare and administrative institutions like the School, Hospital, the Co-operative Stores, the Women Welfare Centre and the Forest Rest House and Forest Beat Post about 3 furlongs away to the east. The Chenchu burial ground and places of worship are dispersed in the forest within a distance ranging from ¼ a mile to 3 miles.

43. The old Chenchu habitation area of Byrlutigudem and the new Chenchu housing colony are exclusively inhabited by the Chenchus. The school colony in the east is inhabited by the staff and their families. The Chenchus generally live in groups of huts called *gudems*. The huts in their traditional setting are found scattered here and there or in small clusters. They are not aligned to a straight foot-path or to any track in a straight line. Each hut is a separate structure put up within a distance ranging from about 3 ft. to 290 ft. from one hut to another. But the new Chenchu housing colony is built in a linear street pattern with rectangular house structures.

House types

44. The Chenchu traditional hut encloses a small and compact circular floor with a conical roof. Sometimes rectangular huts and sheds with two or 4 slopes are also found but they are few in number. After selecting a site which is normally adjacent to their relatives' house, they mark off a fairly elevated circular area of about 10 to 12 feet diameter. Sometimes the floor level is gently raised by putting some extra earth. A central pole of about 10 ft. long is erected. Along the periphery of the circular area of the hut, short posts of 4 feet high are fixed to the ground. From the central pole on to the side posts bamboos, generally bushy, are tied and have twigs to support the thatch (grass) on them. Some huts, particularly the oblong one, are so constructed that there is no wall at all except a bamboo mat hung as a side screen. The thatched (grass) roof slopes at the entrance of hut at a height of about 4'. In a conical hut invariably a wattle wall is made with thin bamboo splints, the smooth green surface of the splints facing outside. This wall is secured to the vertical posts erected on the circumference of the site. Sometimes if the house owner is a salaried worker, he plasters the wattle wall with mud and dung and whitewashes it. In erecting the wall an opening of 4'×3' is left for the door. The door consists of another piece of bamboo wattle more closely woven than the wall itself. The door is merely secured to the opening by means of a string or a strip of cloth.

45. There is only one house in the Chenchu old habitation area which is a *pucca* structure with stone wall and flat mud roof. This belongs to the Village Headman.

46. The hearth is nothing more than three stones kept together over a hollow made in the ground in some corner of the hut.

47. All the huts except one or two are one-roomed structures.

48. The picturesque traditional conical Chenchu huts are now being replaced by some oblong huts constructed by the Forest Department under the Chenchu amelioration scheme. These huts are two-roomed houses with wattle wall and grass roof.

MATTEWADA VILLAGE

Location

49. Mattewada is a tribal village in Narasampet taluk of Warangal district inhabited mainly by the Koya tribe who form 98% of the population of the village. Lying on 17°—45'—11" north latitude and 80° —03' —53" east longitude the village is situated at a distance of 50 miles from Warangal (district headquarters). This is a remote village not connected directly by any bus route. One has to walk or engage a bullock cart to cover a distance of at least 12 miles from the nearest road point at Goodoor or 16 miles from Mahabubabad, the nearest Railway station.

Village layout

50. Out of an area of 4 acres and 28 guntas set apart for *gramakantam* (village site) the area occupied by 87 households which are spread in a haphazard way with no regular roads is only one acre and 30 guntas. All the Koyas and Caste Hindus are living together side by side in one cluster excepting the 4 households of Madigas (S. C.) who have their houses a few yards away from the other caste Hindus including Koyas. The layout pattern of houses

is not a planned one. They are huddled in the northern part of the village with one or two paths and are laid out in a haphazard way. The officials of the Social Welfare Department have induced some of them to construct their houses in a systematic and planned manner.

51. The crematorium of all castes including the Koyas is situated to the south of the village at a distance of six furlongs on the bank of a channel. The places of worship are a stone idol of *Hanuman*, the monkey-God, at the very entrance to the village on the north, on the bank of Ganganakunta, a small pond and *boddarayi* (or a stone symbolising some Village deity) in the heart of the village. There are seven wells in the village. Five of them are used both for agriculture as well as for drinking purposes, while the remaining two are exclusively used for drinking. All the communities in the village except the Madiga (S.C.) draw water from the same well without any restriction.

House types

52. All the houses have thatched roof except the one belonging to the Patel (a Village Headman) which has tiled roofing and brick walls.

53. First of all one *gunja* (pole) is installed in the *nishaninoola* (north-eastern corner) which is treated after the completion of the house as *devuni moola* (God's corner). Depending on the area of the site are installed in four corners four to twelve posts over which are placed wooden beams lengthwise and breadthwise. The bamboos or thin wooden poles are placed lengthwise over them and thatched with grass. The front side is kept projected and the sides and rear portions are used as verandahs. The house is divided into two portions by having a *thatti* partition wall in the middle and one portion is used as kitchen and the other called *lopali ankatam*, as store room. There are some houses with a shed in the front yard which is used for usual conversation and hay is stacked on its roof. The open space in between is used as a sleeping room. The *thatti* walls are thickly plastered with *yerramatti* (red clay) mixed with dung and decorated nicely with drawings drawn with white lines.

PLAINS OF NORTH COASTAL DISTRICTS
KARADA VILLAGE

Location

54. Karada (lying on 18°—32'—37" east north latitude and 83° —25' —35" east longitude) is a multi-ethnic agricultural village situated in Bobbili taluk of Srikakulam district. It is at a distance of six miles to the east of Bobbili. The village is bounded by Vegavathi river in the south and other well settled villages on other sides. Bobbili is the nearest commercial cultural, communication and administrative centre. There is an elementary school and a Post Office in the village. Srikakulam (District headquarters) and Parvathipuram (Taluk headquarters) are at a distance of 90 miles and 23 miles respectively.

Layout and residential pattern

55. There are two Scheduled Castes, one Scheduled Tribe and fourteen other caste people. Adi Andhra (Madiga) and Relli are the Scheduled Castes while Konda Dhora in the Scheduled Tribe, Koppalavelama, Padmasali, Yadava (Golla), Bevara, Telaga, Kurakula, Chakali, Mangali, Jangalu, Gavarakomati, Srishtikarnam, Telukula, Viswabrahmin and Kathadi Vaishnava are the other castes inhabiting the village. Except the Madigas and Rellis (Scheduled Castes) who are still considered as untouchables, all others are living close to each other. The Rellis and Madigas live in the south-west and north-west of the village a little away from the other caste Hindus and Konda Dhora Tribes.

56. The streets and lanes within the village are straight and except one or two, others are narrow and the houses are constructed on either side of these roads and lanes. The main village streets are locally known as Peddaveedhi Rajamargam (big main road—the equivalent of Hindi Rajpath) Chinaveedhi Rajamargam (small main road) and other streets and lanes are known by the predominant Caste/Tribe that inhabits the adjoining sites for e.g. Madigaveedhi (Madiga street), Kurakulaveedhi, Kondadoraveedhi, Relliveedhi and so on. The layout pattern of the houses is in linear streets. Each street is more or less segregated into unicaste and multi-caste

habitations. Physically the village is laid out in four parts. The western and southern peripheral parts are inhabited by the Adi Andhra (Madiga), Konda Dhora and Sigadi (Bevara) communities. Adi Andhras live in two separate blocks which are in 2 to 6 rows a little far away from the habitation of other castes. Konda Dhoras and Sigadis live in a linear street side by side. Yadava, Telukula and Mangali caste houses are also located in this street as individual blocks. In the central portion of the village, several streets of houses running from west to east, the main gate of the house facing either south or north, are found. The pattern of distribution of houses according to communities in this area shows that Koppala Velamas are residing in streets close to each other. Other castes like Srishtikarnam, Gavarakomati, Viswabrahmin are interspersed among Koppalavelama rows of houses. Yadava and Chakali houses are found mostly as a continuous street in the south. Kurakula caste houses are located to the east of the central habitation area. Chakali, Mangali and Telukula houses are also found in their neighbourhood. In the northern side of the village at a little distance from the central habitation area there are two rows of houses inhabited mainly by Telagas. Two houses of Koppalavelama are found in the neighbourhood. In the north-eastern side, again at a little distance from the central habitation area, three rows of Padmasales and Koppalavelamas are found. There is one Chakali house in this new extension area. In the north-western corner of the village are located a School, a Rice Mill, a Coffee Hotel and a cluster of houses at a little distance belonging to Relli caste. There is a tendency for the village habitation area being extended in the north-eastern corner by the Koppalavelama and Padmasale castes and in the south-western corner by the Madigas. Other castes and tribes are making adjustments in their own present habitation area. There are 3 main wells in the village. One in the Madiga street in the south-western corner is used exclusively by them, the second well in the northern portion used by *Velama*, Kurakula, Golla, Sigadi, Koppalavelama, Komati, Srishtikarnalu, Telaga, Konda Dhora, Padmasale and all other castes except, Adi-Andhra. A new well in the north-eastern corner is used by Koppalavelama, Padmasale, Telaga and Chakali castes.

57. To the north-western part of the village there is a tank called Papalahgaricheruvu which is a source of irrigation. The Vegavathi river flowing in the south-west towards the east is another water source for washing clothes etc. Cremation and burial grounds for all castes and tribes are spread out along the bank of the Vegavathi river in the south-west Adi-Andhra (Madiga) and Relli cremation and burial grounds are separate for each caste and are located a little away from that of the caste Hindus.

House types

58. The dwellings in this village are of three types based on the roofing material used viz., *purillu*, *middillu* and *penkutillu*. If the *penkutillu* has a ground floor and an upper storey then it is called *mada*. The houses are commonly constructed on hard soil locally known as *kankara* (gravel land) and *chavaka* (sand mixed with earth) but not on *regadi* (black soil). In *purillu* house type, for roofing purposes, *cheruku* grass (sugarcane leaves) or *relli* grass is used. In *middillu* house type the roof is covered with green twigs and small branches of trees known as *pachchirotta* over which mud and dung are plastered. This mud roof is called *middi* over which is erected thatched roof to protect the *middi* from the vagaries of weather.

59. Except a few houses of Koppalavelama, Padmasale, Viswabrahmin, Srishtikarnam, Gavarakomati castes, all the remaining houses are either *middillu* or *purillu* type. Now-a-days a few well-to-do Koppalavelamas are constructing R.C.C. terraced houses.

60. The homestead area of a Koppalavelama caste household is in the range of 1 to 5 cents and in the case of other households the homestead area is below one cent of land. A large number of houses are constructed by using mud as the wall material. Out of 80 households surveyed, the walls of 64 households are constructed with mud while the walls of the remaining 16 households are constructed with brick. The foundation is dug generally upto a depth of 2.5 feet or 3 feet and the walls are constructed upto a height of 8 to 10 feet from the floor of the house. The roof is supported by two *dulamulu* (main cross beams) extending from north to south. One end of

these beams rests on the walls and the other end is supported by a pillar constructed with bricks on the pial. One end of *pilla dulalu* (small beams) one over the other rest in the wall with the other ends resting on small decorated wooden pegs of 1½ feet or 2 feet in length locally known as *gurralu* which rest on the *talli dulam*, and on the next *pilla dulam* which rests on the *talli dulam*. The roof thus slopes down from the wall to *talli dulam*.

61. The house mainly consists of a *gadapa* (verandah) *nattillu* (the main living room) and *vantillu* (kitchen). Sometimes another room called *lonu* (inner room) is found in some houses. A loft is generally constructed to the full length and breadth of the *nattillu* leaving an opening of 3′ × 3′ to enter the loft with the help of a bamboo ladder. In the *vantillu*, an earthen platform locally known as *neelakuduru* is constructed adjacent to the oven and is used to keep the cooking utensils and water pots. *Vantillu* and *nattillu* are two rooms and a door from *nattillu* opens out into *vantillu*. In many of the houses of Konda Dhora, Adi-Andhra and Relli ethnic groups, there are only one-roomed houses with a small *gadapa* or verandah.

DELTA VILLAGES OF GODAVARI AND KRISHNA DISTRICTS

PASARLAPUDILANKA VILLAGE

Location

62. The village lies on 16° —30′ —08″ northern latitude and 81° —57′ —09″ eastern longitude. Situated on the right bank of the river Vainateyam, a branch of Vasista Godavari, the village is at a distance of 11 miles from the confluence of Vainateyam with the Bay of Bengal. It is constituted into a separate Revenue village of Razole Taluk for administrative purposes. It is bounded by the river Vainateyam and its flood bank on the east, Mamidikuduru, a village, on the western side at a distance of 2½ miles, Pasarlapudi (which is a village different from Pasarlapudilanka) in the north-west at a distance of 1½ miles, Lutukurru village in the south-west at a distance of 1½ miles and Badilanka village in the south at a distance of 6 furlongs. Razole, the Taluk headquarters is 9 miles away from the village and Amalapuram, the Subdivisional headquarters is 6 miles away. Kakinada, the District headquarters, is 40 miles away. Nagaram, the Panchayat Samithi headquarters and where there is a Police Station is at a distance of 4 miles to the south-west. Mamidikuduru is the nearest educational and cultural centre, where there are a High School and a Cinema hall. The important pilgrimage centres that are frequented by the villagers are Antarvedi of the same taluk, Vadapalle of Ramachandrapuram taluk, (seats of Vaishnavite temples) Kadali of Razole taluk and Palivela of Kothapeta taluk (Saivite shrines).

Size and population

63. The area of the village is 1.58 sq. miles (1,012·52 acres). The habitation area is 21·39 acres. At the 1961 Census, there were 453 households residing in 321 houses with a population of 1,975 persons comprising 990 males and 985 females. With reference to the total area of the village the density of the population per square mile works at 1,250. The population is entirely Hindu by religion and composed of the following castes—Agnikulakshtriya (Markadu), Brahmin, Mala, (Adi Andhra or Panchama), Madiga, Mangali, Settibalija, Telaga (Kapu), Vaisya (Komati), Viswabrahmin (Kamsali) and Yerukula.

Village layout and residential pattern

64. The village site is spread over an area of 21.39 acres having various clusters of houses and streets scattered over with long distances of 1 to 3 furlongs in between. Sometimes residential houses are built amidst the cocoanut gardens. The site where there is a clustering of a few houses was obviously the place where the habitations originated and with the passage of time and growth of population, the villagers have found it more convenient to spread out and have their houses constructed amidst their fields and gardens. It is also said that this wide dispersal of the houses prevents the spreading of fire hazards, and also checks the communication of contagious diseases. The location of the houses within the cocoanut gardens, of course, facilitates keeping an easy watch to minimise the

stealing of cocoanuts. In some parts of the village the houses are aligned to a linear street. Those built in the cocoanut groves are either isolated or clustered.

65. The parts of the village are generally called after the *intiperu* (surname) of the families or the name of the caste predominantly inhabiting that area. The well known names of such parts are Borusuvarilanka or Borusuvariveedhi where the majority of the inhabitants belong to Borusu *intiperu* of Telaga (Kapu) caste; the Komativeedhi in which Vaisyas (Komati), Telagas and Settibalijas reside but Vaisyas predominate; the Peethanivarimeraka predominated by Peethani *intiperu* families belonging to Settibalija caste, and Harijanavada, the area inhabited by the Mala and Madiga Scheduled Castes situated in the south-east corner and western side of the village. A compact area predominantly inhabited by Brahmins belonging to Ganti *intiperu* is known as Gantivariveedhi or Gantivarimeraka. Similarly, the area inhabited by Chakali caste is known as Chakalimeraka and that of Bhatraju (Kshatriya) caste is known as Rajuvarimeraka. The western part of the village is sometimes referred to as Badava. This has reference to an old usage, when, as some elders in the village said in the olden days (about 100 years ago), the present western portion of the village area was a scrub jungle. This was used for cattle grazing purposes and was known as Adavi Badava (leased out jungle).

House types

66. The three types of houses obtaining in the village based on the roof material are (1) thatched houses (2) tiled houses (*penkutillu*), and (3) bungalow houses. *Addillu* (with thatched roof, *nittadillu* and *paka* are the three types among the thatched houses whereas the two varieties among the tiled houses are *addillu* (with tiled roof) and *manduvalogili*, the varieties in bungalow type being known as 'simple bungalow' "meda bungalow" and 'bungalow pampini'. A detailed description and ground plan of the different types are given in the following paras.

Thatched houses with thatched roof

67. *Addillu* may be either a tiled one or thatched one. The walls are, however invariably of bricks.

68. The house site extends over an area of 64 sq. yards. The walls built of bricks are raised to a height of 8 feet above the basement which itself is raised to a height of 3 feet above the ground. The side walls stretching east-west and adjacent to the front and rear gates are 8 yards in length, 10 feet in height and 1½ feet in width. The verandah portions under the roof are sloped down to both the sides upto a height of 6 feet when the roof ends. The two central walls stretching north to south are 7 yards in length, 10 feet in height and 1½ feet in width.

69. The roof material consists of 8 beams laid upon the central walls, east to west. Parallel to the beams are kept thin shafts over *gujjulu* (wooden pieces of 3 feet length with 2″ diameter). Across the beams and above the *gujjulu* long and rectangular wooden rafters called *vennugadis* are laid. On the four sides of the *vennugadis*, the roof covered with cocoanut or palmyra shafts slopes down. The approximate cost of such a house with a thatched roof will be Rs. 1,000/- where as a tiled house of this type costs Rs. 1,400/- to Rs. 1,600/-.

Nittadillu

70. Literally it means single poled house. This type of house is rectangular in shape, the sides measuring 4 to 5 yards. A pole of 10 to 12 feet in length is fixed in the centre and from its top bamboos or cocoanut or palmyra shafts are stretched downwards upon the walls. The walls, 6 feet in height are of bricks or mud. The roof material consists of paddy straw, palmyra and date palm leaves. This house costs about Rs. 150/- to Rs. 200/-.

71. To provide further accommodation, one or two more central poles may be erected to the single poled house and this is locally called *rendu nittadillu* (two poled house). The roof of the house yet remains a four sided one. But the floor gives the appearance of a rectangle. *Yennugadi*, a wooden beam is tied to all the two or three central poles. The bamboos or cocoanut or palmyra shafts stretched from the top of the walls upwards terminate at *yennugadi*. The roof material is the same as for *nittadillu*.

Paka

72. A house with one or two central poles, with thatched roof touching almost the ground on all sides fenced with no walls is called a *paka*. Its cost varies from Rs. 60/- to Rs. 100/-.

Tiled houses

Addillu with tiled roof

73. Except the difference in the roofing material all other descriptions of this *addillu* are the same as those described in *addillu* with thatched roof.

Manduvalogili or nalugilla bhavanthi

74. *The Manduvaillu* or *manduvalogili* is also called 'the four room plan' (*nalugilla bhavanthi*). This is a four sided house with single main entrance, having a central ditch (opening sky-wards called *manduva*). It has 8 slopes—4 inwards and 4 outwards. Each of the 4 sides of the house has a central wall to a height of 13 feet, on either side of which the roof slopes. The outside slope is laid upon a wall raised to a height of 8 feet. The inside slopes, ending in the central opening, are stretched upon *vasalu* (long and thin wooden rafters) which are supported from below by poles of 7 feet in height. The back verandah may be walled or fenced or left open. If it is walled on either side of the rear gate two rooms will be formed; the one in the north-western side is used as kitchen and the other in the south-western side is used as provision room. The front verandah is left open and a pial of 4′ height is raised on either side of the steps leading to the main gate. The basement of the house is raised upto a height of 3′ to 4′ above the ground level. The outside walls contain 2 windows on each side so as to allow air and light in. Almirahs are kept to the inside of the outer walls and either side of the central wall to keep the utensils and other goods safe.

75. The roof material consists of palmyra and cocoanut rafters which are locally available at cheap rates and covered with country tiles. The wall material consists of burnt bricks of 9″×4″×2½″ size. Each gate is hinged with two doors of 5′×2′—10′ ×1″. The windows are wooden frames fixed with iron bars.

76. The walls are plastered with mud or cement and white-washed. The floor of the house is plastered with mud or cement or covered with slab stones. The house is conveniently divided into bed-room, store-room, kitchen, dining room, *padmatillu* or the deity room and courtyard of drawing room.

Bungalow

77. The three varieties of the bungalow type of houses are (i) the simple or single bungalow, (ii) *meda* bungalow and (iii) *pumpini* bungalow. Tiles or straw constitute the roofing material of a single or simple bungalow. On all the four sides, this house has verandahs. In the front verandah, there are two rooms one on each side of the main gate. The floor is 4 feet above the ground level. Steps are laid leading to the main gate and on either side of the steps are pials.

78. The house has 8 walls 4 central, 2 side walls parallel to the front and rear gates and 2 in between the central and side wall. The roof is four sided. The main difference between a *manduva logili* (courtyard house) and the bungalow type of house is that the former has 8 slopes—4 slopes inwards and 4 slopes outwards whereas the bungalow type has only 4 slopes and there is no central rectangular opening or *manduva* and instead there is a central hall in the bungalow type. Further, there, a *manduva* type could have only tiled roof whereas a bungalow type may have either thatched or tiled roof. Windows and almirahs could be arranged as per one's desire. The arrangement of the rooms for the different purposes is the same as that of a *manduva logili*.

Meda bungalow

79. A *meda* bungalow is a double-storeyed one essentially. The roof material of the ground and first floors consists of big beams over which thin wooden bars of the required length, usually 6″×3″ are laid. Small sized bricks (6″ × 3″ × 1″) are stretched and plastered with mortar and kiln *chunam*. The two stairs rise to a height of 20 to 25 feet.

Bungalow pumpini

80. The bungalow *pumpini* house is nothing but a big bungalow which is so constructed that it can be partitioned among several members of the family without any inconvenience being felt at the time of partition. Each portion would be provided with all the requirements essential for a single family. The cost of construction depends much upon the quality and quantity of the raw material used and the number of portions etc.

81. Most of the tiled houses have either brick and stone walls or mud walls. Majority of the thatched houses have mud walls made up of palmyra and date palm leaves plastered with mud. The bungalow types of houses have well-built walls with stones and bricks and plastered with cement or *chunam* and white-washed or washed with colours. Out of the 100 houses, 52 have stone and brick walls, 14 have mud walls, 28 have mud walls made up of twigs and branches of trees and coated with mud. Out of the remaining 6, 5 houses have bamboo wattled walls and one has bamboo wattled wall plastered with mud.

82. Out of the 100 houses surveyed 3 are utilised as shop-*cum*-dwellings. In the case of the artisan and service households viz., one household of Viswabrahmin (goldsmith), two households of Manyali (barbers), two households of Madiga and one Telaga household which took to carpentry as a subsidiary occupation, the work spots are located in the dwellings themselves. The rest of the 91 households are used exclusively as dwellings.

83. The houses of Brahmins and Vaisyas, which are of *manduva logils* and *addillu* types are tiled. Out of the 11 Brahmin households 3 are singe roomed, 7 have 2 rooms each, while the other one has more than 3 rooms. All Brahmin houses are maintained neatly. Once or twice in a week, usually on Fridays and Sundays and on festival days, the floors are smeared with cow dung and decorated with different designs of *muggu* (lime drawings) on floor. The walls are white-washed once or twice in a year mostly for Dasara and Deepavali festivals and compulsorily at the time of marriages.

84. People belonging to Vaisya caste live in tiled houses and *meda* bungalows which speaks of their well-to-do position in the village. Out of the 6 households, 5 have more than 3 rooms each and only 1 house is with a single room. Only 42 people reside in 25 rooms—a spacious living area indeed, when compared to the living area occupied by other communities in the village. Besides bed rooms, they have separate store rooms, dining rooms and kitchen rooms.

85. Out of the 20 households of Telaga community selected for study, 10 live in tiled ones, 3 in *addillu* type which may also be included in tiled houses, 2 in bungalow *punyinin*, while 4 are in thatched houses (or the *paka* and *addillu* types) with one family living in a rented house. Among the 20 households, 4 are single roomed, 12 are double roomed whereas 3 have 3 rooms each and only one has more than 3 rooms. 129 people living in 41 rooms, the average thus being 3 persons per room, which is not considered very congested.

86. 25 Settibalija households have been covered by survey. With the exception of one bungalow and one tiled house, all the rest are either *addillu* type or single poled houses or *pakalu*, the roofs of all of which are thatched with palmyra leaves or cocoanut shafts, though in some cases, teak, mango etc., timber also is used. Whereas 9 houses are single roomed, the other 16 are double roomed. In all, 104 people are living in 41 rooms. They do not, however, lag behind other agricultural castes in the matter of maintenance and decoration of houses.

87. Houses of the Kshatriya, Viswabrahmin, Kummari, Rajaka and Mangali castes and the Yerukala tribe have each of them either one or two rooms.

88. The houses in which Malas and Madigas live are mostly thatched ones. There are, however, two bungalow type of houses among Malas. These 28 households comprise 16 single-room tenements 9 two-room tenements, 1 three-room tenement and 2 four-room tenements—have 45 rooms and 116 people live in these households.

MAREDUMAKA VILLAGE

A Typical Wet Agricultural Village in Krishna District.

Location

89. Maredumaka village is located in Kankipadu firka of Vijayawada taluk and sub-division within Krishna district in Andhra Pradesh lying on 16° —28′ —11″ north latitude and 80°—49′—36″ east longitude. The nearest Police Station is at Kankipadu. It is at a distance of 18 miles towards south-east of Vijayawada town and a mile away from Tarigoppula Railway Station on the Vijayawada—Masulipatnam broad gauge railway line. The village is connected by an earthen road in

the north-east to a metal road running between Manikonda and Tarigoppula. It can also be reached from Vijayawada by motor bus upto Kankipadu whence a distance of 7 miles has to be covered by walk, bullock-cart or by bicycle.

Village layout and residential pattern

90. The village site or *grama nattam* (as it is locally called) of Maredumaka is 16 acres 59 cents in size. Location relief of the village site is in a low land. The village site is surrounded by agricultural fields. The distributory canal from Rhyves main channel (Krishna waters) passes through the south and south-eastern tip of the village. The soil is very sticky. A slight shower is enough to make the movement slippery and heavy. Right in the middle of the village there is a Vanneru, a brook flowing in a south-easterly direction. This brook has been both a blessing and a curse to the village. The waters of the brook are made use of for washing, and bathing cattle. Owing to the overflow of water in the brook in the rainy season some of the houses and streets in the village however get submerged. Major part of the village gets separated from other parts thus affecting adversely communication and transport in the village. Because of the open air latrine habits of the people a large area of the fine Vanneru bank gets spoiled and becomes a source of public nuisance and ill-health. The stagnant waters of the Vanneru have thus been a fertile breeding ground for mosquitoes. There is no permanent bridge across the brook, with the result that a temporarily raised earthen road has all the dangers of cart falls and related accidents.

91. The whole village may be broadly classified into three zones. The northern part of the village is a new extension comprising Ramaraopet and Satyanarayanapet. It is mostly inhabited by Golla and Krishna Balija castes. The western part of the old village site is mostly inhabited by Kamma caste and the south-eastern part is inhabited by the Roman Catholic Christians (Harijans converted).

92. The main streets of the village are not metalled. They become impassable and muddy during the rainy season. The village has no pasture lands and jungles as is typical of a deltaic village. There is a poramboke (village waste land) for the cattle to assemble. Grave-yard and cremation ground are on the eastern side of the earthen road leading to Tarigoppula and just a few feet from the habitat of Satyanarayanapet extension. Close to the habitation area, the two parts are set apart for cremation and burial purposes for a section of Kamma and Kummari castes.

House types

93. According to structural characteristics, house types in this village can be classified into *onti nittadi* (one-main-poled). *rendu nittadi* (two-main-poled) and another type called *manduva logili*.

Onti nittadi (one-main-poled) type

94. In this type there is a *nittadi* (main pole) whose height varies between 12 to 14 feet above the ground. Four beams attached to the main pole at a height of about 10 feet slope downwards in four corners and rest either on the walls or poles or on both. These beams are interspersed with bamboos. *Veduru baddalu* (bamboo splits) are tied to them horizontally with palm fibre. On this frame either the palmyra leaves or paddy straw are tidily spread to make the roof. Generally, *onti nittadi* structure provides only a main living room wherein space has to be found for kitchen, store, sleeping, sitting and in some cases for domestic animals also. In such cases, cattle-shed (if the family has cattle) and living room are usually one and the same. In an attempt to solve the space problem some families extend their *onti nittadi* roof a few feet backwards or forwards to form what are called *vasara* (enclosed verandah). Most of the working class and lower middle class families dwell in this house type.

Rendu nittadi (two-main-poled) type

95. In this type, two main poles, erected side by side, at a distance are connected by a beam. The two poles and the main beam hold around them several side beams. Bamboo and *veduru baddalu* (bamboo splits) are fitted to them horizontally with palmyra fibre to form a frame for roofing. Either palmyra leaves or paddy straw or locally manufactured black tiles are used as roofing materials.

Manduva logili

96. There is another type of house called *manduva* logili. It is a spacious house

with four sloped tiled roof. An open rectangular area in the central place as the four roofs slope in the middle of the house ventilates light and air. In the rainy season rain water from the four side slopes of the roof is drained just across the walls by a metallic pipe. All around this central opening, sleeping rooms, drawing hall, backyard, kitchen, and *wasara* (front yard) are situated. Well-to-do families live in this type of houses.

97. Four *pucca* reinforced cement concrete houses have been recently built in the village by a few families belonging to upper class.

Cattle sheds

98. Middle class and upper class families owning cattlestock erect *onti nittadi* and *rendu nittadi* type sheds to house the cattle. One or two upper class families have built cattle sheds on some plan and design recommended by the veterinary department. But in other cases cattle sheds are generally thatched structures with sides open where scant attention is paid to the needs of veterinary and animal husbandry principles.

Housing materials

99. Unskilled labour is available in plenty for house building. Broadly speaking, working class families do not employ paid labour on a large scale to build their houses. Palmyra leaves and paddy straw are available in the vicinity of the village. Black tiles are manufactured by the local artisans. Skilled labour for building *pucca* houses is procured from other places. There are brick kilns in the village. But these have temporarily sprung up to supply the needs of *pucca* buildings. Local labour is employed here in the off agricultural season. All other housing materials are to be procured from outside.

Dwelling layout

100. Except the dwellings of upper and unspecified class, other dwellings are not well kept. Garbage and cattle shed wastes are in many cases dumped very close to the dwelling houses. Poultry-stock are not properly and systematically housed with the result refuse and rubbish get spread by them around the family courtyard. In the whole of the dwelling area in the south-eastern part of the village where working class families live, house layouts and drainage arrangements are deplorable. Houses are generally dark, dingy, ill-ventilated, low-roofed and huddled together. Houses are without baths. Open air latrine habits of both men and women in the same area make a mockery of sanitary standards. All the slum habits prevailing in this area mar the good atmosphere created by one or two decent and disciplined families. Especially houses near the Vanneru brook and the wells are in a dirty swamp.

TELANGANA PLAINS VILLAGES

KOTHA ARMUR VILLAGE

Location

101. The village Kotha Armur lies on 18°—47′—30″ north latitude and 78°—18′—50″ east longitude and administratively falls under Armur taluk of Nizamabad district and is at a distance of 2 miles to the north-east of Armur, the Taluk headquarters and 18 miles from Nizamabad, the District headquarters. The village being situated along the Hyderabad—Nagpur National Highway at the 111th milestone is well served by bus routes as all the buses which go to Adilabad and Jagtial (a town in Karimnagar district) pass through this village. Kotha Armur and Perkit are adjacent villages lying on either side of the National Highway to the east and west respectively. These two villages, to a stranger, look, for all purposes, as one village though they are two separate revenue villages.

There is, however, only one village Panchayat for these two villages as they are very closely inter-related both socially and economically. This village is covered by the Community Development Block of Armur and falls under the jurisdiction of Armur Police Station. The Post Office situated in Perkit village serves this village as well. The nearest Telegraphic Office and the Government Hospital are at Armur, while the nearest Railway Station is at Dichpelly about 29 miles from the village

Population

102. At the time of Survey (10-1-1962 to 9-8-1962) there were 184 households in this village. The total number of

households by communities are detailed below :—

Sl. No.	Name of caste	Total number of households
1	Chakali	2
2	Dhor (S.C.)	1
3	Fakeer (Muslim)	5
4	Ghoshka	2
5	Goondla (Boya)	3
6	Goondla (Fishermen)	6
7	Goundla	21
8	Guratikapu	11
9	Guratireddy	5
10	Kamsali (Viswabrahmin)	1
11	Komati (Vaisya)	3
12	Koshti	54
13	Kummari	2
14	Madiga (S.C.)	17
15	Mala (S.C.)	9
16	Mangali	1
17	Mashitla	1
18	Mera	2
19	Munnurukapu	10
20	Padmasale	4
21	Poosala	9
22	Sathani	1
23	Tenugu (Muthrasi)	2
24	Vaddara	12
	TOTAL	184

Village layout

103. The total area of the village is 1,182 acres and 20 guntas (1 acre = 40 guntas) as per the records available with the village Karnam. Out of this total area, the registered village site accounts for about 6 acres 35 guntas according to the Revenue records and this area covers only the old habitation to the south of the Jagtial road. The newly extended habitation area to the north covering about 2 acres is still registered as a *patta* land only.

104. The entire village of Kotha Armur lies on the eastern side of Hyderabad-Nagpur National Highway which runs from south to north. The Nizamabad-Jagtial road which branches off from the National Highway almost from the middle of this village and runs due east divides the village into two major divisions. The habitation on the northern side of this road represents the newly extended area of the village while that on the southern side, the old one. The layout of the village is haphazard. In the old habitation the houses are clustered together with narrow lanes whereas the streets in the new habitation are comparatively wider.

105. Most of the Devanga community people live in a separate cluster on south-western side of the village though there are a few houses of this caste men adjoining the habitations of the other caste people. The Mala, Madiga and other untouchables have their separate habitations on the south-east corner of the village as they are not allowed to live in the neighbourhood of the other caste Hindus. Again Malas and Madigas have their own habitation areas in separate clusters who practise segregation among themselves. They do not draw water from the same well. Of these two castes, the Malas are considered to be superior. A couple of houses of the Muslims who are Fakeers residing in this village are, however, found close to those belonging to Scheduled Castes.

Place of worship

106. There are no important places of public interest except the small temples of a few village deities. A small Hanuman temple under a tamarind tree on the northern side of the habitation area on a raised platform is the place of worship where on Saturdays people offer cocoanuts, and *bhajans* are sometimes conducted. A small park provided by Panchayat to the east of the National Highway with a community radio set is the place where the people spend their evenings. The village deities Mahalaxmi Pochammathalli, Thathavi, Bhoolaxmi, Rakthamahankali and Ayduchethula Pochamma are located in the agricultural fields on the south-eastern side of the village.

Crematorium

107. With no cremation ground set apart as such in this village, the land situated near a small tank on the south-eastern side of the habitation area is being used as a burial ground.

Monuments

108. A huge dilapidated earthen wall is found around the house of Malipatel (of Reddy caste) called *guruju* which is said to have been constructed by the ancestors of the Malipatel in olden days when

conditions were insecure to safeguard and defend themselves against the raiders. All the inhabitants used to take shelter within this high wall in times of danger.

Sources of water

109. Wells are the only source of drinking water for the villagers. A peculiar feature of this village is that each caste has got its own well and all caste Hindus are allowed to draw water from any one of those wells irrespective of the fact that a particular well is owned by a particular community. The Harijans cannot use the wells of other communities. There is only one public well in the village just near the entrance to the village and the Harijans are also allowed to draw water from it.

House types

110. The three types of houses that one comes across in this village are *poorillu* (thatched hut) *kunillu* (tiled house) and *pucca* house (R.C.C. roofed house). Among the tiled houses there are again two types i.e., *ekeri* and *duheri*. The double storeyed buildings are locally called as bungalows. Out of the 99 houses surveyed (in one house there are two households living) 66 are with tiled roof, one with a *pucca* roof and 32 have their roofs thatched with palmyra leaves.

111. A detailed description of each of these three types of houses is given below:

Poorillu

112. The houses which are roofed with palmyra leaves or grass are called locally *poorillu*. The walls may be of bricks, mud or of any other material. There are a few houses with no side walls but constructed with small side poles and a steep slope which are called *poorigudise*—the poor man's house without walls and windows. These houses can be constructed with one or two rooms. Such types of houses are found among Vaddara and Poosala castes. Following is the brief description of a *poorigudise* of Vaddara caste.

113. The normal measurements of the *gudise* are 26′ × 10′. Small poles of 3′ height locally called *gunjalu* are fixed in the earth in the four corners. Besides, poles of the same height are fixed on both sides lengthwise at an interval of 5′. Over them big rafters are placed lengthwise. These poles are of palmyra tree or of date palm or any other kind of wood locally available. Then in the centre of the other two sides *nittallu* (centre poles) of 9′ height according to the length of the house are fixed in the earth. These two central poles are essential to any house, i.e., one in the front and one in the rear and the number of central poles may increase depending upon the length of the house. A rafter known as *yenugarra* is placed lengthwise over the central poles. Then bamboos are placed on both sides of the *yenugarra* at an interval of 1/2 foot keeping one end on *yenugarra* and the other on the rafter placed over the small poles. The ends of the bamboos are then tied with thin ropes or with palmyra fibre. The roof is thatched with palmyra leaves on both the sides. The slope of the roof on both sides of *yenugarra* is such that ends almost touch the ground on both sides. The rear portion is completely covered while the front portion is used for entrance which is covered by a door made of palmyra leaves locally called *thadika*. After completing the thatching, a big rafter is placed on the ridge lengthwise and is tied with palmyra fibre in such a way that both the ends are brought in the inner portion to protect the palmyra leaves from flying. Many houses of this type are used both for living as well as for cooking purposes but some houses have separate kitchens also. Palmyra leaves and Palmyra rafters etc. required for constructing this type of house are procured from the local palmyra groves. The cost of palmyra leaves per 1,000 is about Rs.4. The barren palmyra tree is cut with the permission of the Excise authorities and used for rafters, poles etc. The poor people generally cut the palmyra tree using their own labour and pay the charges for cutting palmyra leaves only. The cost of construction will be less than Rs. 10 in ordinary cases and may be Rs. 25 in exceptional ones.

114. *Poorillu* type of houses can sometimes be fairly costly. In such cases the walls will be of either mud or brick and the wood used for superstructure is of teak or any other costly one. There would be more rooms with doors and windows but no *gunjalu* and *mitalu* in whose places are constructed walls. *Yenugarra* and *vasalu* (rafter) etc. would be used. Only the roofing is done with palmyra leaves. The minimum amount required for such type of house would be Rs. 250 and the maximum depends upon the quality of the wood used.

115. Thirty-two houses are having roofs of palmyra leaves. Out of these 32 houses, 13 are having only palmyra leaf walls, 2 are of twigs and branches of trees etc., and only one is of bamboo wattled wall plastered with mud. The remaining 16 houses are having either mud or brick walls.

Tiled house

116. Among the tiled houses, one comes across two types of houses, viz., *ekeri* and *duheri*. *Ekeri* houses do not have verandahs whilst those with verandahs go by the name of *duheri*.

Ekeri

117. One of the *ekeri* houses is described below. The total area of the house site of the average weavers' family who generally occupy this type of house, is 36′ × 24′. The actual plinth area of the house is 24′ × 8′. The foundation is of stones and mud. Wall is 1½′ thick and the side walls are 6′ high. Two teak wood beams are placed on the walls breadthwise at an interval of 12′. On these two beams two frames of 3′ height in the shape of inverted 'V' called *komirelu* are fixed. A rafter called *yenugarra* is placed lengthwise over these *komirelu*. Then the rafters at an interval of 1/2 a foot are placed on all sides with one end resting on the ridge piece and the other end on the walls. Small size bamboo rafters are woven closely and covered thickly with neem leaves plastered with mud over which tiles are spread. The main door of the house generally faces east. The space between the walls and beams is closely knitted with small wooden rafters. The space so covered is locally called *ataka* and is used for storing purposes. The *ekeri* house generally consists of one room which is divided into two portions by erecting a small mud wall of 3′, of which one is used as a kitchen.

Duheri

118. The *duheri* type of house is also constructed on lines similar to the *ekeri*. It will, however, have more than one room and verandahs are used for fixing looms by the weaver's community while the other caste people make it the venue for gossiping. In most of the *duheri* houses there is open space in the middle with verandahs on all the three sides and a wall on the fourth side with a main entrance in the middle. The top of the main house as well as the wall are covered with tiles as a protection from rains leaving the central courtyard open.

Bungalow

119. The bungalow or *"Bungala sayabanillu"* is a double storeyed building having verandahs. The roof of ground floor is constructed with wood and the roof of first storey will invariably be a tiled one. The type of construction will be the same as in the case of other tiled houses. Only a few well-to-do families have such type of houses. The front portion is called *arugu* and all the rooms are called *arralu*. The names of these rooms will be according to their usage, i.e., the room used for cooking is called *vantillu* and the one used for keeping other utensils is called *samanarra*.

120. The majority of houses have their main doors facing east locally referred to as *poddikku*, i.e., direction of the sun, whilst in a few cases the main doors may be facing north, locally referred to as *gangadikku* i.e. the direction of the Ganga.

RAYALASEEMA VILLAGES

MANCHALA VILLAGE

Location

121. Manchala popularly known as Manthralayam, is in Yammiganur Sub-taluk of Adoni Taluk in Kurnool district. It is located on the southern bank of the river Tungabhadra lying on north latitude 15° —56′ —35″ and east longitude 77° —25′ —39″. It is at a distance of 32 miles from the Taluk headquarters in the north and 13 miles from the Sub-taluk headquarters at Yammiganur in the north-eastern direction, Kurnool, the District headquarters, is at about 58 miles on the east from this village. The nearest Railway Station is Mantralayam Road (9 miles away) on the Madras-Bombay line. It is connected by motorable roads to Kurnool, Adoni and Yammiganur. Country boats are used by the people on the northern side of the river to reach the place during the rainy season. The village is on the border of Andhra Pradesh and Mysore States. Tungabhadra river flows skirting the village in a semi-circular form on the southern side.

122. The village site including the Mutt area (there is Sri Raghavendra Swamy

Mutt here) is about 12.50 acres. The village has a population of 1,533 persons spread over 281 households. There are 22 communities in the village (Brahmin, Boya, Chakali, Christian, Darzi, Dasari, Golla, Idiga, Jangam, Kapu, Lingayat, Mangali, Muslim, Nambi, Settibalija, Telaga, Viswabrahmin, Vaisya, Begari, Kuruva, Pinjari). Telaga, Boya and Brahmin are numerically large in number.

123. The lanes and by-lanes in the village are very narrow and zig-zag and the houses are clustered together. There are no wide front or rear yards found in a large number of houses. Dung pits are dug on the outskirts of the village. The open air latrine habit of the people and the absence of proper arrangements for the disposal of the night soil and the congestion of house sites are the main factors causing insanitary conditions.

124. No extension of the habitation area could be attempted on the southern side of the village due to the proximity of the river Tungabhadra and on the northern side because of Sri Raghavendra Swamy Mutt, choultries etc. The village is surrounded by agricultural fields on other sides.

House types

125. The total number of residential houses in the village are 287 excluding cattle shed etc. All the residential houses in the village irrespective of caste/community are *middillu* type. The walls are constructed of mud. Date palm leaves are used to cover the walls as protection against rain water. Generally an average dwelling consists of two apartments. The ventilation for the dwellings is very poor. Most of the dwellings have pials on the front side of the house. It serves as a drawing room also. Sometimes the pials are enclosed temporarily with *thattis* and are rented out for the pilgrims that visit Mantralayam at the annual fairs and festivals.

126. The following description of some villages typical of this area with a large number of hamlets is reproduced from Chapter IV of Vol. II—Andhra Pradesh—Part I-A.— General Report.

Case studies of villages with unduly large number of hamlets

Kurabalakota in Madanapalle taluk is a fairly large village covering an area of 10,173 acres within the surveyed boundaries of the Revenue village, made up of 4,257 acres *patta* dry; 701 acres *patta* wet; 68 acres assessed waste; 4,149 acres unassessed waste. The entire village including its hamlets has a population of 6,481 made up of 1,313 households. The village has as many as 37 hamlets besides its main headquarters (Kasba) village of Kurabalakota. The following statement gives a complete list of all the hamlets, their distance from the headquarters village, the communities living in each hamlet, the approximate number of households and population living in each hamlet and the occupation of the residents.

STATEMENT

Hamlets in the Revenue Village of Kurabalakota in Madanapalle Taluk of Chittoor District

Sl. No.	Name of the village/hamlet	Distance from the head-quarter's village Mile-Fr.	Communities inhabiting	Number of households	Approximate population	Occupation	Remarks
1	2	3	4	5	6	7	8
1	Kurabalakota (Kasba)—(Headquarters village)		Dudekula	337	2,180*	Traders in tamarind and coral beads; cultivation	Dudekula is a semi-Muslim and semi-Hindu community. The coral beads of this place are so famous that they are exported to other States as well
			Muslims	25		Business	
			Vaisyas	30		Business	
			Kapus	2		Village Munsiff, Business	

STATEMENT

Hamlets in the Revenue Village of Kurabalakota in Madanapalle Taluk of Chittoor District—contd.

Sl. No.	Name of the village hamlet	Distance from the head-quarter's village Mile—Fr.	Communities inhabiting	Number of households	Approximate population	Occupation	Remarks
1	2	3	4	5	6	7	8
			Balijas	70		Cultivation, Agricultural labour	
			Brahmins	10		Archaka; Karnam	
			Edigas	6		Cultivation	
			Thogata Chetty	5		Cultivation; Handloom weaving	
			Gandla	4		Oil extraction	
			Mangali	20		Hair cutting; Playing on band; Cultivation	They serve the hamlets as well
			Chakali	16		Washing clothes; Cultivation	They serve the hamlets as well
			Kamsali	4		Silversmiths; Cultivation	,,
			Carpenter Muslims	3		Carpentry	,,
			Blacksmith Muslims	2		Blacksmithy	,,
2	Poreddivaripalle	0—2	Balijas	4	15	Cultivation	
3	Maddireddigaripalle	1—0	Kapus	30	200	Cultivation	
4	Kamurivaripalle	1—4	Harijan Christians	20	100	Agricultural labour Railway employees	
5	(a) Kurabalakota Railway station	0—4	Railway employees of different communities	10	50	Railway employees	
	(b) Kurabalakota groundnut factory	1—0	Harijans	15	60	Factory coolies; Small cultivators	
6	Baisanivaripalle	1—0	Kapus	15	60	Cultivation	
7	Kothapalle	1—4	Kapus	15	60	Cultivation	
8	Guttalo Indlu	2—0					
9	Bayyareddigaripalle	1—4	Vadde Boyas and Kapus	20	100	Stone cutting; Cultivation	
10	Errapalle	2—0	Kapus	40	300	Cultivation	There is one Elementary School in this hamlet
11	Thuguvandlapalle*	2—4	Kapus	40	300	Cultivation	
12	Chinnappareddigaripalle	2—6	Kapus	15	100	Cultivation	
13	Singannagaripalle	3—0	Vadde Boyas	60	350	Petty landlords	
14	Brahmanapalle	2—4	Kuruba Gowdu	10	70	Cultivation; Sheep rearing and *Kambli* weaving	
15	Kamtevaripalle	2—6	Kumba Gowdus and 1 Kummari family	25	200	Cultivation; Sheep rearing and pottery	The one family of Kummaris the traditional potters sell their wares at K. Kota shandy

*The total population of the entire village Kurabalakota is 6,481 as per Primary Census Abstracts. After deducting the total of the hamlets the population of Headquarters village has been arrived at as 2,180.

STATEMENT

Hamlets in the Revenue Village of Kurabalakota in Madanapalle Taluk of Chittoor District — contd.

Sl. No.	Name of the village/hamlet	Distance from the head-quarters village Mile—Fr.	Communities inhabiting	Number of households	Approximate population	Occupation	Remarks
1	2	3	4	5	6	7	8
16	Mutravaripalle	3—0	Kapus	3	20	Cultivation	
17	Upparapalle	3—0	Kapus	5	30	Cultivation	
18	Bolakavaripalle	3—0	Kapus and 1 Vadde family	8	40	Cultivation	
19	Eguva Chennamarri	3—0	Golla Gowdu; 4 Kapu households and 1 Medari household	20	120	Cultivation and Sheep rearing; basket weaving (Medari)	Golla Gowdus do not weave *Kambils* unlike Kuruba Gowdus
20	Diguva Chennamarri	2—6	Kapus; 1 Golla Gowdu household	20	120	Cultivation	
21	Madigapalle	0—3	Madiga (S.C.)	30	200	Agricultural labour; Cultivation	These Scheduled Castes serve as Agricultural labourers to all the ryots of the village in the headquarters village as well as the hamlets
22	Malapalle	0—3	Mala (S.C.)	10	50	Agricultural labour; Cultivation	,,
23	(a) Eguva Boyapalle	0—5	Boyas; 2 Madiga households	40	200	Agricultural labour; Cultivation	
	(b) Jogipalem	1—0	Jogis	3	15	Pig rearing and cooly	
24	Pagadalavaripalle	0—3	Balija Settis; 1 Golla household; 1 Thogata Chetty household	16	123	Cultivation and Handloom weaving	
25	Jangavaripalle	0—3	Kapu Reddi; 10 Mondi households; 10 Harijans households	50	300	Cultivation and Agricultural labour	
26	Tummachetlapalle	1—6	Vadde	10	10	Labour particularly earth digging	Portion of this hamlet (30 households) lies in Angallu limits
27	Nayunivaripalle	1—2	Balija Settis; Kapus, Vadde	30	203	Cultivation and Agricultural labour	
28	Kansanivaripalle	1—4	Kapus; Balija Settis; Vadde	71	368	,,	
29	Gunakuntlavaripalle	2—0	Chakali, Madiga (S.C.) Kapu; Kuruba Gowdu	10	60	Cultivation; Agricultural labour; Sheep rearing etc.	

STATEMENT

Hamlets in the Revenue Village of Kurabalakota in Madanapalle Taluk of Chittoor District—concld.

Sl. No.	Name of the village/hamlet	Distance from the head-quarters village Mile—Fr.	Communities inhabiting	Number of households	Approximate population	Occupation	Remarks
1	2	3	4	5	6	7	8
30	Diguva Boyapalle	2—0	Boyas	55	172	Cultivation and Agricultural labour	
31	Buddareddigaripalle	2—4	Kapus;	3	15	Cultivation	
32	Muddumandlapalle		Boya	(EXTINCT)			Hamlet Nos. 33 to 38 lie to the east of a hill separating them from the main village, hence the names of all hamlets carry the prefix 'Konda Turpu' meaning "East of the hill". These hamlets are somewhat cut off from the main village and the residents of these hamlets approach the neighbouring Revenue village of Chinna Tippa Samudram for marketing schools etc.
33	Konda Turpu Siddareddigaripalle	3—4	Kapus; Kuruba Gowdus	20	10	Cultivation	
34	Konda Turpu Kothapalle	3—4	Kapus	8	40	,,	
35	Konda Turupu Diguvapalle	3—6	Kapus	15	75	,,	
36	Konda Turpu Eguvapalle	3—6	Kapus	20	100	,,	
37	Konda Turpu Nallagutlapalle	4—0	Kapus	5	25	,,	
38	Kondaturupu Madigapalle	4—0	Madigas (S.C.)	8	40	Agricultural labour	

The above statement illustrates how rural life in a typical village moves. It is clear that each hamlet represents a functional distribution of the population. There are some hamlets made up purely of the Scheduled Caste agricultural labourers, some made up mostly of sheep rearers, some of cultivating ryots and some represent Railway Colonies and so on. Some hamlets are big containing as many as 70 households with about 300 population and some are tiny with just two households. Some hamlets lie in close proximity to the main village, hardly 2 furlongs away and some are as far away as 4 miles. Yet all these hamlets are tied together to the main village of Kurabalakota in some way or the other. The Co-operative Society of the village serves all the hamlets. The residents of all the hamlets depend on the main village for their marketing and the sale of their produce at the weekly *shandy*. Usury plays a vital part in the life of the ryots. The ryots of almost all the hamlets approach their Co-operative Society located at the headquarters village or a private money lender living there to meet his needs. The village Panchayat which has its jurisdiction over the entire Revenue village is yet another unifying force. Similarly the institution of a single set of village officers for the entire Revenue village and the maintenance of common Revenue accounts render all the constituent parts of the Revenue village being treated as a single unit. The Sub-Post Office and the High School at the headquarters village are the other institutions which serve all the hamlets. The village artisans as the carpenter, blacksmith, etc., mostly located at the headquarters village serve the ryots of all the hamlets customarily. The Scheduled Caste labour though

residing in a couple of hamlets at some distance from the main village serve all the ryots of all other hamlets. Thus a unity of the Revenue village is forged and the main village together with the hamlets positively function as a single unit. It will be artificial to treat each hamlet as a separate independent unit. Making the Census village identical with Revenue village despite the existence of several hamlets appears justified. The people of an entire Revenue village are unified by social, economic and administrative ties. It would appear that probably it was the central headquarters village which was originally inhabited and as more and more lands were brought under the plough and the ryots found the need to exercise closer supervision the people started shifting to fresh habitations close to their lands while they continued their ties with the parent village. To meet the needs of the different hamlets that arose thus, the services came to be concentrated in the headquarters village. It is interesting that almost all agriculturists have moved on to the hamlets, while business, crafts, educational facilities, religious services etc., were allowed to develop predominantly in the headquarters village. It is somewhat curious that the business and trade is concentrated in the hands of a particular community 'Dudekula'—semi-Muslim in Kurabalakota village who could not have had roots in the village. It is also interesting to note how in due course the different communities gathered round their own kith and kin and some hamlets were entirely colonised by a certain community.

However, it is observed that half a dozen hamlets bearing serial Nos. 33 to 38 in the list appear to be at a considerable distance from the main village, nearly 4 miles away and even cut off by a massive hillock. The names of all these hamlets carry the prefix 'Konda Turpu' meaning 'east of the hill. In fact, by virtue of their proximity to the neighbouring Revenue village of Chinna Tippa Samudram, the residents of these hamlets seem to have closer dealings with that village for purposes of marketing, educational facilities etc. But the common institutions such as the Panchayat of Kurabalakota Revenue village, the Co-operative Society, the system of village, officers seem to hold these hamlets together to their parent village of Kurabalakota.

In another Revenue village, Kosuvaripalle, an interior village of Madanapalle taluk, similar characteristics as in Kurabalakota are observed. This village has as many as 54 hamlets. The area of the village is 13,000 acres of which the village site is only 38 acres 61 cents. The population of the village is 4,648. Most of the population seems to live in houses constructed on their own *pana* lands which have now been formed into hamlets. The village artisans such as the carpenter, blacksmith, the barber, washerman live in the headquarters village and serve all hamlets. There is a prominent temple of Venkateswara in the main village. The village is located in rugged country through which a spring channel cuts through. The hamlets have all come up along this spring channel or in the midst of valleys.

When the villagers themselves were asked about the reason for the development of a large number of hamlets in this tract unlike in the neighbouring district of Anantapur, they offered a convincing enough explanation. In this tract which is covered by hills and forests, communications were difficult and when land was opened up for cultivation in the neighbourhood wherever feasible, the cultivators had to necessarily stay close to their lands to look after them and protect the crops from wild animals whereas in the plain open areas as in Anantapur district the need for large number of hamlets did not arise. Further, historically, also, in Anantapur, Kurnool etc., which were often over-run by hordes of invading armies, there was a necessity for the people to huddle themselves around a central village which had its own little rampart and a watch tower and this prevented the growth of small isolated hamlets.

In yet another village viz., Kalakada village of Vayalpad taluk of Chittoor district also it was observed that there were 22 hamlets. The headquarters village is predominated by Muslims while the cultivating population was comprised mostly of Gandla community who are traditional oil-mongers. The Kapus who command cultivation in Madanapalle area are very poorly represented in this area. One has to travel from Kalakada to Piler and from thereon to Tirupati to get a clear idea of the very undulating and broken up country-side

which is very picturesque but challenging to the ryot to appreciate how the rural habitations have come to be dispersed in the area. Quite naturally a group of these had a central core and this central core with its satellite hamlets together constitute a Revenue village which is found to be a most feasible unit to be recognised, as a Rural unit for Census purposes.

127. The upland area of Nellore District bears the same characteristics as Rayalaseema villages have and hence the following case studies pertaining to Nellore District have been given here.

YELAMANCHIPADU VILLAGE

Location

128. Yelamanchipadu is a settled wet agricultural village in Kovur Taluk of Nellore District lying on north latitude 14° —36′ —28″, east longitude 79°— 54 —41″. It is at a distance of 18 miles both from taluk and district headquarters in south-eastern direction. There is no bus route directly connected to this village. The visitor has to reach Buchchireddipalem, a roadside village on the Nellore-Cuddapah road. From there, Yelamanchipadu is at a distance of about 5 miles connected by a *kutcha* road. This distance can be covered by foot and bullock-cart. The nearest Railway Station is Kovur or Nellore since the distance to both these places is the same. There is a Sub-Post Office in the village.

Layout

129. Pathuru and Reddypalem are the two hamlets of Yelamanchipadu which is the main village also known as Kothur. The Pathuru and Kothuru are situated amidst wet lands while Reddypalem is a bit away from the fields. The surroundings of the village present a good appearance to the visitor with green fields, sprinkled with palmyra trees. While going to Pathuru one of its hamlets, one has to cross a small stream and a canal which are at a distance of one furlong from the main village Reddypalem; the other hamlet is at about two furlongs which can be reached by crossing the wet lands by a narrow and slippery foot-path.

130. In Yelamanchipadu, main village (Kothuru) and Pathuru the houses are not constructed in a planned way while in Reddypalem (one of its hamlets) the streets are wider and better planned although the houses are thatched ones. Except three *pucca* houses in the village, the residential quarters in this village are thatched houses. In Reddypalem, each house has a wide front yard fenced with *thummakampa*. The sanitary condition of this hamlet is satisfactory. But the general sanitary condition of Yelamanchipadu main village and Pathuru are far from satisfactory since the residential houses are clustered together with no space in between and as there is no scope for further extension as they are encircled by the wet lands. The unhygienic condition of the village is mainly due to the marshy agricultural fields throughout the year around these two habitations and the proximity of a small tank and the canals flowing adjacent to the village. On the representation of the inhabitants, the State Government has allotted a fairly big plot on an elevated place in the south-eastern side of the present habitation as the new site for habitation. There is a Government Primary School in Reddypalem run by the voluntary subscriptions of its residents. There are two wells in the village but their water is saline. For drinking water purposes the villagers resort to a well situated in a mutt at a distance of 1½ furlongs away from the village. But Harijans take water from canals. The inhabitants of Reddypalem entirely depend on the canal water for drinking purposes.

131. At the time of survey during 1960, there were 1,151 persons comprising 583 males and 568 females. They are distributed over Hindu, Muslim and Christian religions. Among Hindus there are 16 castes viz., Balija, Brahmin, Chakali, Christian, Yerukala (Scheduled Tribe), Kapu (Reddy), Kamma, Kumari, Madiga (Scheduled Caste), Mala (Scheduled Caste), Mangali, Muthrasi, Pichakuntla, Vaisya, Viswabrahmin, Yanadi (Scheduled Tribe) and Yadava. Reddis are numerically dominant followed by Yadavas and Malas (Scheduled Caste) among Hindus. Muslims are also in large numbers.

House types

132. All the houses in the village except three which are terraced are narrow and ill-ventilated and consist of mud walls and bamboo roofs thatched with palmyra leaves.

The Malas are having miserable hovels. They as well as Muslims live aloof from other castes and communities in the village. Their houses are generally circular in shape and have a wall 5' high with tumble-down roof. The dwellings consist of but one room which serves all purposes. Generally the diameter of the house is 12 to 18 feet. The well-to-do agriculturists like Kapus and Gollas have their dwellings consisting of two or three detached thatched huts. One of them serves as sleeping room, the second as kitchen, etc., and the third as cattle shed and for keeping agricultural implements.

APPENDIX

ANDHRA PRADESH

Settlement Patterns in Andhra Pradesh

Extracts from Chapter I—Introduction of Volume II—Andhra Pradesh Part IV-A, Report on Housing and Establishments, Census of India, 1961.

21. It is difficult to define a typical village of the State. The villages vary considerably in size, shape and type of house constructions. This is bound to be so on account of the vast ecological variations that occur among the different parts of the State. If one should get a bird's eye view of the villages of the entire State, one finds the curious conical palmyra roofed clusters of houses closely huddled together in Srikakulam and Visakhapatnam areas; in the other coastal districts of East Godavari, West Godavari, Krishna, Guntur and Nellore, one finds fairly large sized, thickly populated central villages, the houses generally arranged in a linear fashion along a middle road, particularly so in the delta districts where the village site is limited, being a little elevated land in the midst of wet fields, the houses being mostly of thatched roof. By virtue of the uniform productivity of the land, the habitations are fairly uniformly spread with large concentrations of population in each village. In the drier Rayalaseema districts, the villages are a few and far between, normally located by the side of an irrigation tank and the individual hamlets of hardly 5 to 10 huts scattered about at some distance from the parent village. In the heart of the dry tract comprising Kurnool, Anantapur and a portion of Cuddapah District, one suddenly comes across villages with monotonous flat roofed and stone walled houses arranged in a linear fashion or forming square or rectangular clusters. In Telangana area, villages with strangely symmetrical tiled roofs occur. If one scans the tribal areas of Adilabad, Khammam, Godavaris or Visakhapatnam and Srikakulam Agencies, villages with scattered habitations strewn over the valley come to sight.

(Please refer to the illustrated map given at the beginning of this report which gives some idea of the varieties of houses met with.)

22. By and large, the houses can still be divided into three main classifications of thatched, tile and flat-roofed houses as observed nearly a century ago in the 1871 Census Report of Madras Presidency. The photographs at the end give some idea of the villages with these three broad types of houses that occur in this State. The succeeding chapters discuss in greater detail the variations and their relation with ecological factors.

23. A village represents a Revenue village recognised as such by the Revenue Administration of the State, normally with a central village site where the people live, with or without smaller hamlets and certain agricultural lands and waste lands adjoining the village with definite surveyed boundaries, on which the village community generally depends. The villages are mostly located close to a source of irrigation such as an irrigation tank, canal etc.

24. The arrangement of the habitation itself on the village site is that it has a central core where generally the wealthier classes of landlords live. There may be a village platform (Ratcha Banda) around a shady tree somewhere there. Then an outer circle or a parallel street where the poorer tenant ryots live. Further, on the outskirts or sometimes even cut off from the main village, the untouchable "Mala" or "Madiga" agricultural labourers reside. Village layout plan of Tallasingaram village at the end, gives some idea of how a village is constituted.

25. The grouping of houses in a particular fashion may be the result of (i) occupation of the majority of the inhabitants, (ii) caste and religion of the people, (iii) common needs like sinking and up-keep of wells, ponds and pools. It is common to find that in many villages in this State, houses belonging to a community are clustered together in distinct localities or streets. Incidentally, as some of the castes in the rural areas are still pursuing the traditional occupations, grouping of households following the same occupation will also be noticeable in some of these villages. An

example of this type can be seen in the village layout Plan of Tallasingaram village given at the end.

27. It is generally seen that the linear type and the square or rectangular type of arrangement are very common in the old and settled villages with many permanent dwellings, particularly in the delta regions of Krishna and Godavari and in the irrigated zones of other districts. This is illustrated in the village layout Plans of South Tirupati Rajapuram and Doddipalle village and the photo relating to West Godavari district at the end of this note. This feature of the villages in the irrigated areas may be due to the fact that building sites are limited in extent, the village site itself being relatively small, a very large proportion of the area being covered by low level irrigated lands.

28. On the other hand shapeless clusters and isolated homesteads are more common in the hilly and forest regions like the Agency tracts of Srikakulam, Visakhapatnam and East Godavari Districts, and the tribal areas in Khammam, Warangal and Adilabad Districts.

One of the main reasons for such grouping or arrangement of houses in these areas may be that the tribal people inhabiting these tracts frequently move from place to place because of shifting cultivation and for finding means of subsistence in new areas. These little moving clusters of villages are mainly responsible for the difficulty in locating or identifying villages in the Agency tracts or forest regions. Thus, compact and regularly laid out villages seem to be characteristic of the plains, while dispersed or isolated settlements are typical of hilly and forest tracts. Vidal De La Blache in his 'Principles of Human Geography' has stated that "the scattered manner of grouping suits localities where, as a result of the dissection of relief, soil and hydrography, the arable land is itself divided up. The clustered village is indigenous, on the other hand in districts where the arable area is continuous, admitting of uniform and expansive exploitation." In the slopy regions "the scattered fragments of cultivable land are often too small to support more than a few isolated farmsteads. The inhabitants are compelled to depend on other resources* like pasture lands, forest and woodlands. Marshy areas and in some cases scarcity of water, rugged terrain and poor soils are responsible for limiting the amount of contiguous arable land which in turn results in dispersed or isolated settlements. It may incidentally be noted that with the increasing complexity of functions and the consequent increase in size, the bigger villages and towns tend to have more or less well-defined streets, and spaces between the buildings become relatively regular.

*Page 210, Principles of Human Geography by Mamoria and Pritham Singh (Kitab Mahal 1958).

29. In spite of these four distinct types of grouping or arrangement that can be distinguished in different parts of the State, it has to be noted, as remarked in the Memoir of the Anthropological Survey of India that "each type has a fairly wide range of variation, so that instances may not be rare when it becomes difficult to determine if a particular example should be placed in one category or another." Generally the linear type or the square or rectangular development of the linear, is found in many areas of this State, with isolated or dispersed clusters being typical of the hilly or forest regions and Agency tracts.

House types in Andhra Pradesh

Extract from Chapter V—Material of Wall and Roof of Volume II—Andhra Pradesh Part IV-A Report on Housing and Establishments, Census of India, 1961.

House types in Coastal Andhra districts

2. If one traverses Srikakulam and Visakhapatnam districts, the sight of clusters of peculiar conical huts closely huddled together with a very steep roof of palmyra thatch, the leaves almost reaching down to the ground at once strikes one's attention. It is obvious that the constructions are so shaped as to resist the cyclonic weather that this part of the coastal land is frequently subjected to. The area abounds in palmyra trees which obviously form the cheapest material available for house construction. The beams, the rafters, the roof cover and even the rope for securing all these together are all made out of that very useful tree —the Palmyra. Going over to the Agency tracts of these districts, the houses continue to be low roofed and normally they are all constructed in a row with common walls and a long continuous roof. The houses are constructed in the midst of valleys. The tribal of the area obtains all the materials

needed for his house from the forests. The roof is of jungle thatch. The walls are made of wattle covered with earth. The houses are very neatly finished. To the poor tribal the house may cost him hardly anything except his own labour. In the urban areas of Visakhapatnam district and particularly in Visakhapatnam city itself, the construction are greatly influenced by the modern design and technique. For example the large colony put up by the Caltex Petroleum Company looks more like a little America! There are fashionable modern types of buildings on the Uplands overlooking the sea which look very exotic and attractive. But taking some of the older constructions, they seem to conform to some pattern. There are quite a few houses with tiled roofs at a markedly steep incline so as to be gale-resistant.

Crossing over to the next coastal district of East Godavari the pattern of constructions changes distinctly. A good number of houses with country tiled or "Mangalore tiled" roofs which are set at a normal incline unlike the Visakhapatnam roofs which are much steeper are to be seen. The East Godavari district also has a few factories manufacturing the roof tiles which are extensively used in the area. Perhaps this is an indication of the greater prosperity of this delta district. The walls of the buildings are, of course, generally made of mud or brick.

Going down further to West Godavari and Krishna districts, the houses show a further distinction. The walls are, of course, basically mud. The roof material is almost invariably the paddy hay, which is available in plenty in these delta districts. The paddy hay is neatly arranged to form the roof and is secured well by running across ropes which are also made by turning paddy straw. In front of the houses is generally found the peculiar paddy storage bin which is cleverly constructed by running and piling up rings of paddy straw rope to form a cylindrical wall which is secured firmly and rendered damp proof by plastering with cowdung. The roof of the bin is covered by paddy hay. The ryots of the area are apparently so much attached to this pattern of houses that we find that those of them who have colonised in some areas of Telangana as in Nizamabad district or Warangal district almost invariably put up identical type of houses there, which could easily be distinguished from the indigenous type of housing of the area in the neighbourhood. Besides the type of house just described, in the midst of several of the rich delta villages of West Godavari and Krishna one often finds a garish so called modern type of house with *pucca* roof of R.C. and embellished with all types of decorative figures and painted with loud colours of blue, green, red and yellow or whatever colour that meets the fancy of the constructor showing off all the vulgar riches of the owner!

Guntur district does not show any peculiar type of house of its own. The houses are generally of the type found in Krishna district except that in the western portion of the district which is rocky and dry, the walls are made of stones and the roof is put up with dry stalks of corn or red gram or conforms to the flat mud roof type. The tile roofed houses are more common in Ongole area.

The adjacent coastal district of Nellore, however, shows a variation. Quite a few houses have walls made of laterite stone that is easily got in the district. The majority of the poor, of course, stick to mud. The roof is made up of palmyra leaf or paddy hay. In portions of this district, including the outskirts of the district headquarters town of Nellore, one comes across the miserable looking low huts inhabited by the tribe Yenadis, who are the agricultural labourers as well as domestic servants of the area. These habitations can hardly be called as huts. It is just a small low conical shed hardly 6′ or 8′ in diameter made of palmyra leaves with a small entrance which can be entered by a person only by kneeling down on all the fours. These sheds have no walls.

House types in Rayalaseema districts

3. The dry Rayalaseema districts of the State comprising Cuddapah, Kurnool, Anantapur and Chittoor districts show house types entirely different from those found on the coastal district. The clusters of simple round huts with mud walls and roofs made of sheaves of dry corn stalk or jungle thatch, looking almost prehistoric in conception, are a common feature of the villages of Cuddapah district. The poverty of the people is so marked that they can hardly afford any better type of house. Kurnool district and the portions of Cuddapah district adjoining Kurnool district show a distinct type of houses quite different from the houses found in other areas.

One suddenly comes across concentrations of flat roofed houses almost entirely made of stones. The walls are put up by packing flat stones one over the other loose or sometimes dressed and built in mud or lime mortar. Even the roof is formed by spreading flat sheet stones over country wooden rafters and the upper portion covered with saline clay. The soil, though black cotton in its surface layer, has a formation of sheets of flaky stone just a few feet below the surface. One has merely to dig out the surface soil of his field to find the stones needed for his house construction. Several villages of Kurnool district present a monotonous appearance of stone walled and flat roofed houses which are so strikingly different from the houses of other areas. One has only to travel from Kurnool to Srisailam by road to realise this. In the district headquarters, Kurnool city itself, even the most modern type of house is constructed with stone walls. But in the same district as one approaches the forest areas of Nallamalai hill region, the character of the houses changes completely. The walls change to bamboo which can be obtained in plenty in the forest area and the roof is made up of jungle grass. The Chenchu tribal "gudems" of the Nallamalais with small round huts made up entirely of forest products cannot fail to attract the attention of the observer.

In Anantapur district, the constructions reflect the poverty of the area. This is an area often affected by drought and famine. The drab flat mud roofed house is common. The thatch roofed huts also occur in plenty. The thatch is often made up of date palm leaf: the date palm grows extensively in the desert like land. The walls are of coarser stone unless it is dressed and not the neat layers of a flat stone as found in Kurnool district.

The district of Chittoor shows a slightly better type of houses. The district is mostly situated on the Mysore plateau. The picturesquely undulating landscape with clean red soil seems to have had some effect on the housing pattern which is generally neater. In the areas adjoining Mysore State the latter's influence is apparently felt and one often comes across the typical tiled houses which are a general feature in the Mysore State housing. In the interior villages, however, the poverty of the people is reflected by the round mud-walled and corn stalk roofed houses of the Cuddapah type.

House types in Telangana

4. The Telangana region of the State reveals yet another distinct type of housing different from that observed either in Coastal Andhra or Rayalaseema. The tiled house (which is of country tiles and not the Mangalore tile) is more common than thatched houses. Particularly in Medak and Nizamabad districts, one comes across villages almost entirely made up of country tiled houses. But in the Nizamsagar project area of Nizamabad district and also in Warangal district one comes across the spectacle of certain isolated villages presenting an entirely different picture from the other villages of the neighbourhood. These are the villages put up by the migrants from the delta districts of the State who have bought up the lands of this area and settled down in the last decade or two. The habitations make it appear as though an entire coastal delta village had been uprooted and planted in the midst of the wet lands of the project. The roofs of the houses are of paddy hay as described earlier. The peculiar grain storage attached to the house is there. The village also contains a water storage made up of a shallow rectangular pond dug by the villagers in which water from the canals is impounded, which is so typical a feature of most of the delta villages. These villages are generally referred to by the other people of the district as 'Guntur Palli'.

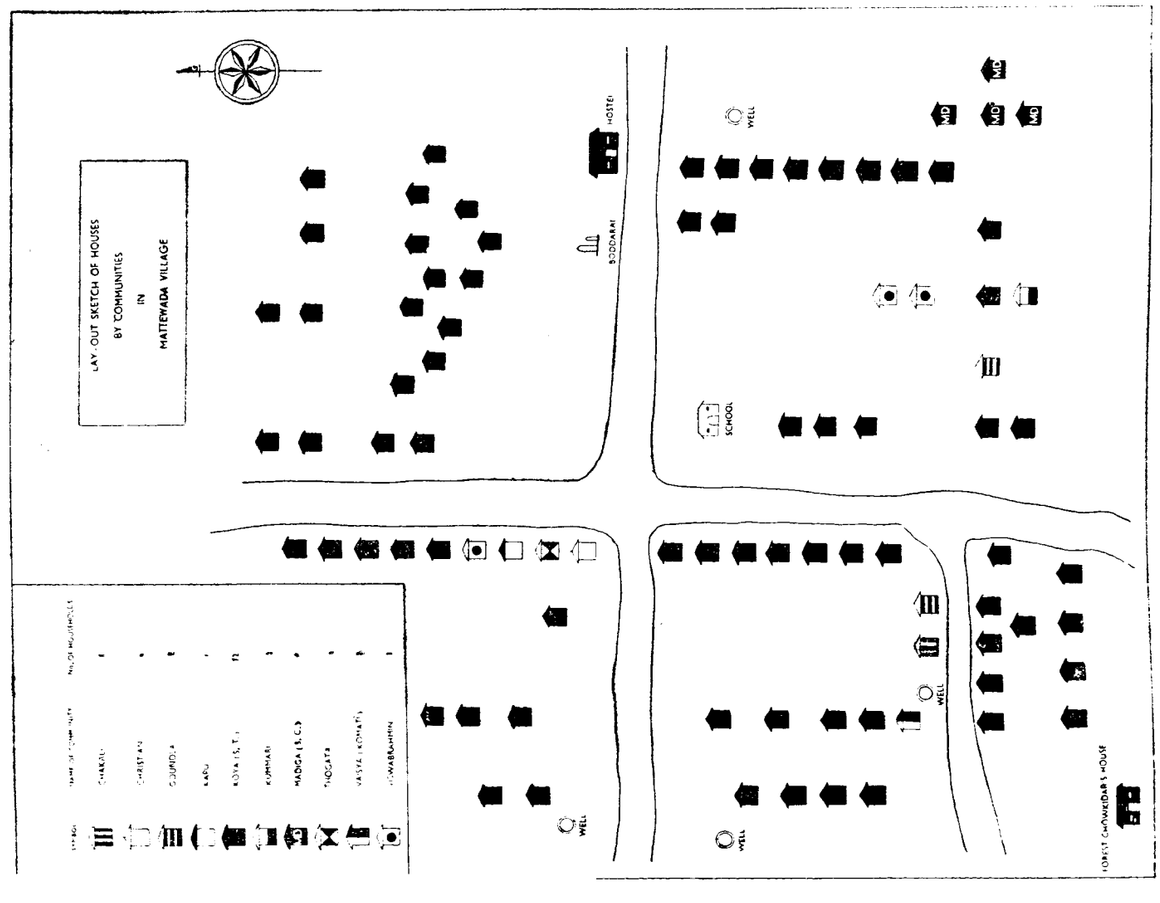
The drier districts of Mahbubnagar and Nalgonda, especially in areas where rainfall is scanty, exhibit a preference for the flat roofed houses. In Makthal taluk of Mahbubnagar district is a peculiar type of house, stone-walled and mud-roofed, with edges of the roof covered by date palm leaves apparently to prevent the erosion of mud over the protecting parapet of the roof. Nalgonda district also abounds in mud-walled and flat mud-roofed houses. In the taluk headquarters of Devarakonda which is situated in the midst of a very dry belt of the district such a type of house is strikingly conspicuous.

All other districts of Telangana and particularly Hyderabad, Medak, Nizamabad, Adilabad, Karimnagar and Warangal,

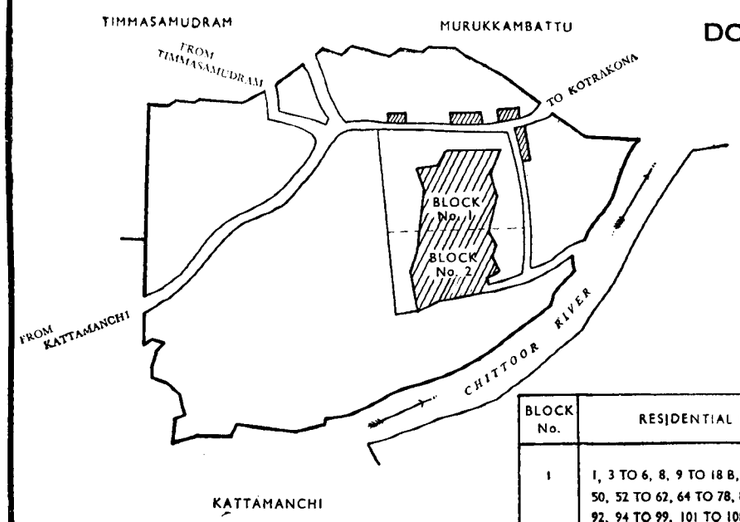
exhibit a distinct bias towards the country-tiled house. It is obvious that the heavier rainfall does not permit of the construction of that flat mud-roofed houses in these areas. Hence the inclined tiled roofed houses are preferred. It is difficult to say exactly as to why the country tiled house is preferred to a thatched house. Obviously the tiled house is more expensive but is more permanent and safer from the risk of fire accidents. Apparently the local soil is better suited for the manufacture of counrty tiles and the non-availability of jungle thatch might have led the people to take more and more to tiles as roofing material. Probably tradition too has something to do with preference for certain types of houses. These tiled residential houses of Telangana also generally follow a certain set pattern in lay out. A typical lay out plan is found among the illustrations in this report. These houses generally have an open courtyard in the middle and the tiled living portions of the house are built round it. An underground drain from the middle courtyard runs below the front portion of the building and opens out into the street in front of the house.

In the western extremity of Hyderabad district, however, a new type of construction comes into view—houses with walls made up of lime stone as also the roof which is not flat but inclined and covered with stone shingle. This is the area well known for quarries of the famous Tandur stone which is extensively used as good flooring material in most houses in Hyderabad city and elsewhere in Telangana.

In the forest areas of Adilabad, Warangal and Khammam inhabited by considerable tribal population, the construction of residential houses conforms to the material that the tribals can get from the forests. The walls are generally made of wattle plastered with earth or dung. The roof is thatched which is sometimes made of mere twigs and leaves. The tribal habitations here are very different from those of the Agencies of Visakhapatnam or Srikakulam. The houses of this area are stabler. Each house is independent and not a row of houses with common walls as found in the Agencies. The walls are high. The roof is not so steep and low as in Visakhapatnam for the obvious reason that this area is free from gales. The area is very hot in summer though it does get to be considerably cold in winter. The tribals of these districts are better settled on agriculture than the shifting cultivators of the Visakhapatnam Agencies.


LAY-OUT SKETCH OF HOUSES
BY COMMUNITIES
IN
MATTEWADA VILLAGE
HOSTEL
SCHOOL
WELL
FOREST CHOWKIDAR'S HOUSE

LAY OUT OF
DODDIPALLE VILLAGE
CHITTOOR TALUK
CHITTOOR DISTRICT

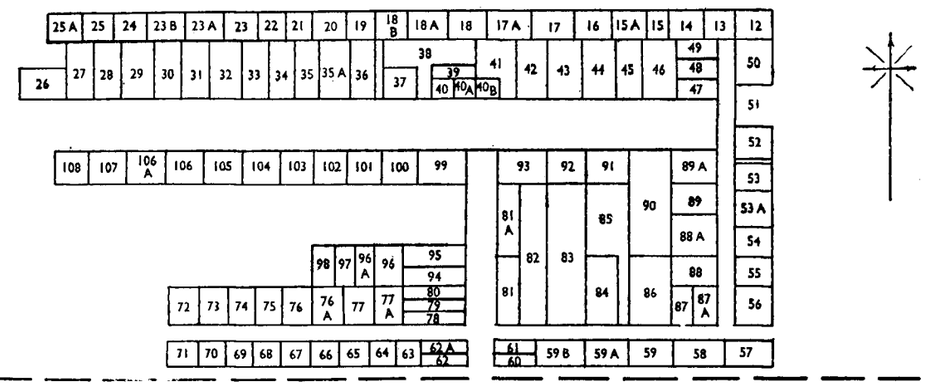


KEY LIST

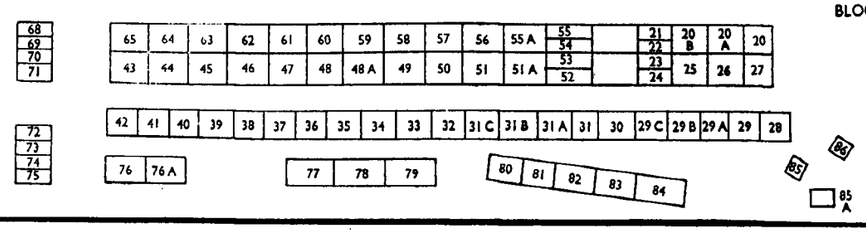
BLOCK No.	RESIDENTIAL HOUSES	NON-RESIDENTIAL HOUSES	TOTAL HOUSES
1	1, 3 TO 6, 8, 9 TO 18 B, 20 TO 30, 33 TO 50, 52 TO 62, 64 TO 78, 81 A TO 84, 86 TO 92, 94 TO 99, 101 TO 108.	2, 7, 8 A, 19, 25 A 31, 32, 40 A, 44, 51, 53 A, 63, 76 A, 79 TO 81, 85, 89 A, 93, 100, 107 A.	132
2	1 TO 4, 6 TO 32, 34 TO 57, 59 TO 61, 64 TO 79, 81 TO 85 A	5, 29 B, 33, 58, 62, 63, 80, 85, 86.	100

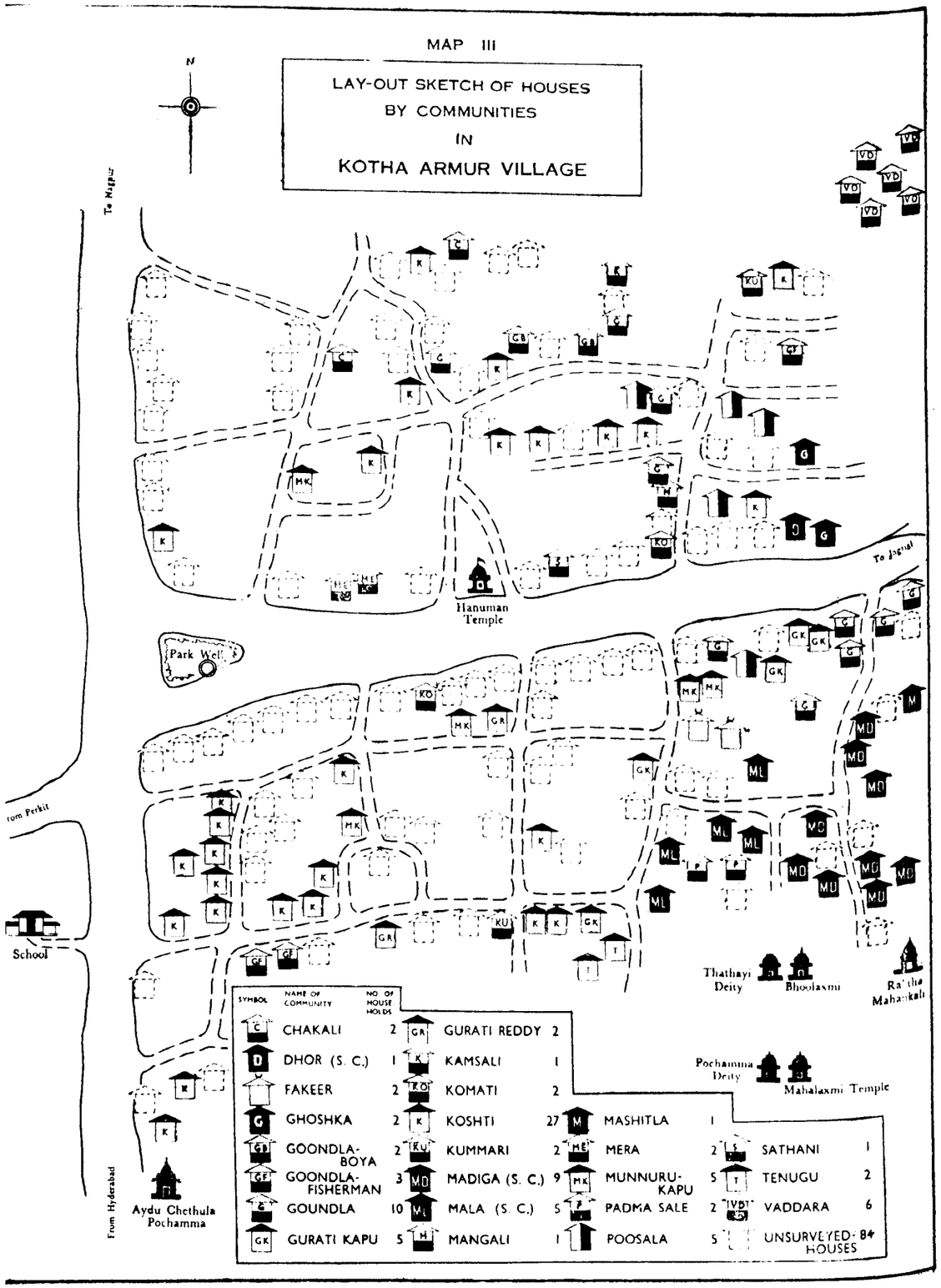
HOUSE DISTRIBUTION PLAN

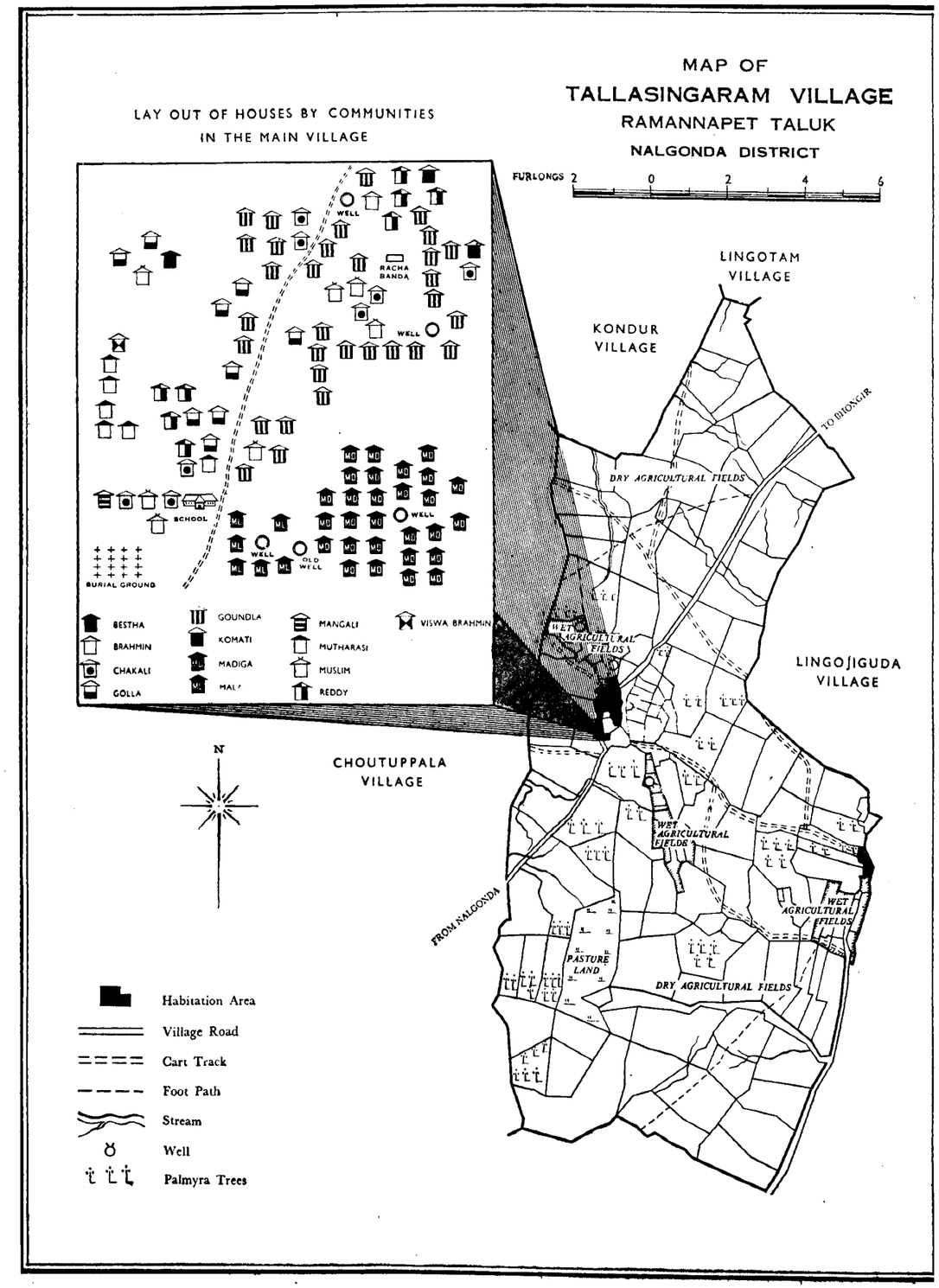
BLOCK No. 1

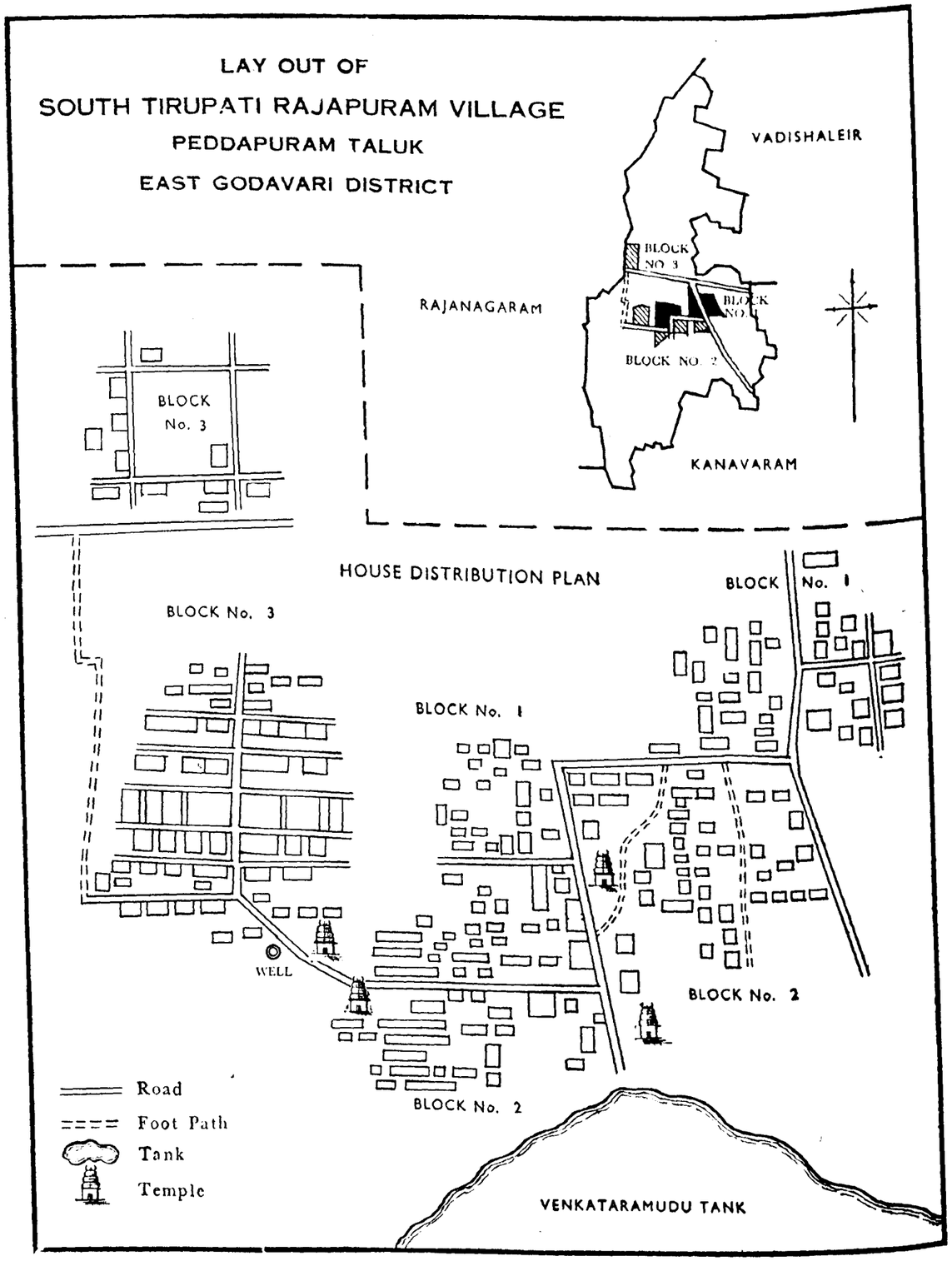


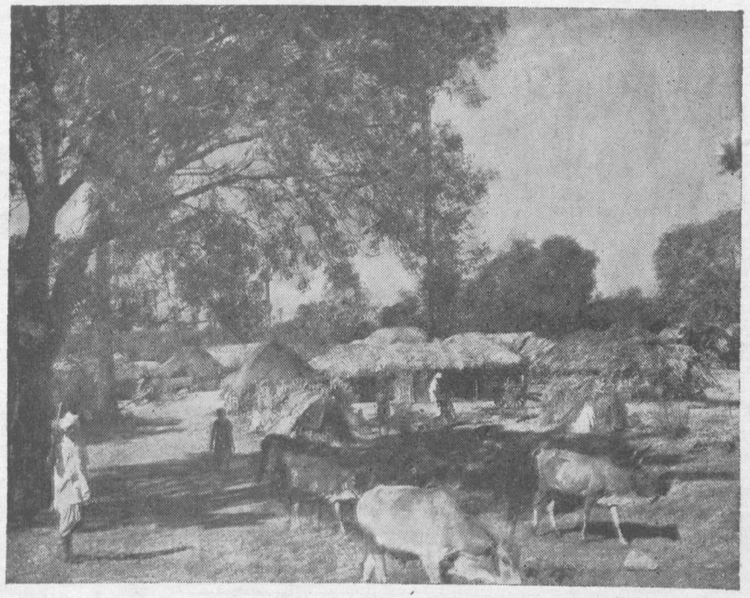
BLOCK No. 2




MAP III
LAY-OUT SKETCH OF HOUSES
BY COMMUNITIES
IN
KOTHA ARMUR VILLAGE
N
To Nagpur
Hanuman Temple
Park Well
To Jagial
From Perkit
School
Aydu Chethula Pochamma
From Hyderabad
Thathayi Deity
Bhoolaxmi
Ra'the Mahankali
Pochamma Deity
Mahalaxmi Temple
SYMBOL
NAME OF COMMUNITY
NO OF HOUSE HOLDS
CHAKALI 2
DHOR (S. C.) 1
FAKEER 2
GHOSHKA 2
GOONDLA-BOYA 2
GOONDLA-FISHERMAN 3
GOUNDLA 10
GURATI KAPU 5
GURATI REDDY 2
KAMSALI 1
KOMATI 2
KOSHTI 27
KUMMARI 2
MADIGA (S. C.) 9
MALA (S. C.) 5
MANGALI 1
MASHITLA 1
MERA 2
MUNNURU-KAPU 5
PADMA SALE 2
POOSALA 5
SATHANI 1
TENUGU 2
VADDARA 6
UNSURVEYED-HOUSES 84

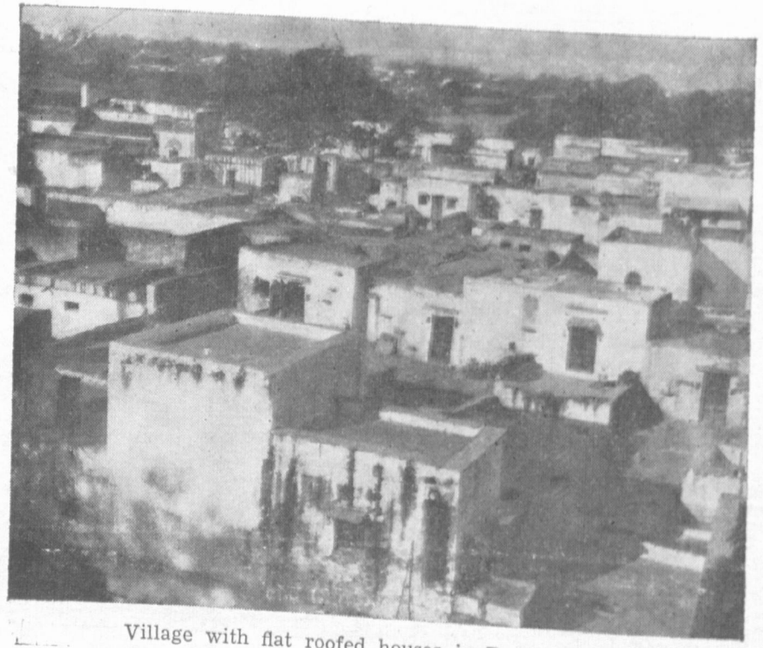

MAP OF
TALLASINGARAM VILLAGE
RAMANNAPET TALUK
NALGONDA DISTRICT
FURLONGS 2 0 2 4 6
LAY OUT OF HOUSES BY COMMUNITIES
IN THE MAIN VILLAGE
WELL
RACHA BANDA
SCHOOL
OLD WELL
BURIAL GROUND
BESTHA
BRAHMIN
CHAKALI
GOLLA
GOUNDLA
KOMATI
MADIGA
MALA
MANGALI
MUTHARASI
MUSLIM
REDDY
VISWA BRAHMIN
LINGOTAM VILLAGE
KONDUR VILLAGE
TO BIBNGIR
DRY AGRICULTURAL FIELDS
WET AGRICULTURAL FIELDS
LINGOJIGUDA VILLAGE
CHOUTUPPALA VILLAGE
N
FROM NALGONDA
PASTURE LAND
Habitation Area
Village Road
Cart Track
Foot Path
Stream
Well
Palmyra Trees


LAY OUT OF
SOUTH TIRUPATI RAJAPURAM VILLAGE
PEDDAPURAM TALUK
EAST GODAVARI DISTRICT
VADISHALEIR
BLOCK NO. 3
BLOCK NO. 1
BLOCK NO. 2
RAJANAGARAM
KANAVARAM
BLOCK No. 3
HOUSE DISTRIBUTION PLAN
BLOCK No. 1
BLOCK No. 3
BLOCK No. 1
WELL
BLOCK No. 2
BLOCK No. 2
Road
Foot Path
Tank
Temple
VENKATARAMUDU TANK

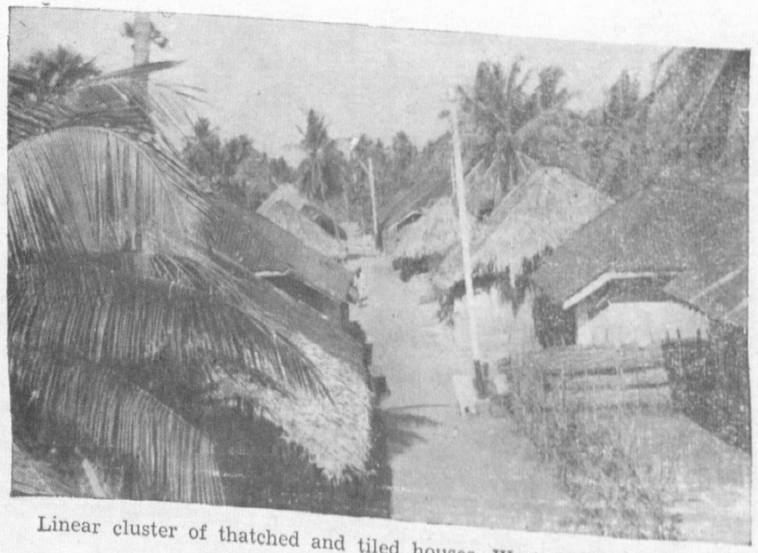


Village with thatch roofed houses.

Village with tile roofed houses in Telangana.

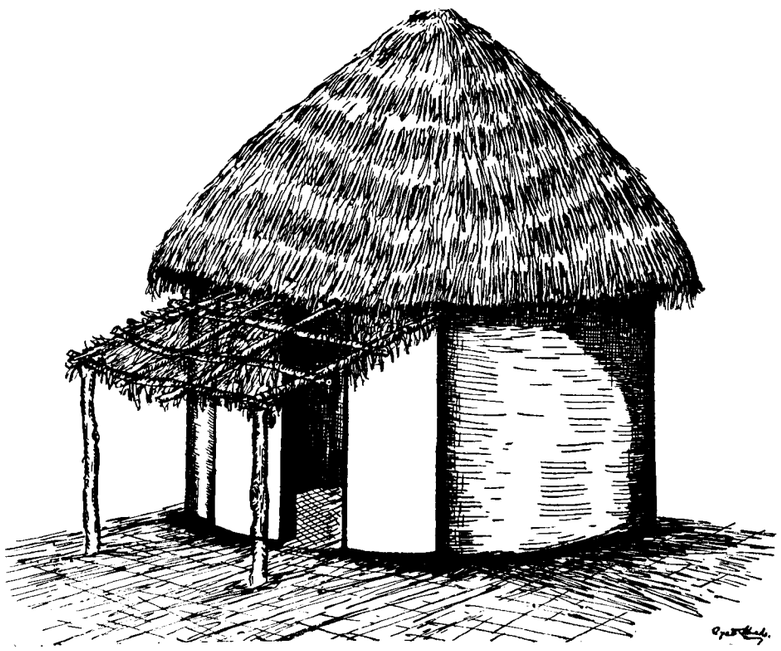


Village with flat roofed houses in Rayalaseema.

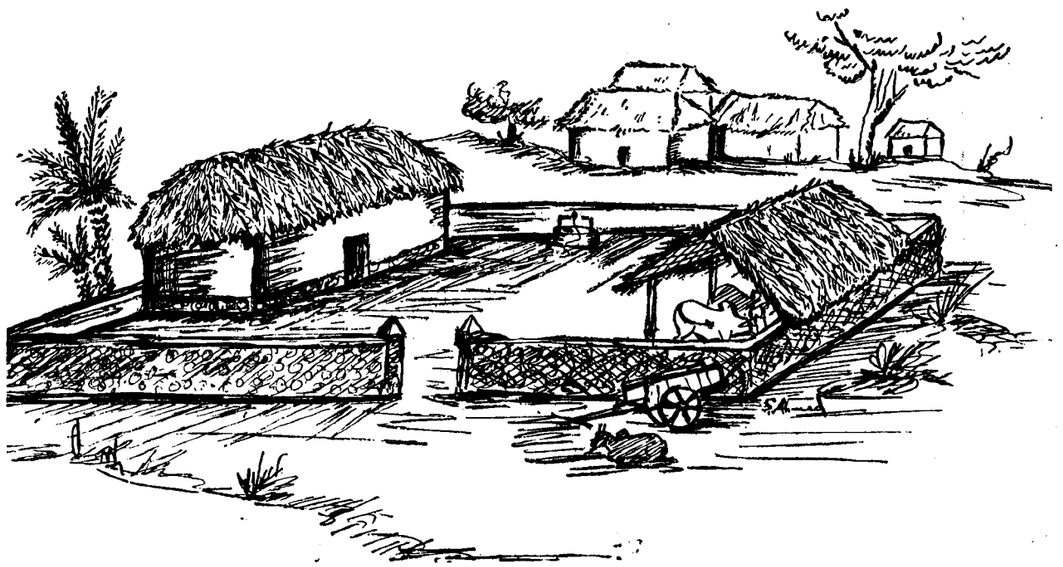


Linear cluster of thatched and tiled houses, West Godavari district.

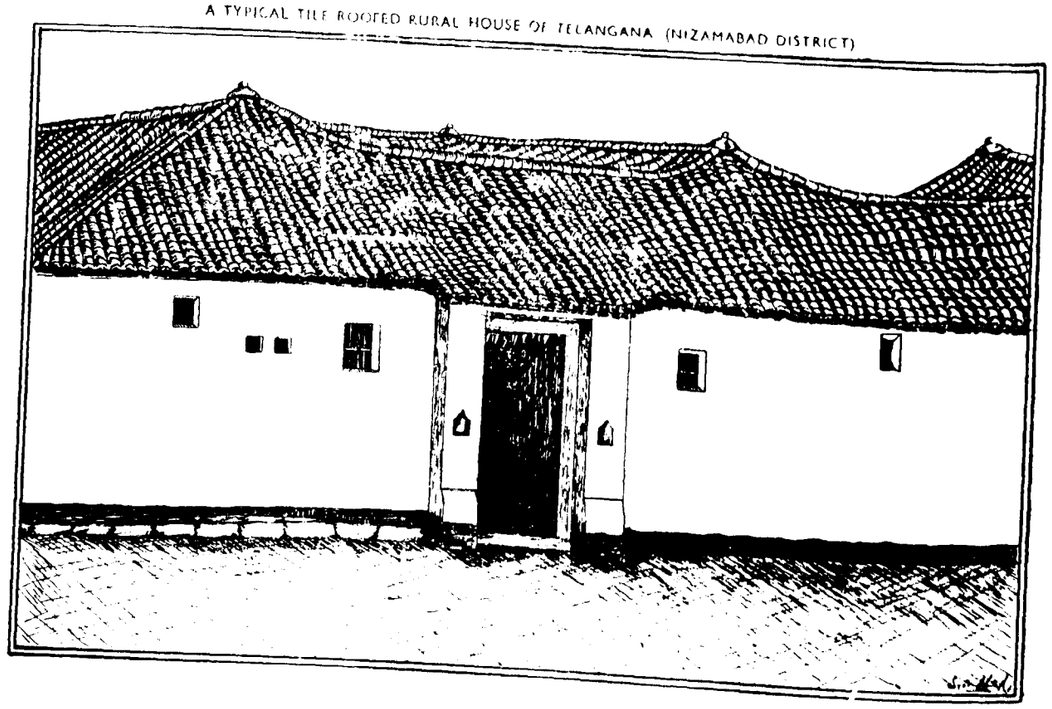
A TYPICAL RURAL HOUSE IN MADANAPALLE TALUK, CHITTOOR DISTRICT
WITH MUD WALL WHITE WASHED AROUND THE ENTRANCE AS A DECORATION
AND STRAW THATCHED ROOF AND THE PANDAL FOR SHADE



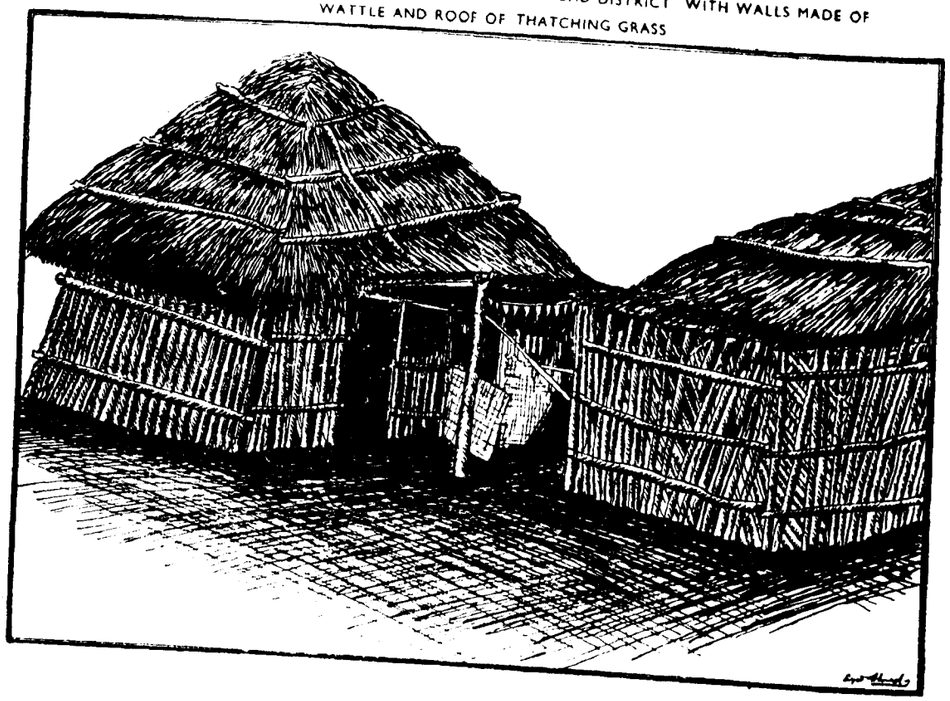
A TYPICAL RURAL HOUSE IN ANANTAPUR DISTRICT,
WITH STONE ENCLOSURE, WALL OF STONE COVERED BY
MUD AND PALM LEAF THATCHED ROOF



A TYPICAL TILE ROOFED RURAL HOUSE OF TELANGANA (NIZAMABAD DISTRICT)



TYPICAL HUTS OF KOLAMS IN UTNOOR TALUK, ADILABAD DISTRICT WITH WALLS MADE OF WATTLE AND ROOF OF THATCHING GRASS



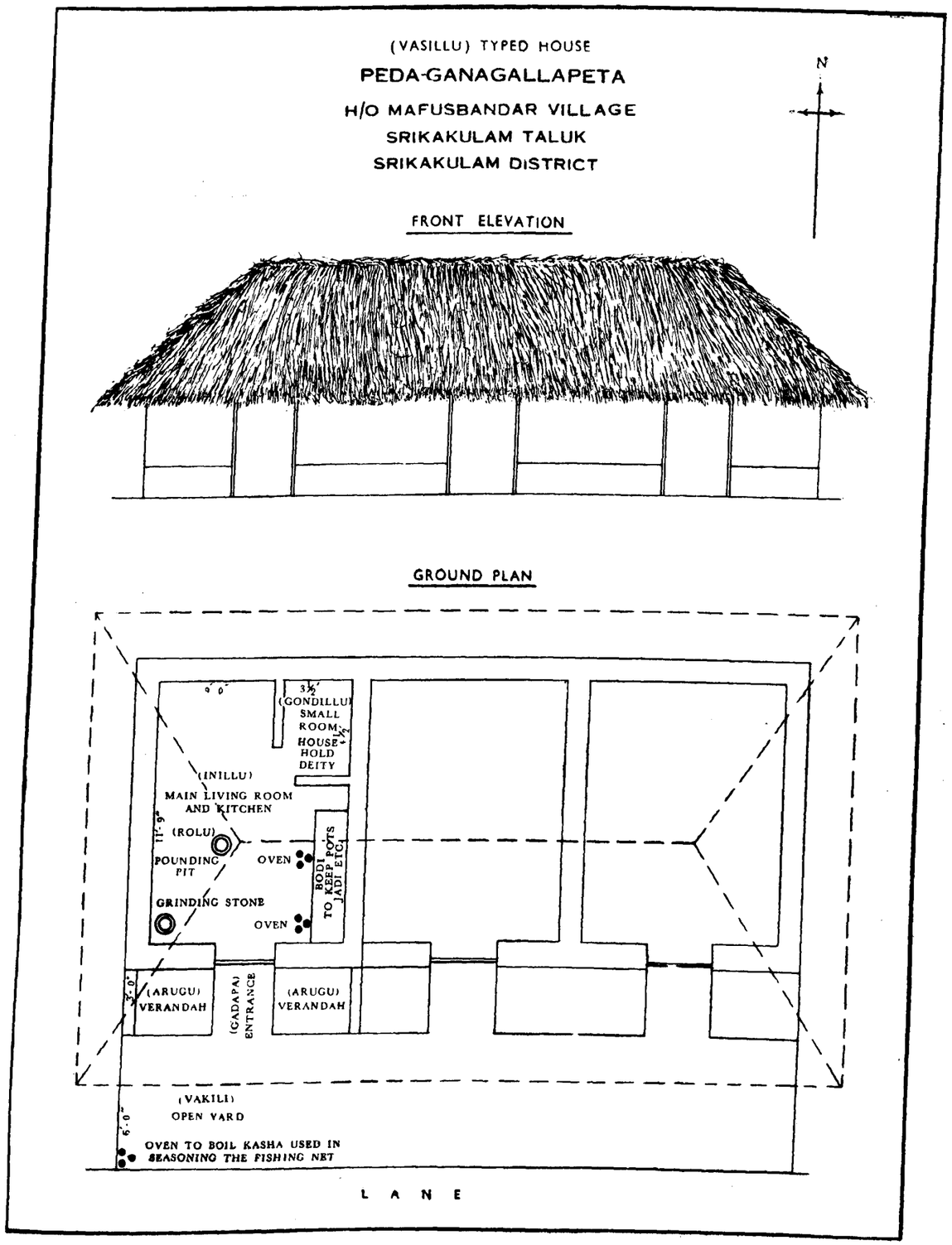
(VASILLU) TYPED HOUSE

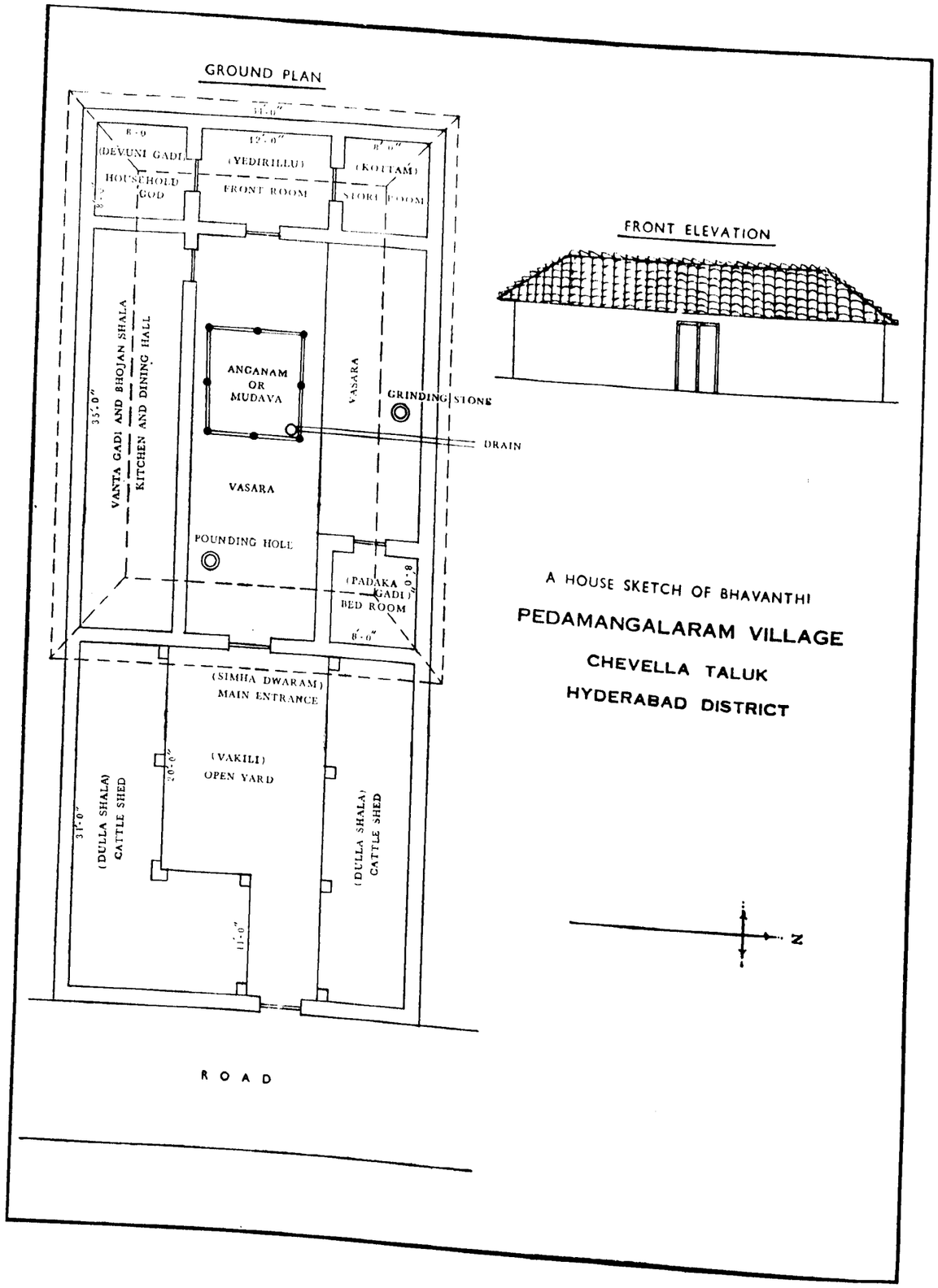
PEDA-GANAGALLAPETA

H/O MAFUSBANDAR VILLAGE

SRIKAKULAM TALUK

SRIKAKULAM DISTRICT





A HOUSE SKETCH OF BHAVANTHI

PEDAMANGALARAM VILLAGE

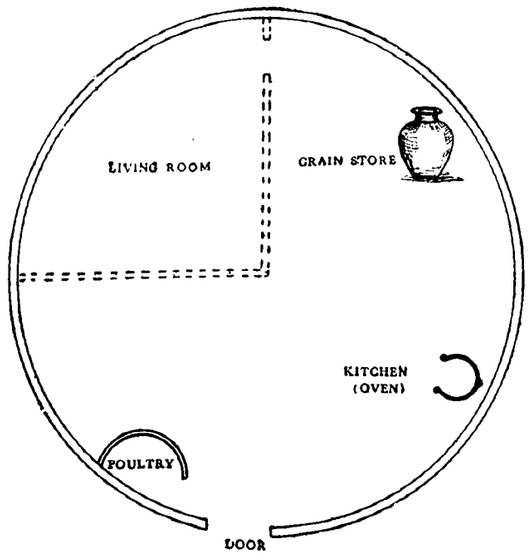
CHEVELLA TALUK

HYDERABAD DISTRICT

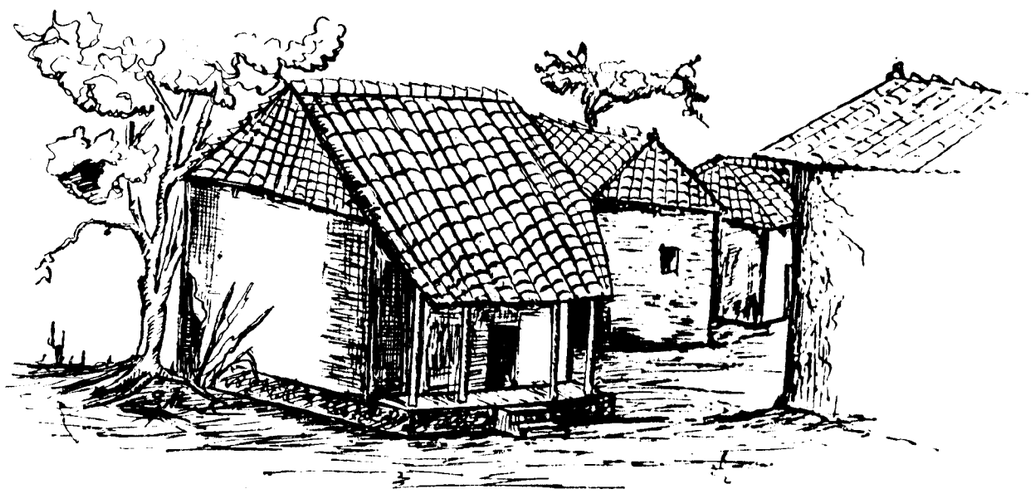
A TYPICAL CONICAL HUT

IN

VISAKHAPATNAM DISTRICT



TILED HOUSES IN EAST GODAVARI DISTRICT



A TYPICAL RURAL HOUSE IN KRISHNA DISTRICT

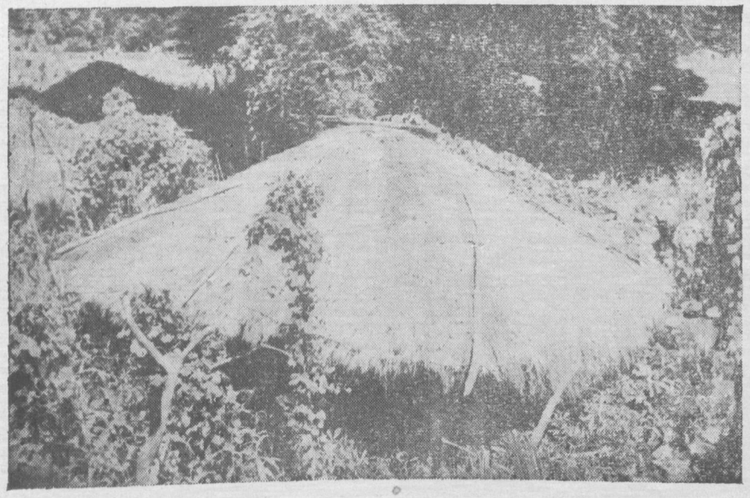
A typical conical Palmyra thatched house of Visakhapatnam district.

A typical dwelling in the delta area of East Godavari district with cocoanut leaf thatch and mud walls.

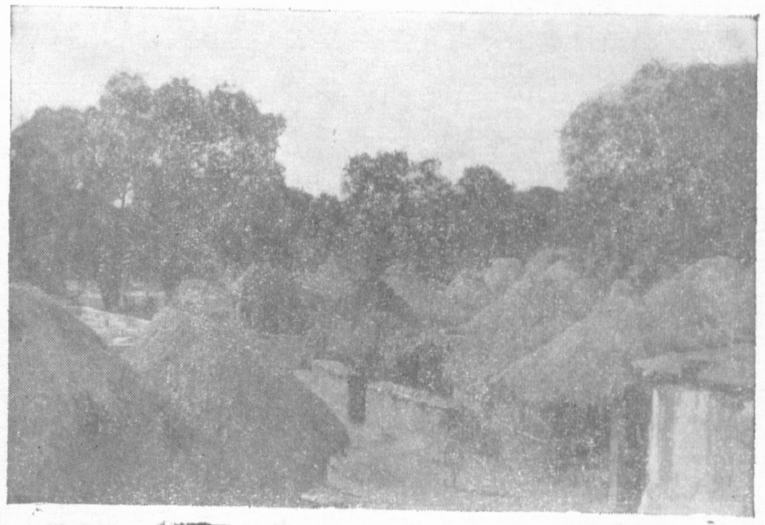
A typical tile roofed house with brick walls, Narsapur taluk, West Godavari district.

A typical tribal hut of Chenchus, with bamboo woven walls and thatched roof of wild grass (బొదగడ్డి) in Byrlutigudem, Atmakur Sub-taluk of Kurnool district.

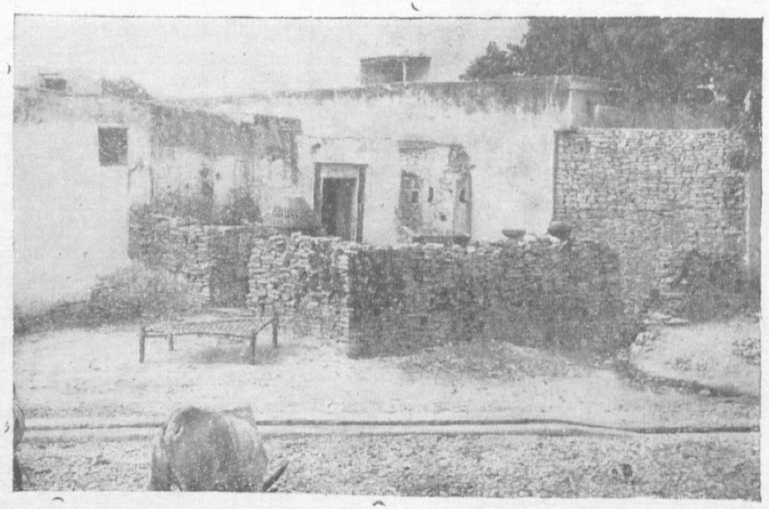
A typical tribal hut of Gonds, Adilabad district.



A typical tribal hut of Nayakpods in Karimnagar district.



Typical round huts — mud walled and thatch roofed in Cuddapah and Chittoor districts.



Typical stone walled and mud roofed houses found in Kurnool district.

ASSAM

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

General description of the Brahmaputra Valley

The Brahmaputra valley is an alluvial plain, about 450 miles in length, with an average breadth of about 50 miles. To the north is the main chain of the Himalayas, the lower ranges of which rise abruptly from the plain, while to the south is the great elevated plateau or succession of plateaus forming some sort of a range though broken here and there. The various portions of this range are called by the names of the tribes which inhabit them—the Garo, the Khasi, the Jaintia, the North Cachar and the Mikir, and the Naga Hills. Except at some points where hills impinge upon the Brahmaputra, the river flows between sandy banks which are subject to constant changes for a breadth of about 6 miles on either side of the stream. Within this belt there is no permanent cultivation or any habitation but only temporary huts are found which are erected by people who grow mustard and pulses on the char lands during the winter season. Beyond, the level of the alluvium rises and tillage and population take the place of sandy flats, sometimes covered with long grass and reeds. At the few points where rocks provide permanency to the channel, towns and villages have been established along the course of the river. These points are Dhubri Goalpara, Gauhati, Tezpur, Kaliabar, the part of Nowgong and Biswanath in the Darrang district. Between the last named place and Sadiya, close to the point where the river emerges from the hills, a distance of about 200 miles, there is practically no town or large village on the banks. Proceeding inland from this point, one comes across a country of alluvial flats, covered with long grass. Much of these alluvial flats are untilled and the eastern portion covered with forests, but much also is under cultivation. The most thickly populated part of the valley is north Kamrup, the most thinly Darrang, west of Tezpur, Lakhimpur and north of the Brahmaputra. So it is clear that at some points the peopled belt on either side of the valley is succeeded by extensive forests and grass sávannahs, which reach to the foot of the hills on the north and south.

As the villages of the valley are subject to similar environmental conditions, they present more or less similar features. This is most evident in the case of locational patterns of the villages and also to some extent in house types. The main factor behind commonness, which is a regular feature of the Brahmaputra valley, is that the bulk of the population retains many things common among them, particularly with regard to ethnic composition, language and culture. What more, they are more or less placed on the same level of economy because agriculture is the main economic pursuit of the valley population as a whole. It is worthwhile mentioning that the proportion of persons whose occupations are purely agricultural is highest in the Brahmaputra valley. Regarding locational patterns and house types of the villages, some of the points of similarity are stated below :—

Locational pattern

(i) Houses lie embedded within bamboo groves or groves of plantain trees and arecanut trees;

(ii) Caste-wise formation of households i.e., formation of several clusters of households each representing one caste;

(iii) Linear type of arrangement of the houses;

(iv) Public houses including namghar (place of worship), village schools and libraries are located in the heart of the village, close to the main road;

(v) Houses of the cultivators are constructed close to the paddy fields;

(vi) The settlement area is generally by the side of a river;

House types

(vii) The houses of the poor peasants are mud-built having thatched roof;

(viii) Except in some parts of Goalpara and Kamrup where reeds are largely employed, in almost all other places split bamboo is used for making walls;

(ix) Either wooden posts or stout bamboo posts are used for giving the structure of the house;

(x) Houses are mostly two-roofed (only some of the tin-roofed houses are four sloped);

(xi) Two sloped houses are like gable type;

(xii) Choraghar (guest room), barghar (bed room) etc. may be found in every traditional Assamese house whether it is in Upper Assam or in Lower Assam.

It is clear that the villages of the Brahmaputra valley lie on a level plain. For the purpose of giving some concrete idea about these villages with particular emphasis on locational patterns and house types; representative villages are taken under study.

The following list gives the name and situation of these villages with regard to the direction and distance from the river Brahmaputra as also the distance from the nearest town :

Sl. No.	Name of the village	Approximate distance from the river Brahmaputra	Located on south/north bank	Nearest town and distance
1	2	3	4	5
1	Japisajia	18 miles	South	Sibsagar, 8 miles
2	Kumargaon	15 miles	South	Jorhat, 2 miles
3	Katanipara	12 miles	North	North Gauhati, 11 miles
4	Nasatra	12 miles	North	Barpeta, 2 miles
5	Titaguri	15 miles	North	Kokrajhar, 3 miles
6	Batasipur	20 miles	North	Dhekiajuli, 8 miles
7	Khara	10 miles	South	Goalpara, 28 miles
8	South Salmara	5 miles	South	Dhubri, 14 miles

(1) JAPISAJIA

P. S. Sibsagar

District Sibsagar

Location and communications

Japisajia is situated on a plain surface in the district of Sibsagar, 8 miles east of Sibsagar town by the side of the South Trunk Road in the sector between Sibsagar and Dibrugarh. It lies approximately at 94°—40′ east longitude and 26°—59′ north longitude. Sibsagar is the Subdivisional headquarters where are located the commercial and other institutions. At a distance of 4 miles and a half east of the village is Dimau where the Public Health Dispensary, the Veterinary Hospital, the Development Block and the Police Outpost are located. The Post and Telegraph Office is located at Rajmai, 1 mile away from the village.

The village is bounded on the north by the Hamating and Dadhara Grant, on the east by the Rajmai Grant and on the southwest by the Rajabari Grant.

The nearest railway station is Disang-Saiding at a distance of 2 furlongs while the State Transport bus station at Dimau is four miles and a half from the village. The South Trunk road through which the State Transport buses and the other vehicles ply is an all-weather metalled road. The village path which passes through the hamlet Thauradol to the other hamlet Majgaon during the rainy season becomes quite insignificant being full of slush. As it is at a

level lower than the homesteads, sometimes stagnant water pools also are found hither and thither on it during that period. The other internal village paths however are quite convenient and accessible throughout the year.

Layout

Neither hill stream nor river is found close to the village, the outskirts of which are surrounded only by the tea plants in rows in the tea garden. Besides, the village itself is under the cover of common vegetation like clumps of bamboos, jackfruit, kadam, simalu, mango, betelnut and leaf, ajra tree and some other shrubs and creepers which are grown in the homesteads perched on a plane higher than the surrounding paddy fields in which paddy luxuriantly grows. The village with its local vegetation really represents a dense forest to the eye of a person who casts a glimpse on it from an appreciable distance. Due to such natural setting in the village, the dwelling structures are completely secluded and cannot be seen from outside the boundary of the village.

Residential pattern

Following no symmetry under the shield of local vegetation, the houses in the village are found on a plain surface slightly higher than the surrounding paddy fields. A cluster of more than two thatched houses around the courtyard forms a typical household pattern in the village. Every household provides in the place behind it a garden called *'bari'* where varieties of plants and trees like clumps of bamboo, betelnut and leaf and other fruit trees are generally found. The main village paths are linked up by as many small lanes as there are households in the village. It is also seen that every household keeps in common a kitchen garden within the homestead for growing seasonal vegetables.

The clusters of houses as stated above lie almost side by side. Each household is well demarcated with a small embankment with a bamboo hedge on it. The houses are built with doors towards the common courtyard. The cowshed and the granary are a bit far from the dwelling structure although the kitchen is either separate or attached to it. Generally the well-off families have a separate kitchen to avoid smoke and soot from the dwelling house. The typical dwelling structures are built on *kaccha* foundation having one or two rooms with no windows except in a few of them. The inside of such houses having no windows remains quite dark, even in the day time also. The walls of the houses are made of either split bamboo or jungle reeds, but the latter is now-a-days not available in the area and that is the reason why the bamboo-made walls are found in the majority of the houses in the village. The doors fitted to the houses are also of wood or bamboo but the former is found only in the minority of the households due to its exorbitant rate and non-availability in abundance in and around the village. The solid bamboo posts of the houses are found in a majority of the households while the wooden posts are found in only a few and limited number of houses belonging to well-off families. There are no bathrooms and latrines in the village. The people of both the sexes feel it rather strange to have their bath in a bathroom than by the side of the wells in an open place. Such a habit as this has been rolled on and on from times immemorial. In the same way the latrine also has no role for the common people here so far and they go to the jungles instead for the purpose. There is only one household in the village having a bathroom and a latrine for use by its members.

Houses and house types

There are as many houses as are the households in the village, the general type of which is rectangular in shape, built on a *kaccha* foundation with two slanting thatched roofs. Thatch and bamboo are the materials essentially required for the construction of a typical house and these are locally available free of cost in the village. In only one household, the main house is found with corrugated iron sheet roofs, wooden doors and windows, ventilaters, *pucca* floor with spacious rooms and finely cement-polished walls, while the remaining three houses also have corrugated iron sheet roofs, *pucca* floor, wooden doors and windows and walls of reed plastered with mud, sand and lime. In an average four domiciles constitute a household pattern in the village in addition to the cowshed and the granary.

All the houses in the village are constructed on a convenient and advantageous place within the homestead and neither any ceremonial practice nor any superstitious belief is connected with the construction. The houses are generally built with the

voluntary help of co-villagers and so no expenses are involved. The posts are first erected in fixed places in the selected foundation. The heights of the posts are so worked out that it will give a slanting position to the roof. After that the covering is made by perching on the posts two pieces of roofs strengthened with bamboo splits which add two slanting surfaces or slopes to the structure. The floor is made by filling the foundation itself with earth simultaneously with the making of the walls either with split bamboo or jungle reeds and then given a coating of mud and cowdung plastering.

(2) KUMARGAON

P. S. Jorhat

District Sibsagar

Layout and locational pattern

Kumargaon, a typical plains village in the district of Sibsagar, lies at 26°—45′ north latitude and 94°—14′—5″ east longitude. The altitude of the area is approximately 300 ft. The village is situated at a distance of about 2 miles from Jorhat town on the east. It has an approximate area of ·75 sq. miles and is extended more on the east-west direction. Along this direction lies the metallic road, which leads towards the Jorhat Engineering College. This metallic road actually runs through the middle of the village, because houses are situated on both sides of the road, connected by small bridle-paths. To put it more precisely, the Jorhat Engineering College road is the main artery from which a number of narrow village paths spread in the form of veins and veinlets. The village is bounded on the north by the river Bhogdai, on the west by the village Kaibartagaon, on the east by the Jorhat Engineering College and on the south by a vast stretch of paddy fields. It is surrounded by tea gardens, which are situated within a radius of 5 to 10 miles. The Tocklai Research Centre is at a distance of about 3½ miles from the village on the south-eastern direction. One striking feature is that the villages of this part of Upper Assam are mostly formed caste-wise. For instance, the village Kumargaon is mainly inhabited by the Kumar-Kalitas who are so to say, a functional caste. Likewise there are a number of other villages namely Kaibarttagaon, Tekelagaon, Sonarigaon, inhabited by different functional castes, situated on all sides of this village. Tekelagaon is about 1½ miles away from Kumargaon on the northern side across the river Bhogdai, while Sonarigaon is a little further far. The nearest railway station is Jorhat while the State Transport Station is also located within Jorhat town. Out of the two the railway station is nearer to the village. Besides the Engineering College road, there is another non-metalled road which emerges from the Engineering College road within the area of Kaibartagaon and runs along the Bhogdai river for a distance of about ¼ a mile before being connected by a wooden bridge across the river Bhogdai. From there the road proceeds along the northern direction and finally joins the Assam Trunk road.

As the village is situated in the plains of Sibsagar district, there is no marked elevation or depression in the village area. However the ground generally slopes from south to north i.e., towards the Bhogdai river. No hillocks can be found within the village area or nearby. There are only few undulations close to the river bank. There are plenty of bamboo groves within the village which are so thick that the residential houses seem to be lying embedded within them. The groves of plantain trees are also common in the village and many houses can be seen surrounded by plantain groves.

The village is divided into two paras or hamlets. These are, (a) Ujani Kumargaon i.e., up stream hamlet and (b) Namani Kumargaon i.e., down stream hamlet. Though Kumar-Kalitas are the dominating caste in the village, there are a few households of other castes also and generally for each caste there is a separate cluster of houses. The houses are mostly arranged in linear pattern on both sides of the road. But there are some houses which are not arranged in any particular pattern but are in an irregular manner. The small paths which emerge from the main road connect

the small clusters with each other. Some of these paths end abruptly in the paddy fields or by the riverside while others take a straighter course before joining the non-metalled road running along the riverside. The village paths are actually on the same level with the homestead lands. Except on the main road there is practically no sewerage by the side of other small roads. So during the rainy season the water collects on these small roads and make them muddy. Besides the river, there is one large tank in the village, surrounded by residential houses. Among the important public places mention may be made of 'Gormur Kumargaon Library', situated on the southern part of the village. This library is an important meeting place for both the young and old persons. In so far as the religious places are concerned, it is interesting to note that for each caste-group there is a separate *namghar*. The *namghar* is not only a place for discussing the important matters of village life. The *namghar* encloses within its compound a plot of land which is owned by the priest. The latter also resides by the side of the *namghar*. There is no crematorium in the village. Dead bodies are taken to the river side and are cremated there. The 'Gormur Co-operative Society, and the village lower primary school are located on the southern part of the village, close to the main road. There are a grocer's shop, a cycle workshop, a barber's saloon, one workshop for carpentry and another for blacksmithy. All these are located by the side of the main road.

The general pattern is that the improved houses of the servicemen and businessmen, public houses and shops are located by the side of the main road, while the houses of the peasants are located in the interior part of the village, close to the paddy fields and hidden within thick bamboo groves.

House types

It is a common feature of the Assam plains villages that members of the same family live under the same roof. New houses are required only with the increase of family members. The family houses are generally represented by one or two dwelling quarters with two to three rooms and often with a kitchen (randhani ghar) attached. There is an open courtyard in front of each house. At one corner a shelter for the cattle (gohali ghar) is present. Over and above, in the house of a peasant a store house for paddy (bharal ghar) is found by the side of the cattle shed. Only well-to-do persons own a guest room (chora ghar) on the front part and a small house for daily worship (gosain ghar. Latrines are also common only to the rich section of the village population. But all these are *kaccha* ones. An average house is 24 to 28 ft. in length and 12 to 16 ft. in breadth. The rooms are not equal i.e., if there are two rooms, one is larger than the other. In most cases the outer room is smaller.

In the village Kumargaon out of the 50 households surveyed 30 households have houses with thatched roof and mud-plastered walls. It is worth-mentioning that these houses are owned by the people of the Kumar caste whose main occupation is cultivation. 14 households are found to be in possession of brick-walled houses, the roofs of which are made of Corrugated Iron sheets. The remaining 6 households have mud-walled houses with tin roofs. Broadly speaking, there are two types of houses found in the village, mud house and brick house. The mud house is two sloped and looks more like a gable house, while the brick built house is four sloped.

The plinth is made by means of beaten earth. In some cases bricks are also used round the posts in order to make the foundation strong. The floor of the brick houses have a complete cement covering. The walls of the mud houses are made of split bamboo with a thick mud plastering all over. Sometimes the villagers smear a very dark grey plastering material which is prepared by mixing cowdung with straw and ash. There is only one front door and one back door. Windows are rare in the mud houses. No other ventilation is found except a few holes on the upper part of the walls. Sometimes the front part of the house extends to form the covered verandah.

Generally there is a narrow ditch in between the homestead and the village path. But in some cases no ditch is found and in such cases the household premises become muddy during rainy seasons. The presence of dense bamboo groves makes the household area very damp and excludes all sun and air. Behind and also in front of the house, there is generally a garden in which vegetables are grown. But flower gardens are not found. Only one or two flowering

trees are present on the front part of the house.

The *namghar* is a large house with four sloped roof of Corrugated Iron sheets. There is no wall in the house. Only a small part at one end of it is enclosed on three sides so as to make it face, like a stage, the other part of the house or auditorium. Any religious rite which concerns the community is also performed in this particular portion.

(4) NASATRA

P. S. Barpeta

District Kamrup

Layout and locational pattern

Nasatra is a medium-sized village, situated at a distance of about 2 miles from Barpeta, the headquarters of the Barpeta subdivision of the district of Kamrup. Barpeta is about 12 miles away from the river Brahmaputra. A small river known as Nakhanda flows from north to south after taking a bend through the heart of the village. It is reported that during the earthquake of 1897 the river Chaulkhowa changed its course near the village, after which the Chaulkhowa river has been renamed as 'Nakhanda' (newly dug course). The area of the village, particularly that of the southern part, is full of ups and downs and not completely a level plain like most of the villages in the Brahmaputra valley. Right from the *Basudeva .Devalaya* (temple) which is situated on a higher level up to the river bank, the land is full of alluvium deposits. This type of land is mainly used for grazing purposes and only small portions are utilised for the cultivation of winter crops. The cultivation of summer crops in these lands is beyond thinking because the river at that time grows in volume flooding the neighbouring areas and leaving no trace of any land nearby. The paddy fields are situated away from the river bank. The village has two distinct clusters (paras)—one on each bank of the river Nakhanda.

The village is connected by a Public Works Department road with Barpeta town. This road terminates on the bank of the river. From the opposite bank starts the main village road. The main village road is also a *kaccha* one which leads from the riverghat to Patbanshi village. Narrow paths known as 'gorubat' connect each and every corner of this part and meet the main village road at different points. The two paras of the village present different pictures in respect of settlement pattern, the difference being due to the action of the river Nakhanda and also due to the nature of the topography, but the latter is linked up with the former in some way or other. So the village is worth-studying particularly for knowing the effect of river action on settlement pattern. The southern cluster (locally known as Kaibartapara) is situated on a more or less flat alluvium which gradually rises from the riverside. This para has constantly been affected by the erosional activities of the river. The result is that many families residing by the side of the river had to leave their houses in search of well-protected, secure places. Hence the houses in this part are situated in a compact manner so much so that no marginal compound is attached to them. There is neither any garden in close association with the residential house. Houses are usually constructed round a common courtyard, having a common thoroughfare. Unlike Kaibartapara, the northern cluster which is situated towards Barpeta town is composed of houses built on either side of the road with sufficient marginal compound in between. More paddy fields are found in this part of the village. There is no side-track as the houses are arranged in one line (linear pattern). Inside the village in the northern cluster there is an old temple known as *Basudeva Devalaya.* It is stated that in the year 1639, during the reign of Raja Shiva Singh, the Barphukan of Lower Assam made a grant of a plot of land along with two 'beels' (fisheries) known as 'Katakotli' for the maintenance of the *Basudeva Devalaya.*

House types

Same as that of the other villages of the Brahmaputra valley.

(5) TITAGURI

P. S. Kokrajhar

District Goalpara

Location and communications

The village is located in a plain surface and is inhabited by a purely homogenous group of Bodo Kachari people. It is situated in 26°—26′—45″ north latitude and 90°—16′—30″ east longitude.

The village is bounded on the north by Purana basti, on the east by the Kokrajhar -Balajan road, on the south by Bhabanipur village and on the west by the new refugee *basti*. In the vicinity of this area all the villages are inhabited by the Bodo Kachari tribe.

Kokrajhar town is only at a distance of 3 miles from the village. It is not only an industrial and market town but also the centre of administration being a subdivisional headquarters. The village is connected by a small *kaccha* jeepable road with the Kokrajhar—Balajan road, the bus service on which again links it with the Kokrajhar town. Though there is a regular bus service, the majority of the people from the village go to and come from Kokrajhar on foot while those people who are rich use their own bicycles and sometimes hire rickshaws from the town.

Layout

The whole area of the village is plain. The homestead lands are slightly higher than that of the paddy fields. The river Gauranga flows through the western portion of the village at a distance of about half a mile. A little further to the north-west of the village the Saraibhanga and towards the further north, the Sanmukha river, meet with the Gauranga river.

The village is not rich in forest resources although the whole of the Goalpara district is famous for its forest resources like sal timbers. But at about 3 miles and a half are situated some forests where are found many valuable timbers like sal (shorea-robusta), sisoo (dalbergiasissu), khakan (duabanga sannoratioides), nahor (mesua-ferrea), gomari (gamelina arborea), petamani (ammoora spectabilis), uriam (bischofia javanica). Only the shed bearing trees like mango (manifora indica), tamarind (tamarindu indicus), neem (metia azadir-achta), modar (calatropis), etc. are available in the village. The trees in the village are arranged by nature in a haphazard manner which therefore looks like a dense forest in its natural setting from a distance outside the village boundary.

Residential pattern

It has been noticed that in the district of Goalpara, the villages are not well defined units. They are mere clusters of huts which stand out clearly in the centre of paddy fields owned by their inhabitants. Rice, the staple food crop, is grown in the wide plains dotted over with clumps of bamboo and fruit trees in which are hidden houses of cultivators in such a way that not a single house can be seen from a distance unless one penetrates into the village.

The houses are so arranged that they may be said to be distributed into two clusters. An internal path of about 1 furlong in length passes through the paddy field linking them. Although the domiciles are arranged into two different clusters within the village, they constitute its integral parts, and the villagers therein live as if in a compact unit of Jonagaon. This settlement pattern has been evolved mainly for the convenience of the people to live near the areas of their agricultural operations.

From the meeting point of Korkrajhar-Balajan road and the village *kaccha* road, if one walks towards the village one will see only the paddy fields on both the sides of the road. Looking to the front one will see only an area forming like an island covered with groves of bamboos in the midst of green paddy fields. So long as a visitor does not penetrate inside the village it will be difficult to realise that under the groves of bamboos there are about 49 households inhabited by the Boro Kachari forming a part of Titaguri village. This main path leading to the village bifurcates at the point from where settlement begins. The houses are arranged systematically on the sides of the village path with sufficient marginal compounds and a gap of about 8/10 feet between them. The settlement

pattern may in fact be defined as linear except in the cases of two or three houses found isolated in the midst of paddy fields.

Houses and house types

Penetrating inside the village from the meeting point of the Public Works Department road and the village path, one can see the houses of the villagers which are arranged systematically in a linear pattern, on the right hand side of the village path, and the village which is more compact, the houses being built more closely than in the other Hindu villages. A few houses forming a nuclear pattern of settlement is seen just at the entrance to the village, where houses lie scattered surrounded by the paddy fields. The number of houses are constructed in such a manner as if they are almost equally distributed into two clusters, but the whole area surveyed is under the same name of Titaguri Jonagaon. The internal village paths separate the different lines of houses composing the village, especially the two clusters where is found the major concentration of the households at a distance of about 1 furlong from each other. Usually, too, there is comparatively little foliage in the shape of trees.

The number of dwelling structures inside a compound has a significant relation with the number of members, economic conditions, etc. of the family. In general two or three dwelling structures are found standing around the courtyard of the houses which are distributed among the different categories of the family members. These dwelling houses of the Bodos usually consist of two rooms viz., 'khofra' and 'akhong', the outer or sitting room and the inner or sleeping room respectively. As a married couple do not usually like to sleep in a dwelling house where other inmates live, and as even the single grown-up boys or girls sometimes have separate houses to sleep in, there stand inside the same compound several dwelling houses (ungugra no). There is no separate house in the village for use by the unmarried young Bodos.

Just at the entrance or in the side of the compound, a 'no-suna' (guest house) stands which is meant for use of the guests. In the case of the poor section who cannot afford to construct a dwelling structure more than what is highly essential for them or in the case of a family with two or three members and without grown up children, the houses are simple and with only one dwelling construction, commonly used by all of them. But the 'emkham suna' or the kitchen is mostly separate near which stands the '*bakri* (granary). In most of the houses the cattle sheds are seen just at the entrance to the compounds, standing separately a few feet from the main house. Though at first glance at the compounds the cowshed draws one's attention and gives a poor impression on the knowledge of design and construction and of the houses inside the compound, inside it is found that the cowshed is almost kept isolated and maintained with a certain hygienic sense. Of course in a few cases the throwing of rubbish and heaps of cowdung just outside or near the entrance to the compounds is an exception. The sheds are very simple in design and generally more or less of a rectangular construction almost open in all sides, and the cattle are tied to bamboo pillars of the same.

The fodder supplied to the cattle is simply thrown in the earth floor, and due to the animals trampling over the cowdung, urine and rejected fodder, it easily gets dirty. The household women are very conscious of their duties and take pains to remove the rubbish from inside.

In respect of bath and latrine, it may be safely remarked that the Bodos are ignorant about their use—the introduction of bathrooms and latrines are still far from their dreams. Irrespective of age the ladies either take bath inside their compound by the brink of their domestic well or simply wet the body while coming to draw drinking water from the *pucca* wells of common use. The male section also practise the same thing and clean both clothes and bodies sitting by the side of the wells. There being no latrine, they either go to the fields or the back side of the garden for the purpose.

The homestead of the poor peasant is generally separated from the village path by a ditch or bank on which there is often a fence of split bamboo, or branches of a 'modar' tree. The well-to-do families have developed the art of hedging the boundaries of their compounds. The houses in the village are constructed on one side of the village path while on the other side are gardens where various fruits; pulses and vegetables are grown. In the majority of

houses, the spaces within the fencing are kept very neat. Round the courtyard stands two or three small buildings which are often little more than huts. In the back of the house, there is a grove of bamboos, plantain, arecanut and coconut trees and arum.

In general, the houses are constructed on mud foundation having walls made of reed plastered with mud or split bamboo. The roof is thatched. The pillars and beams are generally of bamboo but a few houses have been noticed replacing bamboos with wood and introducing corrugated iron sheets in the roof.

The plan and architecture of the houses are very simple—only one room inside and a verandah in the front. In the front-side there is only one door and two or three windows throughout the whole house. Houses are generally dark, ill-ventilated and low-roofed. In the case of poor families both married and unmarried sleep in the same house but generally separate houses are there for the use of both married and unmarried persons. In the majority of houses, the kitchen is separated from the main house but in the poor families it is mostly joined to it.

Every household has got a separate granary. The roof is thatched and the three sides are closed with walls made of reed plastered with a mixture of mud and cowdung. In the top of the front side wall there is a window through which a man can get inside. A ladder made of bamboo is used for reaching to the height of the window.

There is no hard and fast rule among the Bodos regarding the selection of house-site, though during the initial stages of construction at a particular site, if a particular tree cut for the purpose of timber for constructing the house falls in a direction different from that aimed at by the cutters or while erecting the first post of the house, if a snake appears at the site, the phenomena are regarded as omens of bad luck and such site already selected for constructing a dwelling house may be abandoned. But the ideas based on superstitious beliefs are gradually, especially in this respect, losing influence.

The houses are constructed by the local carpenters and all the co-villagers offer their physical help during the construction. The rich families employ labourers on wage basis. The drainage system is absent except that of *kaccha* drains to ooze out water. The materials required in the construction of a hut are not so much varied. Bamboo and wood are the two items that are mostly required. As the area is very rich in timber and bamboo, the villagers generally collect those things from the neighbouring jungles. The other accessories are generally purchased from the local market in the Kokrajhar town.

A typical house consists of one storey only, with the roof of thatch fastened by cane and generally with two main slopes except in the case of the houses having a verandah which add one more slope to the roof of the house. The size of the slopes are between 6′ to 8′ in length. The doors are made of either wooden plank or split bamboo the size of which is approximately 5′ by 3′. The system of windows and ventilation are very poor, the latter being almost absent but one or two windows either of wood or split bamboo hung over rings of canes are used but without any specific size and measurement.

The very way of construction and design of the houses surrounding the courtyard maintain the privacy of the houses. The front dwelling construction is generally a guest house behind which hide the main houses and one cannot see the latter unless one penetrates inside the compound. The houses are without any fitting of windows or door screens but in front of the main door of the house, at the verandah, stands the 'aaralbera', a bamboo fencing plastered with mud, which obstructs the direct visibility of the inside portion of the dwelling house, although entrances are provided on both the sides of the fencing.

Poor ventilation, low roofing, absence of sanitation and drainage, dampness due to inadequate display of sunrays within the house compound caused by haphazard planting of trees and shrubs are some of the features which stand in the way of proper hygienic facilities.

The Bodos do not formally observe any ritual and ceremonies connected with house construction except entertaining the villagers who render physical assistance during the construction. Formerly 'zu' played a very important role in all their

social and religious occasions, and so the drink used to be served to all the villagers who rendered physical help during the construction of a house in the village. The Brahmas in the village neither prepare 'zu' nor encourage the people to drink it. The 'Boro Samaj' (the Boro Voluntary Organisation) has also succeeded to some extent in its efforts to prohibit the people from drinking 'zu'. As a result the majority in the village now-a-days substitute tea for 'zu' for entertaining the villagers on all social occasions.

(6) BATASIPUR

P. S. Dhekiajuli

District Darrang

Location and communications

Batasipur is a village of ex-tea garden employees which is situated in a plain surface near the foothills of North-East Frontier Agency. It lies within the Dhekiajuli circle of the Tezpur subdivision. The village is about 2 furlongs west of the Dhekiajuli Railway Station and is connected with the latter by a small footpath. The Station is linked with Dhekiajuli town, 8 miles on the south, by an all-weather Public Works Department road. The town is the nearest industrial centre to the village.

Batasipur is bounded on the north by the Dhekiajuli reserved forest, on the east by the Dhekiajuli railway station, and the Dhekiajuli Public Works Department road, on the south by the Samaguri grant and on the west by Madhupur.

Communication within the village is not so bad when compared with the state of communications in other villages of Assam. The Dhekiajuli railway station is only a stone's throw from the village and the people can easily avail railway facilities. The villagers can also get bus transport from the Railway Station since the motorable road which goes to Dhekiajuli town runs quite close to the village. This road ultimately joins the North Trunk road at a point 8 miles south of the village. Two buses provided by the railway authorities ply regularly between the station and the Dhekiajuli town. Then there is the Samaguri road which is *kaccha* but motorable upto the Samaguri tea estate. But this road is used only by the estate's trucks and lorries. This road touches the village on the west. The path inside the village gets very wet and slippery in the summer and to pass it is to travel through mud and slush. The inconvenience to travellers, however, is only for sometime because in the winter the path becomes quite dry.

Layout

Batasipur is a typical plain village. However as the village lies near the North-East Frontier Agency foothills, it is slightly higher than other villages in the southern part of the Darrang district. Because of its elevation, the village is free from the annual floods that ravage the plain areas of Assam. There is no river course close to the village which is skirted by dense forests. On the north, there is the Dhekiajuli reserve-forest. The forest is very large and possesses a wild fascinating beauty of its own. It is well cared for and looked after by officials belonging to the Batasipur Range Office. The forest has vast potential wealth.

Residential pattern

The village consists of two hamlets—Hindupara and Telengapara. A village path joins both the hamlets and the dwelling structures are found on either side of it. The dwelling structures are not visible from outside the boundary of the village as they are nicely secluded under the elegant sagoon trees, bamboos, a few arecanuts and other fruit trees. The village with the green coverage of local trees and shrubs appears therefore like a dense forest.

In every household in the village, apart from the main or dwelling house, there are at least three or four other structures usually located around the courtyard. These structures are used to keep the cattle while one structure is usually meant for storing paddy. It is seen that in most of the households, the kitchen is not detached from the

main dwelling hut. Only a few well-to-do families have their kitchens constructed separately from the main building. The people in the village do not know the use of bath room. They take their bath in an open place by the side of the wells. Latrine is an undreamt of luxury to them and they visit the neighbouring jungles for the purpose of clearing their bowels.

In each homestead is often provided a small clearing for growing seasonal vegetables. The garden is usually in front or behind the house. At the back of the house there is also generally a bigger garden (*bari*) where various jungles, fruit trees, few arecanuts and bamboos grow.

Houses and house types

As stated already, the houses are found on both sides of the path connecting the two paras or clusters—Hindupara and Telengapara.. These are not infrequently surrounded by clumps of bamboo and other local vegetation.

The economic backwardness and illiteracy of the villagers is nowhere more manifest than in the manner of constructing their houses which, compared with houses in other villages of Assam, are very inferior both in respect of structural design and workmanship. The typical house in Batasipur is a more or less rectangular structure built on a mud foundation. It has generally two roofs of thatch which slope down on either side from the roof-top. The posts are of wood brought down to the village from the nearby Dhekiajuli reserve forest free of cost. The walls of the houses are made of plaited bamboo and reeds plastered with a mixture of clay and cowdung. The building is usually one to three feet above the plinth area. A fine layer of moss on the outer surface of the backside wall of most of the houses is a usual phenomenon. The majority of the houses are ill-ventilated there being only one door opening towards the front courtyard although a few houses contain either 2 or 3 holes in the walls which serve the purpose of the window, besides the main doors. The interior of these houses having no windows is dark even during day time. An improved type of houses is found in only three households belonging to the Assamese people. These houses possess doors as well as windows and they are also furnished with verandahs. Though houses of this type appear to be hygienically good, they suffer from certain drawbacks in respect of the materials used for their construction. The roofs of these improved types are still thatched and the walls are made of mud-plastered bamboo frame while the floor is of mud. These houses contain however a number of rooms, sometimes more than two, whereas the typical ones are one-roomed structures.

The roofs of houses in the village are not uniform in size. Some are 16 feet long and 7½ feet wide while some others are 14 feet in length and 6 feet 9 inches in breadth. The doors are either made of plaited bamboo or plank. The average size of such doors is 4½ feet by 2½ feet, and because of their smallness, it is very difficult for a person to enter the house. The better type of houses belonging to the Assamese and the Bengali communities are however furnished with bigger doors of about 6 feet long and 4½ feet wide. The windows in these latter houses are 3 or 4 in number and the average size of each is about 4½ feet long and 3½ feet wide. The floors in some houses are 15 feet by 6 feet and in some other 13 feet by 6 feet.

Construction of the house is done with the help of the fellow villagers on a voluntary basis. Almost all the materials required are locally available and the villagers do not have to pay for these. Of these materials the most important are thatch, bamboo, reed and wood, all of which are found in plenty in the village and the surrounding area. The only expenses involved in the construction of the house are those connected with the entertainment of the villagers who assist in the work. After having procured all the building materials by the fellow villagers the construction works start. In the first place the posts are erected on the foundation at a selected place. Secondly the covering above is completed with two slanting slopes of thatched roofs after which the floor is filled up with mud and the walls are attached to the building. The walls made of either split bamboo or jungle reeds are raised about 2 inches above the plinth surface.

As regards the observance of ceremony in connection with the house construction, only the Oriya people practise some occult rites before selecting the site of the house. Their houses are not properly designed and the method of execution is very simple. The

rites and ceremonies practised in connection with the house construction by the people of the Oriya community are given below.

Prior to the construction, the person who wants to build a house must dig five holes with a spade at the selected place, during the months of *Magh* and *Falgun* which are considered to be auspicious. Digging must be done at dusk. Of the five holes, 4 are set in the four corners of the house-site and one is just in the middle of it. Into these holes small bundles containing 5 rice grains wrapped in a plantain leaf are placed. In the hole in the centre is placed one copper coin, some wood apple and *tulshi* leaves, a piece of turmeric and some rice grains. The first house post with its top covered with a bunch of hay called 'chunkher' is raised over the central hole. On the following day in the morning the owner visits the site and makes a final decision whether the site will be favourable for building the house. According to this belief, if the bunch of hay is found intact and the rice grains remain undisturbed or multiply in number, the site selected is considered as ideal for erecting the house. If on the other hand the hay gets separated from the first post and the number of the rice grains put in the 4 holes is reduced, the phenomenon is looked upon as an ill omen for constructing the house.

Except the Oriyas, no other community in the village observes any rites or ceremonies in connection with the selecting of a house site and the construction of the house. To them the main thing is the convenience and ease which the future dwelling will offer to the inmates of the household.

(7) KHARA (PART I)

P. S. Dudhnai

District Goalpara

Location and communications

Khara is situated in a plain surface in the Goalpara subdivision in the district of Goalpara. The village is linked by an unmetalled village path, 1½ miles long, to the south trunk road between Gauhati and the subdivisional town of Goalpara. The latter is 28 miles away from the village. Dudhnai, the nearest market place, is located at a distance of 1½ miles east of the village. It is not only a weekly market place but also an important place of the area where the offices of the Public Works Department, the High School, the Government Dispensary, the Police Station, the Dak Bungalow, the Post Office and the Veterinary Hospital are located.

Inside the village there is no sort of communications. A state transport station is located at Dudhnai from where the people of the village can enjoy easy bus transport. The villagers generally have to come one and a half mile on foot to catch the state transport bus at Dudhnai. The rich people use their bicycles to cover this distance.

Layout

One and a half miles away to the west of Dudhnai is situated the village Khara which is surrounded by trees like bokul, mango, bamboo, jack fruit, nahar, modar and dense groves of arecanuts. Besides these vegetations inside the village a dense forest full of tall valuable sal trees is also found on the south a little distance outside the village boundary. On either side of the village internal path the dwelling structures are nicely embedded under the local vegetations abounding in the village, so that houses cannot be easily traced out from outside the compound of the village and the whole setting looks like a dense forest.

Residential pattern

The homestead lands are situated at a level higher than that of the surrounding paddy fields. There is only one village internal path to which are connected as many small lanes as there are households. On the back side of each household there is a grove of trees of arecanuts, bamboo and other fruit trees. This grove of jungle

is called *'bari'*. It is also seen in the village that each household provides a kitchen garden for growing seasonal vegetables for consumption either on its front or back side. Round the courtyard are usually situated 3 or 4 dwelling structures. Of these structures, those of importance are the granary and the cowshed. In a few households a *'namghar'* also stands on the eastern corner near the granary. The kitchen is in the majority of the households not detached from the dwelling structures as is the case with the rich people. There is no bath room or latrine. Instead of in the bath room the people have their bath in any open space by the side of the tube-well or well. The use of a latrine is quite unknown to the common people of the village and jungle areas near the homestead lands serve the purpose of a latrine.

The homestead areas are clearly differentiated from the plain paddy fields due to their elevated surface alongwith the bamboos, arecanuts and some other trees under which the dwelling huts are embedded. The huts are not easily spotted out because of the presence of dark green cover formed by such local vegetation. There is no symmetry in the arrangement of houses as they are found sometimes on either side of the village path and sometimes away from it. Each household has around it a small embankment with a bamboo fencing which indicates the demarcation between two houses and also prevents the cattle and other domestic animals from coming into the compound of the household.

Houses and house types

A level space is good enough for a house site and a house can face in any direction in the courtyard. The houses are in general of a rectangular shape with two inclined thatched roofs. The plan and architecture in the majority of cases are very simple.

Before the construction of a house, villagers are requested to help in procuring, arranging and assembling the building materials required for the construction. When a suitable foundation is selected by the owner himself, the construction starts.

Almost all the materials that go to the construction of a house are locally available. Of these, the most important are thatch and bamboo and the wooden plank all of which are found in the village or procured from its adjoining area. Most of the houses are built on an insignificant base or plinth with the exception of very few well-to-do families where plinths are about 1½ feet or 457.2 mm. high. Mud is the usual material employed for this purpose except in 3 houses in the village fitted with corrugated iron sheets roofing where the plinth is also *pucca*-built although its floors are *kaccha*. The posts of the thatched houses are of wood and are obtainable either on purchase or free from the Dudhnai forest.

The walls are of plaited split bamboo or reeds plastered with a mixture of beaten mud and cowdung. The doors are also of either wooden plank or woven bamboo split. In a few houses the window and a hole on the wall were seen during the survey. But many of the houses bear no window or slit and their interior remains dark not only at night but during the day time also.

For the construction of a house the posts are first fixed to the ground. On top of them two pieces of thatch strengthened with bamboo splits are placed as roofs in slanting positions. After thus putting the roof in position, the floor space is filled up with earth and plaited split bamboo fixed to the posts for the walls which are next plastered with a mixture of mud and cowdung.

The villagers employ no hired labourer for the construction which is done only with the assistance of the co-villagers. The villagers who render help in the construction are given tea, *bidi*, tobacco and betelnut and leaf.

(8) SOUTH SALMARA

P. S. South Salmara

District Goalpara

Layout and locational pattern

Situated on the south bank of the river Brahmaputra, South Salmara is under the jurisdiction of Dhubri subdivision and is at a distance of about 14 miles from Dhubri town. There is a very irregular ferry service on the Brahmaputra by which one could cross the river up and down. From Dhubrighat a narrow dusty road leads towards the village. After traversing about 5 miles, the road joins the Mankachar-Goalpara road near Fakirganj, which is within 5 miles from the bank of the river Brahmaputra. South Salmara is on the way of the Goalpara-Mankachar Public Works Department road. From the village a road again leads to Phulbari which is about 3 miles away. But before going to Phulbari, one has to cross the river Jinjiram. The Jinjiram river flows along the western boundary of the village. Phulbari is a growing business centre and from here a road goes to Tura the headquarters of Garo Hills. South Salmara is an important meeting place, because besides two major roads i.e., Mankachar road and Phulbari road, which pass through the village, there is also a small road going towards Taltari.

The village is bounded by Balduba on the north, Taltari on the south, Fakirganj-Phulbari road on the east and the Jinjiram river on the west. Due to the depressed economic condition of the people, the village presents a picture of distress and poverty, while a veil of despondency shrouds the face of the common people. The main reason underlying the deterioration of economy is the flood which leaves practically nothing for the people, so that they could at least meet the basic needs of life with what is left to them. Actually the village has two separate parts—South Salmara part I, comprising the bazar area and South Salmara Part II, consisting mainly of poor peasant's houses. For the purpose of exhaustive study concerning the subject matter, South Salmara Part II has been selected. South Salmara Part II, is, so to say a satellite village, the nucleus being South Salmara Part I. The houses of the village are arranged in small clusters and are situated on a level slightly higher than the surrounding paddy fields. The bamboo trees and the plantain trees (musa sapientum) are so common that while approaching the village, the houses remain unseen from a distant corner. The arecanut trees are however, not so common. There are a number of clusters of houses, one comparatively larger, which occupies the central position of the village. All these clusters are connected by village foot paths, which are narrow and dusty. The mosque and the Lower Primary School are located at the centre of the village, by the side of the footpath. The footpath and the homestead land stand on the same level. There is only a ditch in between the household area and the footpath. Unlike Upper Assam villages, the arrangement of the houses is more compact. There is practically little open space between two houses. One more feature is that the villages of this area are situated more apart, in comparison with Upper Assam. Generally speaking, this part of the country presents a view of vast tracts of dust-ridden cultivable lands or waste lands by the side of the Brahmaputra, covered with reeds, dotted with small clusters of fishermens' houses. Only occasionally a big or middle-sized village with houses hidden within groves of bamboo trees and plantain trees, is noticed.

House types

Generally one house accommodates the members of a family. Separate houses are built only with the increase of family members. Besides the main house which is used for sleeping, there is a separate kitchen and a cowshed. Latrines are not common to the poor peasant. Although the kitchen is separate, it is constructed on the same line of the main dwelling house. The cowshed and the latrine, if present, are situated at remote corners of the household area. The household premises enclose an open courtyard in front, while the back part is covered with groves of plantain trees. In some households vegetables are also grown there. Some sort of bamboo-made fencing exists between the household area and the village footpath. Sometimes in place of bamboo fencing, plantain

trees are grown in a line along the boundary of the household. However at least the front part of the household is invariably covered up with a bamboo fencing. This is only to give some sort of privacy to the household and is a common feature of the Muslim villages.

The houses are mud built having thatched roofs. After the construction of the plinth, the walls are made with reeds, supported by wooden or bamboo posts. It is interesting to note that in this area reeds are used for making the walls, while in Upper Assam split bamboos are used for this purpose. This is due to the fact that the people of this area can easily procure reeds from the bank of the river Brahmaputra where one can find them in plenty. For making the walls, the reeds are placed in close proximity with each other in two or three lines. Mud plastering is then applied thoroughly over the reed walls. Almost all the houses are thatched. Only two houses are found in the village with roofs of Corrugated Iron sheets. An ordinary house contains two to three rooms with a covered verandah in front. Unmarried girls and boys sleep in separate rooms. The houses are invariably two-roofed and are gabled. There is no separate granary for the storing of paddy. The crops are stored in big baskets. There is a front door which is either made of wood or bamboo. On the back also there is a small door, which is exclusively used by the family members only. It is interesting to find windows in a village house here which are either wooden or bamboo-made. On the walls of some houses decoration with flowering patterns are done. These are however done at the time of marriage ceremonies only.

UNITED KHASI AND JAINTIA HILLS

(1) MODYMMAI

P. S. Jowai

District United Khasi and Jaintia Hills

Introducing the village

South of the Brahmaputra valley stands the ranges which constitute a part of the State of Assam. The ranges run parallel to the majestic snow-capped Himalayas separated from them by the valley of the mighty Brahmaputra. These ranges are continuous and form the four autonomous districts of Garo Hills, United Khasi and Jaintia Hills, Mikir Hills and North Cachar Hills. The village we are about to discuss is situated in the Jowai subdivision of the United Khasi and Jaintia Hills district. The topography of the district in general is mountainous and rugged, with a high plateau covering the greater part of the district. The hills are steeper in the southern part, the middle part is a plateau, and then the land slopes gently towards the north. The plateau also is not an even one, it is frequently interrupted by some peaks and river gorges. Bearing the characteristics of the old hard rock type of plateau, it has been subjected to constant and alarming weathering by the various agents of denudation. The effect, particularly on rain-fed rivers is quite remarkable, since the area is noted for the high amount of annual rainfall. It is amidst these complexities of nature that the village under survey, that is Modymmai, is found.

Grounds for selection

The village is inhabited by the Pnars, a section of the Khasi-Jaintia tribe who occupy the eastern part of the district. They call themselves Pnars to differentiate themselves from the other sections of the tribe known as the Khasis, the Lyngngams, the Bhois and the Wars, who generally occupy the middle, the western, the northern and the southern parts of the district respectively. The area in which the Pnars live is separated and is distinctly marked from the rest of the district by the British who called it the Jaintia Hills, a name borrowed from the conquered territory of the Jaintia Kings. At present the area is known

as the Jowai subdivision. In many respects the Pnars are identical with the other sections of the Khasi tribe. Modymmai is a typical Pnar village, but the conversion of the inhabitants into Christianity has changed their belief, religious rites and some customs.

Like other villages in the hills of Assam, the majority of Pnar villages are also inhabited by agriculturists Modymmai is no exception to the rule. In fact it is one of the leading agricultural centres in the subdivision. For untold generations the people have earned their living mostly by cultivation. But unlike some of the tribals in the State, the inhabitants of Modymmai as well as most of the people in the Pnar villages do not resort to jhuming method of cultivation. Instead, they have been using the wet method of cultivation, building their settlement on hill slopes or higher grounds to avoid malarial fever. Throughout the whole subdivision, the Pnars have changed the faces of the available river valleys, the adjacent plains and lowlands into irrigated terraced paddy fields. Thus even in this uneven, rugged mountain terrain, thousands and thousand acres of land have been brought under the plough and wet method of cultivation. Modymmai is a typical dwelling place of such agriculturists. Both men and women of the village would trek every sunrise to Sung and Litang valleys, about five and three miles respectively from the village, to labour till sunset. This is the normal pattern of life in the village, a pattern that is vigorously followed by all the Pnars. Modymmai has the pride to be the representative village in respect of agricultural production, since Sung valley where the villagers have their fields, can boast of having a rich and fertile soil, and has qualified itself for the title "the granary of the subdivision".

Just after the declaration of independence, the two headquarters, till then linked only by a bridle path, are connected by 40 miles of motorable road. Twisting and winding, the road leaves the busy and crowded town of Shillong, ascending slowly along the eastern side of the plateau on which Shillong peak, the highest point of the district stood, providing a panoramic view of the town of Shillong. Then this east bound road, passes through pine groves and rolling grasslands, through paddy fields and potato, maize and vegetable gardens all of which add pleasant variety to the view. Against this background, villages appear one after another at certain intervals to present a complete picture of village life on these hills. By the side of the road, here and there, monoliths are seen. These erected big slabs of stones with no inscriptions, have their own silent testimony to offer to the present world. They are generally marks of remote past, but the near past also has such marks along the way though on a smaller scale. Then there are cliffs of hard rocks, gorges between the hills and swift running streams in the gorges which accounted for the great endeavours which the surveyors, the contractors and the labourers had to face while preparing an easy or comfortable journey for the travellers of the coming generations in these hills.

The journey to Modymmai from Shillong continues along this road for nearly thirty two miles. Then with eight miles more to cover before entering Jowai town, an incomplete motorable road, one of its kind found here and there along the main road, branches towards the south through the majestic columns of pine trees. This is the road to the village which is about one mile from the junction. The road continues beyond the village to serve other villages also, of which Sohmynting, 6 miles from the junction, is the last.

Back to the junction with the main road, and one mile towards Jowai, the road passes through the Ummulong market place, the nearest market for the people of Modymmai. Though Ummulong is merely a village, yet it is the centre encircled by a number of villages such as Wahiajer, Nongbah, Madur, Larnai, Mokyndur, Sohmynting and others. So it is provided with a Sub-post Office and the Sub-office of the Assam State Transport. Here there is also a Government Sericulture Farm and a Cocoon-rearing centre.. To add to the importance of the place, a dispensary has been opened here by the Block. All these facilities are shared by Modymmai alongwith its neighbours. Perhaps one of the most important assets that nature can bestow to any spot on earth, is the natural beauty of the place. While none can deny that every place has its own charm, it is equally true that some are above the average, and these places usually attract holiday-makers and sight-seeing parties. The road is about to enter one of such rare natural beauty spots. This is an undulated open space carpeted in green with magnificient pine groves in the

background. Few clear rivulets, flanked on both sides by small bushes run through the place. It is in this open space, four miles from Modymmai, that the headquarters of the Jowai Block is built. The picture of this spot will remain incomplete if one of the most impressive workmanship of the Pnars remain untouched. This is the Thadlaskein tank built about 25 generations ago by U Sajar Nangli and his people. The tank is on a side of the road facing the headquarters of the Block. Covering another milestone from the tank is the Technical Institute established by the American Missionaries of the Seventh Day Adventist Church in which some children from Modymmai village are educated and trained in various trades. Leaving this scene behind the road twists and turns down to the valley of the Myntdu river and up again to the headquarters of the subdivision, Jowai, which is a beautiful town, standing on a plateau which is almost surrounded by the gorges of the Myntdu. It is a typical Pnar town of the age, but to suit its rank as the subdivisional headquarters, it is marked by the presence of the Subdivisional Officer's Office, the Police Station, the Public Works Department's Office and a number of small offices. The town is also provided with a State Transport Bus Station, the Post and Telegraph Office and the High School. The Government High School has recently been converted into a Higher Secondary School. There are also two hospitals in the town—the Jowai Presbyterian Mission Hospital and the Civil Hospital. Though eight miles away, Jowai is a very important place for the people of Modymmai because apart from being the headquarters of the subdivision in which the village is situated, it is also the nearest town in which most of the important facilities are to be found.

Residential pattern

Approaching the village from the north, some houses appear in an open land and to each of these houses big compounds are attached. This is the extended part of the village. The compounds are well fenced. This is done to preserve the vegetables from damage by stray cattle. In some of the gardens, a few orange or other fruit trees are grown, but the most common plants are maize, pumpkin, cucumber, cabbages and other vegetables. In these gardens or in a portion in each of them vegetables are seen throughout the year. But in winter the size of the plots under cultivation is determined by the available family labour since watering is very essential. As the road continues towards the old section of the village, more houses are seen. Here the compounds are smaller and the village looks more congested. While houses are seen on both sides of the road which also continues on its north to south direction, on both sides of it footpaths branch towards the east and the west. These footpaths link the compounds which are at some distance from the main road. Of these footpaths, the one which leads towards the east from the middle part of the village is the most important since most of the houses which have no direct connection with the main road are situated in this part. This is also the footpath which leads to the graveyard of the village. In serving as the connecting link in that part of the village, this footpath sends forth many such footpaths towards its left and right. Here also wherever enough space is available a compound includes the same items as in the compounds of the former section.

The arrangement of the compounds vary from one another. The site of the house is always chosen first, so that the building always takes the highest, hence the driest ground in the compound. In this district where rainfall is very heavy, a high and dry spot on which the house is to be built is an essential pre-requisite for a good compound. Even in the selection of a site for the village, this condition is essential. The absence of villages in the lower or flat ground is explained by the fact that during the rainy season these lands are always muddy and very inconvenient. So most of the Khasi villages are on the hill slopes where rain water can find its outlet very easily. Now, a small courtyard and a playing ground for small children is always in front of the house and it is in some cases decorated with flower beds. The remaining space in the compound is always converted into vegetable garden and sometimes a few fruit trees are also grown. Animal sheds are always in a hidden part of the compound, that is on the back or the sides of the house, but never in front of it.

Sometimes the gardens appear in front of the house, but generally they are at the back or the sides of it. As pointed out above there is no hard and fast rule for the location of the gardens or the houses, but the essential condition is to see that the

house is built on the driest part. Thus if such a spot is in the far corner of the compound, with the flat and lower ground in front of it, the house is found to appear behind the garden. All the compounds are fenced. In the front part, the fences are neat and tidy. The fences are of stone or mud walls and rows of small trees or split bamboo. At the back, the fencing is somewhat more indifferently arranged. Apart from the above materials found in the fencing, sometimes big trees and bamboos are also grown to serve as a fence.

Communications

The main road, that is the branch of the Shillong-Jowai road which has become the subject of discussions in the previous chapters, is now once again the base of discussion. The direction of the road is by now well-known, and at the same time it is also clear that the road passes through the village. Before it is converted into a motorable road, there is a footpath which passes through the village more or less in the very place of the present road with only slight diversions here and there to maintain the motorable gradient. In such cases the tracts of the old footpath remain and serve as short-cuts for the foot travellers. The conversion of the old footpath into a motorable road with an average width of 8 feet took place under the supervision of the Block. It has been pointed out in the previous chapters, and further discussion will also be made in subsequent chapters, about the bulky products of this area, specially timber. Thus the need of a vehicular tract is felt, and the problem is solved by the self-help effort of the villagers alongwith the help of the Block. The Block together with the villagers share the expenditure, the contribution of the villagers being mostly in terms of labour. The part which the villagers were to play is now completed. But no one can say that the road is complete. The road has not yet been gravelled, leave alone the question of metalling or black-topping. When vehicles ply during the dry season, a large amount of dust is thrown on both sides where most of the dwelling houses are built. The road becomes worse during summer when the dust becomes mud and is very slippery. It is said that the construction of the road is still in progress, so it is hoped that sooner or later this vital road will become tolerable both during winter and

In the chapter dealing with the residential pattern of the village, it has been shown that not all the houses line up on both sides of the road, that there are also smaller sections of the village the compounds of which are not directly connected with the road, and that joining these sections are the footpaths with an average width of three to five feet. From the width, it is evident that these footpaths are not motorable. They represent a true picture of the typical footpaths in these areas. Most of them are bare, earth-topped, but some are covered by slabs of stones. Again, while serving the level or gentle sloping parts of the village, they are flat, but when they approach the high grounds, steps are used. The maintenance of these networks of communications in the village is done by the villagers themselves under the supervision of the village durbar. The latter makes all arrangements and call upon all the villagers to clean and repair them twice a year. In spite of the great pains taken by the villagers and its elders to keep them in good condition, they present a very poor sight, especially during rainy season because of the quick growth of jungle. To provide them with proper drainage and to cover them with shingles seems to be the only way out of this problem. With proper guidance to these enterprising villagers and through the self-help schemes of the Block, the goal is not too great to be achieved. Apart from the above communications which serve the village proper, there are also footpaths of the same type leading to the burial ground and the playground and also to the bridle paths leading to Sung and Litang valleys and to other working areas. The condition of these bridle paths also are so poor as those of the footpaths within the village and the task of improving them is yet to be performed.

Important public places

The most important public places in the village are the two churches standing more or less in the most thickly populated part of the village about 200 yards apart from each other. One of the churches is fairly big and can accommodate a congregation which attends one or the other of the three or four services held every Sunday.

On the western side of the road, just opposite to the old church building, is the Lower Primary School founded by the Welsh Presbyterian Mission. It was taken over by

Government and then passed on to the management of the District Council, United Khasi and Jaintia Hills, alongwith some other Lower Primary Schools in the district.

The bigger church stands on the slope of a small hillock. Its foundation is a levelled ground on the upper part of the compound. Just beneath the foundation of the church is another levelled ground smaller in size. This also belongs to the church, or in other words, it is within the church compound. In 1956 a small club house was built here by the villagers. The house is only a temporary building, with a bare earth floor, walls of split bamboo plastered with mud and a thatched roof. The dimension of the room is 25 feet by 20 feet and it is very poorly furnished. Still it is enough for the youth of the village to start with, and it is expected that within a few years, the building will be improved. Now it is not an unusual sight to see the church and the youth recreation centre side by side provided the latter is the project of the former. But in this case, the club is not a part of the activities of the church. Judged from the date of establishment, it appears as if it is the product of the nation-wide effort to encourage social, recreational and cultural activities among the young people of the country. The coincidence of the club being built in the church compound certainly has some interesting things.

Another important public place in connection with the cultural activities of the young people in the village is the playground. It is situated about 500 yards away from the last household on the northern part of the village. It is a small flat space, surrounded nearly on all sides by the higher grounds on which pine trees are grown. This level ground has been used for this purpose for a long time, but an endeavour to improve it is taken only when the Block steps in to give its helping hand. Though not so big, the field presents a picture of a raw stadium, with all the efforts to make it as good as possible under the social service activities of the villages. It is therefore hoped that in the near future the field will add up to the pride of the village.

Like all Khasi villages, Modymmai is well organised. The traditional village organisation run by the elderly persons of the village has no Durbar of its own. Thus the meetings and the councils are held in the elder's house, in the School building or in the club house. The organisation performs all sorts of function in and for the village. In the village, the maintenance of footpaths, drinking water holes and springs fall under its supervision. It is also the duty of the elders to organise the working parties for social services. Again, it is also their duty of settling minor disputes between villagers. They lay down the policy for the activities of the village and make the rules which the villagers have to observe and follow. Some of its function are excellently performed, such as those of its efforts to maintain the local footpaths, the paths leading to the working areas, the market place and the Block and the maintenance of community grazing land, forest and other lands and places falling in this category are worth mentioning.

So far, discussions have been made about the important public places in connection with the religious and social activities of the villagers. Fortunately for Modymmai, there is another institution with bright prospects for the future. This is the Gram Sevaks' quarter. The building is built in the community land of the village which is on the extreme northern part of it. The building is a four-roomed permanent building with the roof covered with corrugated iron sheets. Half of the building is divided into three rooms utilised by the gram sevak as his office and for his private use. The remaining half is the Block store where agricultural tools, manure, seeds, pesticides, medicine for cattle, articles used in some industries and D.D.T. sprayers are kept. Though the work of the gram sevak is meant for a circle consisting of a number of villages, the village is chosen to be the operational centre and the villagers gladly give their consent in allowing the Block to construct this building in this place. The presence of this operating centre in the village itself is a very valuable asset to its inhabitants. It is marked that since the gram sevak has been there for some time, he has been accepted by the villagers as a member of their society.

Types of houses in the village

In Modymmai, all the houses are no longer of the pure Khasi type, most of them are of an improved type and some are modern. The improved Khasi types are those still constructed with traditional materials or the same materials used for the construction of the old Khasi type but they are

in many ways more hygienic than the traditional ones. It is the general practice among the Khasis to raise the floor of the house above the ground. It is their experience that if the floor is too low or in the same level with the ground, the floor will become wet and uncomfortable during the wet season. Thus all the floors are raised at least 2 or 3 feet above the ground. The floors are almost always made of wooden plank supported by timbers which in turn are supported by stone wall foundations or by upright single stones. The roofs which are supported by wooden rafters are covered with kerosene oil tins or corrugated iron sheets. Only a few houses have thatched roofs. In constructing the walls, either split bamboo or ekra plastered with mud or plaster or wooden planks are used. In comparison with the old Khasi types, these improved houses are taller; they have better ventilation on the wide walls; and while in the old house-types there was generally only one or two rooms, the improved ones always have more than two rooms. The modern types, on the other hand, are constructed according to what is now generally known as the Assam type of houses. These have glass windows, many rooms with proper ventilation and are very comfortable to live in.

Though conforming to the Assam pattern, the shapes of the houses vary from one to another. In this village, two-storeyed buildings are also found. As in the case of shapes, so also in the case of rooms. There are all sizes of rooms which may widely vary in number.

Household goods and arrangements

It is a general feeling among the Khasi women to be proud of the neatness, cleanliness and tidiness of their houses.

This feeling is properly upheld among the womenfolk of Modymmai village. Right from the footpath leading to the house across the compound and also within the house, everything is kept neat and clean. In the front courtyard of many houses, flower beds are found. Inside the house, especially in the front room where friends or outsiders are entertained, the sitting arrangements, either by benches, chairs or stools and sometimes tables, are systematically arranged. Pictures, photos and portraits are placed on the walls as part of the decoration. In some houses friends are entertained in a verandah where sitting arrangements are always provided or taken from other rooms. Bed rooms are furnished with bedsteads made of wood over which a neatly knitted mat of bamboo is placed before other bed clothes are spread. It is in these rooms that clothes are kept in wooden or iron boxes, or they are kept in the wooden frames. Sometimes the big basket in which paddy is stored is found in these rooms. But the most important room in a Khasi house is the kitchen. It is provided with a hearth and the washing place. In the washing place which is made of big slabs of stones or cemented, water containers made of brass and carefully polished stand in rows. There are other kinds of containers such as kerosene tins, bamboo pipes and procelain vessels.

The fireplace in all the houses of the village show that though the form and shape of houses are no longer of the traditional Khasi type, they cannot altogether throw away their past. Here is something typical in the floor of the kitchen where a space is left out about 4 feet square without plank covering. This portion is made of earth and stones, raised right up from the ground level upto the level of the room. Three stones are fixed in such a way that some space is left between each one of them. Of these three stones, the bigger one forms the back and the other two the front part of the fireplace. In this way, wood which is the common fuel used for cooking can be placed into the fireplace from three sides, i.e., front and sidewise. The function of the stones is to support the vessel over the fire. The peculiarities of these fireplaces are that they have no chimney or outlet for the smoke and they are always near the centre of the kitchen. Over the fireplace there is a hanging platform where small knitted bamboo splits, and sometime meat, salt and other things are kept for drying. There is no ceiling, and the inside part of the roof is pitch dark in colour due to the effect of smoke. Instead of a ceiling, straight bamboos or poles are kept in horizontal position across the room over which maize and other things are dried. The kitchen walls are provided with shelves where vessels and plates are arranged or other household articles are kept. Potato, rice and other things for consumption are kept in this room either inside knitted bamboo baskets or in wooden boxes. In some houses, tools also are kept in this room.

This is the general description of an average Khasi house in Modymmai, though it

must be said that there is no dead uniformity. In bigger houses where there are many rooms, the above arrangement or even a better one is followed, but in small houses with one or two rooms, the above arrangement is adjusted according to the size of the house. Whatever the differences between these houses are, two important things are always common, that is, the Khasi hearth and the neatness and cleanliness in which the houses are kept.

GARO HILLS

The Garo Hills with the headquarters at Tura are situated in the southern part of the western-most tip of the State. The separate district of Garo Hills with its headquarters at Tura was constituted in 1869. The northern terai and other plain areas of the Garo Hills is covered with some thickly-populated and prosperous villages, while the interior villages are thinly populated and consist of economically poor communities. The latter are situated mostly on a sloping ground or on hill tops and retain much of the traditional features. To show the differences regarding locational pattern and house type two representative villages, one from each part of the district, are described.

(1) RENGSANGIRI

P. S. Tura

District Garo Hills

Location

Rengsangiri is a Garo village situated in the northern part of the Garo Hills district. It is situated at approximately 90°—16′ east longitude and 25°—37′ north latitude north-east of Tura, the district headquarters at about 1,700 feet.

It lies about 13 miles north of Tura. A motorable *kaccha* road has lately been opened which links Tura with some of the interior villages in the north-eastern side of the district. A footpath as wide as 12 feet or so branching from this main road approaches the village through the jungle. This footpath has been improved and rendered jeepable for most parts of the year.

Layout

The village is situated on the slope of a hill. It is not a compact one and houses are found in a number of clusters which are connected with one another by a network of footpaths. To the south of the village is the jungle through which, as has been stated above, a wide footpath branching from the main road approaches the village. There is no remarkable institution in the village except the "nokpante or bachelors' house" which is situated north-east of the village in a wide open space. The Garos use to carve out a block of wood to resemble their dead relative and clothe it with the deceased's apparel. Such a memorial is called 'kima' and is found in every cluster of the households. The village is provided with three water taps by the District Council and the water to these taps is conveyed by iron pipes from springs up the hills.

House types

The arrangement of houses usually follow the lay of the land. The sites chosen for the houses are nevertheless generally steep though some of them are also built on flat ground. Thus when built on a sloping side, the weight of the front part of the house (nokkreng or nokmikkang) almost rests upon the ground while the hind part (nokgil) of the house is 6 to 8 feet in height according to the steepness of the ground plan. When built on a level site the raised platform is generally 2 to 3 feet in height. The

building materials for the roof consist of three long wooden beams supported by wooden posts and other bamboo poles which are fastened on the beams. A good number of split bamboos are clasped on both sides on the bamboo poles and are securely tied up to tighten the joints. On such roof frame, thatch-grass is patched up. The floor of the house is covered with fine knitted bamboo frame resting on cross-beams which are fastened to the posts which support the house. The wall is constructed mainly with stout bamboo poles to which is fastened a thickly plaited bamboo frame. No mud plastering of any sort is done on the wall.

Thus a Garo house usually consists of two parts, viz., the front part known as 'nokkreng' or 'nokmikkang' and the hind part known as 'nokgil'. The 'nokkreng' is always utilised for stocking firewood, agricultural implements as well as shelter for pigs and fowls. A stairway of wood leads one from the front part (nokkreng) to the hind part (nokgil) through a doorway. Now the hind part or 'nokgil' consists of two parts, each meant for different purposes. The first part is used as a dining room. There is also a firepalace beside which household utensils are kept. It is separated from the second part by a partition wall of split bamboo so made for the purpose and at one corner of this first part is a doorway which leads to the second part. The second part is wholly meant for sleeping apartment of the members of the family. At its one corner is a private closet for the heads of the family close beside which is a paddy receptacle. At one end of the second part an outlet by means of a doorway is made which leads one out by a stairway. A platform raised about the same height as the level of the floor of the house is made at one side of the first part and is used for sitting purposes.

(2) RESUBAKRAPARA

P. S. Tura

District Garo Hills

Location

Resubakrapara is a Garo village situated in the northern part of the Garo Hills District in the valley of the river Damring or Krishnai, one of the important tributaries of the mighty Brahmaputra. It is situated at the foot of the hills in the region that may be termed the 'terai' of Garo Hills which marks the southern limit of the Brahmaputra in this sector. In other words, the valley in which the village is situated stretches and blends with that of the Brahmaputra.

Longitude 90°—36′ east and latitude 25°—54′ north indicate the position of the village in the map. In the ground it is located at about 19 miles from Krishnai, one of the important stations on the Assam Trunk Road on which vehicles of the State Transport as well as of other concerns, for both goods and man, ply regularly. A *kaccha* but fair weather, motorable road leads one to the village from Krishnai. This road runs through Resubelpara, the headquarters of the Tribal Development Block, which is just about a mile away from the village. Krishnai, it may be said, serves as the doorway linking the village by road with Tura (about 139 miles), the headquarters of the Garo Hills District, also with Goalpara (about 34 miles), the subdivisional headquarters of the district of the same name and with Gauhati (about 92 miles).

Layout

As has been mentioned above, the village is situated at the foot of the hills. Dense forests cover the ridges and lower ranges surrounding the village area rendering communications through them hazardous. Around the village, however, the low hills are cleared of forests giving place to orchards mostly of oranges and the betelnut trees which bring wealth to the villagers. There is no reserved forest near or around the village and the surrounding forests are subjected to orange plantations thereby yielding good trees only in scattered areas.

The village is not a compact one. A vast open space is all that is necessary for building a house. This is so because only a

large compound can allow space for a betelnut and orange garden or in a few cases a fishery, besides the house. All the households lie to the right of a visitor approaching the village from Resubelpara. They are laid mostly in two patches separated by a football ground.

The village has with it one lower primary school which is situated in the south west and to the west of the village is found a church house. To the south of the village is the club house which has with it a small library, a community radio set and some provisions for games and sports. There are two football grounds, one situated in the eastern side of the village and the other in the north west. The villagers are all Christians and have permanent burial place which is located to the north of the village on the slope of a hill. Their wet paddy fields extend to the north, east and south of the village while further west are the fruit plantations as well as the surrounding forests. In the north eastern part but away from the residential areas at the foot of the hills is a natural hot spring. It may be noted that the sources of water in the village are the two water taps provided by the Public Health Department with the villagers' voluntary service. These two taps are conveyed through iron pipes from a spring in the fields north west of the village.

House types

There are 39 households in the village. The houses are of the modern type and consist of two or three rooms, the number of room varying according to the members of the family. Sometimes households with more than 3 rooms are found. Almost all the houses are thatched with sun grass which makes it quite comfortable and cool specially in the hot seasons, although in as many as seven houses bamboo leaves are also used for roofing. The side walls are of ekra, plastered with sand and mud and white-washed with lime. The posts of the houses are of sal wood and are therefore durable and stronger than those of any other kind of wood tree. The posts are raised from the ground level and the floor of the house is either covered with bamboo split or no plinth at all is raised and in that case the ground floor is polished and plastered with mud. Sometimes blocks of stones are also used alongwith sal posts to support the house. All posts and doors are painted with black coaltar to prevent them from being rotten or moth-eaten. In every room there are windows, the number of which varies according to convenience. One room leads to another through a doorway. The rooms specially the one chosen to receive outsiders or strangers are decorated with furniture of various kinds such as chairs, tables, photos hung on the wall, flower pots, ashtray, etc. The floors also are covered with bamboo mats. The fireplace is made at one corner of the kitchen with three embedded stones. There is no chimney and the smoke is let out usually through a window so made for the purpose. Bedsteads of wooden planks are arranged according to convenience at the four corners of the sleeping room. The compound of each house is neat and clean. Under the shade of betel and plantain trees are grown flowers of various sorts. About 10 feet or so from the house, a pit laterine is built walled on all sides by sun grass fastened to wooden posts. Each house provides a dustbin for throwing all waste matters which in course of time are processed into manure. There is also drainage system for draining waste or foul water so that it does not remain stagnant but flows easily through drains provided for the purpose.

UNITED MIKIR AND NORTH CACHAR HILLS

The United District of Mikir and North Cachar Hills was formed just after Independence although it was formally constituted only in November, 1951. Within the district there are three separate areas, two of which are more or less inhabited by the Mikirs while the remaining area, that is, the North Cachar Hills with its headquarters at

Haflong, is inhabited by the Dimasa Kacharis, the Zemi Nagas, the Kukis, the Pnars, etc. The two areas inhabited by the Mikirs are the East Mikir where the district headquarters Diphu is situated and the West Mikir area which formally belonged to the Jowai Subdivision. It may be mentioned that for the socio-economic survey, three villages have been selected in the whole district to "represent adequately geographical, occupational and even ethnic diversity". A note on the village layout and locational pattern and house type found in the survey in these villages is given below :

(1) PHONGJANGRE

P. S. Baithalangso

District United Mikir and North Cachar Hills

Location

The layout and locational pattern as well as house type are more or less common in all Mikir villages. It is but natural that when some people first select a site for village three factors are to be considered. These are nearness to a good supply of water, availability of good jhuming land and safety from attack of wild animals like elephants, tigers, etc.

Phongjangre is a typical village inhabited by a homogeneous group of people known as the Mikirs. It is situated in the remotest part of the Mikir West area of the United District of Mikir and North Cachar Hills at 25°—49′ east longitude and 92°—38′ north latitude at an altitude of about 1,700 feet. It lies about 94 miles from Diphu, the district headquarters and about 40 miles from Hojai, the nearest railway station. From Hojai a motorable non-metallic road runs about 16 miles in the direction of the village to Dongkamukam, the headquarters of the Rongkhang Multi-purpose Community Development Block. From there it continues to run for about 6 miles to Kalonga, a village near the Kalonga river. The road terminates here. From Kalonga a footpath, winding the ups and downs of an undulating plateau, takes one to the village for about 18 miles.

Layout

The village covers an area of about 843 acres of land. It stands on the saddle of low ranges running from north to south. There is a wide footpath which runs along the range where on both of its sides are found the main arteries of the residential quarters of the village. The village is not a compact one. Houses appear on top of six low hills and they are all connected by footpaths. It may be noted that there is no clan or kurwise clustering of households on these separate hills but the fact that the village is not a compact one is due to the nature of the place itself. To the north east of the village is the Lower Primary School and further east are found their jhum fields as well as some small patches of wet paddy fields. Although the villagers burn their dead there is no permanent crematorium. Such places lie scattered around the village. The Mikirs have no temple, shrine or altar. There is no club house. There is also no permanent place where the village durbar can be held. Such an assembly is usually held at the house of the 'Sarthe' or village Headman. The village gets its supply of water through bamboo pipes which convey it to the village from streamlets of the surrounding hills. It may be noted that the land towards the western part of the village is higher than the village itself while towards the east it overlooks a rolling plain.

House types

Phongjangre, as has been noted already, is a typical village. The nature of the family is of the joint type, that is, all members of a family occupy a single house. The house is, as a rule, divided lengthwise by a partition into two or three rooms with one portico on one side. The house is generally divided into a 'kam' or a room for outsiders or guests which is always on the right hand side opposite the only door into the house while another room which is known as 'kut' is meant only for the family. In the 'kut' there is a platform or chang called 'tibung' raised about 2 feet above the floor running

along the wall. This is used as sleeping apartments for the members of the family, that is, for the young and unmarried sons or in some cases for the married couple and in the latter case the unmarried sons have to sleep alongwith their parents in a room called 'damthak'. Outside the wall of the 'kut' but attached to the house is a place called 'biroi' in which fowls and goats are kept. The fire-place called 'mehip' lies at the back of the 'kut' and by the side of this fireplace is the 'damthak' where the heads of the family, i.e., the father and the mother, sleep. Here also stands the paddy receptacle or 'ingkro' made of bamboo. Behind the fireplace there is a place called 'dambuk' which is attached to the 'damthak', where the young and unmarried girls sleep. The front verandah is known as 'hongkup' in which is kept the loin loom, firewood, baskets, mortar and pestle, vegetables, daos, etc.

The floor of the house is usually raised about 4 feet or more above the ground and it is supported by strong posts on all sides. The whole structure of the house including the side walls is made of split bamboo finely woven and knitted together so firmly that no mud plastering or anything of the sort is necessary. The roof of the house which always consists of two sloping parts is thatched with sun grass which is generally replaced after a lapse of four or five years. The floor of the house is covered with knitted bamboo splits which are arranged as above and fastened at each end to the posts which support the roof of the house. The inside of the house is rather dark except for the scanty light that filters through the openings in the split bamboo walls. There is no resemblance of a window or a chimney, the main door and the tiny slits in the bamboo walls acting as sources of ventilation. The fireplace is built on a platform and around the fire is a plaster of mud and cowdung. In the middle portion stand three upright stones enclosing the spot where the fire is built. Above the fireplace is suspended a bamboo-made 'chang' where items of food required for drying by smoke like fish and meat are kept. The 'mehip' is usually spacious to provide enough sitting room around it for all the members of the family.

(2) LAISONG

P. S. Haflong

District United Mikir and North Cachar Hills

Location

Laisong is a village inhabited by the Zemi Nagas, a sub-tribe of the Kaccha Nagas. It lies about 32 miles from Haflong, the sub-divisional headquarters, and about 16 miles from Mahur, the nearest railway station. It is situated at 93°—17′—30″ east longitude and 25°—12′—30″ north latitude at an altitude of about 3,500 feet in the far south of the North Cachar Hills Sub-division. The road from Mahur which is about 16 miles from Laisong approaches the village from the south west along the western slope of the Barail. The road was opened up in the late forties of the present century but is still very far from completion and no regular motor service axists yet.

The village is bounded on the north-east by Thingje village, on the north-west by Maibong, on the south-east by the Jenam river and on the south-west by Asalu.

Layout

There is a wide footpath branching from the main road and as the path approaches the village it becomes wider and reaches a span of about 30 feet or so. It is on both sides of this footpath that houses are built. The village is a compact one and houses are more or less of the same pattern and each house has a wide open space in front where the dead relatives are buried. In the centre of the village there is a wide open space, where lies the sacred jumping stone (hezuachu) over which jumpers spring and land at a place close beside which heads taken in war were buried. In the middle of the village path stand two huge wooden troughs each fed by a bamboo pipe line coming from spring originating on the hills beyond. The two 'morungs or bachelors' houses stand amidst the dwelling houses in the village. One of these 'morungs' is

situated in the centre while the other is in the far end of the village. Here and there inside the village can be seen memorial flat stones or 'herauchu' marking the places where their ancestors lie. To the south east of the village are the river Jenam and numerous streams and rivulets which rise from the surrounding hills. The jhum fields lie scattered towards the north and west of the village. The community forest lies on the south western side of the village. In the vicinity of the village on the east stands a military check-post which has with it a dispensary that caters for indoor as well as outdoor patients. To the south east of the village is the Inspection Bungalow.

House types

Laisong is a secluded village of sleepy old huts inhabited by a people whose customs and manners, handed down by tradition from remote antiquity, still survive and where the social fabric has undergone but little change for centuries. The houses are arranged in two rows facing the footpath in opposite directions. The huts are all thatched with sun grass. Whether for personal comfort or for the sake of tradition, it is considered necessary by the villagers that the front of their houses should face the rising sun. Each house has a small clearing in the front where their dead relatives are buried. Small uneven paths or sometimes steps connect the houses in the village. Small compact gardens containing little patches of maize or mustard are frequently found in most household where there is enough open space in the homestead ground. Houses are one storeyed affairs. They stand on bare ground roughly levelled to form the floor of the building. The roof is thatched, the leaves slanting down on each side nearly touching the ground. This kind of roofing prevents the house from being blown off by strong winds. The houses rest on either bamboo or wooden supports. The walls of the building are of split bamboo frames over which layers of straw are fastened. The interior of the house is divided into two compartments. One which forms the front room (kungduaki) is used as a store room where paddy, placed inside great baskets, is stored. These baskets are placed against the walls of the room. In this room pigs and fowls are also kept. It is thought necessary to have the shelter near their owners. Besides, mortar, pestle, baskets, hoes, does, etc. are kept in this room. The second compartment is separated from the first by a plank wall on which there is an opening or doorway. In this compartment there is the hearth which is made of three upright stones embedded in the earth forming a kind of a stand for the cooking pot. The enclosed space between the three stones contains firewood. By the side of the fireplace bedsteads are constructed. These bedsteads are raised about 2 feet above the ground and are made of planks. The house has usually three doors—one at the front which serves as the main entrance, another at the back of the house and the third on either of the side walls of the house. There are no windows. So the doors are the only ventilation of the house. As there is no chimney the smoke has to find its own way out. The result is that the walls look black and dismal. The whole room is covered with fine dust and dirt which are left uncleaned. This is due not so much to the people's aversion to domestic work as the people's total ignorance of the basic principles of clean and hygienic living.

(3) GUNJONG

P. S. Haflong

District United Mikir and North Cachar Hills

Introduction

*"The (Dimasa) Kacharis live in villages containing any number from 5 to 1 hundred or more houses. These villages are situated in the valleys among the hills in North Cachar; and in the plains, as a rule, on any more or less raised land there may be. They are rarely built on high hill tops or ridges, and no fortifications of any sort are put round them, the entrance at either end being entirely open. The houses are placed in two lines, facing one another a common way, varying from 15 to 25 feet, extending down the centre. Each village, in some open, easily accessible place, has a raised house termed "nodrang" used by the youth of the community as a club and sitting rooms. No females are admitted on any account. Each house is divided into three compartments, the first used as a sitting room, the second as a sleeping apartment, and the back as a kitchen. The house itself is built in the shape of an ordinary hut, and is on the ground and not raised. There is no peculiarity in the construction calling for remark. Two or more families never by any chance combine and occupy the same house. In the case of a daughter marrying, however, the son-in-law lives in the house for a full year with his father and mother-in-law".

*A Historical and Descriptive Account of the Kachari Tribes in the North Cachar Hills by C. A. Soppitt, 1885, pp. 16—17.

Gunjong is taken up for the purpose of our socio-economic survey with a view to represent the other type of Dimasa villages in the subdivision which are more or less of the same pattern.

Location

Gunjong is one of the Dimasa Kachari villages of the North Cachar Hills subdivision. It lies at 93°—1′ east longitude and 25°—18′ north latitude at an altitude of 2,436 feet. It is situated north of Haflong, the subdivisional headquarters of the North Cachar Hills. Haflong is in the region of longitude 93°—1′ east and latitude 25°—10′ north. Hence the village is 10 miles as the crow flies from the subdivisional headquarters. The village is connected with Haflong by a motorable road which runs through Mahur, the nearest Railway Station to the village. By this road the distance of the village from the subdivisional headquarters is about 40 miles and about 24 miles from the Railway Station. The Haflong-*via*-Mahur road approaches the village from the south. The road does not terminate here. It continues to run northwards *via* Jowai to Shillong, the State capital. The distance from Gunjong to Shillong by this road is about 150 miles.

Layout

It is on the eastern side of the road that the village is situated. The village is a compact one, that is, the houses are built more closely together. A wide footpath, as wide as 20 feet, branches from this road where on both of its sides the houses are situated. The path thus seems to separate the two lines of houses which compose the village. There is a wide open space in the south eastern side of the village where are situated the Nodrang or Bachelors' house and the Dimazik Weaving Society. There are two schools in the village, viz., the Lower Primary School which is situated a little towards the north with a football ground near it and the Middle English School with its hostel situated in the north of the village. The village boasts of having a Government Hospital with residential quarters for the staff in its vicinity towards the west. North west of the village and by the side of the main road are found the residential quarters of the Public Works Department workers while on the other side of the road, is the Inspection Bungalow. There is one retail shop in the village standing just by the roadside. Towards the north of the village lies a waste land or an old jhum while forest trees are found at some places around the village. The supply of water to the village is obtained from springwells and there are 3 such wells in the village. The crematorium lies towards the east. On the whole, the village is well planned and in fact Gunjong boasts of having been once a subdivisional headquarters until 1896 when the headquarters was transferred to Haflong which remains upto this day the headquarters of the North Cachar Hills subdivision.

House types

Houses are more or less of the same pattern. The dwelling house is simple, measuring usually 60 feet by 30 feet and is built on the ground. The houses are of the usual type, one storeyed only, the walls being of ekra reeds or split bamboo and the roof of thatch fastened by cane and supported by wooden posts. The side walls as well as the floor are plastered with mud mixed with cowdung. The house is, as a rule, built as one big spacious hall which is then divided by a partition wall made of bamboo in two parts or sometimes three according to convenience. Generally, the house contains two rooms known as 'nokhong' and 'noringh', the outer part or chamber and the inner one respectively. The outer chamber is used for all purposes such as dining, sleeping and sitting while the inner one is used as kitchen and also as a dormitory for the unmarried girls. All articles of daily use are kept in the same house at different places meant for particular items. Their houses have no furniture except 'pira' for sitting and bedsteads for sleeping. In the 'noringh' a big fireplace of three stones

embedded in the earth floor is made at one corner. In the same room and a little away from the fireplace are bedsteads made of bamboo and raised about 2 feet from the ground. Usually the house has two doors, one at the front and the other at the back. The front door serves as the main entrance to the house. There are no windows. Nor there is any chimney to let out the smoke. Naturally the inside of the house is very dark.

A shed for cattle or pigs is built separate from the dwelling house but always inside the compound. Except in few cases sheds for poultry are built close or attached to the dwelling house. The compounds are neatly fenced by bamboo which thus marks the boundary of each house. A small garden is seen either in front or behind each house where some vegetables are grown. A small pit in which is stored cowdung etc. for manure is also found in the garden.

THE SURMA VALLEY

The Surma Valley with particular emphasis on Cachar District

The Surma valley, which constitutes the main southern division of the province of Assam, comprises mainly the district of Cachar and presents many points of contrast with the Brahmaputra valley. As its elevation above the sea level is much lower in comparison with the Brahmaputra valley, the course of the rivers which traverse the Surma valley is extremely sluggish, while the stream of the Brahmaputra is swift. The Barak is the main river of this valley, which rises in the Barail range to the north of Manipur. The general appearance of the Cachar plains is picturesque. There are practically none of those wide stretches of plain land, which is a somewhat tedious feature of other valleys. Low hills or *tilas* crop up here and there. Here and there swamps, beels and haors with clumps of grass and reeds lend variety to the scenery. The river Barak flows through the centre of the plain with its banks for the most part lined with villages. These villages lie embedded within groves of areca palms, plantains and feathery bamboos. At all seasons the country wear a fresh and green outlook. There is little forest in the Surma valley except on the southern hills extending from Tippera, in the south-eastern and also in the north-eastern corner. As mentioned previously almost the whole of the country north and south of the Barak is dotted over with low ranges or *tilas*, which rise like islands from the dead level of the alluvium. So it is clear that a large proportion of the Cachar plains is not level land at all and this has resulted in the growth of the tea industry in this region. A generalised picture of a village is given below :

(i) the core is the village proper, made up of compact residential houses. temple, schools, market place (not in all cases), which are mostly arranged in a line;

(ii) nearest to the village proper are small plots used for gardening;

(iii) more remote are the cultivated lands and other small clusters of village houses;

(iv) sometimes adjacent to cultivated lands are pastures;

(v) most remote from the village are waste lands or cultivated lands belonging to another village, or beels or haors.

As the district is not rich in timbers, very few houses in the village could be found where timbers are extensively used. On the other hand, bamboos are plentiful and so for the construction of the houses in the village these are used to a large extent in every possible way. The roof of the houses are either thatched or made of torzas (bamboo mats). The use of torzas for roofing is a common feature of this area.

An attempt will now be made to describe the locational pattern, layouts and house types of a typical village of the valley. The village is Sadarashi under the jurisdiction of Karimganj Subdivision.

(1) SADARASHI

P. S. Karimganj

District Cachar

Layout and locational pattern

Sadarashi lies between 24°—85′ and 25°—0′ latitude north, 92°—30′ and 92°—45′ longitude east, about 2½ miles west of the subdivisional town Karimganj. This is a middle-sized village with an approximate area of 2 square miles. It is bounded on the north by the river Kushiara, on the south by Faridpur mauza, on the west by the Dawki beel, the Chirua beel and Banamali mauza, on the east by Batarshi mauza and Dhid mauza. The Cachar Trunk Road is about 1 mile from the southernmost point of the village. The Trunk road runs in an east-west direction along the course of the Langai river. Besides the Dawki and the Chirua beels, there is the Haravallabi beel within the village, close to the eastern boundary and the Faridpur beel on the south, the Kucharkuri beel on the south-east. Over and above there are a number of shallow marshes within the paddy fields. It is worthmentioning that as far as the eye can see there are probably more beels, haors and swamps in this district than in any other part of Assam, and close to many of these haors and beels a number of permanent villages have been established. Sadarashi also justifies the above findings.

The population of the village is a mixed one as both the Hindus and the Muslims reside permanently in the village. The core of the village is populated by the Hindus. Besides, there are two small clusters—one by the side of the river Kushiara comprising both the Hindus and the Muslims and another on the southernmost point of the village, which is populated purely by the Muslims. An interesting feature is that though there is a general liking for having a neighbour of the same community, there is no hard and fast rule for the formation of households on the basis of community. But generally the people are guided by feelings because a hindu will look for a hindu area rather than a muslim area while constructing his house in the village. The Karimganj Lakhibazar P.W.D. road runs through the village from the south-east to the north-west direction. There is another P.W.D. road which is connected with embankment and drainage works. This road emerging from the Karimganj-Lakhibazar road goes past the Haravallabi beel towards the Kushiara river in the northern direction and finally ends abruptly by the side of the river. The subdivisional local board (subdivisional planning board) road comes across the above mentioned P.W.D. road, after covering a tortuous way through the village. All these roads are connected by a network of small village paths. Moreover there are a number of irrigational canals covering almost every part of the village.

It needs no explanation here that the river and the beels make possible the formation of a chain-work of irrigated canals, which feed the paddy fields throughout the year. The residential areas lie embedded within thick groves of bamboo trees in such a fashion that to a distant viewer the village appears to be a dark green spot on a vast stretch of paddy fields with the roofs of the houses peeping through narrow gaps. Small village paths are practically on the same level as the homestead land. The homestead land includes the plot on which the residential house is constructed and the adjacent area on which garden crops are cultivated. The village paths are connected by temporary bamboo bridges over the drains and canals. The heavy rainfall combined with the extremely tenacious character of the clay poses a serious problem for the maintenance of roads. During the rainy season the roads are extraordinarily muddy.

The main cluster which is the core of the village consists of one Lower Primary School, the Government Dispensary, the Post Office and one Middle English School. There are two religious places—one the seat of the God Siva and the other the seat of the Goddess Kali. Moreover within this part are found two 'akhras' (place for musical rehearsal or monastery of Vaishnav monks). There are two mosques in the village, one in the southern and one in the northern part. The dwelling houses are located on both sides of the village path in a crowded manner. Very recently three ring wells have been constructed in the village—two in the main part and one in the southern part. There are two more Lower Primary Schools, one in the northern part and one in the southern part of the village close to

the military camp. The military camp has been established by the side of the river Kushiara at the point where the P.W.D. road comes to an end. There are two market places—one within the village known as 'naya bazar' and the other outside the village on the southern bank of the Kushiara known as 'tilaia bazar'. The 'naya bazar' is located by the side of the Karimganj-Lakhibazar road. Adjacent to the military camp there is a customs house, the establishment of which has been necessitated by the fact that the village is not far from the Pakistan border.

House types

Except some of the public buildings like the 'akhras', 'mosque', the dispensary, the Post Office and the Middle English School, the common people's houses are two-roofed and mud-walled. Unlike the straggling aspect of a village in the Brahmaputra valley the houses are crowded together in a manner little conducive to health. Almost all the houses have an open courtyard in front. The main residential house is a bigger structure than the other houses constructed within the same household area. But there is a distinctive feature in the arrangement of the houses which strikes the eyes. Unlike in some parts of the Brahmaputra valley the houses are usually not constructed just by the side of the village footpath. The general tendency is to set back the houses from the common village footpath. In between the residential houses and the footpaths are found thick bamboo groves. At some points the bamboo groves are so thick that it is difficult to see the complete house from the footpath. A narrow path which is meant exclusively for the use of household members connects the household with the main village footpath.

Besides the main residential structure which is used by the members of the family for the purpose of sleeping and storing household goods, there is generally a guest room (*ba'thak*), a cattle shed (gohal), and a store house of paddy (*marai*). Latrines are found only in the case of well-to-do persons all of which are *kaccha*. Sometimes a hole simply dug within the bamboo grove with a bamboo platform over it serves the purpose of a latrine. It is needless to say that from the hygienic point of view this sort of arrangement is quite harmful. Besides cattle, fowls, ducks and geese are very common to the villagers. For their maintenance a small enclosure is generally built within or attached to the cattle shed. The muslim houses are well-wooded with bamboo groves or provided with fencing of split bamboo at the front part, while the houses occupied by the Hindus are less damp, more spacious and more closely-set. One more difference is that in every Hindu house there is a '*tulshi* manche' (ground for the *tulshi* plant—ocimum sanctum) which is the place for daily worship. But in the case of Muslims there is no particular place for daily worship within the compound of the house.

The use of 'torja' which are made of split bamboo pieces woven in twilled pattern, is also known to the villagers. As a rule there are a few houses in the village the roofs of which are found to be made of 'torjas.' The villagers have a general liking for tin roof because it gives permanency. But as thatched grasses are easily available by the side of the beels, they still use them to a large extent for roofing the houses. Of the two mosques in the village one is brick-built and the other is bamboo-made having tin roof.

What is found in the village Sadarashi is also applicable generally for the Surma Valley as a whole. Even then some villages present many differences due to local factors. Fulertal is such a village with many distinctive features of its own.

(2) FULERTAL

P. S. Lakhipur

District Cachar

Layout and locational pattern

Fulertal is a big village under the jurisdiction of the Silchar Subdivision in the district of Cachar. The village is situated at a distance of 18 miles from Silchar town on the bank of the river Barak which

flows along its eastern boundary. A small stream (Hato khal) passes through the village and joins the river Barak in the eastern direction. The village is connected by regular bus service plying between Lakhipur and Silchar. Lakhipur, an important business centre, is only about one mile from Fulertal. The village is under Lakhipur Police Station. Unlike other villages of the valley Fulertal is situated on an undulating surface. There are many *tilas* (hillocks) most of which have been brought under cultivation of pine apples and other fruits. The Hato khal bifurcates the village into two halves, the only link between which being a bamboo bridge. But as the stream is very small and narrow the villagers find little difficulty in crossing it in dry season. The Silchar-Lakhipur P.W.D. road runs from the west to the north-east direction. A number of footpaths merge with the main road after covering a tortuous way through the village. It is difficult to follow the course of these bridle paths. Wherever there is any open space between the residential houses, the people use it as thoroughfare. The general appearance of the village is a wavy land with marshes and small *tilas*, which gradually slopes down the river Barak. On the opposite bank of the Barak there is the Bhuban hill within a range of five miles from the village.

The houses are scattered all over. There is practically no cluster-wise formation of the households except at some points close to the river bank. Fulertal is an ideal place for cultivating fruits and as such there are many fruit gardeners in the village. There is also a co-operative society for fruits and vegetables growers which is accommodated just by the side of the main road on the northern direction. Besides, there is one senior basic school, one mosque and one church in the village. There is no regular market within this village. For marketing and particularly for selling the fruits, the villagers go to Lakhipur. They maintain regular contacts with other nearby villages in matters of trade. Sometimes they go upto Silchar on business matters. As the village is located just on the bank of the river Barak, the use of country boats is very common, and in fact it is one of the major means of transporting local products. The products which are transported by this way include paddy, vegetables and fruits. How much they earn from the fruits can be understood from the fact that pine apples are exported to Silchar, Gauhati and even to Calcutta. The village is mainly occupied by three communities namely the Hmars, the Bengali Hindus and the Bengali Muslims. The Hmars constitute one of the tribes of Assam and are said to be a branch of either the Lushais or the Kukis.

House types

As mentioned previously the houses in the village are scattered here and there. The houses located by the side of the main road are constructed in the form of long parallel rows. Each main house is divided into three to four rooms. Most of the houses have an open courtyard in front which is neatly polished with cowdung and mud. Those houses which are constructed away from the riverside are invariably attached with a small pond either in front of or behind the compound. Though there are a few wells in the village, ponds are the main source of water for daily use particularly for washing the household utensils and clothes. But to those who reside by the riverside, the Barak is the only source of water for bathing, washing and drinking even.

The Hmars have a distinctive house pattern of their own. They live by the side of the river without any protection, thereby exposing themselves to the capricious river. But they have a quick power of adaptability and this power accounts for the building of a new type of house, i.e., pile-dwelling. Moreover for the uneven surface this type of houses is an appropriate solution as the dwellings are constructed on piles about 1½ feet or more above the ground level. Each house consists of 2 to 3 rooms with one portico in front. The roof is thatched while the walls and the floor are made of split bamboo. In order to make the plinth, wooden planks are horizontally placed over three or four rows of piles in juxtaposition. Then a bamboo'*machan*' is placed over these wooden plankings. The roofs are generally four-sided with a part being extended to form the cattle shed either on the front part of the house or towards the sides. Windows are also common to these houses. In some cases, a small portion, square or rectangular in shape, is cut from the bamboo wall which serves as a window. The agricultural and fishing implements, fuel of dried wood, etc. are kept below the plinth. The household premises are quite spacious and sometimes bounded by a fencing of split bamboo of about 2 feet high.

(3) JOYPUR

P. S. Lakhipur

District Cachar

Where the valley meets the hills the country retains many features common to both the plains and the hills. The village Joypur of the Cachar District is situated on a rolling surface at the foot of the Barail Hills at a distance of about 23 miles from the Silchar town. On the north and the east the steep hills of the Barail range rise gradually until they appear to be merged with one another. The village has three different parts namely Langlachara, Molura and Joypur III proper. Out of these three, Joypur III and Langlachara are close to one another while Molura is at a distance of about one mile from the other two. Molura is situated on a raised level which is more or less a table-land and just along the edge of it, a small river also named 'Molura' flows down the valley. After some distance it joins with another river known as 'Siril' on the south-west direction. During the summer months the rivers swell and plying of country boats is possible downstream. But in winter the rivers partially dry up and so boating becomes totally impossible. It is a known fact that high land with regular slopes, where water does not collect, is suitable for tea cultivation. In the Cachar District the low *tilas* and most of the elevated tracts have been brought under tea cultivation. Joypur is also surrounded by upland tracts almost on all sides, where many tea industries thrive. Many ex-tea garden labourers from the nearby Tarapur Tea Estate and Bandoo Tea Estate have settled in the village. The village is predominantly occupied by two groups of people, namely, the Dimasa Kacharis and the Manipuris.

House types

Most of the houses are *kaccha* and are of simple type. These are constructed on a raised plinth and are roofed with thatch. Walls are made of split bamboo or bomboo pieces placed in a row, which are then plastered with mud and cowdung. But the Manipuris have a special fascination for a kind of sticky soil which they acquire from the riverside or by the side of the low hills.

The houses of the Manipuris are spacious and are made with a wooden framework. Mostly one long house with a verandah in front accommodates all the members of the family.

The houses of the Dimasa Kacharis have a distinctive pattern of their own. The plinths are hardly raised at all and in fact houses are constructed almost on the ground level. A typical Dimasa Kachari house is a long structure, the front portion of which is raised a little. The front portion of the roof is cut in such a way that the tipmost point extends more than the two sides. A small extension is also made on the front part of the house which serves as a verandah. There are only one front door and one back door in the whole house. Windows are not found. Roofs are made of thatch. Only in few cases 'torjas' are used. Walls are made of split bamboo with no mud plastering. It is worthwhile to mention that the houses of the Dimasa Kacharis are constructed without any definite pattern. These are huddled together and face a common courtyard from all directions.

(4) TARAPUR

P. S. Silchar

District Cachar

House types

Tarapur is a big village in the Silchar Subdivision of the Cachar District. It is situated at the western proximity of the Silchar town close to the railway station. Although there is nothing striking in its locational pattern which could very well differentiate it from other villages of the district, there are many distinctive features to be found in its house types. The

use of 'torjas' and split bamboo walls which are so common in the Surma valley is also found in the village. In this respect the village is no exception. But the following points indicate where it differs from other villages :—

(i) There are more concrete buildings in the village which exist side by side with the *kaccha* buildings;

(ii) Besides some double-storeyed concrete houses there are a few double-storeyed *kaccha* houses also;

(iii) The application of mud plastering over the split bamboo walls is not common;

(iv) Corrugated iron sheets, thatch and 'torjas' (split bamboo made) are used for roofing the houses;

(v) Windows are common;

(vi) Many houses are built wholly on bamboo materials, e.g., roofs are made of 'torjas' while walls, doors and windows are of split bamboo. Moreover, instead of wooden posts bamboo posts are used for supporting the whole structure.

MIZO HILLS DISTRICT

House types and villages in Mizo Hills District

The District

Mizo Hills District or Lushai Hills District as it was known during the British period is the southern-most district in the State of Assam. It lies between latitudes 21°—50′ and 24°—30′ north and longitudes 92°—20′ and 93°—20′ east. This hill district is almost blocked on all sides by foreign countries. The only free passage into and out of the district is through the plain district of Cachar on the north. Through this passage runs the only communicating link of the district with other parts of the State. The condition of communication and transport facilities within the district is very poor. These hill tracts are the homes of the Mizos or the Lushais.

Historical background

It appears that until the middle of the 19th century the contact of these people with others was very limited being confined only to their land or the lands of their adjacent neighbours who happened to have close affinity with them. Since they entered these hills they had been left alone. There are, therefore, very little chances for other cultures to creep into their society. The first British expedition into these hills took place in the middle of the 19th century. By the end of the century nearly the whole land was brought under the British. The event was gradually followed by many changes in all fields of the people's activities. Of all these changes the three well marked are in the fields of administration, religion and literacy.

General influences

The combination of all the changes mentioned above in turn have certain bearings on the social and cultural life of the people. This combined force may be regarded as the general influence—general in the sense that there is no nook or corner of the district left untouched by it. In the pre-British period each village was an independent administrative unit under the chief. The people were, therefore, frequently involved in conflict with each other. The circumstances compelled the people to be very particular about the site of their village and the layout of their houses. The hill tops which constituted the most impregnable strongholds were the favourite sites for villages. Again, all the houses were very close to each other encircling the chief's house at the centre. These inhabited parts of the villages were always fenced with timber and bamboos. When the land was brought under one rule at the beginning of the 20th century the inter-village disputes were no longer settled by the sword. The hilltop, the fencing and the

squeezing of a large number of houses in a very small area were no longer the important factors of a village. The sense of security with its consequences are, therefore, the outcome of the changes in the pattern of administration. The inhabited parts of the villages are bigger now than they were then and there are more spaces between the recently constructed houses than between the old ones. Likewise, the change of religion and growth of literacy have done their parts. When the people turn to the new faith, they also forget many do's and don'ts and superstitions which ran side by side with their old religion. Now they are free to get rid of their uncomfortable, and ill-ventilated old types of houses. Now they know that doors and windows are not the inlets of evil spirits and they can have many doors and windows in their houses without fear that evil spirits will be too free to enter their houses. They are also free to build any type of house they like without violating or tampering with any code of religion. With their knowledge of hygiene, the pattern of their houses are gradually drifting away from the unhygienic old types.

Particular influences

As far as changes in the picture of villages and houses are concerned there is no uniformity at all. The changes are there, but in some cases the rate is faster than in other cases. Special facilities enjoyed in some areas account for the more rapid changes of villages and houses in such areas. Among the special facilities which stimulate the changes are the nearness of the villages to the marketing centres, the district and subdivisional headquarters and the motorable roads. In this district the headquarters, that is Aijal and Lungleh, are also the main marketing centres. Living near these centres and the motorable roads, the people have a close contact with the events in the headquarters. More modern building materials are available from these centres and they can be transported easily to the villages. Again, these villagers are in a better position to raise cash for the payment of the building materials. Lastly, in the above centres there are various types of Government buildings the pattern of which serve as models for private buildings. Thus the villagers around the headquarters and along the motorable road are ahead of their fellow dwellers in the rural areas.

General picture of villages

Most of the Mizo villages are still on the hills. The hilltops are generally the residential parts of the village while the lower slopes are used for cultivation. The two areas are usually separated by a ring of mixed wood and bamboo forests which are usually kept in their natural state and are known as Village Safety Reserves. These forests are preserved to keep the thatched cottages in the villages at a safe distance from the sparks of fire which may be blown by the winds when jhums are burnt.

Two areas of the district

Two villages are taken up to serve as illustration for the villages in the district and for the pattern of houses in different parts of the district, having certain sets of environments. After the declaration of Independence and with the adoption and the enactment of the Constitution of India, two administrative councils were formed within the district. One of such councils is the Mizo District Council and the other one is the Pawi-Lakher Regional Council. The jurisdiction of the former is in the northern part of the district while that of the other is in the southern part. The northern part is the Mizo area but the southern part is the Pawi and the Lakher area. Though the Pawis and the Lakhers are also known as the sub-group of the Mizo people, they have certain characteristics of their own and they live in the extreme corner of the district.

(1) LAWNGTLAI

P. S. Lungleh

District Mizo Hills

Position and size

Lawngtlai is one of the villages in the southern part of the district. It is situated on the northern part of the Pawi-Lakher Region. It is about 45 miles south of Lungleh, the subdivisional headquarters and the market centre of the area. The village is, however, connected with the subdivisional headquarters by the fair weather jeepable road. The village is one of the largest in the area. There are 112 households in the village with a population of 698 of whom 349 are males and 349 are females (1961 Census). The majority of the people are Pawis, but there are also some Lakhers and other Mizos in the village.

Topography

The village is situated on two spurs of a hill. The inhabited sectors lie at an altitude of about 3,000 ft. The land beyond the village to the north and east drops suddenly many hundred feet and forms a natural formidable wall. Towards the south and west, however, the land slopes more gently. Immediately beyond the inhabited part of the village is the Village Safety Reserve which on the south and west looks like an arch. In the gentle slopes on the south and the west beyond the Reserve are the cultivable lands of the villagers. Of the two spurs on which houses are built, the one on the north is a little higher than that on the south.

Residential pattern

Most of the houses on the northern spur are huddled together with the houses of the *ex*-chief (whose post was abolished after the formation of the Regional Council) still located at the top or centre. In front of the *ex*-chief's house there is an open ground which looks like a big village street, surrounded by houses which are very close to each other. From this open ground many footpaths run in different directions down the gentle south-western slope of the hill. Houses are also built on both sides of these footpaths with their front parts facing each other. The main outlet from this part of the village runs down the gentle southern slope towards the southern hill. This outlet is improved and jeeps can ply through it. As a footpath the outlet continues towards the south passing through the top of the southern hill and reappears on the southern face of this hill. On reaching the saddle between the two hills two branches of the jeepable road turn towards the east and the west both reappearing again on the southern face of the lower hill where both meet the footpath after making a complete circle around the hill. Houses are built on both sides of these roads and footpaths. However, houses on the saddle and the southern hill are not as close to each other as in the higher hill. Judging from the outlay of houses in the village the upper part of the northern hill seems to be its oldest part. Close to the *ex*-chief's house is the village Primary School, opposite to it on the other side of the open ground is the church, and the Middle English School with a playing ground are beyond the church. On the western part of the southern hill is the Private High School. The villagers get their supply of water from three springs all of which are situated on the slopes below the level of the village. The springs are on the northern, the southern and the western slopes. Twice they had changed their burial ground. So there are three places for the purpose, two of which have been abandoned and only one is in use. The oldest ground is beyond the *ex*-chief's house, the next is near the Private High School and the present ground is on the slopes in the southern part of the village.

House types

Most of the houses in the village are approximately 30 feet by 15 feet. Generally, a house consists of a front verandah, a spacious main room and another open air verandah attached to the building at the back. The single rectangular space or the spacious main room is used as the kitchen as well as the sleeping room. Sitting arrangements are arranged either in this room or in the open air verandah. The front verandah is the place where agricultural implements and firewood are kept. Mortar and pestles by which inmates husk rice are also kept here. On the walls there are few shelves and baskets where fowls retire and hens lay their eggs. Generally the front verandah is without the front wall.

The people never bother to level the foundation of the house. Most of the buildings are, therefore, on the slopes, supported by means of raised poles of different lengths. This is done to maintain the horizontal balance the building needs. Bamboo matting or wooden planks are supported by cross beams and long bamboos laid cross-wise over them. A small place on one side of the room, a few feet from the front door, is supported by many strong raised poles because it is used as the hearth. The floor of the hearth is made of clay and stones. The walls of the building are made of bamboo matting fastened to the outer posts and

the cross bars. The roof rests on the top cross bars and the forked posts. Solid and split bamboo frames are then laid to support several layers of straw. Doors and windows are cut out on the plaited bamboo walls. Most of the doors and windows are made of the same materials as that for the walls. They are fastened to the walls in such a way that opening and closing them are done by sliding them sideways on two parallel solid bamboo rods. On one side of the house, generally on the same side of the hearth, the far corner is divided into a number of small temporary compartments. The compartments are made of cloths tied to bamboo or wooden frames. These are the sleeping arrangements for the inmates.

In the space between the hearth and the front wall there is a big and rough bamboo basket in which paddy is stored. Above the fireplace is a kind of hanging shelf made of bamboo or wooden frame. On the floor of the shelf cooked foods are kept. During wet season paddy stored in bamboo trays is kept in the shelf for drying. On the walls near the fireplace there are wooden shelves in which utensils are kept. Around the fireplace there are some short wooden stools. Each sleeping compartment is furnished with a bedstead and boxes in which the inmates keep their clothes and other belongings. In the space opposite to the sleeping compartments few items of furniture such as chairs, benches and tables are arranged. This place serves as the sitting place where friends are entertained. Opposite to the hearth on the other side of the room, there is a washing place where water containers are kept.

In the village most of the houses are of the type explained above, but there are some buildings with two or three rooms or having different shapes, sizes and materials used in their construction. Though individual taste of house plans and construction is no longer absent in the village, all the dwelling houses are built mostly with the materials that the villagers procure from the neighbouring forests.

(2) DURTLANG

P. S. Aijal

District Mizo Hills

Position and size

Durtlang is a big village situated in the middle part of the Mizo inhabited area. The village is on the Silchar-Aijal Road. It is about 6 miles north of Aijal and about 99 miles from Silchar the nearest Railway Station. The latitude 23°—47′ north and the longitude 92°—44′ east run through the village. According to the Census 1961 there are 225 houses in the village with a population of 1,399 of whom 660 are males and 739 females. Nearly all the inhabitants of the village are Mizos. However, there are few Nepalis with their families who came to the village during the British period. According to the information given by the villagers about 4¼ square miles of land is attached to the village.

Topography

The inhabited part of the village is about half a mile along the top of the ridge which runs north to south. The edges on the north and the south are much higher than the middle portion of the ridge. The western slope of the ridge is too steep to be used for any purpose, but the eastern slopes are not wholly useless. Most of the houses are on the top of the ridge which appears to be very sharp in the middle. On the north and the south the houses appear on the eastern slope. Again it is on the lower part of the eastern slope that most of the working areas of the villagers are situated. These are separated from the residential area by a long natural forest or a village safety reserve.

Residential pattern

The Silchar-Aijal road avoids the higher points of the ridge. Taking the eastern slope, it approaches the inhabited area from the north-east direction and it leaves the middle part of the village towards the south-east. Most of the footpaths are on the southern half of the village. One of them

starts from the middle part of the village and approaches the top of the higher point in the south in which the Presbyterian Mission Hospital is situated. The Hospital Authorities have constructed a motorable road which runs down the south-eastern slope and meets with the Silchar-Aijal road in the southern part of the village. Another footpath starts nearly from the same point as the first one and runs through the lower point of the eastern slope parallel to the southern half of the road. All the houses in the village appear on both sides of the road and the footpaths. In the middle part of the village stands a big, beautiful chapel of the members belonging to the Presbyterian church of the village. Another small church—the Pentecostal Church—is in the northern part of the village. At about 150 yards from the big church on the north and on the south are the Lower Primary and the Middle English School of the village respectively. Again near this church on the north is the Branch Post Office. The recreational centre is on the southern side of the church. Opposite to the Lower Primary School on the eastern side of the road is a small playing ground and beyond it further east is the cemetery. The villagers get their supply of water from five springs but only one of them serves the village throughout the year. There are few private shops in the village.

House types

Only a few houses in the village are of the old types found in the interior parts of the district. These houses are constructed with materials obtainable from the neighbouring forests of the village. A pretty large number of houses are modern types constructed with the imported materials. There are also many houses in the village which may be said to be between the two types. While most of the old types are single-roomed buildings, the semi-improved and modern types generally have more than one room. The old types are rectangular buildings while the other two types are of different shapes and depend on the individual tastes. The most striking characteristic of these different types of houses is that the old types are temporary buildings but the new ones are permanent.

As pointed out above the old types are constructed with materials available from the local forests. The floor of these buildings are supported by timber. The floors are made of split bamboo or planks. The walls of the buildings are made of plaited split bamboo and the roof is covered with thatch. Among the semi-improved types the materials used in some portions such as the floor, the walls or roofs are substituted by imported materials. There are some local materials used in constructing the modern types. These are timber and planks but before use they are well processed by carpenters. The roofs of these buildings are made of corrugated iron sheets and the walls are either of corrugated iron sheets, plain sheets or asbestos sheets. Instead of bamboo or rough planks used for doors and windows in the former type, here glass panes or well processed planks are found.

In short, as far as house type in the village is concerned, the people are from time to time replacing their old types by the modern ones. This, however, has been possible because most of the villagers have ready cash and the transportation problem or payment involved for the same is not so acute as in the case of most of interior villages.

APPENDIX

ASSAM

VILLAGES

Villages—definition of the term

12. Before discussing the distribution of the people by villages, it is necessary to explain what is locally understood by the term. In most provinces there is very little room for doubt on the subject. As a general rule, a village in India consists of a collection in one place of a number of houses occupied by persons living under a common constitution and sharing the lands attached to the village, which moreover are clearly demarcated from lands appertaining to other communities in the neighbourhood. In Assam there are no such villages. Amongst the Angamis, and a few other tribes, who until very recently were engaged in constant warfare with their neighbours, we find permanent and semi-fortified villages, the inhabitants of which are bound together by common interests and live for protection within the same ring fence. But, as a general rule, in the hills as well as in the plains, the people live in houses scattered promiscuously about the country, wherever the ground happens to be suitable for a homestead, and is conveniently situated for their cultivation. Occasionally the houses are crowded together into a small space, but this is accidental, and is merely due to the want of a sufficient quantity of high ground. Where such land is plentiful, villages are long and straggling. The houses have large compounds, and are often placed considerable distances apart, so that it is frequently hard to say to which village any particular house or group of houses belongs. There are besides no village lands, that is to say, no lands to the cultivation of which the inhabitants of any specified village have an exclusive or even a preferential right. A man may settle down and cultivate wherever it suits him, and if the land he takes up is too distant from his house, he promptly moves the latter to a new and more convenient site.* With this want of fixity of site and boundaries, it was difficult to frame a satisfactory definition of a 'village'. In many districts it was necessary to treat it as a collection of houses bearing a separate name. But this did not altogether solve the difficulty. Sometimes one group of houses bore two names, or a separate name had been acquired by a few outlying houses, which really were only a hamlet belonging to some neighbouring large village. It was impossible to lay down any general rule, saying when such places should be treated as one village and when as two; each case had to be treated on its merits by the local officer responsible, and it is hard to say to what extent uniformity of practice has been attained.

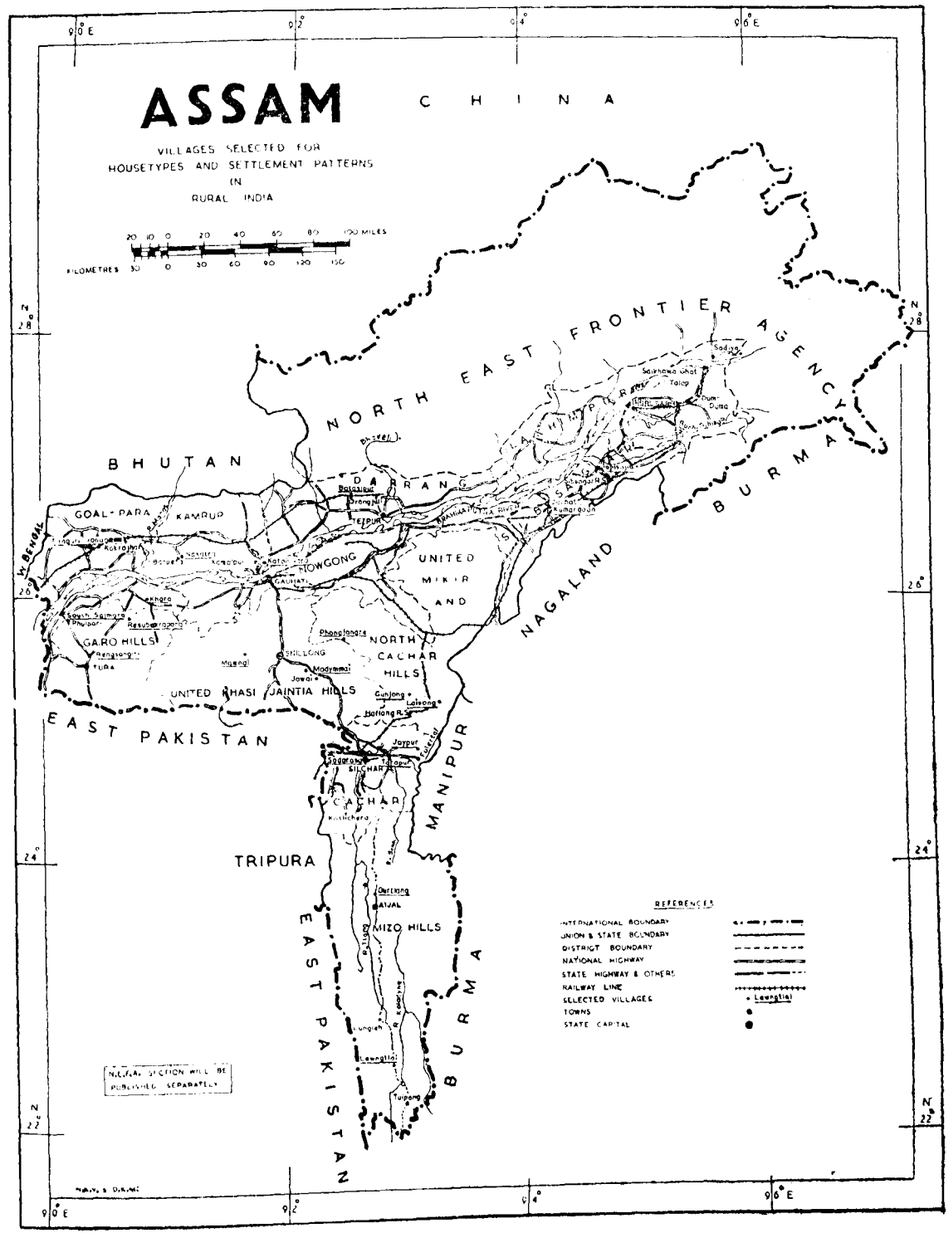
I have not yet referred to what is often a valuable auxiliary when other means of defining a village fail, that is to say, to the survey and the areas demarcated as revenue villages. In the hill districts there has been no revenue survey, and in Sylhet the *thak* villages are too straggling and indefinite to be of much use. They are said to have been resorted to at the census of 1872, but were almost entirely abandoned in 1881, and no attempt was made to revert to them on the present occasion. In Cachar the survey village is better known, and was often found useful. But it was in the Brahmaputra valley that most use was made of the survey. Since 1881 cadastral operations have been in progress, and the greater part of four districts had been surveyed by the time the census was taken. The land being temporarily settled, there was a plentiful supply of local revenue officers, tahsildars, mauzadars, and mandals and to all of these the survey villages with which they were concerned were well known. They were besides compact and of a suitable size. In all such tracts, therefore, the straggling, undefined groups of habitations were left out of account, and the survey village was taken as the basis of the census. It is true

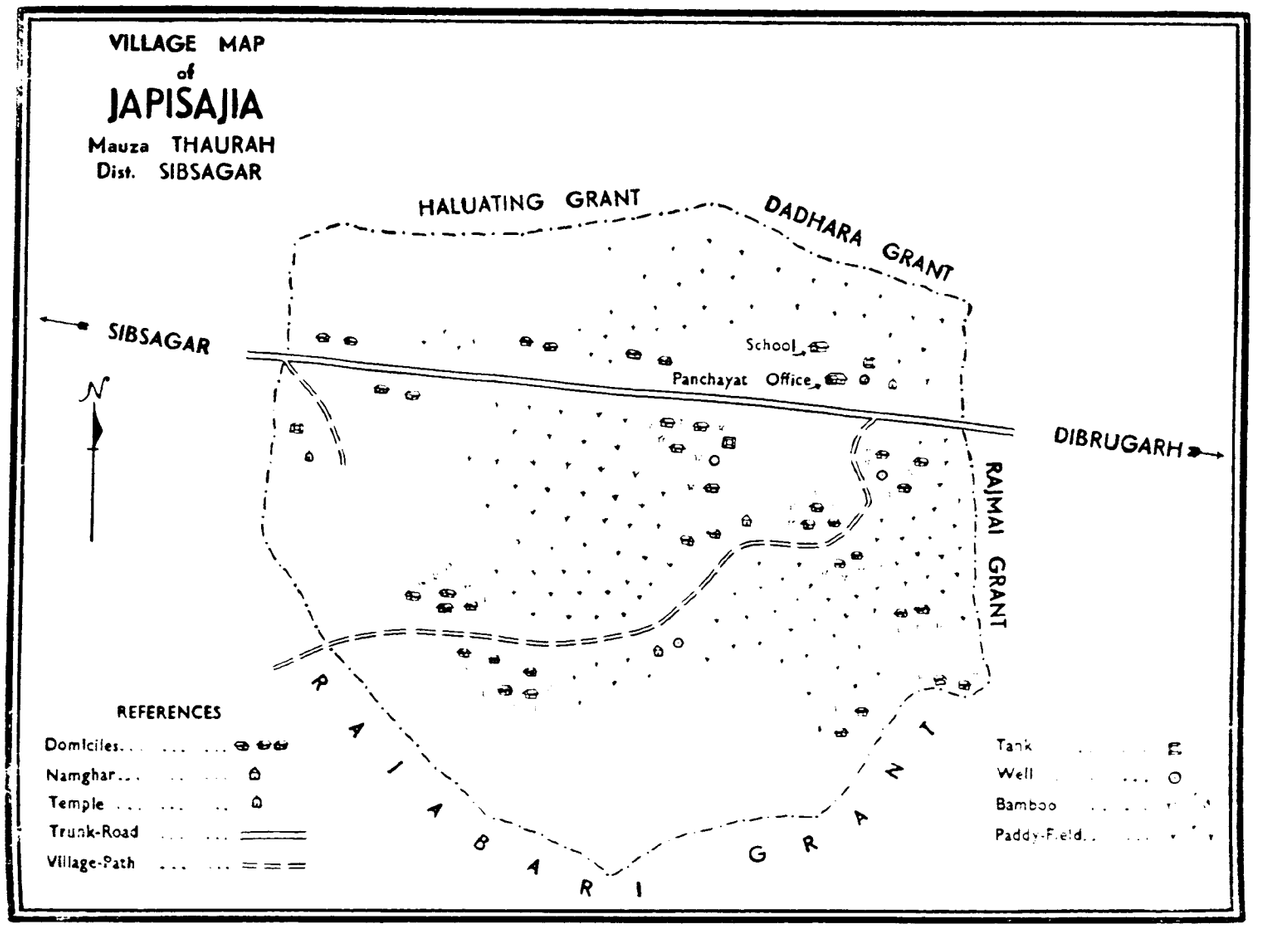
*The least permanent villages of all are those of the Kacharis and Lalungs and cognate tribes.

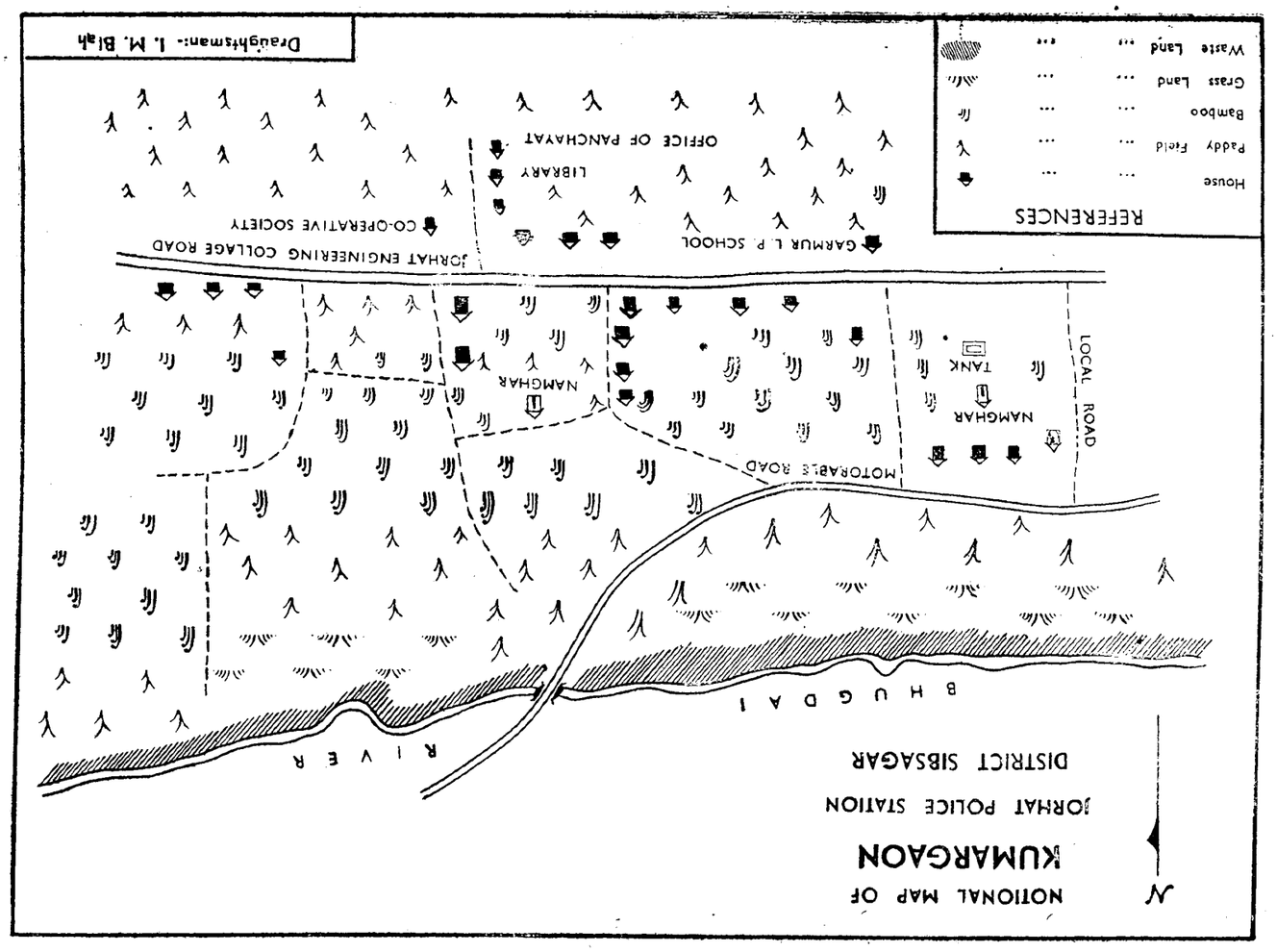
that by so doing two separate hamlets were sometimes treated as a single village, and that sometimes a collection of houses previously known by one name was split up into two villages, but this could not be helped. The great desideratum was a definite unit on which to base the census divisions, and the survey village answered this purpose admirably. To sum up, the village in the cadastrally-surveyed portions of the Brahmaputra valley and Cachar was the area which formed the revenue survey village. Elsewhere, it was a group of houses bearing a separate name; in rare instances these groups of houses were compact, but, as a general rule, they were long and straggling. Sometimes outlying hamlets were included in the parent village, at other times each hamlet was treated separately.

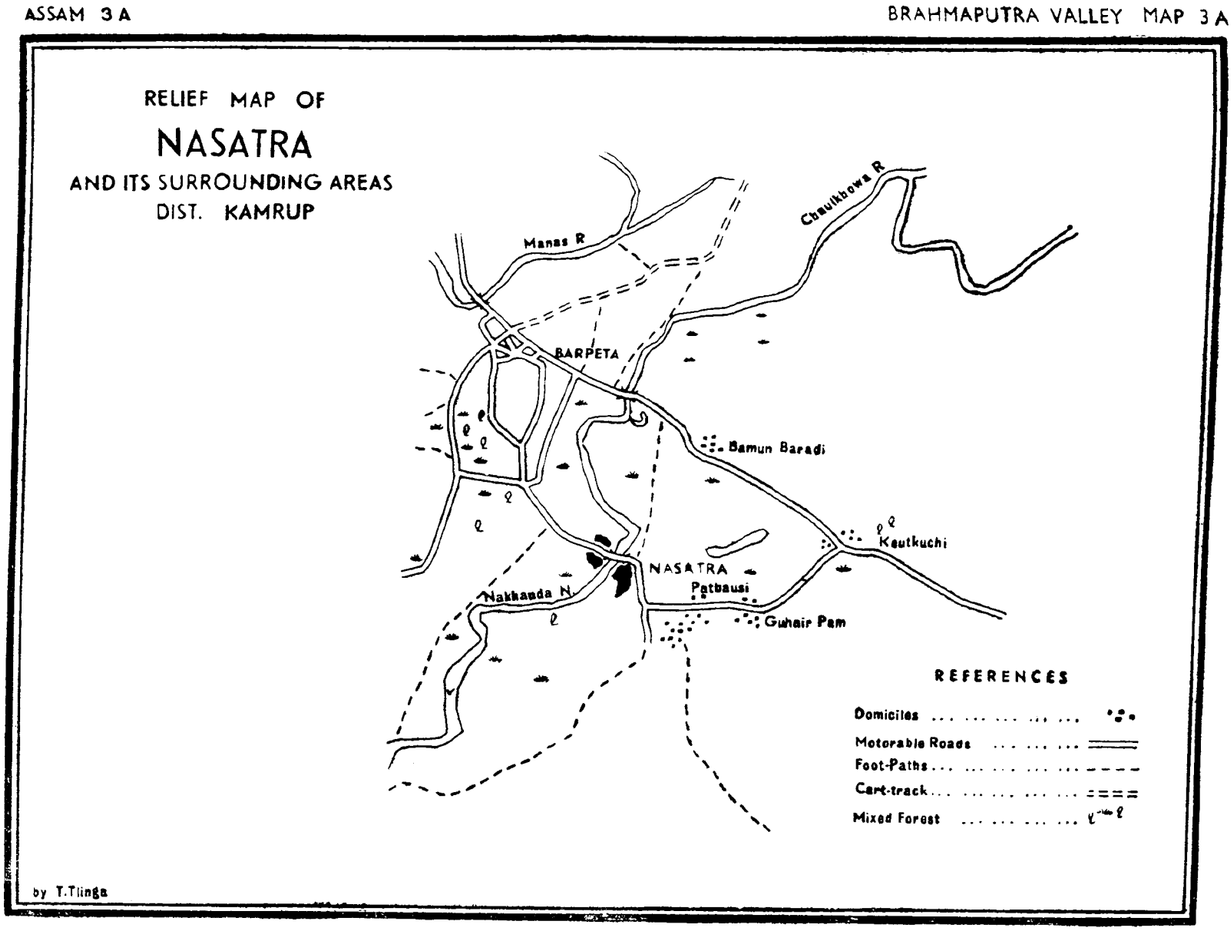
Assam Report 1891

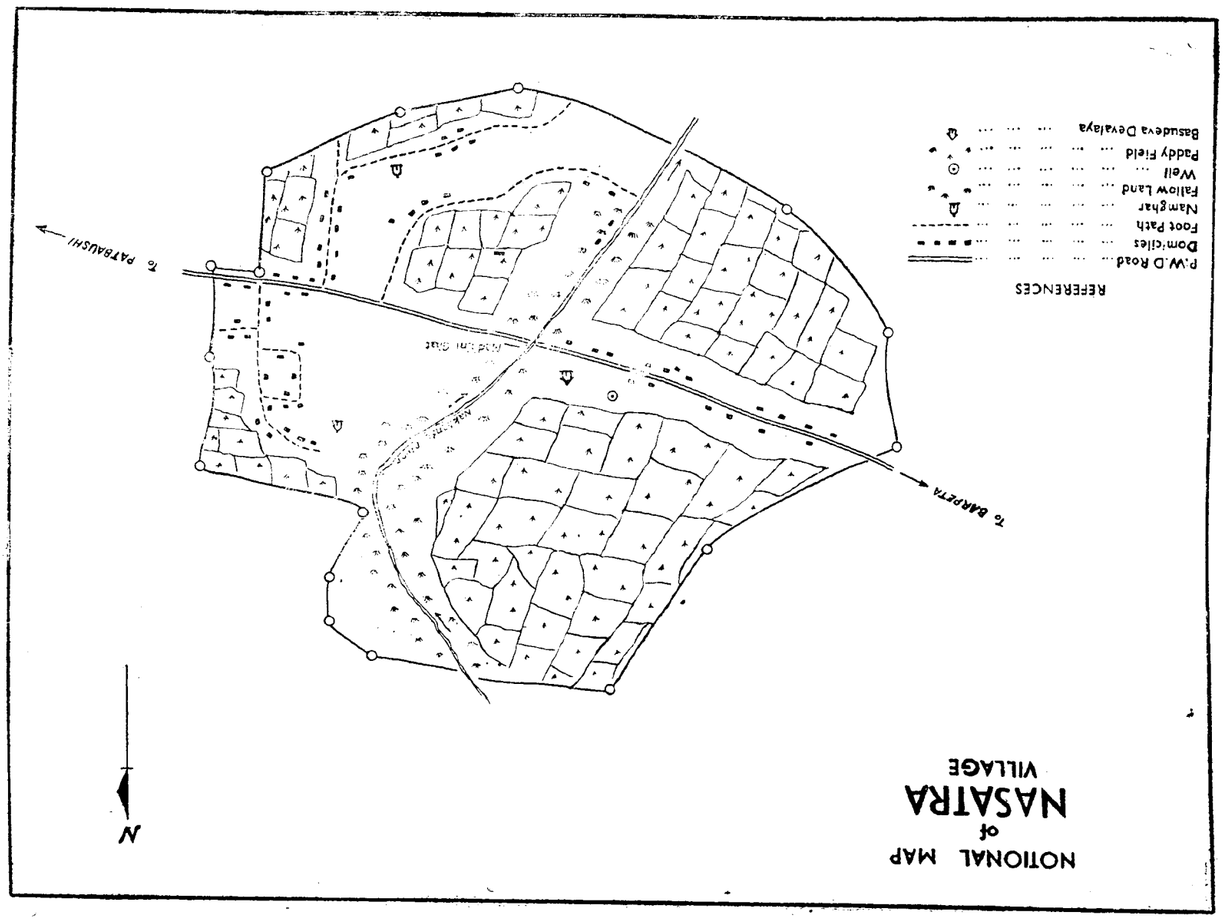
Para 12 *Page Nos.* 60-61

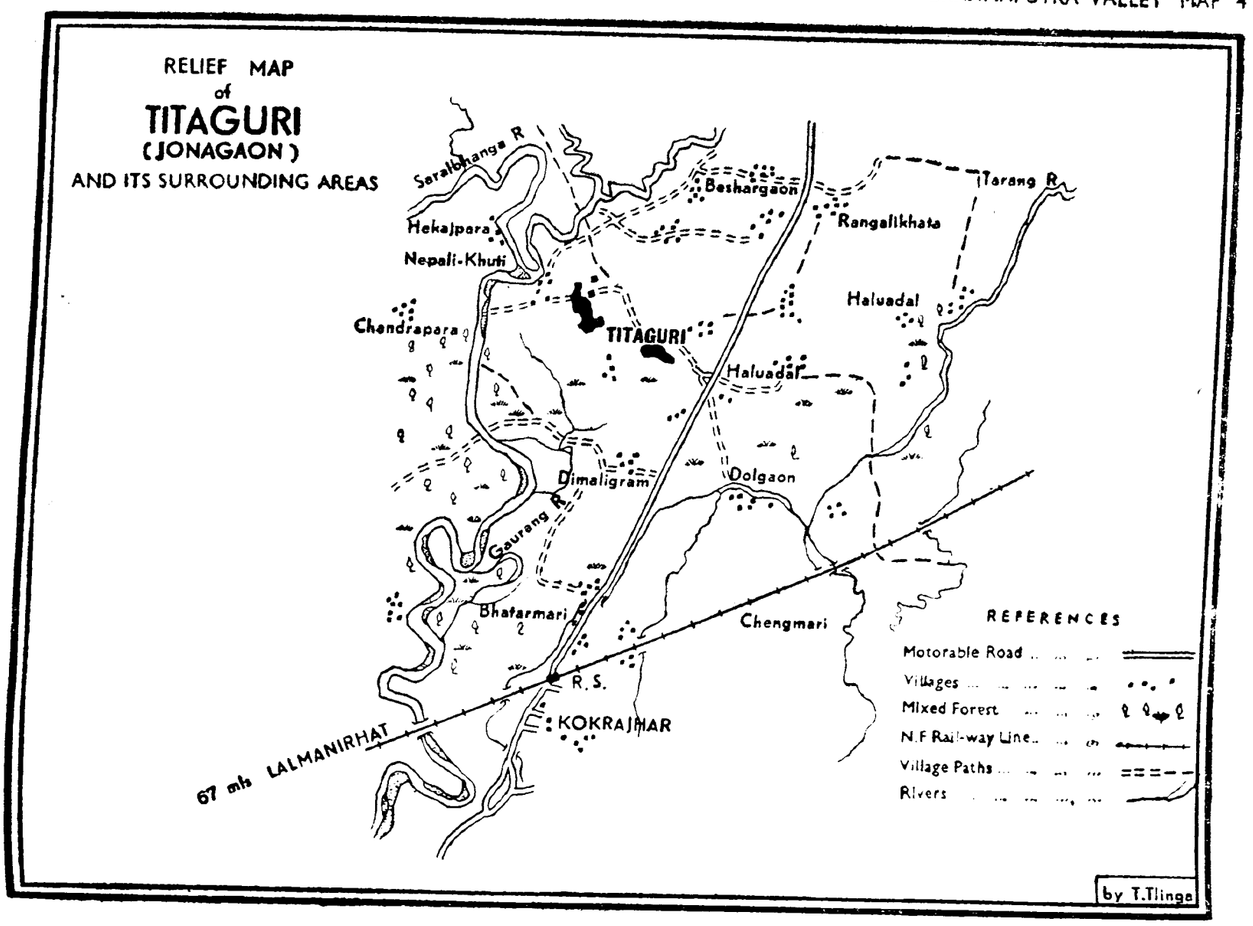


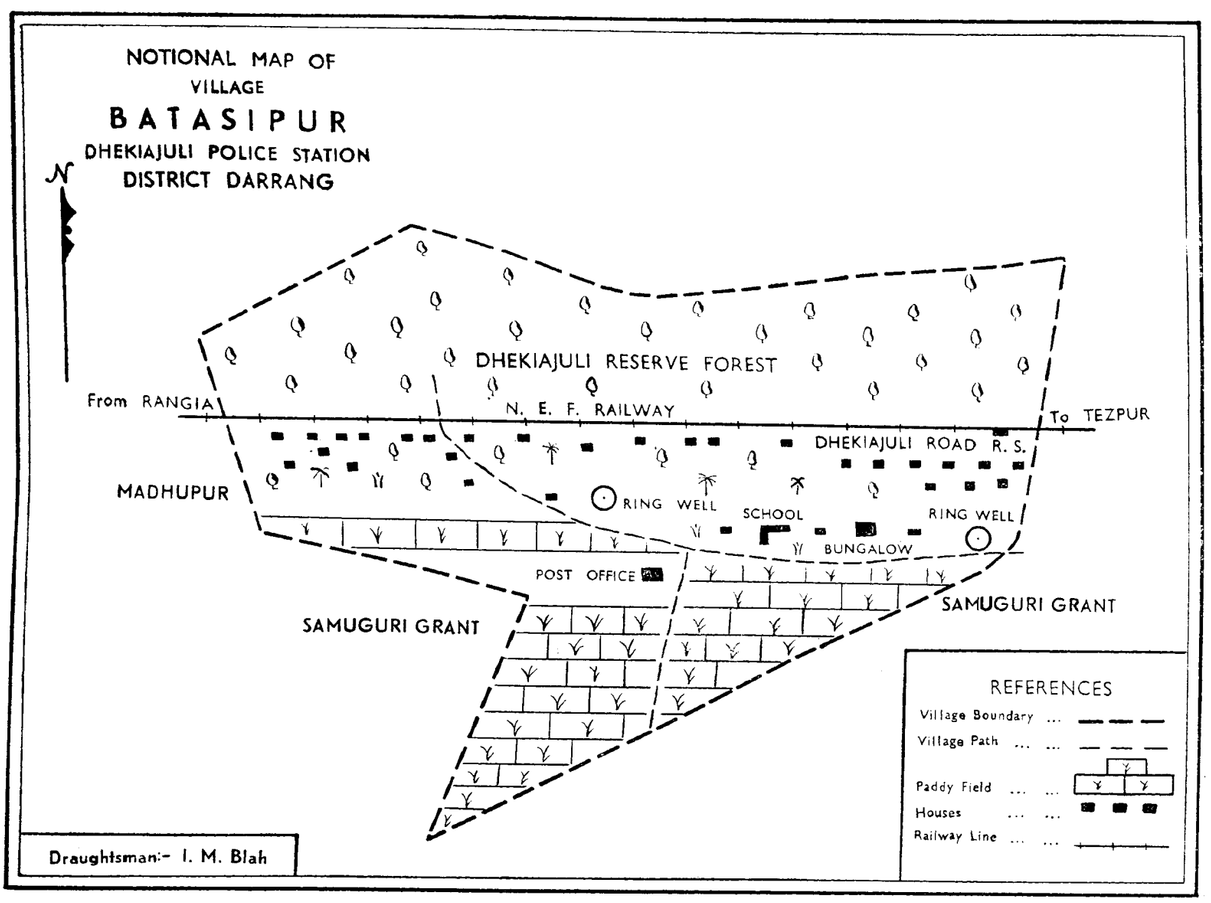

VILLAGE MAP
of
JAPISAJIA
Mauza THAURAH
Dist. SIBSAGAR
HALUATING GRANT
DADHARA GRANT
SIBSAGAR
School
Panchayat Office
DIBRUGARH
RAJMAI GRANT
N
RAIABARI GRANT
REFERENCES
Domiciles
Namghar
Temple
Trunk-Road
Village-Path
Tank
Well
Bamboo
Paddy-Field

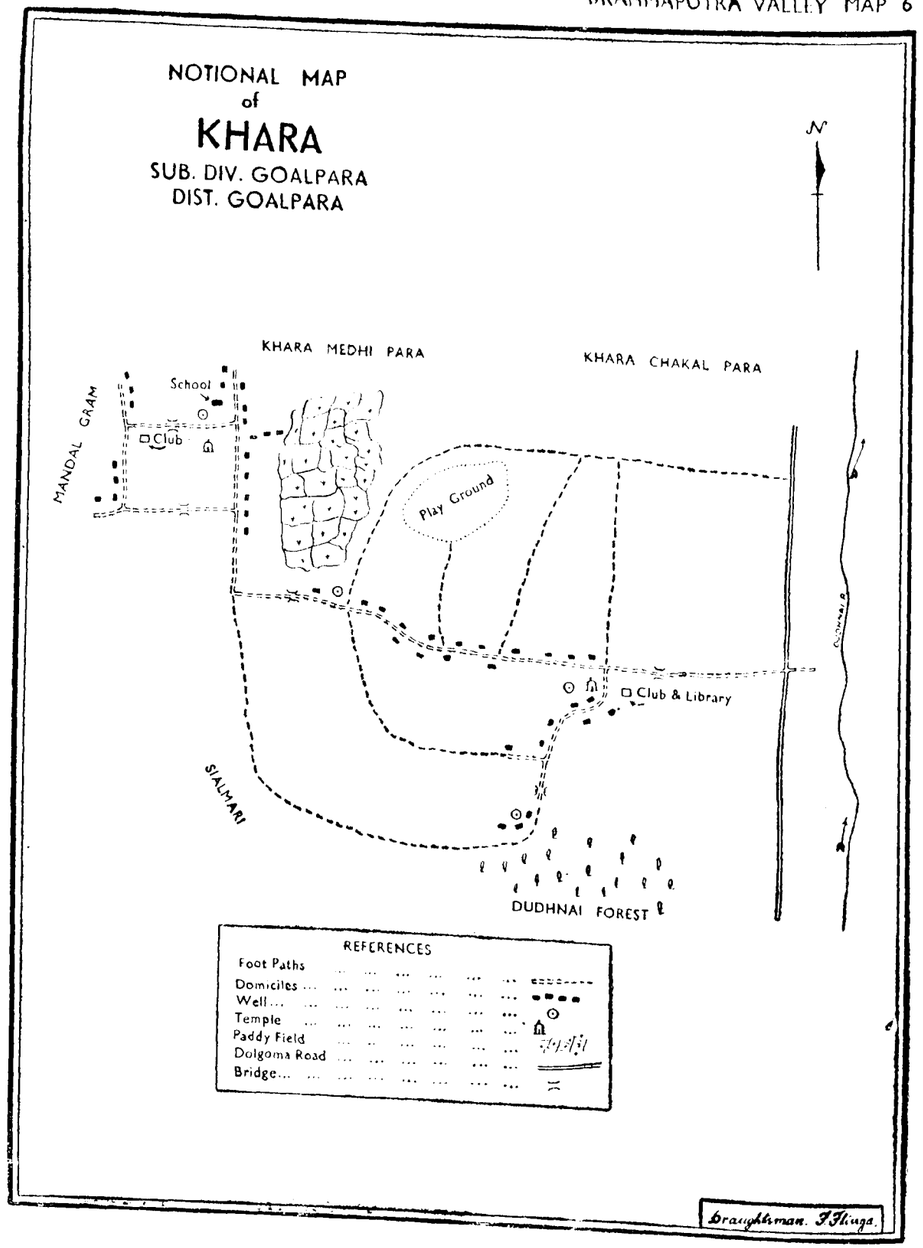

NOTIONAL MAP OF
KUMARGAON
JORHAT POLICE STATION
DISTRICT SIBSAGAR
N
RIVER
BHUGDAI
MOTORABLE ROAD
LOCAL ROAD
NAMGHAR
TANK
NAMGHAR
GARMUR L.P. SCHOOL
JORHAT ENGINEERING COLLAGE ROAD
CO-OPERATIVE SOCIETY
LIBRARY
OFFICE OF PANCHAYAT
REFERENCES
House
Paddy Field
Bamboo
Grass Land
Waste Land
Draughtsman:- I. M. Blah

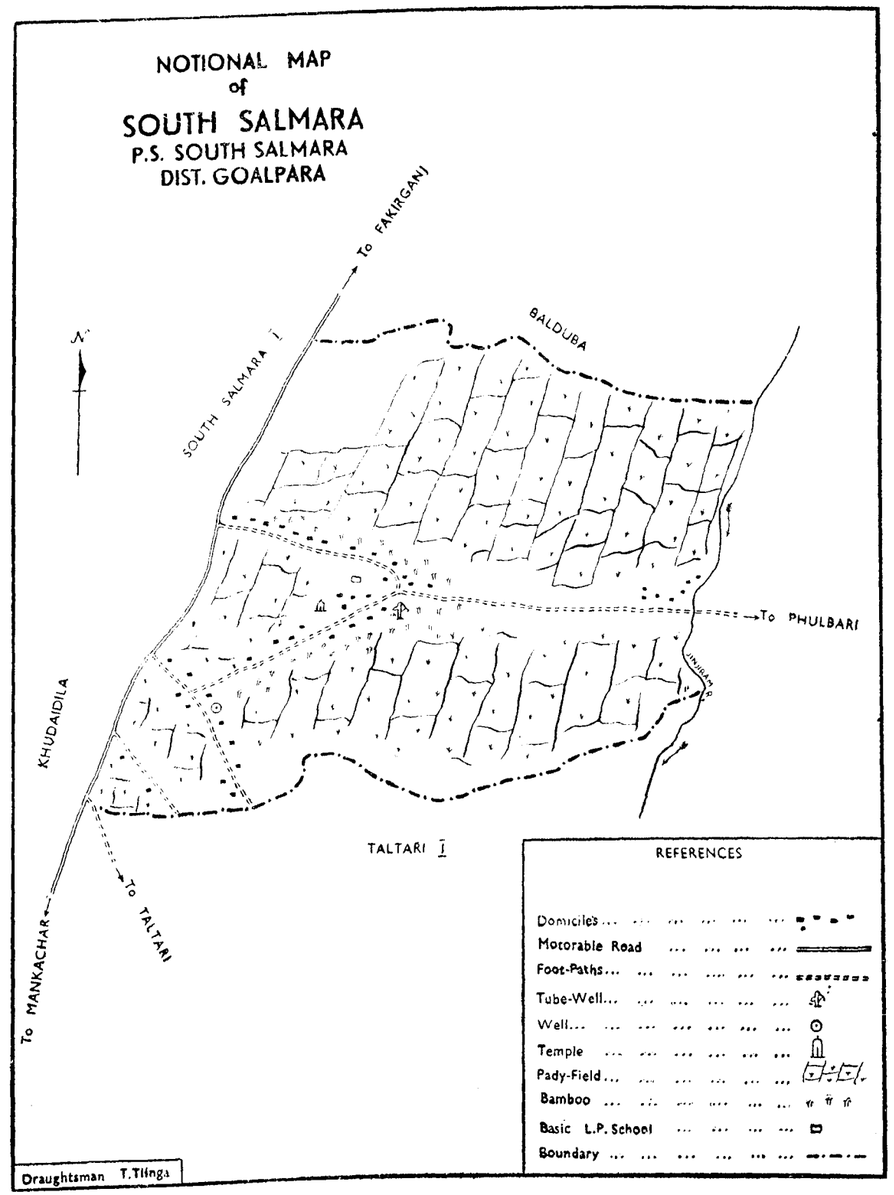

RELIEF MAP OF
NASATRA
AND ITS SURROUNDING AREAS
DIST. KAMRUP
Manas R
Chaulkhowa R
BARPETA
Bamun Baradi
Keutkuchi
NASATRA
Patbausi
Nakhanda N.
Guhair Pam
REFERENCES
Domiciles
Motorable Roads
Foot-Paths
Cart-track
Mixed Forest
by T.Tlinga

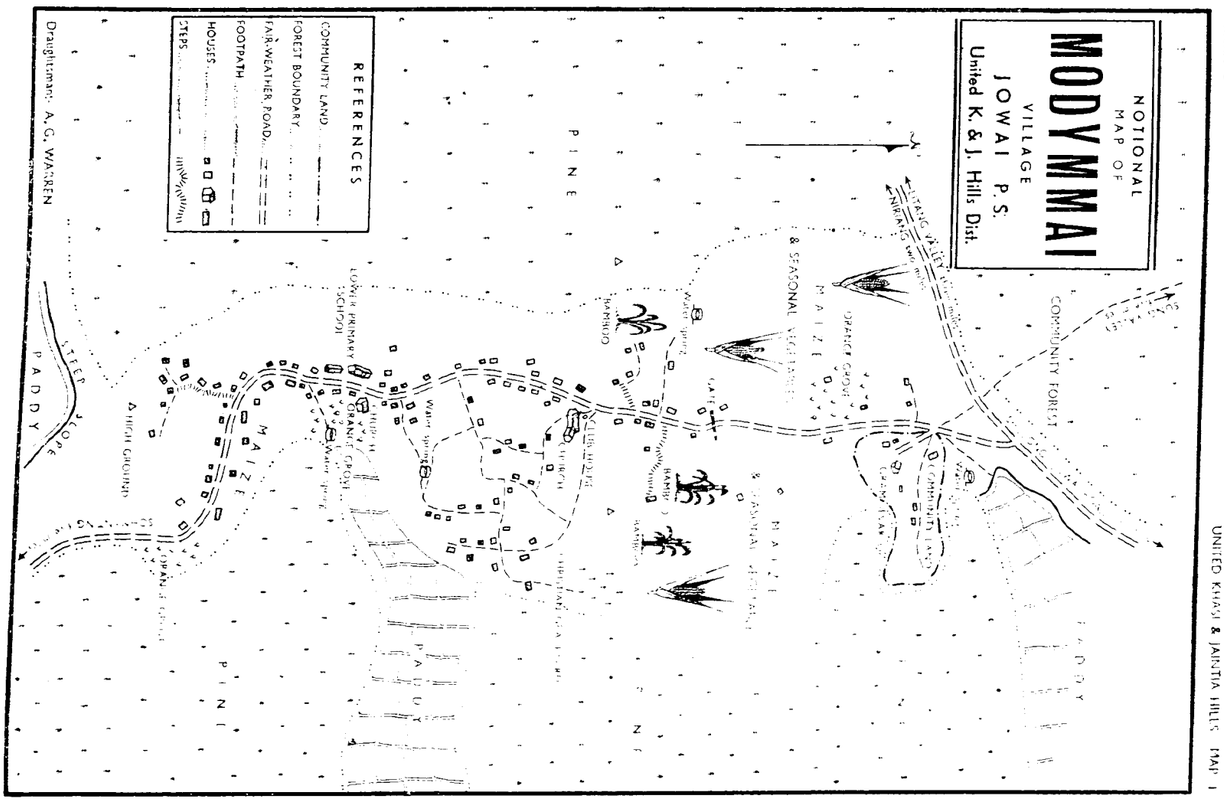

NOTIONAL MAP
of
NASATRA
VILLAGE
N
To BARPETA
To PATBAUSHI
REFERENCES
P.W.D Road
Domiciles
Foot Path
Namghar
Fallow Land
Well
Paddy Field
Basudeva Deyalaya

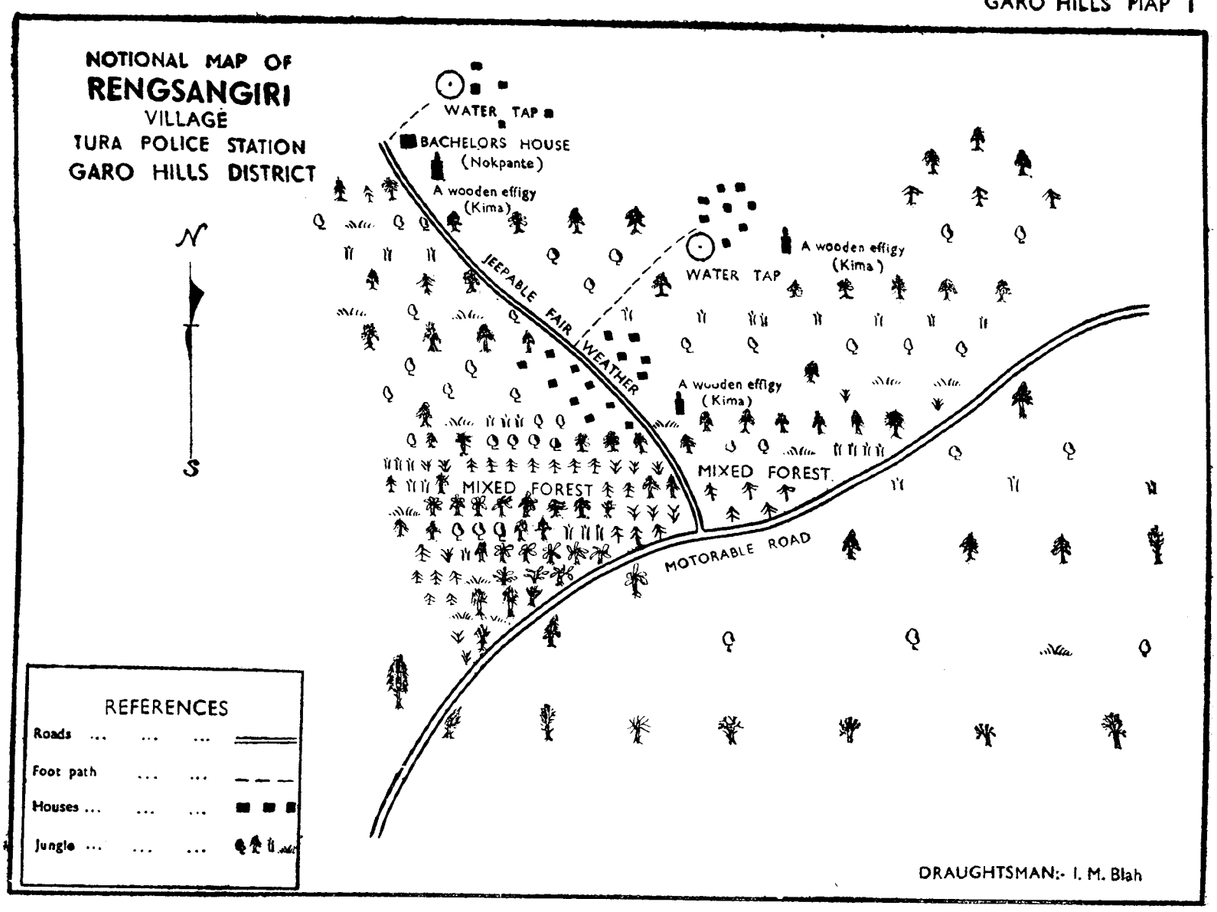

RELIEF MAP
of
TITAGURI
(JONAGAON)
AND ITS SURROUNDING AREAS
Seralikhanga R
Beshargaon
Tarang R
Rangalikhata
Hekajpara
Nepali-Khuti
Chandrapara
TITAGURI
Haluadal
Haluadar
Dimaligram
Dolgaon
Gaurang R
Bhatarmari
Chengmari
R.S.
KOKRAJHAR
67 mls LALMANIRHAT
REFERENCES
Motorable Road
Villages
Mixed Forest
N.F Rail-way Line
Village Paths
Rivers
by T.Tlinga

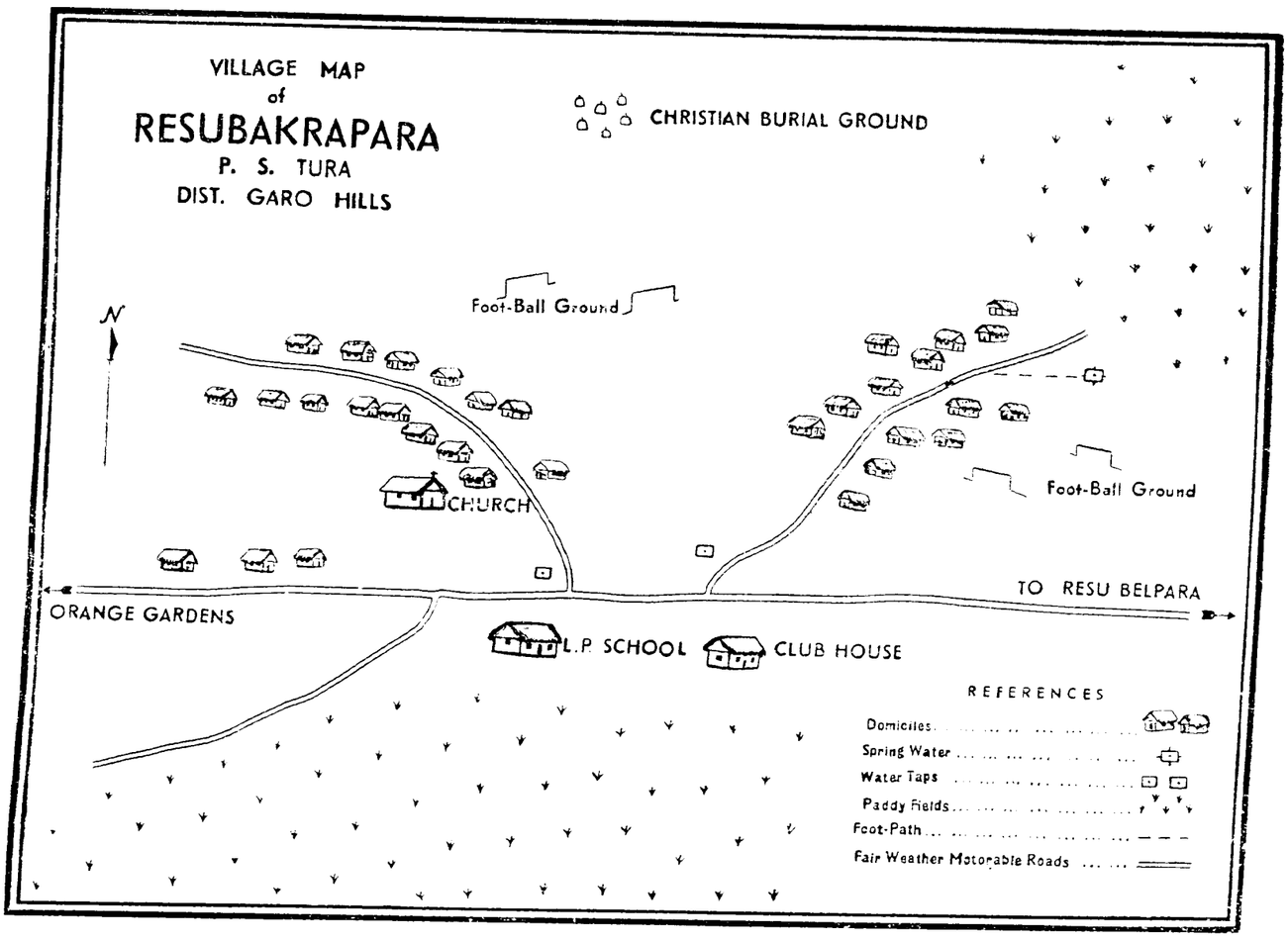

NOTIONAL MAP OF
VILLAGE
BATASIPUR
DHEKIAJULI POLICE STATION
DISTRICT DARRANG
N
DHEKIAJULI RESERVE FOREST
From RANGIA
N. E. F. RAILWAY
To TEZPUR
DHEKIAJULI ROAD R. S.
MADHUPUR
RING WELL
SCHOOL
RING WELL
BUNGALOW
POST OFFICE
SAMUGURI GRANT
SAMUGURI GRANT
REFERENCES
Village Boundary
Village Path
Paddy Field
Houses
Railway Line
Draughtsman:- I. M. Blah

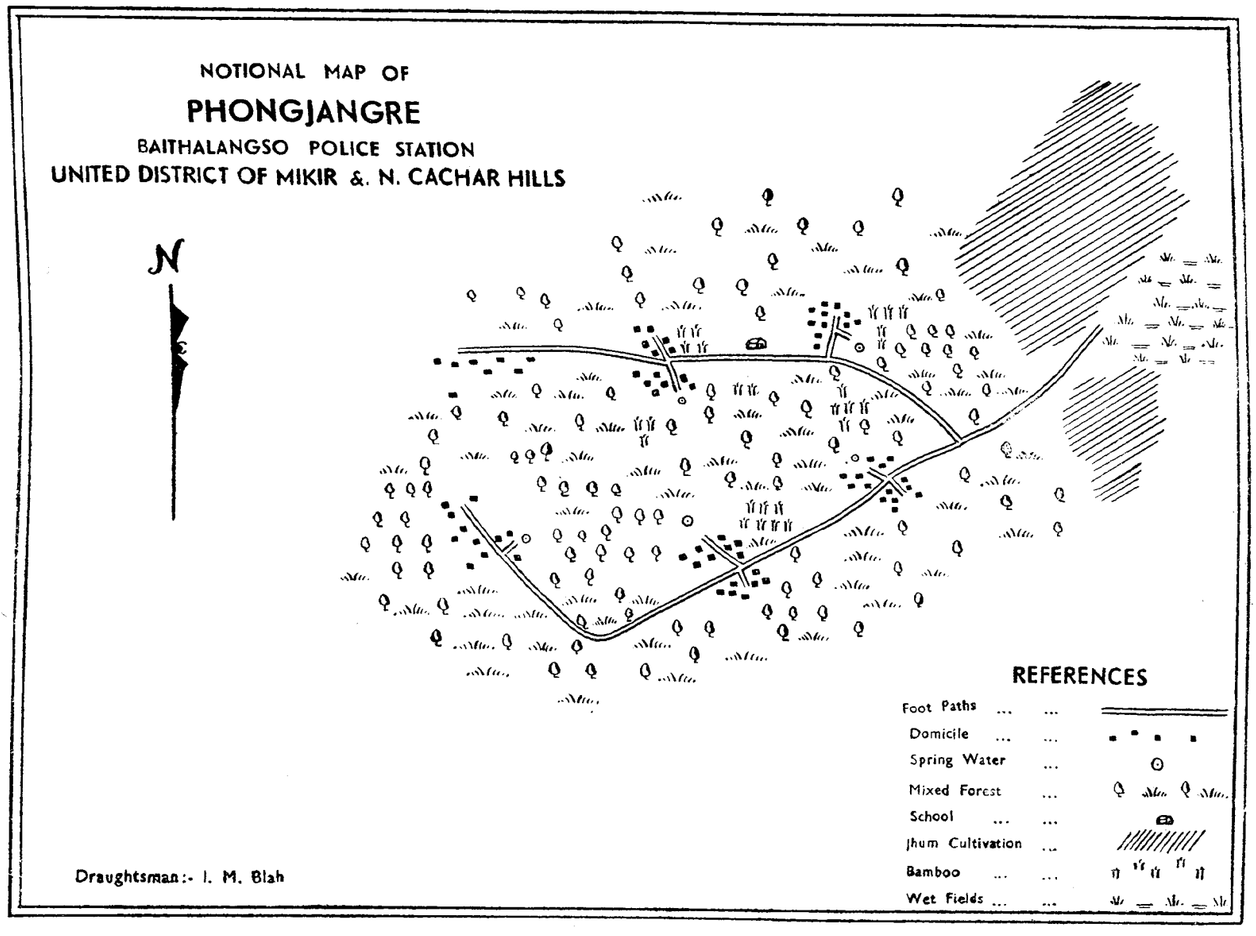

NOTIONAL MAP
of
KHARA
SUB. DIV. GOALPARA
DIST. GOALPARA
N
KHARA MEDHI PARA
KHARA CHAKAL PARA
MANDAL GRAM
School
Club
Play Ground
Club & Library
SIALMARI
DUDHNAI FOREST
REFERENCES
Foot Paths
Domiciles
Well
Temple
Paddy Field
Dolgoma Road
Bridge
Draughtsman. T.Tlinga.

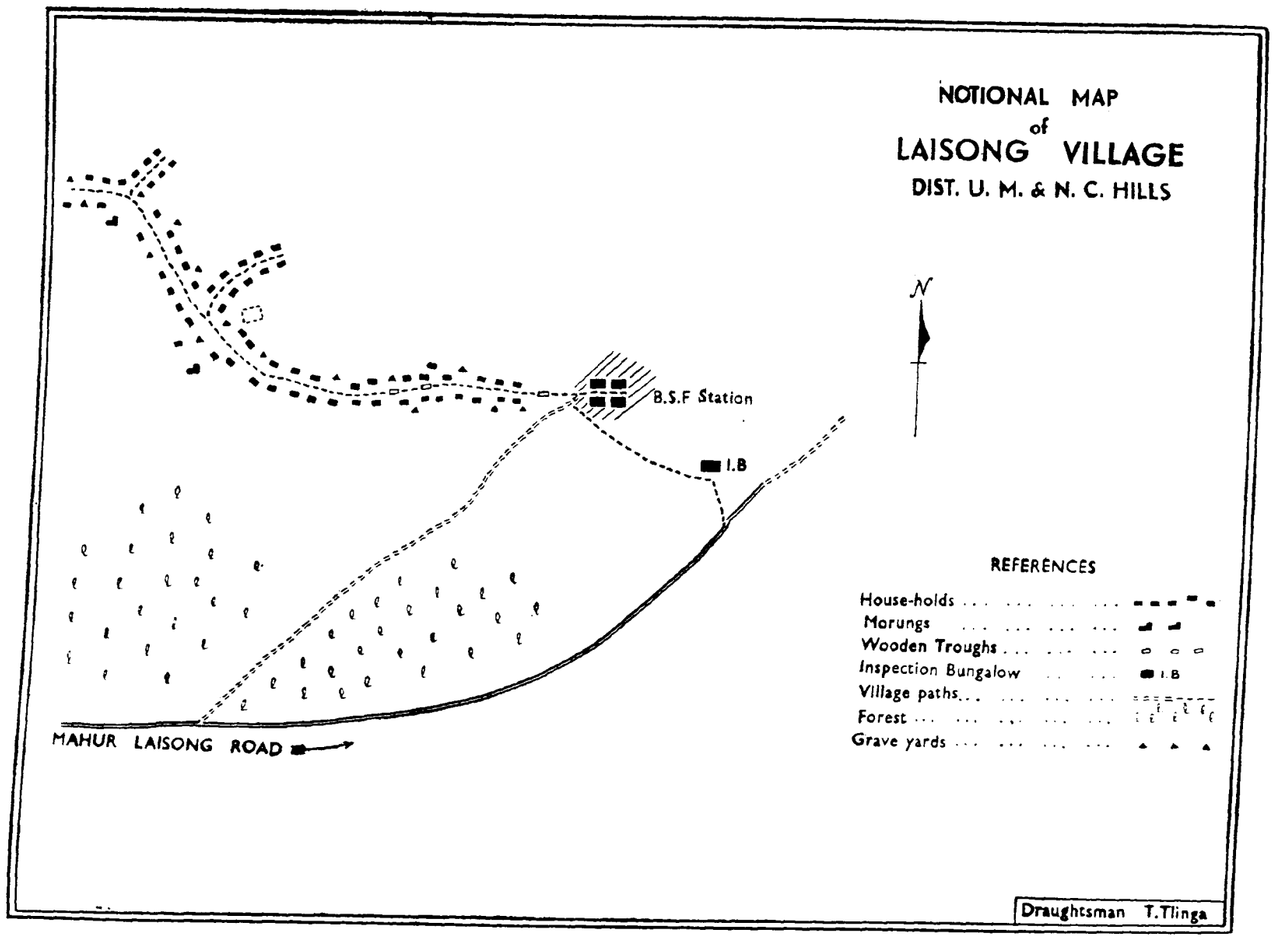

NOTIONAL MAP
of
SOUTH SALMARA
P.S. SOUTH SALMARA
DIST. GOALPARA
To FAKIRGANJ
N
SOUTH SALMARA I
BALDUBA
To PHULBARI
KHUDAIDILA
TALTARI I
To TALTARI
To MANKACHAR
REFERENCES
Domiciles
Motorable Road
Foot-Paths
Tube-Well
Well
Temple
Pady-Field
Bamboo
Basic L.P. School
Boundary
Draughtsman T.Tlinga

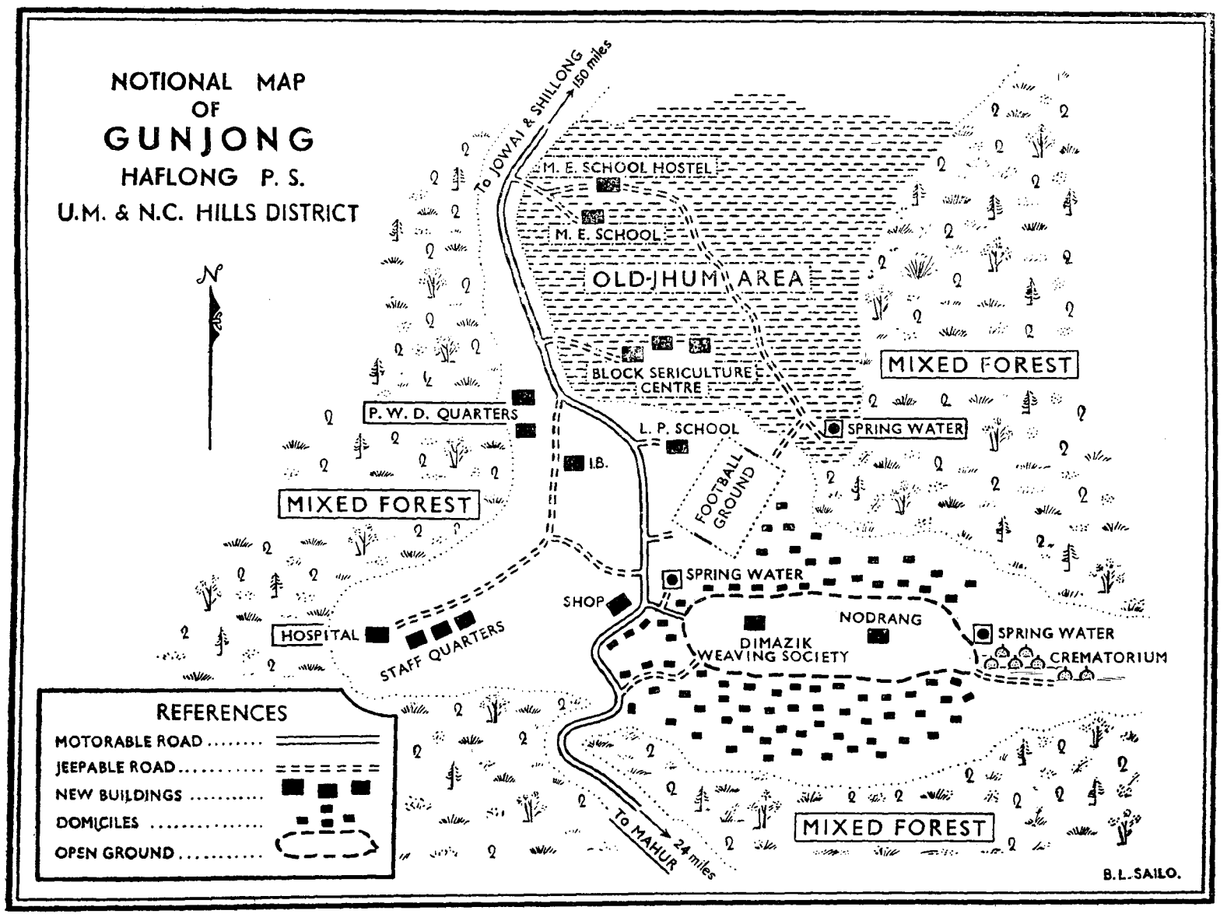

NOTIONAL MAP OF
MODYMMAI
VILLAGE
JOWAI P.S.
United K. & J. Hills Dist.
REFERENCES
COMMUNITY LAND
FOREST BOUNDARY
FAIR-WEATHER ROAD
FOOTPATH
HOUSES
STEPS
Draughtsman: A. C. WARREN
PADDY
MAIZE
PINE
COMMUNITY FOREST
LOWER PRIMARY SCHOOL
HIGH GROUND
STEEP JUNGLE

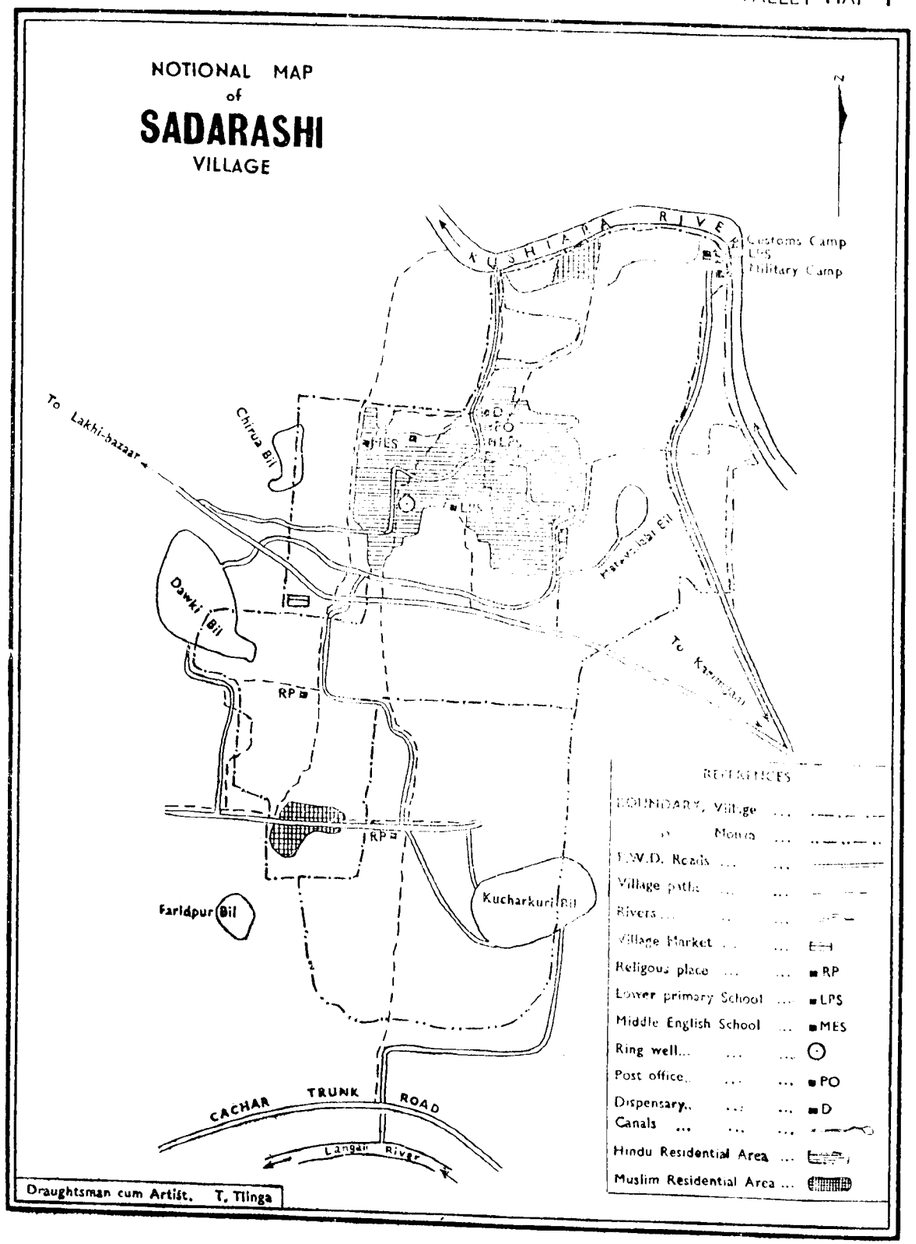

NOTIONAL MAP OF
RENGSANGIRI
VILLAGE
TURA POLICE STATION
GARO HILLS DISTRICT
N
S
WATER TAP
BACHELORS HOUSE
(Nokpante)
A wooden effigy
(Kima)
JEEPABLE FAIR WEATHER
WATER TAP
A wooden effigy
(Kima)
A wooden effigy
(Kima)
MIXED FOREST
MIXED FOREST
MOTORABLE ROAD
REFERENCES
Roads ... ...
Foot path ... ...
Houses ... ...
Jungle ... ...
DRAUGHTSMAN:- I. M. Blah

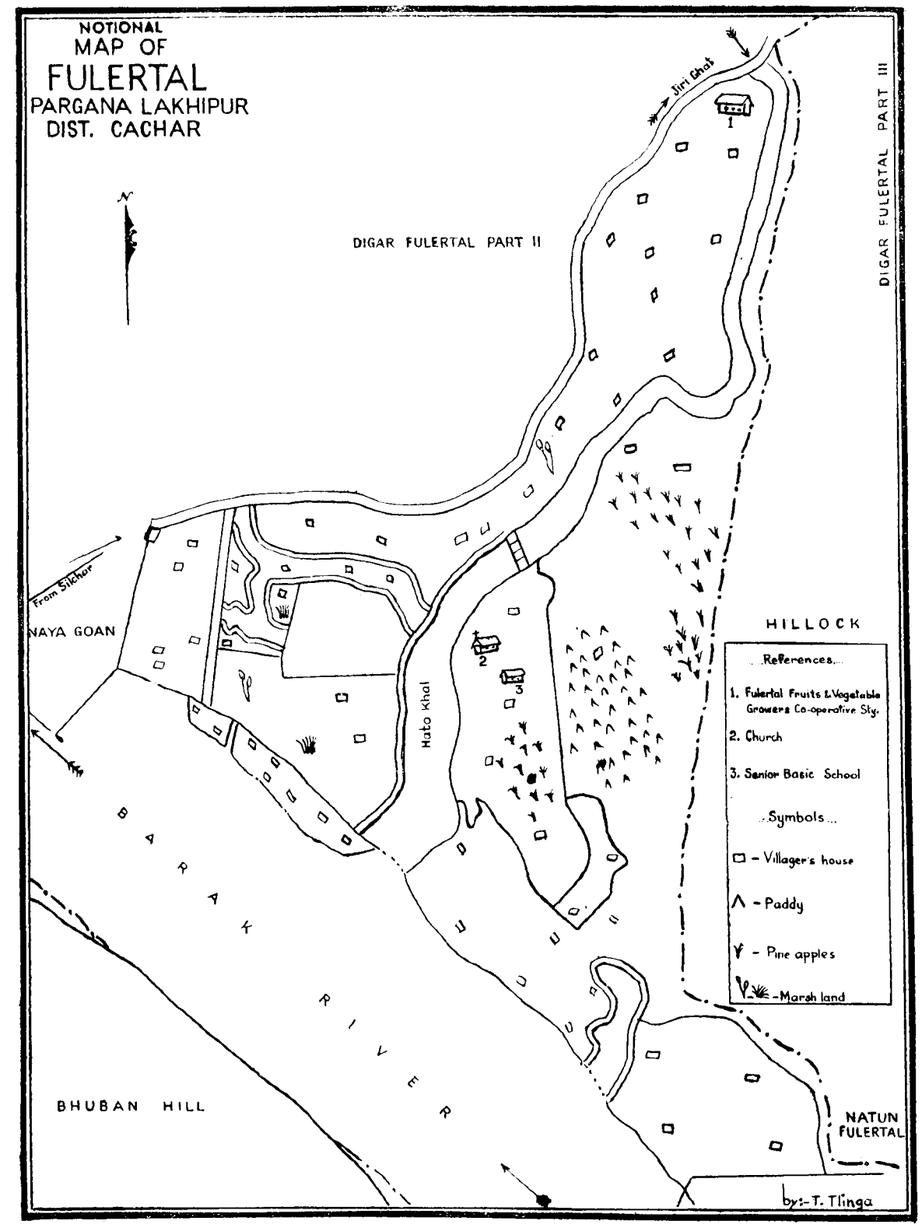

VILLAGE MAP
of
RESUBAKRAPARA
P. S. TURA
DIST. GARO HILLS
CHRISTIAN BURIAL GROUND
N
Foot-Ball Ground
CHURCH
Foot-Ball Ground
ORANGE GARDENS
TO RESU BELPARA
L.P SCHOOL
CLUB HOUSE
REFERENCES
Domiciles
Spring Water
Water Taps
Paddy Fields
Foot-Path
Fair Weather Motorable Roads

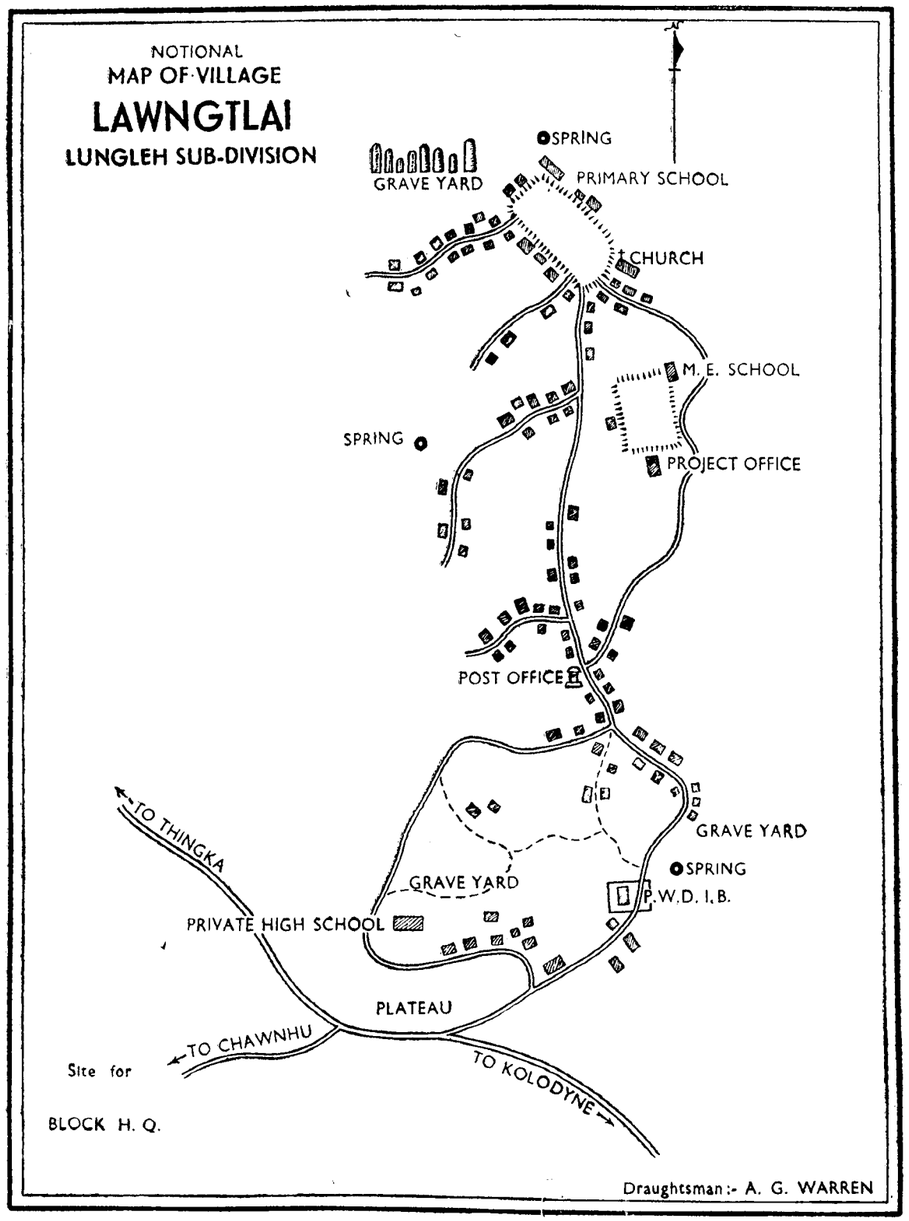

NOTIONAL MAP OF
PHONGJANGRE
BAITHALANGSO POLICE STATION
UNITED DISTRICT OF MIKIR &. N. CACHAR HILLS
N
REFERENCES
Foot Paths
Domicile
Spring Water
Mixed Forest
School
Jhum Cultivation
Bamboo
Wet Fields
Draughtsman:- I. M. Blah

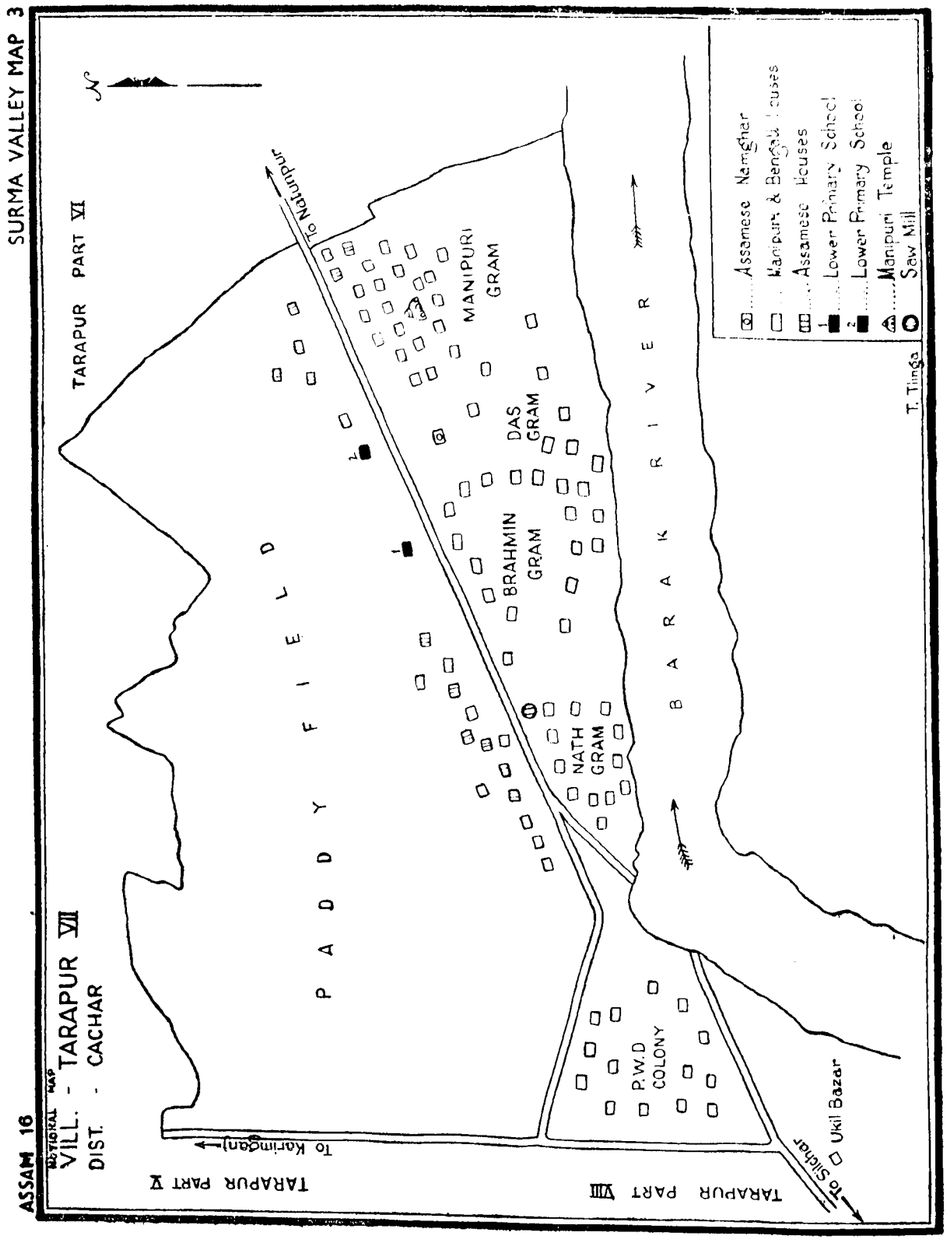

NOTIONAL MAP
of
LAISONG VILLAGE
DIST. U. M. & N. C. HILLS
N
B.S.F Station
I.B
MAHUR LAISONG ROAD
REFERENCES
House-holds
Morungs
Wooden Troughs
Inspection Bungalow
I.B
Village paths
Forest
Grave yards
Draughtsman T.Tlinga

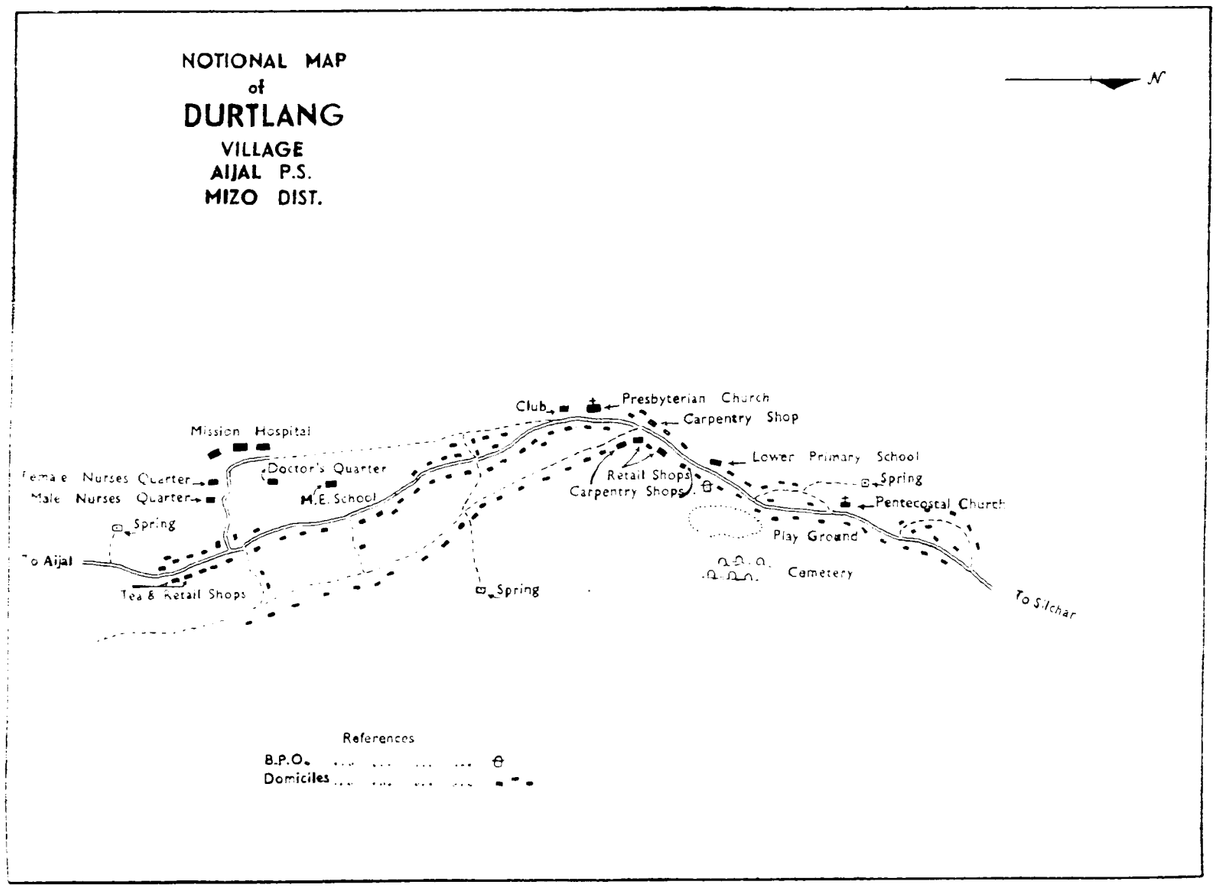

NOTIONAL MAP
OF
GUNJONG
HAFLONG P. S.
U.M. & N.C. HILLS DISTRICT
N
To JOWAI & SHILLONG 150 miles
M. E. SCHOOL HOSTEL
M. E. SCHOOL
OLD JHUM AREA
MIXED FOREST
BLOCK SERICULTURE CENTRE
P. W. D. QUARTERS
L. P. SCHOOL
SPRING WATER
I.B.
FOOTBALL GROUND
MIXED FOREST
SPRING WATER
SHOP
NODRANG
HOSPITAL
STAFF QUARTERS
DIMAZIK WEAVING SOCIETY
SPRING WATER
CREMATORIUM
REFERENCES
MOTORABLE ROAD
JEEPABLE ROAD
NEW BUILDINGS
DOMICILES
OPEN GROUND
To MAHUR 24 miles
MIXED FOREST
B.L.SAILO.


NOTIONAL MAP
of
SADARASHI
VILLAGE
N
KUSHIARA RIVER
Customs Camp
LDS
Military Camp
To Lakhi-bazaar
Chirua Bil
Dawki Bil
Palendisai Bil
To Karimganj
RP
RP
Faridpur Bil
Kucharkuri Bil
CACHAR TRUNK ROAD
Langai River
REFERENCES
BOUNDARY, Village ...
" Mouza ...
P.W.D. Roads ...
Village paths ...
Rivers ...
Village Market ...
Religous place ... RP
Lower primary School ... LPS
Middle English School ... MES
Ring well... ...
Post office.. ... PO
Dispensary.. ... D
Canals ...
Hindu Residential Area ...
Muslim Residential Area ...
Draughtsman cum Artist. T. Tlinga


NOTIONAL
MAP OF
FULERTAL
PARGANA LAKHIPUR
DIST. CACHAR
N
Jiri Ghat
DIGAR FULERTAL PART II
DIGAR FULERTAL PART III
From Silchar
NAYA GOAN
Haba Khal
BARAK RIVER
BHUBAN HILL
NATUN FULERTAL
HILLOCK
References...
1. Fulertal Fruits & Vegetable Growers Co-operative Sty.
2. Church
3. Senior Basic School
Symbols...
- Villager's house
- Paddy
- Pine apples
- Marsh land
by:- T. Tlinga


NOTIONAL
MAP OF VILLAGE
LAWNGTLAI
LUNGLEH SUB-DIVISION
SPRING
GRAVE YARD
PRIMARY SCHOOL
CHURCH
M. E. SCHOOL
SPRING
PROJECT OFFICE
POST OFFICE
TO THINGKA
GRAVE YARD
SPRING
GRAVE YARD
P.W.D. I.B.
PRIVATE HIGH SCHOOL
PLATEAU
TO CHAWNHU
TO KOLODYNE
Site for
BLOCK H. Q.
Draughtsman:- A. G. WARREN


SURMA VALLEY MAP 3
TOPOGRAPHICAL MAP
VILL. - TARAPUR VII
DIST. - CACHAR
TARAPUR PART VI
To Nilkunpur
MANIPURI GRAM
DAS GRAM
BRAHMIN GRAM
NATH GRAM
P.W.D COLONY
PADDY FIELD
BARAK RIVER
Assamese Namghar
Manipuri & Bengali Houses
Assamese Houses
Lower Primary School
Lower Primary School
Manipuri Temple
Saw Mill
T. Tilinga
To Karimganj
TARAPUR PART X
TARAPUR PART VIII
To Silchar
Ukil Bazar



ASSAM DIAGRAM 1

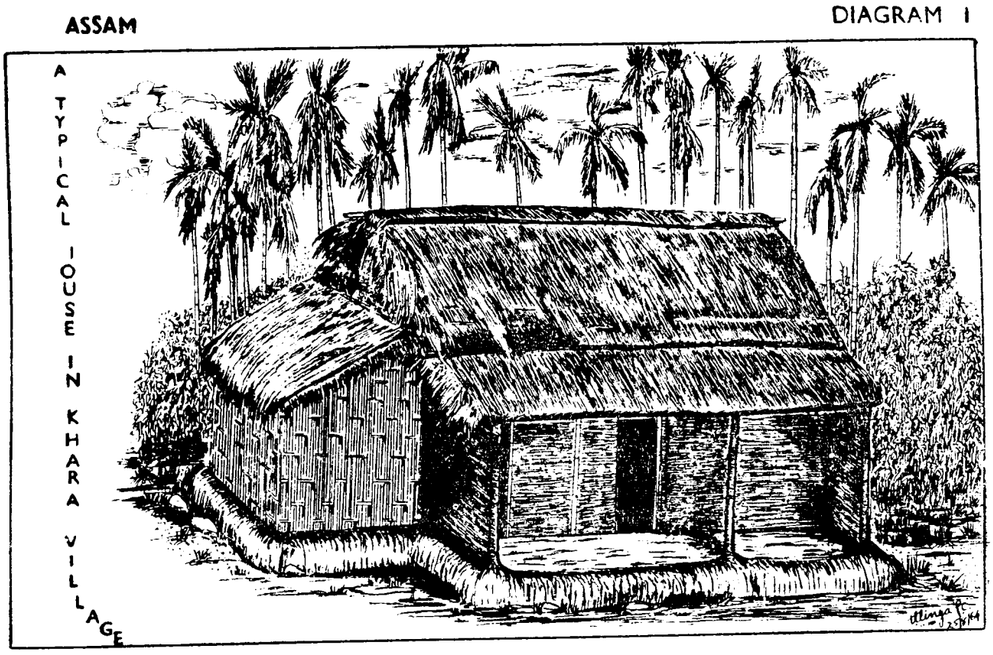
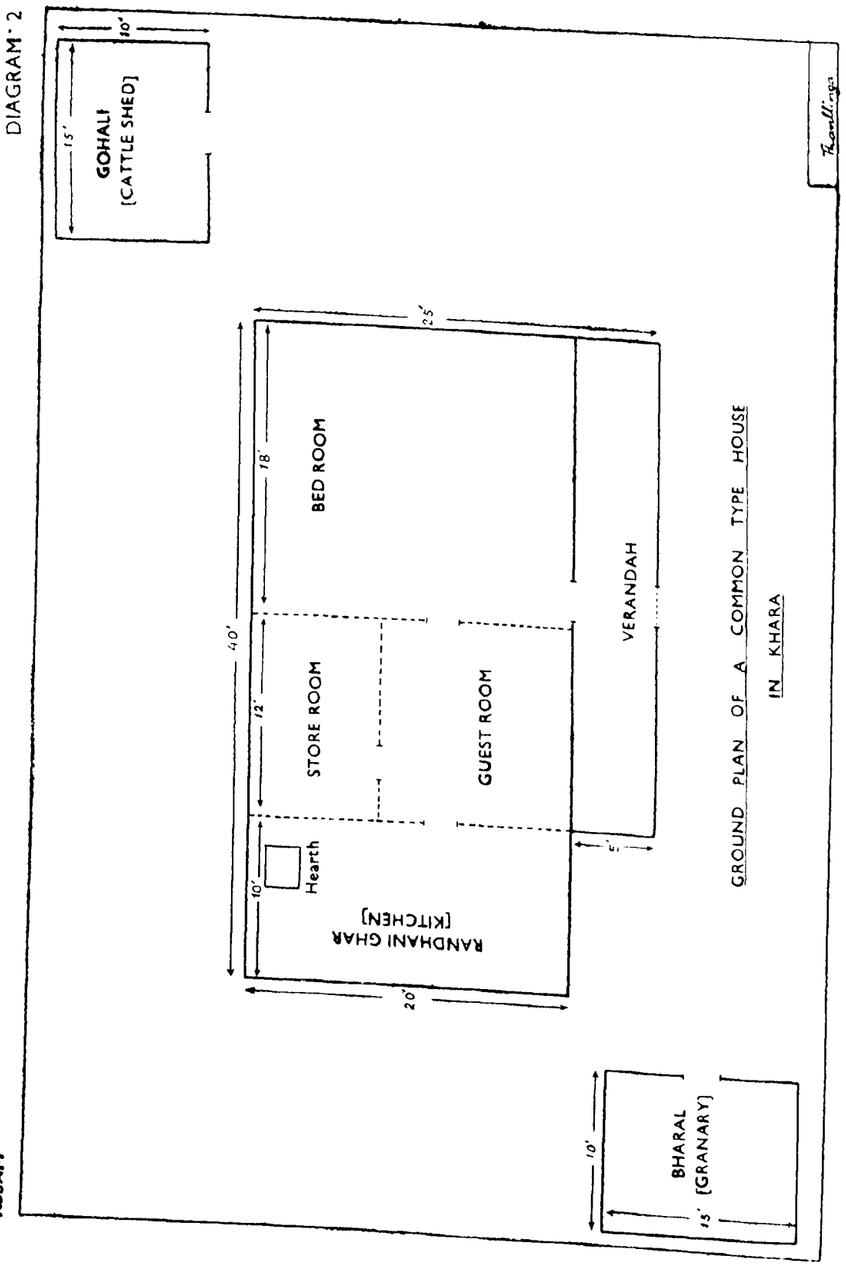


DIAGRAM 2

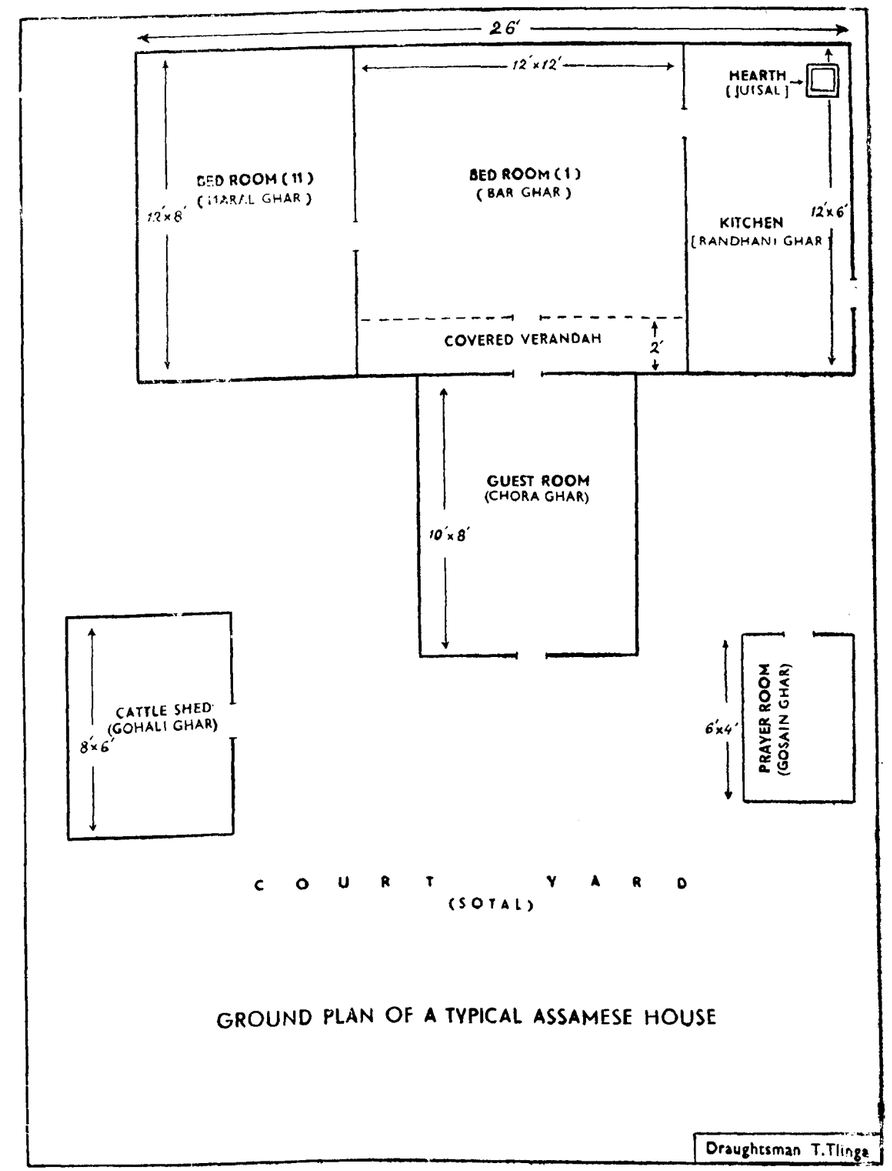


GROUND PLAN OF A COMMON TYPE HOUSE IN KHARA

ASSAM

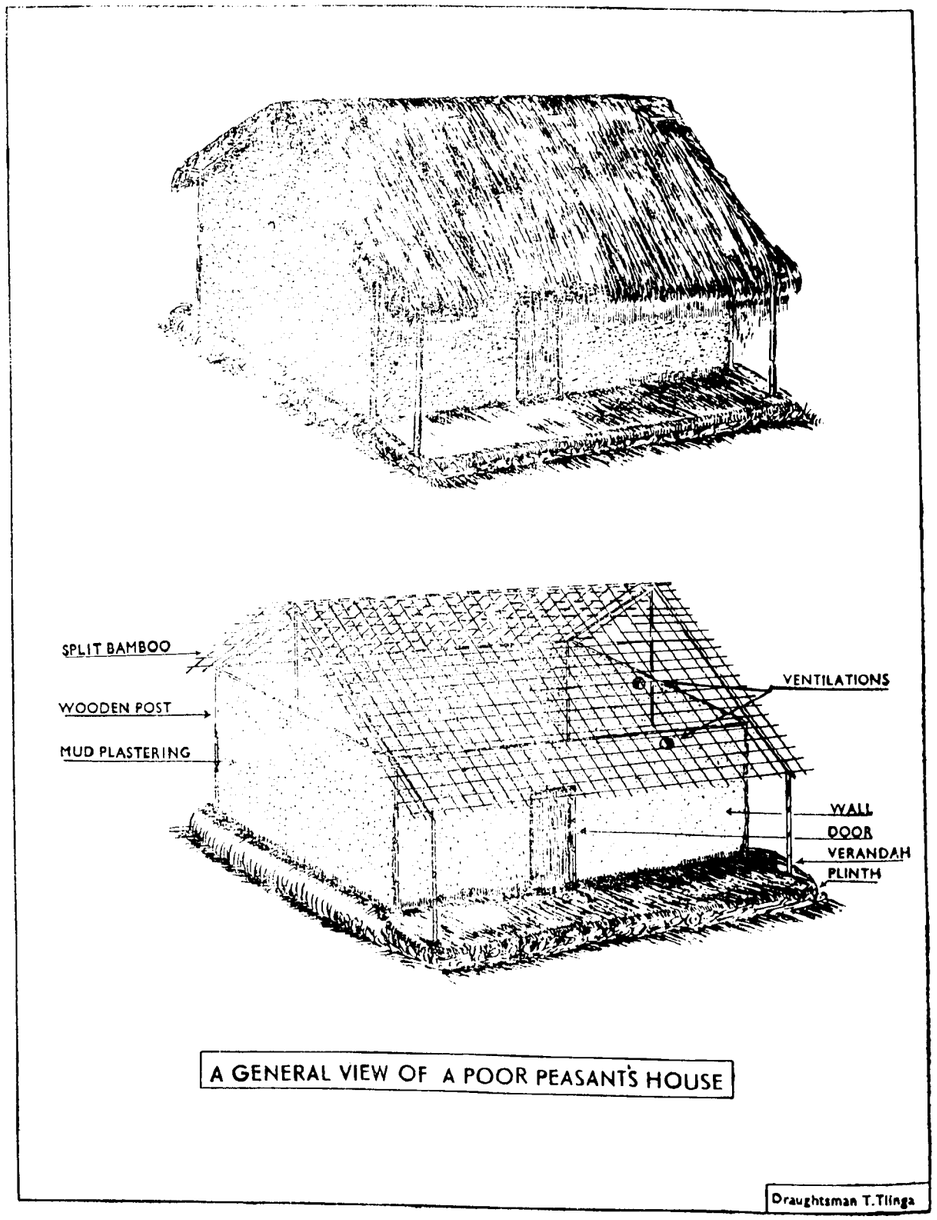
ASSAM

DIAGRAM 3

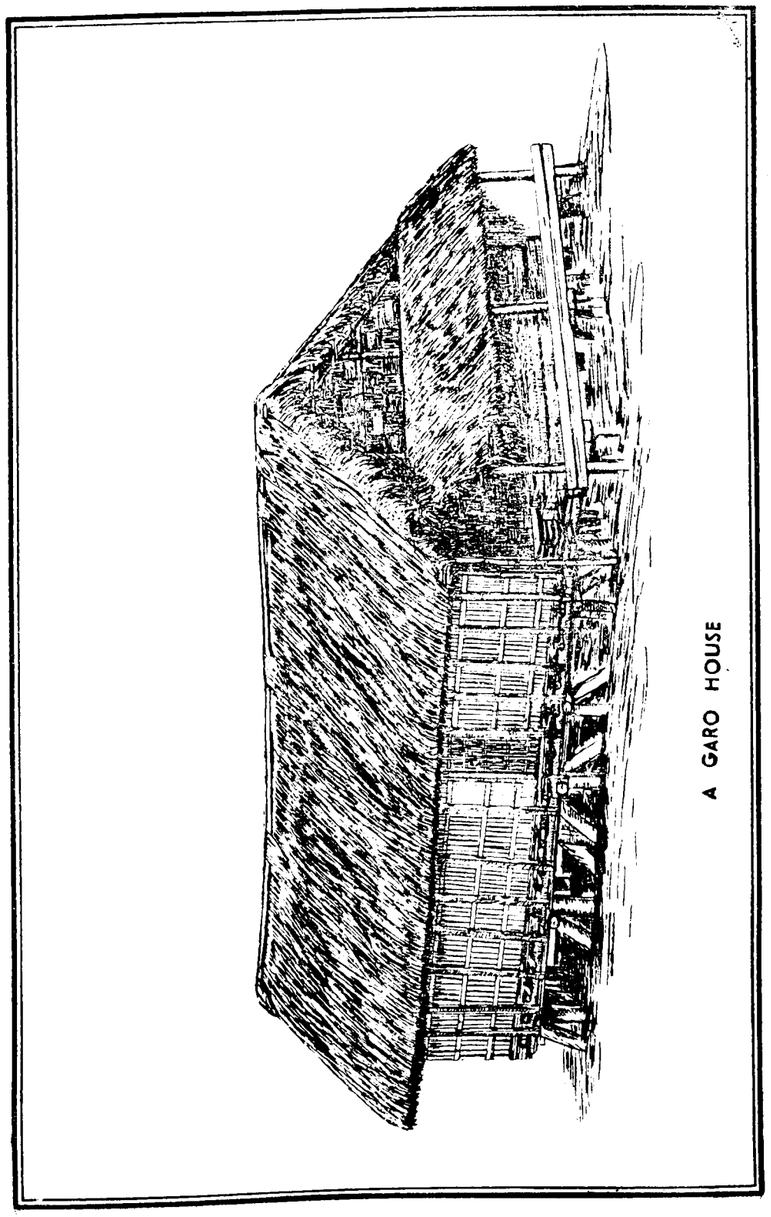


GROUND PLAN OF A TYPICAL ASSAMESE HOUSE

Draughtsman T.Tlinga



A GENERAL VIEW OF A POOR PEASANT'S HOUSE

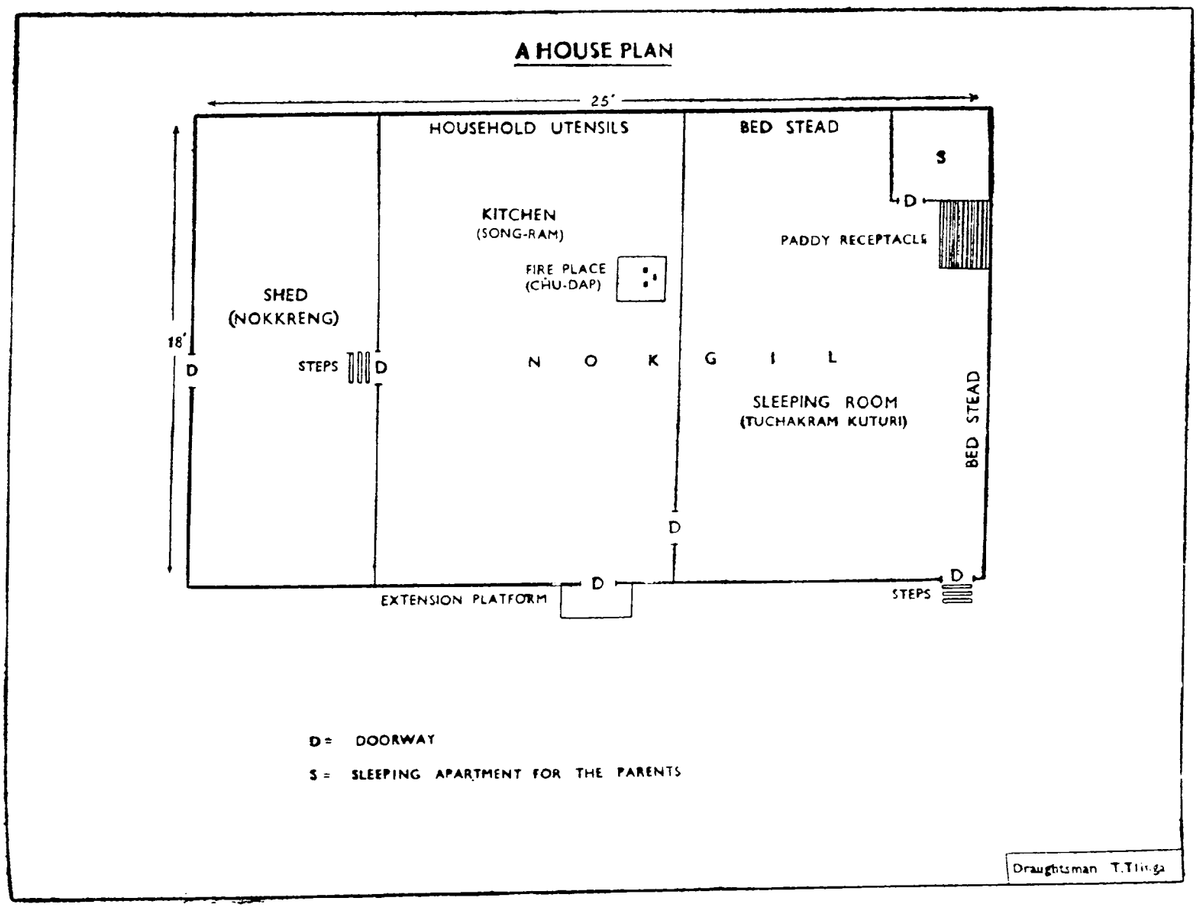


A GARO HOUSE

ASSAM

Ground plan of a typical house of village Rengsangiri, Garo Hills District.

DIAGRAM 6



ASSAM

Ground plan of a typical house of village Laisong, United Mikir and North Cachar Hills District.

DIAGRAM 7

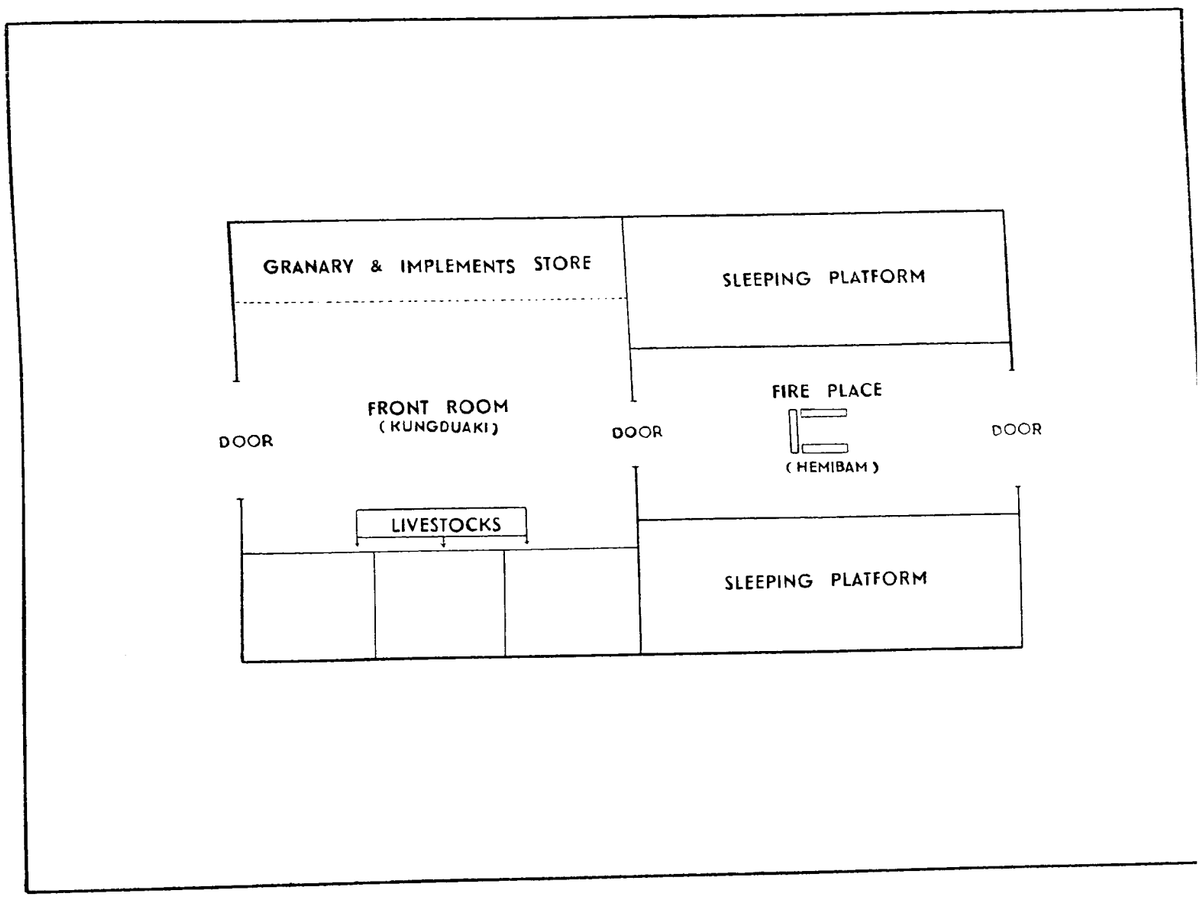
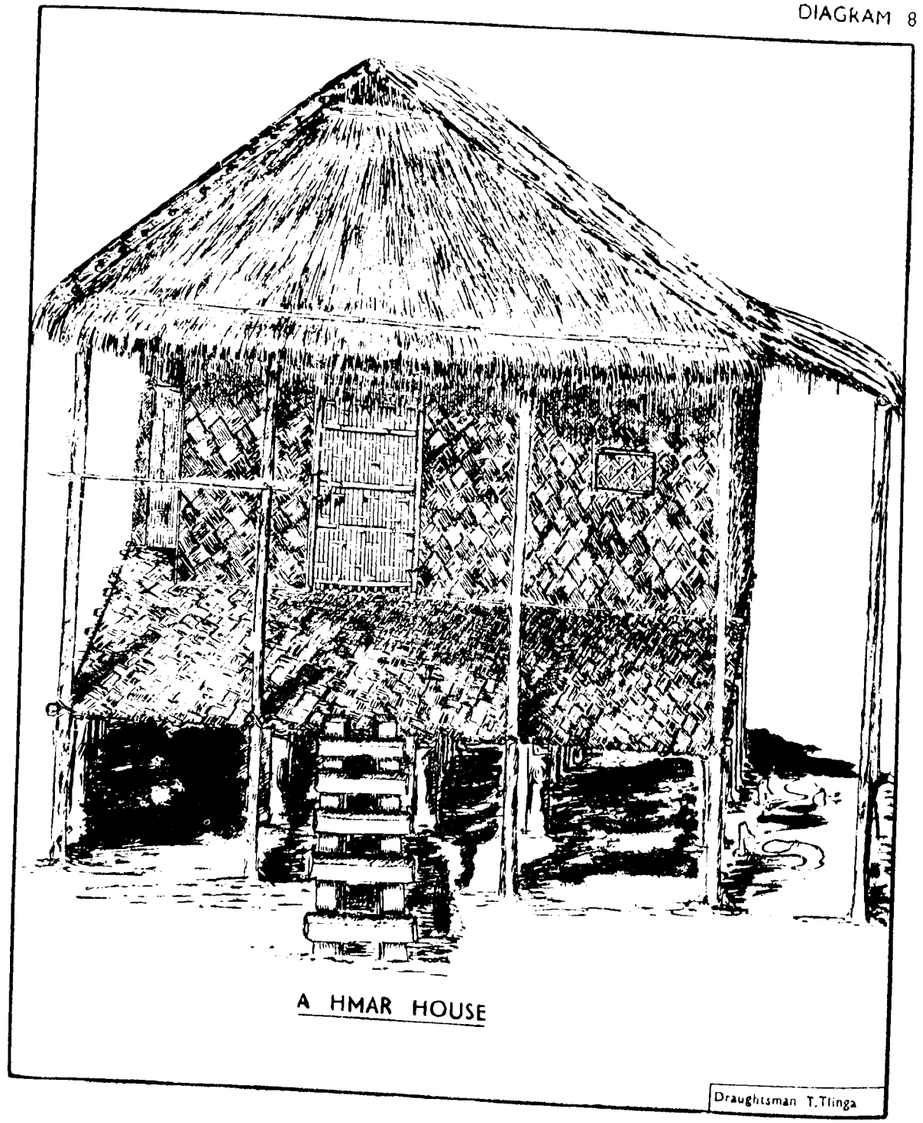


DIAGRAM 8

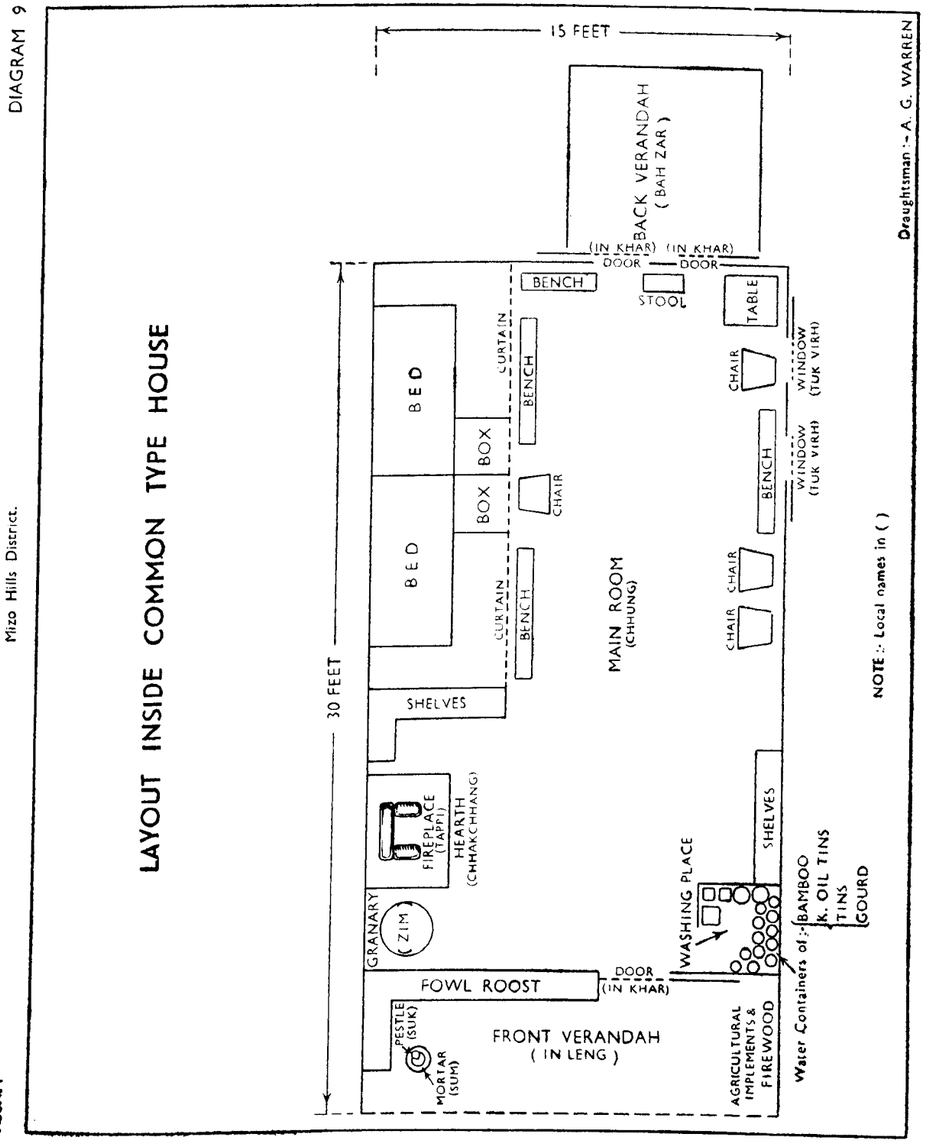


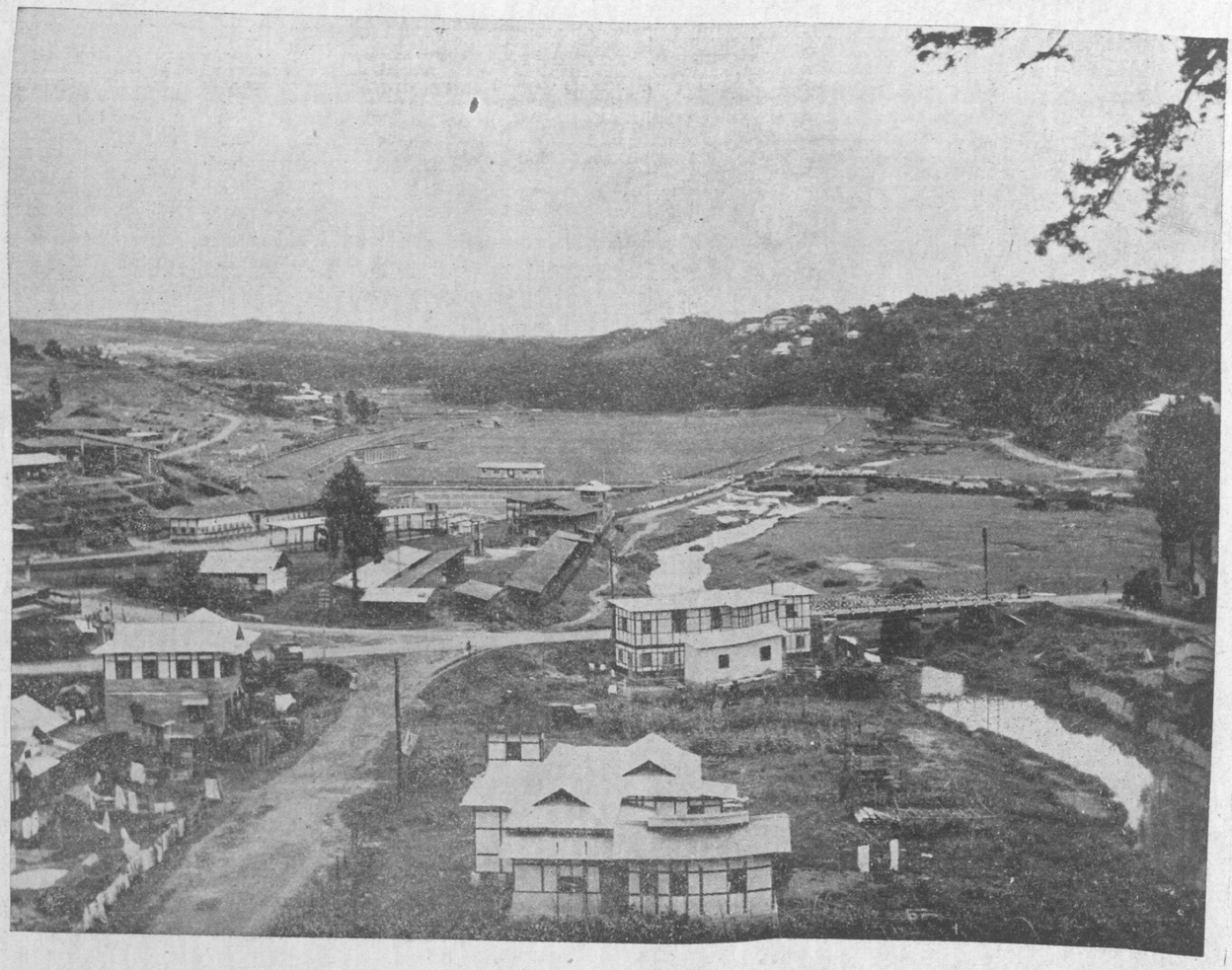
A HMAR HOUSE

Draughtsman T. Tlinga

DIAGRAM 9

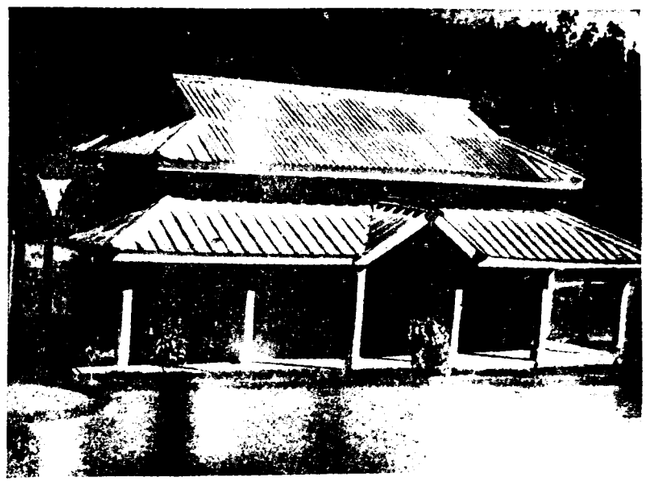
Ground plan of a typical house of village Lawngtai, Mizo Hills District.





A view of Assam type houses in Shillong

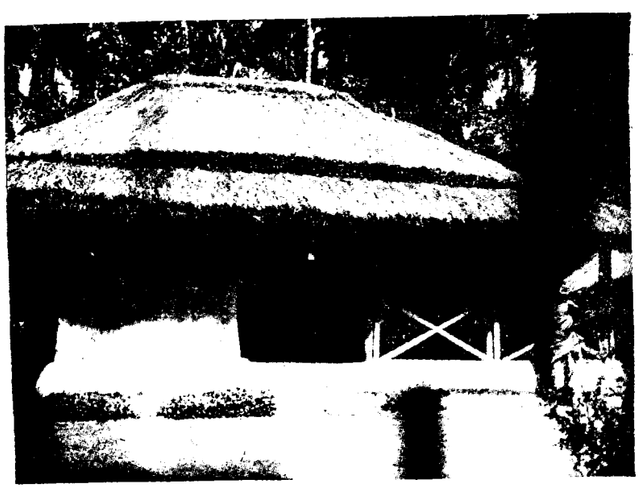
A modern Bungalow type of house in Assam



A house with asbestos sheets roofing (Assam)

An oval-shaped Khasi House (Assam)

A middle class house (Assam)



A Bodo house (Assam)

A Garo house in the plains (Assam)

A modernised Namghar (Assam)

A granary (Assam)

A Hmar house (Assam)

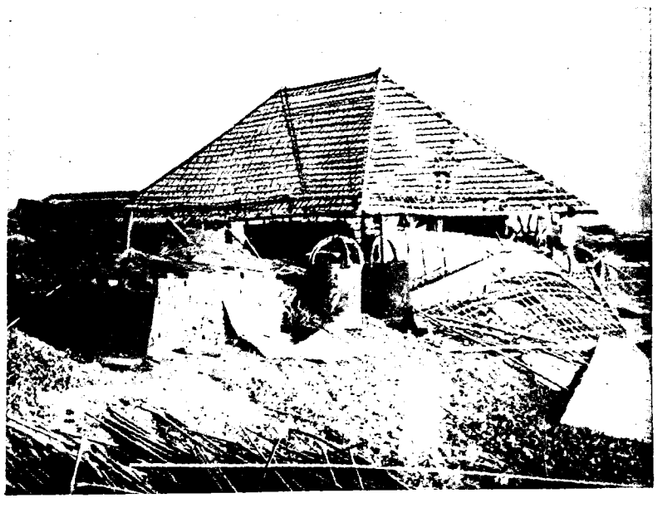
A Jaintia House with kerosene oil tins roofing (Assam)

A Garo House in the Hills (Assam)

A house with roof of tiles (Assam)

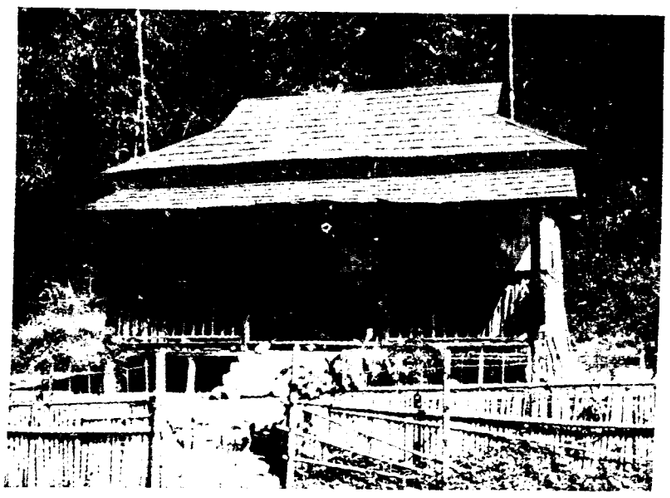
A housing colony with bamboo materials (Assam)

A house with bamboo torza roof (Assam)



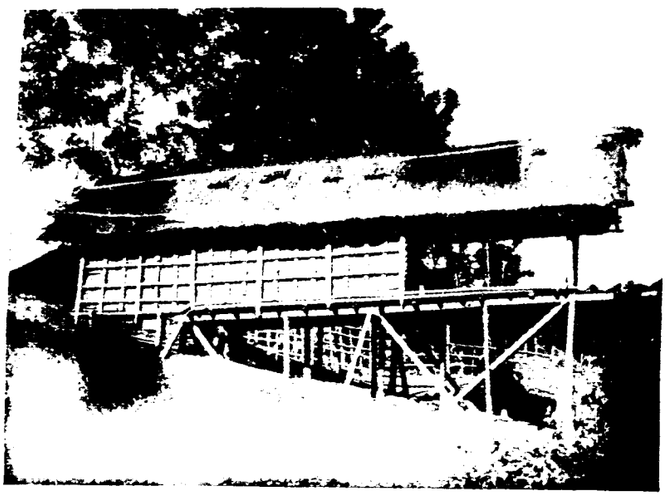
A frame of a bamboo house (Assam)

A close up of a bamboo torza roof (Assam)



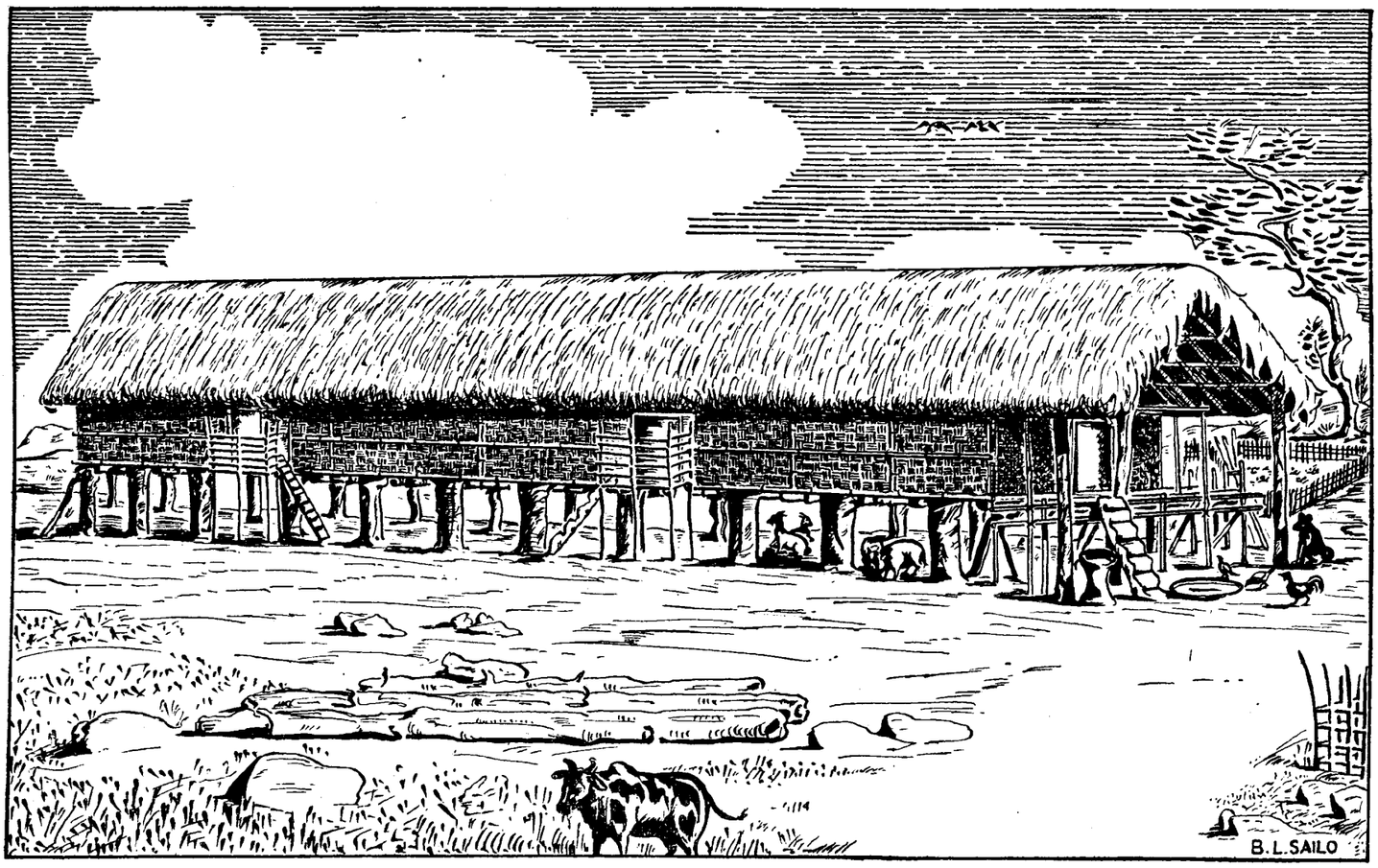
A typical house with tin roof (Assam)

A house half-walled with bricks (Assam)

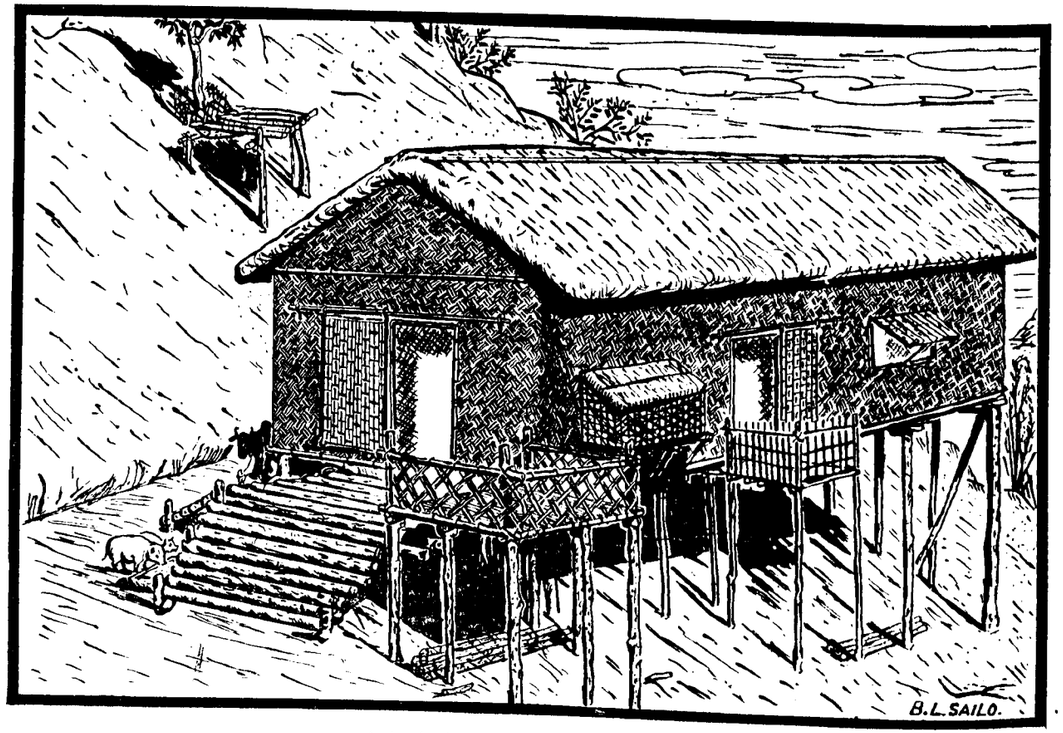


A Mizir house in the hills (Assam)

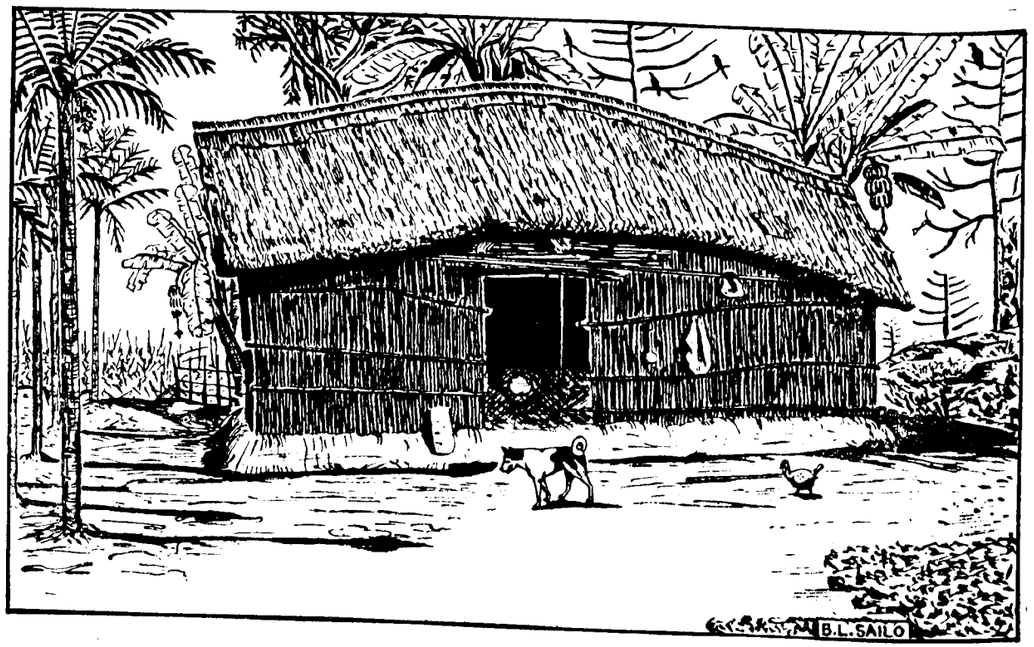
A Garo housing colony (Assam)



A typical Miri house (Assam)



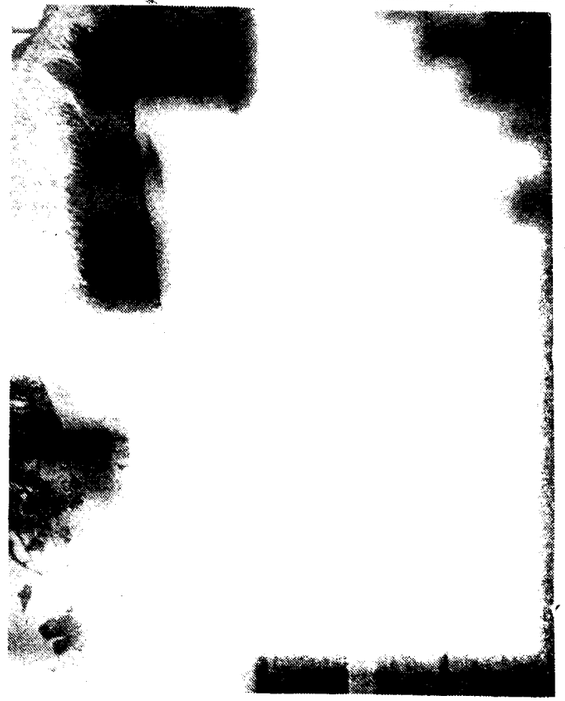
A typical Mizo house (Assam)



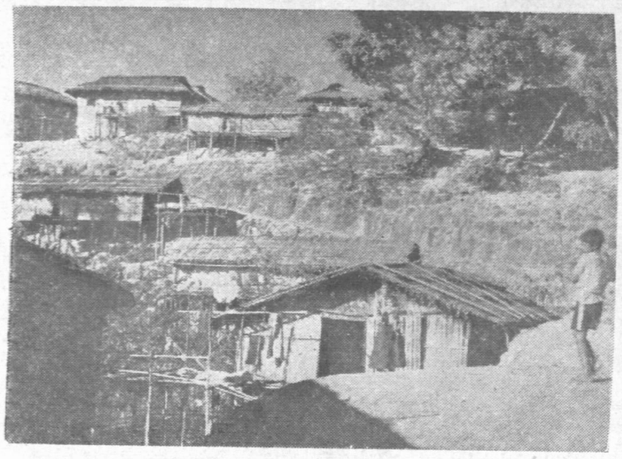
A typical immigrant house (Assam)

Houses at Rengsangiri, Garo Hills District.

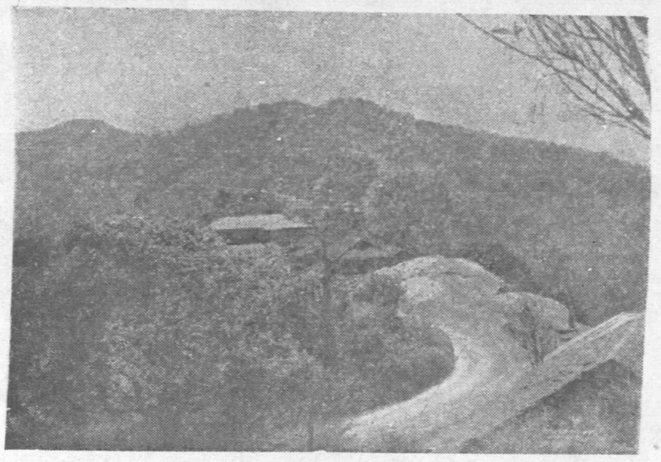
The Dmasa Kachari settlement area in the village Joypur of Cachar district.



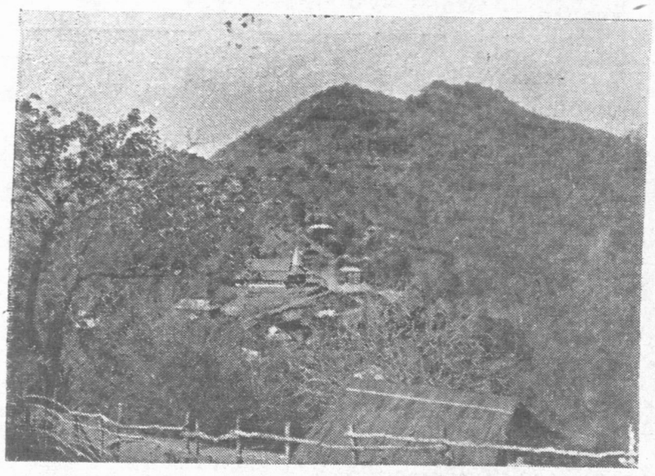
A double storeyed katcha house in the village Tarapur of Cachar district.



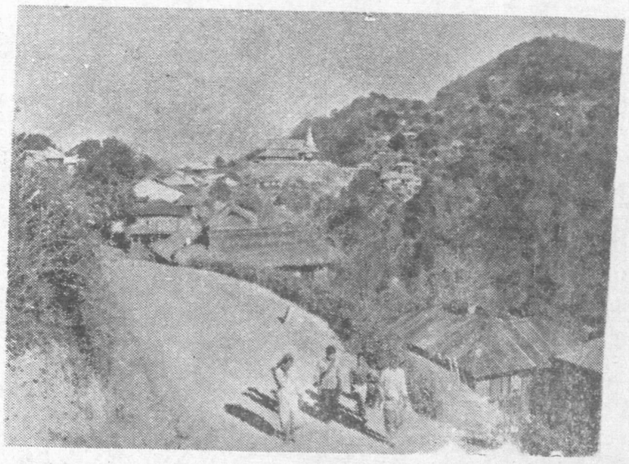
Part of Lawngtlai village, Mizo Hills District.



Southern part of Durtlang, Mizo Hills District.



Northern part of Durtlang, Mizo Hills District.



Middle part of Durtlang, Mizo Hills District.

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

A village is sociologically defined as "a territorially separate collection of homesteads, which is regarded as a distinct unit, and of such size that its inhabitants can all be personally acquainted.*" The Census statistics of Bihar, however, invariably deal with villages in the sense of *'mauzas'* which are essentially units of land and not units of habitation or villages in the proper sense.

The *'mauza'* has had its origin in the Survey and Settlement Operations, the object of which was to prepare a complete record of rights in land. In these operations, the name of the landlord and tenant of every field is recorded. At the same time a large-scale map of the *mauza* is made showing separately every field, as well as roads, rivers, village sites, forests etc. It is clear, therefore, that every *mauza* has its area and position well defined, and it is for this reason that it constitutes the basic unit for census enumeration. It will be readily appreciated that there may be (and in fact, are) many *mauzas* which have no population. On the other hand *mauzas* may—as as most do—have more than one population cluster of significant sizes situated within the confines of the respective *mauzas*, termed *tolas* or hamlets.

According to the Census of 1961, there are 67,655 inhabited *mauzas* in Bihar. Their populations vary from more than 10,000 to less than 200. Thus there are 485 *mauzas* with a population of more than 5,000 each, collectively accounting for as much as 8 per cent of the rural population. On the other hand, almost one-third of the inhabited *mauzas* (21,228 in number) contain less than 200 persons each.

The average population per inhabited *mauza* however remains the only index of the population sizes of villages in the different parts of the State. But, the *mauzas* vary rather widely in extent of area. They are from less than half a square mile (average for Santal Parganas district) to 1¾ square miles (average for Ranchi district). Further, the size of population of a village is also determined by the locality *i.e.*, whether the area is densely populated or otherwise. The following statement gives the average population per inhabited *mauza*, average area in sq. miles per *mauza*, and the rural density of persons and households per square mile for the State, Divisions and Districts of Bihar.

*Notes and Queries on Anthropology: London, 1960, P. 64.

STATEMENT I

Average population and area per **mauza** *and density of persons and households per square mile in State, Divisions and Districts*

State/Division District	Average population per inhabited mauza	Average area in sq. miles per mauza borne on thana jurisdiction lists	Population density (Rural) per sq. mile	Density (Rural) of households per sq. mile
1	2	3	4	5
BIHAR	629	0·84	643	115
PATNA DIVISION	655	0·71	786	126
Patna District	1,009	0·79	1,147	183
Gaya District	542	0·68	721	118
Sahabad District	628	0·72	685	107
TIRHUT DIVISION	1,006	0·78	1,158	208
Saran District	776	0·54	1,290	215

STATEMENT I

Average population and area per mauza *and density of persons and households per square mile in State, Divisions and Districts*—concld.

State/Division District	Average population per inhabited mauza	Average area in sq. miles per mauza borne on thana jurisdiction lists	Population density (Rural) per sq. mile	Density (Rural) of households per sq. mile
1	2	3	4	5
BIHAR—*concld.*				
Champaran District	1,083	1·22	820	148
Muzaffarpur District	948	0·66	1,315	238
Darbhanga District	1,343	0·91	1,264	239
BHAGALPUR DIVISION	556	0·66	659	122
Monghyr District	869	0·78	780	142
Bhagalpur District	612	0·57	726	132
Saharsa District	1,386	1·53	798	143
Purnea District	787	0·94	698	130
Santal Parganas District	252	0·44	465	89
CHHOTA NAGPUR DIVISION	406	1·19	311	60
Palamau District	354	1·36	231	45
Hazaribagh District	356	0·97	317	
Ranchi District	502	1·78	278	52
Dhanbad District	594	0·64	831	161
Singhbhum District	366	1·09	316	65

The *mauzas* of Tirhut Division are most densely populated even though their average area is a little less than that for the State. The average population of *mauzas* in Patna Division is only two thirds that in Tirhut Division and even less in Bhagalpur, while in Chhota Nagpur the average is only two fifths that of Tirhut Division. While the average populations of *mauzas* of Patna and Darbhanga districts are related to the high density of population in the respective areas, the high figures for Champaran and Saharsa districts are largely accounted for by the higher average areas of the *mauzas*. This feature also becomes apparent when the average populations per *mauza* of Ranchi and Dhanbad districts are considered. Although the average size of a *mauza* in Ranchi is almost three times that in Dhanbad, the average population is lower in Ranchi than in Dhanbad, reflecting the disparity in density of population in largely rural and industrialised areas.

As has been mentioned above, the *mauzas* do not reflect the actual settlements of houses or villages in the real sense. In the Tirhut Division hamlets falling in different *revenue mauzas* almost invariably adjoin each other, and particularly so in the more populated areas of Darbhanga, Saran and Muzaffarpur district. This revenue *mauza* Jahangirpur (of Sonepur Revenue Thana of Saran district) contains hamlets on its eastern and western sides which are contiguous to hamlets of Sahpur *mauza* to the east and Bhasalpura *mauza* to the west. Similarly, the hamlets on the western extremity of Jitwarpur *mauza* (in Samastipur Revenue Thana of Darbhanga district) is contiguous to the eastern-most hamlets of Samastipur town. The phenomenon is also met to some extent in the sparsely populated areas of the Chhota Nagpur Plateau. Thus the hamlets of *mauza* Hesla (in Ramgarh Anchal of Hazaribagh district) are contiguous to a hamlet of the *mauza* situated immediately to the north of it. In all the instances cited above, it is note-worthy that the adjoining hamlets are invariably inhabited by members of the same caste. In Jahangirpur, the hamlet in the east comprises of the houses of Chamars and the hamlet situated next to it in the adjacent *mauza* also consisted of houses of Chamars. In the case of Jitwarpur the houses are of Dusadhs and in the case of Hesla, of Kumhars (potters).

A rough picture of the extent of prevalence of hamlets in revenue *mauzas* can be had from the following statement which gives the numbers and names of hamlets in some of the revenue *mauzas* situated in different parts of Bihar.

STATEMENT II

Numbers of tolas (hamlets) in selected villages

(Figures in brackets after names of tolas indicate number of households in the tola, wherever such information is available)

Name of district	Name of village	Total No. of Households	Total No. of tolas	Name of tolas
1	2	3	4	5
Patna	Naipura	170	3	Bazar, Dih, Musahri (43).
	Pareo	350	2	Jungitola, Chamtoli.
Gaya	Manjhauli	225	6	Manjhauli proper, Dalaldih, Chatakpur, Ahirdih, Loharadih, Mehraon.
Saran	Hathauri	246	3	Hathauri proper, Mahual tola, Nanka tola.
Champaran	Dhokhnahwadon	119	3	Dhokhnahwa tola, Bhurahwa tola, Chulahaia tola.
Bhagalpur	Asauta	181	3	Asauta proper, Harijan tola, Nagel tola.
Monghyr	Sabalbigha	184	2	Sabalbigha proper (171), Tanrpar (13).
	Hill-block	86	8	Hanumanthan (12), Dudham (5), Kanauri (5), Jamunia (14), Hadhadia (24), Maniara (11), Kachram (8), Gobardhan (7).
Singhbhum	Uparsole	69	3	Uparsole proper (58), Kendega (6), Tunika kocha (5).
	Bharbharia	303	8	Bharbharia proper, Surasai, Baliasai, Bisai, Bhimsai, Dumkursai, Serengsai, Pandusai.
Ranchi	Jojohatu	78	3	Jojohatu proper (64), Hesatola (8), Gangudih (6).
	Bergari	141	2	Upar tola, Nicha tola.
	Humta	348	7	Humta proper, Jamjori, Burutola, Gitildih, Hesadih, Amanburu, Tara toli.
	Kujam	84	9	Pirhapat (15), Nawatoli (11), Koinar toli (4), Chirodih (1), Garha Kujam (11), Dipa Kujam (13), Bhatti tola (14), Ramharia (8), Chotong (7).
	Harup	86	7	Risapat (17), Parbapat (14), Kabrapat (5), Mahuapat (5), Kolhukona (5), Garha Harup (26), Birjiatoli (14).
	Kathgaon	75	4	Kathgaon proper (26), Charkatola (18), Bataspur tola (15), Gianidwara (16).
	Parba	197	17	Fagutoli (12), Sugatoli (9), Sukhramtoli(2), Bartoli (13), Bhadultoli (3), Telitoli (21), Mahuatoli (10), Jamtoli (11) Pahardhipa toli (3) Jokna toli (3), Churgintar (12), Dholtangar toli (9), Dhabai toli (9), Girja toli (12), Sundargarh toli (7), Bhalughutkura toli (5), Parba proper (56).
	Meromdega	337	14	Meromdega proper (91), Purabtoli (20), Bar toli (62), Phar toli (4), Bhadratoli (6), Mahto toli (8), Girja toli (38), Mahua toli (20), Tangar toli (9), Nawa toli (10), Kasbahar (28), Kahupani (36), Bair toli (3), Nagra toli (2).

STATEMENT II

Numbers of tolas (hamlets) in selected villages—concld.

(Figures in brackets after names of tolas indicate number of households in the tola, wherever such information is available)

Name of district	Name of village	Total No. of Households	Total No. of tolas	Name of tolas
1	2	3	4	5
Ranchi—*concld.*	Baraghaghra	340	3	Seromtola, Chottam tola, Latar tola.
Palamau . .	Orsapat	209	9	Ambakona (64), Orsa proper (45), Bheriganjhar (42), Bartola (15), Bhagat tola (13), Chiknikona (10), Nawa toli (9), Chirchiripat (6), Pakripat (5).
	Orea	34	..	
	Ghutua	34	2	Uper Ghutua, Ghutua proper.
	Nareshgarh	81	3	Kharwar tola, Parhaiya tola, Bhandar.
Hazaribagh .	Hesla	167	5	Hesla proper (91), Heth tola (51), Jamuntanr (7), Mahuatanr (14), Jobhia (4).
Santal Parganas .	Kumarbhaja	65	3	Paharia Basti (37), Manjhi tola (14), Hesa tola (14).
	Jamkanali	173	7	Pldo tola (6), Manjhi tola (46), Hodgo or Kamar tola (48), Indir tola (17). Bhuiya tola (20), Bathan tola (28) Hesa tola (8).
	Batbanga	63	2	Lowar tola (35), Upper tola (28).
	Palasi	144	4	Palasi proper, Bazar tola, Mahli tola, Madhudangal.

The above statement will show that many of the hamlets have been formed on caste basis, this being particularly true of non-tribal areas. In tribal areas a particular tribe often predominates and may sometimes even be found incomplete isolation from others. Most *mauzas* in Patna, Tirhut and Bhagalpur Divisions contain separate hamlets for communities of the Scheduled Castes, the hamlets being named according to the predominant community found therein. It is seen that hamlets are found in most of the *mauzas,* only 1 out of 28 villages listed above having no hamlets. The number of hamlets appears to be related to the area of the *mauza,* and it is higher in Ranchi district.

The following Statement gives the caste/tribe composition of 32 villages including 28 given in Statement II. The association of hamlets with particular communities is apparent in many cases.

STATEMENT III

Names of the Scheduled Tribes/Scheduled Castes/Other Communities in selected villages

(H. H. means households)

District	Village	Scheduled Tribes	H.H.	Scheduled Castes	H.H.	Others	H.H.
1	2	3	4	5	6	7	8
Patna . .	Khaspur	..	..	..	..	Yadav	74
						Hazam	1
Patna .	Naipura	..	..	Chamar	13	Bania	7
				Dhobi	3	Mali	7
				Manjhi (Musahar)	30	Kahar	5
						Tanti	10
				Pasi	6	Patwa	18
						Sonar	2

STATEMENT III

Names of the Scheduled Tribes/Scheduled Castes/Other Communities in selected villages—contd.

District	Village	Scheduled Tribes	H.H.	Scheduled Castes	H.H.	Others	H.H.
1	2	3	4	5	6	7	8
						Hazam	3
						Gosain	5
						Kumhar	4
						Tamboli	2
						Barhi	3
						Teli	14
						Brahmin	4
						Bhumihar	14
Patna . .	Pareo	..	..	Dusadh	24	Kasera	134
				Chamar	13	Yadav	33
				Pasi	11	Malah	24
				Dhobi	2	Koeri	17
				Nat	1	Kandu	13
				Musahar	3	Halwai	11
						Kumhar	10
						Musalman	9
						Mali	7
						Hazam	7
						Lohar	5
						Teli	5
						Brahmin	4
						Kaistha	1
						Bhumihar	2
						Sonar	4
						Barhi	3
						Kahar	1
						Bania	1
						Gosain	1
						Bhant	2
						Rajput	1
						Banskhor	1
Gaya . .	Manaribigha	..	..	Chamar	9	Muslim	71
				Pasi	5	Kahar	4
				Dhobi	1	Kurmi	1
Gaya . .	Manjhauli	..	..	Bhuiyan	42	Muslim	43
				Chamar	16	Teli	25
				Dusadh	13	Halwai	20
				Pasi	7	Agrawal	11
				Dhobi	6	Yadav	9
				Mehtar	1	Kumhar	6
						Barhi	6
						Gareri	6
						Lohar	5
						Koeri	4
						Hazam	3
						Brahmin	2
Saran . .	Hathauri	..	..	Dhobi	2	Muslim	119
				Chamar	6	Kaistha	4
				Nat	7	Kumhar	19
				Dusadh	2	Teli	3
						Lohar	11
						Brahmin	6
						Hazam	2
						Koeri	20
						Kanu	20
						Nonia	10
						Yadav	15
Champaran . .	Dhokhnhawandon	..	..	Dhangar	42	Tharu	62
				Chamar	5	Hazam	1
				Musahar	4		

STATEMENT III

Names of the Scheduled Tribes/Scheduled Castes/Other Communities in selected villages— contd.

District	Village	Scheduled Tribes	H.H.	Scheduled Castes	H.H.	Others	H.H.
1	2	3	4	5	6	7	8
Champaran .	Jamunia	..	..	Dom	4	Tharu	137
				Dusadh	1	Bhuiya	1
						Hazam	1
						Lohar	1
						Kaistha	2
						Teli	2
						Bania	1
Bhagalpur .	Asauta	..	..	Dusadh	17	Yadav	82
				Chamar	15	Kocri	30
						Khatwar	17
						Dhanuk	8
						Hazam	7
						Teli	2
						Brahmin	1
						Rajput	1
						Kurmi	1
Monghyr .	Sabalbigha	..	..	Musahar	24	Mohammadan	43
				Pasi	19	Brahmin	43
				Chamar	8	Gareri	13
				Dhobi	1	Kumhar	8
						Hazam	6
						Yadav	5
						Teli	3
						Kahar	3
						Barhi	2
						Bania	3
						Dhanuk	2
						Kanu	1
Monghyr .	Manikpore	—	..	Dusadh	1	Yadav	100
				Chamar	16	Tatwa	7
						Sahni	15
						Malah	5
						Hazam	2
						Kanu	8
						Tanti	1
						Halwai	2
						Kumhar	4
						Barhi	11
						Kalwar	2
						Teli	3
Monghyr .	Hill-Block	Korwa	51	..	..	Naiya	21
		Santal	14	..	..	..	..
Singhbhum .	Uparsole	Bhumij	30	..	..	Mohammadan	7
		Santal	24	..	..	Kurmi	6
Singhbhum .	Bharbharia	Ho	191	Ghasi	2	Tamboli	2
		Bhumij	9			Yadav	40
						Tanti	23
						Sunri	4
						Kumhar	1
						Brahmin	1
						Halwai	1
Ranchi .	Jojohatu	Munda	70	Sawasi	4	Lohar	6
		Lohra	4				
Ranchi .	Bergari	Traditional Oraon	64			Ahir	9
		Christian Oraon	48			Kumhar	8
		Lohra	7				
		Gorait	3			Hazam	3
						Mohammadan	6

STATEMENT III

Names of the Scheduled Tribes/Scheduled Castes/Other Communities in selected villages—contd.

District	Village	Scheduled Tribes	H.H.	Scheduled Castes	H.H.	Others	H.H.
1	2	3	4	5	6	7	8
Ranchi .	Humta	Munda	281	Sawasi	1	Hazam	9
		Birhor	30	Ghasi	1	Yadav	6
		Lohra	19			Bania	1
Ranchi .	Kujam	Asur	72				
		Oraon	11				
		Kharwar	1				
Ranchi .	Harup	Oraon	36			Rajput	2
		Bhagat Oraon	29				
		Birjia	19				
		Kharwar	10				
Ranchi .	Kathgaon	Christian Oraon	44			Yadav	2
		Traditional Oraon	2			Rajput	3
		Korwa	12				
		Baraik	2				
		Munda	1				
		Kharwar	1				
		Kisan	1				
		Asur	4				
		Lohra	3				
Ranchi .	Parba	Binjhia	70	Dhobi	2	Rautia	8
		Munda	33	Dom	1	Ahir	4
		Chik-Baraik	5			Brahmin	3
		Lohra	3			Teli	16
		Oraon	50			Rajput	1
						Gosain	1
Ranchi .	Meromdega	Kharia	117	Bhogta	43	Mehar	55
		Gond	54	Turi	15	Naik	13
		Baraik	10			Kumhar	2
		Lohra	14			Brahmin	2
		Munda	2			Malar	1
		Baraik-Christian	1				
Ranchi .	Baraghaghra	Oraon	269			Gosain	38
		Mahli	14			Mirdha	3
		Lohra	15				
		Baraik	1				
Palamau .	Orsapat	Kisan	158	Chamar	1	Yadav	12
		Mahli	5			Muslim	11
		Oraon	4			Bania	9
		Baraik	3			Rajput	1
		Binjia	2			Hazam	1
		Korwa	1				
		Lohra	1				
Palamau .	Orea	Parheiya	14			Teli	1
		Kharwar	18				
		Oraon	1				
Palamau .	Ghutua	Chero	24	Bhuiya	1		
		Kharwar	7				
		Lohra	1				
Palamau .	Nareshgarh	Kharwar	45	Bhuiya	3	Sao	3
		Parhaiya	24	Ghasi	4	Teli	1
		Lohra	1				
Hazaribagh	Hesla	Karmali	16			Bhuiya	2
		Bedia	91			Gulgulia	1
		Munda	23			Muslim	15
						Kumhar	5
						Hazam	12
						Bania	1
						Teli	3

STATEMENT III

Names of the Scheduled Tribes/Scheduled Castes/Other Communities in selected villages—concld.

District	Village	Scheduled Tribes	H.H.	Scheduled Castes	H.H.	Others	H.H.
1	2	3	4	5	6	7	8
Santal Parganas	Kumarbhaja	Mal Paharia	37				
		Santal	28				
Santal Parganas	Jor[illegible]	Santal	168				
						Maraiya	5
Santal Parganas	Bat[illegible]	S. Paharia	63				
Santal Parganas	Pala[illegible]	Mahli	37	Chamer	1	Chhatri	31
		Munda	1			Teli	17
		Santal	2			Kumhar	10
		Lohra	4			Koeri	7
						Marwari	6
						Brahmin	5
						Hazam	5
						Muslim	4
						Mayara	3
						Ghatwal	2
						Rajput	1
						Sunri	1
						Bania	3

Houses are always built on land situated at a higher level than the adjoining agricultural fields. This is particularly so in villages of North Bihar which were susceptible, till recently, to recurrent floods. Inter-village communications during the rainy season are possible in these areas only by means of country boats. Though the construction of a large number of embankments has reduced the overall area inundated annually, the village sites remain. Even in South Bihar Plains and the Chhota Nagpur Plateau, houses are constructed on elevated lands, which are comparatively less fertile than the lowlands.

A category of settlements quite distinct from the general pattern comprises the houses of tribes living on hill tops. There are two broad areas of this type, viz., the hill tops in Netarhat area (in south-west of Ranchi district) and the hill-tops of the Rajmahal hills (in Santal Parganas district). In these cases there is no premium on land, yet the houses are as often clustered together as dispersed.

In the paper published by the Anthropological Survey of India a four-fold classification of villages has been made. The primary classification is into nucleated or dispersed settlements, the nucleated settlements being further classified into linear, square or shapeless clusters. According to the Survey the classification of districts of Bihar is of the following order (districts being the units) :—

(*a*) Shapeless agglomerates and linear assemblages—Hazaribagh, Ranchi, Singhbhum, South-East Palamau, Western Dhanbad, Eastern Champaran,

(*b*) Shapeless agglomerates-Patna, Gaya, Shahabad, Saran, South Monghyr, West of Palamau,

(*c*) Shapeless agglomerates and dispersed clusters-Muzaffarpur, Darbhanga, Bhagalpur, and North Monghyr,

(*d*) Linear assemblages-Santal Parganas, western Champaran, eastern Dhanbad,

(*e*) Dispersed clusters—Purnea,

(*f*) Dispersed clusters and linear assemblage—Saharsa. Bihar's villages are, therefore, mostly shapeless clusters and in some cases linear clusters, but often within one category there may be very many variations. Thus a densely populated village which is a massive shapeless cluster is quite distinct from Asur village at the top of Netarhat hills which consists of hardly 2 or 3 houses in each cluster.

Generalized impressions gathered during tours give the following picture :—

Houses are clustered close together and isolated structures are uncommon. Even on hill-tops there are usually 2-3 house clusters. There is no purposive orientation in the settlement area. However, roads and lanes have houses on either side, leading generally to a linear arrangement which is found in parts of most villages.

Sketch-maps showing settlement patterns in 6 villages are enclosed.

House types

The following discussion about House types relates only to rural areas :

Houses naturally vary from small huts (*Jhopari*) to spacious brick walled houses of well-to-do cultivators and landlords. In the course of the Census of houses, information was collected regarding material of wall and roof and number of rooms in each house. Statement IV below gives the distribution of 1,000 households living in Census houses by predominant material of wall in rural areas :—

STATEMENT IV

Distribution of 1,000 *households living in Census houses by predominant material of wall in rural areas only*

Unit	Grass, leaves, reeds or bamboo	Timber	Mud	Unburnt bricks	Burnt bricks	C. I. sheets or other metal sheets	Stone	Cement concrete	All other materials
1	2	3	4	5	6	7	8	9	10
BIHAR . .	225	3	663	7	99	1	2	N	N
Patna Division . .	6	1	840	3	149	N	1	N	N
Tirhut Division . .	333	1	542	6	118	N	N	0	N
Bhagalpur Division . .	386	1	545	3	64	1	N	N	N
Chhota Nagpur Division .	9	10	882	19	69	1	10	N	N

'N'—Negligible
'O'—No figure

It is apparent that mud walls are most common. Patna Division, which has 84 per cent of houses with mud walls, has also the highest proportion of houses with walls of burnt bricks, and these two categories account for almost all the houses. In both Tirhut and Bhagalpur Divisions the proportion of mud-wall houses is only a little more than a half. In Tirhut walls made of grass, reeds and bamboos account for one third of the total number of houses. This is so because in areas of Darbhanga and Muzaffarpur districts which are liable to floods, light structures made of *Khar* (a kind of grass) are rather common, vide photograph I (Muzaffarpur district) and photograph II (Saharsa district). More than a tenth of the houses in the Tirhut Division have walls of burnt bricks, a proportion that is below that only of Patna Division, and much above the average for the State. The proportion of grass-walled houses in Bhagalpur Division is the highest in the State. This is accounted for by the fact that areas of Purnea, Saharsa and North Monghyr are even more liable to floods than parts of Tirhut. Further, houses of some of the Scheduled Tribes of the Santal Parganas district (like Sauria Paharias and Malpaharias) are usually made of straw or *Khar*. The picture is quite different in Chhota Nagpur Division in which the proportion of mud-wall houses is the highest in the State. As a matter of fact, houses with other than mud walls are uncommon. Walls of timber assume significant proportions only in this Division.

Statement V, gives the distribution of 1,000 households living in Census houses by predominant material of roof.

STATEMENT V

Distribution of 1,000 households living in Census houses by predominant material of roof in rural areas only

Unit	Grass, leaves, reeds, thatch, wood or bamboo	Tiles, slate, shingle	Corrugated iron, zinc or other metal sheets	Asbestos cement sheets	Brick and lime	Concrete and stone slab	All other materials
1	2	3	4	5	6	7	8
BIHAR	446	522	8	1	22	1	N
Patna Division	228	740	1	1	29	1	N
Tirhut Division	529	439	2	N	20	N	N
Chhota Nagpur Division	185	777	[illegible]	[illegible]	22	N	N
Bhagalpur Division	666	295	21	1	17	N	N

'N'—Negligible

It is seen that grass roofs occur much more frequently than grass walls. It is usually found that all houses with grass walls also have grass roofs. On the other hand, houses with walls of burnt brick are more prone to have roofs of brick and lime, concrete, asbestos cement or corrugated iron sheets. From this point of view, the two statements above reveal the following comparative picture :—

State/Division	Proportion per 1,000 of: Grass wall houses	Grass roof houses	Burnt brick wall houses	Lime and brick, concrete, asbestos, corrugated sheet roof houses
1	2	3	4	5
BIHAR	225	446	99	32
Patna Division	6	228	149	32
Tirhut Division	333	529	118	22
Bhagalpur Division	386	666	64	39
Chhota Nagpur Division	9	185	69	38

The figures also tend to reveal that while grass walled houses also have grass roofs, a number of mud walled houses have similar roofs. On the other hand, not all burnt brick walled houses have roofs of brick and lime, concrete, asbestos cement or corrugated iron sheets. Tile-roofing accounts for more than half of the houses in the State, the proportion being highest in Chhota Nagpur where it is found that most of the houses, even of the poorest tribal families, are usually tiled (potter's tile). The explanation seems to lie in the fact that these communities generally prepare their own tiles. Thus even Asurs, Korwas and Birjias on the hill-tops of the Neterhat plateau, (who are economically rather backward) have the bulk of their houses with tile roofs. Patna Division is only slightly below Chhota Nagpur in the matter of proportion of tiled roofs. In Tirhut Division the proportion of tiled roofs is less than half, a little more than a half being accounted for by grass roofs. Grass roofs are most widely found in Bhagalpur Division and the reason seems to be the same as for the highest incidence of grass walls.

The statement on next page gives the distribution of 1,000 Sample households living in Census houses according to number of rooms occupied :

STATEMENT VI

Distribution of 1,000 sample households living in Census houses according to number of rooms occupied in rural areas only

Unit	Households having: No regular room	1 room	2 rooms	3 rooms	4 rooms	5 rooms and above
1	2	3	4	5	6	7
BIHAR	2	356	296	157	84	105
Patna Division	1	166	215	184	146	288
Tirhut Division	1	328	335	177	80	79
Bhagalpur Division	2	431	301	142	68	56
Chhota Nagpur Division	2	475	298	120	56	49

There is little difference between Bhagalpur and Chhota Nagpur Divisions so far as the accommodation provided is concerned, the ratio of houses with different numbers of rooms being roughly similar. Patna Division appears to be most favoured, having five rooms or more and only a sixth being single-roomed houses. Tirhut Division lies in an intermediate position, two-thirds of the houses containing one or two rooms only.

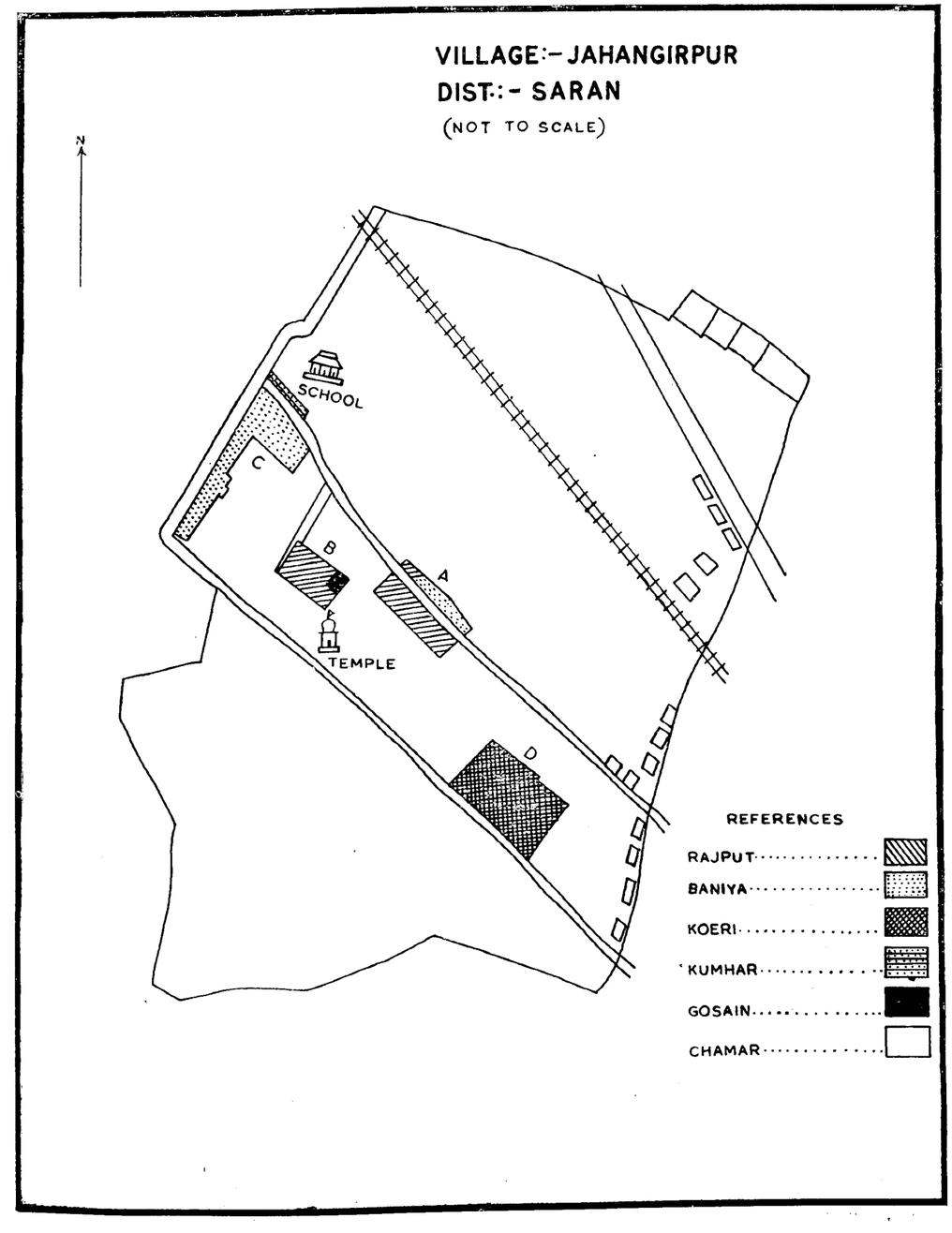
In listing the parts of houses, Grierson in his "Bihar Peasant Life" gave the first place to the courtyard known generally as *Angan*. The term *Angan* is used for the open space provided inside the house between structures on two sides or on four sides. Often space is provided in the front or back of a house in which case it is known as *Aguar* or *Pichuar*. These being provided in addition to the *Angan*.

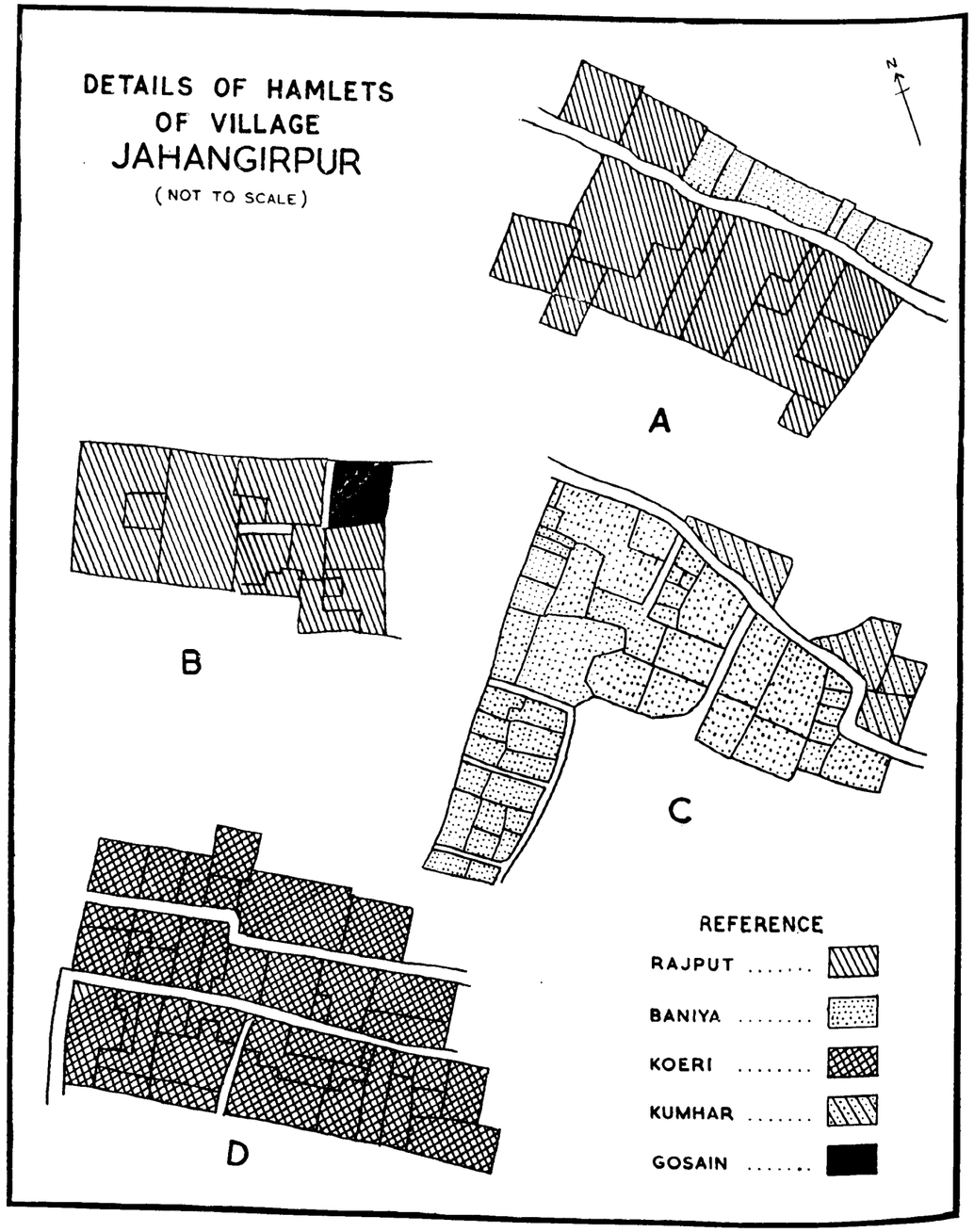
The courtyard of the house shown in the Photograph I is indicated in diagram 1. The house is in Saran district and the courtyard is situated in the centre, around which rooms are constructed on all the four sides. It is apparent that such courtyards can be provided only in houses with a sufficiently larger number of rooms. As has been seen earlier, the number of rooms in a majority of houses varies from one to three. The most frequent type of courtyard, therefore, is the one situated between two structures vide photograph II (and depicted in diagram II). Such courtyards are also to be seen in Photograps III (Saran district) and IV (Darbhanga district). This type of house allows for adoption even by the less affluent persons and in Photographs V and VI can be seen similar courtyards in case of small grass houses of Dusadhs of Darbhanga district. A courtyard of one or other kind is commonly found in most of the houses in Tirhut, Patna and Bhagalpur Divisions. Photograph V shows that a courtyard has been provided even in a single roomed house by using the back wall of the adjacent house.

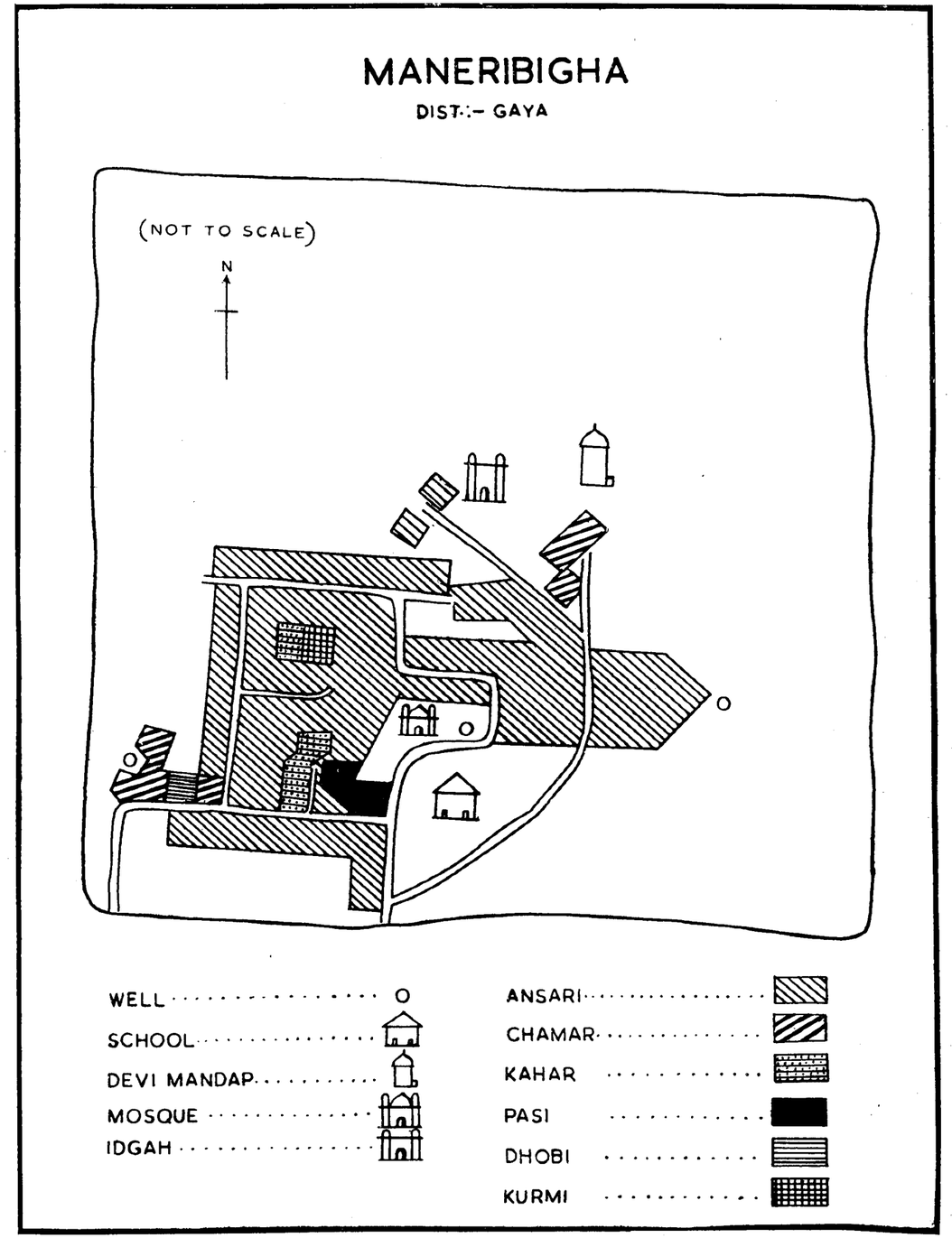
Among tribal communities of Santal Parganas district and the Chhota Nagpur Division, courtyards in the sense indicated above are usually absent. The equivalent of *Aguar* and *Pichuar* are, however almost invariably found (vide photograph X the house of a Chero of Palamau district). Most houses have small open spaces adjoining. The difference seems to have occurred because unlike other communities, there is no segragation of women or *Purdah* among the tribal communities.

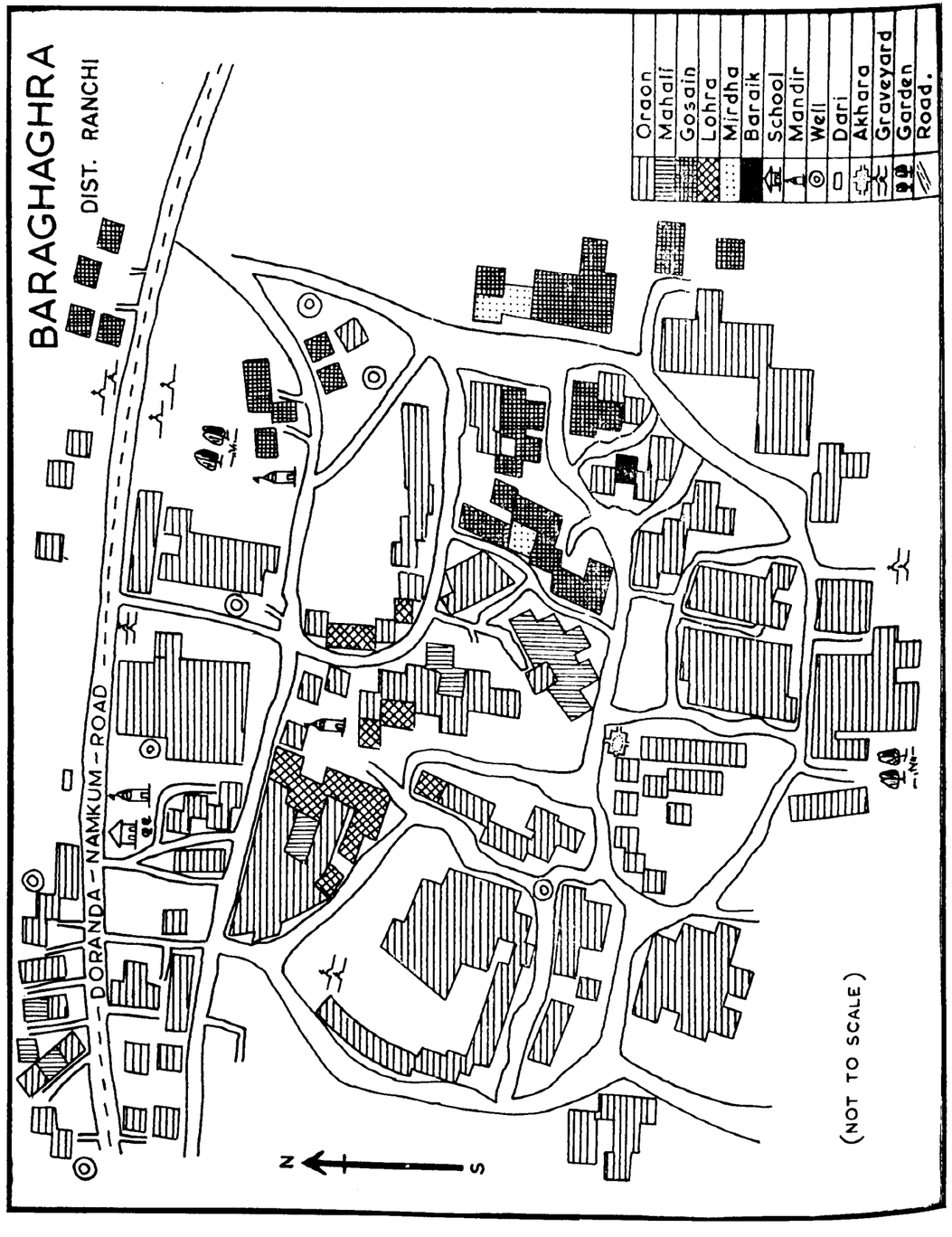
Cattle are often housed separately, though in some cases one of the rooms of the house may also be used for this purpose. Generally a temporary structure is erected by the side of the house. It is to be noted, however, that such houses are not always residential houses but are store houses known as *Bhandar* in which only males keep watch. It is relevant to note that the type of house shown in the photograph, is one of the essential type-plan followed by many tribes of Ranchi district. The difference lies in the fact that while the surrounding verandah in the front is open in the photographs, the verandah is enclosed in tribal houses. While the central room is used for storage, the enclosed verandahs, duly partitioned, are used as living rooms.

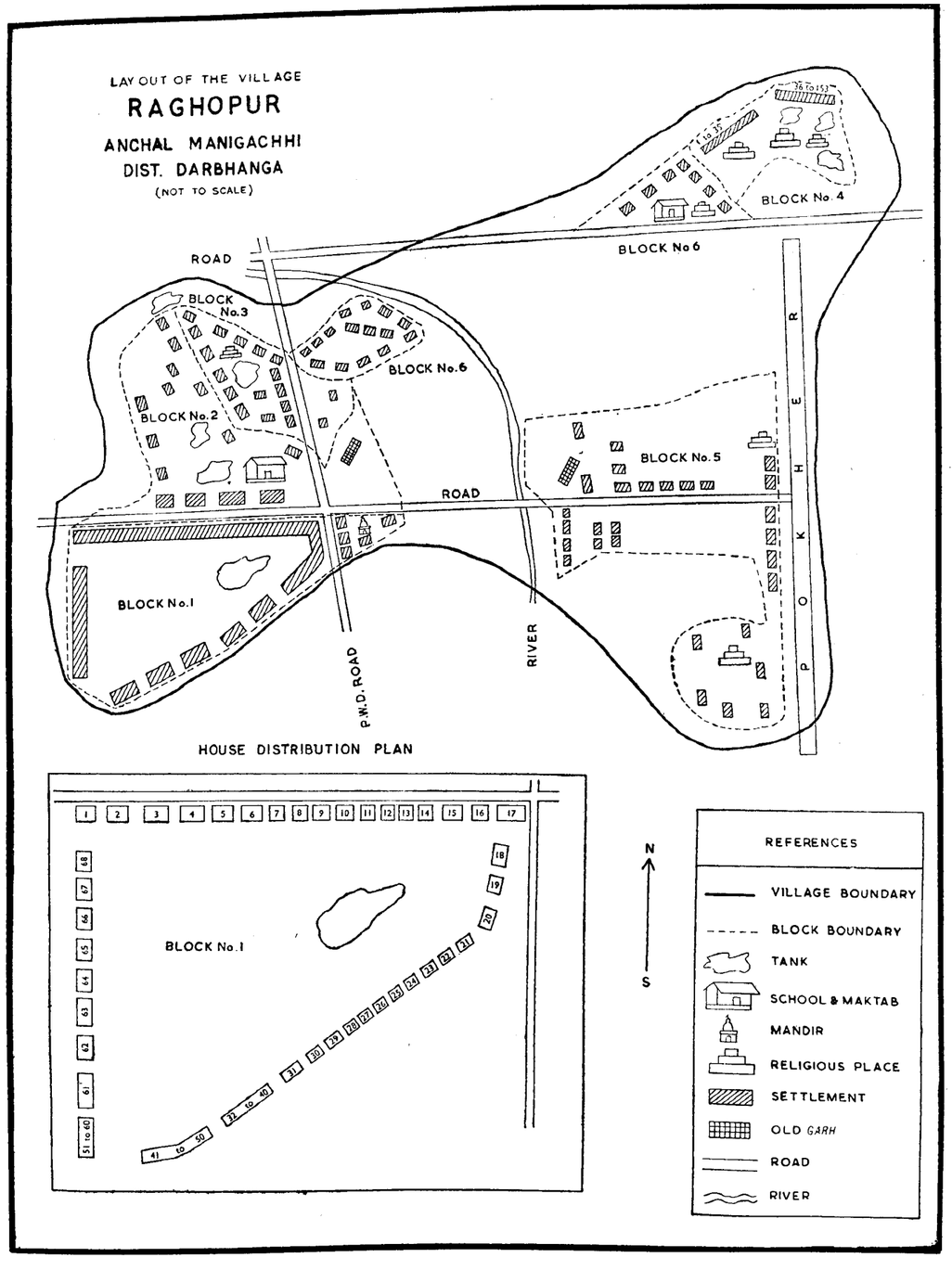
Means rather than social status determine the types of houses. While this is true of most parts of Bihar, among tribals there is no such distinction. The temporal and spiritual heads of the tribes and even the wealthiest among them are generally found to possess houses no better or worse than the average houses of other villagers.

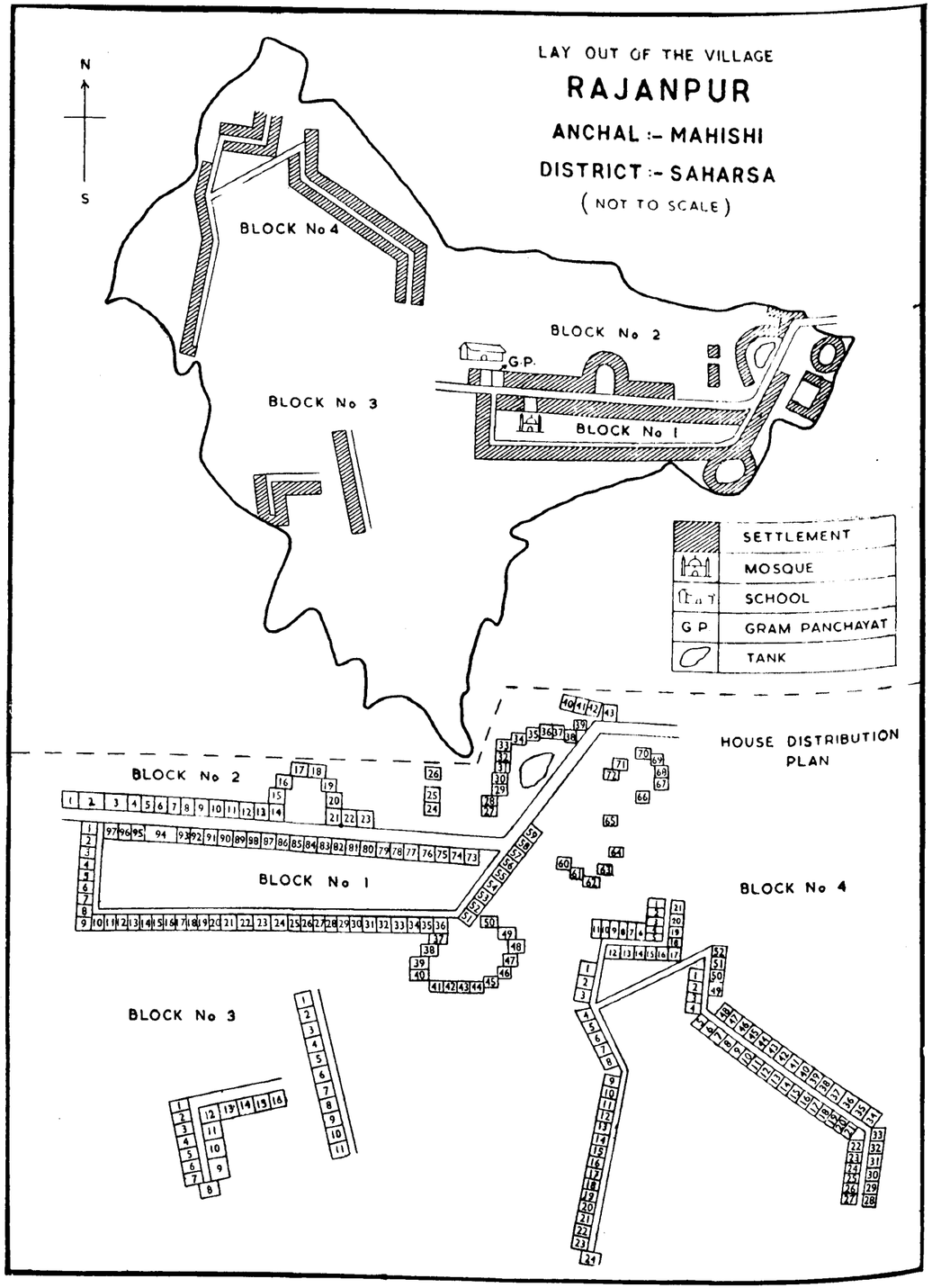

VILLAGE:- JAHANGIRPUR
DIST.:- SARAN
(NOT TO SCALE)
N
SCHOOL
C
B
A
TEMPLE
D
REFERENCES
RAJPUT
BANIYA
KOERI
KUMHAR
GOSAIN
CHAMAR

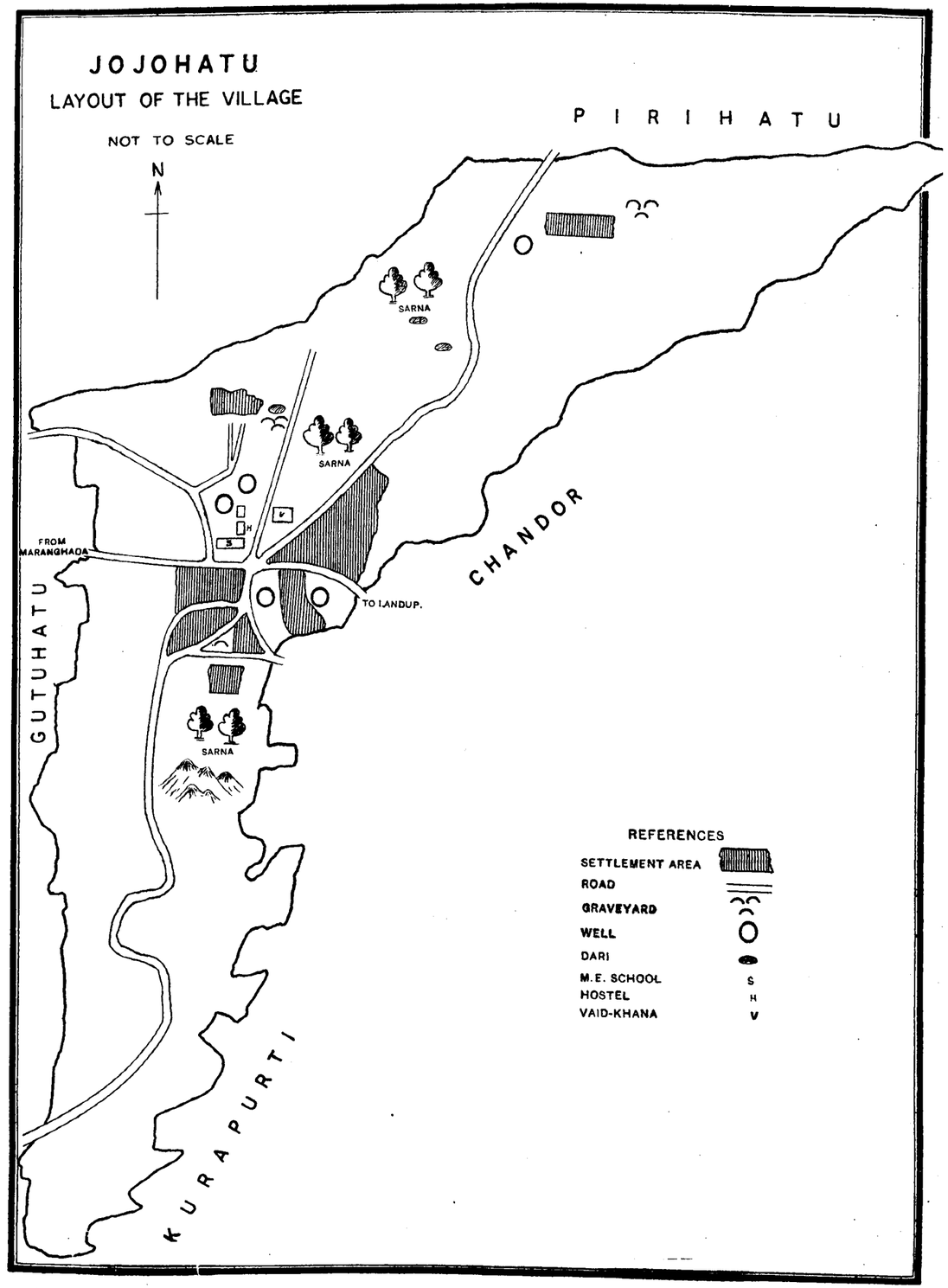

DETAILS OF HAMLETS
OF VILLAGE
JAHANGIRPUR
(NOT TO SCALE)
N
A
B
C
D
REFERENCE
RAJPUT
BANIYA
KOERI
KUMHAR
GOSAIN

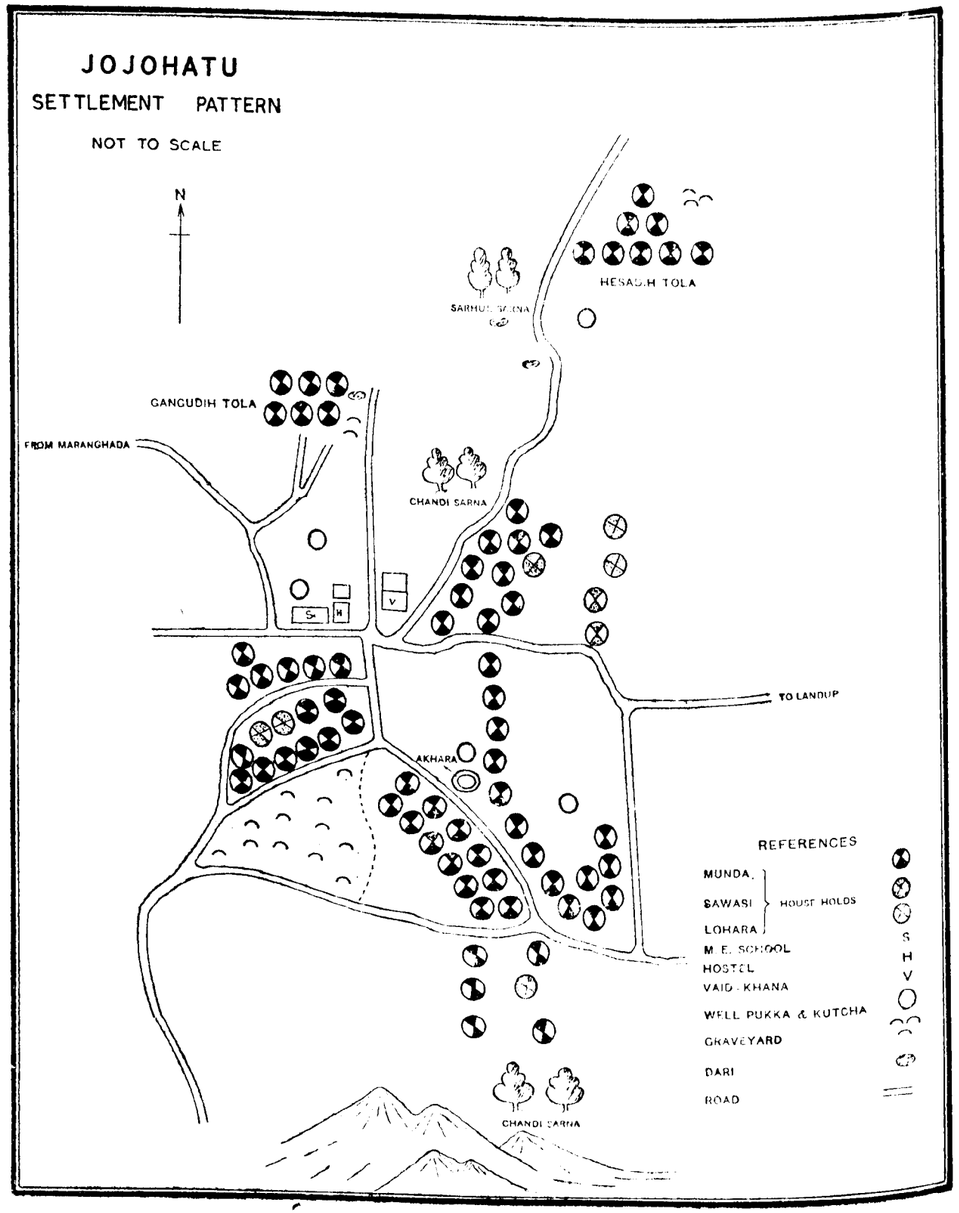

MANERIBIGHA
DIST:- GAYA
(NOT TO SCALE)
N
WELL
SCHOOL
DEVI MANDAP
MOSQUE
IDGAH
ANSARI
CHAMAR
KAHAR
PASI
DHOBI
KURMI

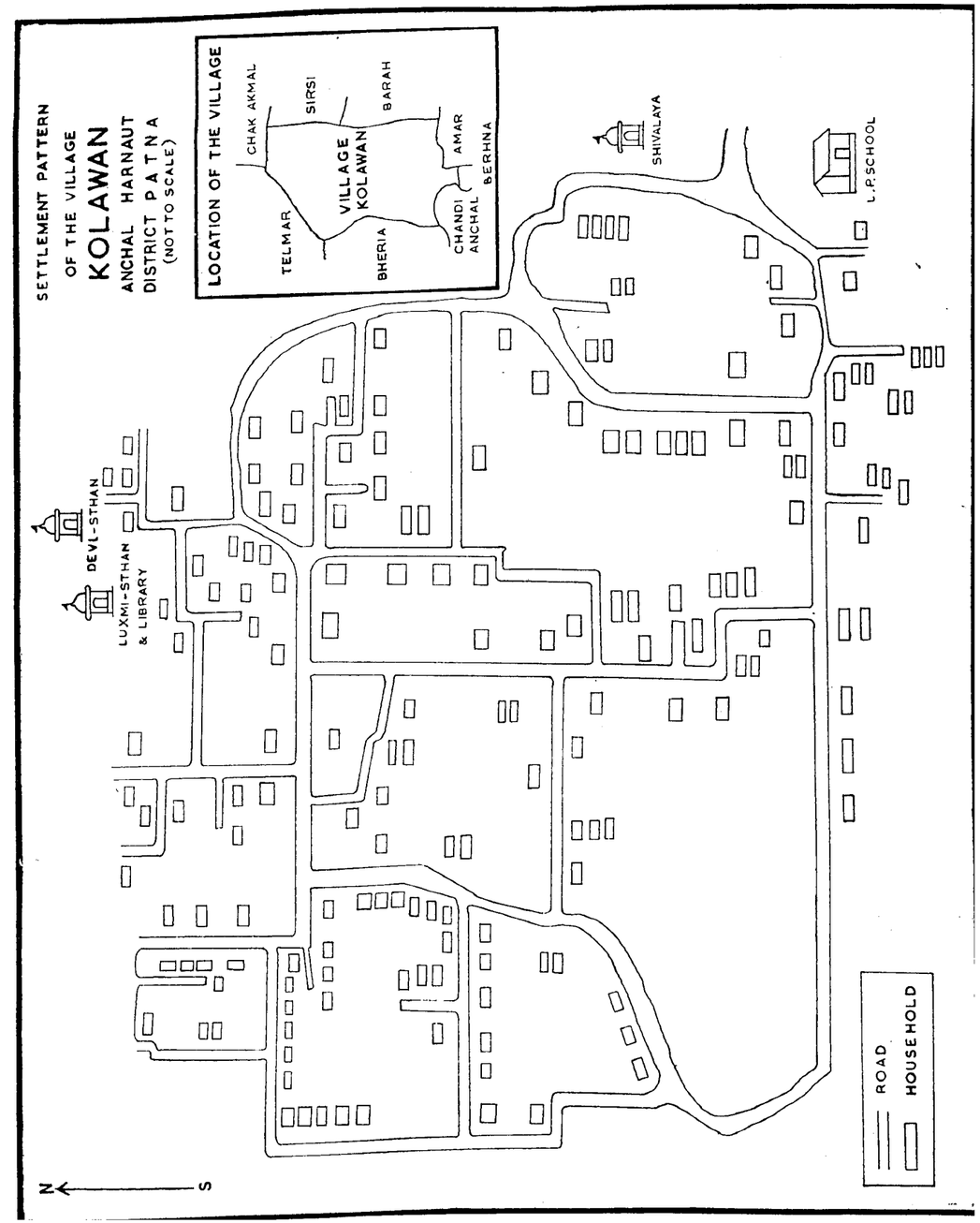

BARAGHGRA
DIST. RANCHI
DORANDA-NAMKUM-ROAD
Oraon
Mahali
Gosain
Lohra
Mirdha
Baraik
School
Mandir
Well
Dari
Akhara
Graveyard
Garden
Road.
N
S
(NOT TO SCALE)

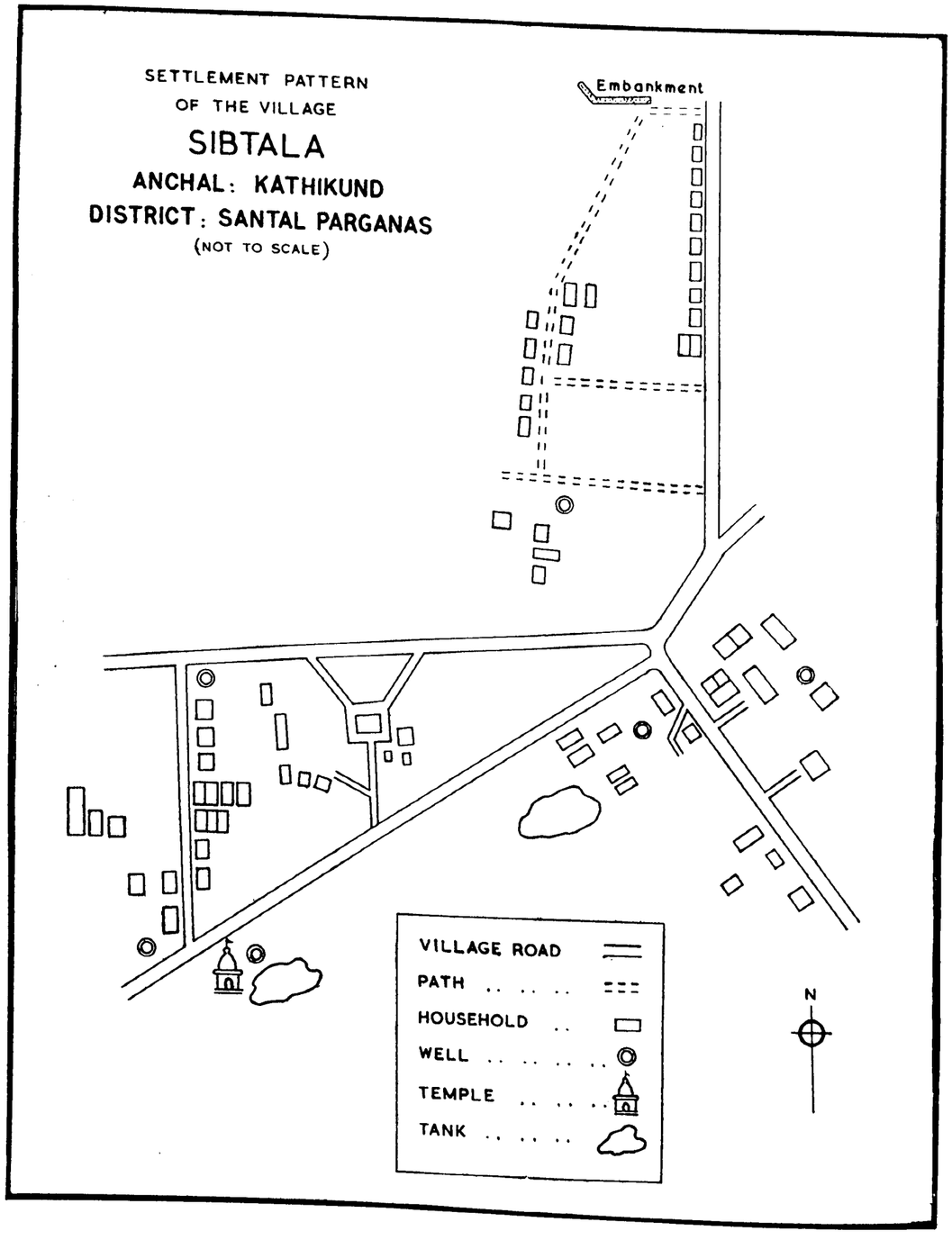

LAY OUT OF THE VILLAGE
RAGHOPUR
ANCHAL MANIGACHHI
DIST. DARBHANGA
(NOT TO SCALE)
ROAD
BLOCK No. 4
BLOCK No 6
BLOCK No. 3
BLOCK No. 6
BLOCK No. 2
BLOCK No. 5
ROAD
BLOCK No. 1
P.W.D. ROAD
RIVER
POKHER
HOUSE DISTRIBUTION PLAN
BLOCK No. 1
N
S
REFERENCES
VILLAGE BOUNDARY
BLOCK BOUNDARY
TANK
SCHOOL & MAKTAB
MANDIR
RELIGIOUS PLACE
SETTLEMENT
OLD GARH
ROAD
RIVER

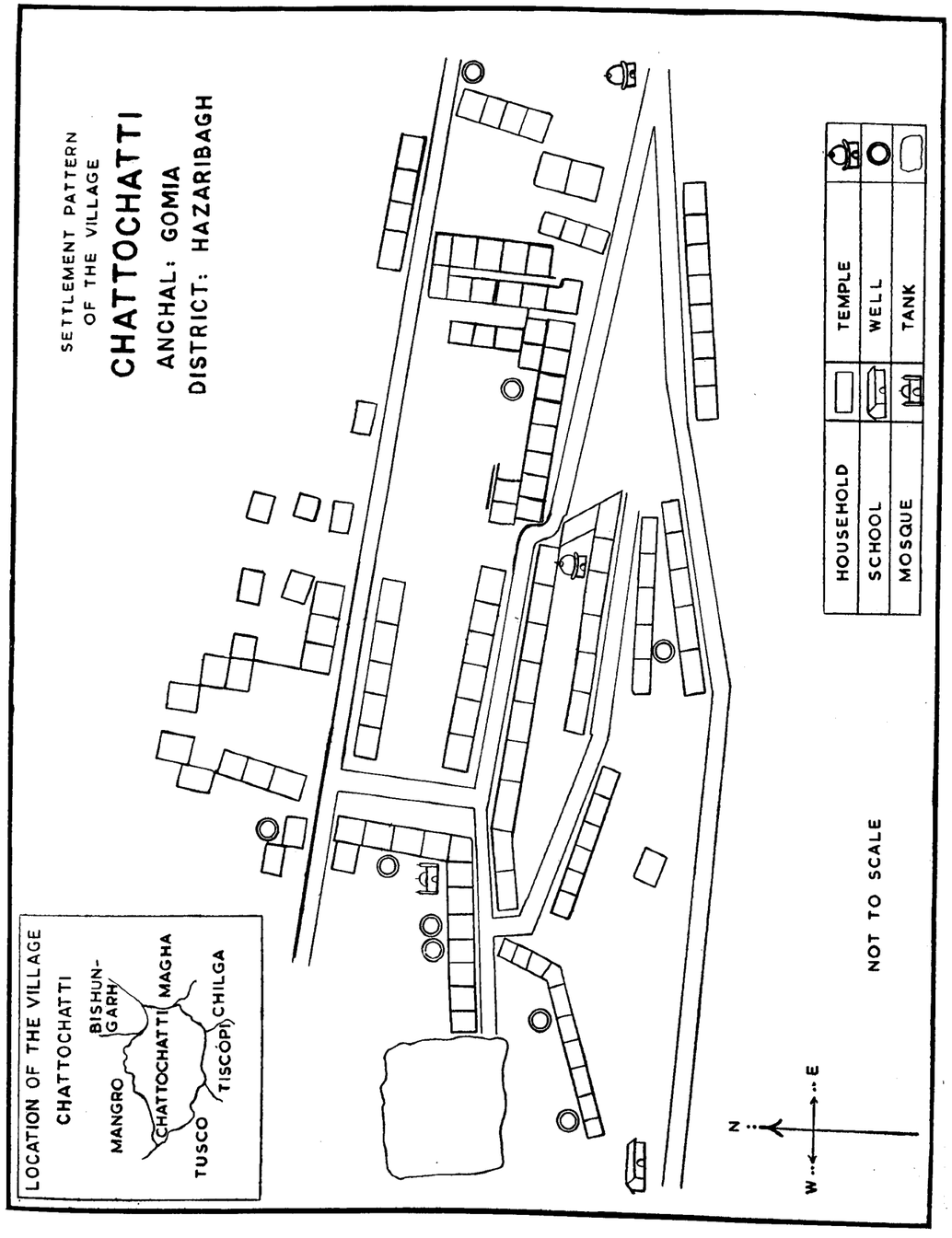

LAY OUT OF THE VILLAGE
RAJANPUR
ANCHAL :- MAHISHI
DISTRICT :- SAHARSA
(NOT TO SCALE)
N
S
BLOCK No 4
BLOCK No 2
G.P.
BLOCK No 3
BLOCK No 1
SETTLEMENT
MOSQUE
SCHOOL
G P
GRAM PANCHAYAT
TANK
HOUSE DISTRIBUTION PLAN
BLOCK No 2
BLOCK No 1
BLOCK No 4
BLOCK No 3


JOJOHATU
LAYOUT OF THE VILLAGE
NOT TO SCALE
N
PIRIHATU
SARNA
SARNA
SARNA
FROM MARANGHADA
TO LANDUP.
CHANDOR
GUTUHATU
KURAPURTI
REFERENCES
SETTLEMENT AREA
ROAD
GRAVEYARD
WELL
DARI
M.E. SCHOOL
HOSTEL
VAID-KHANA
S
H
V


JOJOHATU
SETTLEMENT PATTERN
NOT TO SCALE
N
HESADIH TOLA
SARHUL SARNA
GANGUDIH TOLA
FROM MARANGHADA
CHANDI SARNA
TO LANDUP
AKHARA
CHANDI SARNA
REFERENCES
MUNDA,
SAWASI
LOHARA
HOUSE HOLDS
M. E. SCHOOL
HOSTEL
VAID-KHANA
WELL PUKKA & KUTCHA
GRAVEYARD
DARI
ROAD


SETTLEMENT PATTERN
OF THE VILLAGE
KOLAWAN
ANCHAL HARNAUT
DISTRICT PATNA
(NOT TO SCALE)
LOCATION OF THE VILLAGE
CHAK AKMAL
SIRSI
BARAH
TELMAR
VILLAGE KOLAWAN
BHERIA
AMAR
CHANDI ANCHAL
BERHNA
SHIVALAYA
L.P.SCHOOL
DEVI-STHAN
LUXMI-STHAN & LIBRARY
ROAD
HOUSEHOLD
N
S


SETTLEMENT PATTERN
OF THE VILLAGE
SIBTALA
ANCHAL: KATHIKUND
DISTRICT: SANTAL PARGANAS
(NOT TO SCALE)
Embankment
VILLAGE ROAD
PATH
HOUSEHOLD
WELL
TEMPLE
TANK
N


SETTLEMENT PATTERN
OF THE VILLAGE
CHATTOCHATTI
ANCHAL: GOMIA
DISTRICT: HAZARIBAGH
HOUSEHOLD
SCHOOL
MOSQUE
TEMPLE
WELL
TANK
LOCATION OF THE VILLAGE
CHATTOCHATTI
BISHUN-GARH
MAGHA
MANGRO
CHATTOCHATTI
CHILGA
TUSCO
TISCOPI
NOT TO SCALE
N
W
E

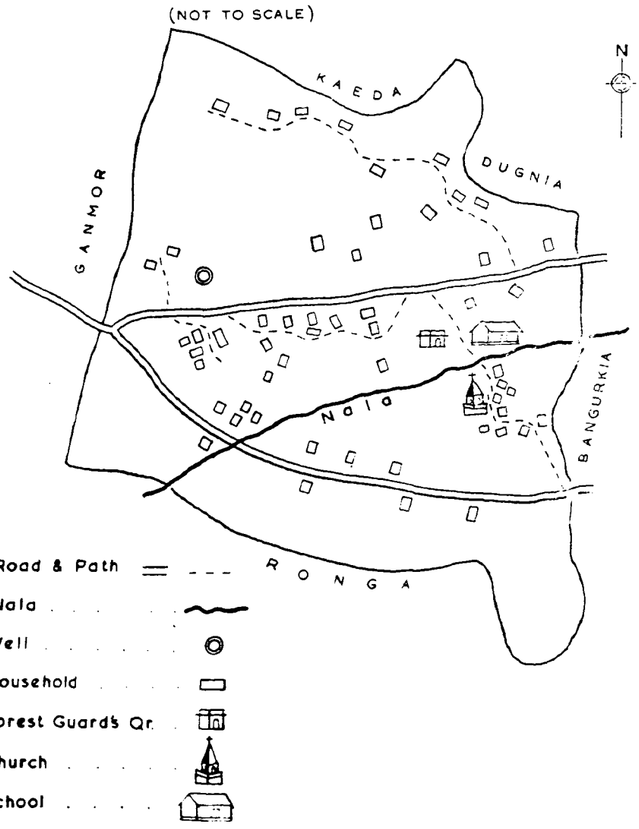
LAY OUT OF THE VILLAGE

POSAETA

ANCHAL : GOILKERA

DISTRICT : SINGHBHUM

(NOT TO SCALE)



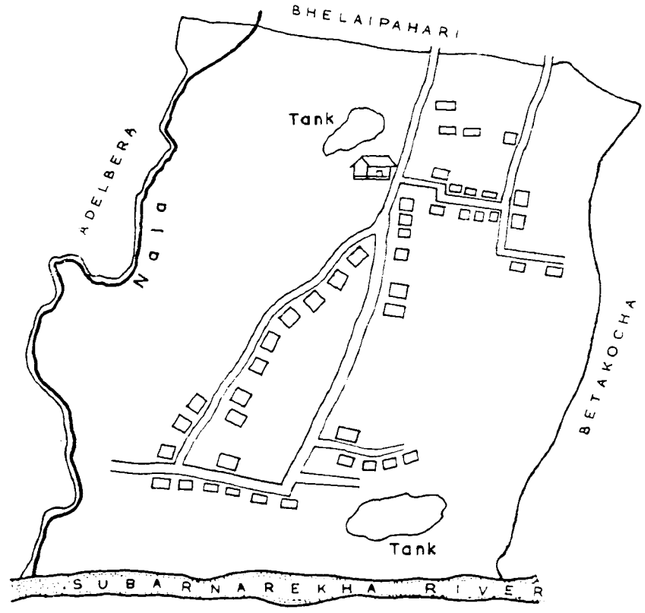
LAY OUT OF THE VILLAGE

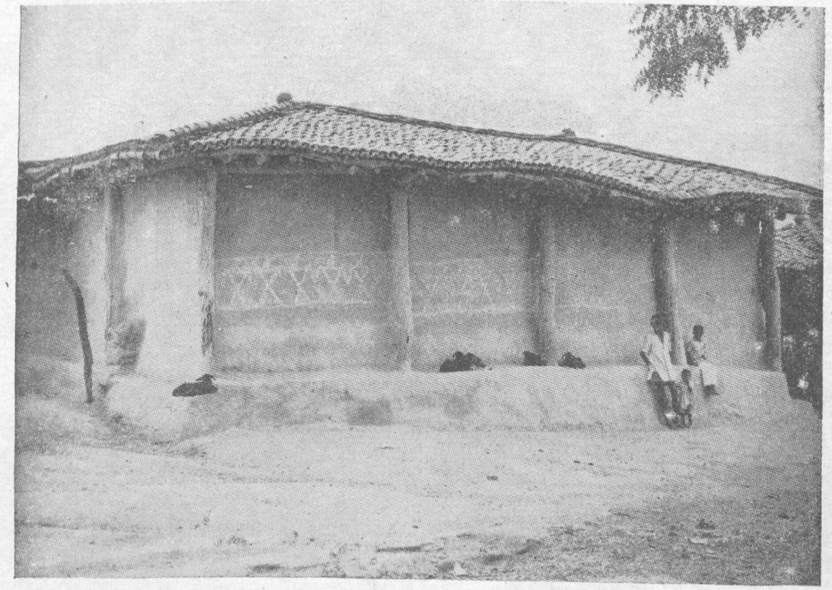
SIMALDANGA

ANCHAL: GOLMURI-CUM-JUGSALAI

DISTRICT: SINGHBHUM

(NOT TO SCALE)



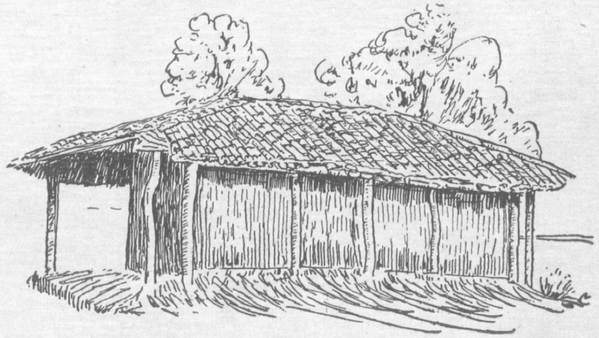


A mud walled and tile roofed house in village Hesla, District Hazaribagh (The paintings on the wall are intended to beautify)

The house of a well-to-do Ho in village Manjhari, District Singhbhum (The surroundings are particularly clean)

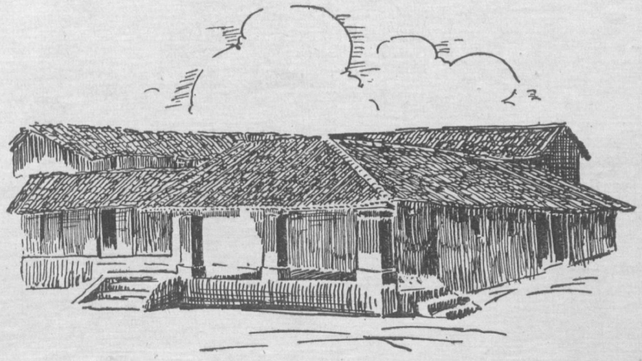
A typical house in village Ghutua, District Palamau with mud wall and tiled roof (The opening leads to the *angan* or courtyard)

A typical house with mud wall and tiled roof in village Hathauri, District Saran (The ventilators on the top serve the purpose of windows)

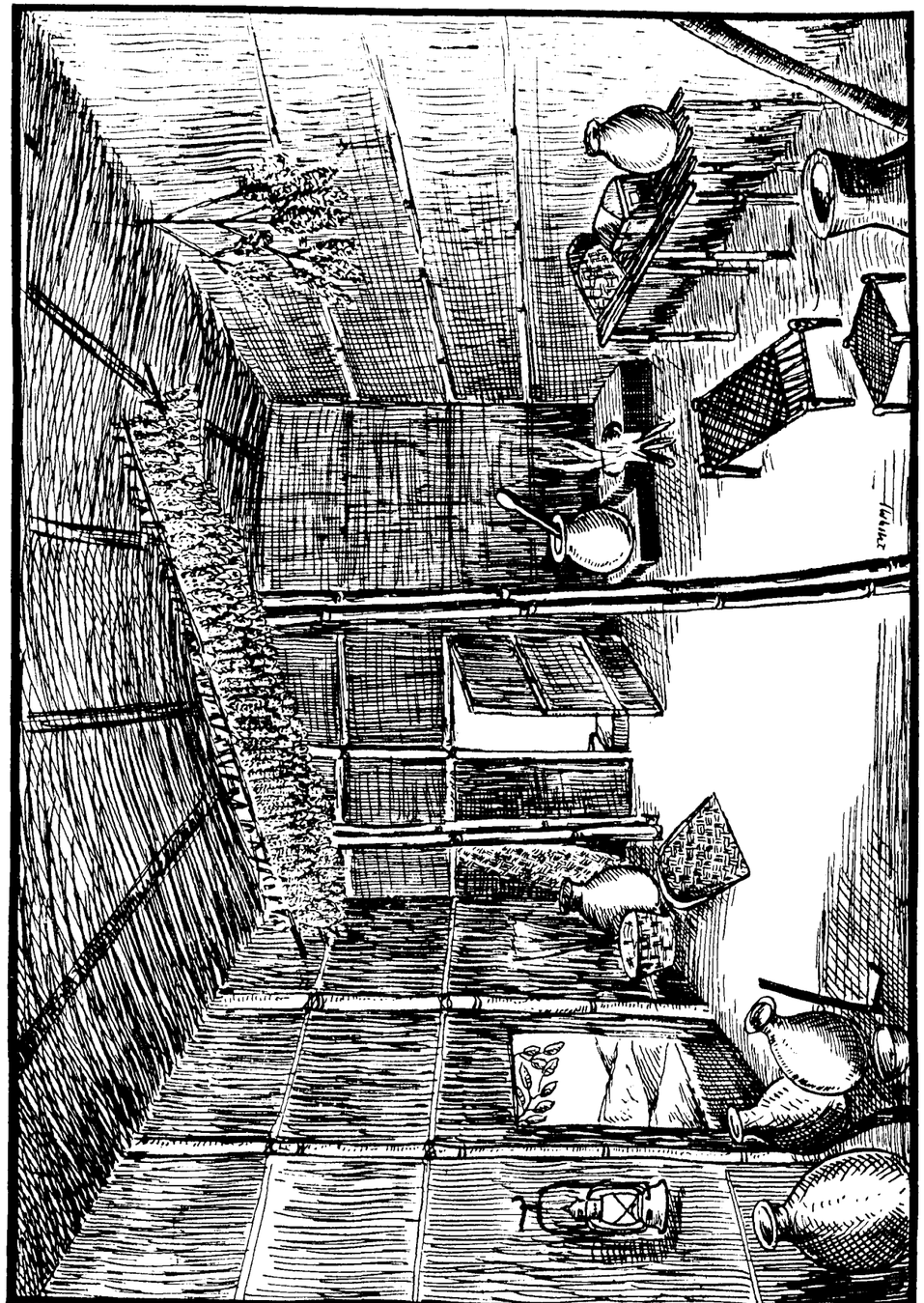


A typical house of a Binjhia in village Parba, District Ranchi

A typical house of a Kharia in village Meromdega, District Ranchi



A typical house in Musabani Anchal (Rural), District Singhbhum



The interior of a house of Saurria Paharia in village Batbanga, District Santal Parganas

GUJARAT

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Selection of site

1. A village community generally settles in the heart of the area of cultivation of the village, though in the forest and tribal areas compact settlements are abandoned in favour of isolated homesteads situated at some convenient place, most probably in the centre of the field held by each individual family. Before a community or a group of families settles down on a particular place, the village site is carefully selected. Since proximity to the source of water supply is the principal consideration, it is located usually on the bank of a river high enough to prevent damage by floods. Where such an ideal situation is not possible, it is located either at one end of the cultivable area or in its midst where facility of pasture and pond for cattle can be had.

Village fortifications

2. More often than not, the villages were enclosed by a wall built of mud, brick or stone. Though such walls were a common feature of the villages in Saurashtra and Kutch, they are to be found in the villages of North and South Gujarat also. These defences have now-a-days fallen into ruins and are fast disappearing. Some of the fortwalls are very massive and imposing structures provided with huge gateways having wooden doors studded with iron and with high towers or *kothas* to detect the approach of enemies and robbers. The smaller and poorer villages had an earthen wall or fencing of thorn with less pretentious gateways made of branches of trees which could be closed at night. While offering security against dacoits and thieves, they also served the purpose of ensuring that the cultivators brought all their field produce to the common *khalawad* or threshing floor and did not pilfer any portion of it to escape the payment of land revenue recovered in kind as crop-share.

Distribution of localities by caste

3. In the usual settlement pattern of villages, the central portion of the village used to be occupied by those higher in the social scale, the zamindar or the landlord of the village, the village money-lender, the village official and higher caste families such as Brahmins, Banias, etc., followed by those of the artisan and cultivating classes, the dwellings of the service and depressed classes like Harijans, Vaghris, Bharwads, Rabaris, Kolis, being always on the outskirts of the village. The different residential localities called *fali, vado,* or *vas,* were named after the caste inhabiting it, i.e., Brahmanvado, Sutharvado, Sonifalia, Patelvas etc. as the members of the same caste lived in the same locality, Brahmins living with Brahmins, Banias with Banias, Kunbis with Kunbis and artisans with artisans.

Streets, lanes and bye-lanes

4. The rows of houses are usually separated by small, narrow and tortuous roads or streets branching off into lanes and bye-lanes. But where the village is built after some pre-arranged pattern, it presents a neat and clean appearance and the main streets are sufficiently wide.

5. The usual and most common layout of houses is that they are situated in *falis* or narrow lanes constructed in parallel rows with common side walls and the back or a dead wall facing the main street. The houses are usually grouped in a *fali or* street having an open courtyard in front held either in common or belonging to each individual household enclosed by a compound wall or fencing with a common gateway within which families having a common ancestor reside.

6. The linear arrangement of houses is the most common pattern of settlement of an average village in Gujarat, though shapeless or isolated clusters are not uncommon and are also to be found in backward and Adivasi areas. That this is the traditional pattern of village layout in vogue in this part of the country even since

pre-historic times will be evident from the excavations at Lothal, some 40 miles from Ahmedabad, where plinths of houses built of burnt bricks in parallel rows on either side of a straight and broad street have been recently unearthed.

B. HOUSE TYPES

General pattern of houses

The house sketches for the different districts reveal certain distinct varieties of houses. They are, for the most part, rectangular or square and at times circular in case of the tribals and some of the backward classes living in houses of cylindrical shape like beehives. The commonest types of houses are, (i) single-room, (ii) double-rooms with common side-walls and a common verandah in front, (iii) multiple rooms arranged one after the other opening in a backyard, and (iv) a number of rooms with open verandah surrounding a central courtyard. For the most part houses are one room tenements and single-storeyed, though dwellings with more than one room and multiple storeys owned by the well-to-do exist in most of the villages and in every district of the State. All houses have a verandah where the members of the family sit during leisure hours and ladies carry on their household chores. It is thus a sort of living-*cum*-meeting room. The open space which most of the houses have in front is enclosed by a courtyard where the agriculturists keep their cattle and the village artisan plies his household industry. A separate cook-room is generally unknown as most of the dwellings have only one room used as cook-room, living-room, bed-room, store-room and even for keeping the cattle at night, with whom the room is shared by the members of the household when sleeping outdoors is not possible.

Building material

The study of building materials used in the construction of walls and roofs reveals the following conclusions.

Wall material

Most of the houses have either mud walls or stone walls plastered with clay and cow-dung emulsion, though grass, leaves, reeds or bamboo are in frequent use in the construction of hutments of those who are economically and socially backward, the Scheduled Castes and the Scheduled Tribes as also in the forest and some of the coastal areas. Burnt bricks are in use in all the districts by those who are materially prosperous, the landowners, the Banias, the Brahmins, the Patidars, etc.

Roof material

Roofs are for the most part covered with country-tiles, the houses of those who are backward being covered with straw, grass, or palm leaves. There are certain areas however, districts of North Gujarat in particular, where corrugated iron sheets are in greater use than the country tiles because of the prosperous condition of the agriculturists. Mangalore or *vilayati* tiles are also used in the coastal areas, where they are brought in country-craft from Southern India.

Roof types

The rainfall conditions in Gujarat favour inclined roofs having double slopes, though multiple roofs having more than two slopes pyramidal in shape and joining at the centre are not rare. The slope in front is generally longer than the one at the back, as the former encloses the verandah adjoining the main living-room. Circular hutments of Vaghris and other backward classes in Adivasi areas have conical roofs, thatched with grass and palmyra leaves.

Flooring, plinth, ventilation

The face of the countryside is gradually undergoing a change for the better resulting in the replacement of less permanent and flimsy material by such stable material as bricks and stones. In fertile tracts where the standard of farming has considerably improved, the houses of the prosperous and well-to-do agriculturists can compete with those built in urban areas, not only as regards the material used in the construction of walls and roofs but also

as regards the facilities provided and the living space available.

Flooring : The flooring is usually of beaten earth covered with cow-dung emulsion which is believed to possess certain antiseptic properties, though stone and cement tiles are also in demand in the houses built by those who are economically better off. The flooring and even the walls are done in an ornamental way with semi-concentric circles. At times the walls are studded with pieces of mirror or decorated with folk designs and pictures drawn of animals, birds, flowers, etc.

Plinth : All houses, either urban or rural have some plinth. But it is not very high and hardly extends over two feet.

Ventilation : Light and air did not matter much for people whose economic activity kept them busy outdoors for agricultural operations and labour in fields. Besides, the prime use of housing was considered to be safety and protection against adverse climatic conditions and the place for keeping their scanty belongings and cattle. Even while at home the most of the life was lived in the open compound or in the verandah. Ventilation is not indispensable to those who live an outdoor life. Its provision is also not possible in dwellings which are short sized and make use of material which is unstable and does not permit of any large openings in walls. But as time went on, considerations of convenience and comforts came into play and the people have now realised the necessity of having proper light and air, which are provided in all new structures and added in the old by opening windows close to the existing ventilators.

Wood carving

Delicate wood carving of exquisite beauty, though a unique feature of urban houses. In towns, door frames, window the door frames of some of the rural houses. In towns, door frames, window frames, ceiling, props, railings, buttresses, lintels, balconies and even walls, wherever use of wood was possible were decorated with designs and geometrical patterns of excellent workmanship. This art is practically extinct now, as the artists who executed such beautiful pieces of art have disappeared with the use of cement and the resultant lack of encouragement on the part of the public. Some specimens of wood carving have been reproduced in this Report by way of illustration.

Different portions of a rural house

The different portions of a rural house and their arrangements which illustrate the type of living and housing conditions obtaining in villages are explained below :

House : A village house is generally enclosed either by a compound wall or some sort of hedge with open space either in the front or at the back or both and provided with a cattle-shed and a grass-shed.

Fali : Falia or Faliu is the enclosed open space either in front of an individual house or infront of a group of houses, having an access from a common entrance or gateway.

Courtyard : There are various types of courtyards. They may be in the front, centre, or rear. The front courtyard—chowk—is generally enclosed and enjoyed either by an individual household or shared in common by more than one household in which case it is accessible by a common gateway at the entrance of a *fali* or lane. The usual pattern is to have an independent courtyard in front of the house where a cultivator can stall his cattle, store grass and keep his card and implements of agriculture. A front courtyard is also provided in the houses of the well-to-do and the advanced classes like Brahmins and Banias. Some houses also have a central courtyard or 'chowk' which divides the front from the back apartments. It is usually found in the houses of the Girasdars such as Rajputs and Kathis, whose women folk do not show themselves out of the house as a mark of social superiority. The backyard or '*wada*' which is in the rear is generally very extensive as it provides space for a manure pit in addition to a separate bathing place, cattle-shed and grass-barn.

The various portions of rural houses which illustrate the type of living and housing conditions obtaining in villages are explained below :—

Furjo : The covered shed either in front of the house or close to one of the side walls is called *furjo* where the agriculturists keep their cattle and store grass. The place where cattle are kept is popularly termed *kodh* or *gaman*.

Otta : The open platform in front of the house or verandah called *otta* is generally

uncovered and a little higher than the ground level.

Osari or Verandah : Is an indispensable adjunct to every rural house, which is located always in the front and precedes the living-room. Some houses have a verandah also at the back either instead of or in addition to the one in front. Functionally, this is a very important part of the house whose use is multi-purpose where all sorts of domestic work is done, and serves the purpose, of a sitting-*cum*-living room. When enclosed by a wall it is called *'Parsal'*.

Living Room : Even in single-room tenements, the size of the room is ample. The shortage of space which is generally experienced in urban areas is not felt in rural areas, where the rooms are comparatively more commodious than in towns. Tenements with smaller rooms are, however, not rare. The general size of a room varies from 12′ × 15′ in some places to 17′ × 20′ and even more in case of the well-to-do, as will be evident from the measurements given in some of the ground plans reproduced in this Report. The verandahs are wide and spacious, possess an average width of about 7′ and are much wider in many houses. But it is as regards the number of rooms occupied that the village people experience heavy congestion and overcrowding.

Kitchen or Rasodu : The usual place in most of the houses is some convenient corner in the living-room or a separate cook-room provided in a portion of the front verandah as most of the structures are single room tenements. Where a house has more than one room, it is the back room which is used as a kitchen and living room for the women of the household. But separate kitchens are invariably provided these days in all new structures and added to old ones by those who can afford it.

Paniara or water place : is usually kept either in the front courtyard or on one side of the verandah either made of wood or built in the wall with decorative freeze and painting. Sometimes it is located in the house itself preferably near the kitchen, and provided with shelves for keeping utensils of brass and copper.

Medo : *Medo* or loft is affixed into one of the walls and used for storing household kit, grain and grass. The term *medo* or *medi* has another meaning also when it is applied to the upper storey of a house.

Place of worship : Some houses have a separate place of worship in a corner of the house where a small *niche* is provided in the wall to keep the image of God or family deity. In most of the houses there is no specific place of worship but images of Ram, Krishna, Shanker, Ambaji and other Goddesses are invariably to be found and not infrequently in the shape of a variety of calendars sold in the market. Some houses also have a *tulsi kyaro* in the front courtyard where *tulsi* plant is worshipped.

Terrace or Agashi : Open to the sky it is usually provided in a part of one of the upper storeys which at times it entirely covered. This is considered to be an essential feature of an urban house used for drying clothes and sleeping in the open during summer. Rural houses also have this luxury wherever the village people can afford it.

House types by caste

House types vary according to caste and combine one or more of these facilities according to their social status, occupation and economic condition as will be seen from some of the instances given below :

(i) *Girasdar* : The house of a *Girasdar* or the village yeoman is a large *pucca* built multi-storeyed edifice standing in the centre of the village entered by a huge gateway or *delo* on either side of which is a *bethak*, or meeting place separated from the main house by an open courtyard. An open verandah adjoins the living rooms in front which are occupied by male members. An open *chowk* separates the male from the female apartments in the rear. Such houses are ample and spacious and provided with a separate kitchen, dining room, water room and servant's quarters cattle and grass sheds are either in the front or in the rear.

(ii) *Bania's House* : A Bania's House is a shop-*cum*-dwelling. It has more living rooms, a separate kitchen and stores with a verandah and open space in front. The Bania who is also the village *shahukar* and trades in all sorts of sundry articles of daily needs of the villager has his shop in front of his house adjoining the entrance.

Brahmin : Like a Bania's house, a Brahmin's house has more than one room and is also provided with a separate kitchen and separate living rooms.

Patidar : Amongst the cultivating classes of Gujarat, the Patidar community residing in the fertile tract of Charotar and some other areas is very wealthy because of the better returns from agriculture and extension of area under cash crops like tobacco, rice and cotton as also because of the money the members of this community earn outside India, Africa in particular. The houses of some of the Patidar families are provided with all the modern facilities of separate bath rooms, privies, store rooms, kitchen, etc. They are modern not only as regards the facilities provided but also in construction and design.

Artisan Classes : Houses of artisans such as goldsmith, potter, carpenter, blacksmith, etc., combine dwelling with workshop situated either in the front portion of the house or in open courtyard which such houses invariably possess.

Backward Classes : The house of the backward classes like Rabaris, Kolis, Kumbhars, Vaghris, Tribals and Harijans are for the most part single room tenements with verandah in front usually located at the entrance to or outskirts of the village.

Increasing efforts are being made now-a-days to improve the living conditions of the Scheduled Castes and Scheduled Tribes as well as other backward classes through a number of schemes formulated by Government for providing them with better houses well ventilated and properly lighted and having ample accommodation. The necessity of better housing has been amply realised by these communities who take full advantage of these schemes by getting financial aid in the shape of loan and subsidy offered. The houses which have thus come into existence are better planned, more sanitary and hygienic and provide greater comforts than those in which they were housed before. Even the existing houses of some of the less advantageous communities are far better and cleaner than those of the so-called higher classes. It has been found that Vaghris and Harijans who ply occupations which are by their very nature filthy live in far better and cleaner surroundings than those who are economically well placed and boast higher social status.

Village Vigodi—Taluka Nakhatrana, District Kutch

This village presents a good layout. The streets are fairly large and well planned with houses in linear clusters constructed in rows parallel to each other. Houses are built of stone and lime or mud masonry and have inclined roofs with double slopes covered with country tiles. The Girasias, Banias, Soni or goldsmiths live in the central part of the village; then come houses of Patidar and Kanbi cultivators followed by those of village artisans, hutments of Harijans being at one end outside the village. While the village *Chora* is in the middle of the village; temples of different castes and communities are also located opposite to the local office of the Public Works Department with mosques in the muslim locality, the temple of Hanuman, the gaurdian deity of the village is as usual at the entrance of the village.

Village Abhapur—Mahal Vijaynagar, District Sabarkantha

This is a tribal village inhabited by Bhils. No regular village site with isolated hutments constructed in the midst of cultivated fields. The houses are built of clay or bamboo and covered by country tiles or thatch. Every house invariably has an open compound in front and a cattle shed on one side.

Village Jesawada—Taluka Dohad, District Panchmahals

This is a tribal village inhabited by Bhils. One central road passes through the village on both the sides of which the houses are built partly in shapeless clusters and partly in linear clusters. A village pond, a temple of Hanuman, panchayat office and a dispensary are at a point where the village settlement begins. It has two Harijanvas on either side of the village isolated from the main habited area, as different denominations of Harijans, namely Bhangis, Vankars and Chamars do not live side by side but have their own separate settlements. Village *Chora* and police station are located outside the village. The Bhils, village artisans and other classes live in groups of their own castes.

Houses are built of rubble and clay or mud and covered with country tiles or thatched roofing. Roofs are inclined having double slopes.

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Village Kajali—Taluka Dharampur, District Surat

Houses stand in the midst of survey numbers. They are scattered into groups separated by well defined boundaries having separate localities called *Faliu* such as Phanas Faliu, Patel Faliu, Khadki Faliu, etc. While each *Fali* has a separate well, some also have a separate temple dedicated to Hanuman or to some other deity. The houses are built of mud masonry covered with country tiles or bamboo and leaves thatched with grass and wattle.

Village Jambur—Mahal Talala, District Junagadh

Built in shapeless and isolated clusters, the village is situated in the Gir forest on the bank of the river Saraswati, and inhabited by the Scheduled Tribe called 'Siddis'. It has a Sanskar Kendra, a Durgah of Nagarcha Pir and a temple of Hanuman.

Village Kochariya—Taluka Dholka, District Ahmedabad

The village is in shapeless clusters of houses. A central road passes from one end to another intersected by small and narrow lanes. Houses are built side by side, or back to back in rows with open space in front. While Rajputvas where the landholders live is in the centre, Bhangivas and Vaghrivas are at the outskirt of the village. The school building and office of the co-operative society are situated in open space near Bhangivas. Houses are built of mud or brick and mortar, plastered with cow-dung or lime. The roofs are inclined, double sloped and covered with country tiles.

Village Velavadar—Taluka Bhavnagar, District Bhavnagar

This village has been settled on the pattern of rectangular clusters formed on the basis of castes and communities, those of the higher classes occupying the advantageous location which is usually the centre of the village. This is a typical Bhal village in the midst of saline land. Because of the extensive grasslands in the neighbourhood of the village, separate grass godowns are provided at one end of the village and a police line at the other; on the third the rest house and cattle pound; the community building called the *chora* being in the centre. The houses are built of mud and country tiles. All public buildings are *pucca* structures built of stone or bricks. But those of the inferior castes have roofs of thatch and walls of mud.

Village Handod—Taluka Sankheda, District Baroda

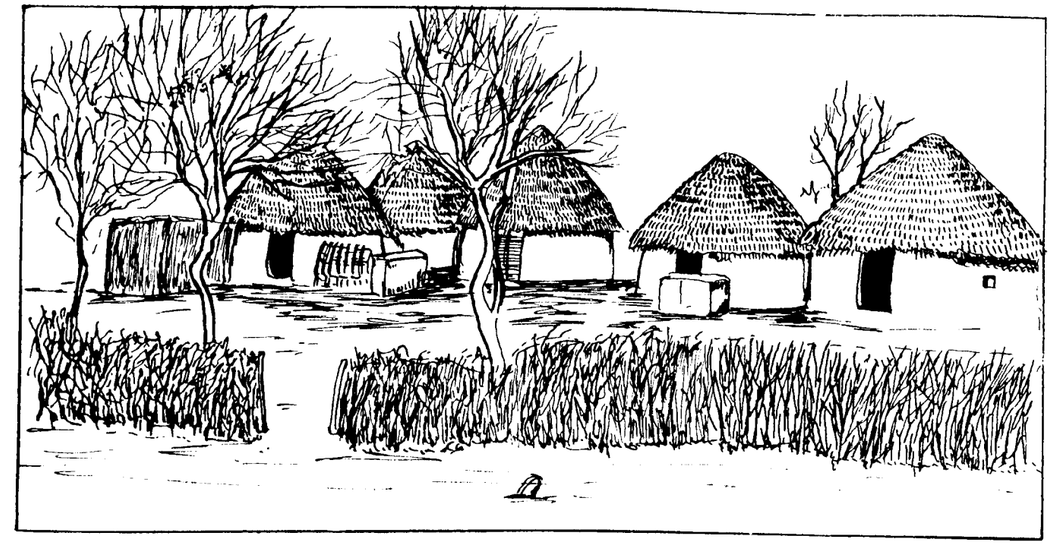
The village is built in linear order. *Wadas* or plots of open land attached to agricultural holdings are scattered on the outskirts of the village. Houses are built of bricks and mortar and covered with C.I. sheets with an open courtyard in front. But those of the poorer classes have walls of mud. Structures with more than one storey provided with all the modern conveniences built in modern fashion with free use of cement have also come up in recent times. The village has a library and a primary school located after the hutments of Harijans outside the village. Harijans and non-Harijans have separate wells for drinking water.

Village Vankia—Taluka Babra, District Amreli

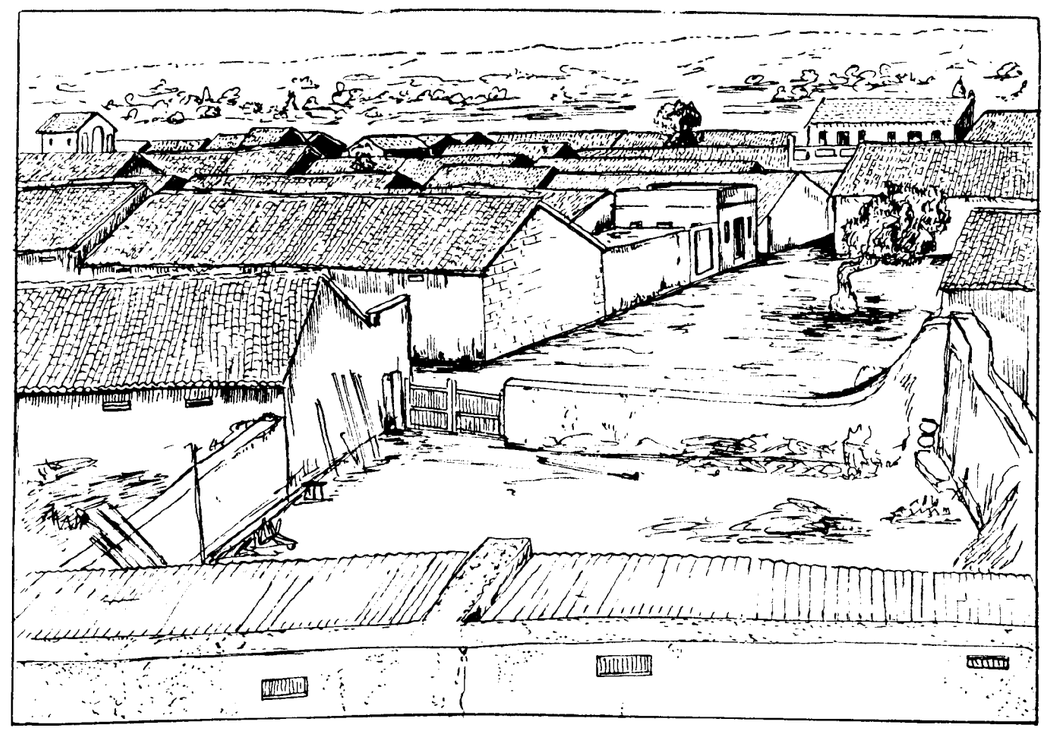
This is a typical Girasdari village built in the order of linear construction, enclosed by a stone fortwall, and entered by a central gate. The main road passing through the village is fairly wide intersected by streets, lanes and bye-lanes. The central portion of the village site is occupied by a huge structure called Darbargadh or mansion of the landlord surrounded by the houses of his relatives and flanked by those of Kolis and potters who render domestic service to them. Then follow houses of cultivators and artisan classes, Harijanvas and Rabarivas being on either side of the village. A community centre or *Chora* occupies the usual central place. Panchayat Office is located in one of the main gateways and the village school immediately near the gateway but inside the village. The village well is outside the fortwall with a water trough attached to it. At some distance from the fortwall is a temple dedicated to the village deity. Memorial stones called *palias* dedicated to those who lost their lives in some good cause are also to be found at the entrance to the village.

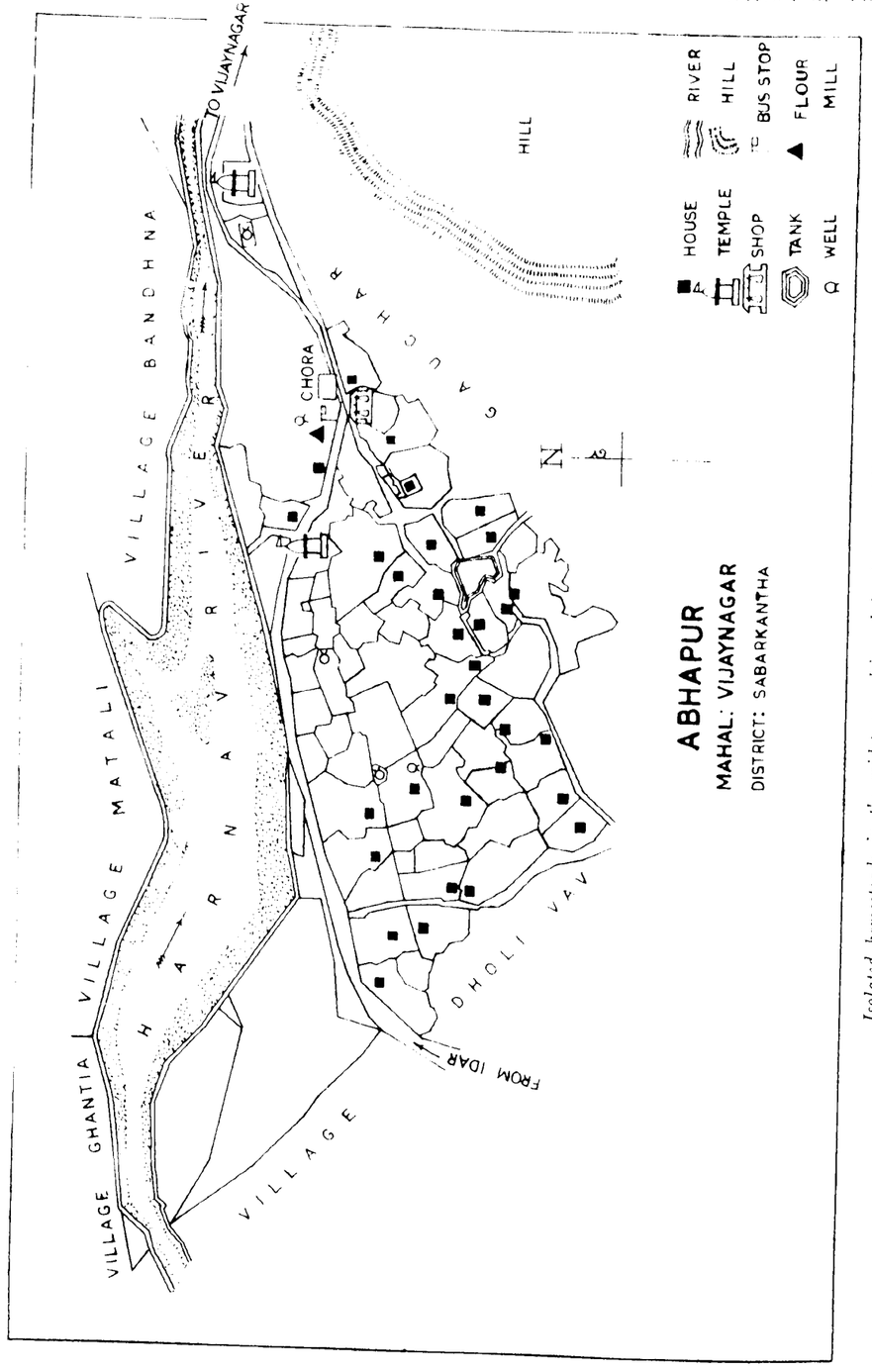
Village Divel—Taluka Borsad, District Kaira

Built in the style of linear clusters of square types with narrow lanes in between, the village presents a rectangular shape. Houses are built in rows and grouped in localities according to castes and communities. Open courtyard both in front and rear attached to each house is a special feature of housing in this village. Separate *wada* or open plot of land attached to the agricultural holding for storage of grass and manure is another distinguishing feature. The houses of the higher castes are in the centre, followed by those of artisans with the hutments of Vaghris on the outskirts of the village. The houses are constructed side by side, but separated at the back either by a backyard or a *naveli*. Built of mud masonry they are also intermixed with *pucca* structures of modern type. Temples of Shiva, Balia Dev, Verai Mata and Jogini Mata are located at the entrance of the village where a well with water tap is also provided.

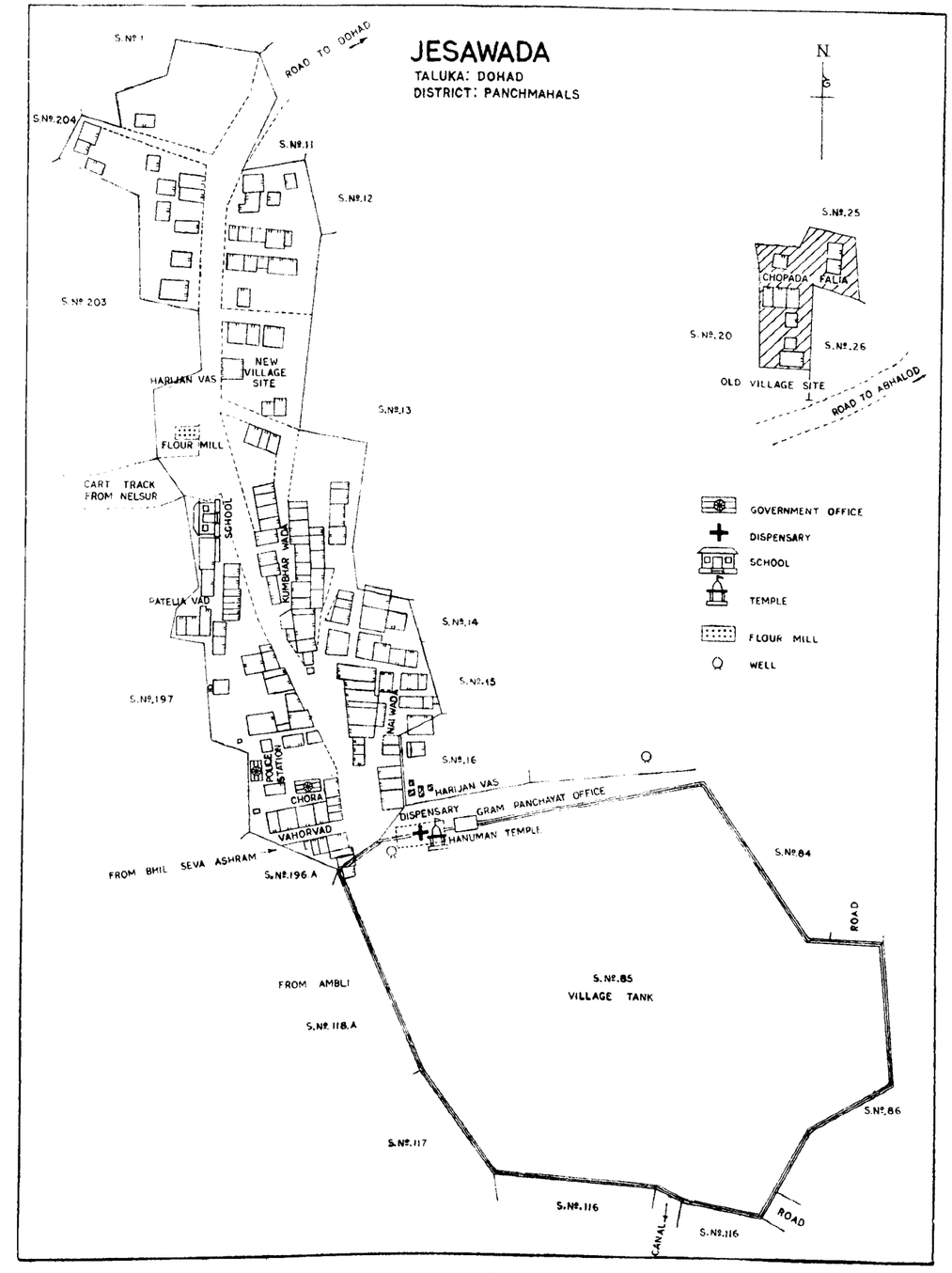


1. Village : Vigodi, Taluka : Nakhatrana, District : Kutch

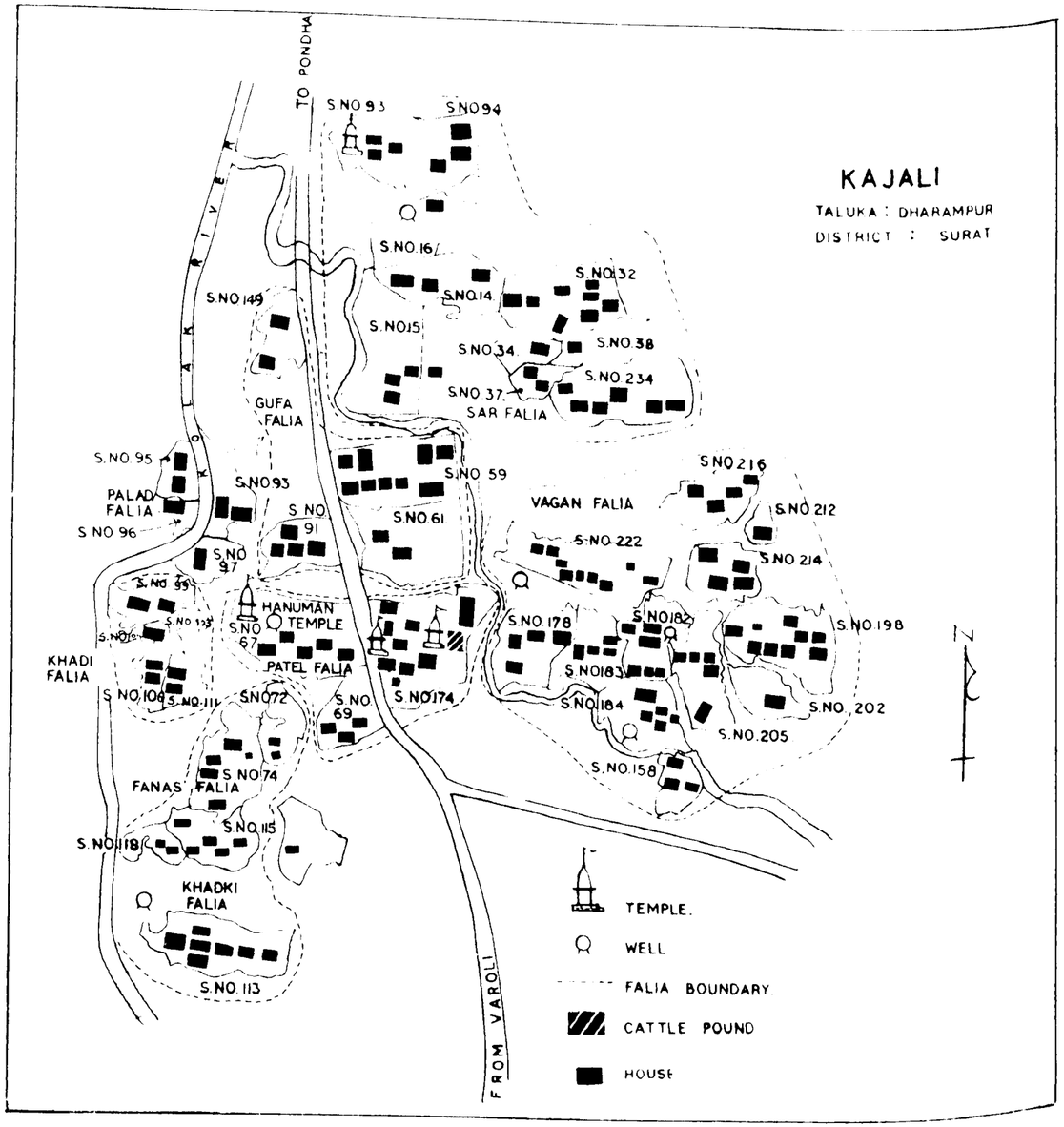




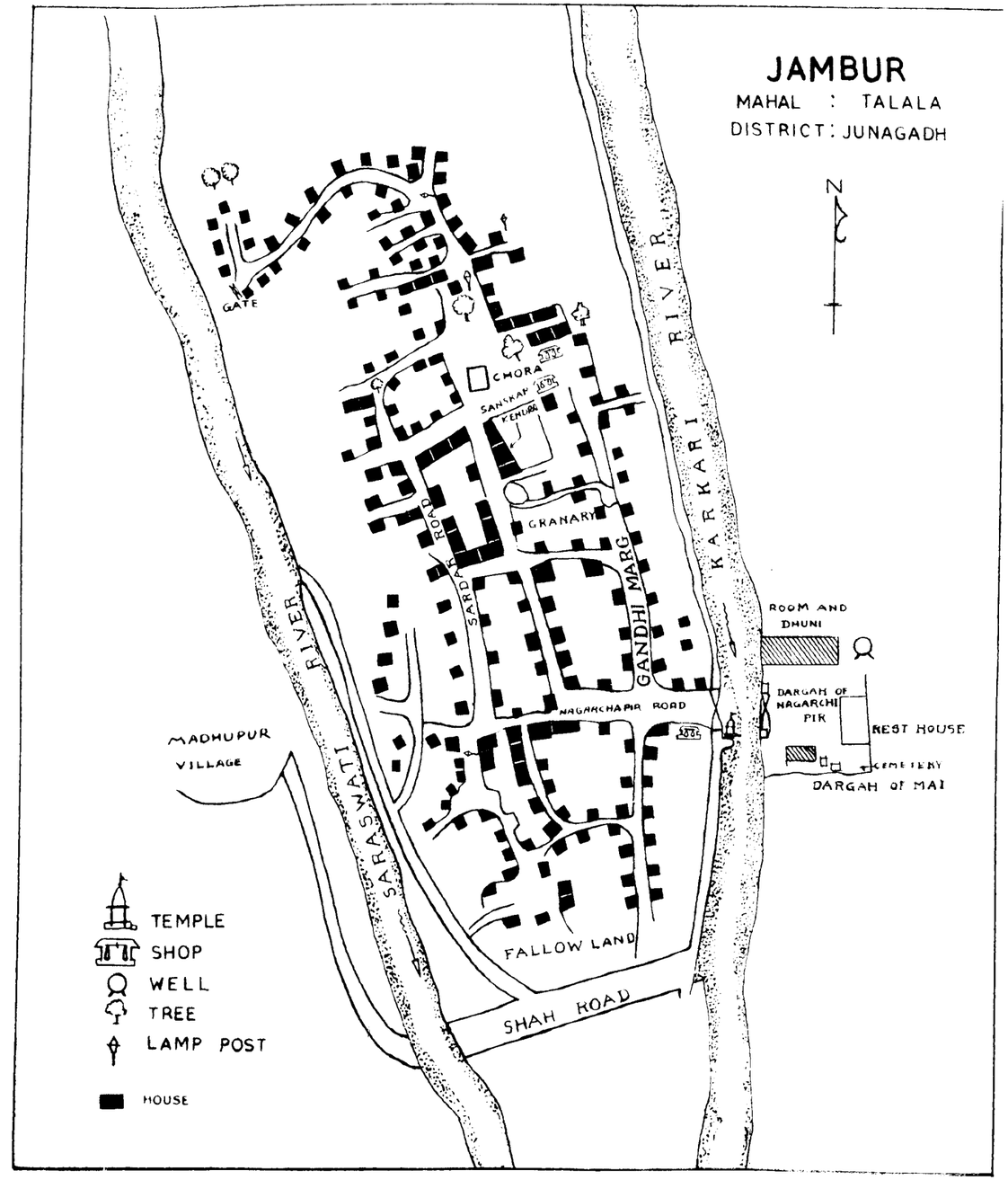
Isolated homesteads in the midst of cultivated land in an African village



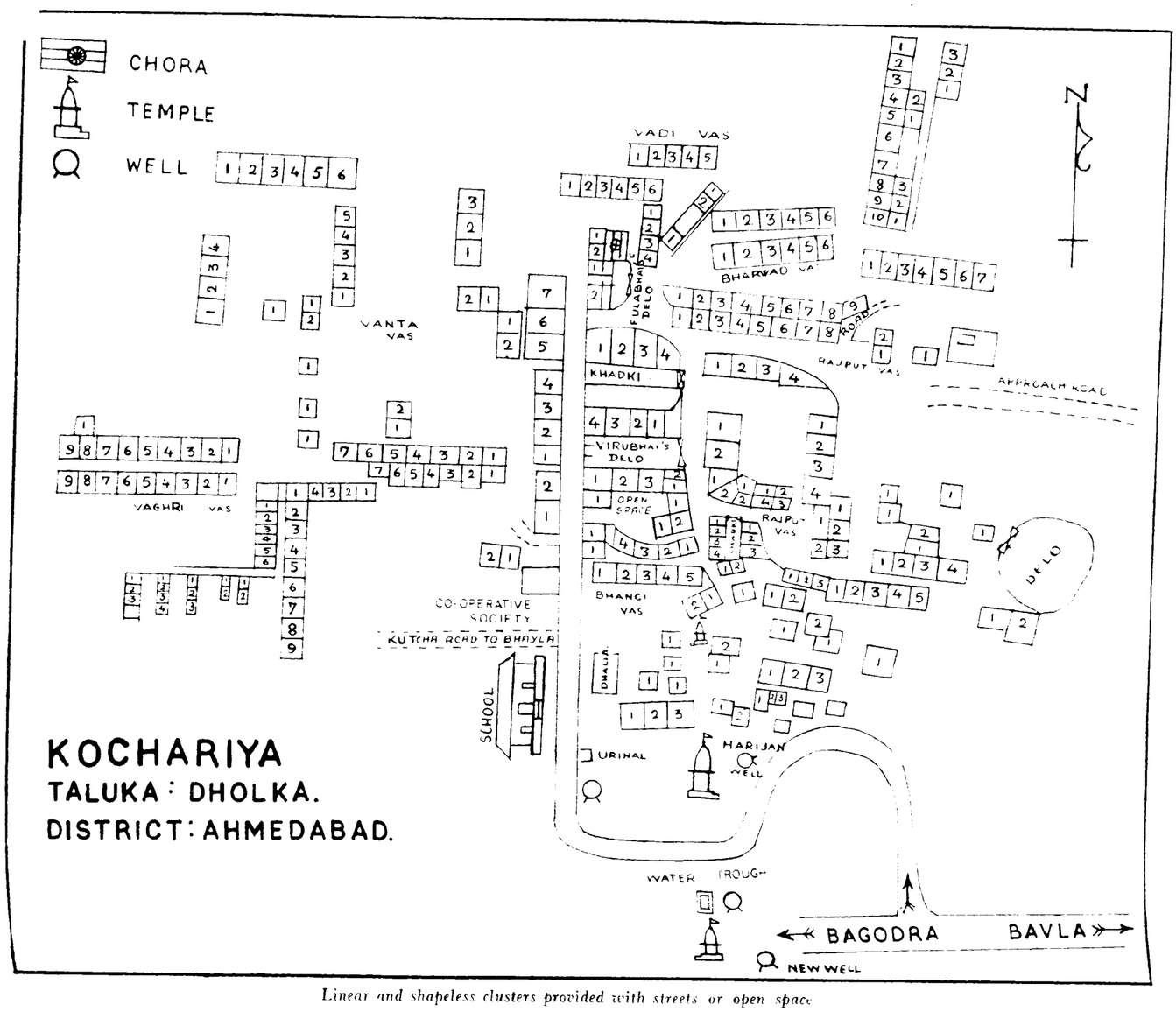
Old and new village sites with houses grouped in linear clusters on either side of a main street



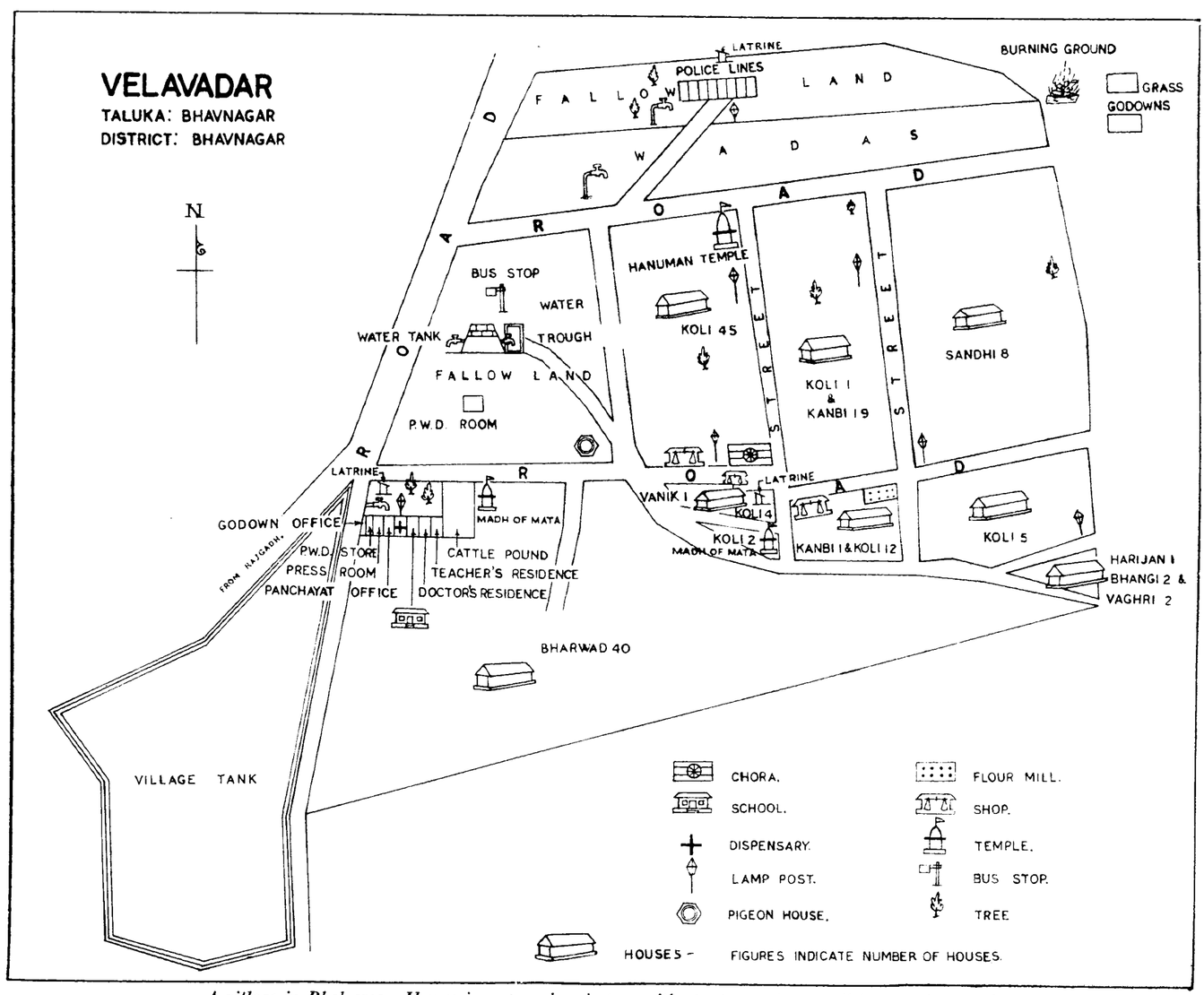
A tribal village - Scattered clusters in the midst of survey numbers



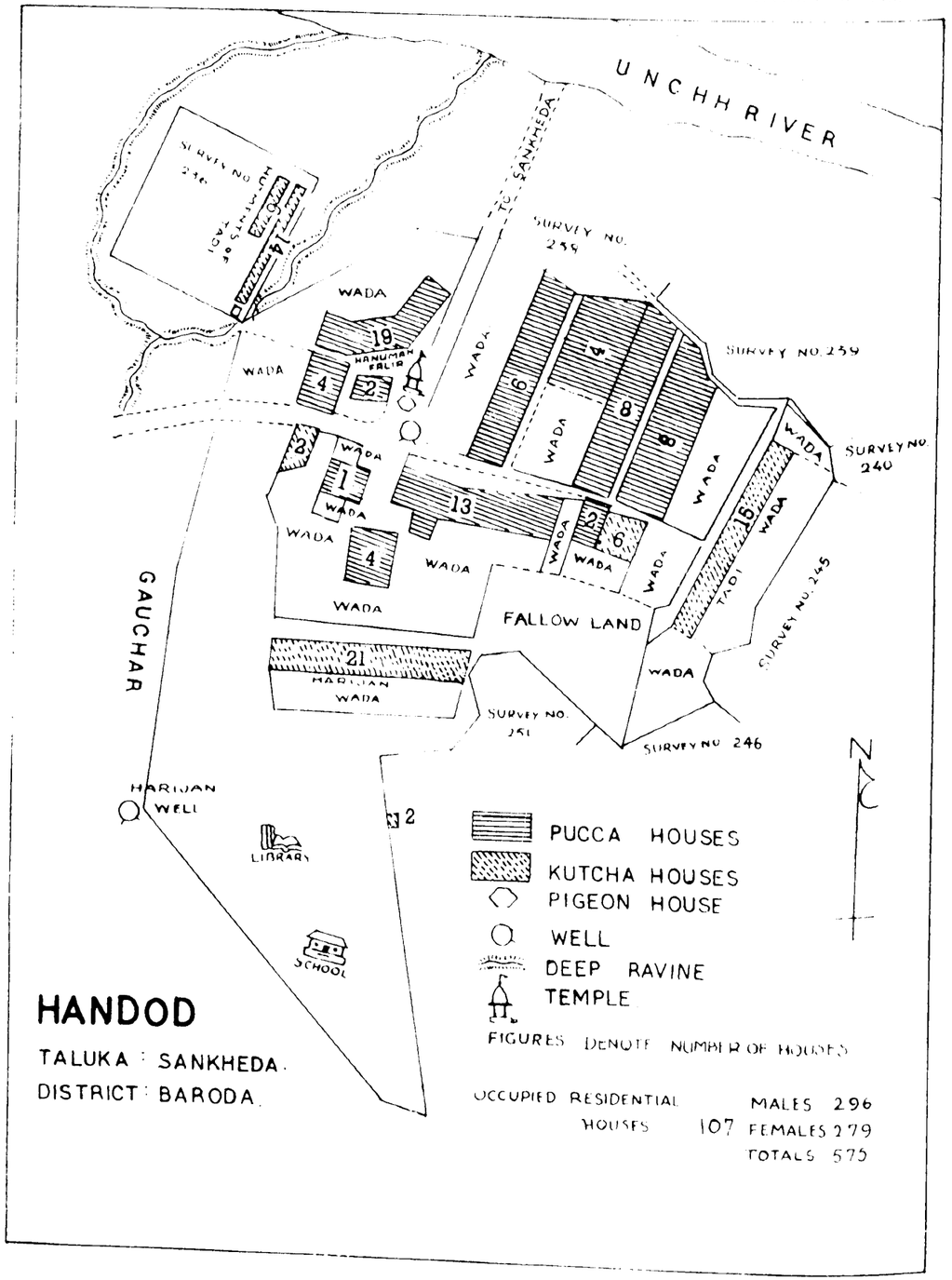
Rectangular clusters of houses inhabited by Siddis in Gir forest



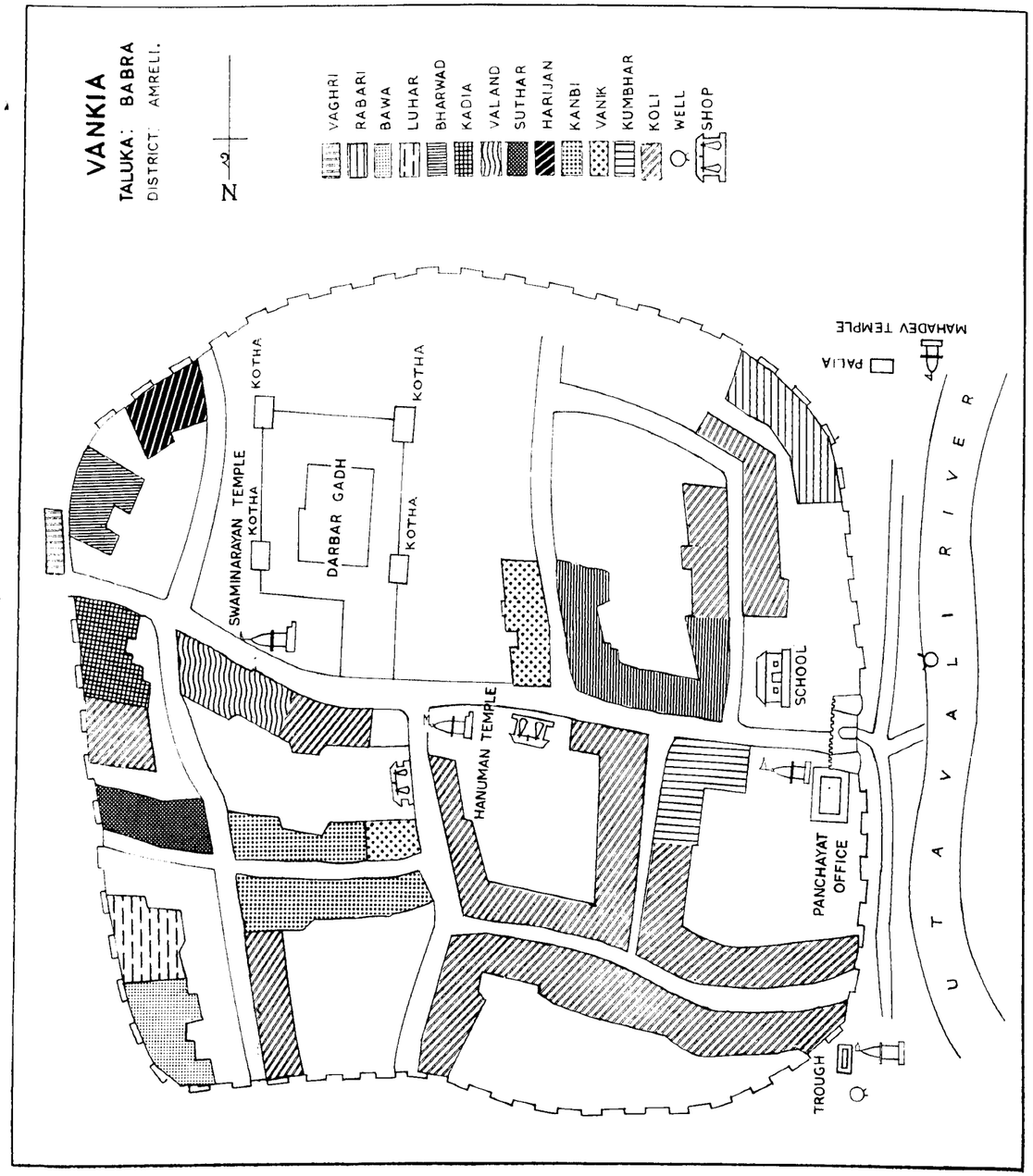
Linear and shapeless clusters provided with streets or open space



A village in Bhal area—Houses in rectangular clusters with streets running parallel or at right angle

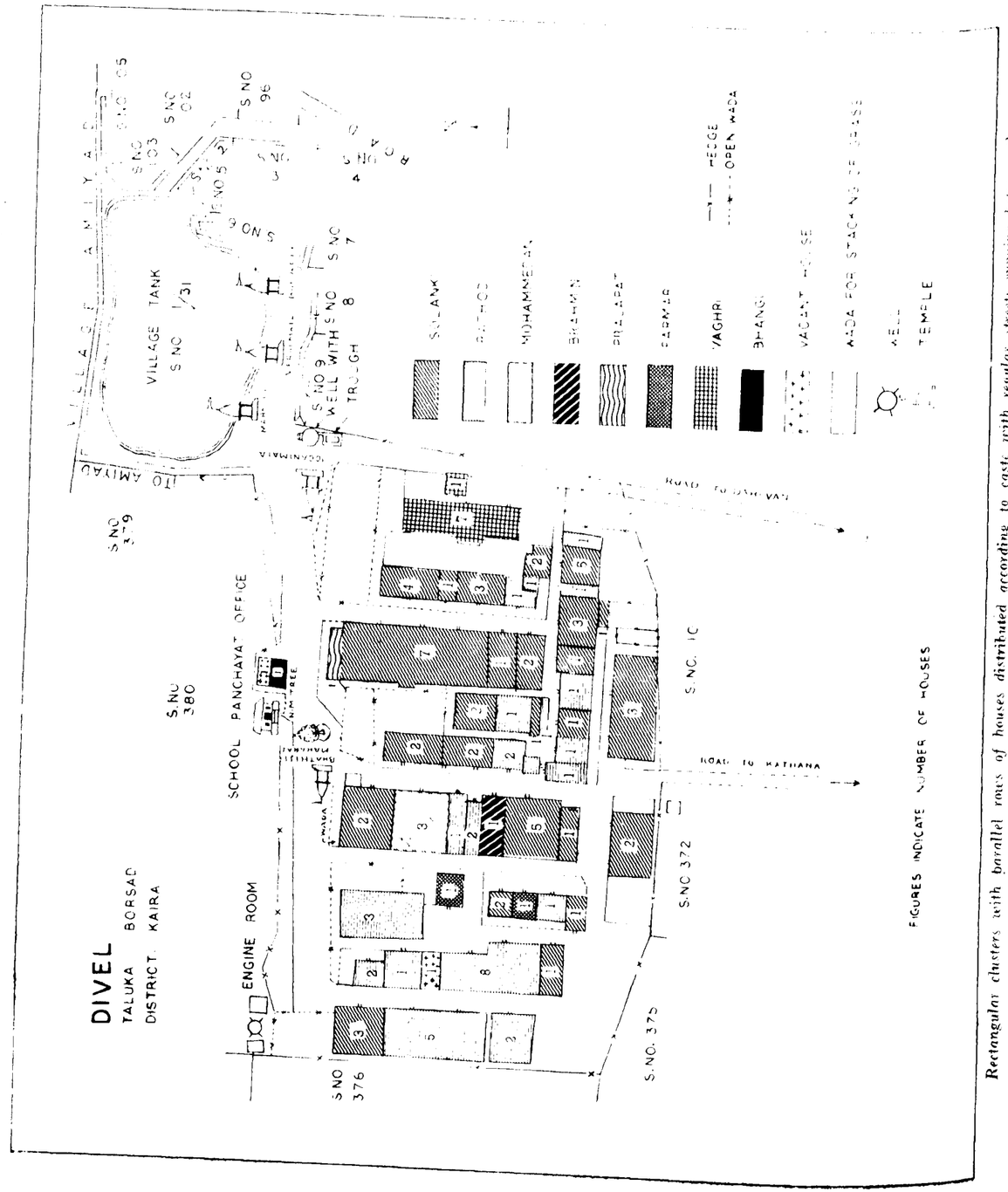


Houses in rectangular clusters with "wadas" or farm yards attached to houses

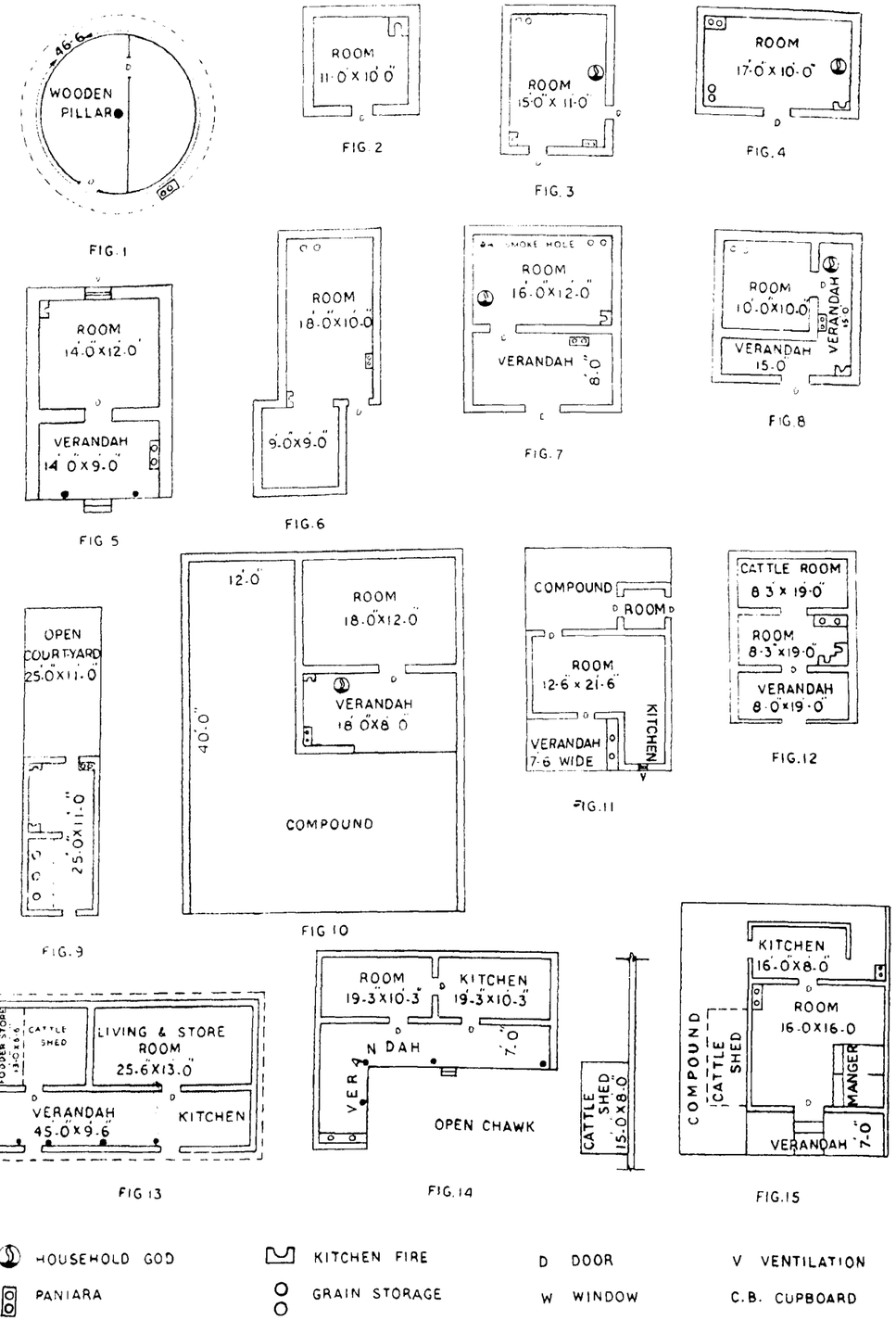


Houses in square clusters enclosed by a fortwall and distributed into localities according to caste with regular streets and open space

LAYOUT OF VILLAGE SITE



Rectangular clusters with parallel rows of houses distributed according to caste with regular streets running between them



Single room dwellings with or without verandah, kitchen, courtyard, cattle-room or shed inside or ***outside the house***

Ground Plans of Rural Houses

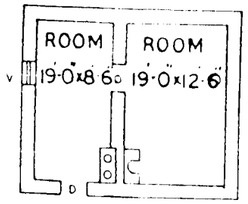


FIG. 1

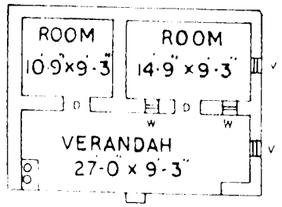


FIG 2

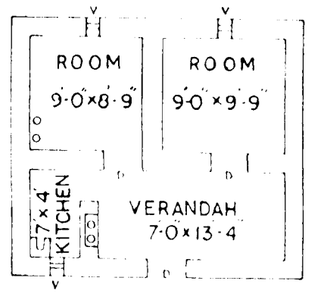


FIG 3

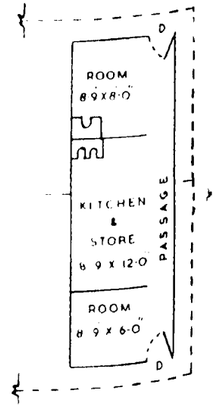


FIG 4

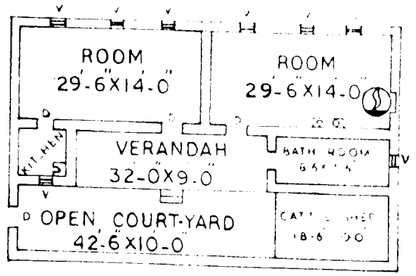


FIG. 7

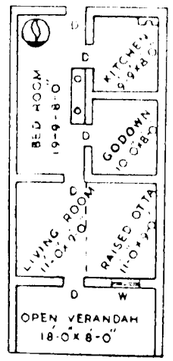


FIG 6

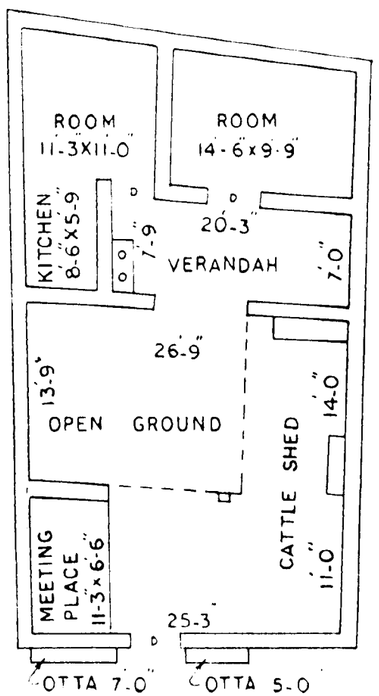


FIG 9

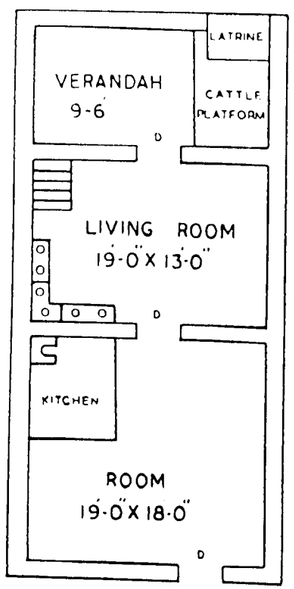


FIG 8

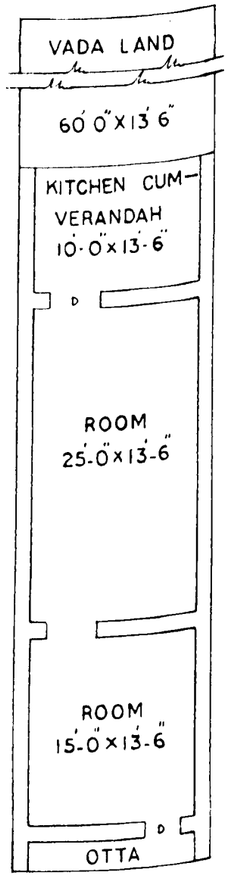
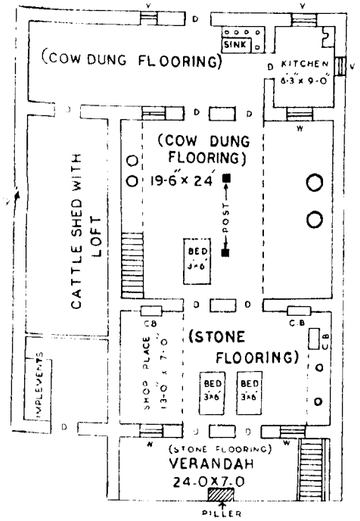


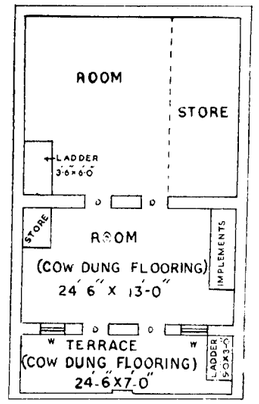
FIG 5

Two rooms dwelling

Ground Plans of Rural Houses

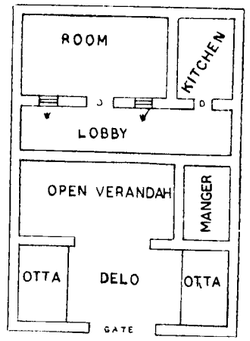


GROUND FLOOR

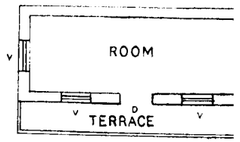


FIRST FLOOR

FIG. 1

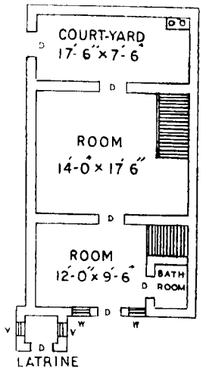


GROUND FLOOR

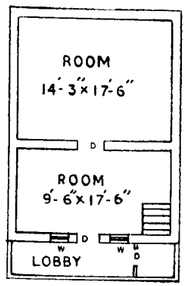


FIRST FLOOR

FIG 2

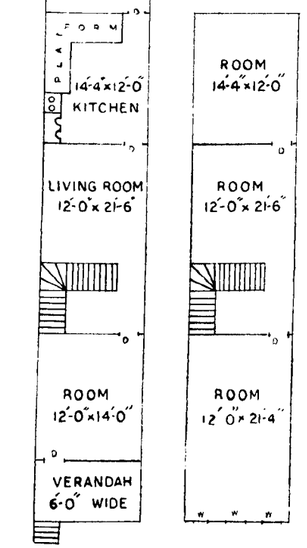


GROUND FLOOR



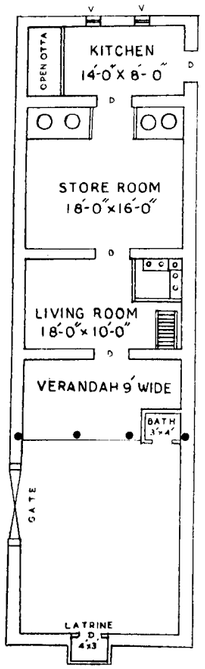
FIRST FLOOR

FIG. 3

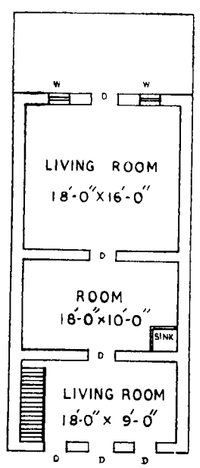


GROUND FLOOR FIRST FLOOR

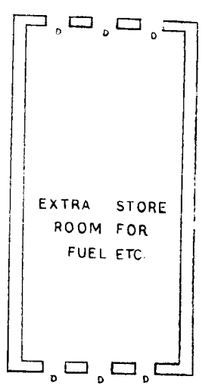
FIG. 4



GROUND FLOOR



FIRST FLOOR



SECOND FLOOR

FIG. 5

Storeyed Houses

GROUND PLANS OF RURAL HOUSES

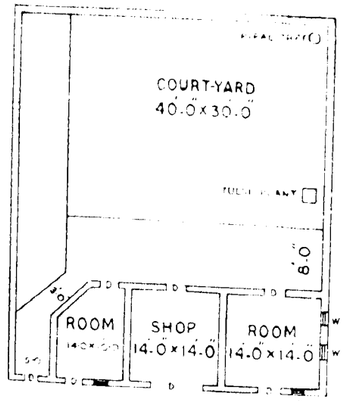


FIG 2

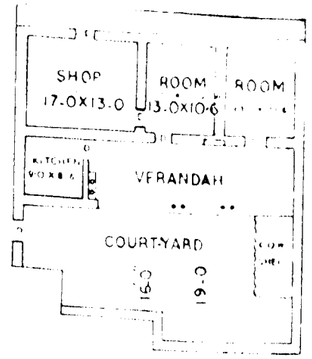


FIG 1

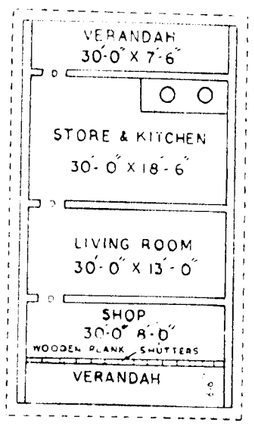


FIG 3

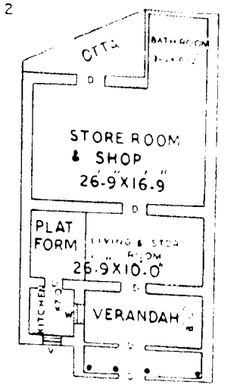


FIG 4

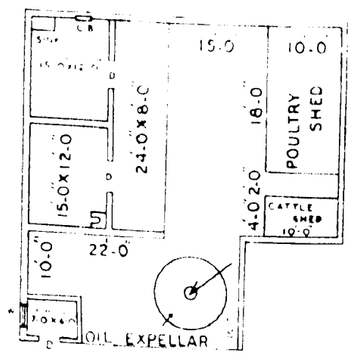


FIG 5

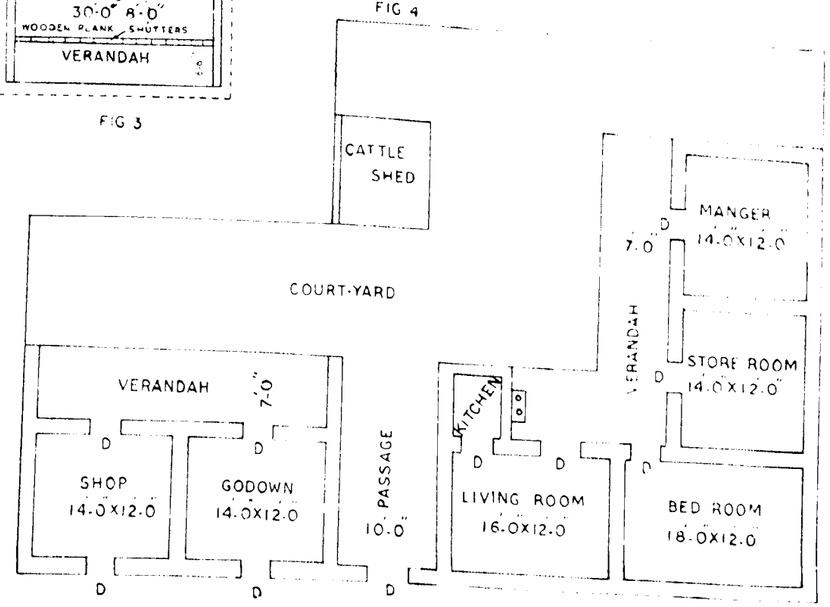
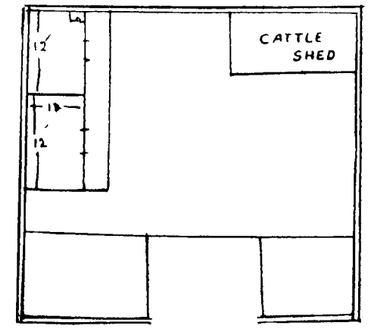
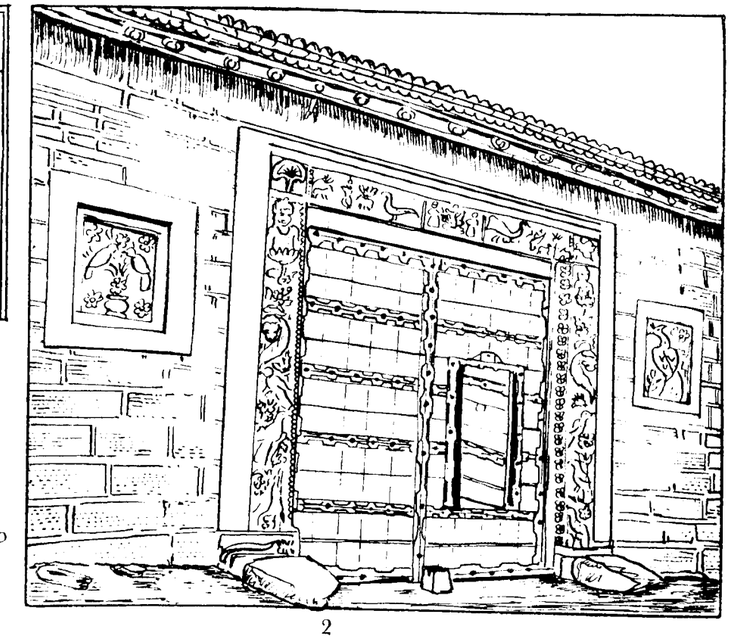


FIG 6

Workshop and shop-cum-dwellings

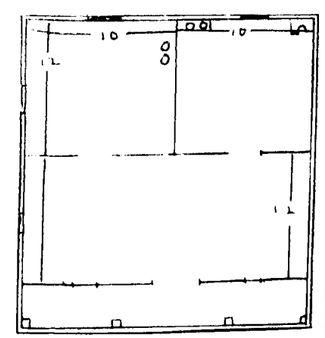
1

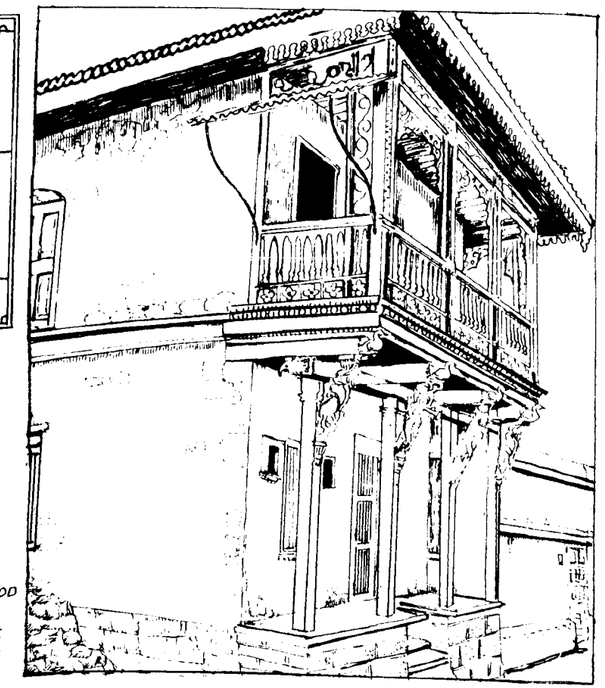




DISTRICT: BHAVNAGAR
TALUKA: TALAJA
VILLAGE: UNCHADI
LOCATION OF HOUSEHOLD GOD
" " WATER PLACE
" " KITCHEN FIRE
GRAIN STORAGE

2

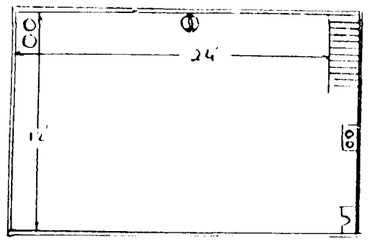




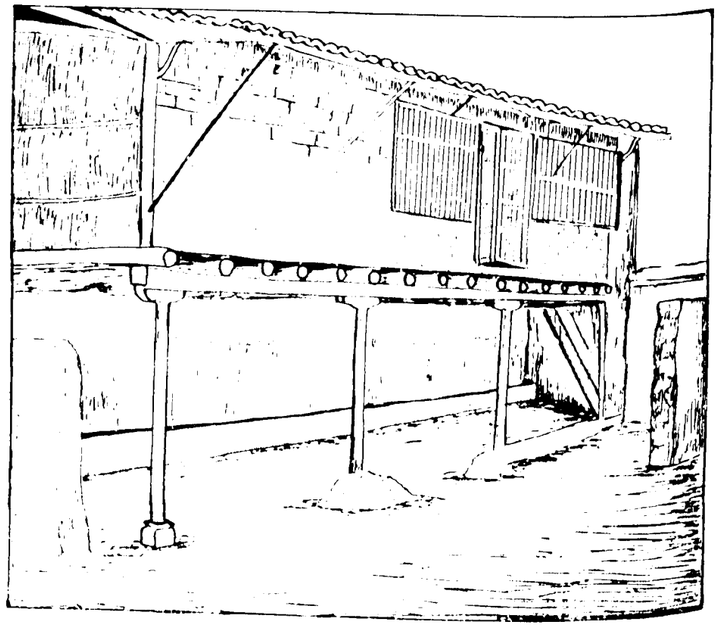
DISTRICT: BHAVNAGAR
TALUKA: BHAVNAGAR
VILLAGE: KOLIAK
LOCATION OF HOUSEHOLD GOD
" " WATER PLACE
" " KITCHEN FIRE
GRAIN STORAGE

1, 2 Dwelling [illegible]

1

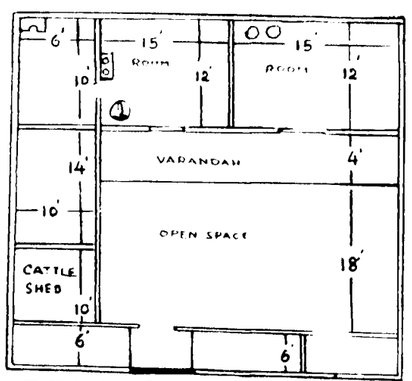


1st floor

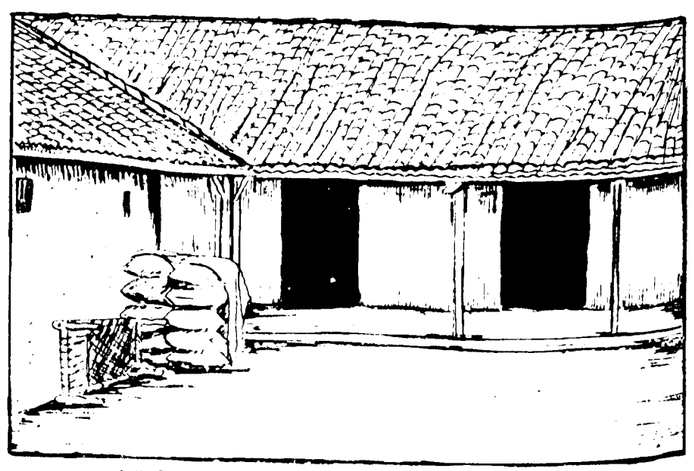


DISTRICT: BHAVNAGAR
MAHAL: GADHADA
VILLAGE: UGAMEDI
CENSUS H.NO 123
OWNER: TRIKAM RUDA
LOCATION OF HOUSEHOLD GOD
" " WATER PLACE
" " KITCHEN FIRE
" " GRAIN STORAGE

2

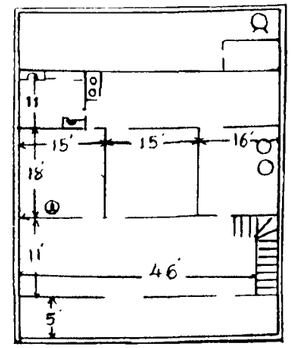


DISTRICT: RAJKOT
TALUKA: GONDAL
VILLAGE: JAMVALI
LOCATION OF HOUSEHOLD GOD
" " WATER PLACE
" " KITCHEN FIRE
" " GRAIN STORAGE

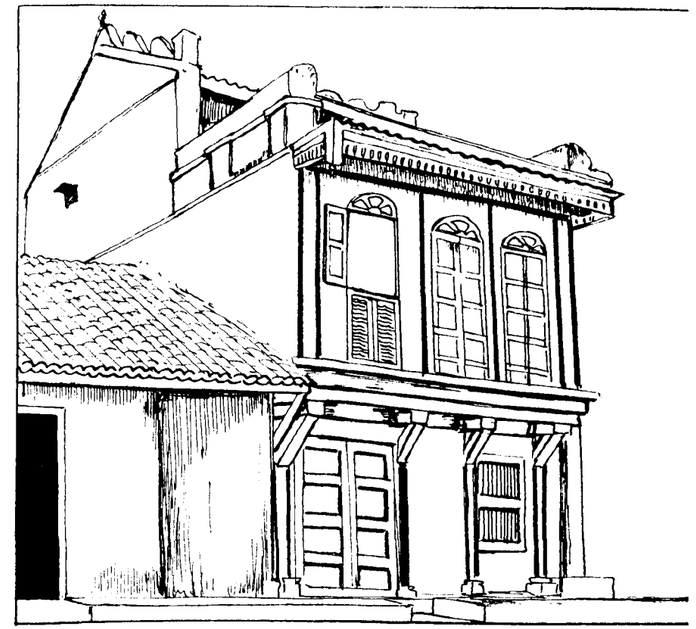


1-2 Dwellings with brick walls and country tiles

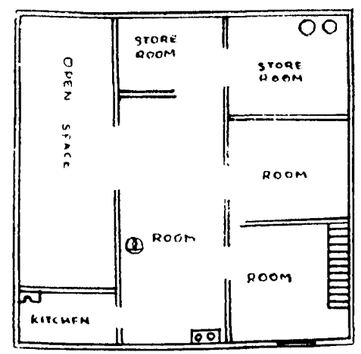
1



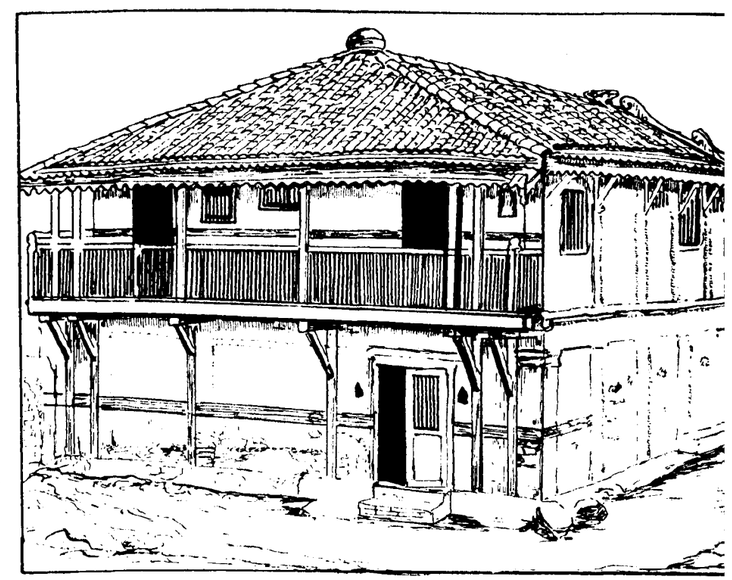
DISTRICT: BROACH
TALUKA: BROACH
VILLAGE: CHAVAJ
OWNER: CHHAGANBHAI K. PATEL
LOCATION OF HOUSEHOLD GOD
" " WATER PLACE
" " KITCHEN FIRE
GRAIN STORAGE
WELL



2

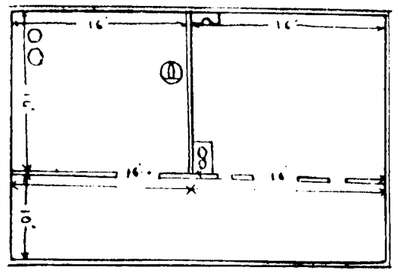


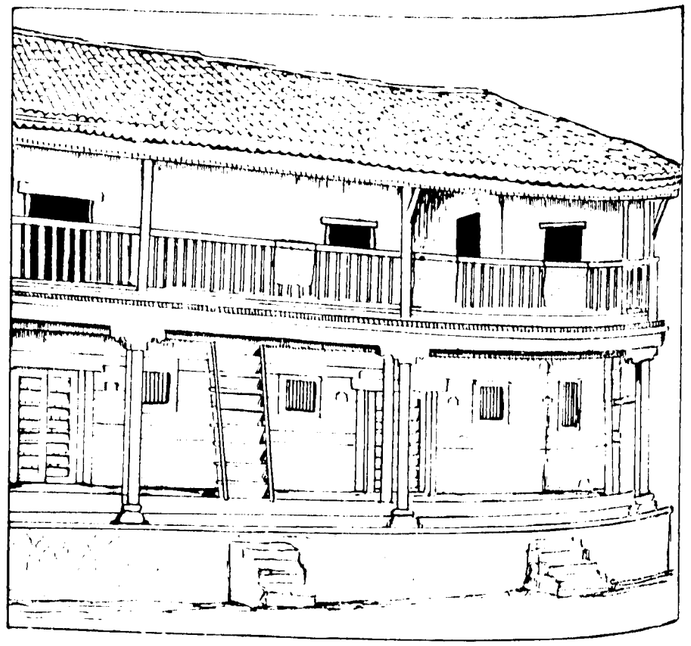
DISTRICT: BHAVNAGAR
TALUKA: BHAVNAGAR
VILLAGE: BHANDARIA
CENSUS H.NO. 117
OWNER: BHASKARRAI REVASHANKAR TRIVEDI
LOCATION OF HOUSEHOLD GOD
" " WATER PLACE
" " KITCHEN FIRE
" " GRAIN STORAGE



1-2 Dwellings with brick walls and roofs covered with terrace, C.I. sheets or country tiles

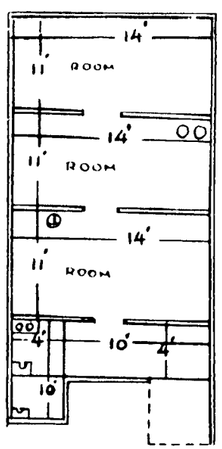
1

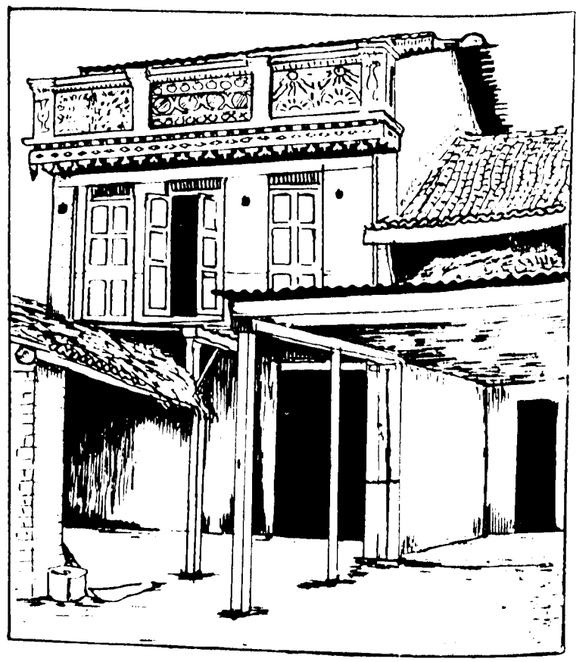




DISTRICT: BHAVNAGAR
MAHAL : VALLABHIPUR
VILLAGE: CHAMARDI
LOCATION OF HOUSEHOLD GOD
" " WATER PLACE
" " KITCHEN FIRE
" " GRAIN STORAGE

2





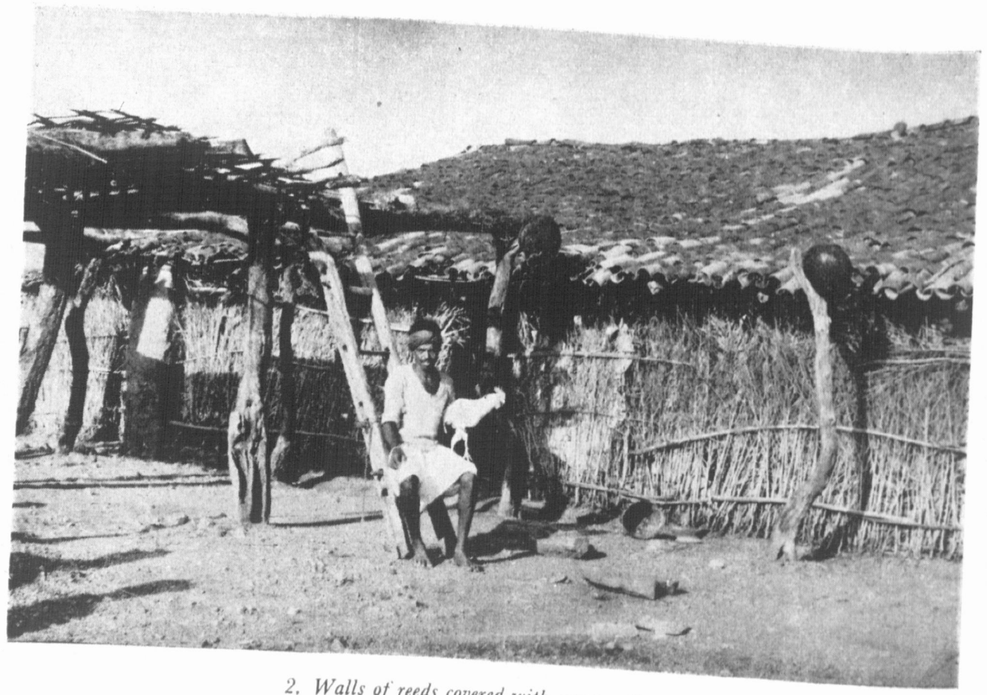
DISTRICT : AHMEDABAD
TALUKA : DASKROI
VILLAGE : SOLA
CENSUS H NO. 188
OWNER : MANGALBHAI KALIDAS
LOCATION OF HOUSEHOLD GOD
" " WATER PLACE
" " KITCHEN FIRE
GRAIN STORAGE

1-2 Dwellings with brick walls with terrace or country tiles

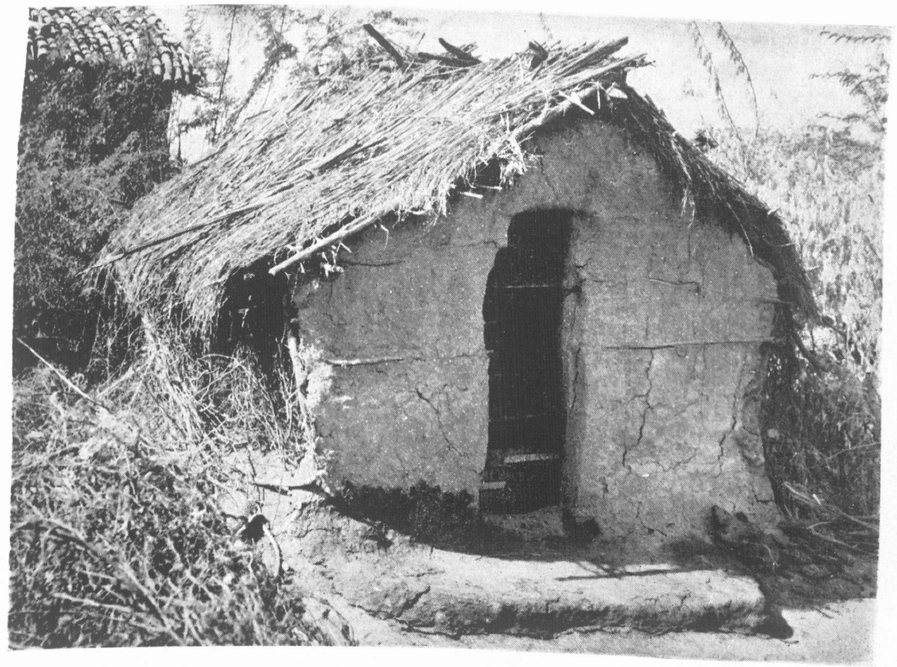
1. The Houseless with a camp in the open air

2. No Regular Room

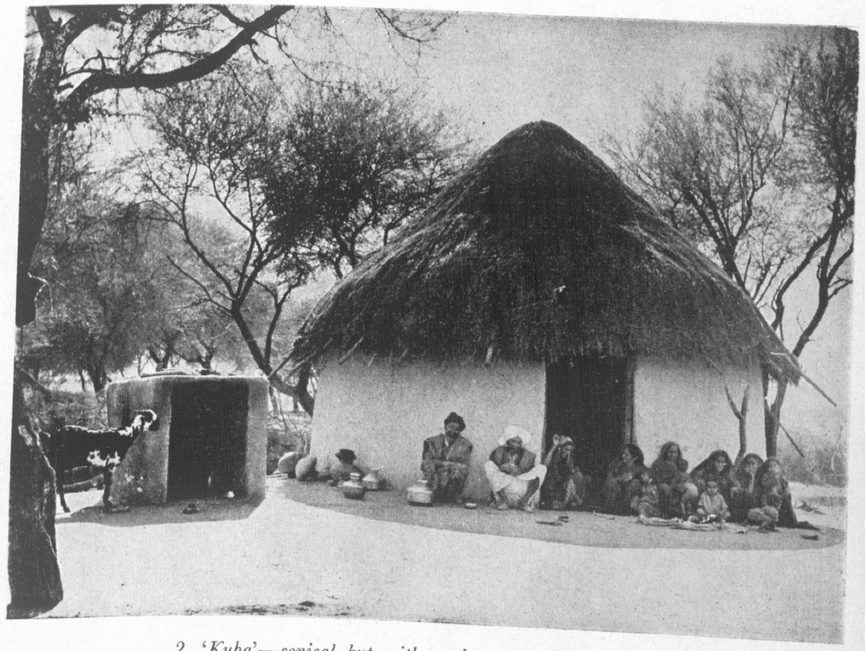
1. Bamboo walls and thatched roof



2. Walls of reeds covered with country tiles



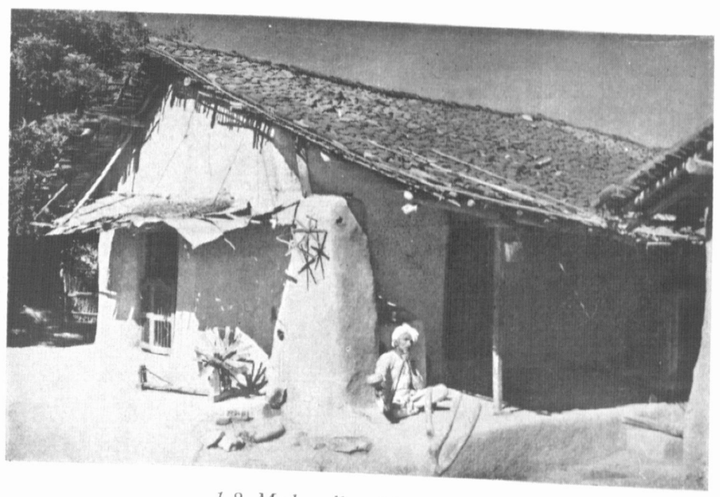
1. Bamboo walls plastered with clay and cow dung covered with thatched roof



2. 'Kuba'—conical hut with mud walls and thatched roof

1

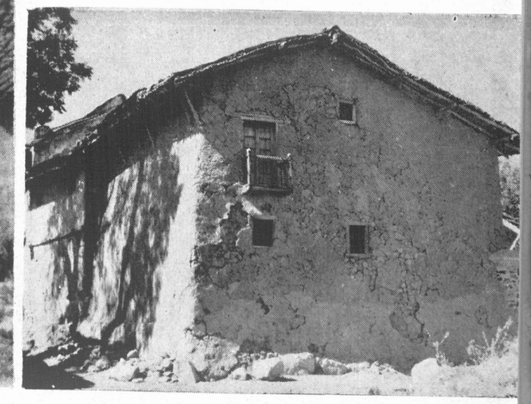
2



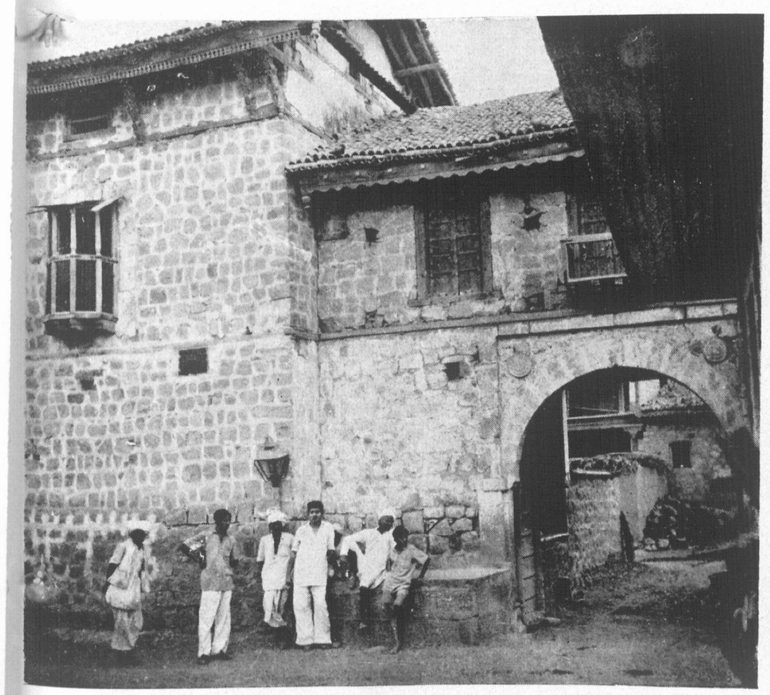
1-2 Mud walls with country tiles

1

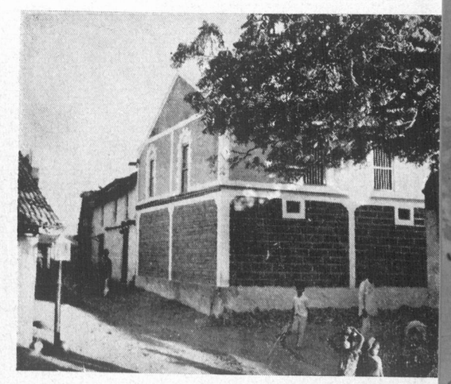
2



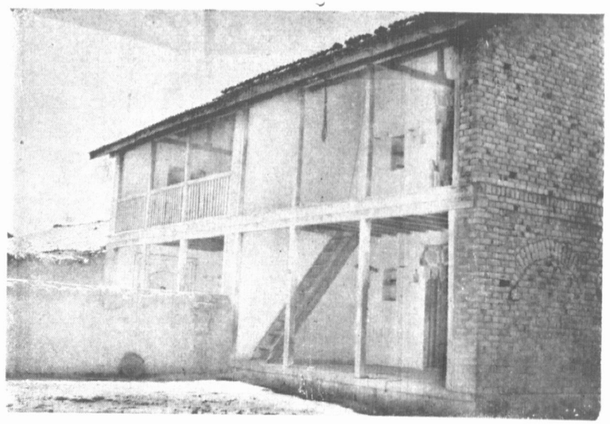
3



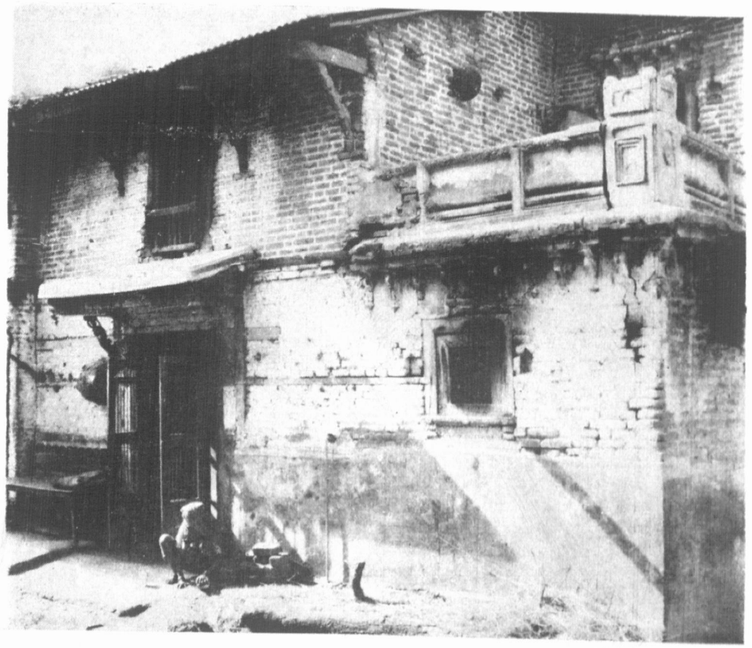
4



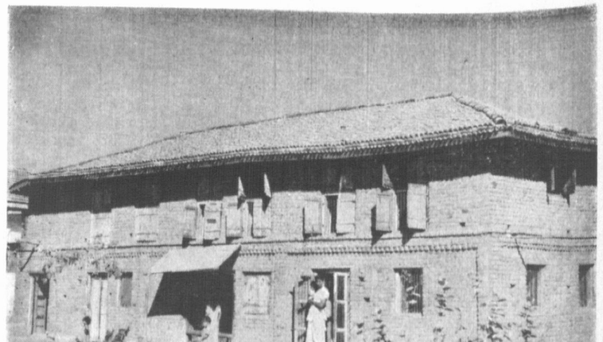
1-4 Stone walls covered with country or Mangalore tiles



1



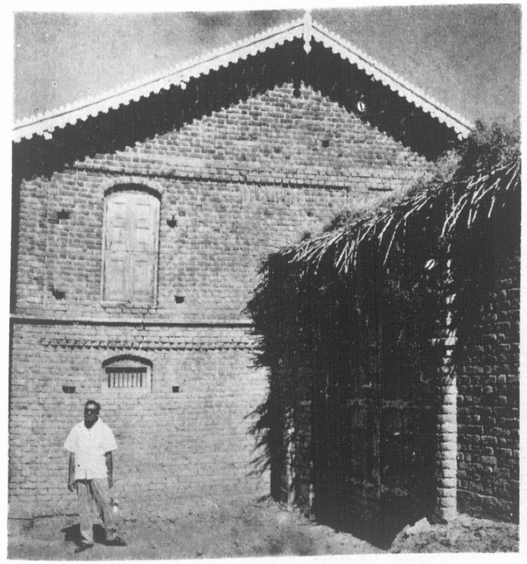
2



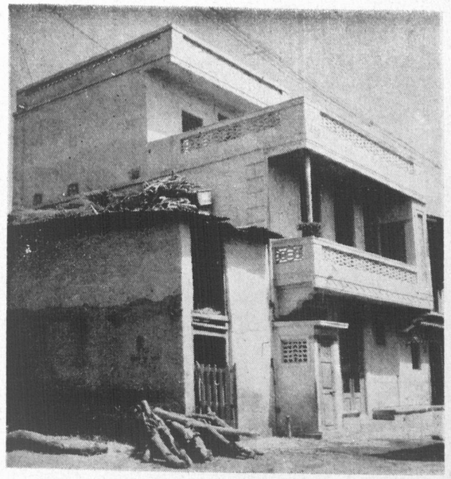
3

1-3 Brick walls covered with country tiles, C.I. sheets or terrace

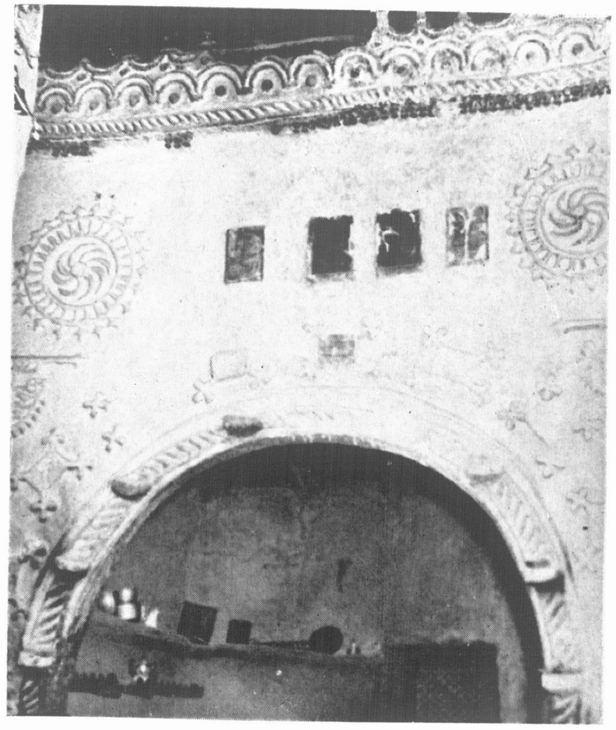
1. Brick walls and tiled roofs with multiple slopes



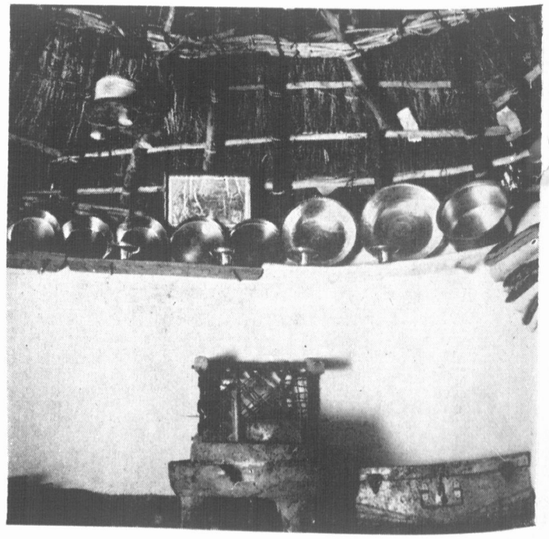
2. Brick walls with Mangalore tiles or thatched roofing



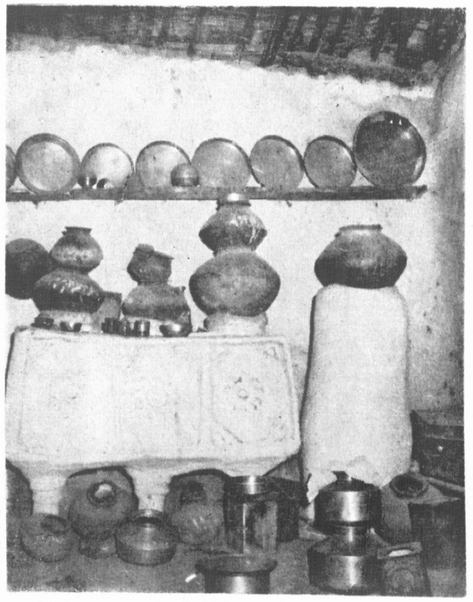
3. Brick walls plastered with cement with R.C.C. terrace



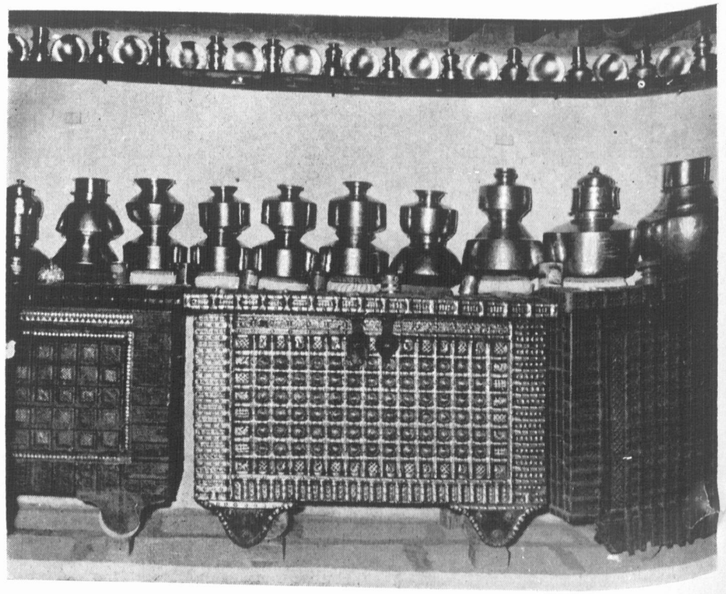
1. *Interior of a Mer house*



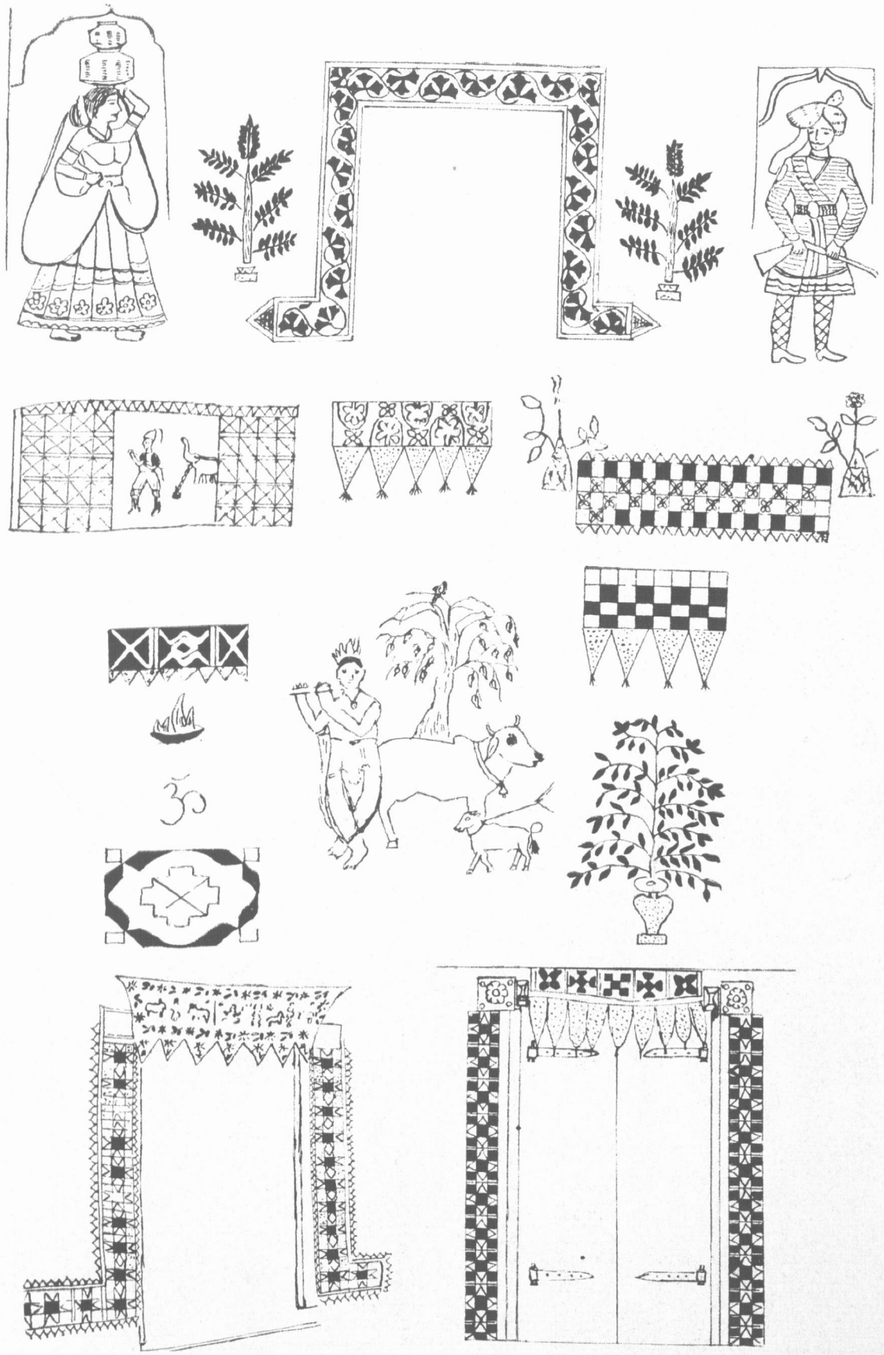
2. *Interior of a 'kuba' or cylindrical hut*



3. *Interior of a house with storage receptacles, utensils, earthen pots, etc.*

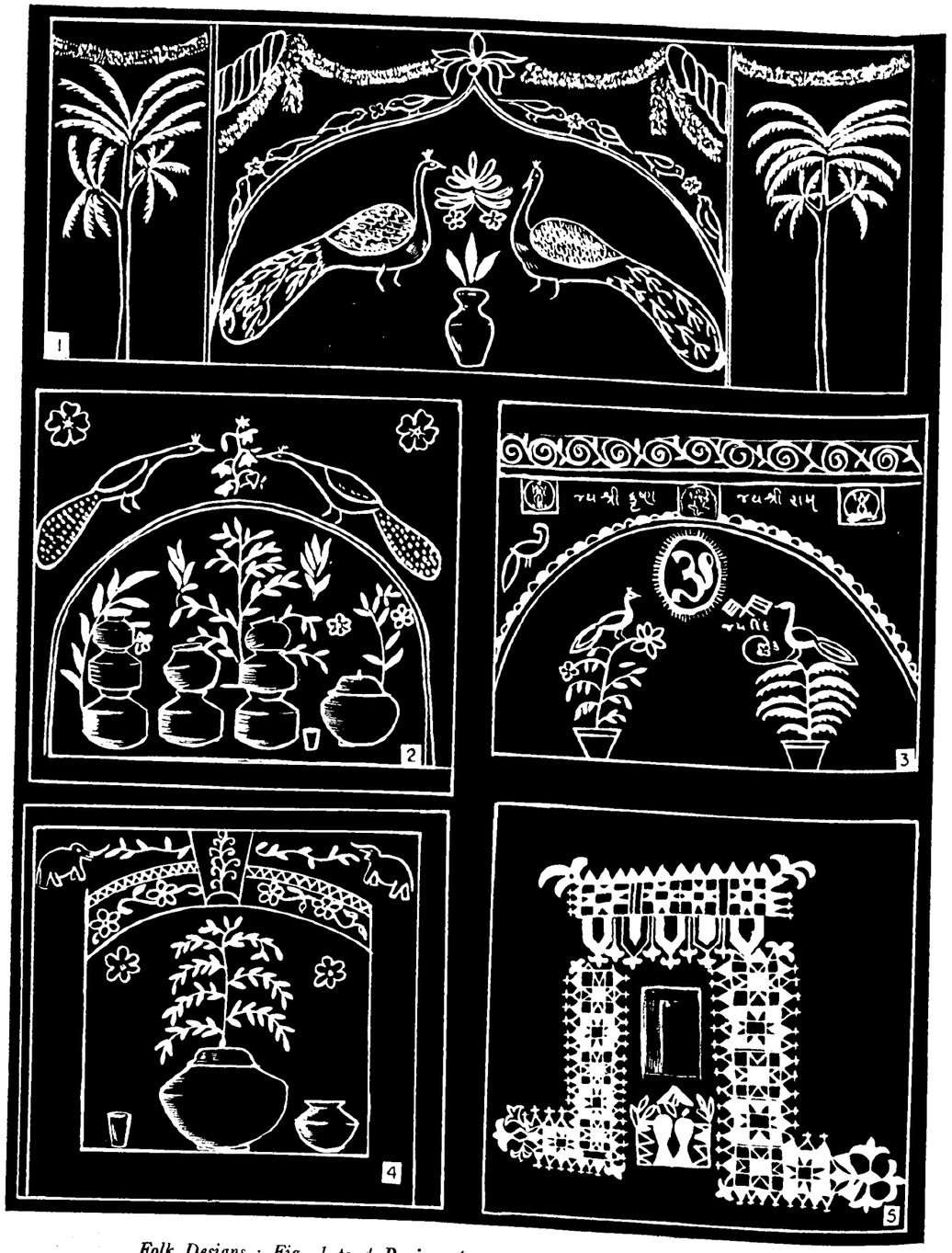


4. *Interior of a Girasdar's house*



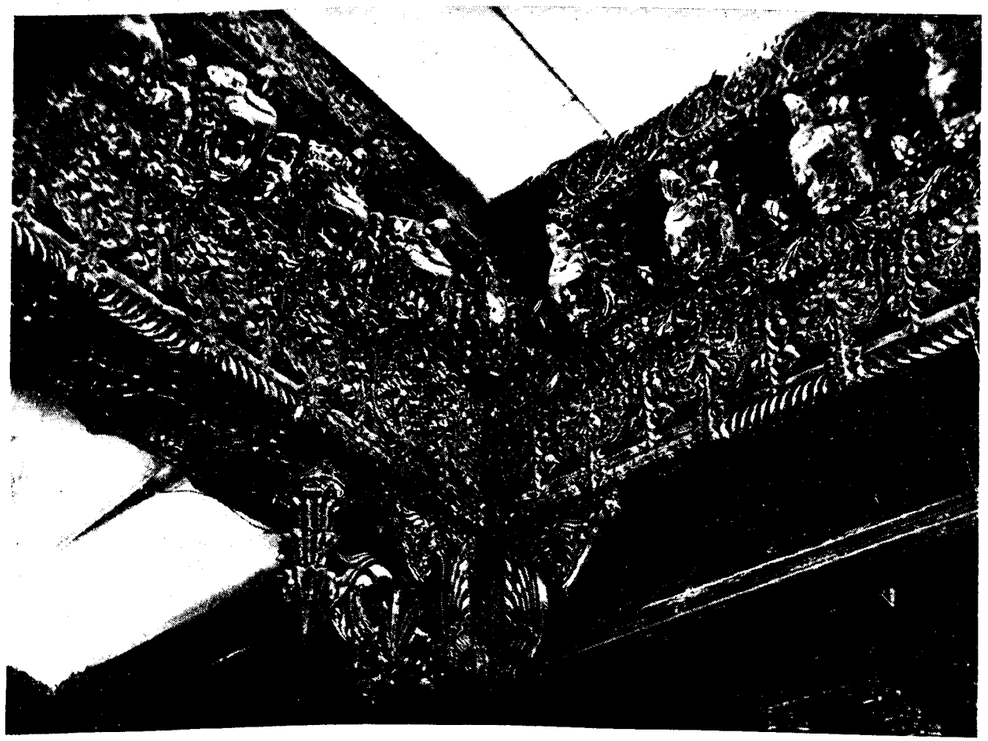
Folk designs on door frames and walls

FOLK DESIGNS ON RURAL HOUSES

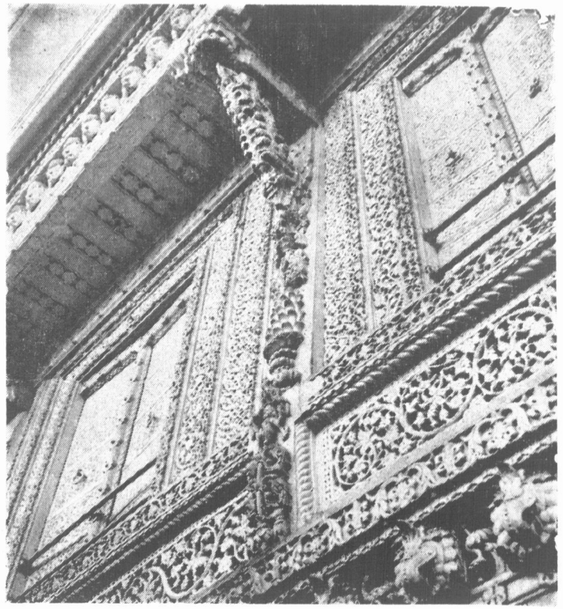


Folk Designs : Fig. 1 to 4 Paniara (water place) Fig. 5 Place of worship

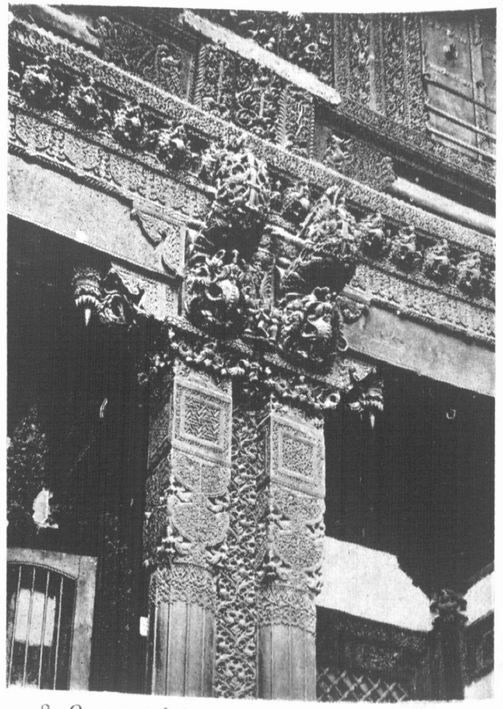
1. A richly carved facade



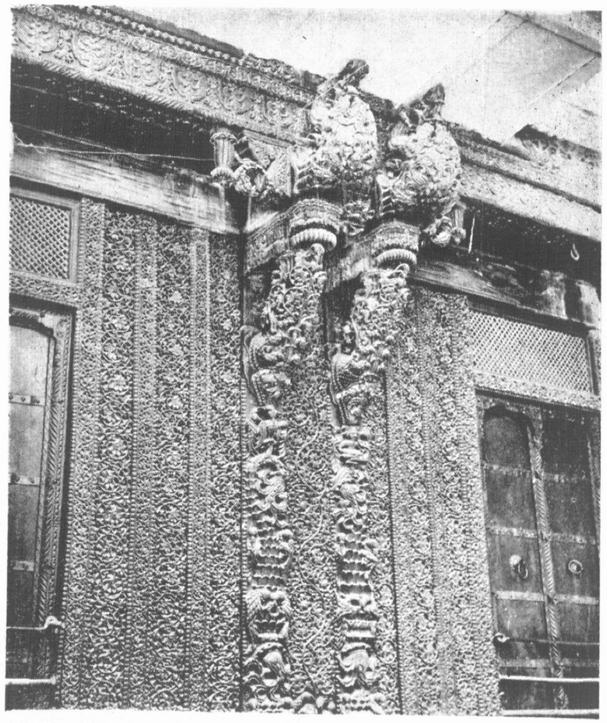
2. Traditional designs on beams supporting the ceiling



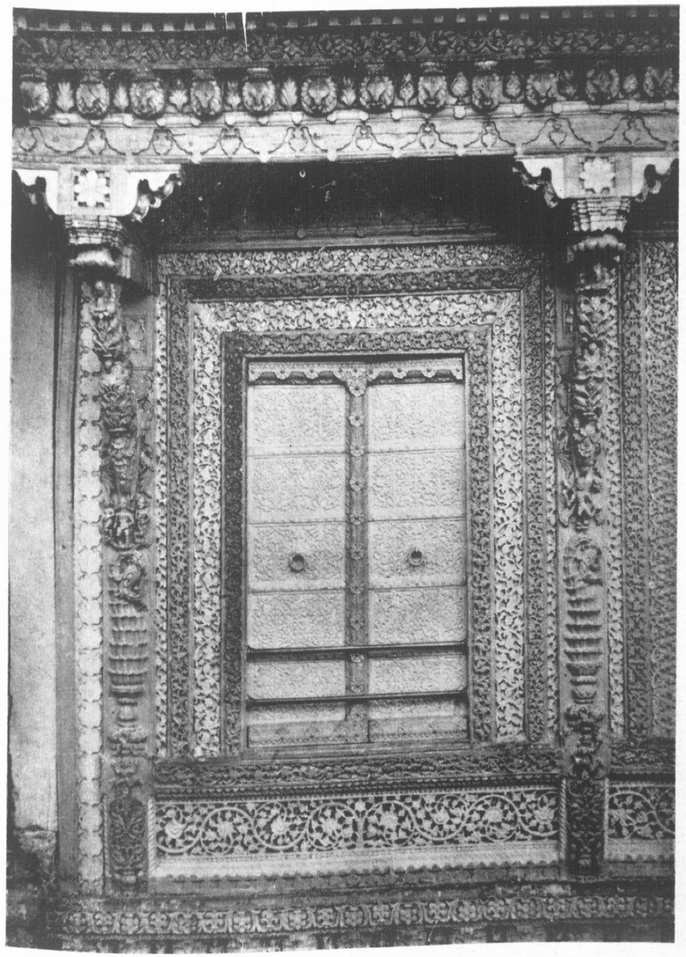
1. Close up of a front view



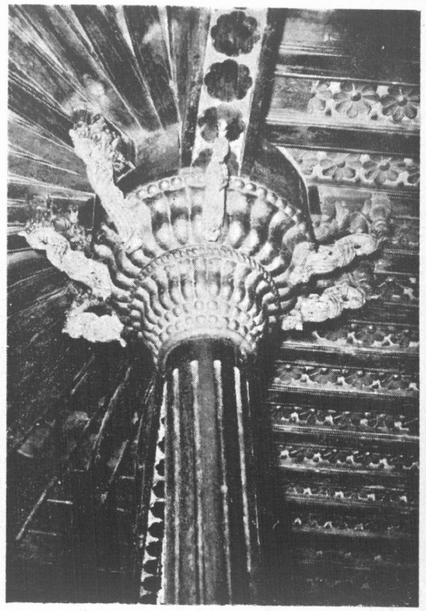
2. Ornamental designs decorating pillars, beams and supports



3. Details of carvings on wall panels, window frame and props



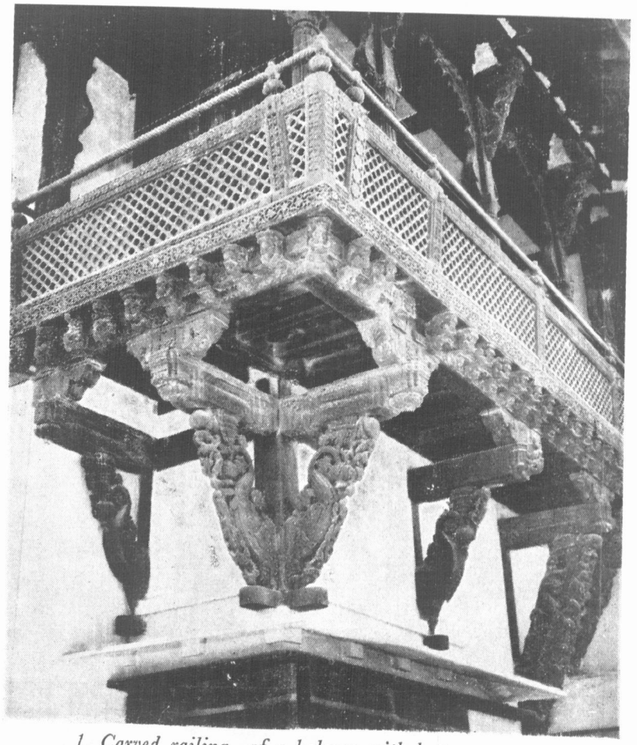
1. Carvings on window frame, doors and lintel



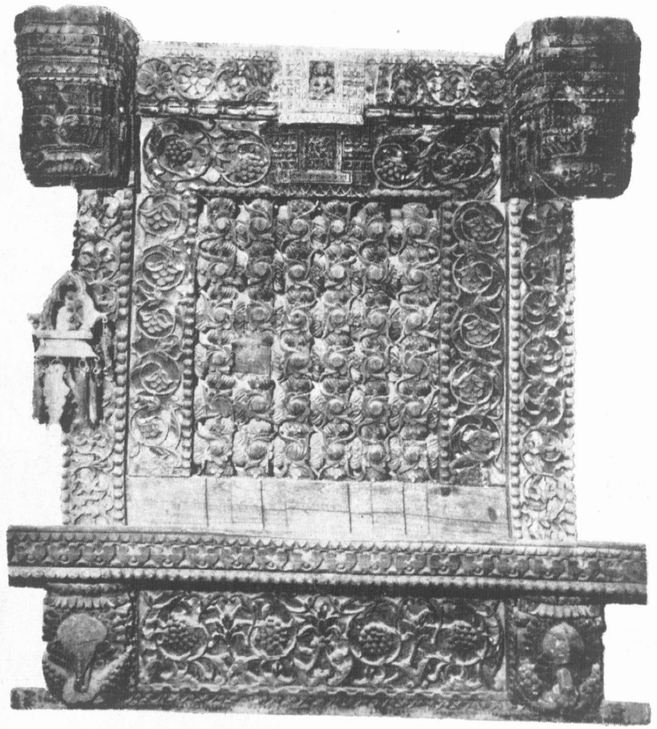
2. Carved pillar supporting the ceiling

3. Traditional designs on the support of a beam

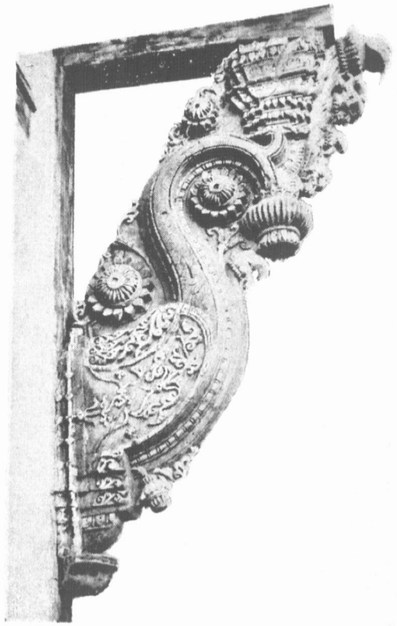
PLA



1. Carved railing of a balcony with buttresses



2. Artistically designed window screen



3. Peacock shaped support

JAMMU AND KASHMIR

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Natural regions and houses

Geologists have classified the State of Jammu and Kashmir under Western Himalayas and Sub-Himalayas. The State is an agglomeration of a variety of physiographical entities interspersed between mountains, valleys, rivers, lakes, passes, glaciers etc. The diversity of physical characteristics is so pronounced that it is not possible to demarcate the natural divisions with such precision as to ensure the homogeneity of the characteristics of all parts of each such division. Subject to overlappings of this kind here and there, the State may be divided into the following four natural divisions :—

(i) *The Sub-Mountain and Semi-Mountainous Region.*—This region extends to partly plain and partly kandi areas skirting the great mountain ranges of the Himalayan Series. It includes the tehsils of Kathua and Hiranagar of District Kathua, the entire district of Jammu and tehsil Nowshehra of District Poonch. The average rainfall in this region is over 48″ or 122 cms. The maximum temperature as recorded in 1960 stood at 45·7 centigrades and the minimum at 2·5 centigrades.

The most predominant material used in the walls of dwellings is mud or burnt bricks which do not absorb much heat. In Nowshehra, however, majority of the dwellings have stone walls due to stone being available locally at a nominal price.

(ii) *The Outer Hills.*—This consists of the region of low-lying hills bordered in the north by Pir Panjal ranges which abound in the south in low mountains giving them the name of Siwalik (Sawalak). This part of the State territory includes the tehsil of Bashohli, the district of Poonch except tehsil Nowshehra and the districts of Udhampur and Doda. The average rainfall stands at 60″ or 152 cms. The region includes such areas as Ramban, Reasi etc., where the mercury touches even 43° centigrades. In most other parts, the temperature is as low as in the Jhelum valley.

Most of the areas falling in this region experience heavy snowfalls and rains. Tehsil Ramnagar of District Udhampur has the maximum rainfall in the State, which is as high as 83·60″ or 212 cms. It is for this reason that the largest number of dwellings in the whole region consists of those having walls built of stones which besides being unaffected by the inclemencies of weather, prevent the cold draught from entering into rooms.

(iii) *The Jhelum Valley.*—This comprises the flat area extending from south-east to north-west and includes not only the valley of Kashmir, but also all its enclaves and smaller valleys formed by numerous rivulets. It is bounded in the south by Pir Panjal and in north and north-east by the Central Himalayan range, separating the Indus valley. The average rainfall is 33″ or 83 cms. The maximum and minimum temperature recorded in Srinagar in July 1960 and January 1960 stood at 35·4 centigrades and —9·4 centigrades respectively. In this area the snowfalls are very heavy and the lowest temperature was recorded in winter January 1954 at —12·2°. As stone is not readily available in the plain areas, the walls of majority of the dwellings are built of burnt or unburnt bricks plastered with lime or mud coating. The clay is not hard and is suitable for manufacturing of bricks.

Before the introduction of shingle or corrugated iron sheets, all buildings in the valley, whether used as dwellings or for other purposes were covered with thin wooden planks, which were supported by beams. Birchbark, which is obtained from the forests at the height of about 8,000 feet, was then spread over the planks. The top of this was coated with very thick mud plaster of not less than 6″. These roofs were generally used by some people in autumn for drying in sun stocks of vegetables to be consumed by them during winter. In the large majority of buildings, however, seedlings particularly of tulips were strewn on the roofs and in spring, when the tulips blossomed, the roofs looked like beautiful gardens. Such houses are still to be seen in

almost all urban areas and some parts of the rural sector.

(iv) *The Indus Valley or the Tibetan and Semi-Tibetan Tract*: This region consists mainly of the valley formed by great Indus river which has its origin in the Mansarowar lake in Tibet. The river passes through the entire frontier province running from south-east to north-west. It is bounded by the Central range of the Himalayas in the south and by the Karakaram mountains in the north. Practically, the whole area is rainless, dry and barren, the average rainfall being 15·33″ or 389 cms. only. The maximum temperature in August, 1960 was 31·1 centigrades at Leh. In winter, it was as low as —18·4 centigrades.

Because of the topographic character of the area and the climatic condition, there are very few, if any, dwellings in this region with walls built of materials other than stone.

Village layouts

Village settlements in Jammu and Kashmir belong to one or the other forms of villages mentioned in Memoir No. 8 of 1961 brought out by the Anthropological Survey of India. In the non-hilly areas of the State, the layout of the villages corresponds to what is known as shapeless cluster. Villages of this pattern consist of a single shapeless cluster of houses or several smaller clusters situated at varying distances from each other. In district Ladakh and other hilly areas, however, houses are built at fairly long distances on small flat projections of mountain and slopes where facilities for culivation, grazing and drinking water are available. These villages are classifiable as isolated homesteads.

Houses in small urban areas and big villages form an assemblage with a regular open space provided between parallel rows of buildings. These correspond to the linear cluster. So far as the two cities of Jammu and Srinagar are concerned, almost every mohalla is divided by straight streets which mostly run parallel to each other and at right angles at places where the volume of traffic is heavy.

Progress of replacement of *kutcha* material

The progress of replacement of *kutcha* material used in the construction of walls and roofs of the dwellings in the rural parts of the State is still very slow. In District Anantnag, about 76 per cent and 93 per cent dwellings have still walls built of unburnt bricks or mud and thatched or wooden roofs respectively. The position obtaining in the rural areas of district Srinagar is comparatively better but even here houses with walls of unburnt bricks and mud continue to dominate. In so far as roofs are concerned, 86 per cent dwellings are even now covered by wooden and thatched roofs.

The proportion of dwellings with *kutcha* walls in District Baramulla is not as high as in Anantnag and Srinagar. This is because a good portion of the district is mountainous and stone is available at nominal price. Further, dwellings in areas in the close vicinity of forests have walls made of timber which can be had at cheaper rates than those obtaining in Srinagar or elsewhere.

Almost all the houses in Ladakh have stone walls. Besides the economic backwardness of the area, its inaccessibility and the prohibitive price at which durable materials can be imported from the valley, account for the use of stones as the most predominant material in the construction of walls. Wood is very scarce and, therefore, extremely expensive. Only two wooden planks are spread over the walls and the intervening gaps between them are covered with tender twigs of poplar trees. The holes and crevices, if any, are then filled up with mud or stone metal. The whole surface is finally plastered with 4-5″ thick mud coating.

Like Ladakh, Doda District is also hilly and barring a few small plateaus and extremely narrow valleys, it extends to mountainous areas only. This explains the large incidence of stone made walls of rural dwellings. In the case of roof material also there has been no progress in its replacement by durable materials. The large majority of the dwellings continue to be covered with roofs of wood, thatch, mud and fibre of kail and deodar.

Dwellings with roofs made of all other materials claim a fairly good proportion. The district is rich in forests which mostly grow deodar and kail trees. This is because the roofs of most of the dwellings in the forests areas are built more or less in the same manner as in Ladakh. The materials employed, however, consist of tiny twigs of deodar and kail, which occupy the empty

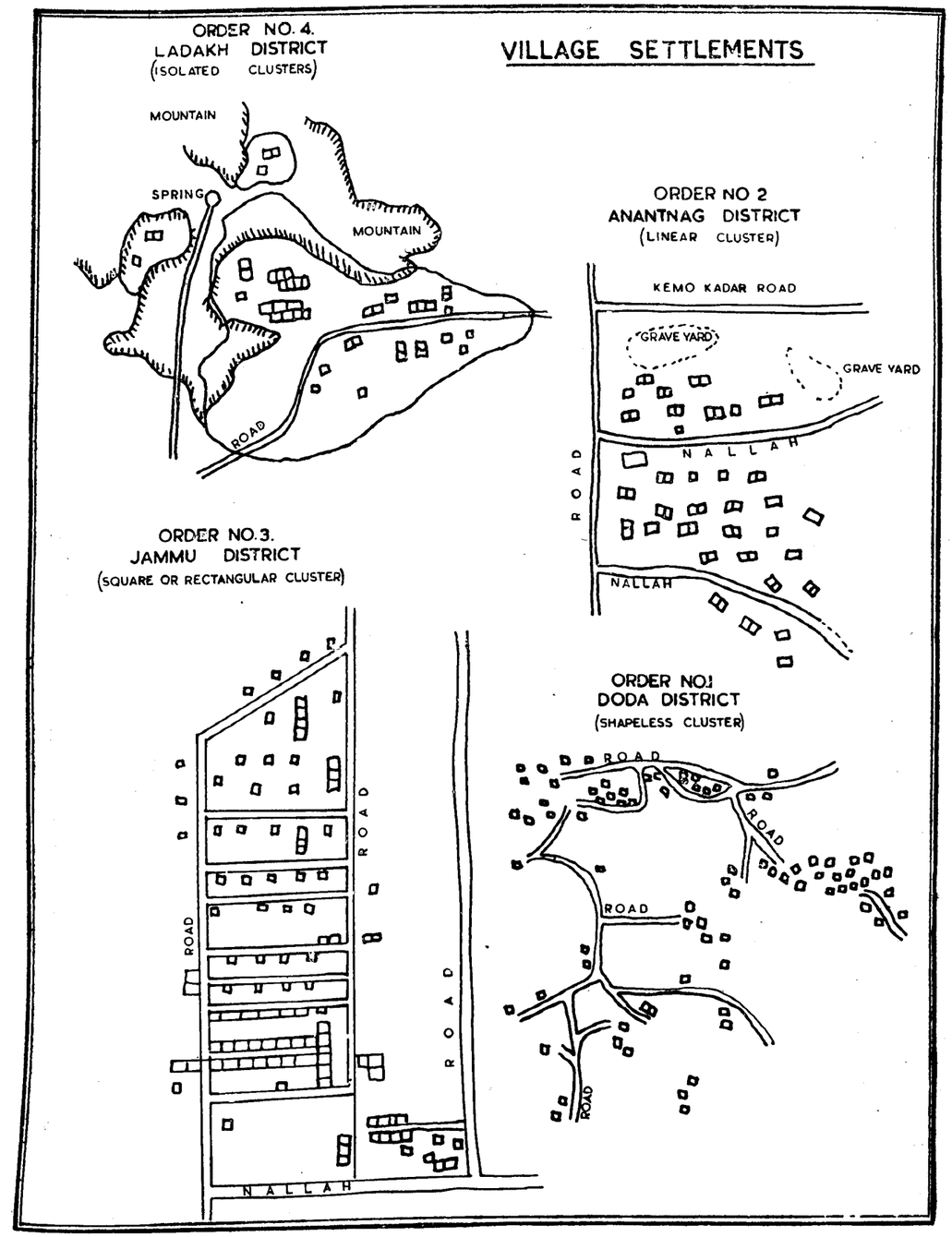
space between the wooden planks extended across the wall. Instead of using stone metal, as is done in Ladakh, the top surfaces of the planks and the twigs are covered with fibres of deodar and kail trees. The entire surface is then plastered with 6-9″ thick mud coating.

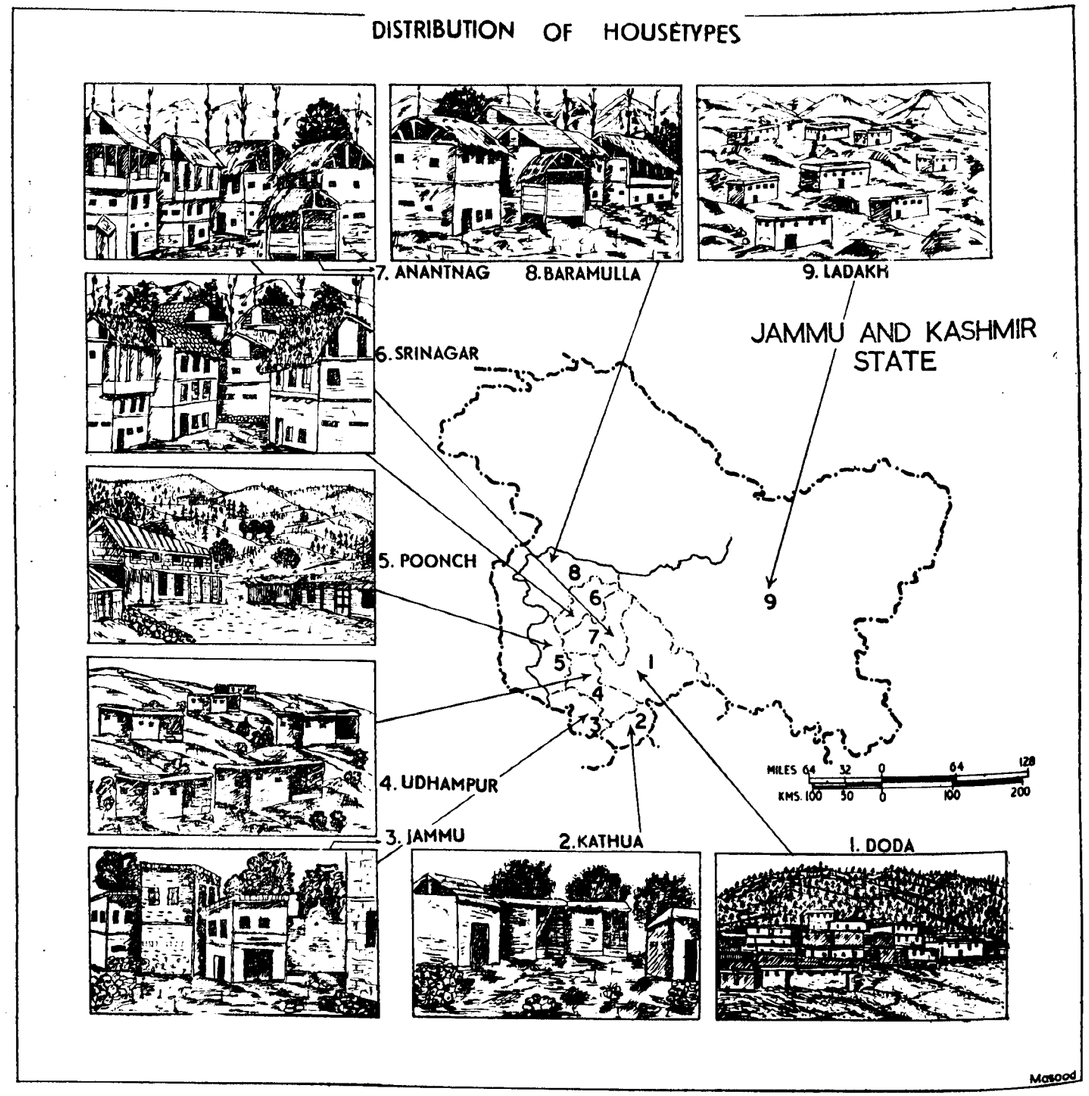
In District Udhampur, the progress of replacement of roof material is faster than in Doda but the incidence of houses with walls made of durable materials is still less pronounced.

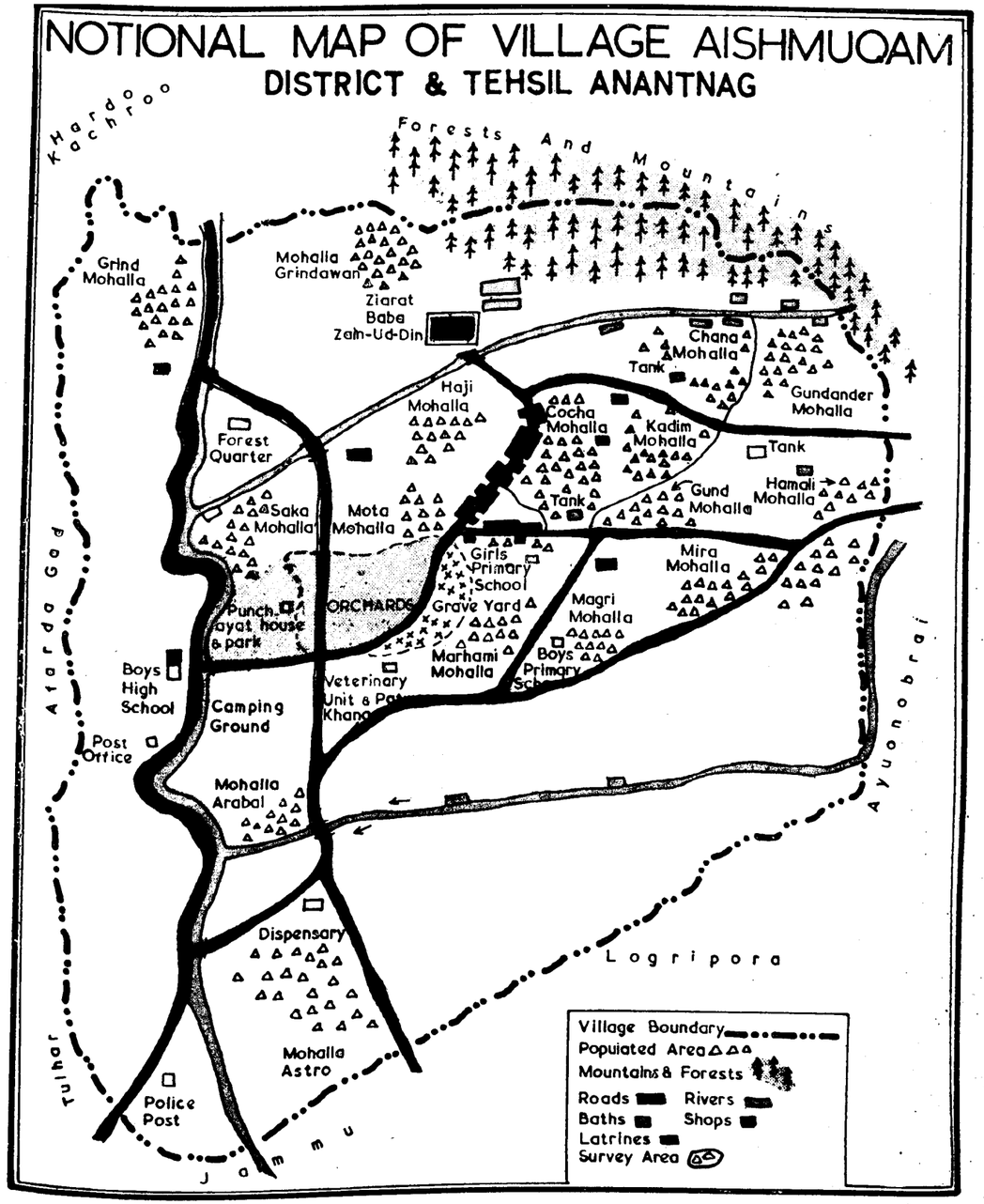
Jammu District abounds in houses made of mud walls. Even as it is, the speed of substitution of durable materials is much greater than in Doda and Udhampur. This could certainly be regarded as an index to the growing prosperity of the people if the replacement of roof material had also proceeded at the same pace. The fact that about 93 per cent residential houses still continue to be covered with roofs of grass or bamboo suggests that the speed of replacement is by no means encouraging. The aggregate proportion of houses with roofs made of shingle, corrugated iron sheets, bricks and lime and concrete and stone is less than 2 per cent.

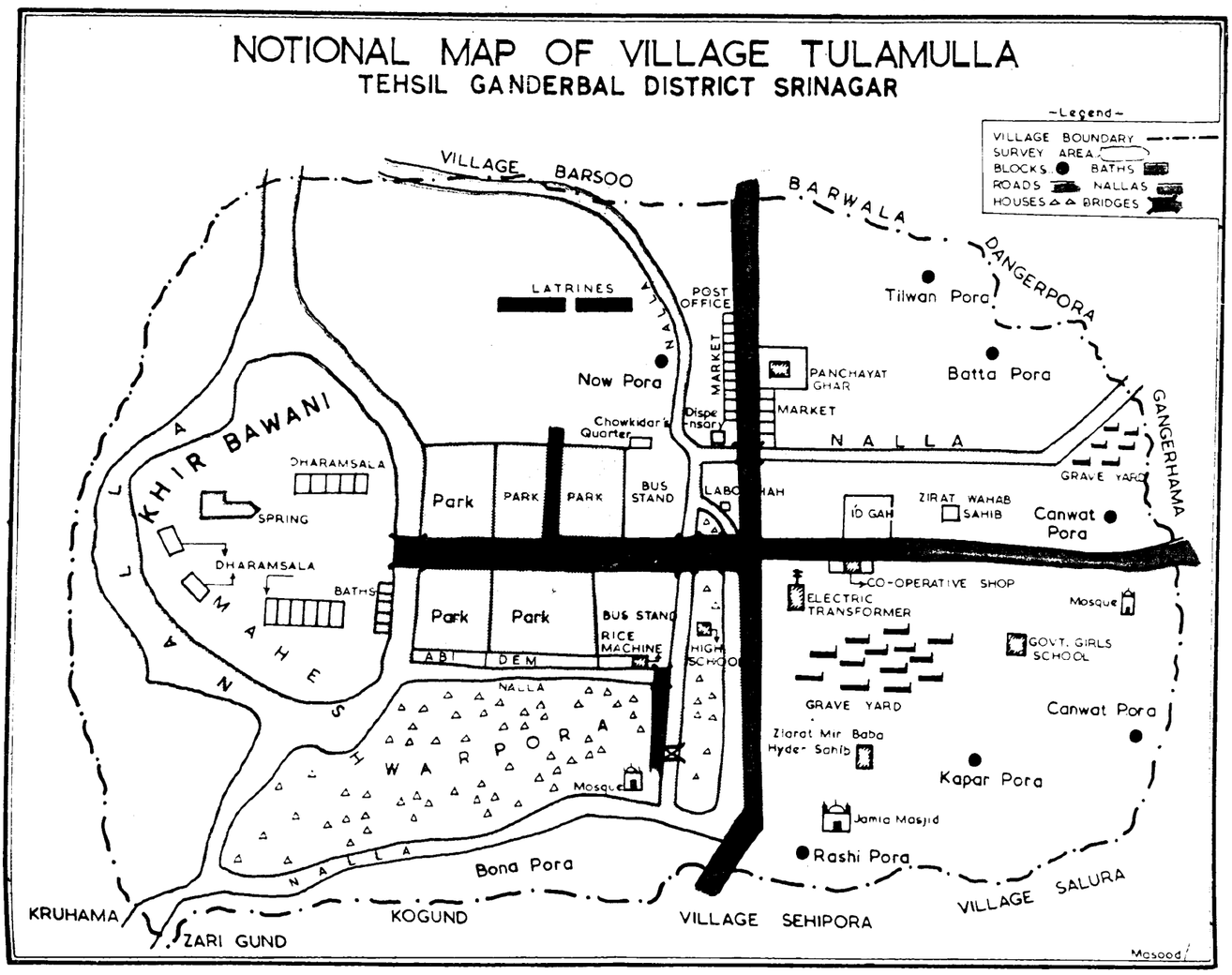
About 59 per cent houses of District Kathua have walls made of stone which is available in plenty in the hilly areas at nominal price. The district being very near the rail-head at Pathankot, the proportion of houses roofed with corrugated iron sheets is highest among all the districts of Jammu province. Houses roofed with durable materials being about 5 per cent, it may be assumed that the speed of replacement of materials is not unsatisfactory.

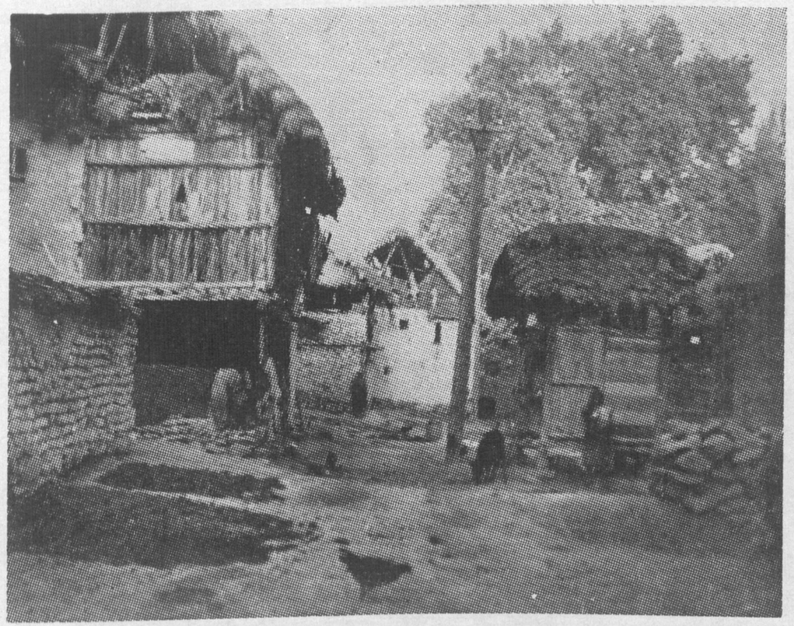
In Poonch District, there has been virtually no replacement of the traditional material employed in the construction of walls and roofs. The district like several others enjoys the advantage of stones being available everywhere almost free of cost. As regards roofs, practically all residential census houses are covered with wood, thatch, reeds or bamboo only.


VILLAGE SETTLEMENTS
ORDER NO. 4.
LADAKH DISTRICT
(ISOLATED CLUSTERS)
MOUNTAIN
SPRING
MOUNTAIN
ROAD
ORDER NO 2
ANANTNAG DISTRICT
(LINEAR CLUSTER)
KEMO KADAR ROAD
GRAVE YARD
GRAVE YARD
NALLAH
ROAD
NALLAH
ORDER NO.3.
JAMMU DISTRICT
(SQUARE OR RECTANGULAR CLUSTER)
ROAD
ROAD
ROAD
NALLAH
ORDER NO.1
DODA DISTRICT
(SHAPELESS CLUSTER)
ROAD
ROAD
ROAD
ROAD

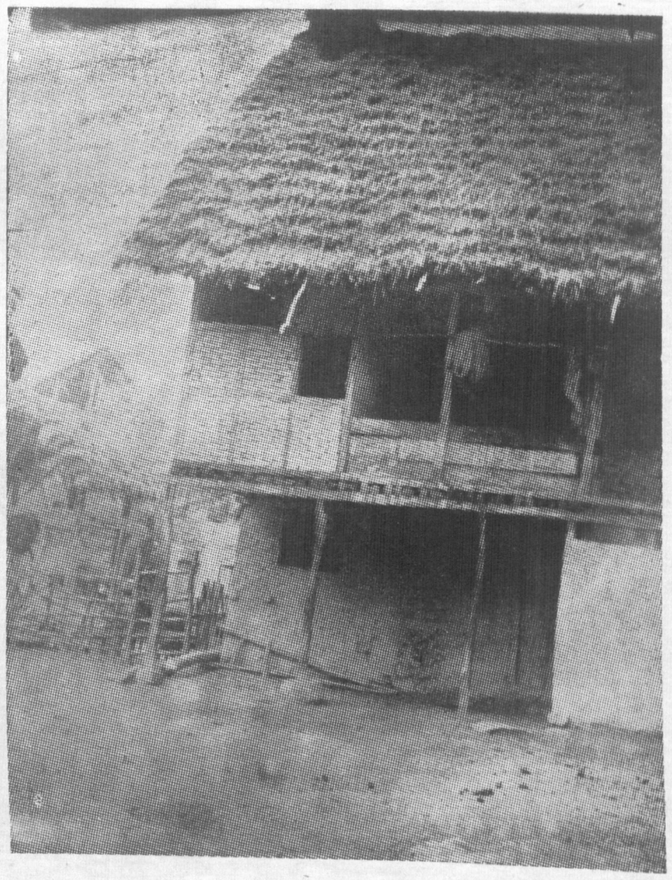

DISTRIBUTION OF HOUSETYPES
7. ANANTNAG
8. BARAMULLA
9. LADAKH
6. SRINAGAR
5. POONCH
4. UDHAMPUR
3. JAMMU
2. KATHUA
1. DODA
JAMMU AND KASHMIR STATE
MILES 64 32 0 64 128
KMS. 100 50 0 100 200
Masood


NOTIONAL MAP OF VILLAGE AISHMUQAM
DISTRICT & TEHSIL ANANTNAG
Khardo Kachroo
Forests And Mountains
Grind Mohalla
Mohalla Grindawan
Ziarat Babe Zain-Ud-Din
Chana Mohalla
Tank
Gundander Mohalla
Haji Mohalla
Cocha Mohalla
Kadim Mohalla
Tank
Forest Quarter
Saka Mohalla
Mota Mohalla
Tank
Gund Mohalla
Hamali Mohalla
Girls Primary School
Mira Mohalla
Punch. Ayat house & park
ORCHARDS
Grave Yard
Magri Mohalla
Marhami Mohalla
Boys Primary Sch
Boys High School
Veterinary Unit & Post Khana
Camping Ground
Post Office
Mohalla Arabal
Dispensary
Logripora
Mohalla Astro
Police Post
Tulhar
Ayunobrai
Village Boundary
Populated Area
Mountains & Forests
Roads
Rivers
Baths
Shops
Latrines
Survey Area

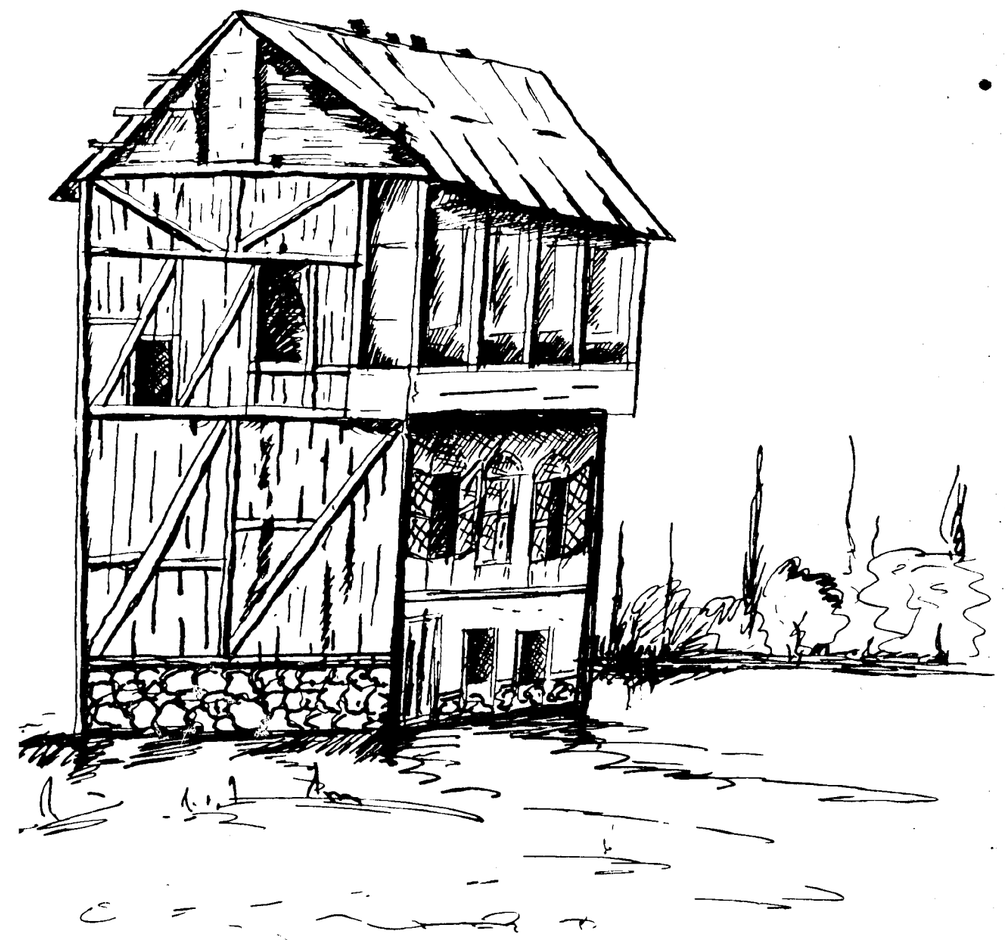

NOTIONAL MAP OF VILLAGE TULAMULLA
TEHSIL GANDERBAL DISTRICT SRINAGAR
-Legend-
VILLAGE BOUNDARY
SURVEY AREA
BLOCKS
BATHS
ROADS
NALLAS
HOUSES
BRIDGES
VILLAGE BARSOO
BARWALA
DANGERPORA
LATRINES
POST OFFICE
MARKET
Now Pora
Tilwan Pora
Batta Pora
PANCHAYAT GHAR
MARKET
Chowkidar's Quarter
Dispensary
NALLA
GANGERHAMA
GRAVE YARD
KHIR BAWANI
DHARAMSALA
SPRING
DHARAMSALA
BATHS
Park
PARK
PARK
BUS STAND
LABOUR HAH
ID GAH
ZIRAT WAHAB SAHIB
Canwat Pora
CO-OPERATIVE SHOP
ELECTRIC TRANSFORMER
Mosque
Park
Park
BUS STAND
RICE MACHINE
HIGH SCHOOL
GOVT. GIRLS SCHOOL
GRAVE YARD
Canwat Pora
Ziarat Mir Baba Hyder Sahib
Kapar Pora
Jamia Masjid
Rashi Pora
NALLA
WARPORA
Mosque
NALLA
Bona Pora
KRUHAMA
ZARI GUND
KOGUND
VILLAGE SEHIPORA
VILLAGE SALURA
Masood



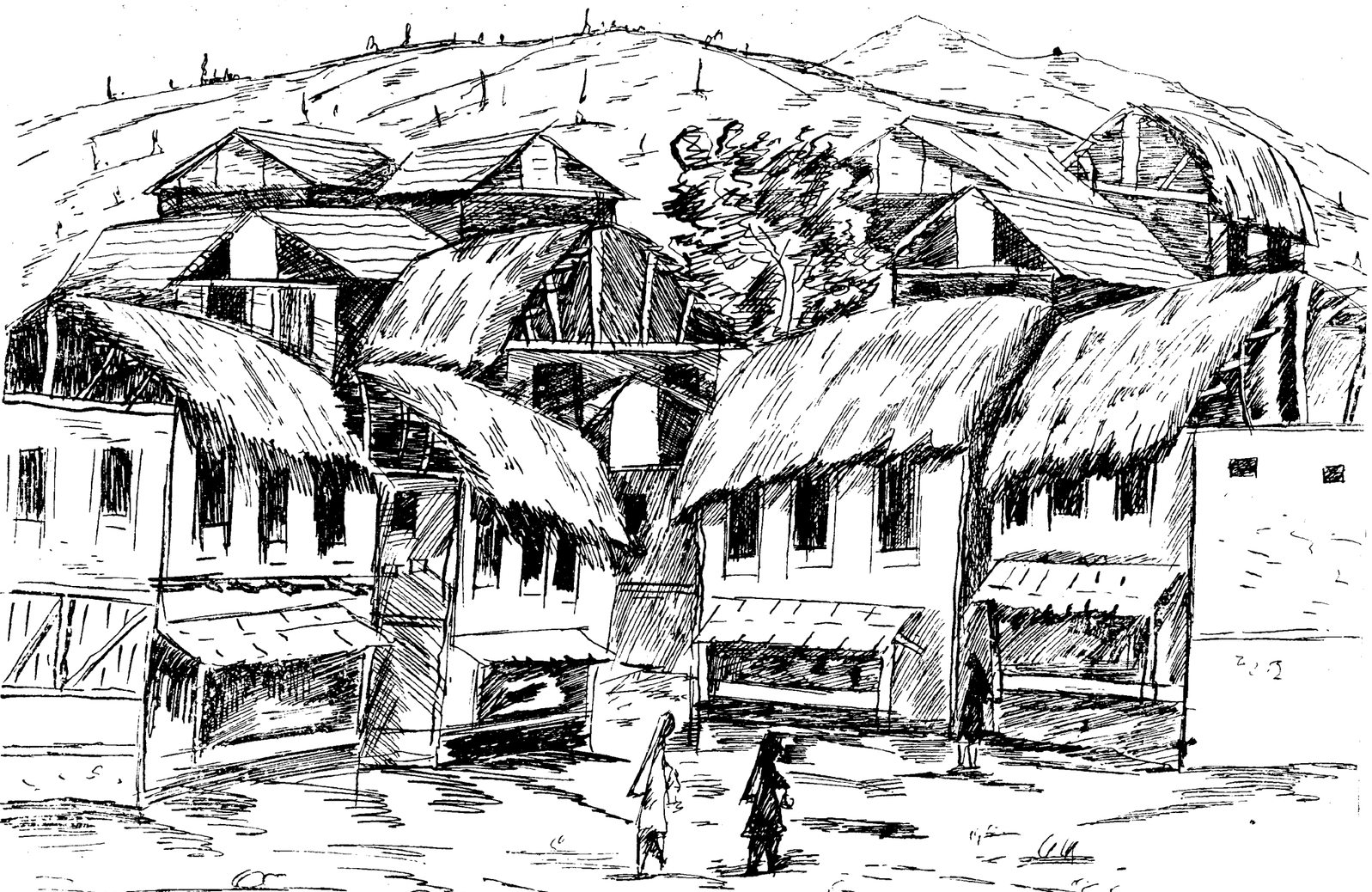
House and 'Kuth'



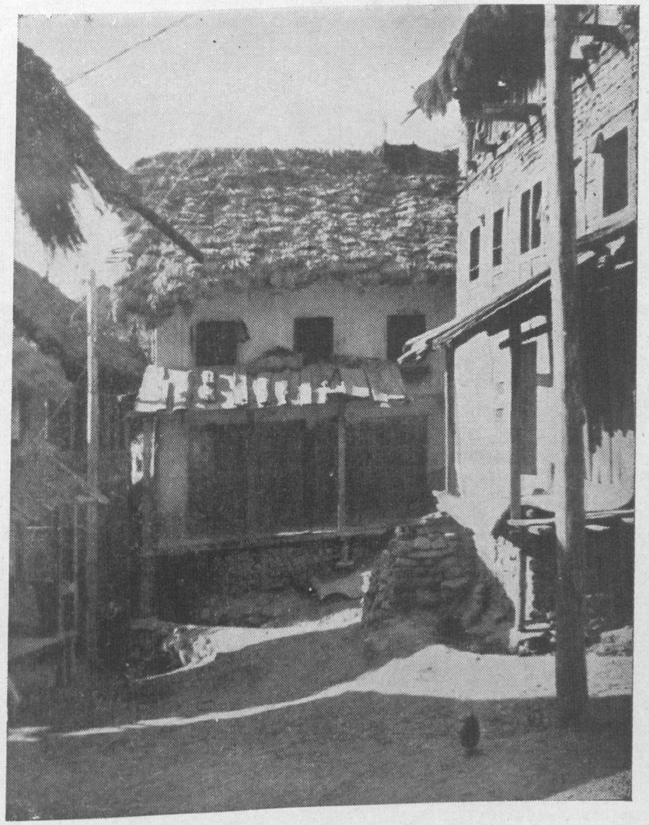
House Type



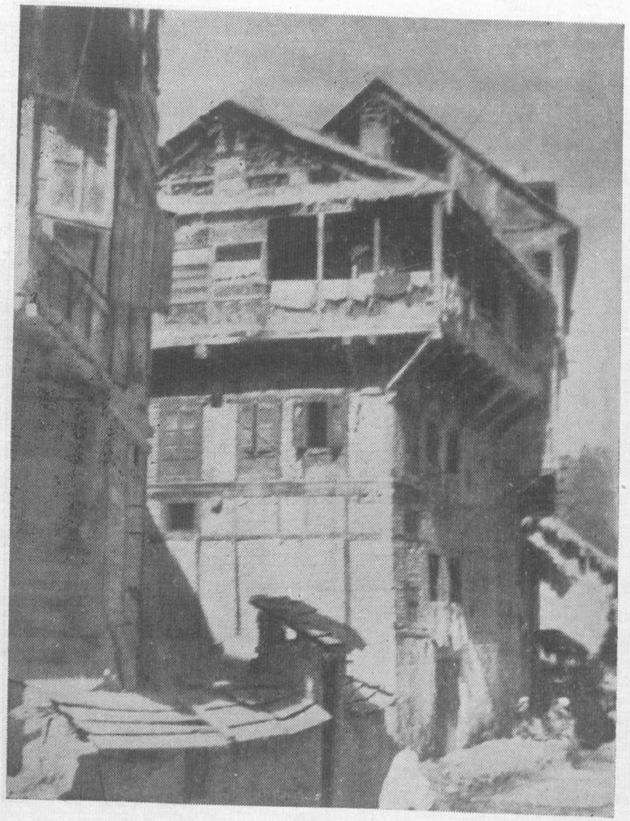
PATTERN OF THREE STOREYED HOUSE



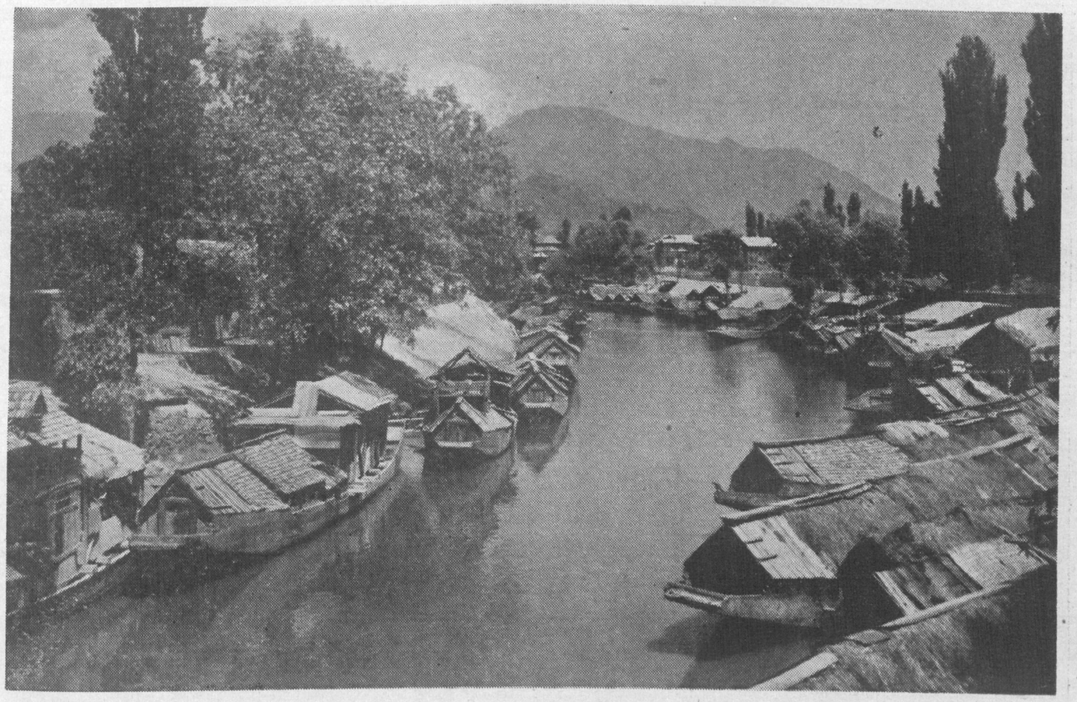
DWELLINGS



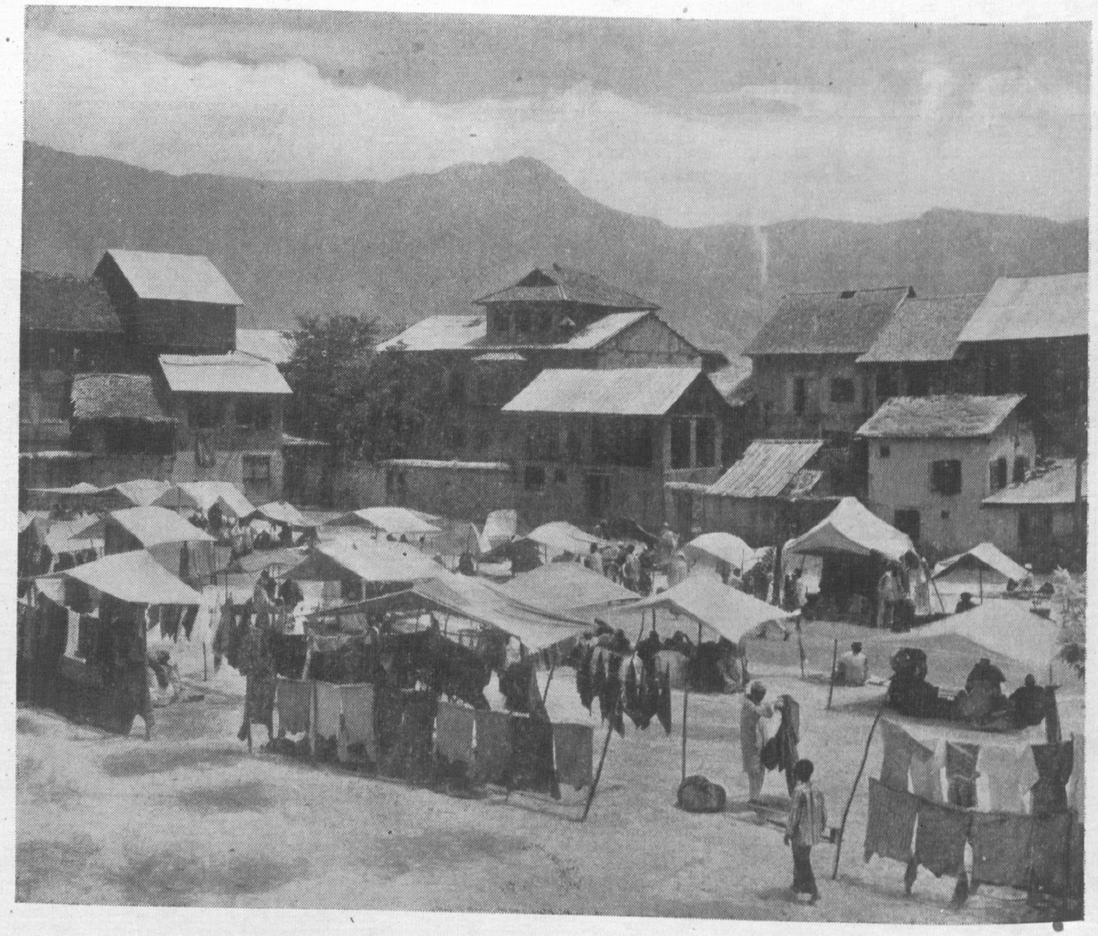
House type



House type



Large and small, single and double storeyed dongas used for transporting building materials in rural areas



Temporary stalls put up at Hazratbal, Srinagar, during religious festivals

KERALA

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

The Malayalee is generally not a lover of towns and villages. His austere habits of caste purity and impurity made him in former days free from places where pollution in the shape of men and women of low castes met him at every corner. Therefore instead of living huddled in a street the people of Kerala prefer the privacy of their own fenced compones at a distance from each other. The density of palm trees, plantain and other vegetations often renders one house invisible from the next. The localities, where paddy fields are few, settlements of this kind, may be continuous for miles with no obvious territorial boundaries to individual villages. Even the poorest householder of the lowest caste lives a little apart from his neighbours and kins, though often on a perimeter of the village or close to his fields. With this exception the settlement is usually haphazard with no special tendency for houses of a particular caste to crowd together.

The straggling villages of Kerala are not a result of population increases during the last one or two centuries alone. The people of the western coast always looked to quiet and retirement in selecting sites to their dwellings and towns and town-life were not congenial to their tastes. The coast tracts were so densely populated even in olden days that as at present it was difficult to say where one village began and the other ended. From end to end of the western coast on the low lying lands near the sea there was an unbroken belt of cocoanut-palm orchards. Ibn Batuta, the 14th century traveller has left an account of this fact in the following words. "We next came into the country of Malabar which is the country of black-pepper. Its length is a journey of two months along the shore from Sindabur to Kawlam. The whole of the way by land lies under the shade of trees..... And in all this space of two months' journey there is not a span free from cultivation. For everybody has here a garden and his house is placed in the middle of it; and round the whole of this there is a fence of wood up to which the ground of each inhabitant comes". Lieutenants who made a detailed survey of Travancore and Cochin in the beginning of the 19th century also gave the same picture of the villages of west coast. "The villages", they say "as throughout the other parts of Malabar, stretch over a considerable extent of ground; their constitution and arrangement is in every way similar..... In Nanjanaad the villages have the compact united form in the Eastern Provinces, but proceeding North they are more straggling, and comprehend a large surface. Unlike the people of the other coast, those of Malayalaim scarcely ever live congregated; their houses are always separate, concealed in fragrant groves, draperied by the pepper-vine whose clustering produce intermingled with the arreka, constitutes a portion of the wealth of the possessor; in the more open parts they are embosomed in the deep foliage of the jack, the fruit of which forms a material article of subsistence..... The Nair villages are scattered along the cultivated glens, and penetrated by narrow and winding traverses intersected by others passing under an arch-way formed by the intermingling branches of the high bamboos and thorny hedges that define or rather defend their gardens, which are entered by a gate, a steep flight of steps, or ladders sometimes ....." Early in the present century Mr. William Logan describing the Malabar villages draws the same picture of their layout and locational pattern. He says that the people of Kerala select the sites for their dwellings on the margin of a fertile valley or ravine, with bright green fields of rice in front of their doors. According to him "the fact which on the coast of Malabar indicates the existence of a town is the occurrence of one or more streets of shops —bazaars—longer and busier than those to be met with elsewhere in the district. The foreign Brahmans, the Eurasian population, and, to a certain extent the Mohammedans also, live in streets of houses built in continuous rows." More lately Innes and Evans have noted in the Malabar District Gazetteer that the true Malayali seems never to have lived in villages of the East coast type, that is, in houses built in streets. "Each house, even the humblest, stands in its little compound or garden, which is usually thickly planted with areca and cocoanut palms, jack trees, plantains,

betel and pepper vines and the like..... The favourite situation for a Nayar house is in the strip of gardens fringing the broad expense of green paddy fields, which occupies the centre of a typical Malabar velley ..... The Malayali's choice is determined by the necessity for a well and tank in every compound, and he likes too, no doubt, to live close to his fields."

The present layout of villages in Kerala does not differ from the picture given by the early writers except for the fact that the compounds have shrunk in extent and numerous new houses sprung up everywhere. In no part of the State is it easy to decide where one village begins and the other ends by a mere observation of the locational pattern. Even on the basis of social attachment and territorial loyalties, it is difficult to demarcate the boundaries of the villages. As the population increases and more houses come up, this becomes more difficult. The boundaries are fused together so homogeneously that often it becomes meaningless to speak of a village as a separate entity in Kerala. But it is not difficult to locate the centre of a village. As Logan has observed, the streets and bazaars crowded with shops and institutions mark out the centre of each village clearly. In these streets there are few residential houses, but the important places of public worship, educational institutions and other public places are located either in the streets or in their immediate precincts. Surrounding these streets there is a circle of houses belonging mostly to the landless people or to the rich landlords who do not cultivate their lands directly. The houses in this area are more clustered together than in the border areas of the village. A majority of the people living in this locality belong to the richest section of the village community. Outside this circle of houses remain the paddy fields and the large garden plots with houses scattered among them. This border area merges indistinguishably with the border areas of the neighbouring villages. The people living immediately around the centre of the village make use of the institutions available in the village, but it is not a general rule that the people in the border areas should confine to their own village institutions for worship, education or for other purposes. For some purposes they may go to one village and for others to another village according to the convenience of the individuals.

The business centre of a village may have different streets branching from a central place. This central place is naturally the nerve centre of the village. All the other streets generally end up in smaller satellite centres. It is not unlikely that the people of each street or centre develop closer affinity and argue in terms of the street. Thus it is not unusual that the people of a particular street or centre demand the location of a new institution in that area and *vie* with the others for the possession of it. In such cases it is an attachment to a particular street or centre that guides one rather than the common interest of the village. It is also common for the border areas adjoining each centre or street of the village to join the particular street or centre in this rivalry. Viewed from this angle, probably these centres of streets may be compared with different hamlets in a village of the west coast type.

Communal clustering is rarely met with in the villages. There may be a higher concentration of a particular religious group around a place of worship, but even in that area members of other religions frequently met with. The Anglo-Indians, the Tamil Brahmans, the Konkanis and to a certain extent the Muslims are the communities in which the clustering is found most predominantly. The Christians, Nairs, Ezhavas and other Hindu castes live scattered. Throughout the State the same lay-out and locational pattern are found. The only distinction that can be made between the various regions of the State is that, as one proceeds from the coast to the interior the density of houses decreases, and the streets and bazaars become more and more distant from one another.

On the basis of materials used, plinth area number of rooms and conveniences, the houses of the State can be broadly classified into four types. The first of them is that of the typical Kerala house, surviving through the centuries. They are built of wood, thatched with cadian or tile and provided with a number of appurtenances Generally they are called *Nalukettu*, a description of which has been given in Chapter V of the Housing Report of Kerala. Other three categories consist of the modern houses and may be called the high class, the middle class and the poor class houses according to the size, number of rooms and materials used for construction.

A high class house of the modern type consists of a drawing room followed by a dining room, bedrooms with attached bath rooms, the number of rooms being limited according to necessity, a kitchen and a store room. Majority of these houses are single storeyed and in no case they have more than two storeys. The roof may be reinforced concrete but in the central and northern parts of Kerala where heavy rainfall is experienced, such roofs are found to be leaky after a few years. Therefore in those areas tiled roof is more common. In such cases the roof generally does not extend beyond the walls as in olden days. Whether concrete or tile all the four sides are decorated with parapet walls or with concrete railings of beautiful designs. The walls are plastered with lime and in a few cases with cement and then whitewashed. The floor is done in cement in some cases and in mosaic in other cases. The windows have iron bars placed vertically formerly, but horizontally in recent times. Wherever possible these houses are electrified and in many cases provided with pipe for water supply to the different rooms. If the house has a tiled roof it is also provided with a wooden ceiling.

The middle class houses in Kerala have a rectangular ground plan. The basement is constructed in laterite or, burnt or unburnt bricks and rarely in granite stones to the height 2' to 3' above the ground. In the low lying areas along the coast the basement may be even higher to keep the water out of the rooms during the flood time. The plinth area varies from 200-600 sq. feet, the superstructure is of laterite stone or unburnt bricks and in a few cases of mud. The walls are often plastered with lime and sand, and in a few cases with lime and red laterite soil. As in the case of high class houses, majority of these houses are whitewashed. There are a few cases in which the walls are left unplastered exposing the laterite stone, but they are few in number nowa-days. In a few other cases the floors are done with cement but in the majority of cases it is coated with cow-dung and charcoal. In the latter case the floor is beaten hard after spreading laterite soil and then ground to make the surface smooth. The cow-dung mixed with charcoal is coated over this periodically. These houses generally have a verandah on the front and back, and at times on one of the sides. The front verandah often serves the purpose of a drawing room. From the verandah one enters the principal room of the house which could best be described as the guest room. At times this is also used as the bedroom of the head of the family. This is followed by one or two bedrooms and a dining room. Every house has a kitchen, some have a store room also. Where there is no store room the kitchen itself is used as a store room. The entrance of the rooms except that of the kitchen is generally towards the front. The kitchen, however, opens to the back of the house. The important rooms in the house have wooden ceiling. The roof of a middle class house is generally sloping, the framework of the roof being either of wood or of palmyra palm or cocoanut palm according to the means of its owner. It is either thatched with plaited cadjan leaves or the leaves of palmyra palm or tiled. In some houses the ends of the superior ridge pole of the roof are turned upwards. At the superior end of the smaller or transverse slope, a flat, perforated, triangular ventilator is set obliquely at an incline opposite to that of the underlying thatch, and in order to accommodate it, the superior ridge line of the thatch takes on a saddle-like appearance. This has been equated with the Chinese or Japanese roofs; but there seems to be a distinction between the two which should not be overlooked. In China and Japan the leaves are more often turned upward at the ends rather than the ridge. The only place which seems to bear a relationship with the upturned ridges of Kerala is Thailand and middle Sumatra, where, in the Batak style of architecture, the corner of the ridges are turned upwards. A small extension of the roof, usually on one side, serves the purpose of a store-shed for firewood, agricultural and industrial implements, ash and other manures etc. Ventilation is supplied by windows which are generally smaller than those of the upper class houses. Such houses have their latrines of cadjan leaf enclosures. Where the houses are located by the side of rivers or backwaters or canals the latrines are often located by the side of such water-ways. In other places, deep pit latrines are made. But where the population is scanty and the house has got extensive compound, even the cadjan enclosures or pit latrines are absent. In towns the latrines in the cadjan enclosures have scavenging arrangements. A few, extremely few indeed, houses have sanitary type latrines. Ordinarily there is no bath room for such houses. When, however, special occasions like marriage or confinement arise, bath-rooms are provided by cadjan enclosures. None of these houses have gate-

houses, but the compounds are fenced either with thorns or with plaited cadjan leaves on bamboo frame. A cow-shed is provided wherever the household has cattle. Generally it is situated at some distance from the house. A goat-shed and a hen-coop are also usually found as annexes to the houses.

The worst of the poor class houses is a cadjan leaf roofed and cadjan leaf walled hut which is found in almost all parts of Kerala. While most of these huts are constructed on a platform either of mud and rarely of laterite stone about 2′ in height from the ground, there are also huts which have practically no platform as its basement. The plinth area of this house varies from 100 to 200 sq. feet. Where it is constructed of mud, the platform is beaten hard and the floor covered with cow-dung and burnt cocoanut husk. In the eastern villages of the Trichur taluk after coating the floor with cow-dung and burnt cocoanut husk, it is rubbed with a smooth-stone. In some of the coastal villages of the district on the other hand, the floor is first coated with a mixture of cement and powdered charcoal and rubbed with the stone and then coated with cow-dung. The walls are either of plaited cadjan leaves on bamboo frame or of mud. Where the walls are of plaited cadjan leaves, the roof of the hut rests on bamboo pillars. Along the coastal region the roof is made of bamboo frame and thatched with cadjan leaves. In the midland region of Kottayam, Ernakulam, Trichur districts straw is used instead of cadjan and in certain areas of Palghat district palm leaves. In Cannanore and Kozhikode districts, the low classes in the eastern taluks use grass as thatching material. In most cases, the hut will have only one roof for all purposes. But in some huts, there may be a separation between the kitchen and the other room which is used for all purposes. Where the walls are of plaited cadjan leaf the door also—there will be only one door or at the most two—will be of cadjan leaves on bamboo frame. There is no window for this type of huts. Perhaps, windows are unnecessary as the holes of the cadjan leaves themselves provide sufficient ventilators. In another type of huts which are also used by the poor people the walls are of mud and are unplastered. The doors will be of some cheap wood. Most of such huts have the principal room and the kitchen separate. Ventilation is hardly provided, there being only an apology for windows in the shape of ill-equipped small windows looking more like ventilators. The thatched roof with its bamboo frame rests on the walls. These huts may or may not have a verandah. Where the walls of huts are of plaited cadjan leaves verandahs are often absent. But where the walls are of mud there is often a verandah which serves the purpose of a workshop as well as a drawing room.

The dwellings of hill tribes have a few more variations than the houses described above. The houses of Kurumans are constructed on rectangular earthern basements of two or three steps with a total height of 3 to 5 feet. All houses have regular walls of clay or unburnt bricks. The roof, constructed with jungle wood and bamboo and thatched with straw, slants rather low so that one sitting inside the house can hardly see the sky. This device is meant to afford protection from wind and lightening during monsoons. The low roof is supported on slanting pillars. Except for a single door which may be located on any side, the house has no other opening or ventilators. Each house has only one room for all purposes including cooking and sleeping. Some houses may have a side room improvised on one side of the main building under the same roof to serve as a seclusion shed for confinement. The upper half of the walls of the house is coated to a wonderful smoothness with red soil while the lower half and the floor are plastered with a mixture of cow-dung and charcoal. The vertical sides of the basement are made attractive by designs of parallel lines drawn before the hearth hardens. A cellar in the basement with an opening to one side is made in all houses for keeping poultry.

In the case of several other huts of hill tribes the walls are of bamboo. The bamboo is beaten into flat mat like pieces when they form a convenient material for the walls. In certain tribal areas where attacks of wild elephants or other wild animals are not infrequent, the huts are constructed at sufficient height from the ground level on the branches of trees so as to ensure safety from attacks of wild animals. The construction is light in which case alone it can stand on the trees. The walls are invariably of leaves or bamboo. The floor is of bamboo or other wood. The roof is thatched.

APPENDIX I

Village description

108. The administrative village, or the pakuthi as it is called, which has an average area of 17.6 square miles, being too large for purposes of statistical comparison, the residential village, known as kara or muri which has well-known though undefined boundaries, having an average area of 1·9 square miles, has been adopted as the territorial unit at this census as in the previous censuses. The kara is a subdivision of the pakuthi and a pakuthi generally contains from 3 to 20 karas. The "village", as it is used in Subsidiary Table I given at the end of this chapter and in the Imperial Tables, means the kara. It is not the same as the ordinary village in India. Except in the two southernmost taluks of Thovala and Agasthiswaram and in the taluk of Shencottah, which are more like the East Coast than the West Coast, there is no village in Travancore in the strict sense of the word, which connotes a cluster of houses, huddled together in a small area, possessing a common well and a common tank, with wide stretches of arable land around them having no habitation. The rural parts of Travancore resemble more or less the country side in Bengal, and Mr. Jack's description of rural Bengal will, with a slight modification, apply equally well to this State. Mr. Jack says, "Each family lives within its own holding digging a moat round an ample piece of land, and planting a garden of fruit trees to enclose the homestead. The homestead itself is a collection of mat and thatch huts on high mud plinths all built on well-raised ground surrounding a courtyard. Near by within the moat is a muddy tank. The homestead is usually entirely concealed by trees so that at first sight it appears as if all the cultivated land is a clearing in the forests. The *Khola* (opens) in which crops are grown are always kept delightfully green by the unfailing moisture of rain and flood, and the eye is never tired by the weary miles of dust which is the common habit of an up-country landscape." * The only alteration necessary to make the above description applicable to rural Travancore is to substitute the words "making an earthern wall" for the words "digging a moat." The rest of it is exactly like what one finds in this State.

The absence of compact villages in Travancore has, however, not been a bar to the creation of a village organization. From very early times the kara came into existence as a unit of rural organization. Each kara contained a number of homesteads of Nayars and other high caste Hindus, a sufficient number of field labourers of the depressed classes, a few washermen, barbers, carpenters, smiths and other artisans. In olden days the kara was a self-contained unit. The oldest member of the most influential Nayar family was the leader of the kara, and the others obeyed his orders and carried out his instructions. They lived like the members of a family, helping one another in times of necessity and co-operating together in conducting religious and social ceremonies, in thatching houses, and even in cultivating their lands. The artisans and labourers catered to the needs of all the families in the kara and usually received their wages in kind at the time of harvest. They were treated with great kindness and consideration by their masters and a mutual bond of attachment grew up between them. Such an organized life flourished in the karas till recent times; but with the growth of individualistic ideas it has broken up and has practically vanished except in some remote corners. The kara, however, still remains, though its organization has disappeared, and it is this kara that is treated as the village for census purposes.

Travancore Report, 1932
Part I—Page 73.

*The Census Report of Bengal 1921, Page 126.

APPENDIX II

Section I

Houses known by names

40. A peculiarity of this coast is that most of the houses and gardens are known by names and the inmates invariably add to their full names, the names of their houses or compounds in every document or transaction they affix their signatures to. This custom is unknown on the other coast except in the Telugu country where too, the house name is generally a pre-nomen. This suggests a strong argument in favour of the truth of the tradition that a large proportion of the colony brought down by Sri Parasu Rama were emigrants from the Telugu country.

Classification of houses

41. In addition to distinguishing the houses according to the nature of their roofing, a classification according to their *value has been adopted as on this coast the roofs seldom show the rank or durability of the buildings which they cover. The coconut leaves' thatch in addition to being a cheap one counts several other advantages in its favour. They (the cocoanut leaves) preserve the joists, rafters and beams infinitely better than tiles which on the contrary gradually eat them away and the buildings fast decay often in the lifetime of the persons who raised them. The segregation of the houses and their position in the centres of large Topes (Purayidems) almost eliminate the chances of extensive and wholesale destruction from fire, the apprehension of which is one of the material causes of tiling so generally adopted on the other coast.. so that .. while the most flimsy houses on the other coast are protected by tiles, the most substantial mansions on this coast are left covered with thatch. The cocoanut leaves are renewed once or twice every year according to circumstances, and the buildings thoroughly examined and dusted and necessary precautions taken to prevent leakage or other decay. This cannot be done with tiled houses. A further advantage of thatched roofs is that they moderate the temperature within them.

Masonry work

42. For similar reasons, terraced houses are almost unknown in Travancore. The schedules return only 33 terraced houses out of an aggregate of 507,425 houses for the whole country. Masonry work is but a rare luxury in a normal Malayali house. No terraced building can be rain-proof in this climate of violent and excessive showers, except at an enormous expense and out of all proportion to the cost of similar buildings. The thatched roof is therefore no indication whatever that the house is of an inferior sort.

Census Report of Travancore 1874—*Pages* 46-47.

*Houses valued at Rs. 1,000 or more have been placed in the *first* class; Houses valued between Rs. 200 and Rs. 1,000 in the *second* class; and all the rest in the *third* class.

Section II

Names given to the habitations of the different classes

Before quitting this part of the subject it may be noteworthy to remark the several names by which the habitations of the different classes are distinguished. That of a Namboory Brahmin is called "Illam" (....) or "Manakul" (....); that of a Foreign Brahmin "Matam" (....); if situated in a compound, or a "Agaram" (....) if situated in a *village;* that of a Thumban is a "Kolagom" (....); a Varar's is a 'Variyam" (....); a Psharody's is a "Psharum" (....); a Pushpagan's is a (....); a Nair's is a "Veedoo" (....); an Eloova's is a "Kottil" (....); "Perray" (....) or "Kynila" (....); a Shanan's is a "Koodi" (....). The Pulayan's is either a "Madum" (....) or "Thara" (....); and the "Chery" of the Parayan "Parachery." (....).

Census Report of Travancore 1874—*Page*—134.

APPENDIX III

Section III

Description of a Nair House

A Malayali house though neither remarkable for its loftiness, space or architectural beauty is undoubtedly neat and deserves the title "pretty." The Nair's habitation is generally in the centre of a large and spacious compound thickly planted with the valuable cocoanut, the prolific jack, the highly prized areca and the useful plantain. Around his main house and the little detached buildings, each of which serves its own purpose of accommodating either the Karanavan of the family or the venerated Brahmin traveller or the females of the house, is thrown a neat mudwall covering an oblong space which forms a ring fence separating the premises of the house from the outer compound. "The house occupies an elevated platform, and the basement of stone has a flat plank ceiling overspread with a layer of mud to obstruct the progress of fire, and the usual pent roof covered with leaves; it is sometimes half encompassed by a rude corridor; the centre forms a small magazine in which are deposited the whole valuables of the family; around it are the chambers in which they sleep; a small porch marks the entrance". (Lieutenants Ward and Conner).

The better class of Nair houses can, of course. count a few more advantages. One or two spacious yards in the centre which admit plenty of light and some air, numerous doorways connecting the different apartments which, in some houses count so many as a dozen. The kitchen or the cooking apartment which generally abuts the northern end of the building is always at a respectable distance from the house, if under one roof. and not unfreqently forms a detached building. The construction of the house is peculiar, being a succession of *"Nalukettoos"* the number of which varies according to the opulence and respectability of the owners. The building Nalukettoo is in the form of a square with an open yard in the centre. A low but beautifully carved panelling often screens the roof and affords a cool retreat from the midday sun. Wood of course, enters largely in the contruction, the body of the house being entirely in that material, the partitions of all the inner apartments as well as the granaries being generally wrought in very superior timber such as the Anjelly and the Jack.

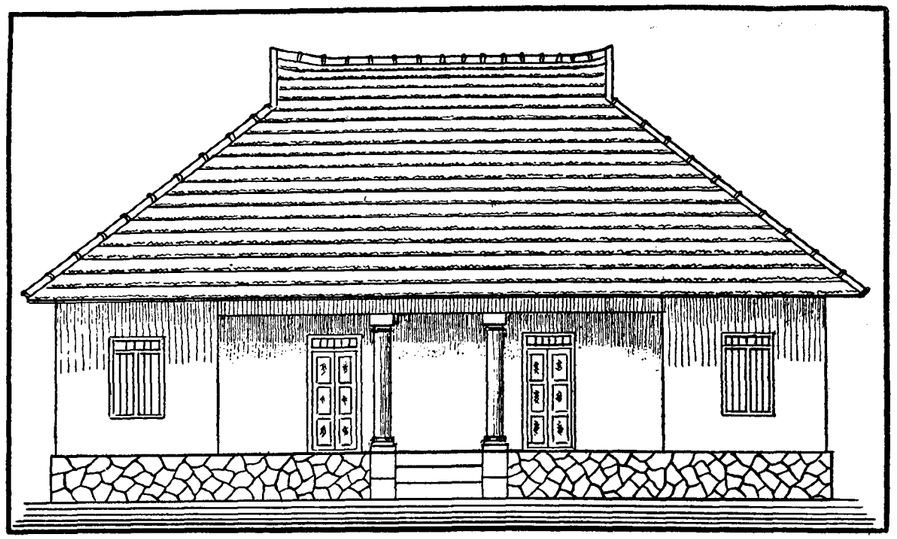
The Nair's house almost inveriably faces the east, its situation in the compound giving the owner free scope to choose his own direction, which long established custom and superstitious belief enjoin.

Every house has in addition to the "Padipura" or "Poomugum," a "Tekkathoo" (simply meaning southern shed) or Matam, which is generally dedicated to the presiding deity of the house, and is kept neat and clean and without any furniture or household utensils, except a brass lamp which is lighted up every evening. The place is looked upon with reverence by the inmates of the house, who do not enter it except after purifying themselves by a bath which is generally done by dipping into cold water. The Brahmin visitor of the family often retires to the Tekkathoo for purposes of meals and drink. The wearied Brahmin traveller also is treated to this hospitable retreat. The spacious open yard, enclosed by this cluster of buildings so useful for drying paddy, gram, peas and oher annual stores, is kept scrupulously neat, the floor having been first hardened and made smooth by a solution of cowdung and charcoal, which is often repeated during the hot weather. The master of the house, most probably an old Proverty accountant or a pensioned Tahsildar not noted for overscrupulousness while in office but now in affluent circumstances and respectable old age, sits in the Poomugum chewing away the tender betel and the narcotic tobacco or beguiling the hours of the afternoon with anecdotes of his early prowess, achievements and successes, while the religious books of his family the time-honoured Ramavana and Mahabharata alternately engage and exact his time and attention.

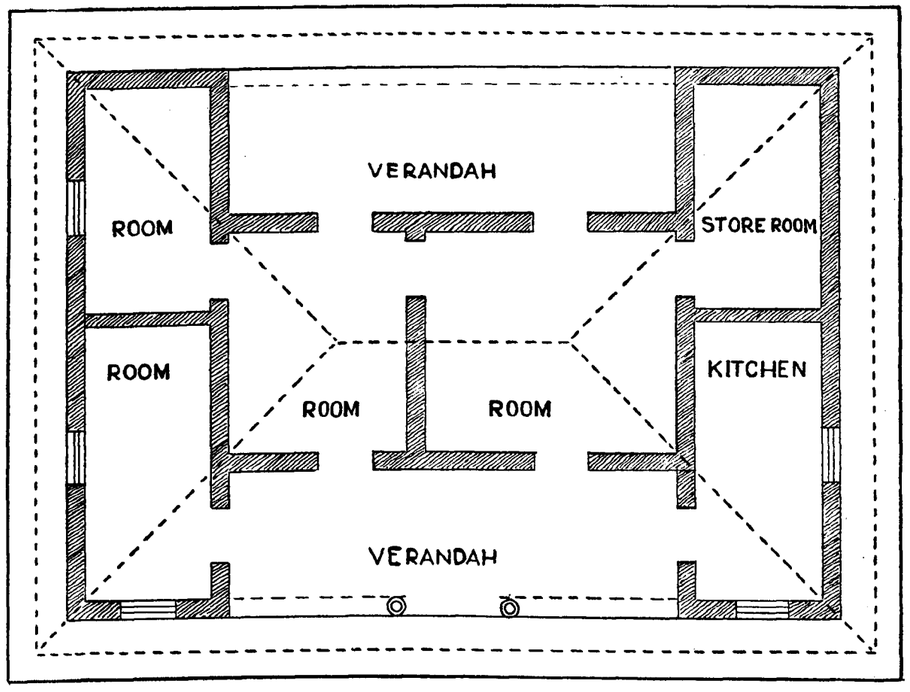
Furniture, utensils, &c.

The furniture of a Malayali house, as that of all native houses, is scanty in the extreme. A metal ewer with a wide spout, generally known by the name of "Kindy", a few metal plates and cups for eating and drinking, one or two "Urulis" (. . . .), of different sizes, a brass spittoon, a brass lamp, a betel box, a few mats, an old cot, and a long knife meet nearly all the demands of a household, while the higher order of them can count in addition a "Changalavatta" (Lamp) of superior workmanship, a "Pidimontha" or a narrow-necked brass pitcher and a fine "Chellem" (brass box or betel) the use of which indicating as it does, social rank, position or respectability is limited to a few of that class, mostly to those among them who enjoy the privilege of Government service. Earthen vessels are largely used in the houses of the poorer classes.

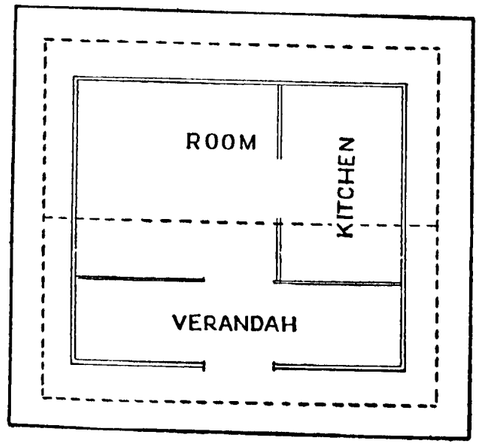
Census Report of Travancore 1874—
Pages 121-124.



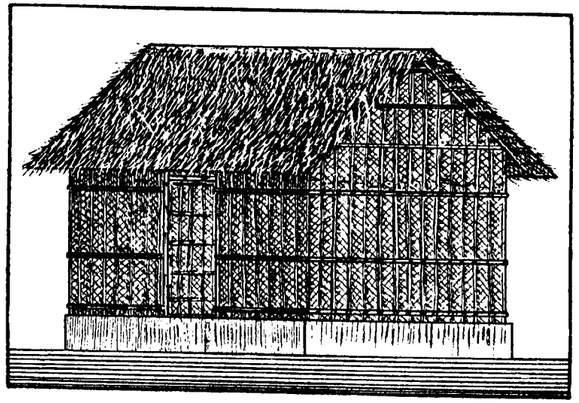
A HIGH CLASS HOUSE



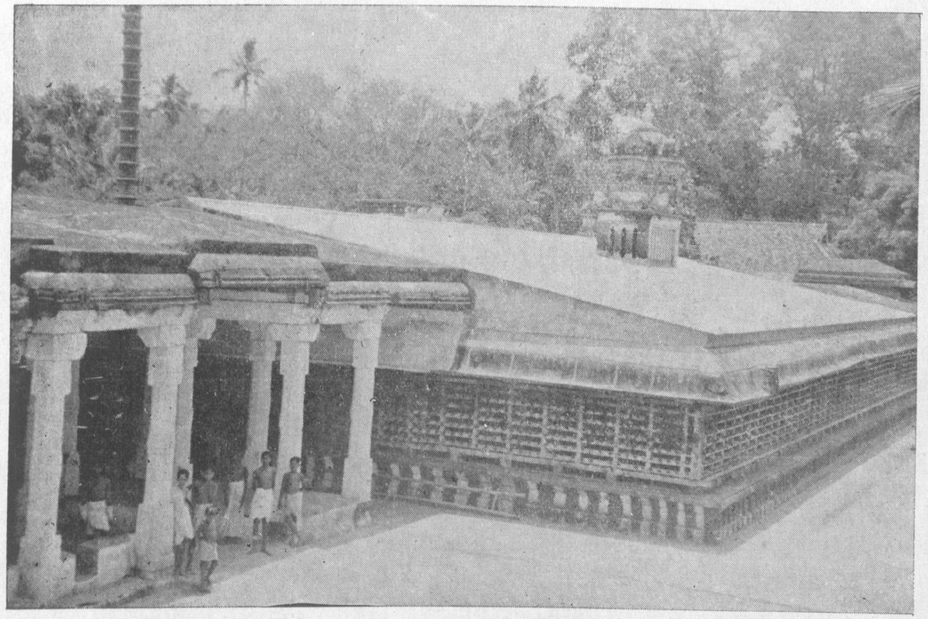
GROUND PLAN OF A HIGH CLASS HOUSE



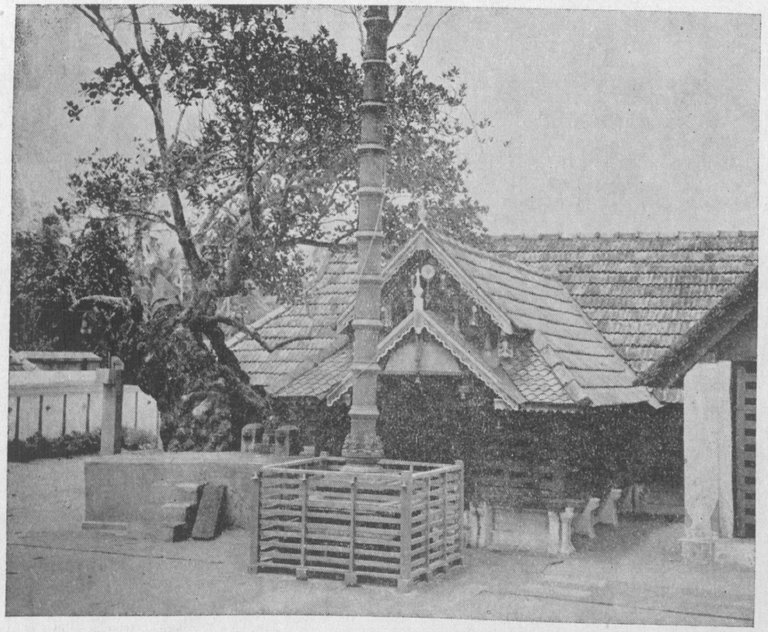
GROUND PLAN OF A POOR MAN'S HOUSE



A POOR CLASS HOUSE WITH PLINTH OF LATERITE STONE

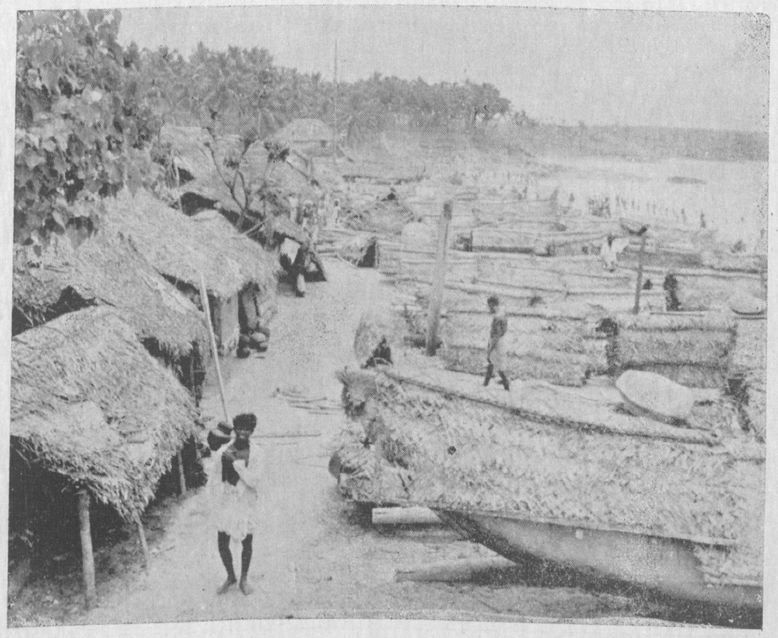


THE MAHADEVAR TEMPLE, PARASSALA



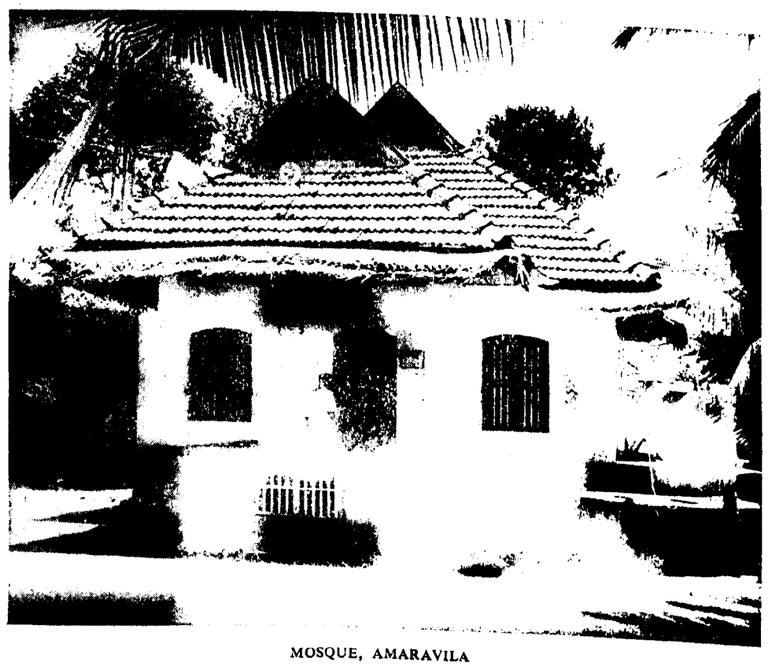
KRISHNASWAMI TEMPLE, NEYYATTINKARA

A WATERWAY SETTLEMENT

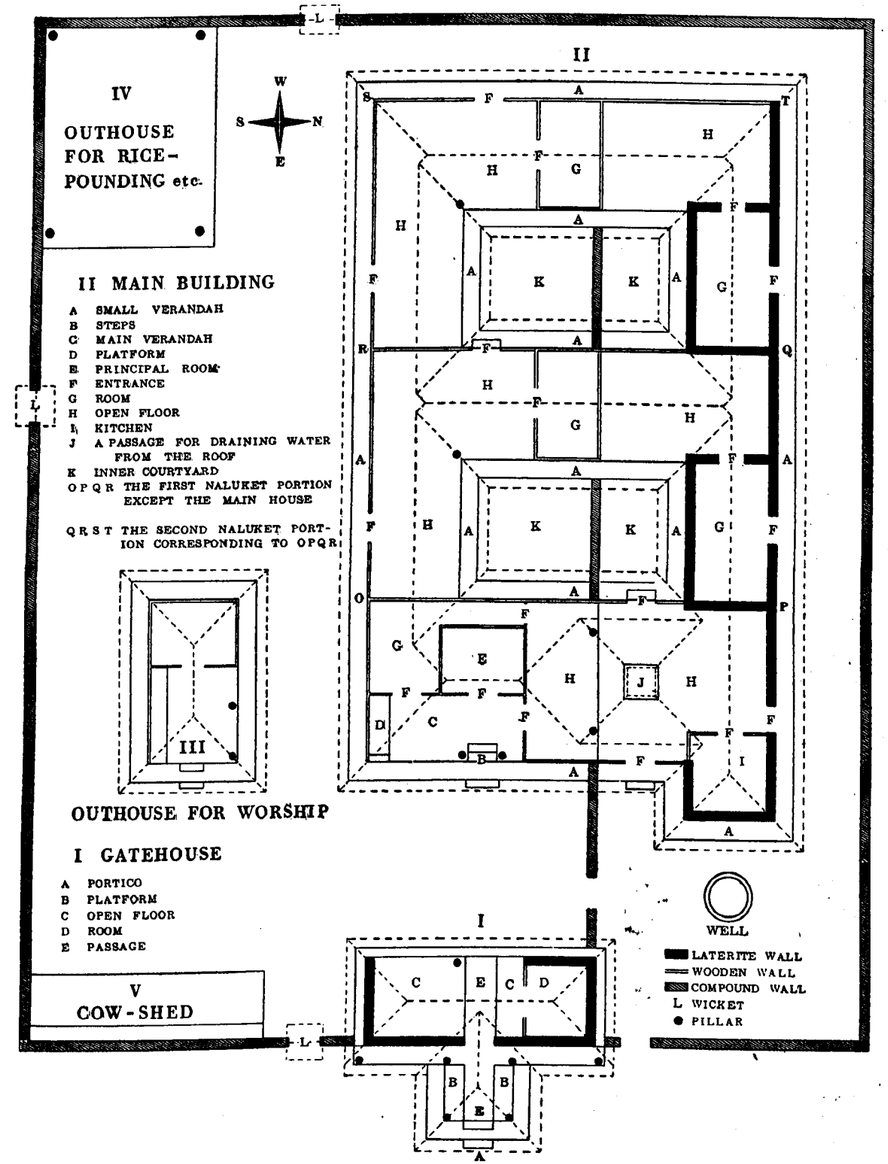


A FISHING COLONY AND FORESHORE

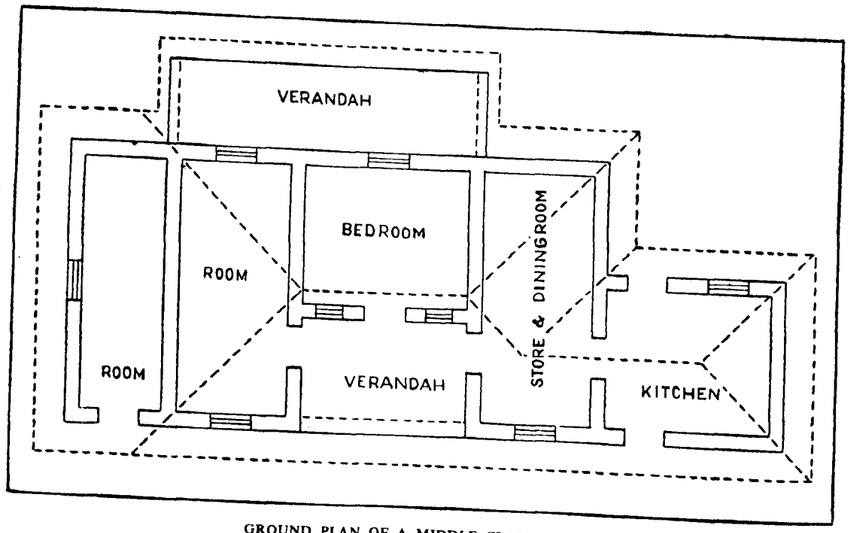
ROMAN CATHOLIC CHURCH, PARASSALA



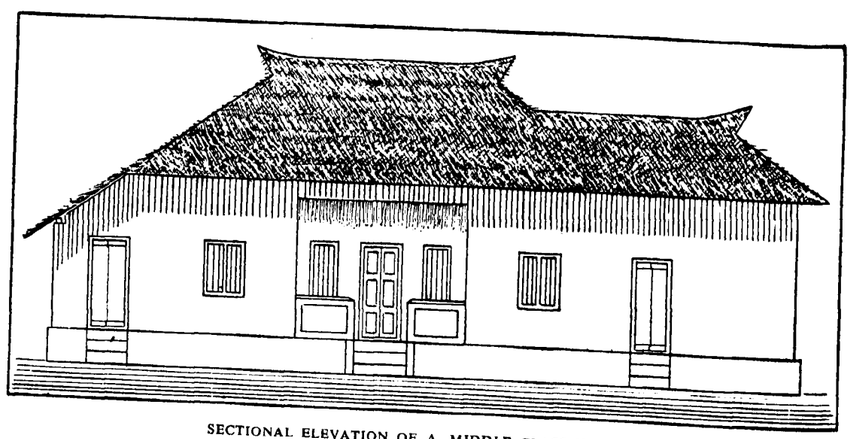
MOSQUE, AMARAVILA



GROUND PLAN OF AN EXTENDED NALUKET (ETTUKET)



GROUND PLAN OF A MIDDLE CLASS HOUSE



SECTIONAL ELEVATION OF A MIDDLE CLASS HOUSE

MADHYA PRADESH

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

There are in all 76,833 villages in Madhya Pradesh, 6,419 of which are uninhabited. The State is predominantly a State of small villages—over 73 per cent have less than a population of 1,000 each and nearly 42 per cent have populations of less than 500 each. The general impression one gets is that the rice-growing tract has a larger proportion of medium-sized villages where as the wheat-growing areas have a larger proportion of the bigger as well as the smaller villages. In their general form and locational patterns, these villages do not present any area-wise characteristics; more or less the same forms and same house types are seen throughout the State, one type preponderating over the other in different areas. Areas where a departure is noticed from the general pattern of villages and the house types are more usually the tribal regions. Madhya Pradesh has a scheduled tribe population of 6,678,410 which constitutes 20.63 per cent of the total population of the State. Broadly speaking, there essentially tribal areas could be marked out on the map of Madhya Pradesh. These areas are :—

(i) Western and south-western zone consisting of Jhabua, West Nimar and Dhar District and Sailana Tahsil of Ratlam District. (Bhils)

(ii) The Central belt encompassing the south-eastern areas of Harsud Tahsil of East Nimar District, Betul, Chhindwara (except the southern-most part of Sausar Tahsil), Seoni (except southern-most part), southern tip of Narsimhapur, eastern part of Jabalpur, northern parts of Waraseoni, Balaghat and Baihar Tahsils of Balaghat District, northern half of Kawardha Tahsil of Durg District; Mandla, Shahdol, Sidhi, Surguja, northern parts of Bilaspur District and northern half of Raigarh District (mixed Gond).

(iii) The southern zone consisting of Bastar District, Sanjari-Balod Tahsil and southern-most part of Durg Tahsil of Durg District, south and south-eastern parts of Raipur District (Gond).

The locational patterns of villages and house types in these 'essentially' tribal areas are somewhat different from those occurring elsewhere and there is a greater proportion of villages in these areas where there is no compact settlement, the village being represented by isolated homesteads and dispersed clusters. Further, there is a greater tendency in these areas, particularly in the eastern and southern parts of the State, toward formation of separate hamlets which are sometimes as far from one another as 3-4 miles and almost bear the semblance of separate villages. Except in the western and south-western areas, there is an evident tendency in these tribal areas towards linear type villages. Again, the house types in all these 'essentially' tribal areas are different, not in the ground plan and roof types but in the kind of material used.

In the present note, the terms used are those given in "Peasant Life in India" (Memoir No. 8 : 1961 of the Anthropological Survey of India). For determining the typical locational patterns of villages a random sample was drawn from the notional maps prepared at the time of house-listing operations. For this purpose a stratified sample was drawn for each Commissioner Division separately, the stratum being the size-classes of villages :

(a) Villages with population below 200;

(b) Villages with population 200—499;

(c) Villages with population 500—999; and

(d) Villages with population 1,000—1,999.

Village with population above 2,000 were not taken into consideration. For each division 1 per cent of villages were selected and beginning with a random start, every 100th village was selected. The

tahsils were arranged in order of their L.C. No. and a list of villages arranged in different size-classes was drawn. This procedure thus ensured geographical contiguity—for a well-spread sample.

Locational pattern

The most predominant form of villages in Madhya Pradesh is what is known as the shapeless cluster and even in most of the essentially tribal areas, shapeless clusters are usually the result when homesteads are built in the nature of compact settlements. Locational pattern and forms of villages, as they are obtained in the different Commissioners Divisions are given below :

GWALIOR DIVISION.—The predominant form of villages in Gwalior Division is shapeless cluster. Other types in addition to this are :—

Morena.—Rectangular (Bijeypur Tahsil); Linear (Sabalgarh Tahsil) and dispersed clusters (Joura Tahsil and Sabalgarh Tahsil).

Bhind.—Rectangular in all the Tahsils; linear (Lahar Tahsil); Dispersed (Bhind Tahsil).

Gwalior.—Rectangular type in Pichhor and Bhander Tahsils, the predominant form exhibited in the latter Tahsil is rectangular; Dispersed (Gwalior, Pichhor).

Datia.—Dispersed clusters (Datia) linear (Sendhwa); Rectangular (Sendhwa).

Shivpuri.—Dispersed clusters in Shivpuri, Karera and rectangular type in Pichhor Tahsils.

Guna.—Linear type predominating in Guna Tahsil; linear type also seen in Mungaoli and Raghogarh Tahsils. Dispersed clusters in Chachoura Tahsil; Rectangular in Ashoknagar, Mungaoli and Raghogarh.

REWA DIVISION.—In Rewa Division, the areas which are 'essentially' tribal in the context referred to earlier, are Sidhi and Shahdol Districts, but it is actually Pushparajgarh Tahsil of Shahdol District, where 80.20 per cent of the population of the Tahsil is constituted by the Scheduled Tribes, that one comes across the distinctive isolated homesteads. Here also, the predominant type of villages are the shapeless clusters, except in three tahsils Pushparajgarh of Shahdol District (Linear and isolated homesteads); Maihar Tahsil of Satna (Rectangular) and Bijwar Tahsil of Chhatarpur District (Linear and dispersed) where other types as shown in brackets predominate.

Apart from shapeless clusters the other types met with are :—

Tikamgarh.—Rectangular and dispersed (Niwari Tahsil).

Chhatarpur.—Linear (Laundi and Bijawar Tahsils); Dispersed (Bijawar).

Panna.—Linear (Pawai Tahsil).

Satna.—Rectangular (Raghorajnagar and Maihar); linear (Nagod).

Rewa.—Linear (Teonthar, Sirmour and Huzur) Dispersed (Mauganj) Rectangular (Huzur and Mauganj).

Shahdol.—Rectangular (whole district) isolated homesteads and dispersed clusters (Pushparajgarh) linear (Sohagpur, Pushparajgarh and Bandhogarh).

Sidhi.—Linear (Deosar); Rectangular Singrauli); Dispersed (Deosar Tahsil).

INDORE DIVISION.—In Indore Division, the most predominating form of villages is shapeless clusters, but in the tribal areas constituting the western and south-western tribal zone of the State, isolated homesteads predominate over other forms and sometimes the homesteads coming together give rise to dispersed clusters. Shapeless cluster type of villages form a minor proportion in these areas and it is only the bigger villages which belong to the shapeless-cluster type. Dispersed clusters also result in the areas because of caste-wise segregation and the feature is even seen in some of the towns e.g. Maheshwar of West Nimar District where the 'low' castes have built their settlement quite far from the town proper and 4 such clusters, one of Khangar and Balahi, second of Koli and Bhoi, third of Bhambi, Salvi and Bhangi and the fourth consisting of 2 or 3 houses of Bhils can be distinctly seen apart from Maheshwar town proper.

Different forms of villages met with in Indore Division, (other than shapeless clusters) are as follows :

Mandsaur.—Shapeless clusters only.

Ujjain.—Rectangular.

Dewas.—Rectangular.

East Nimar.—Linear.

West Nimar.—Isolated homesteads; Dispersed clusters, linear.

Jhabua.—Isolated homesteads; Dispersed clusters.

Dhar.—Isolated homesteads (Kukshi Sardarpur, Manawar Tahsils); Dispersed clusters (whole district).

Ratlam.—Dispersed clusters (Sailana Tahsil).

Indore.—Dispersed clusters (Mhow Tahsil).

BHOPAL DIVISION.—As elsewhere in the State, shapeless clusters type of villages predominate over other forms. However, there are some areas where other forms become more frequent. These areas are Susner and Shajapur Tahsils of Shajapur District (Rectangular type); Raisen Tahsil of Raisen District (Dispersed clusters) and Bhainsdehi Tahsil of Betul District (Linear clusters). Apart from the ubiquitous shapeless clusters, other form met with in the district of this division are :

Shajapur.—Rectangular (whole district).

Rajgarh.—Linear (Khilchipur and Rajgarh Tahsils); Dispersed clusters (Raigarh Tahsil); Rectangular (Khilchipur and Sarangpur Tahsils).

Sehore.—Linear (Sehore and Budhni Tahsils).

Raisen.—Dispersed clusters (Raisen Tahsil).

Vidisha.—Rectangular (Sironj and Basoda Tahsils) Linear (Vidisha Tahsil); Dispersed (Basoda).

Hoshangabad.—Rectangular (Harda, Seoni-Malwa and Hoshangabad Tahsils) Linear (Seoni-Malwa and Sohagpur Tahsils).

Betul.—Linear (whole district) Rectangular (Multai Tahsil) and isolated homesteads (Betul Tahsil).

JABALPUR DIVISION.—In this division, Mandla District, northern half of Chhindwara District, most of Seoni District and north-eastern half of Balaghat District constitute the 'essential' tribal areas. The eastern part of this division (i.e., Mandla District, eastern part of Jabalpur District and Baihar Tahsil of Balaghat District) is the home of the Baigas and Bhumias and in the south-western part of this division live the tribes—Bharias, Mowasis and Korkus. Gonds are spread all over the division.

In this division also, the predominant type is shapeless cluster. In the interior regions of Jabalpur District inhabited by the Kols, in Dindori and Mandla Tahsils of Mandla District, Baihar Tahsil and part of Balaghat Tahsil of Balaghat District which is the home of the Baigas and Bhumias, Dispersed Clusters and rectangular forms also reach considerable proportions. Rectangular forms of villages are characteristic of the Baigas and that appears to be the reason why this type becomes somewhat numerous in this region. Dispersed clusters are also typical of Chhindwara tribal area.

Different forms of villages (other than shapeless clusters) found in the district of Jabalpur Division are :

Sagar.—Rectangular (Khurai and Sagar Tahsils) Linear (Banda, Sagar and Rehli Tahsils); Dispersed (Rehli-Tahsil).

Damoh.—Rectangular (Hatta Tahsil).

Jabalpur.—Linear (Patan and Sihora Tahsils) Rectangular (Jabalpur and Murwara Tahsils) Dispersed Murwara, Sihora and Jabalpur Tahsils).

Mandla.—Rectangular (whole district Linear (Mandla and Niwas Tahsils); Dispersed (Dindori and Mandla Tahsils). (The typical linear form seen in the district, especially in Niwas Tahsil is linear in rectangular i.e., a combination of linear and rectangular forms)

Balaghat.—Rectangular (Waraseoni and Baihar); Dispersed (Baihar and Balaghat).

Seoni.—Linear and rectangular (whole district).

Chhindwara.—Dispersed (Chhindwara and Sausar Tahsils); Linear (whole district) Rectangular (Chhindwara Tahsil).

Narsimhapur.—Linear (Narsimhapur Tahsil).

BILASPUR DIVISION.—A major area of this division i.e., practically the entire

Surguja District, northern half of Raigarh District the Katghora Tahsil and northern parts of Mungeli and Bilaspur Tahsils of Bilaspur District, constitute the 'essential' tribal areas. The remaining area of the division is a very compact and thickly populated area.

In the thickly populated plain areas the common form is the shapeless cluster sometimes tending towards a vague rectangular pattern. In the tribal areas the predominant form of villages shift from shapeless clusters to dispersed and linear type. In Sarangarh Tahsil of Raigarh District, linear type of villages preponderate over other forms. Village-forms in addition to shapeless clusters in Bilaspur Division are :

Surguja.—Rectangular (Pal, Samri and Ambikapur Tahsils); Dispersed (Surajpur, Baikunthpur, Pal and Ambikapur). Isolated homesteads are sometimes seen in the Pahari Korwa areas but do not form any significant proportion.

Raigarh.—Dispersed (Jashpur); Rectangular (Gharghora); Linear (Raigarh and Sarangarh). (In Sarangarh Tahsil, linear form is the major form).

Bilaspur.—Linear (Mungeli, Janjgir and Katghora Tahsils); Dispersed (Bilaspur and Katghora) (Sometimes the linear forms and Dispersed clusters are found together in Katghora Tahsil). Rectangular (Katghora, Bilaspur and Mungeli Tahsils).

RAIPUR DIVISION.—The predominant type in Raipur Division also is the shapeless cluster. More than half of Raipur Division i.e., the whole of Baster District, south and south-eastern part of Raipur District and Sanjari-Balod Tahsil and Kawardha Tahsil of Durg District, constitute the tribal belt and in this region, the village-form somewhat changes, the shift being more towards dispersed clusters and isolated homestead. In the Kawardha Tahsil, Durg District (inhabited by the baigas) and in the Narayanpur Tahsil of Bastar (Mostly inhabited by the Hill Marias and Murias) the predominant type of villages are not the shapeless clusters. In Karwardha Tahsil of Durg District the predominant forms are linear and rectangular and in Narayanpur Tahsil the forms are linear, isolated homesteads and dispersed clusters. Village-forms, apart from shapeless clusters, seen in this Division are :

Durga.—Linear (Kawardha, Khairagarh Rajnandgaon, Sanjari-Balod and Durg Tahsils); Rectangular (Kawardha Bemetara, Khairagarh, Rajnandgaon and Sanjari-Balod Tahsils); Dispersed clusters (Sanjari-Balod Tahsil).

Raipur.—Linear (Balodabazar, Mahasamund, and Bindranawagarh Tahsils); Rectangular (Balodabazar, Dhamtari and Bindranawagarh Tahsils); Dispersed clusters (Bindranawagarh and Dhamtari Tahsils isolated homesteads Bindranawagarh Tahsil).

Bastar.—Linear (Kanker, Kondagaon, Bhanupratappur, Narayanpur, Bijapur and Jagdalpur Tahsils) Rectangular (Jagdalpur Tahsil) Dispersed clusters (Bhanupratappur, Narayanpur, Kondagaon, Jagdalpur, Dontewara and Bijapur Tahsils) isolated homesteads (Narayanpur Tahsil).

It may be mentioned here that the tribal village in the eastern part covering from Sidhi District to Bastar District and extending towards up to about Mandla District and Baihar Tahsil of Balaghat District, are situated near rivers and streams and in areas covered by forest. Another character of some of the tribal villages in this region is their location on hill and plateau tops which makes the accessibility to those villages extremely difficult. Examples of such villages are Kamar-Bhoudi, Od, Kurkar, Nangrar, Amamora in Bindranawagarh Tahsil of Raipur District and many villages in Bastar District especially the Madia village. Villages of the Patalkot region in Chhindwara District inhabited by the shy Bharias are situated in a physiographic basin and accessibility to them is as difficult as regarding those on hill-tops. Some of the Bhil villages in the extreme west, especially those inhabited by the Naire and Tadvi Bhils are also situated on hill-tops. The general nature of Bhil settlements are clusters or isolated homesteads dispersed in an eroded country and occupying separate mounds of eroded hillocks.

House types.—The predominant house-types found in this State are :—

(i) Rectangular ground-plan with horizontal roof; and

(ii) Rectangular ground-plan with inclined roof.

Actually speaking pure horizontal roof is not seen in villages of this State except in those rare houses where cement concrete is used. The house type represented by (i) is actually a slate or sandstone slab-roofed one where the roof is inclined on one side only. The inclination in these houses is not as much as it is in the inclined roof houses. Apart from the factor of easy availability of state and thin sandstone slabs, rainfall is a more important governing factor in this respect and such houses with slate or stone roofs are limited to the regions where rainfall is low. In this State, therefore, the slightly-inclined flat-roofed houses are found in Gwalior Division. In Gwalior Division the areas where such houses are found are : Morena District, Bhind District except Lahar Tahsil thereof; Datia Tahsil of Datia District, Shivpuri District; Guna, Ashoknagar and Mungaoli Tahsils of Guna District. Memoir No. 8 : 1961 of the Anthrophological Survey of India mentions that houses with rectangular ground plan with horizontal roof are found in Ratlam and Dhar Districts. In addition to this Jawad and Neemuch Tahsils of Mandsaur District in Indore Division also show a fair proportion of houses with horizontal or slightly one-way inclined roof. Such roofs are also seen in some villages e.g. Gomatpur of Sagar District.

In other areas of the State rectangular-ground plan with inclined roof is the commonest type. Houses with circular ground-plan with conical roof are not seen in this State. In the Bhil tract, however, such structures are constructed, but they are not for habitation and are used as fodder-store houses. In the Anthropological Survey Memoir "Peasant Life in India", it is stated : "An interesting variant of the circular plan is afforded by some castes in Andhra who migrate with their pigs to Orissa and even Madhya Pradesh". Such homesteads may be temporarily constructed by nomadic migrants from Andhra Pradesh; they are not constructed by any caste or tribe in Madhya Pradesh.

Inclined-roofed houses show one more variation and that is the multiple-roofed houses and two-roofed houses. The former type is quite common among the Ponwars of Balaghat District. But the two-roofed houses are seen more commonly than the multiple-roofed houses in other districts.

House types may also be classified on the basis of the material used for walls and roofs. Mud for walls and tiles for roof are the most preferred materials used in the house of the State. In the tribal areas, however, the pattern changes. In the Bhil and Bhilala areas constituting the western and south-western tribal zone, the commonest wall material is bamboo and roofs are made of tiles and also of grass. The bamboo is split and a beautiful mat—like structure is made.

This alone serves as the wall or it may also be plastered with mud. The Bhils seem to have preference for one-room house and even bigger houses have only one room under the roof which sometimes, appears like a big hall. In cases where the family increases, the big room may be partitioned by similar bamboo-wattle but there are no doors and the 'wall' is hardly 6-7' high; it does not reach up to the roof. Such single-room houses are seen even when the Bhil is well-to-do and constructs stone houses. One example of this is in village Khadki near Pansemal in Sendhwa Tahsil of West Nimar.

In the tribal areas of the Central tribal belt (Betul, Chhindwara, Seoni, Balaghat, Mandla and the Korku areas in Hoshangabad) the walls are commonly made of thatched branches and bamboo-wattle. In the eastern tribal areas Pushparajgarh Tahsil of Shahdol District, Deosar Tahsil of Sidhi, and tribal areas of Raipur and Bilaspur Divisions thatch-wall and thatched-roofed houses are quite numerous. *Khadar* roof (*Khadar* is the name of a thatching grass) are very common in Bastar and Raipur tribal areas.

The subject on wall and roof material has been discussed in some detail in the Report on Housing and Establishments—Madhya Pradesh, and has not been, therefore, discussed in the above.

APPENDIX I

MADHYA PRADESH

Villages of the lowest class are, of course, most common in those districts which contain a large extent of forest and waste. Such are Mandla, where 65·4 per cent of the villages contain under 200 inhabitants, Chhindwara, where the proportion is 63 per cent, and Chanda, 64·5 per cent. In Chhindwara most of the small villages are situated in the jaghirs in the north of the district, where the population is almost entirely aboriginal. In Bastar, and generally in the Uria States, the number of villages of the smallest size is very high; in Rairakhol they form 90·6 per cent of the total, in Bastar, 83·9, and in Kalahandi, 75·6 per cent. The places with the lowest proportion of small villages are Bhandara, where they are 32.7 Kharagarh, 30.4, and Chhuikhadan, 25·2 per cent of the whole. Villages of the next class, containing between 200 and 500 inhabitants, are most numerous in Chhattisgarh, where they are nearly as common as ones of the smallest size, which predominate in other parts of the Province. On the two following classes, with a population of between 500 and 1,000, and between 1,000 and 2,000, it is hardly necessary to remark. It will be noticed that they drop off in strength in the Satpura districts and in the Uria States, in all of which small villages are the rule.

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APPENDIX II

TILAIBHAT

(*From Village Survey Report of Tilaibhat,* 1961 *Census*)

Village Tilaibhat (population 325) is situated in the southern part of Mungeli Tahsil of Bilaspur District of Madhya Pradesh. It is a medium-sized predominantly Teli (Oil-presser) village located 50 miles from Bilaspur town and 19 miles from Mungeli which is the tahsil headquarters. Situated about 3 miles from the all-weather Mungeli-Pandariya road, the approach to the village is not easy. In the rainy season, the village can be reached only on foot and, since the fields are all sown, the track lies in a zig zag manner over the field embankments.

For Revenue administration, the village is included in Patwari Circle 32 of Revenue Inspector Circle Pandariya. In respect of Police jurisdiction, the village comes under Kunda Police-station. A Development Block, with headquarters at Pandariya, has started functioning for 3 years and village Tilaibhat is covered by this Block. Prior to the abolition of Zamindari in Madhya Pradesh, Tilaibhat was a part of Pandariya Zamindari of the Bilaspur District.

Pandariya, which was the seat of Zamindari, continues to be an important place for the inhabitants of Tilaibhat. It is not only the headquarters of the Revenue Inspector, the Patwari and of the Development Block; also it has a hospital, a weekly market and is the headquarters of the Forest Ranger as well as the venue of the Touring Talkies.

The name Tilaibhat literally means "the open ground of Telis" or "the open ground of *til* (sesamum)" and evidently the name is related to the preponderance of the Telis in the village. Telis happen to be numerically quite an important caste in Bilaspur District. As per Census of India, 1931, Bilaspur District had a total population of 1,400,248 and out of this population the Telis numbered 100,999 or 7·2 per cent of the total population of the district. There are many villages in the district whose names are related to this caste. Some examples are villages Tilsara, Tilkeja, Tilaikunda, Tilaikundi, Tilaidand, Tilaipar, Tilaipuran, Tilaikhami and Tilaipani, etc.

The inhabitants have no definite idea as to when and why the first settlement took place. They, however, say that they have been here for about three generations. According to them, the first settler here was a Teli and, since before the settlement the ground was open *bhata,* the village came to be so named. A reference to the Village Lists of Bilaspur District[1] prepared at the Census of 1901 shows that the village did not exist in 1891 since no population is recorded in 1891 Census. The Lists also show that in 1901, the number of occupied houses was 30 with a population of 124 persons and the *Lambardar Malguzar* of the village was of Raj Gond caste.

It appears that this village came into existence sometime in the period 1895-1900, because this was a period of scarcity and famine in the whole district and in the whole province, and Mungeli Tahsil was among the worst affected areas[2]. Large-scale migration had occurred and because of the famine and migration, Mungeli Tahsil returned the greatest decrease in the population in the Census of 1901[3]. Since the village is shown as not having any population in 1891 and the period from 1895 to 1898 was a very bad period in this area especially, it would not be wrong to fix the age of this village as 61 to 67 years. This also corroborates the villagers' idea that they have been here for some three generations.

The village-site gently slopes in two directions, three-fourths to the north and one-fourth to the east. A stream flows from west to the east in the north of the village and there are two tanks. The bigger of these is the one in the west of the village. It is surrounded by some trees and the most important of these trees is a *peepal* (*Ficus religiosa*) tree. It is not only an object of worship itself. An idol of Gold Hanuman is kept beneath it. This

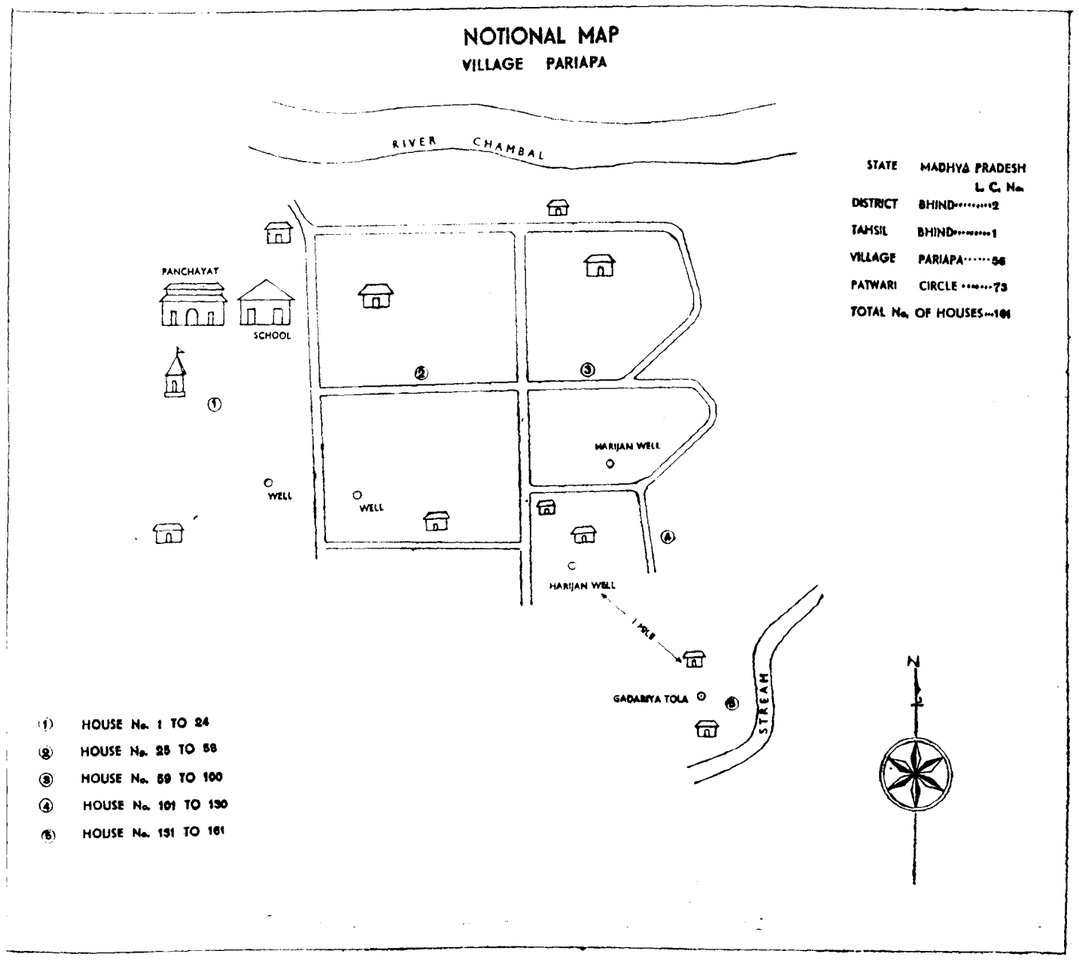
1 Village list of Bilaspur District, Census of India 1901 pp. 192-193.
2 Final Report of the Land Revenue Settlement of the Bilaspur District 1904—1912, J. B. Manee, P. 53.
3 Ibid P. 56.

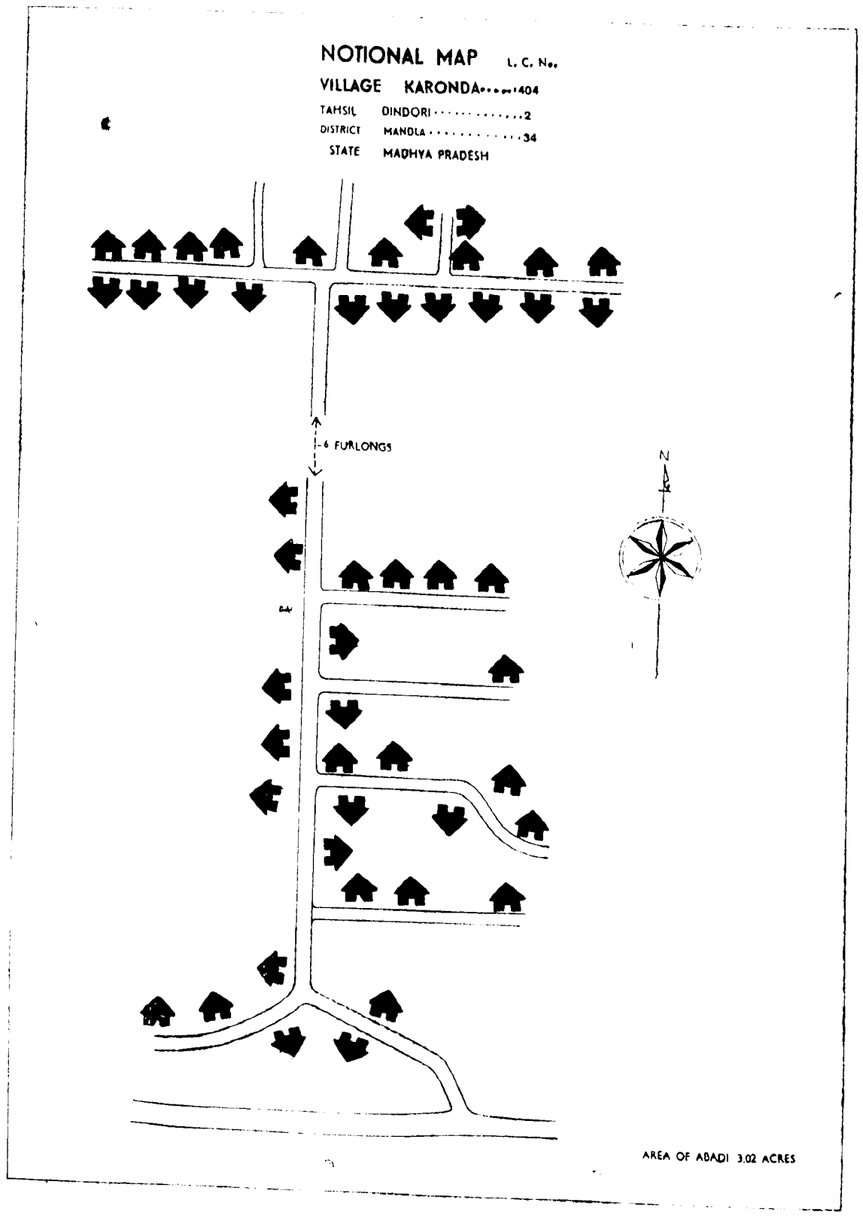
tank is used for bathing and as a source of drinking water. There is a smaller tank situated south of the village and it is used for bathing the cattle. It is also used by some villagers for bathing, but is not used for drinking water.

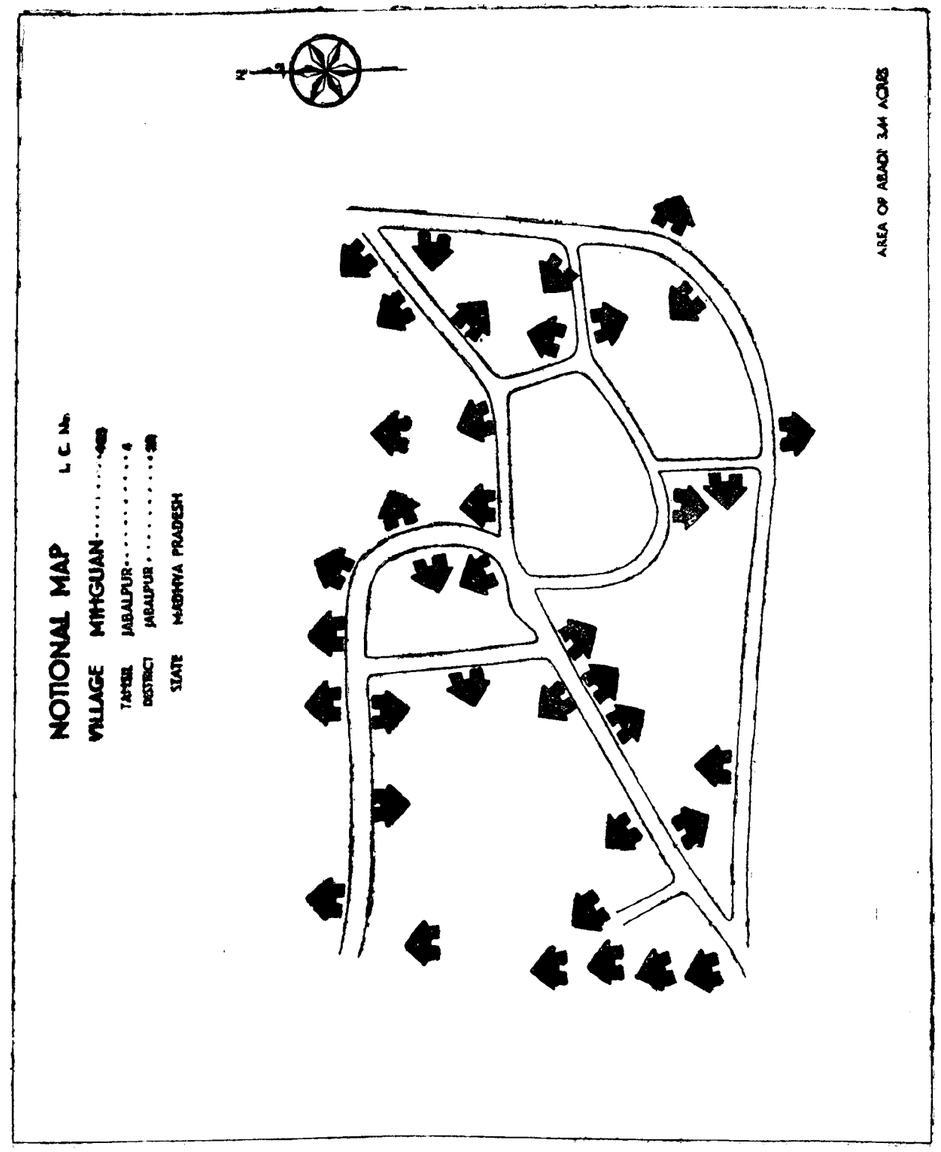
There are in all three wells in the village. One of these wells is situated within a house and the other two are situated on open space and available for water supply to the villagers. These two wells are situated on the two extremities of the village, one in the east and the other in the west. One of these wells is lined, the other is *kutcha* and the water of this *kutcha* well is not used for cooking purposes.

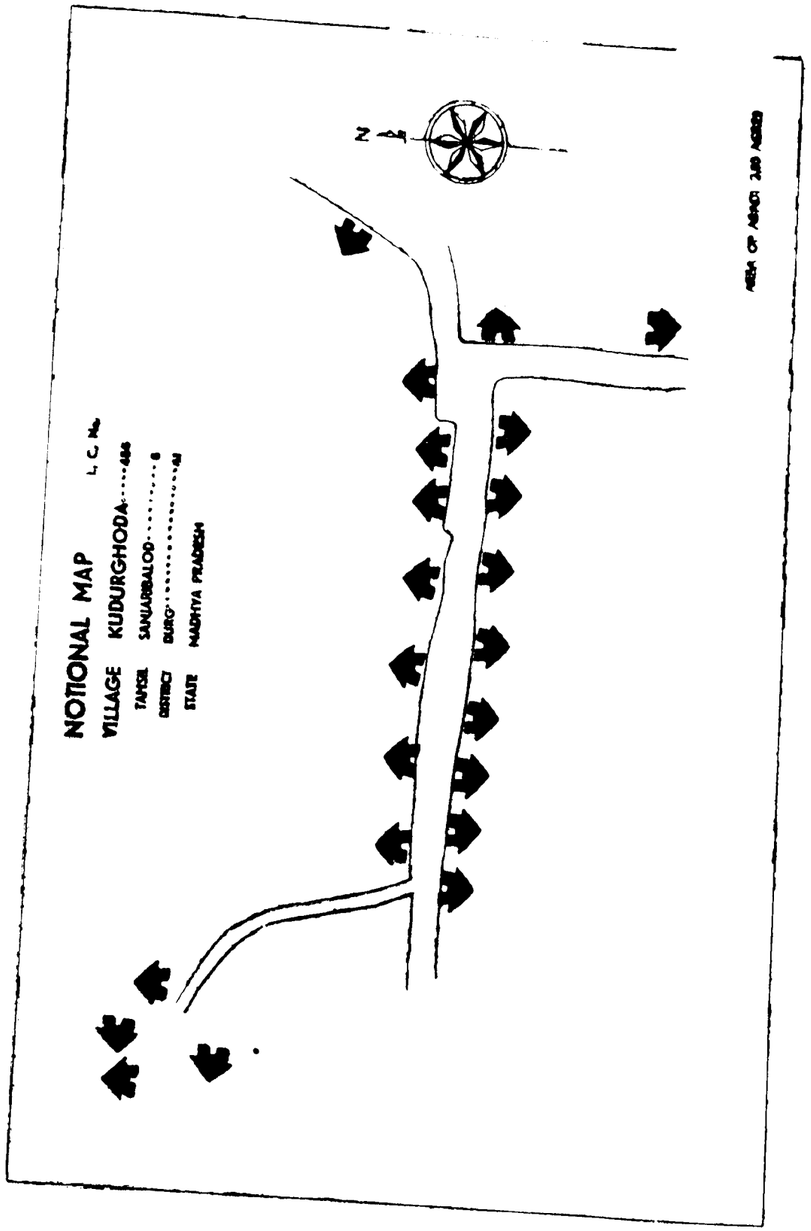
There is no temple or any other religious building in the village. The *peepal* tree, the idol of Hanuman beneath it and the stones representing Thakur Dev serve the villagers as places of worship. There is no common meeting place like *chaupal, chabutara,* etc., or any community centre. The tank bank or the house of village Patel generally serve as places of meeting and exchange of gossip, views, etc.

There is no school in the village and the children go to village Mohli, which is about 3 miles from here. The native means of transport is the bullock-cart but it is rarely used for going to Mungeli or even to Pandariya. The carts are used for carrying the manure to the fields and for bringing back the harvested crop or for taking the crop for sale to Mungeli market.




NOTIONAL MAP L. C. No.
VILLAGE KARONDA....404
TAHSIL DINDORI.....2
DISTRICT MANDLA.....34
STATE MADHYA PRADESH
6 FURLONGS
N
AREA OF ABADI 3.02 ACRES


NOTIONAL MAP L. C. No.
VILLAGE MIHGUAN.....
TAHSIL JABALPUR.....
DISTRICT JABALPUR.....
STATE MADHYA PRADESH
N
AREA OF ABADI 3.44 ACRES


NOTIONAL MAP
VILLAGE KUDURGHODA
L. C. No.
TAHSIL SANJARBALOD
DISTRICT BURG
STATE MADHYA PRADESH
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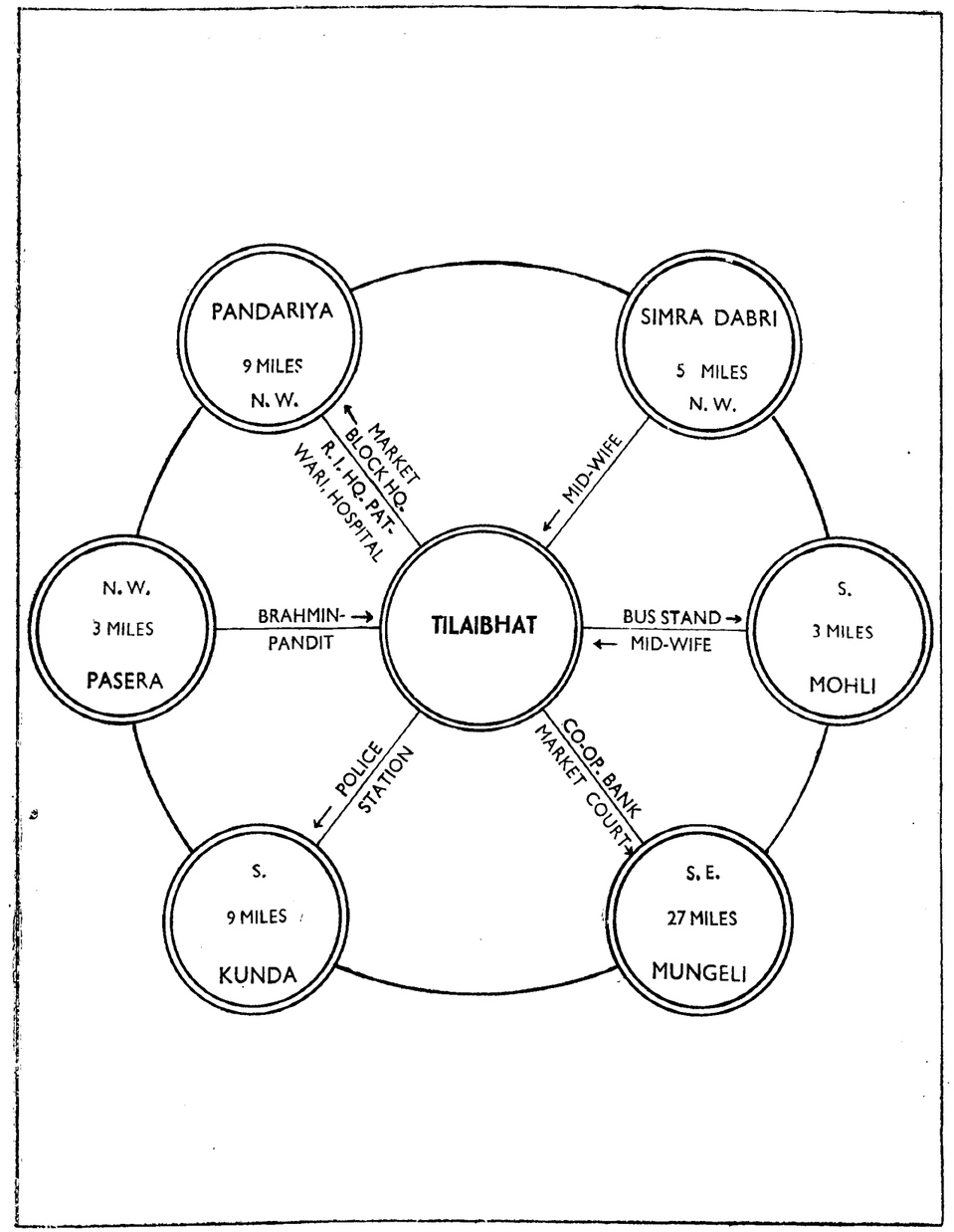
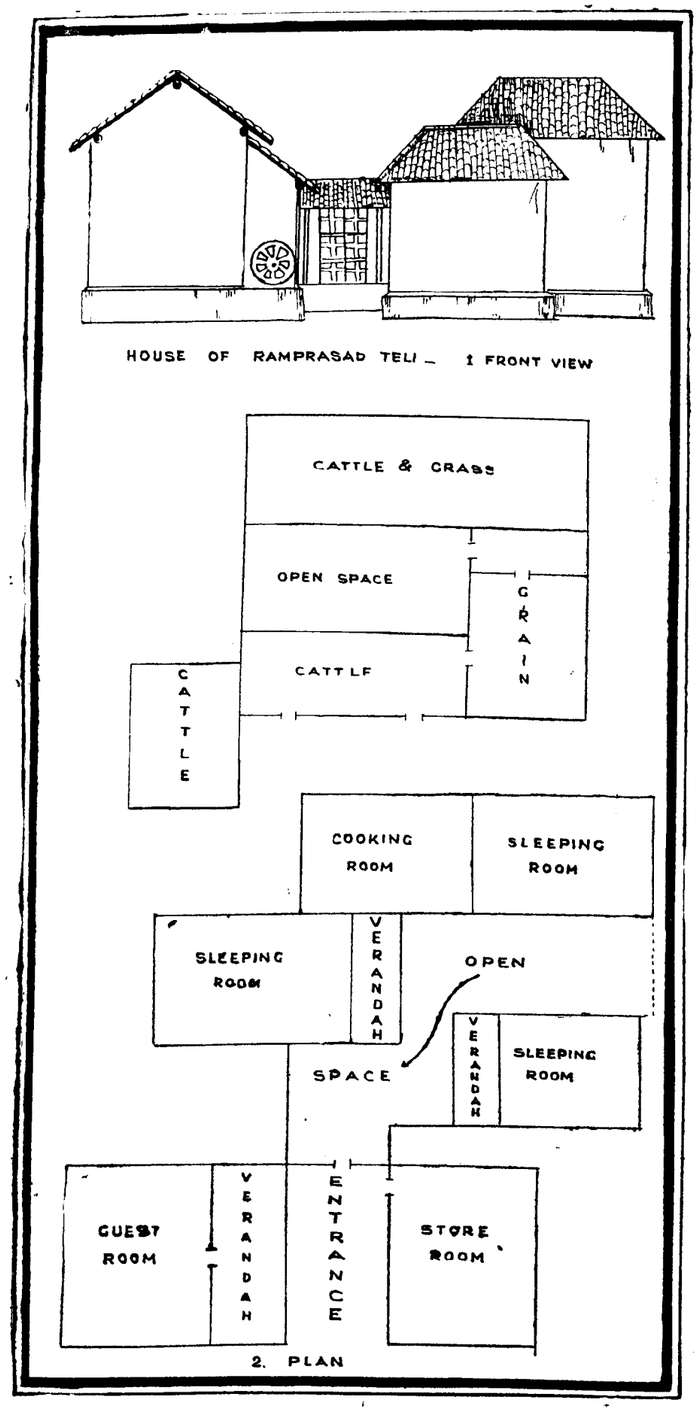
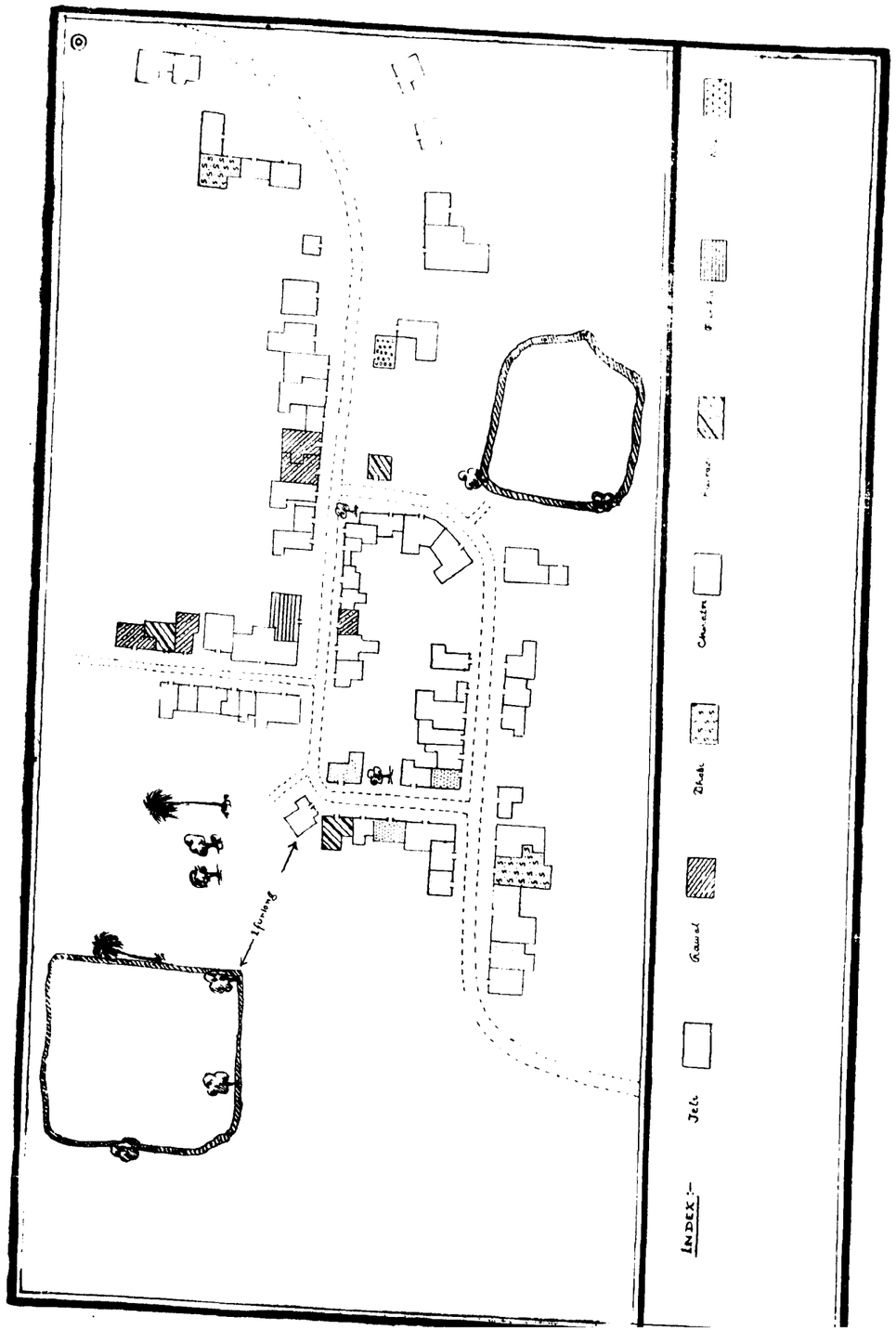
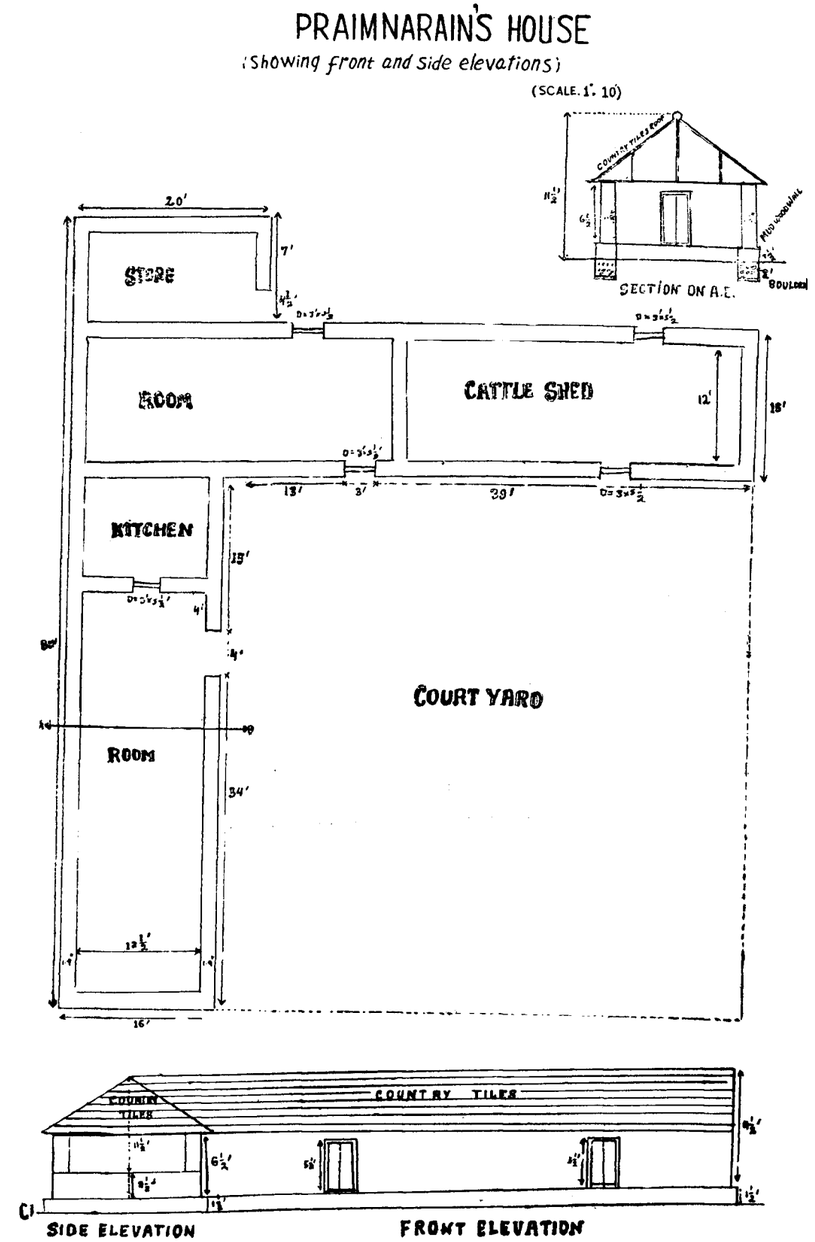

PANDARIYA
9 MILES
N. W.
SIMRA DABRI
5 MILES
N. W.
MARKET
BLOCK HQ.
R. I. HQ. PAT-
WARI. HOSPITAL
MID-WIFE
N. W.
3 MILES
PASERA
BRAHMIN-
PANDIT
TILAIBHAT
BUS STAND
MID-WIFE
S.
3 MILES
MOHLI
POLICE
STATION
CO.OP. BANK
MARKET COURT
S.
9 MILES
KUNDA
S. E.
27 MILES
MUNGELI



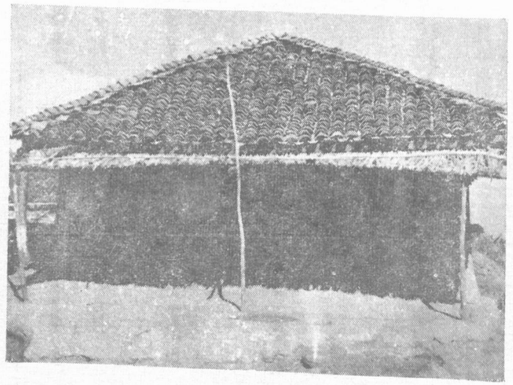
PLAN OF THE HOUSE OF A RICH PERSON
VILLAGE TILAIBHAT
BILASPUR DISTRICT, M. P.



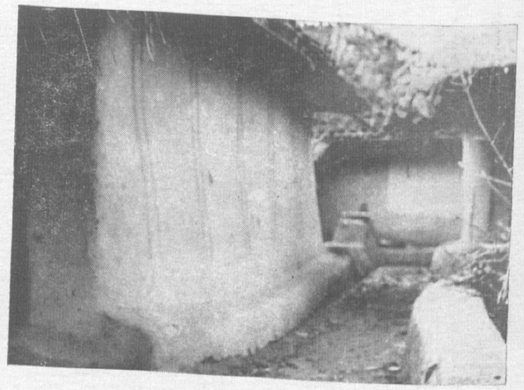
LAY-OUT OF VILLAGE TILABHAT
BILASPUR DISTRICT, M. P.



PLAN AND ELEVATIONS OF THE HOUSE OF A RICH PERSON
VILLAGE KULHARI
SEHORE DISTRICT, M. P.

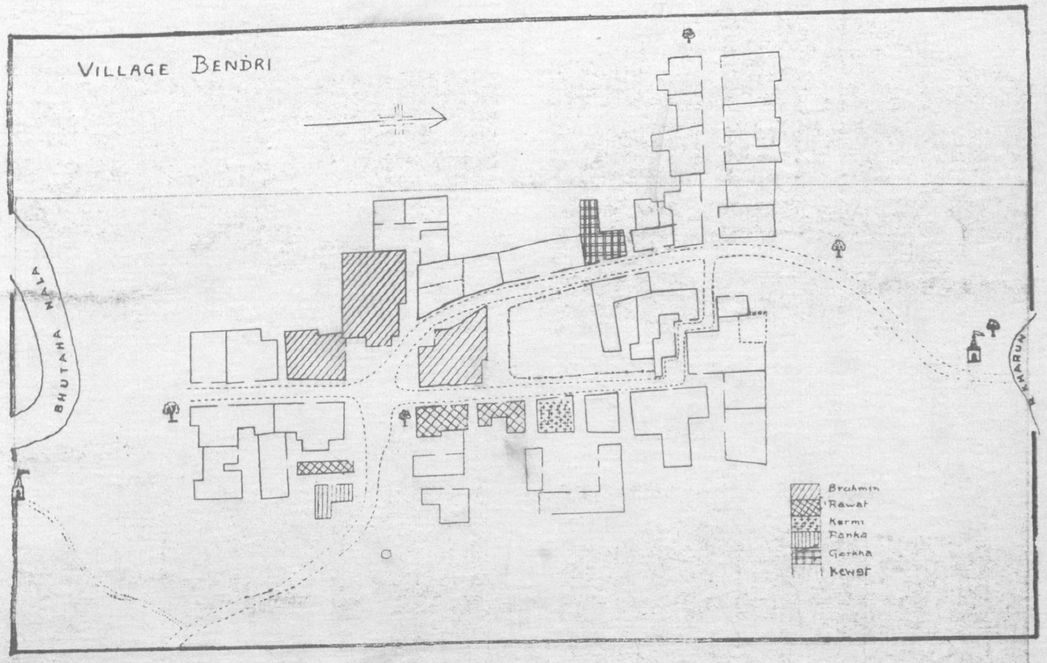


HOUSES OF RICH PERSONS

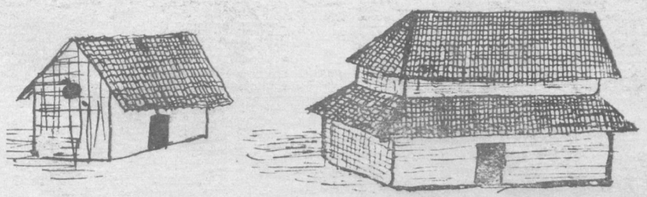


HOUSES OF MIDDLE CLASS PERSONS

HOUSES OF POOR PERSONS
VILLAGE KULHARI
SEHORE DISTRICT, M. P.



LAY-OUT OF THE VILLAGE



ROOF TYPES

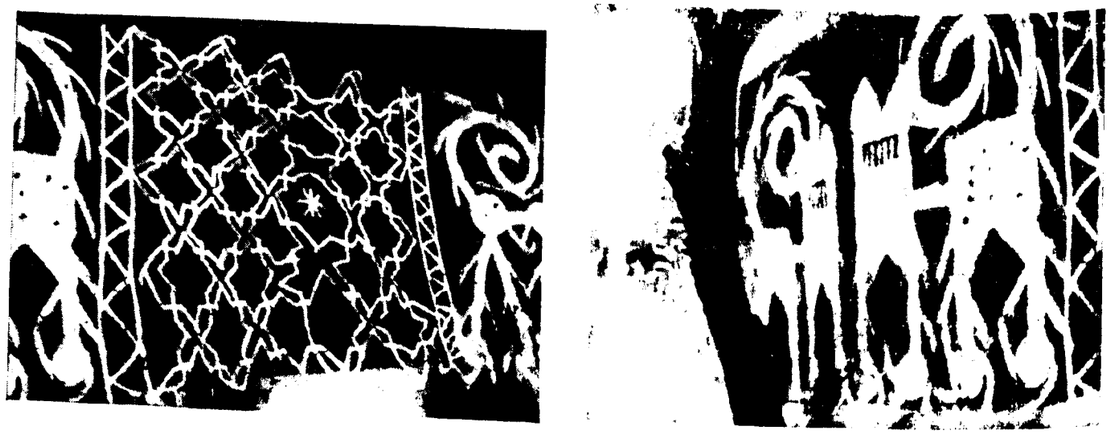
THE LONGEST STREET
VILLAGE BENDRI
RAIPUR DISTRICT, M. P.

A VIEW OF VILLAGE BENDRI
RAIPUR DISTRICT, M. P.

DISTANT VIEW OF NAHARKHEDA, A BANJARA VILLAGE SHOWING DISPERSED CLUSTERS
INDORE DISTRICT, M. P.

BHIL HOUSES IN VILLAGE DIWADYA (THE CYLINDRICAL STRUCTURE WITH CONICAL ROOF IS A FODDER STORE)
WEST NIMAR DISTRICT, M. P.

A VIEW OF THE VILLAGE



PICTURESQUE PAINTINGS ON THE HOUSE WALLS

CATTLE-SHEDS
VILLAGE KULHARI
SEHORE DISTRICT

MADRAS

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Residential pattern

A notable feature of the residential pattern of the village is that the dwellings are segregated on the basis of castes. Very rarely do we find the dwellings of high caste people in close proximity to the dwellings of low castes. The Scheduled Castes like Pallas, Parayas or Chakkilias who were once treated as untouchables, usually live in a secluded corner of the village segregated from the dwellings of other communities. The segregated settlements of inferior communities are usually referred to as the 'Cheris'. As between the other castes also, there is certain amount of segregation of dwellings. The Brahmins, wherever they are found in significant numbers, live in a segregated portion of the village which is usually known as 'Agraharam' (the front garland—A.M.). Wherever the dwellings of more than one caste are clustered together, those castes would be of equal or at least of comparable social status. In other words, the non-Brahmin communities which are not considered as inferior or polluting communities, live close to each other. Agraharam is not found in every village and it is come across only where the Brahmins form a numerically significant group of the village population. In villages where there are only one or two Brahmin households, they normally live amidst other high caste non-Brahmins. The polluting castes invariably live in a segregated corner. Though untouchability is slowly dying away, closer living of high caste Hindus and inferior castes is not found anywhere. The inferior castes have separate drinking water well, burial ground etc., as they are not allowed to use those belonging to the high caste Hindus.

The House types

The house types normally vary according to the climatic conditions, nature of the terrain, economic conditions of the people and availability of housing materials. Since the climatic conditions, nature of the terrain and availability of housing materials do not differ very much from region to region of Madras State except the mountainous regions of Nilgiris District and Kodaikanal Taluk of Madurai District, the house types in Madras State vary more according to the economic conditions of the people. The houses in Madras State can be grouped into three broad categories viz., (1) Thatched huts, (2) Small and medium-sized tiled houses and (3) Big tiled houses and terraced constructions.

Thatched huts

The first category viz., the thatched huts form the numerically largest group as bulk of the rural population live in these thatched houses built out of mud and thatch. The poorer section of the rural population consisting of petty cultivators, agricultural labourers, general coolies and the poorer among the village artisans mostly live in these thatched huts. Most of these huts are single-roomed huts and double-roomed huts are rare. A corner of the living room inside the hut is used as the kitchen and the other portion is used for storing, living and sleeping purposes. Another common feature of these huts is an open verandah in the front, covered by the projection of the roof. This is also used as living space and people usually sleep here during summer. In some huts, they have the raised platforms or some sort of earthen benches abutting on the entrance and these are called 'Thinnais' in local parlance. These huts have very low entrances of about 4 feet in height and even men of normal height have to bend down considerably before entering these huts. The walls of these huts are built of mud and the roofing is made of either palmyra leaves, plaited coconut leaves or dried stalks of 'cumbu' and 'cholam' depending upon the availablity of the materials in that area. The roof is supported by a simple frame work made out of palmyra or coconut rafters or bamboos. No bricks or cement are used in the construction of these huts. The flooring is also made of mud and it is coated with a thick layer of cowdung mixture. As this is a

simple construction, no assistance of a mason is required for the construction of the hut. The walls are built on a foundation of 1 to 1½ feet depth and the foundation is built out of random rubble and mud. These huts do not normally have any windows and they are ventilated only by the door ways and by the holes in the roofs. Even in day time, many of the low roofed huts are dark. In many places, a loft or an attic is constructed under the roof with bamboos and planks and this attic is used for storing grains or implements. It normally costs between Rs. 100 and Rs. 150 to construct a small hut which would accommodate a family of 3 to 4 people and it would cost more for bigger huts.

Tiled houses

The second category of dwellings viz., the small and medium sized tiled houses are owned by the middle income groups. These are mostly 2 roomed or 3 roomed dwellings. Some of the common features of these tiled houses are as follows : There is an open verandah in front of the house which is covered by the projection of the roof and it is also used as living space. The entrance in the verandah leads into a big living room. A portion of this big room is partitioned as the kitchen and there is also a store-room opposite to the kitchen. The living room in between is used for dining, sleeping etc. In some houses, a large living room and a store-room are found immediately after the verandah and the kitchen is separate at the rear. In such houses, a small enclosed verandah in front of the kitchen is used as the dining room. In tiled houses, the walls are usually built out of burnt bricks on a strong foundation built out of granite stones and random rubble. The walls are plastered with a soft mixture of 'chunam' sand and red soil. The flooring is also made of such soft mixture. Very rarely do we come across cement flooring in this category of houses. The tiles used for roofing are mostly country tiles and houses with Mangalore tiles are an exception. The doors and window frames are made out of country wood and very rarely do they use teak and other superior qualities of timber in the construction of these houses. Some of these houses have small compounds with compound walls very close to the houses. The open space in front of the house or in the backyard is used for tying the cattle. The drinking water wells are usually situated at the backyard. Even these houses are not properly ventilated and they have only one or two windows. The old-fashioned houses have been built more for security and for storing the belongings than for comfortable living.

Big houses

The third category of houses are the big tiled houses and terraced constructions which are owned by the affluent section. These big houses have a number of living rooms and separate rooms set apart as store-rooms, living rooms, kitchen etc. In many of the big tiled houses, they have an open courtyard in the midst of the house, open to the sky. Such open courtyards are surrounded by verandahs on all sides beyond which lie the living rooms, store-room, kitchen etc. There are two types of terraced houses. In the smaller type of terraced houses, there are open terraces above the ground floors and in such houses there are no rooms upstairs. In the big terraced houses, there are living rooms on the first floor also and open terraces are found above the first floor. They have spacious pials or covered verandahs in front and spacious backyards where the drinking water well, cattleshed etc., are situated. The walls of these houses are invariably built of burnt bricks and mortar. They are built on strong foundations of granite stones and in some of the houses, cement is also used in construction. In the big tiled houses, the roof usually consists of Mangalore tiles and in some places country tiles are also used. Strong timber rafters are used for the construction of the roof and many of these houses have cement flooring. These big tiled and terraced houses are owned mostly by the rich land-lords, money-lenders and merchants.

Ground plans and roofs

The typical house in Madras State has a rectangular ground plan. Some of the small huts which have square ground plans form an exception. The terraced houses have horizontal roofs but in the tiled and thatched houses, the roofs are made up of inclined slopes. Only in a few tribal villages in the mountainous regions, does one come across huts with circular ground plans and conical roofs. But these form an exception to the general pattern. In thatched huts, the roof normally consists of 2 inclined planes which meet at a ridge at the

top and in the tiled houses, the roof is made up of 4 slopes. The slopes in the front and at the rear are broader than those at the sides. Some of the bigger huts also have roofs consisting of 4 slopes. Among the tiled houses, majority are roofed with hand-made and semi-cylindrical country tiles which are made by the village potters. Some of the country tiled roofs are plastered with ridges of lime and sand at the ends. People who can afford, use the costlier type of tiles known as 'Mangalore tiles'. These are flat tiles which interlock with one another. A house with Mangalore tiles is generally regarded as an indication of opulence, as the poor people who build small houses cannot afford these tiles.

These are the salient features of the locational patterns of villages and house-types which do not vary much from region to region except in the case of special regions of Nilgiris and Kanyakumari. There are however some small variations in the housing materials predominantly used in different regions. These are indicated in the following description of the different regions along with a brief description of the nature of the terrain and the climatic conditions :

Region 1 : *Chingleput, North Arcot and South Arcot Districts*

This region forms the north-eastern portion of Madras State and it is a dry region except Chidambaram taluk of South Arcot District which forms part of Cauvery basin. The aspect of the country is flat, dreary and monotonous with no great physical features except perhaps the river Palar and a few ranges of hills. The settlement patterns of villages conform to the typical pattern described above. The inhabited area is generally on a higher level. Chingleput District has a mean annual rainfall of 140 centimetres, and it has a predominance of mud walled houses with brick walled and stone walled houses forming a minority. Out of the 1,000 houses, 724 are mud walled houses, 220 have brick walls and 41 have stone walls. As for the roof material, the thatch is the predominant material used. Out of the 1,000 houses, 707 are thatched houses, 250 are tiled houses and only 36 are terraced houses. The terrain of North Arcot District is also a flat plain except for the northern and eastern parts which contain hilly tracts. The Javadhi hills which start a few miles south west of Vellore pass through Polur, Chengam and Tirupathur. North Arcot District also has a low rainfall of 95 cms. per annum. This district is also characterised by the predominance of mud walled thatched houses. Out of 1,000 houses, 706 are mud walled, 273 have brick walls and 10 have stone walls. As regards the roof material, 673 houses out of every 1,000 are thatched houses, 293 are tiled houses and 27 are terraced houses. The South Arcot District is for the most part, a flat plain sloping very gently from the west towards the sea on the east. The important hill ranges of the district are the Gingee hills, Gangavaran hills and Mount Capper plateau. The three main classes of soil found in this district are red, black and the arenaceous soils. The mean annual rainfall in this district is 1,132 millimeters. Here also mud walled thatched houses are predominant, to a greater extent than the other two districts of the region. Out of every 1,000 houses, 814 have thatched roofs, 145 have tiled roofs and 37 have terraced roofs. As regards the wall material, 800 houses have walls built of mud, 163 have walls built of bricks and 28 have walls built of stone. In North Arcot and Chingleput Districts, the material used for thatching the roof is either palmyra leaves or plaited coconut leaves. It is so for the most part of South Arcot District too. But in a few portions of South Arcot, grass is used for thatching the roofs. This grass grows in abundance in the tank bunds and in the channel bunds.

Region 2 : *Tirchuirapalli and Thanjavur Districts*

This region is covered for the most part, by the fertile Cauvery basin except the Pachamalai region of Musiri and Perambalur taluks of Tiruchirapalli District and the dry regions of Pattukottai and Aranthangi talûks in Thanjavur District. The region is marked with vast stretches of paddy fields and the wide net-work of irrigation channels. The settlement pattern conforms to the typical pattern described above except to the extent that in the dry tracts, the villages spread out whereas in the Cauvery basin, the wet fields tend to prevent the expansion of villages and the built-up area is a compact area surrounded by paddy fields on all sides. Here also, there are no fortifications for the villages. In the Cauvery basin, there are a number of temple-centered villages which are believed

to have grown around famous temples. Usually, the high castes like the Brahmins and others live around such temples and the low castes like Pallars and Parayas live in segregated hamlets.

The house patterns are also similar to the types described above and in both the districts, mud walled thatched houses are predominant. In Thanjavur District, brick walled tiled houses are in greater number indicating the general wealthiness of the district. In Tiruchirapalli District, out of 1,000 houses, 750 houses have mud walls, 212 have brick walls and 31 have stone walls. As regards the roof material, 703 houses are roofed with thatch, 217 with tiles and there are 61 terraced houses. Thanjavur District also presents the same pattern except for the greater number of tiled houses. Out of 1,000 houses, 701 houses have mud walls, 245 have brick walls and 19 have stone walls. The stone-walled houses are found in the dry areas of Pattukottai and Aranthangi taluks. In the deltaic region granite stone is not available and in some places laterite is used in the construction of walls. Thatch is the predominant roof material used here. Out of the 1,000 houses, 745 houses are thatched houses, 248 are tiled houses and 25 are terraced houses. The petty cultivators and landless agricultural labourers mostly live in thatched huts. The material used for roofing the huts is either coconut leaves, palmyra leaves or paddy straw or grass. The villages in the coastal region are exposed to the danger of frequent cyclones and strong winds. Here, the roofs have been built strongly to withstand the cyclonic winds. In many of these coastal villages, the roofs of thatched huts consist of two layers. The first layer is made of either cocnut leaves, 'cumbu' or 'cholam' stalks or palmyra leaves and the secon layer consists of grass above which strong ropes made out of straw are tied as a sort of reinforcement. Another method of strengthening the roof against the winds in these coastal villages is to grow creepers like pumpkin, Bellgoard etc., on the roofs.

Region 3 : *Madurai, Ramanathapuram and Tirunelveli Districts*

This region forms the southernmost part of Madras State except for the small district of Kanyakumari at the southern extremity. The Tambraparni basin of Tirunelveli District is the most fertile part of the region whereas Ramanathapuram District is the driest part where near-famine conditions prevail. Madurai District consists of a level plain broken only by the isolated hillocks and the mountainous region of Kodaikanal taluk. The areas irrigated by Vaigai and Periyar rivers form the comparatively richer portion of the district. Ramanathapuram is a monotonous stretch of dry plains stretching from Western Ghats to the Bay of Bengal on the east. The Tirunelveli District is bounded by the Western Ghats on the west and the sea on the east. The fertile Tambraparni basin is situated in the middle of the district stretching from mid-west to the east. The dry black-cotton-country of Koilpatti and of Sankarankoil taluks lies to the north east and the dry red soil country of Nanguneri taluk lies to the south of it. The settlement patterns generally conform to the pattern one finds in the other Districts of the State except to the extent that in Ramanathapuram District, the villages are dispersed over larger areas and sometimes the hamlets are separated from the parent village by 4 or 5 miles. In Tambraparni basin, on the other hand, the village site or the Natham covers a smaller area. Maudrai and Ramanathapuram get an annual rainfall of about 860 millimeters and Tirunelveli gets a little more. In this region, the mud walled thatched houses predominate as in the other regions but in the Tambraparni basin, more tiled and brick walled houses are come across. In Madurai District, out of 1,000 houses, 693 have mud walls, 255 have brick walls and 35 have stone walls. The stone walled houses are mostly found in the mountainous region of Kodaikanal taluk where walls are built out of stones to keep out the extreme cold. Out of 1,000 houses, 493 houses are thatched houses, 235 are tiled, 175 are terraced and 79 houses are covered with metal sheets like asbestos, corrugated iron and tin sheets. The houses roofed with metal sheets are found in the cold region of Kodaikanal hills. The pattern of Ramanathapuram District varies only to the extent that the number of thatched houses are more and tiled and terraced houses are less than in Madurai District. Here, too, the mud walled houses predominate. Out of 1,000 houses, 704 have mud walls, 214 have brick walls and 55 have stone walls. Stone walled houses are come across frequently in portions of West Ramanathapuram, particularly Sattur taluk where sand rocks are available. In some of the interior villages, the huts have walls built of

bamboos, thatch and reeds. These, however, form only a small percentage viz. 1.4 per cent of the houses in Ramanathapuram District. As regards roof material 538 houses out of every 1,000 have thatched roofs, 299 have tiled roofs and 131 have terraced roofs. The housing conditions are comparatively better in Tirunelveli District where a greater number of tiled and terraced houses are come across indicating the prosperity of the people in the Tambraparni basin. Here, out of every 1,000 houses, 525 have mud walls, 304 have brick walls and 130 have stone walls. The stone walled houses are generally come across in Koilpatti and Sankarankoil taluks where isolated hillocks of sandstone form an important aspect of the country. Out of 1,000 houses, 26 houses are found to have walls made up of thatch and reeds. These are come across in Tiruchendur and Srivaikuntam taluks where these reeds grow in abundance. Out of 1,000 houses, 465 have thatched roofs, 395 have tiled roofs and 120 are terraced houses. Tiled and terraced houses are found frequently in the Tambraparni basin. The material used for thatched houses in this region, is palmyra leaves because these grow in profusion particularly in Tirunelveli District and in the dry areas of Ramanathapuram District where coconut trees are rare. Only in the wet areas where coconuts are grown are coconut leaves available for roofing the huts.

Region 4 : *Salem and Coimbatore Districts*

Salem and Coimbatore Districts from the north western part of the State previously known as Kongunad or Kongu country. Salem District is chiefly a vast stretch of dry land intersected by numerous hill ranges, notable among which, are the Kalrayan hills, Shevroy hills, Kollimalai hills and a part of Pachamalai hills. Coimbatore presents a diversified geographical relief. It has hill ranges both in the north as well as in the south. The Anamalai range on the south forms part of the Western Ghats. The three main tributaries of Cauvery viz. Amaravathi, Noyyal and Bhavani irrigate vast extents of lands in this district. The district has vast extents of forests mainly in the hill ranges. Apart from paddy which is grown in the river basins, dry crops like cotton and millets are the main crops of the district. The settlement pattern of villages in these two districts does not show any significant variation with that in the other districts except in some of the tribal villages in the hill ranges. These tribal villages consist of small shapeless clusters of dwellings in favourable parts of the mountain slopes. Tiled houses predominate in Coimbatore District unlike in the other districts of the State where only thatched houses predominate. In Coimbatore, for every 1,000 houses only 269 are thatched houses, 15 are terraced and as many as 691 are tiled houses. 18 houses have roofs built of metal sheets. As against this, out of every 1,000 houses in Salem District, 651 are thatched, 325 are tiled and 19 are terraced. As regards the wall material, mud walls predominate in both the districts but stone walled houses are more in Coimbatore District. In Salem, out of every 1,000 houses, 746 houses have mud walls, 173 have brick walls and 76 have stone walls. The stone walled houses are found in the hilly regions like Yercaud taluk. In Coimbatore District, 565 out of every 1,000 houses have mud walls, 155 have brick walls, 273 have stone walls and 31 have walls made up of metal sheets. These stone walled houses as well as houses with walls built of metal sheets are mostly found in the mountainous regions of Coimbatore District. The hill tribes live in small beehive type huts possibly to suit the climatic conditions. The huts with circular ground plans and conical roofs are come across in these tribal villages. Here the walls are also constructed with split bamboos daubed with a thick coating of clay. The conical roofs are thickly thatched with grass. These huts have very small entrances of about 2½ feet wide and 3 feet high. But for these tribal houses in the hills, the house types in the plains are similar to those in the other districts.

Region 5 : *Nilgiris District*

This is entirely a mountainous region situated at the north-western corner of the State. The altitude of this great plateau ranges from 5,000 feet to 6,000 feet normally and the highest peak of Doddabettah is 8,640 feet above the sea level. The famous hill resort of Ootacamund is the headquarters of this district. The endless undulations of this plateau sometimes swell into distinct ranges forming beautiful valleys and they are clothed with ever green forests containing valuable timber. This region gets heavy rainfall both from the north-east and south-west monsoons and the mean annual

rainfall is about 1,868 millimeters. Because of the different nature of the terrain and the climatic conditions, the locational pattern as well as the house types here are varied from the patterns come across in the other districts.

Nilgiris is a sparsely populated district and it is the home of certain special communities like Badagas, Kotas, Thodas and forest tribes like Irulas and Kurumbas. In Wynaad, the Manthathan Chettics and Paniyans are found. The Badagas are the agriculturists of the hills and they occupy the eastern side of the plateau. Their villages consist of orderly lines of tiled houses all alike. Their villages are surrounded by fields of red soil. The Kotas are the musicians and artisans of the hills and they are also farmers of considerable skill. Their villages, which are fewer in number, are big and untidy collections of thatched huts. The Todas are a pastoral tribe who claim to be the original inhabitants of the hills. They generally live in little hamlets which they call Mands'. Each Mand consists of 4 or 5 dwelling huts, a larger one forming the cattleshed, and the buffalo-pen. These are situated usually near a stream or a spring. Their huts are quaint erections which may be likened to the half of a barrel cut through its longer axis. The entrances of their huts are so low that one has to bend down considerably before entering them. They are flanked on either side by earthen benches. Such raised platforms are found inside the huts also and these are used for sleeping. The house is surrounded by a wall containing only one opening which is purposely made too small to admit a buffalo. The Irulas live in small hamlets formed of huts built with plaited bamboos plastered with mud. The Kurumbas also live on the slopes in small huts made of wattle and mud and thatched with grass.

In the urban areas of the district, modern type of houses are come across. These are built with burnt bricks on strong foundations of granite stones and they are roofed with tiles. The poorer section also lives in stone walled houses which are roofed with metal sheets or tiles. In the district as a whole, out of 1,000 houses, 119 are thatched huts, 685 are tiled houses, 182 are roofed with metal sheets and 3 are terraced constructions. It is noteworthy that tiled houses are predominant in this district unlike the other districts where thatched houses predominate. As regards the wall material, brick walls are predominant. Mud walls occupy only the third place in this district as against the first or the second place in the other districts. Out of 1,000 houses, 96 have mud walls, 559 have brick walls and 209 have stone walls. 60 houses have walls made of reeds and bamboos and another 56 have walls built of metal sheets. This varied pattern of settlement as well as the house types are explained by the hilly terrain and the different climatic conditions.

Region 6 : *Kanyakumari District*

This is the southern most district, which, though smaller in area, is densely populated. It is bounded by natural barriers on all sides. The Bay of Bengal, the Indian Ocean and the Arabian Sea form the natural boundaries of the district on the south-east, south and south-west respectively. On the north, it is bounded by the Western Ghats. It formed part of the Trivandrum District of Kerala till November 1956, when it was merged with the Madras State under the scheme of States Reorganisation. It receives heavy rainfall from both the monsoons. Exuberance of vegetation is a distinguishing feature of this district which can be divided into three natural divisions namely, the mountainous region on the north, the coastal strip on the south and the undulating midland region in between. The land slopes gradually from the north towards the south. The mountainous region in the north is studded with coffee and tea plantations and in the lower altitudes tapioca is widely cultivated. In the midland region particularly in Agastheeswaram and Thovala taluks, paddy is cultivated extensively and towards the sea coast on the south coconut groves dominate the land scape. A lot of fruit yielding trees like cashew, jack and plantains are also cultivated in this region.

The locational pattern of villages in this district is noticeably different from the pattern of the other districts of Madras State. A typical village in Madras State consists of a cluster of dwellings on a compact plot known as the village site, which is surrounded by arable lands and fields on all sides. But here there are no clusters or conglomeration of dwellings as in other parts of Madras State and there is a complete absence of street system which characterises the villages in other parts of Madras State. The dwellings here are scattered all over the arable land which is usually cultivated with fruit yielding trees like coconuts, pla-

myras, jack, cashew and a number of others. Each dwelling even the humblest, stands on its own ground surrounded by a few fruit yelding trees. The small plots of land cultivated by the households also lie adjacent to the dwellings. Since the dwellings are concealed by the surrounding clusters of trees and since they are scattered all over the area, it is very rarely possible to see more than two or three dwellings from one place and much less to have a panoramic view of the village. There are no public path-ways or streets connecting one dwelling with the other and the winding lanes which cut across the private plots provide the only access to the houses in the interior. Because of this scattered disposition of the homesteads, it is often difficult to distinguish where one particular village ends and where the other begins. This is particularly so where the boundaries of the villages are not clearly defined or well marked. This is the typical locational pattern of a village in Kanyakumari District which however conforms to the pattern come across in Kerala State. In a few parts of Thovala and Agasthleswaram taluks bordering the Tirunelveli District, the locational pattern is similar to that of other parts of Madras State. This however is an exception in Kanyakumari District.

The village organisation for purposes of local administration is also different in Kanyakumari District. Here a taluk is divided into a number of 'pahuthies', a 'pahuthi' denoting a group of villages and corresponding more or less to the size of a firka in other districts of Madras State. Each of the villages grouped into a 'pahuthi' is known as a 'Kara' which can be considered to be the smallest territorial unit as well as the unit of rural life in Kanyakumari District. The 'Kara' denotes a group of scattered homesteads and does not have any hamlets. The size of a 'pahuthi' varies greatly and the number of 'Karas' in a 'pahuthi' ranges from 10 to 30.

The housing patterns in this district are also slightly different. The slopes of the roofs are much steeper here than elsewhere, possibly to drain off water quickly during heavy rains. Another noticeable feature of this district is the use of timber as wall material mainly because of the availability of cheap timber and the custom of having wooden walls common in Kerala. Bamboos, reeds and coconut leaves are also used as wall material in some parts. The brick walled houses predominate in this district and the mud walled houses take only a second place. Out of the 1,000 houses, 41 houses have walls built on reeds, leaves or bamboos, 18 houses have wooden walls, 262 houses have mud walls, 41 houses have stone walls and as many as 634 houses have brick walls. Out of this, 262 houses are built of unburnt bricks and 372 with burnt bricks. The largest number of houses with unburnt bricks are come across in this district. The stone walled houses are come across in the hilly regions. In the midland and the coastal strip, the brick walled houses predominate. As regards the roof material, 531 out of every 1,000 houses are thatched huts and 463 houses are tiled houses and the number of terraced houses are negligible. The middle and the high income groups use the Mangalore tiles whereas the low income group people use country tiles. Plaited coconut leaves are used for thatching the roof and in those parts where coconuts are not grown extensively, the palmyra leaves are used. The interior of the houses, however, conforms to the patterns come across in other parts of the State. A typical house has a verandah in front covered by the projection of the roof and it leads into an inner hall. In some of the big houses store room and kitchen are found on either side of the hall and this leads into another verandah at the backyard. Many of the huts are single-roomed dwellings. On the whole, the housing conditions in this district seem better than in many other districts.

APPENDIX I

MADRAS

Villages in Madras

19. Generally speaking the census village is not a residential unit, but the administrative unit which cosntitutes the charge of a village headman. But in a country so extensive as the Madras Presidency, with such varieties of climate, and inhabited by such diverse races it is natural to find villages of many different types. There is the village common in the Agency division "A tiny temporary affair, containing only a couple of huts and a cattle byre," perpetually shifted according to the exigencies of the season or the requirements of cultivation. Or there is the village typical of the Deccan, fortified up to 100 years ago, and still presenting traces of the old stone walls and circular watch towers. Being compelled to live within fortifications the people were forced to crowd their square flat-roofed houses close together so that in many villages there are only one or two streets wide enough to admit an ordinary country cart, the other thoroughfares being merely tortuous lanes. For the same reason hamlets are rare in the Deccan districts. Villages of this type are found also in those portions of the Salem district which were the scene of successive campaigns in the Mysore wars. Or again the ordinary villages of the Tamil country will contain three or four broad streets, each bordered by the houses of the better class villagers; these houses will, as a rule, be substantial buildings of solid masonry with tiled or terraced roofs. Behind or interspersed among these houses will be a shapeless cluster of thatched mud huts in which the humbler folk lead their lives. It is in these quarters that congestion and overcrowding is common, the houses are frequently huddled close together without any consideration of drainage or ventilation.

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The West Coast Village

21. For the West Coast village is entirely different from that of any other part of the Presidency. Except for a few bazaars, the houses are not built in regular or irregular streets. But "each house, even the humblest, stands in its own little compound or garden, which is usually thickly planted with areca and coconut palms, jack trees, plantains, betel and pepper vines and the like." The "village" here again is an administrative unit, it may cover a wide areas and it may contain a great number of isolated homesteads. It is this pecularity—coupled with the luxurious vegetation of the West Coast—which gives the whole of Malabar the appearance of a beautiful garden, where live a race of prosperous lotus-eaters, each family nestling under its own pepper vine and jack tree. And it is due to this peculiarity that in Malabar it was impossible for the enumerators to conduct the final census by night. On the East Coast the 25 or 30 houses allotted to an enumerator were all situated close together, in one or at the most two streets; but in Malabar to visit 25 or 30 houses probably involved a prolonged tramp along dark and deserted jungle paths.

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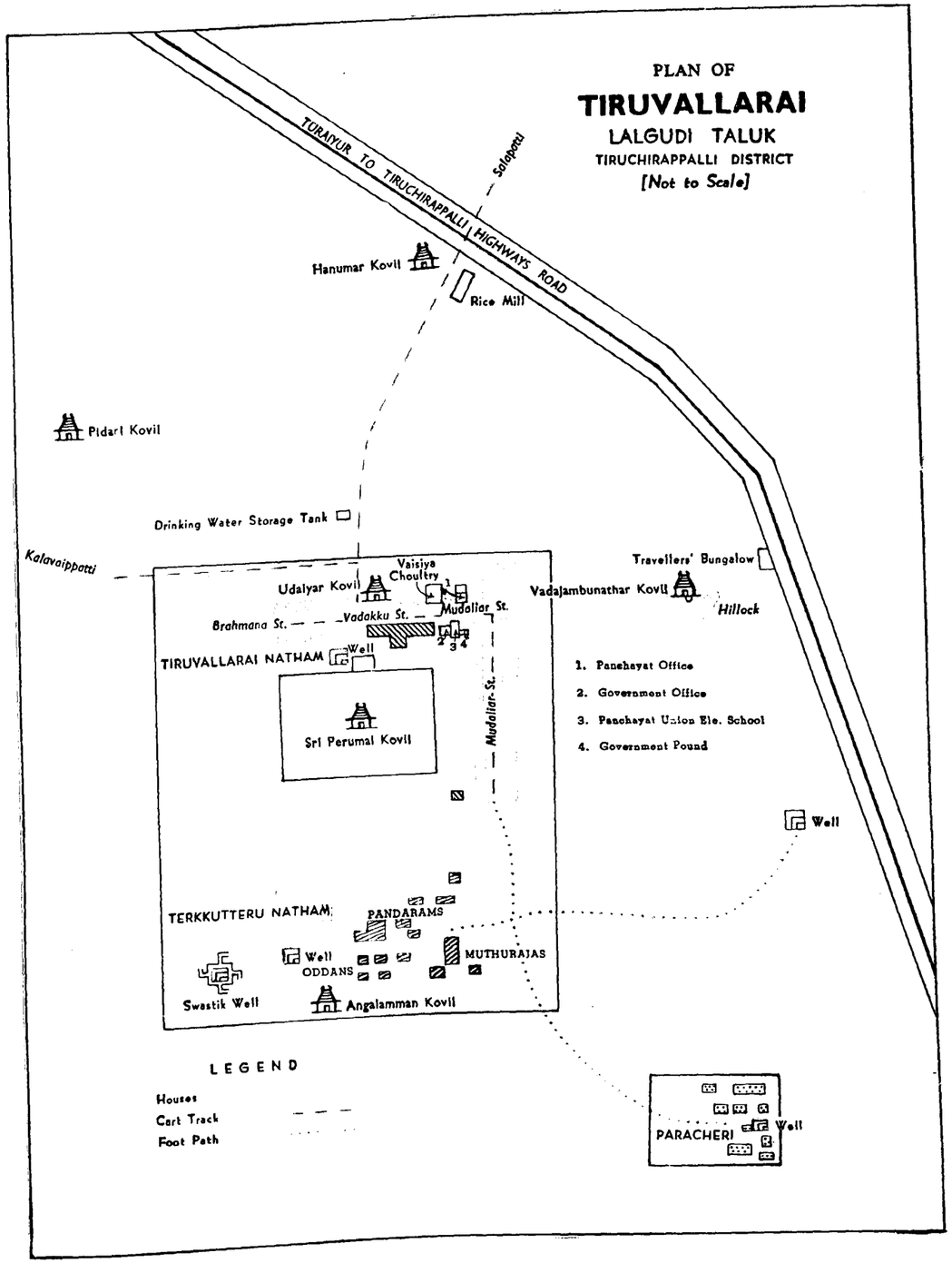


SITE PLAN OF

BETTAI GOUNDANUR

MAIN HAMLET OF ARAKASANAHALLI

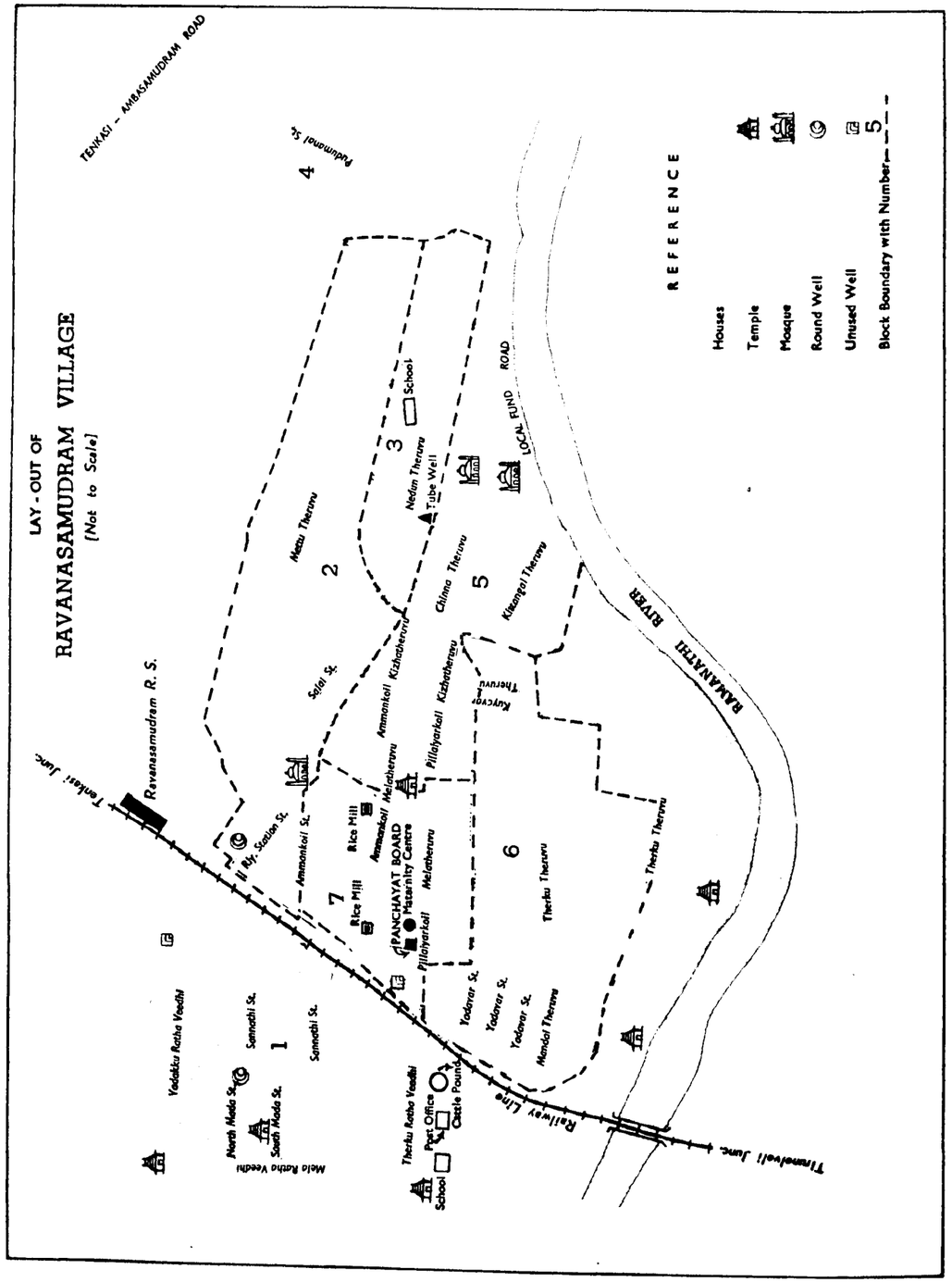
DHARMAPURI TALUK

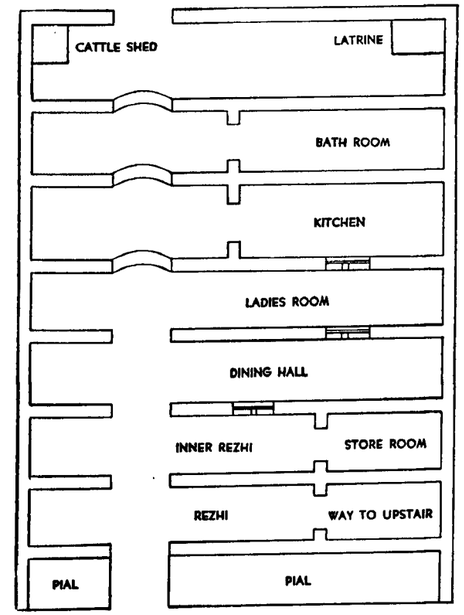
Scale 1 cm. = 9 Metres

RESIDENTIAL PATTERN OF

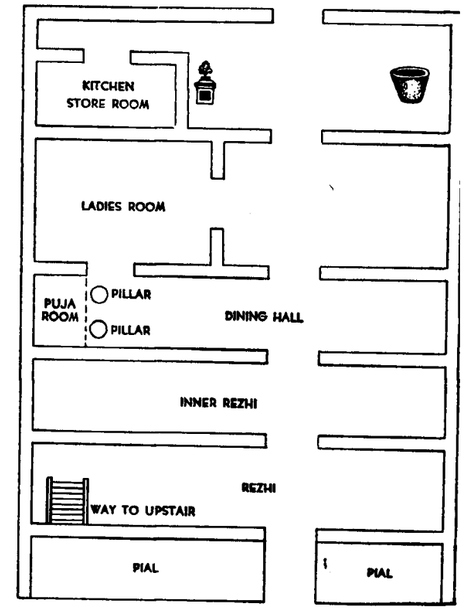
RAVANASAMUDRAM VILLAGE

[Not to Scale]

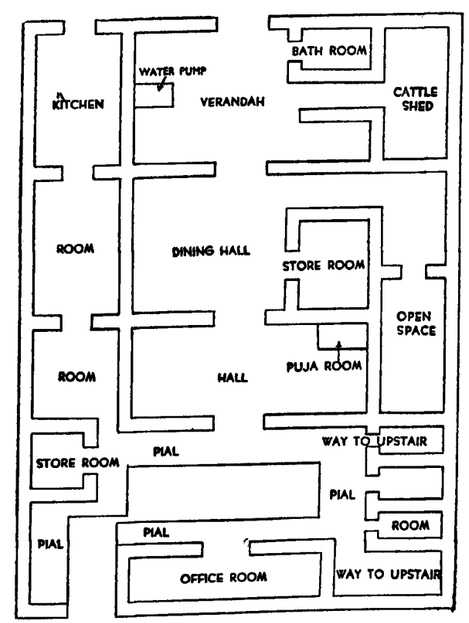




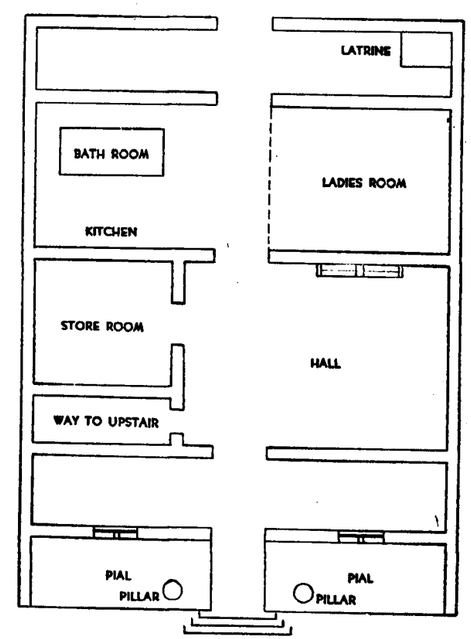
The ground plan of a Brahmin's house. (Ravanasamudram)



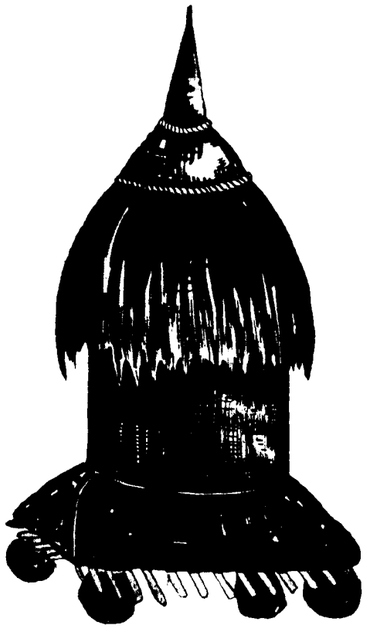
The ground plan of another Brahmin's house.



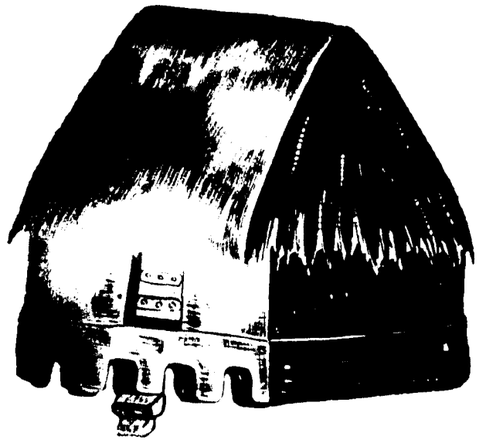
The ground plan of an opulent Pillai's house



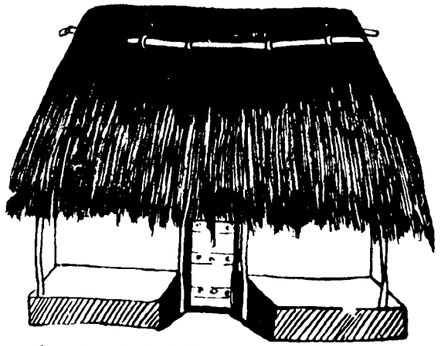
The ground plan of a rich Muslim's house



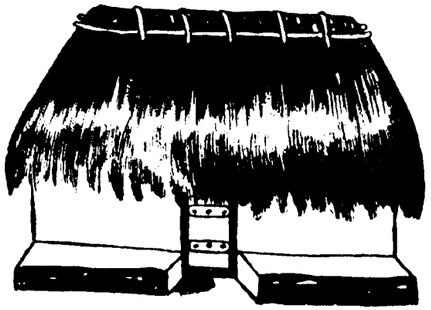
Circular Granary (Thembaranadu)



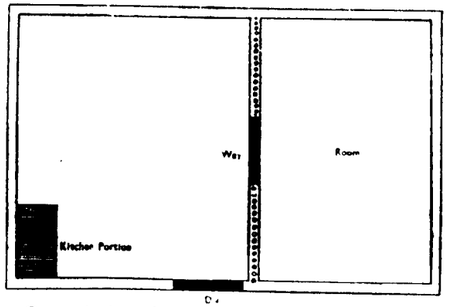
House type Granary (Thembaranadu)



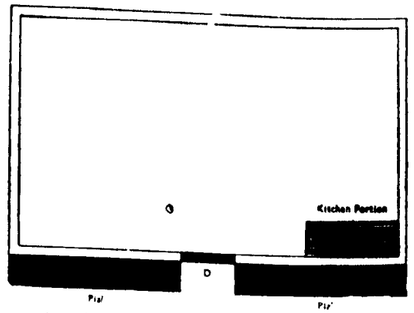
A typical Pacha-Malayali hut (Thembaranadu)



Another type of hut (Thembaranadu)



Ground plan of a Malayali hut (Thembaranadu)



Another ground plan (Thembaranadu)

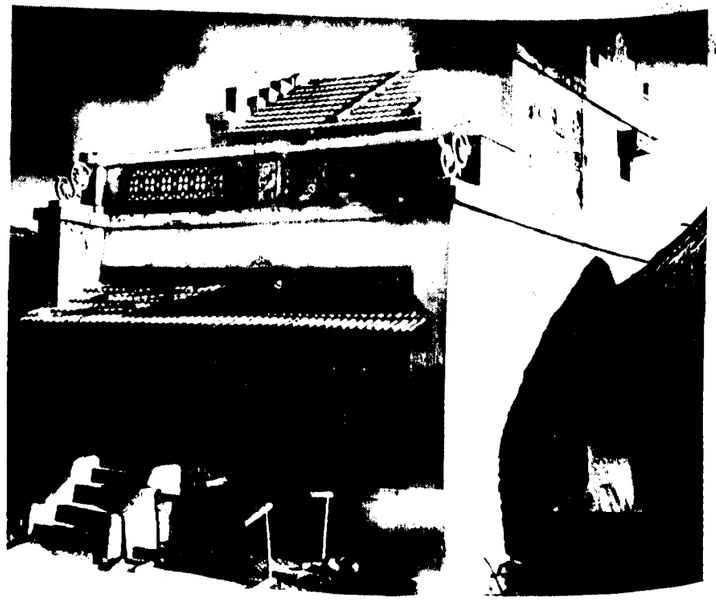
A terraced house in Ayyangarkulam village (Chingleput District)

A tiled house in Sunnambukulam village (Chingleput District)

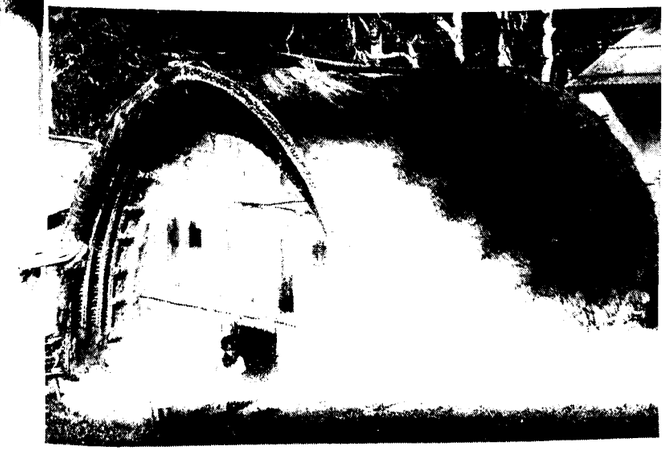
A thatched house in Sunnambukulam village (Chingleput District)

A tiled house in Kunnalur village (Thanjavur District)

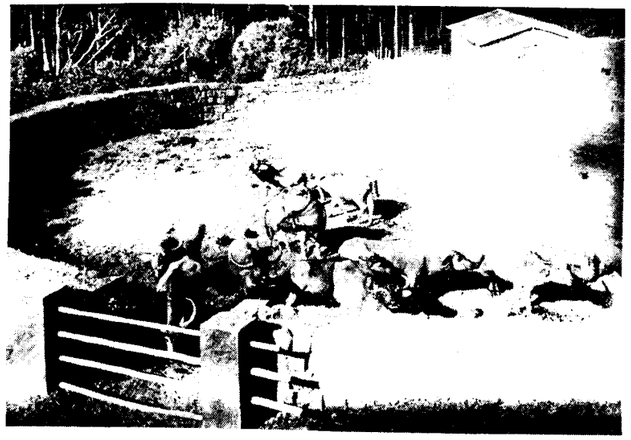
A colony of tiled houses in Hallimoyar village (Nilgiris District)



A terraced house in Ariyur village (Tiruchirapalli District)

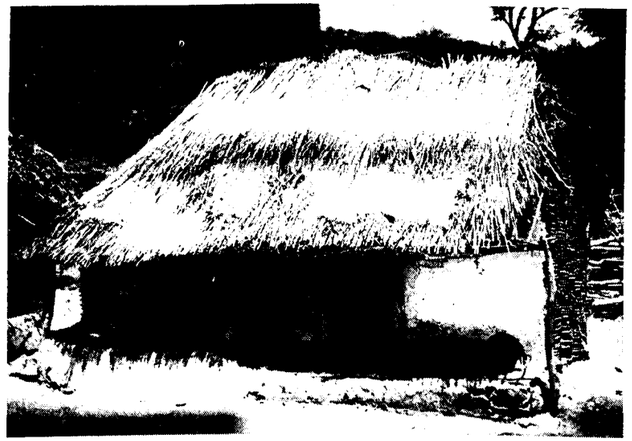


A typical Toda hut in Nilgiris District



A Buffalo–pen in a Toda village (Nilgiris District)

A typical hut in Kunnalur village (Thanjavur District)

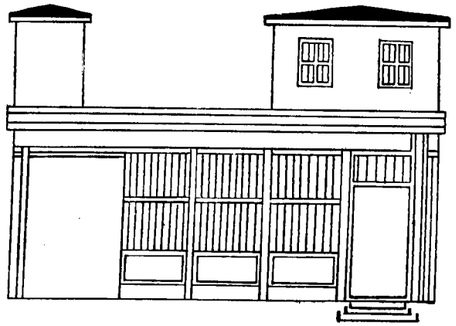


A thatched hut in Hallimoyar village (Nilgiris District)

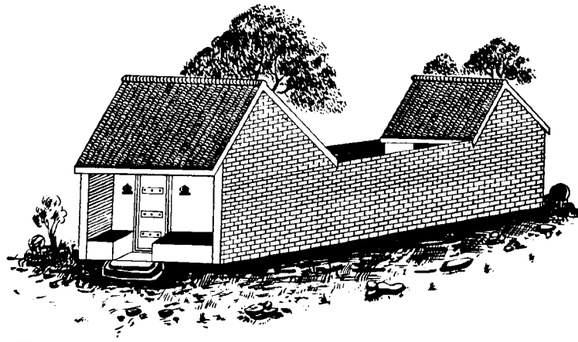
A tiled house amidst coconut groves in Kootumangalam village (Kanyakumari District)

A mud-walled thatched house in Kootumangalam village (Kanyakumari District)

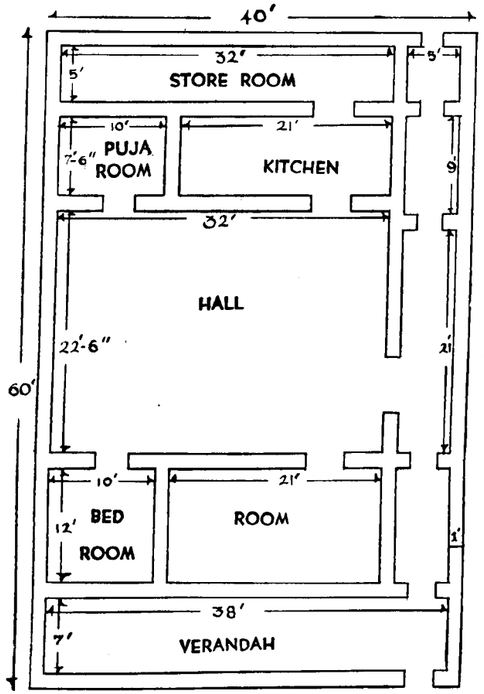
A hut constructed with plaited coconut leaves in Kootumangalam village (Kanyakumari District)



FRONT ELEVATION

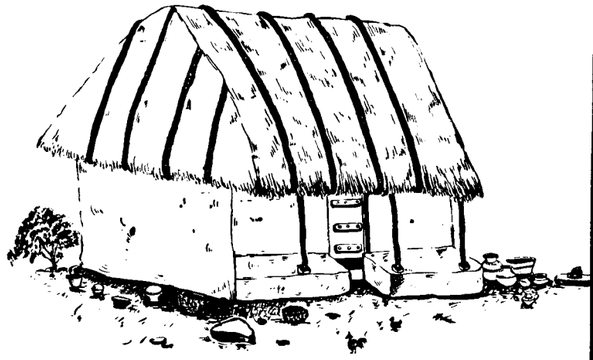


This is a sketch of a Senguntha Mudaliar house and gives a three-dimensional effect. Note the open court-yard and the kitchen at one corner with a tiled roof. (Ayyangarkulam, Chingleput District)

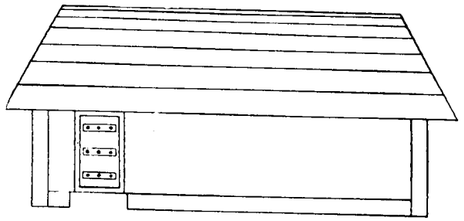


GROUND PLAN

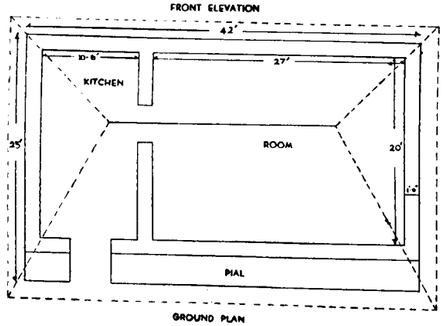
This is a terraced-house owned by a well-to-do Senguntha Mudaliar. It has a room at the top and is cement-concreted. There is a big room which is used for setting up of a loom, a spacious central hall, a seperate pooja room, a store room and a kitchen. A wide enclosed verandah runs along the length of the house. Constructional details can be found in report.



The hut of a Valluva Pandaram with its thatched roof and mud walls (Ayyangarkulam)



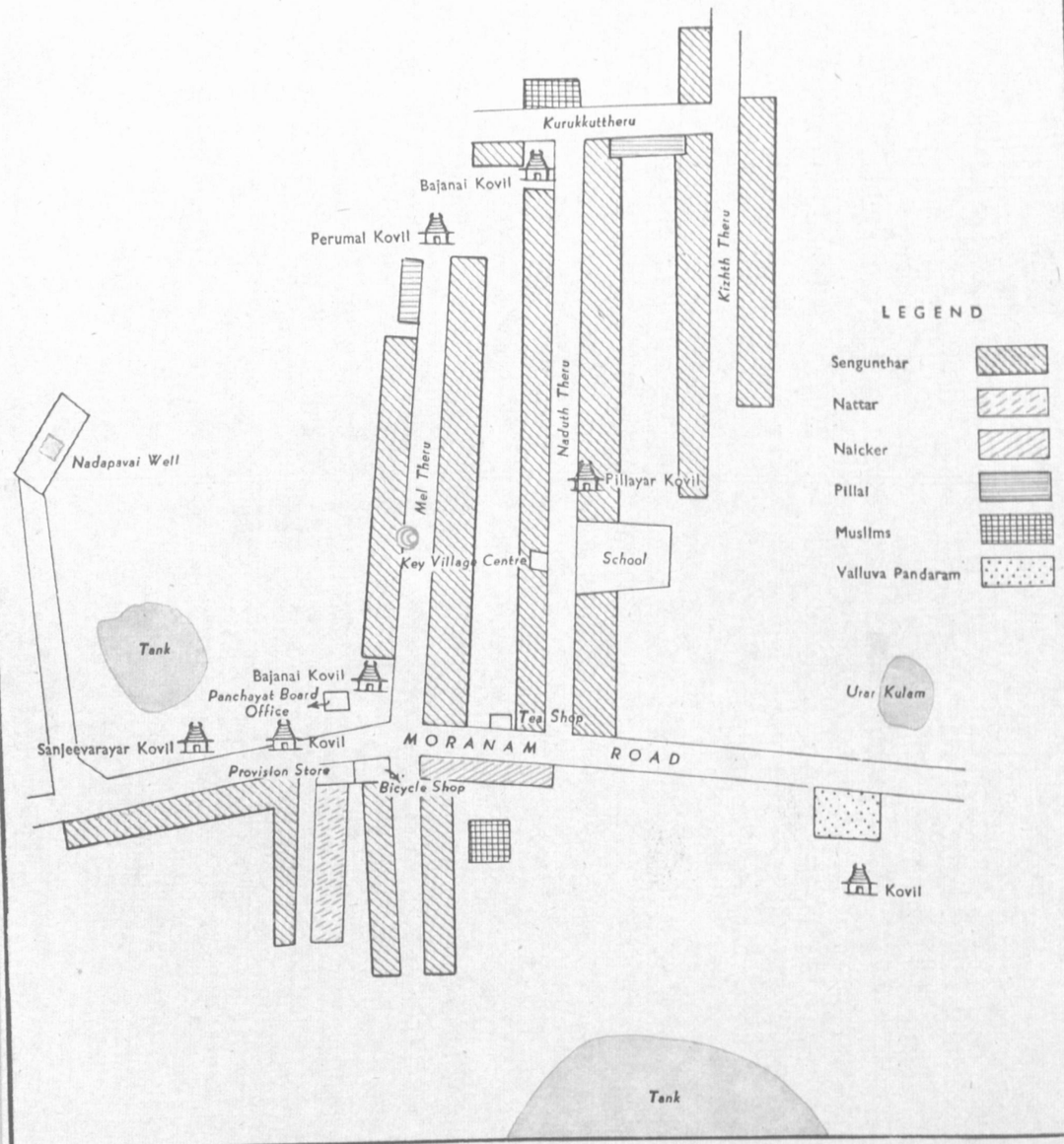
FRONT ELEVATION

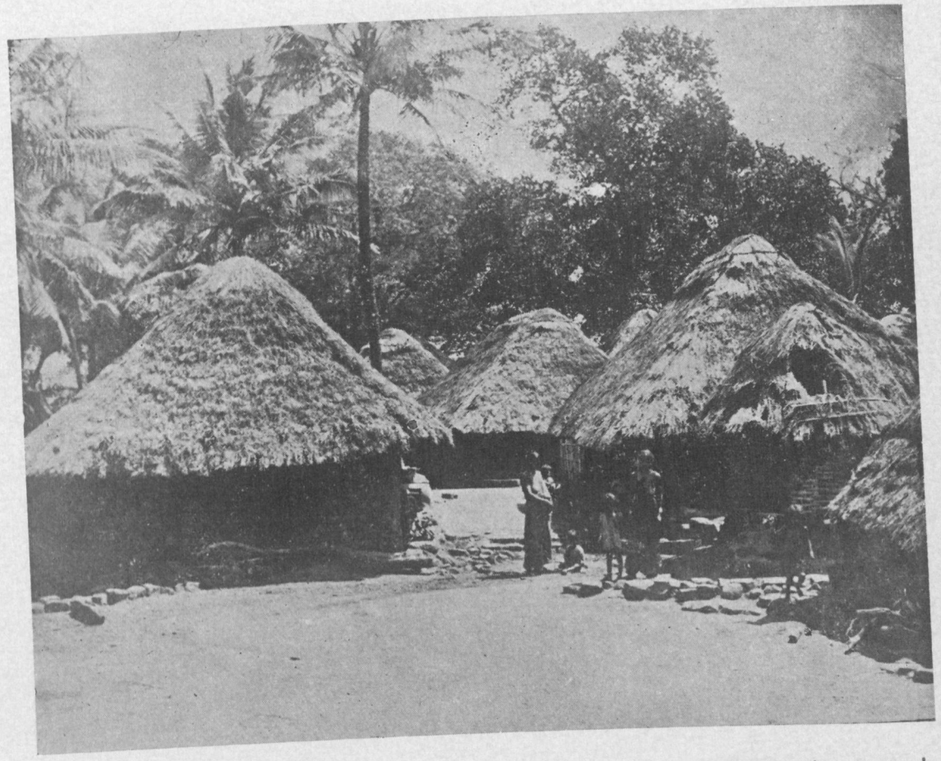


GROUND PLAN

This is a plan of a Valluva Pandaram hut. This is constructed of mud with mud for flooring and palmyra thatch as roof. It consist of only one big room partitioned and in one corner is set up a kitchen hearth. Two families live in this hut.

Residential Pattern
in
AYYANGARKULAM
[Not to Scale]



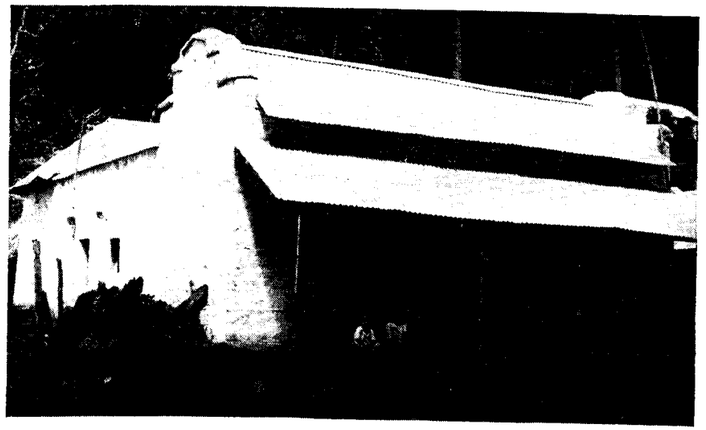


A cluster of huts in Top Sengattupatty (Tiruchirapalli) — Note the circular granary adjacent to a hut

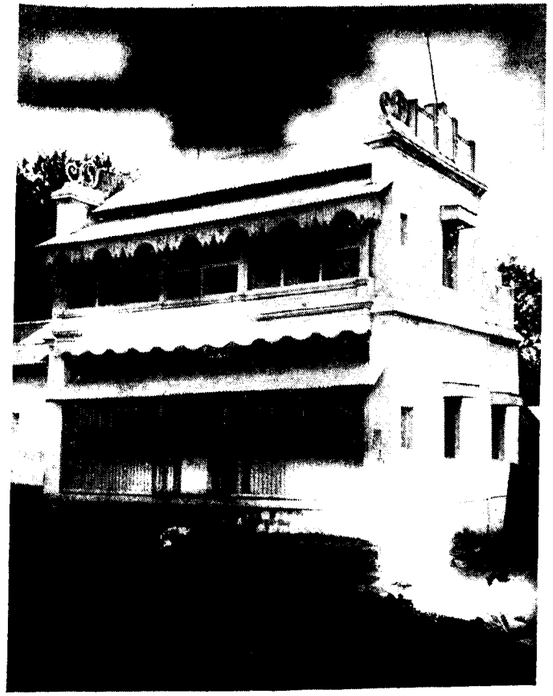
constructed with mud and rubble stones with 'seevu' roofing.

A view of a street in Thenbaranadu (Tiruchirapalli district)

A street scene in Top Sengattupatty hamlet (Tiruchirapalli district)



A tin-roofed house in the hilly village of Sirumalai (Madurai District)

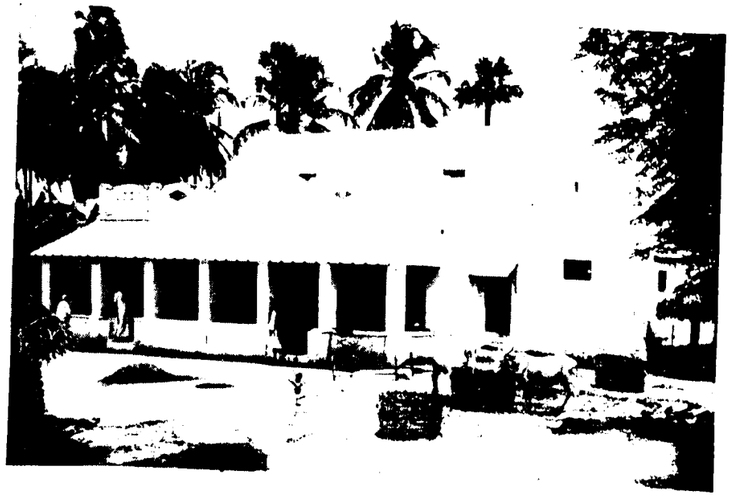


A two-storeyed house in Sirumalai village (Madurai District)

A tiled house in Kilakottai viliage (Tirunelveli District)

A tiled house in Kanakagiri village
(Salem District)

A mud-walled thatched hut in Kanakagiri village
(Salem District)



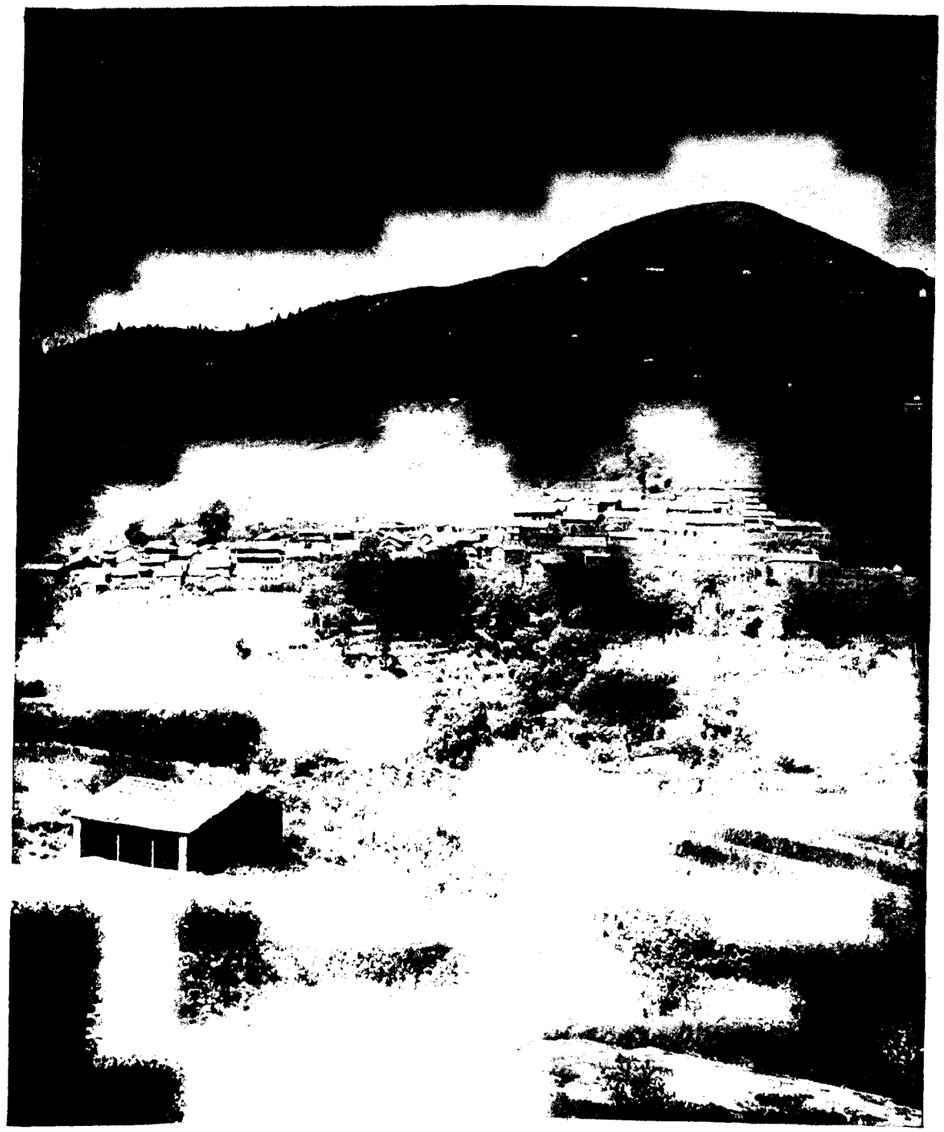
A terraced house in Kanakagiri village
(Salem District)

The North main street is in the sole occupation of the Brahmins of this village. The well-built tiled and terraced houses are indications of their prosperity. Note the Mottai Gopuram at the far end of the Street (Thiruvellarai in Thiruchirapalli district.)

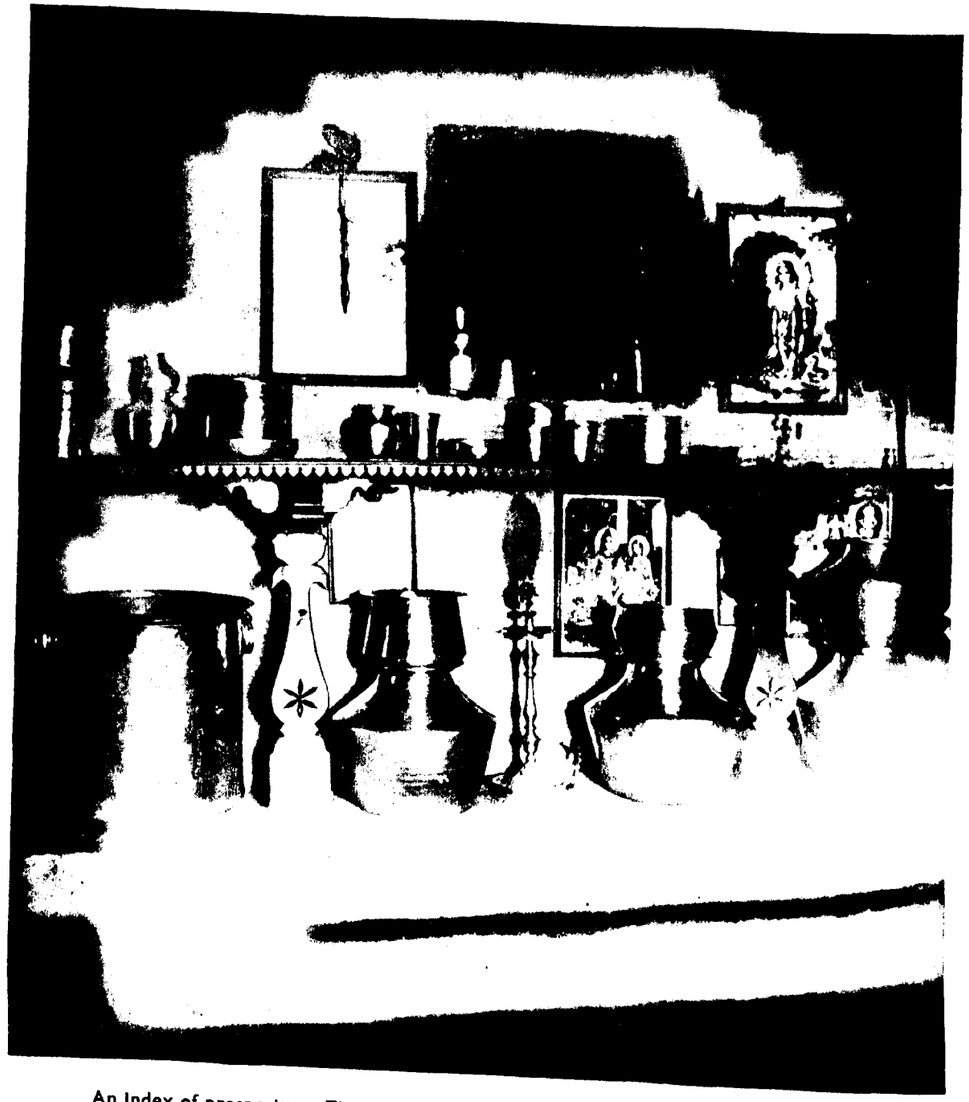
The East main street is in the sole occupation of the Senguntha Mudaliars. The well-built tiles and terraced houses amidst the thatched huts are the cases of plenty amidst poverty. (Thiruvellarai village)

A street in the main village of Thiruvellarai. Note the water tap in the foreground. Protected water supply is available only in the main village.

The public drinking water well in Kalavaipatty hamlet of Thiruvellarai. An electrically operated pump-set has been fitted to this well.



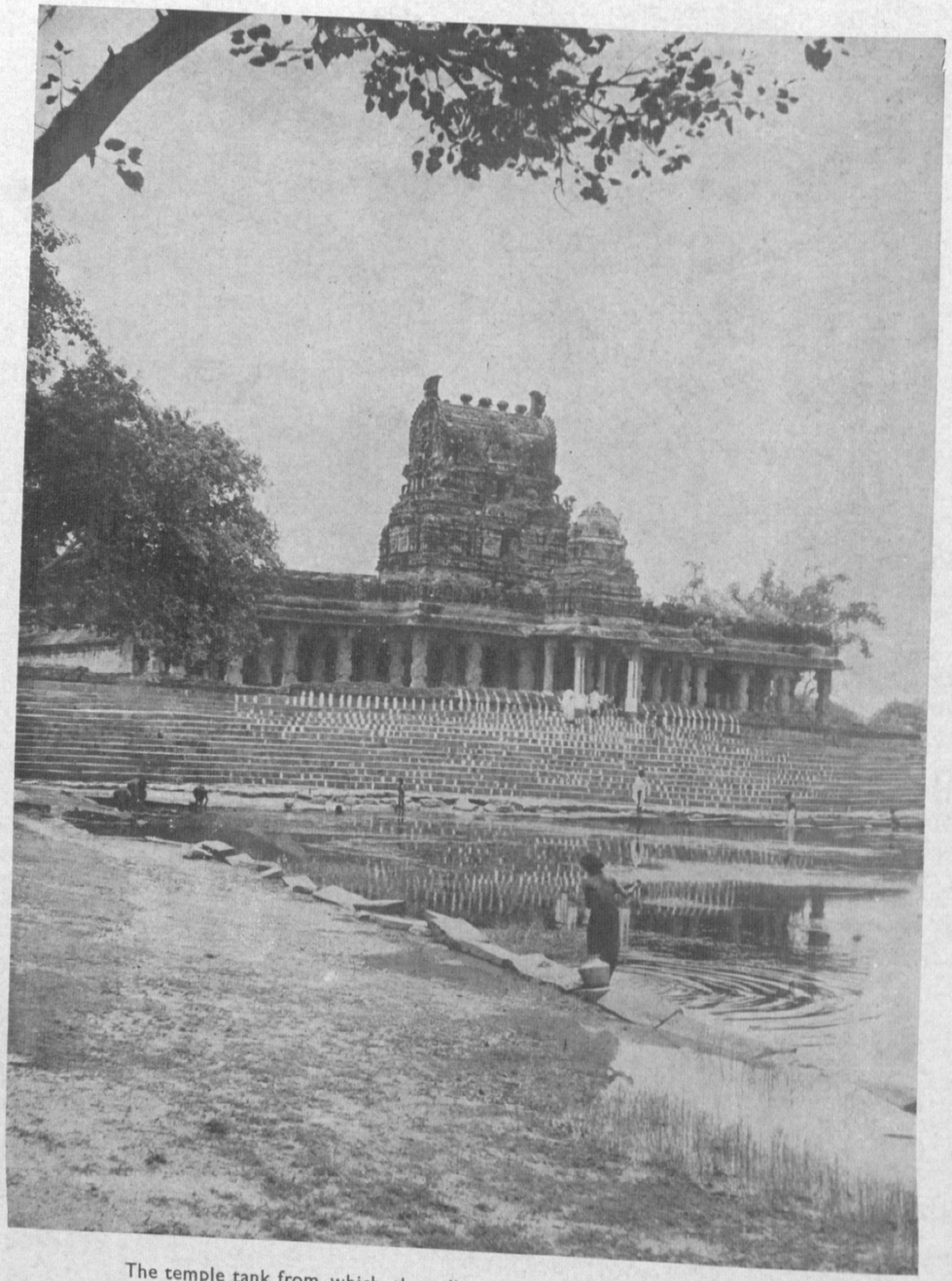
Ever in tune with the voice of the Mountain - The setting of VILPATTI in Madurai district.



An Index of prosperity. The kitchen of a well-to-do Reddiar household in Vilpatti- more an exception than a rule.

The Senguntha Mudaliar Street in Ayyangarkulam: (Chingleput district)
The Electric Lamp post has replaced the archaic wicker lamp.

The village cheri in Ayyangarkulam village (Chingleput district)



The temple tank from which the village of Ayyangarkulam derived its name

MAHARASHTRA

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Layout of villages

1. The village settlements and house types in Maharashtra can be studied in four distinct regions viz., Konkan, Desh, Marathwada and Vidarbha.

2. In the Desh region or Western Ghats districts the villages are generally situated on high elevated ground alongside a stream or a river or other water source. Within the village site there are usually a temple and/or a *Chavadi* which serves as a centre of village administration and as a meeting place for villagers, where all social business could be transacted. Surrounding the *chavadi* stand the village houses, the castes deemed untouchables having their houses on the outskirts of the village. This type of villages are what is called 'tightly nucleated villages with the habitation clearly defined from the surrounding cultivated fields'[1]. This village type has evolved out of the consideration of security and availability of other services.

3. Where the village site is not sufficiently large to hold the growing population there grow up hamlets (or Wadis) to which a section of the population shifts. The hamlets however continue to be administered as a part of the main village and are attached to the main village in social, religious and other matters. A *Wadi* or hamlet is generally a cluster of hutments belonging to one or more families whose fields lie in the immediate neighbourhood. *Wadi* people are dependent upon the village servants and craftsmen staying in the main village.

4. In most backward rural economy where the services of village craftsmen are not felt necessary or in the area of intensive farming such as sugarcane or garden lands there is no nucleated type of village.

5. In the Konkan region, in coastal districts of Thana, Kolaba and Ratnagiri including *ex*-Sawantwadi State, the village type differs from the earlier type. Here there are no well defined village sites or *chavadis* and the villagers stay in clusters near their fields, generally on high elevated lands and in the case of garden lands they have their houses in the land itself which is fenced on all sides and contains water facilities. They have generally farm-houses, besides the houses they stay in, situated near the house or field, which are used for temporary residence during the monsoons, for keeping agricultural store and implements and also for threshing purposes.

6. Near the coast the villages are generally settled on both sides of the road and the houses stand in their own compounds with their fruit and coconut gardens, fenced on all sides.

7. In Satpura region also we find the houses in individual fields, in clusters of two or three houses belonging to some single close kinship group.

8. In the Vidarbha region 'the population of the village is concentrated in one common residential site known as 'Gaothan'[2]. The reason for this is partly historical. When these villages were settled the villagers had no assured rights in particular portion of land. 'The cultivators often changed their lands from year to year and so it was unlikely that they would build a house upon the land they cultivated at the time'.[3] The dictates of the sense of security also demanded that all the villagers built their houses close together. And naturally in every village in Vidarbha we find an old Garhi-ruins of an old fort—in which the village headman resided.

9. In Marathwada districts the villages are usually situated on unculturable hard, stony land near a *nala* and they are all walled.

10. Walled villages are also to be found in parts of Kolhapur and Jalgaon and some other districts of Western Maharashtra. In the coastal districts none of the villages are walled.

1 Article by Iravati Karve in Rural Sociology in India Dr. A. R. Desai—P. 177.
2 Central Provinces and Berar Census Report 1931.
3 Ibid.

11. In the predominantly tribal or tribal villages, which are generally in the vicinity of forests there are thatched huts with reed walls, having one room which is used for all purposes, with no foundation or plinth.

12. In the villages throughout the State except those in the coastal districts and those in Satpura region there are two types of roads, viz., (1) the roads connecting different villages and (2) roads within the village site connecting housing areas. The roads inside the village are called Ali, Galli or Bol. Ali is a row of houses of one caste and one profession. Galli is the thoroughfare between houses of two or three communities, one on either side. Bol is often a road which defines a neighbourhood. The internal roads in the village are in many cases not properly maintained and cesspool water from adjoining houses is allowed to flow on them.

13. In the coastal districts where many villages are settled along road side the main road in the village also forms the main arterial road joining villages. In the case of the interior villages however there are no roads within the village but the housing areas are joined by foot-paths across fields and hillocks with sometimes an approach road connecting the village to the main road.

Locational pattern

14. People of more than one caste generally live in the villages. There are some castes such as Mahars, Mangs, Chambhars etc., who being deemed as untouchables are forced by circumstances to live away from the general village habitation generally on the outskirts of the village amongst their own caste groups. The other castes are spread over the entire village site, but with an exception here and there, they also form their own groups, each group living distinctly and apart from the others in an area usually called after their caste name.

House types

15. House types as a rule depend upon the rainfall, climatic conditions, availability of building material and last but not least the financial condition of the owner.

16. In the area of heavy rainfall, viz., the Konkan district of Thana, Kolaba, Ratnagiri and in the districts of Amravati, Nagpur, Yeotmal (part), Chanda and Bhandara, we find houses with mud walls or walls of grass, reeds, wood or bamboo, and sloped roots, either tiled or thatched with grass, leaves, reeds, bamboo, etc. In the rest of the State where the rainfall is not so heavy there are mud or stone walls and flat roots of grass, leaves, reeds, wood or bamboo or corrugated iron sheets or cement. "The border line of flat roofs coincides pretty fairly with the line of 25 inches rainfall[1]".

17. In the coastal districts of Thana, Kolaba and part of Ratnagiri the houses of the agriculturists and artisans are in general built on raised plinths built in mud and stones and floor of hardened mud with a thatched or tiled roof. The roofs rest on wooden poles. The walls are of Karvi sticks or Bamboo chips plastered with cow-dung from within and without. The houses are generally square with one or two rooms depending upon the means of the owner. The cattle are generally tethered in the main building though some well-to-do persons have separate arrangements for tethering their cattle.

18. In the Ratnagiri district the houses have mostly mud walls except in the area where laterite stone is available, where some houses, especially of the well-to-do, have walls of dressed laterite stone. The houses are usually detached from one another, each standing in its own compound containing fruit and flower trees and some open space. The Kunbis generally live in small houses with mud walls and thatched roofs resting on wooden poles. Their houses are divided into 2 rooms. The cattle and poultry are housed in the back or side room. The house of a Maratha is generally better and more neat than that of a Kunbi, with brick walls and tiled roofs. Brahmins, Bhandaris, Muslims etc. live in well built houses standing on raised plinths. The village Mahar lives in a small hut usually with a thatched roof.

19. In the Poona district there are five types of houses.

1. Large *Wadas* (Mansions). They have stone or fire-baked brick walls, tiled roofs and verandahs. They are generally storeyed and have 2 to 5 rooms. These are found in towns and large villages.
2. The second type of house is also a storeyed one but with walls of dressed or coarse stones, and burnt or sun-dried bricks and tiled or flat roofs. They are found both in towns and villages. These houses have a front verandah, *Majghar* (Central hall), *Deoghar* (a room for worshipping family gods), kitchen and a room to spare. The cattle shed is either in the front or at the back.
3. The third type of houses are one storeyed with walls of unburnt bricks or mud and stone. They have 2 rooms and thatched or tiled roofs.
4. The fourth and fifth type of houses are single roomed thatched huts with walls of mud or mud and wattle reed, millet or cotton stalk and roof of a Bamboo frame covered with grass or leaves. Such houses are found in villages or hilly parts of the district and are owned by poor people including scheduled castes.

20. In the Satara district also there are four types of houses :—

1. Those with tiled roofs and walls of fire-baked bricks;
2. Those with tiled or thatched roofs and walls of sun burnt bricks or mud;
3. Those with thatched roofs and wattled or grass walls; and
4. Those with flat-earth roofs and walls of unburnt bricks.

21. The first class of houses are seldom found except in towns and large villages. They consist of one or two open squares surrounded by rooms or verandahs and one or two storeys high. Of the two open squares, that in the front is used by men and that at the back is set apart for use of women. The rooms in the inner square are used for sleeping, sitting, cooking, dining and as store rooms. The rooms in the outer square are generally used as sitting rooms.

22. The front room on the ground floor and that on the upper storey are set apart for guests. In front of some houses is a verandah where servants wait. Bathing rooms and cattle-sheds are at the back. Such buildings belong to *Inamdars, Jagirdars* and rich merchants. Their place is however being taken by modern type cement concrete structures.

23. The second class of houses exist both in towns and in villages. They consist of a front verandah and a central room with three or four other rooms, one of which is set apart for cooking. The central room is used for dining and worshipping household gods. Such houses have a cattle-shed, either in the front or at the back.

24. The third class of houses are found chiefly in villages and in the hilly parts of the district inhabited by the poorer land holders and field labourers, etc.. The inside of the hut is generally divided into 2 or 3 parts by Bamboo matting etc.

25. The fourth class of houses, *viz.* those with flat earth roof called *Dhabas* are mainly found in the eastern part of the district.

26. Except tile-roofed houses of the rich in the towns and large villages, most Kolhapur houses are thatched in the rainy west and flat-roofed in the dry east. Town houses have generally burnt bricks walls and most rural houses are built of stone or undried brick and mud-mortar, pointed mud or mortar. Window and door frames etc. are made of *babhul, mango, jambhul* and *umbar;* and bamboo and teak rafters are largely used.

27. In the Buldhana district it is insisted that the house should be *Gaimukhi* (Cow-faced) *i.e.*, the front should be narrower than the back.

28. In the Akola district the houses in the old villages are crowded together and open on narrow lanes. The walls are of earth or mixture of stones and earth though brick and stone walls are not uncommon. Houses occasionally have a flat top called *Dhaba* but more frequently they have sloping-roofs of tiles, corrugated iron sheet or grass thatch. It is only the poorest who use thatch.

1 Bombay Census Report 1911

APPENDIX I

MAHARASHTRA

Wardha—"To each circle of ten or twelve villages forming their common centre, is some place of rather higher pretensions than its neighbours, at which the weekly market is held. This is called the *kasba,* and as some small amount of trade is carried on here, the population, not being limited to agriculturists, is more numerous than that of the adjoining villages. In the same proportion to the *kasba* as the *kasba* is to the smaller village is the town, the old pergannah headquarters, which, from associations, has still some importance in the eyes of the inhabitants, and generally boasts of an old mud fort in which the deshmukhs or deshpandias of the pergannah reside. But apparently the pergannah towns and the *kasbas* have for many years past been falling off in importance, and as they decline the adjacent villages improve, so that village, *kasba,* and pergannah town are, by degrees, approaching one level, the villages profiting by the decline in the towns, the one rising in proportion as the other falls. This is to be attributed to the change in the times. The *kasba* originally did not owe its importance to the small amount of trade carried on there, so much perhaps as to some advantage of position which constituted it a convenient place of rendezvous in troublous times. In days when a visit from the *Pindharis* or some other lawless hand from across the river was no very extraordinary occurrence, the agriculturists were obliged to flock together for purposes of mutual protection and defence, and sacrificing convenience to safety to take up their quarters at some central spot, at perhaps a considerable distance from their fields. Thus large gatherings together of agriculturists. deserving the name of town, became dotted at considerable intervals over the district. The villages were comparatively few, and the country indeed was a country of towns, traces of the importance of many of which are still to be seen. But times being now peaceful, the necessity for crowding together no longer exists, the large gatherings of agriculturists are breaking up, and the cultivators are taking to living as near as possible to their fields, and what were once small hamlets are now flourishing villages".

Nagpur—"The size population and importance of the larger towns, when compared to the total district population and area, are remarkable. The circumstance is, in some measure, to be accounted for by the system under the Maratha Government, which made the Kamaishdar or head administrative official of each pergannah reside at the head-quarters of the pergannah. The pergannahs were small and many. The Kamaishdar brought in his train a numerous retinue for whose food, lodging and clothing arrangements had to be made on the spot and thus the nucleus of something like a town was commenced at once by the drawing together of a body of artisans, grain-sellers and others, who were required to provide for the wants of the officials and their followers. The cloth trade again, which is so largely followed and so widely dispersed over the district, must have done much to increase the towns. There may be other special causes on which it would be out of place to speculate. At all events to whatever cause ascribable, the preponderance in number of the rural over the urban population is here much smaller than in most other districts of India." The process of disintegration to which the Wardha report refers has long been a thing of the past, but of the old order traces remain in the large number of populous villages and towns which are still a distinguishing feature of the district. The commercial development, moreover, which Wardha has witnessed during the past twenty years, has helped to increase the size and importance of its large villages and to check any tendency to decline which might otherwise have existed. Nagpur from its proximity to the seat of the former ruling power, and Chanda and Bhandara from their greater inaccessibility, were less exposed to the raids of free-booters than the border tract of the Wardha valley. The growth of the pergannah towns in their case has, therefore, probably taken place in the more peaceful manner described in the second extract that has been given. In the Nerbada districts and in Nimar, as in Wardha, it is likely that many of the larger villages* trace their origin to the close of the last and the early years of the present

*Cf. Nimar Settlement Report, para 86, and Hoshangabad Settlement Report, para 27.

century, when the valley was the scene of constant warfare and plunder. That more of these have not remained is probably due to the utter devastation that had been wrought. The land had been laid wholly waste and trade there was none, so that the larger communities which had been formed for purposes of protection, were necessarily compelled to break up in order to obtain the means of support. The scarcity of large villages and towns in Chhattisgarh, so noticeable a feature in the Census returns, has been thus accounted for in the Bilaspur Settlement Report.

"It is the marked absence of towns which soon strikes a visitor to Chattisgarh, a matter for the more surprise when the entire plain is seen covered with hamlets. It arises from the fact that the people are a simple agricultural community requiring few of the luxuries which have become necessities in more advanced localities. The tract too possesses but little amassed wealth, having lain for so long a period distant and remote from all the regular channels of trade. All the demands of the people are fully satisfied by the weekly markets which are very common all over the district."

C. P. Report 1893 *Pages* 25-26.

APPENDIX II

Extract of 'Appendix II—Extracts from Reports and Gazetteers to Chapter I—Introduction of Volume X Maharashtra Part IV Report on Housing and Establishments, Census of India, 1961.

(i) Village settlements

Bombay Census Report, 1911

"The ordinary average Bombay village consists of a central inhabited nucleus situated high and surrounded by cultivated lands. The local aristocracy congregate round the village meeting house where all Government business is transacted, and the unclean and servile castes reside in the outskirts, generally in a compact area, on one side. But in the Konkan there is a tendency to decentralize and the head of each family has a house within his own holding; sometimes two or three families live in the same block and even under the same roof-tree, though with separate entrances to their domicile, no doubt an instance of sons or brothers breaking away from the ancestral home and founding a family of their own".

Central Provinces & Berar Census Report, 1911.

"....the mouza, as the village is called for purposes of revenue administration, presents a well recognized unit and in all except the remoter areas is determined by definitely surveyed boundaries. In the case of small villages the mouza consists of a single collection of houses in which the cultivators of the surrounding fields reside together with the few artisans who practise the rude industries necessary to rural life. In the case of the larger villages, the extension of the cultivated area or the crowding of the village site has sometimes necessitated the distribution of the surplus population in hamlets situated usually at a short distance from the central village. These hamlets are for administrative purposes, as well as in the social life and sentiment of the people, treated as a part of the village to which they belong. Special arrangements were made at the time of census that none of these hamlets should be omitted from enumeration. In the remoter areas which are not subject to a direct administration, and where the population is less settled, the village is somewhat less accurately defined, but even where the population is partially nomadic there is usually at any given time a definite collection of houses or huts which has a separate name and individuality, and it was the business of the local Census Officer to discover and schedule such settlements."

Central Provinces & Berar Census Report, 1931.

"In the Central Provinces and in most other parts of India the farmstead standing in its own land, so familiar in Europe and elsewhere, is almost unknown. The population of the village is concentrated in one common residential site, known as the *abadi* in the Central Provinces and the *gaothan* in Berar. The reason for this is partly historical. Before rights in land were granted during the early settlements after the formation of the province the individual cultivator was usually a tenant-at-will. When the British took over the administration, they found in the local *patel,* the predecessor of the *malguzar,* little more than a revenue collector liable to change from year to year. He was responsible for paying the land revenue of the village and distributed land for cultivation among the villagers on his own terms. Cultivators often changed their lands from year to year, and cultivation in those days was largely on a communal basis. Without any assured rights in any particular portion of the land it was clearly unlikely that an individual cultivator would build a residence upon the land which he happened at the time to be cultivating. Apart from that before the establishment of the Pax Britannica there was little security of person or property, and the residents of the village were constrained to erect their houses close together for self defence. In many villages the remains of old forts still exist. In Saugor District they are particularly numerous, and some are still of considerable strength, recalling the days of frequent invasions from the north and the raids of the *Pindaris* and *Bundelas.* Throughout Berar the village *Garhi* is found—the ruins of a mud fort, in which the local headman resided and within which villagers collected together for safety when free-booters were active in their neighbourhood. The old

custom has outlived its necessity but it is still the rule always to define at settlement an area in which houses may be constructed. The description of the ordinary village house in the Central Provinces has been repeated many times in census reports and other Government Reports."

Hyderabad Census Report, 1941.

"*Typical Marathwara villages.*—The usual site is an unculturable hard stony land near a *nala.* The houses are flat roofed of dull khaki colour, and not attractive to look at as compared to those of Telingana. They are not arranged in any system. There are no good streets or roads within the village but narrow crooked lanes with cess-pools of household water stagnating all along them. There is a *chauri,* places of worship and public wells besides a number of private wells. There is no regular village grazing ground. The *Dherwara* is separate."

Hyderabad State Gazetteer, 1909.

"Garhis or walled villages are found all over the State, testifying to the necessity that existed, up to the beginning of the nineteenth century, of affording security against the depredations of marauders, and the constant fear of civil wars in those troubled times. The houses are usually built of mud with thatched roofs."

Maharashtra State Ratnagiri District Gazetteer 1962.

"None of the villages are walled or fenced. The people in South Konkan live in small tile-roofed houses, spread out in two or more hamlets which comprise the village. The hamlets or *vadas* are as a rule, situated according to availability of land for cultivation. Many of the villages are thus divided up into four or five hamlets, though there are a few instances of exceptionally big villages containing as many as 30 hamlets. Coastal villages are densely shaded by belts of cocoanut gardens, and the road between the long lines of houses are usually paved with cut laterite stones. These raised causeways are called *pakhadis.* The village sites of the inland parts are well, though less densely shaded with mango, jack and tamarind trees."

Kolaba and Janjira Gazetteer, 1883.

"As a rule the larger villages are along the coast or on one of the creeks. In these coast and creek villages all signs of houses are hidden by belts of cocoa and betel palms, which fringe the sea from a quarter to a mile broad and sometimes from mile and a half to two miles long. Except the row of small dwellings and shops that form the market place, each house stands in a separate fenced garden. A main road from end to end of the village, with side lanes, runs through the palm groves, the trees meeting above and casting an unbroken shade. Owing to the dampness of the climate the houses are built on plinths from two to three feet high. The richer rice land villages are usually built on the skirts of one of the hill ranges which fringe the rice lands. They are fairly shaded with large mango and *pipal* trees and here and there an isolated clump of bamboos. The houses are much like the coast houses, except that they are grouped together not separate, and that the plinths are lower and less regular. The hill hamlets are clusters of low huts in spaces in the forests cleared of brush wood; some have plinths and some have no plinths. All are built of rough poles cut from the forests with no attempt at dressing, and with walls of mud and stone or of wattle and daub."

The Bombay Presidency—Kolhapur, 1886.

"The Kolhapur villages are of two classes, walled and open. Some of the village walls are of burnt brick and mud and some are of stone and mud. Some old villages have stately gates and ruined fortifications. Though proud of their old walls and gates, the villagers seldom take any steps to keep them in repair. In most villages houses are not built in rows but are scattered all over the village site. Kunbis or husbandmen, Marathas, Jains and Lingayats form the bulk of the village population. Dhangars or shepherds and other herdsmen live with their herds on the hills. In the skirts of the villages are the quarters of the Mhars, Mangs, Chambhars or shoe-makers, and Dhors or tanners whom most villages hold impure."

Buldana District Gazetteer, 1910.

"Many of the names of villages have a meaning. Some have a religious origin as Dattapur (City of Datt), Hanuwantkhed (from god Hanuwant), Kamalapur (from goddess Kamalja) and Parashrampur (from god Parasuram). Among villages named

after trees or plants may be mentioned Sagwan from the teak (*sag*) tree, Palaskhed from the *palas* tree (*Butea frondosa*), Chinchkhed and Chinchpur from *Chinch* (tamarind), Pimpalpur from *pipal* tree, Babulkhed from *babul* tree, Umarkhed from *umar* tree, Kusamba from *kusum* plant, Jamthi from *Jam* (guava), Wadali from *wad* (banyan tree). Some are named after animals as Asola from *asol* (bear), Undri from *undir* (mouse), Waghapur from *wagh* (tiger), Nagapur from *nag* (serpent). Those bearing personal names are usually of Musalman origin, for instance Ibrahimpur, the village founded by Ibrahim, Muradpur, Afzalpur and so on. Among miscellaneous names may be mentioned Loni (butter), Bhalegaon from *bhala,* a spear, Buldana from Bhilthana, an abode of Bhils, Tapowan, a forest of penance."

Akola District Gazetteer, 1910.

"Occasional villages are notable for having an unusual proportion of some particular caste, Marwaris, Wanis, Wanjaris, Kolis, and so on, but the local division of castes is not very pronounced. The more aboriginal castes are more common in hilly parts, and Muhammadans are especially numerous in places of ancient importance. Within a village, again, the distinction of locality is scarcely applied except in regard to the lowest castes; Mahars and Mangs almost always occupy quarters on the outskirts, distinct both from the general population and from each other. Banjaras, who are common in the south, also live separately; their quarters are called *tandas* and used to be at some distance from the village-site. The village-site, *gaothan,* is sometimes called *pandhari,* white, because the ground within it approximates to that colour with the accumulations of long habitation. The depth of this soil would give some indication of the age of the village. Sometimes, but rarely, a quarter within the village is practically given up to some other caste, to Muhammadans for instance. Even when Muhammadans are scattered among all parts of a large village they divide the area for their own purposes into separate *muhallas;* each of these has its hereditary *jamadar,* its *bangala* or common house, and perhaps its separate procession in Muharram. Similarly a very slight degree of localisation has developed in regard to occupation. In a large village one or two definite streets are known as the daily bazar, both permanent shops and stalls for vegetables being chiefly gathered there; the ancient crafts of turban and carpet-making have been located in different parts of Balapur; the recent metalled roads have busy cart-wrights' shops beside them; and cotton factories, just outside the village, often grow up side by side."

Central Provinces, Yeotmal District Gazetteer, 1908.

"Members of each caste usually occupy a quarter of their own and that of the Mahars and of Pardhans is at a little distance from the rest of the village. The shrines of Maroti or Hanuman, the tutelary deity of the village, and of Marhai, the goddess of small pox and cholera, are found everywhere. Very many villages have an old fort with earthen or brick walls known as a *garhi,* and this is commonly the residence of the patel. The fort is square and has walls about 10 to 15 feet high and 150 feet long. These are relics of the period of the *Pindari* raids, when on the approach of the marauders all the villagers hastened within the fort. In some villages there is a *chauri* or common house which serves as an office for the patel and also as a rest-house for subordinate Government officials. This is maintained by the District Board. The blacksmith's and carpenter's shops are places of common resort for the cultivators. Hither they went in the morning and evening, often taking with them some implement which has to be mended and stay to talk. In the evening the elders generally meet at Maroti's temple and pay their respects to the deity, bowing or prostrating themselves before him. They sit and talk for a while and come away. A lamp before the temple is fed by contributions of oil from the women, and is kept burning usually up to mid-night. In some villages there are two or three *baithaks* or places of meeting in the evening, and each cultivator frequents one of these. The *baithak* usually consists of a large banyan or *pipal* tree with a platform of stone or earth built round it to serve as a seat."

Bhandara District Gazetteer, 1908.

"The typical Bhandara village is situated on the highest ground available. If possible, the site is chosen with a view to constructing a tank hard by, to be used for irrigation, for washing and for watering cattle. The embankment of the tank is planted with

mangoes, and frequently there is also a grove of mangoes close to the village, in the shade of which travellers may rest. Within the village site, tamarinds are usually found; and there are one or two *bargat* or *pipal* trees, underneath which will be placed a rude *Mahadeo*, with or without a protective roof. The lanes in the village are flanked by custard-apple trees and gourds creep over the less pretentious houses. The malguzar and tenants have, large yards, walled in, which contain a number of buildings and if possible, a well; the buildings are occasionally of brick but commonly of clay and are tiled. The larger yards are bare and clean. Poor tenants utilise any spare space for Indian corn or *juar* and this, joined to the common indifference about clean roads, does much to give the village an untidy appearance. Outside the village site the most notable object is the tank. On this the prosperity of the village depends, and a glance at its size and condition enables one to guess the state of the inhabitants."

(ii) Houses

Bombay Census Report 1911.

"Just as the villages vary according to local condition so do the houses of which they are composed. In the regions of heavy rainfall the houses are built with gables, generally thatched, but, in the case of the comparatively wealthy, tiled. It is a significant fact marking progress that tiled houses are on the increase due partly to the improvement in economic conditions but also to the fear of fire, which was of frequent occurrence with low thatched caves and cooking done on the verandah. In the dry country the houses are generally built of mud with flat roofs, the well-to-do using stone for their walls. The border line of flat roofs coincides pretty fairly with the line of 25 inch rainfall."

Hyderabad Census Report, 1951.

"Houses in this part of the country probably cover a greater variety of structures than in most areas of comparable dimensions in the world. There is considerable difference between the average type of a house in the villages and in the towns of the State, in its black cotton and in its granitic regions and in its forest areas and in its plains, as well as from tract to tract within each of these areas depending upon the kind of building material easily procurable locally. Again, there is appreciable dissimilarity between the average type of a dwelling as built by the Muslims and the non-Muslims and sometimes even by members of different castes or tribes. This diversity is further amplified in respect of sizes and embellishments (or lack of embellishments) by extremes of riches and poverty and backwardness and enlightenment among the people. In the construction of houses, some Hindus take as much care to see that the house-wife working in the kitchen can keep an eye on the main entrance of the house and the street or the lane beyond it, as some Muslims do to screen the interior rooms from the most prying of the passers-by. It is neither possible nor necessary to describe in this report the numerous distinctive types of dwellings found in the State. But what is really pertinent is the fact that in this State it is difficult in thousands of cases to draw a line between a permanent dwelling and a makeshift encampment—the value and type of the material used as well as the space covered being identical in both the cases."

Kolaba and Janjira Gazetteer, 1883.

Kolaba.—"In 1850 there were 140 tiled and 1,087 thatched houses with an average household of three members. Most of the houses facing the roads were well built and tiled. In 1881 there were 966 tiled and 180 thatched houses. The houses of the rich are usually tiled, with walls at least six feet high and not very pointed roofs. There is frequently an upper storey and inside, on both stories, rooms are partitioned off and sometimes matted. The houses of the poor have low walls of Karvi or bamboo, high pointed thatched roofs and floors of hardened mud. They have usually but one room."

Janjira.—"In 1872 there were 13,769 houses or 5·16 persons to each house. Of the whole number 689 were of a superior and 13,080 of an inferior class, the proportion of inferior to superior being as ninety-four to six. According to the 1881 Census there were 15,926 houses, including huts. Many Musalmans, Bhandaris and some Prabhus own good houses. Except the row of small dwellings and shops that form the market place, each house, especially along the coast, stands in a separate garden. Owing to the dampness of the climate the

houses are all build on plinths from two to three feet high. The plinths are of stone rubble and mortar faced with dressed trap or laterite. The walls are a frame work of wood filled with baked or sun-dried bricks, with coating of mud or white wash. These better class houses are oblong, and have tiled roofs. They are two storeys high, and have two rooms and a central hall on each floor, with necessary and bathing rooms attached. Their value varies from Rs. 2,000—Rs. 3,000. The middle class house has walls of wattle and daub and a roof thatched with rice straw. They are square and have two rooms, and part of the veranda is enclosed with a daub and wattle wall and used as a cook-room. A house of this kind costs to build from Rs. 60—Rs. 75. The huts of the poorer classes cost from Rs. 3—Rs. 5.

"Rich Sidi gentry, Syed landlords and Konkani timber and other merchants own good one or two storeyed houses of brick or stone with strong timber and tiled roofs. The houses of middle class and poor Musalmans, except in some of the larger towns where they have tiled roofs, are built of bamboos and rafters, thatched with rice straw or grass. Their houses are oblong and are peculiar in having the front door at one end. The better class of house costs to build from Rs. 200—Rs. 300 and the poorer house from Rs. 30—Rs. 50. The articles generally found in a house are a few Indian carpets and quilts, some cots and copper, brass and earthen vessels. The Sides deck their walls with swords, shields, lances, muskets, guns, knives and daggers."

Ratnagiri District Gazetteer, 1962.

"The houses, mostly built of mud-walls and some of dressed laterite stone, are usually detached from one another each house having a small compound or courtyard of its own containing a few fruit and flower trees and some open space. During the fair weather, a part of the open space is often covered by a small *pandal* erected in front of the house. A noticeable feature found in the south except in Kankavli Mahal and the extreme south of Sawantwadi is that a number of houses have in their compounds a few cocoanut trees and in coastal villages almost every house except in the bazzar areas is built in a coconut garden."

"The types of houses built in the district vary with the locality and the stage of development and culture of the community to which the inhabitant belongs. The Kunbi generally lives in a small house with mud and gravel walls and a thatched roof held up by wooden posts let in at the corner and the gables. The rafters are generally bamboos, and the thatch of bundles of rice straw and coarse grass.' In the south, the rafters may be of cocoanut palm and the roofing of cocoanut leaves plaited or loose. The inside is generally divided into two rooms, a larger where the family cooks and lives in the day time, and smaller the sleeping and store room. At the gable end is usually a lean-to shed in which cattle and field tools are kept, and grass and wood stored. A Maratha house is generally better and much neater than a Kunbi's, with sun-dried brick walls, a tiled roof, a front verandah and in the fair season an outer booth with a flat roof of plaited palm leaves, the floor every-day carefully smoothed and cowdunged. Most Brahmans, Bhandaris, and Musalmans, live in well-built houses raised on stone plinths. The walls are masonry or burnt brick work and roofs are tiled. The wood work in the roof is generally substantial and well built and the door and window frames neatly put together. Wooden shutters are generally used, though glazed windows are sometimes seen in Ratnagiri, Malvan, Vengurla and other towns. The village Mahar usually lives in a small shapeless roughly-built thatched mud hut. But pensioners and other high class Mahars generally, like the Marathas, build a better style house".

"Except in large towns, houses are very seldom built as a speculation. Well-to-do traders, retired Government servants and pleaders build for their own use substantial and comfortable dwellings but seldom let them to tenants. All large trading towns and villages have a good number of substantial stone tile-roofed buildings housing nearly five per cent of the population. The better sort of house, square built, with an open central or front courtyard, has, round the courtyard, an eight feet deep verandah-like dais or platform raised about three feet from the ground; its walls covered with cement or chunam plaster, oil painted, and its cornices hung with frames of bright coloured lithoprint pictures of gods, saints and mythological subjects. From this veranda, the common family resort, doors lead into back rooms, mostly dark and windowless or out into a cattle yard with offices in the rear. Shopkeepers live i

dark rooms behind their stalls, with a back-yard for cattle, and offices in the rear, entered through a back door. The hovels of the poor, a few feet square with one doorway, generally the sole opening for light or smoke, are divided by bamboo or *palas* leaf partitions into three or four small rooms into which a family of eight or ten are often crowded. The houses of the richer classes, one, two or three storeyes high, have walls of laterite or black stone, bricks, either with cement or chunam plaster or pointing and tiled roofs. According to the means and size of the owner's family, they contain from eight to fifteen rooms. In front there is a porch *ota,* and settle, and a veranda behind. Inside are central room *majghar,* god-room, store-room, kitchen, bed-rooms and several other rooms according to the necessity of the family. These houses have some open space in the rear containing a well, a privy and a cattle-house or an out-house."

Poona District Gazetteer, 1954.

"The types of Dwellings found in the district as a whole may be classified under two divisions, movable and immovable."

"The movable ones belong to wandering tribes or labourers who move from place to place. They are of two kinds; small tents or pals, either of coarse cotton or woollen fabric, and small huts of bamboo or date matting. The dwellers in tents and mat huts suffer much from heat and cold and still more from rain. To escape the wet many of them stop, during the monsoon, near some village and build small huts of grass and leaves and branches of trees."

"The immovable houses may be divided into five classes, according to the cost of building and the type of material used in construction. There are the first class houses, known as large *vadas* (mansions) now rarely built and becoming fewer and obsolete. These *vadas* are seldom found except in towns and large villages and are generally *dumajli* (two storeyed). They are built round cowks (quadrangles or central plot or yard) with stone or fire-baked brick walls, tiled roofs and verandas. Entry into them is through a gateway or passage in one of the outer faces of the building. From the inner court a few steps lead to the *oti* or veranda, for the house is always raised on a jote (plinth) three or four feet high. In the veranda strangers are received, children play or the women of the house swing and talk. The ground floor has four to seven rooms, a central hall, a back veranda; and the second storey has four rooms or two halls. At places, such types of houses have two open squares surrounded by rooms and verandas, the first where the men live and the back set apart for women. In the rear of the house are a cattleshed and a bathing room. A privy is attached to a distant corner either in the front or at the back of the building according to convenience. There may be a rear yard with flower and plantain trees and a tulas (holy basil) is a masonry pillar pot. Buildings like these are owned by *inamdars* (holders of public grants), *jagirdars* (big landed proprietors) and wealthy merchants.

"From the architectural point of view these *vadas* have little beauty or ornamention; even the finest are plain, massive and monotonous. The plinth is of close-joined blocks of polished stone. The posts and beams are massive but short. The ceilings are made of smaller closely fitted beams sometimes ornamented with variegated geometrical figures and flowers made of small chips or slits of gaily painted wood or ivory. If width is wanted, it is secured by two or three rows of wooden pillars joined together by ornamental ogee-shaped cusped and fluted wooden false arches. The pillars, which generally spring from a carved stone or wooden pedestal, have shafts carved in the cypress or suru style and lotus-shaped capitals. The eaves are generally ornamented with carved plank facing and project boldly from the walls. The roofs are either terraced or covered with flat tiles. The staircases are in the walls, and are narrow and dark".

"These *vadas* are being replaced in their class by modern houses, *i.e.*, mansions or big bungalows." Houses of the second class are generally two-storeyed, with walls constructed of dressed or unworked stone and burnt or sun-dried bricks and tiled or flat roofs. They occur both in towns and villages. A house of this class consists of an *osari* (front veranda) which is used as an office or place of business, *majghar* (a central room for dining and sitting), *devghar* (a room for worshipping gods), a kitchen and a room to spare. There is generally also a cattle shed either in the front or at the back."

"Houses of the third class, though smaller than the first two when occupied by husbandmen, are roomy, and they have

large cattle sheds attached. They are one-storeyed and the walls are built of unburnt bricks or mud and stone. They have two rooms and tiled or thatched roofs."

"Houses of the fourth and fifth classes are single-roomed thatched huts with walls of mud or mud and wattle reed, millet or cotton stock, and roofed by a bamboo frame and covered by grass or even leaves. Houses of this class are found chiefly in villages and hilly parts of the district and are owned and inhabited by poorer landholders and field labourers and people of the backward and depressed classes. Except when the number of the cattle is small and part of the house can be set apart for them, the poorer husbandman's cattle live in sheds or pens separate from the dwelling. In the eastern part of the district, where rain is scanty, houses, known as dhabis, with flat earth-roofs, are sometimes found. Owing to the weight of the earthen roof, they seldom have an upper storey."

"Within the last fifty years urban housing in the Poona District has changed a great deal. As knowledge of sanitary principles has advanced, houses of the modern type have come into existence, which are, in style and accommodation, superior to those they have replaced."

"As security of life and property is more assured under modern conditions, the necessity to group houses close to one another and minimise the number of windows in houses has disappeared, and the prevailing trend is also towards formation of garden suburbs. Simultaneous with this trend there has been a change in taste. Perhaps the easy availability of building materials like reinforced concrete has led to new ideas in architectural design. People now prefer simplicity of form and structure to the massive and ornate style. While the old houses ensured more privacy in the household of a joint family by their dark and labyrinthine rooms, the houses which are now built only for individual families allow more light, ventilation and accessibility. Self-contained cottages, or at least blocks, consistent with economy of space, are the modern aim. The kitchen, and bath and toilet rooms are attached to the main structure and made accessible from every other room."

Satara District Gazetteer, 1885

"Satara houses may be arranged under two divisions, immovable and movable. The immovable houses may be divided into four classes: Those with tiled roofs and walls of fire-baked bricks; those with tiled or thatched roofs and walls of sun-burnt bricks or mud; those with thatched roofs and wattled or grass walls; and those with flat earth roofs and generally walls of unburnt brick. The movable dwellings belong to the wandering tribes who carry them with them. They are of two chief kinds small tents or pals either of coarse cotton or of wool and small huts of bamboo or date matting. The dwellers in tents and mat huts suffer much from the heat and cold and still more from the rain. To escape the wet many of them stop during the whole rains near some village and build small huts of grass, leaves, and branches. First class houses are seldom found except in towns and large villages. A first class house consists of one or two open squares surrounded by rooms or verandas and one or two storeys high. Of the two open squares the first is where the men live, and the back is set apart for women. The rooms in the inner square are used for sleeping sitting, cooking, dining and as store-rooms. The rooms in the outer square are generally used as sitting rooms. The front room in the ground floor and in the upper storey, if there is an upper storey, are used as guest halls. In front of some houses is a veranda where servants wait and behind are bathing rooms and cattle sheds. Buildings like these are owned only by *inamdars* or holders of public grants, *jagirdars* or land proprietors, and wealthy merchants. Almost all of them date from the times of Maratha rule. Houses of the second class, with tiled or thatched roofs and walls of fire-backed bricks, occur both in towns and in villages. The house consists of a front veranda and a central room with three or four other rooms, one of which is always set apart for cooking. If there is room in the veranda, the owner of the house makes it his office and place of business. As a rule the central room is used for dining and worshipping the house gods. Houses of this class have generally a cattle shed either in front or behind them. Houses of the third class, with thatched roofs and wattled walls, are found chiefly in villages and in the hilly parts of the district inhabited by the poorer landholders and field labourers, and by the depressed or impure castes. The inside of a wattled hut is generally divided into two or three spaces by bamboo matting or by branches. Except when the number

of the cattle is small and part of the house can be given to them, the poorer husbandman's cattle live in sheds or pens separate from the dwelling. The fourth, class of flat earth-roofed houses called *dhabis,* are chiefly found in the east of the district. Owing to the weight of the earth roof they seldom have an upper storey."

Kolhapur District Gazetteer, 1886.

"Except tile-roofed mansions owned by rich men in towns and large villages, most Kolhapur houses are thatched in the rainy west and flat-roofed in the dry east. Most houses in the *Gadinglaj* and Shriol subdivisions and in the petty divisions of Katkol and Raybag (now in Belgaum district of Mysore State) are flat-roofed and in the Ajra, Bavda, Bhudargad and Vishalgad subdivisions which are close to the wet Sahyadris are thatched. Town houses are generally built with burnt brick; most rural houses are built of stone or sun-dried brick and mud, mortar pointed mud, or mortar. Window and door frames, door panels and window shutters are generally made of *babhul,* mango, or *jambhul,* sometimes of *umbar,* and in the houses of the rich of teak. Bamboo and teak rafters are largely used".

"Kolhapur houses may be arranged under four classes. Houses of the first class, which are generally two-storeyed or *dumajli,* are built round quadrangles with stone or burnt brick walls, tiled roofs, and verandas. These houses contain *osris* or halls used for large dinner parties and office room, three or more sleeping-rooms, rooms for keeping clothes and ornaments, a central store-room, a cook-room, and god-room. In the rear of the house are a cattleshed and a bathing-room. A privy is attached to a distant corner either in front or behind according to convenience of the building. In the rear yard, where there is a rear yard, are flower and plantain trees with a tulas or holy basil bush in a masonry pillar pot. The houses have room for fifty to eighty retainers, but are close and badly aired. The fronts are ornamented with carved wood, and on the front walls in gaudy colours are drawn pictures of gods, goddesses, heroes, and wild beasts with alternate bands of white and red to scare the cholera spirit. Houses of the second class are generally one-storeyed with burnt or unburnt brick walls and tiled or flat roofs; they contain three or four rooms. In towns the second class houses are roomy and showy and when held by shopkeepers and craftsman the verandas are made into shops or work rooms. Houses of the third class though smaller than first or second class houses. When occupied by husbandmen are roomy and have large cattle sheds. They are one-storeyed with unburnt brick walls and two rooms. Houses of the fourth class are single-roomed thatched huts with mud or mud wattled reed, millet, or cotton stalk walls, roofed by a bamboo frame covered with grass and *palas* leaves. Houses of this class are generally owned by labourers."

Buldhana District Gazetteer, 1910.

"At the time of digging the foundation of a house, Ganpati and Prithvi are worshipped by the offer of cocoanuts, and betel-leaves. When posts are erected the kham *puja* is performed. A wooden post is worshipped and ghi is poured at its top so as to flow down to the bottom. A bundle of grass is then tied to the top so that crows and other inauspicious birds may not perch on it. When the beams are posted the owners place a few pieces of turmeric and betel-nut, and a little quantity of *juari* grain dyed yellow in a piece of yellow cloth and tie it to the first beam. When the house is complete they perform the *vastu puja i.e.,* a ghara containing a small image of a serpent made of copper, a pearl and small pieces of silver and copper is burried in the east corner of the house. Brahmans are fed and a feast is given to the caste fellows. The house is adorned with flags and buntings, and a turban of white or yellow colour is also tied round it.

"The front of a house should face to the east. It may also face to the north or the west, but not to the south, which is an inauspicious direction. A house should be *gaimukhi* (cow-faced), *i.e.,* its front should be narrower than the back; it should not be *wyaghra mukhi* (tiger-faced) for that would bring misfortune to the owner."

"The proverb *'moho, koho, mokha; ani ghar gele lawkar'* is common in the mouth of every villager, and it means that the wood of *moho, koho* and *mokha* trees should not be used in the construction of a house, otherwise it will soon change hands. *Pipal, umar* and *palas* trees are considered Brahmans, the sagwan (teak wood) a Kshattriya, and these trees can be planted in the courtyard of a house. The *hiwar* tree is supposed to be a Mang, and it is natural that it should not grow in the yard of a Hindu. The *wad* tree is the abode of an evil spirit called Hadal, which destroys children, and hence it is not safe to have this tree close to a house. The thorny *babul* and *ber* trees, if grown in the neighbourhood of a house, are apt at times to catch the owner's turban at a time when he is going out on some important business. The falling of a turban from ones head on such occasions is a bad omen, and therefore these trees cannot be planted in the yard. As regards *pipal,* which is a very sacred tree, it is said that as far as possible this tree should not be allowed to grow in the yard of a house. The supersution is that if its roots ever reach the cooking place, extinction of the family is inevitable. If by oversight such a tree is grown and it has not got over a hundred leaves upon it, it should at once be cut down; but in case the number of leaves is above one hundred there is no other remedy but to rear it very carefully. As the *pipal* is a Brahman, its thread ceremony must also be performed in the same way as that of a Brahman boy."

Akola District Gazetteer, 1910.

"The houses of an old village are crowded together and open on narrow winding lanes. People like to have a sacred *tulsi* plant growing in their little *awar,* yard, and a parrot may be hung up in a metal cage; the main door of a house must not face the south. The larger houses have within one enclosure a dwelling-house, with separate places for cooking and for bathing, a yard, and buildings for cattle, agricultural implements, and perhaps grain. Berar is practically a land of peasant proprietors, though on the one hand there are a few large landholders and on the other there is a technical limitation which makes the tenure of land not strictly proprietary. Each petty cultivator needs something in the way of a farmyard but makes the little walled space within and about his dwelling-house answer the purpose. All the manure of the establishment used to be collected in a large pit in the midst, and this may still occur, but the practice is now commonly understood to be illegal; people say little about the sanitary considerations involved but complain of the present waste of their manure. In villages with a good water-supply houses have often their own wells within the same enclosure. The walls are commonly built of *mati,* earth, clay, or of a mixture of stones and *mati;* but brick walls are by no means uncommon, and dressed stone is used sometimes. Wealthy people often have attractive wood-carving on the fronts of their houses, Telhara in Akot taluk being especially distinguished in this way; Marwaris and Cutchis perhaps most frequently use this means of ornament. Strongly-built houses are owned by men of the poorest castes as well as by people of wealthier communities, though sometimes a poor man's house is made of a kind of a basket-work daubed with *mati.* Large metal sheets are often made of kerosene oil tins flattened out and soldered together; these are commonly used to shade, the fronts of shops (which are always open) but sometimes for other kinds of roofing or even for the whole of a small building—such as the solitary, ill-situated hut occupied by the sweeper of a village. Houses occasionally have a flat top of *mati,* called *dhaba,* but more frequently they have sloping roofs of tiles, corrugated iron-called tin or grass thatch; red chillies are spread out on these to dry. It is only the poorest, generally living at the sides of a village, who use thatch, because it causes great danger of fire. Tiles are more common in the north of the District and tin in the south; a little village in Basim or Mangrul taluk, especially if close to a main road, may appear almost wholly roofed with tin. Tin is said to have the advantages of being easy to apply and seldom needing repairs; it has the defects of being expensive, cold in winter, hot in summer, and noisy in the rains, along with a possibility of blowing off and hurting someone; a ceiling is rarely added to reduce the heat. Old men say that 60 years ago houses were almost always covered with thatch and were frequently huts of cotton stalks."

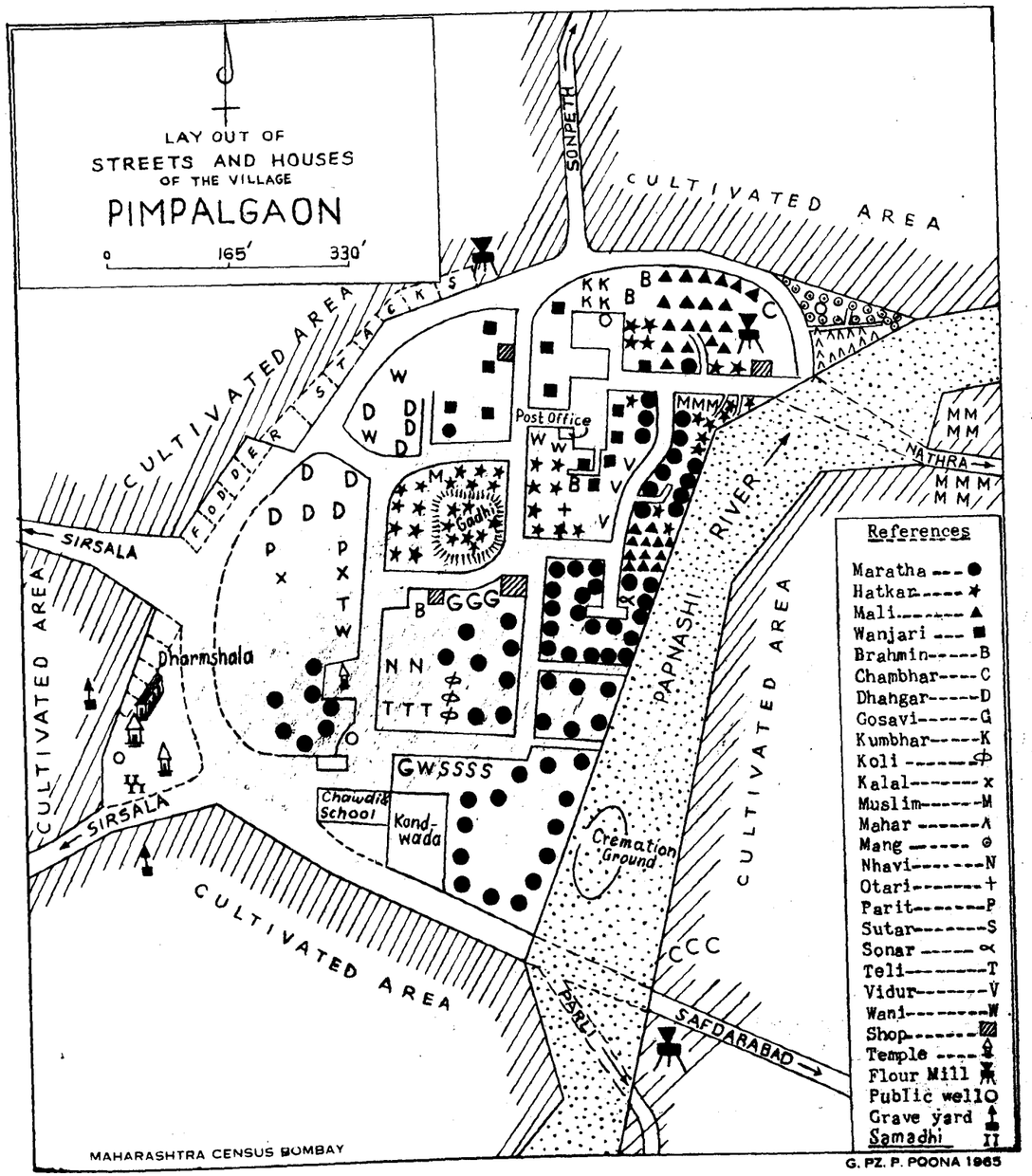
Yeotmal District Gazetteer, 1908.

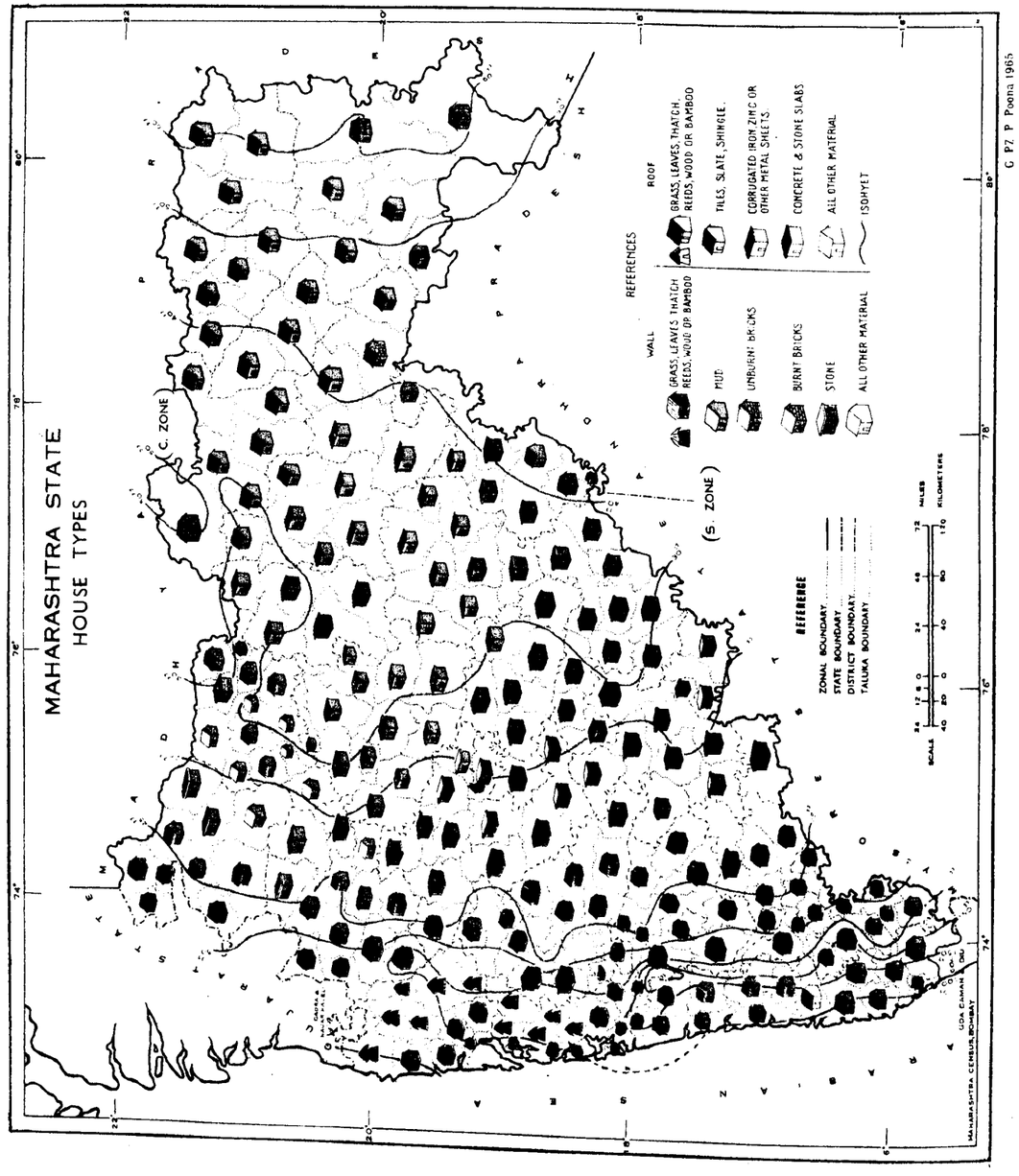
"In Wun, where there are very few forts, the patel's house does not differ from that of the cultivators. The houses of the tenants have one to three rooms with an *angan* or small yard in front, and a little space for a garden behind in which vegetables are grown during the rains. In Wun taluk the houses are usually thatched, but elsewhere they are often tiled; and *dhaba* houses with flat mud roofs are common. The walls are of mud, plastered over bamboo matting. The Kunbis have a *Kotha* or shed by the side of the house in which they keep their carts and agricultural implements. The

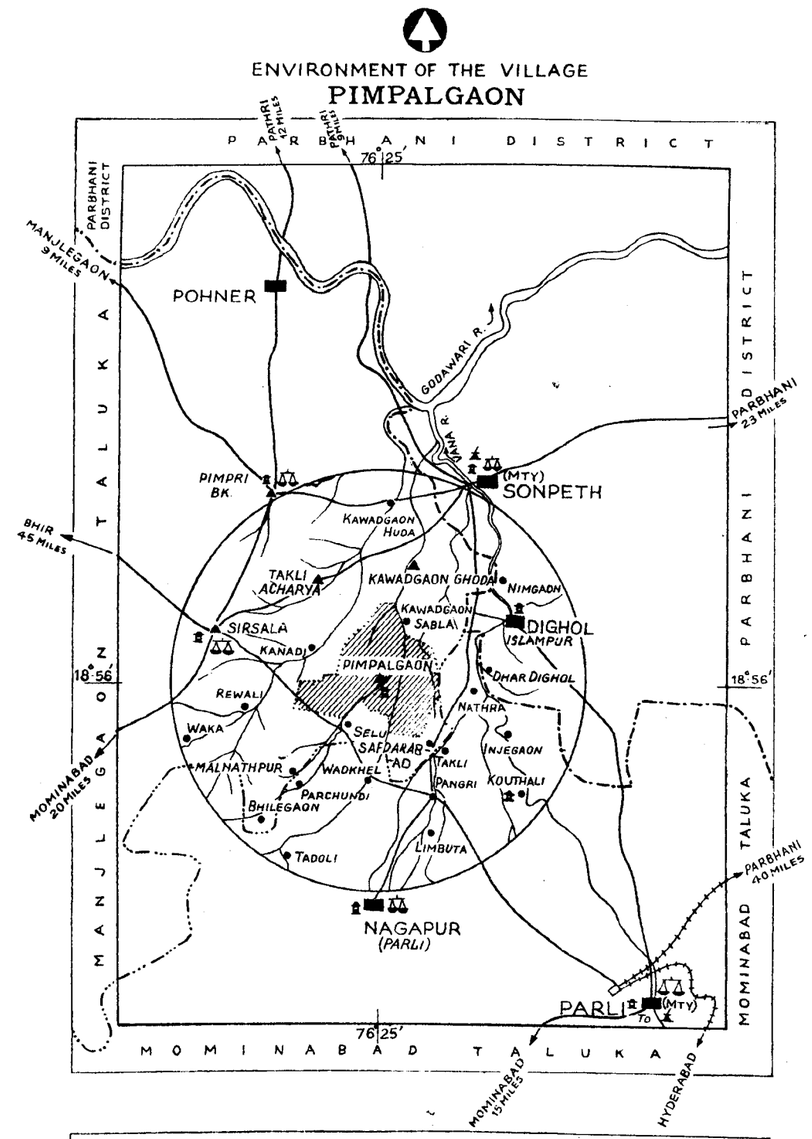
houses of the Mahars are little one-roomed huts or *jhopras* with a small yard in front."

Bhandara District Gazetteer, 1908.

"In Tirora tahsil houses are usually tiled, in Bhandara both tiled and thatched, and in Sakoli usually thatched. Large proprietors and a few tenants have *dhobedar* or terraced houses. Subordinate Government officials and guests are lodged in the *parchhi* or enclosed room beside the gateway of the malguzar's house. Private latrines do not exist in villages and the country people greatly dislike them. The cattle are tied in a shed near the main dwelling or in the veranda behind the house, as they must be always under the owner's eye. Grain is kept in round bamboo receptacles called dholas supported on wooden posts with thatched covers. Those for seed-grain are often outside the house and are only opened when sowing-time comes. While those for food are kept inside the house, and the requisite amount of grain is allowed to run out daily from a hole in the side. Among the most essential articles of furniture are a roller and slab of stone for pounding spices, and a stone mortar and pestle; these articles are worshipped by several castes at marriages. All households also have the *bothris* or mattresses made of old clothes and rags sewn together. If struck with one of these by a Hindu, a Mang is temporarily put out of caste. The ordinary tenant sleeps on straw and covers himself with one of these mattresses."



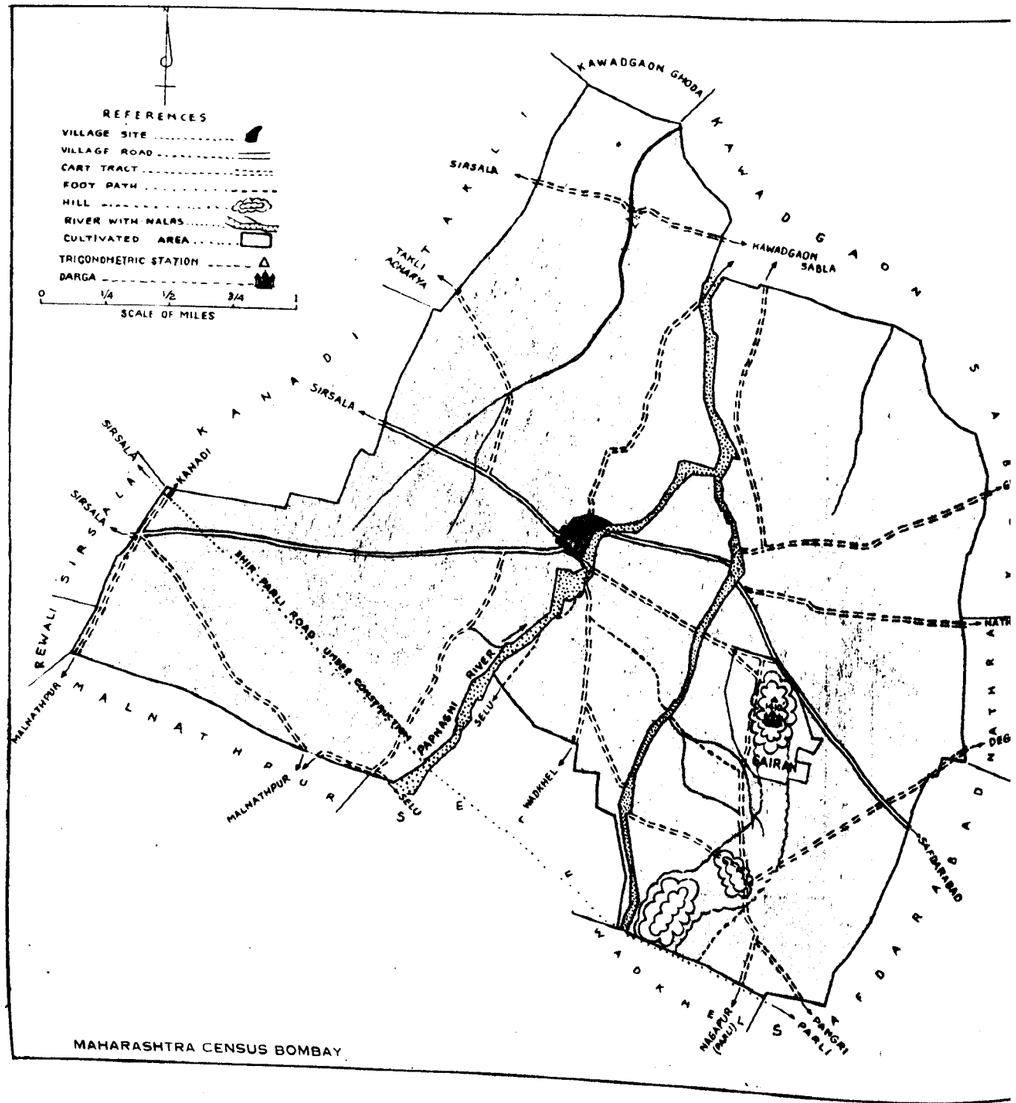

MAHARASHTRA STATE
HOUSE TYPES
C. ZONE
(S. ZONE)
REFERENCES
WALL
GRASS, LEAVES, THATCH, REEDS, WOOD OR BAMBOO
MUD
UNBURNT BRICKS
BURNT BRICKS
STONE
ALL OTHER MATERIAL
ROOF
GRASS, LEAVES, THATCH, REEDS, WOOD OR BAMBOO
TILES, SLATE, SHINGLE.
CORRUGATED IRON, ZINC OR OTHER METAL SHEETS.
CONCRETE & STONE SLABS.
ALL OTHER MATERIAL
ISOHYET
REFERENCE
ZONAL BOUNDARY
STATE BOUNDARY
DISTRICT BOUNDARY
TALUKA BOUNDARY
SCALE
MILES
KILOMETERS
G. PZ. P. Poona 1965


ENVIRONMENT OF THE VILLAGE
PIMPALGAON
PARBHANI DISTRICT
PATHRI 12 MILES
PATHRI 6 MILES
76°25'
PARBHANI DISTRICT
MANJLEGAON 9 MILES
POHNER
GODAWARI R.
PARBHANI 23 MILES
PARBHANI TALUKA
(MTY) SONPETH
PIMPRI BK.
KAWADGAON HUDA
BHIR 45 MILES
TAKLI ACHARYA
KAWADGAON GHODA
NIMGAON
KAWADGAON SABLA
DIGHOL ISLAMPUR
SIRSALA
KANADI
PIMPALGAON
DHAR DIGHOL
REWALI
NATHRA
WAKA
SELU
SAFDARAB AD
TAKLI
INJEGAON
MALNATHPUR
WADKHEL
PANGRI
KOUTHALI
PARCHUNDI
BHILEGAON
LIMBUTA
TADOLI
MOMINABAD 20 MILES
MANJLEGAON TALUKA
18°56'
NAGAPUR (PARLI)
PARLI (MTY)
To
PARBHANI 40 MILES
MOMINABAD TALUKA
MOMINABAD 15 MILES
HYDERABAD
REFERENCES
VILLAGE HAVING POPULATION ABOVE 2000
" " " 1000 TO 2000
" " " BELOW 1000
SURVEYED VILLAGE
BAZZAR
POST OFFICE
TELEGRAPH OFFICE
HIGH SCHOOL
MUNICIPALITY
DISTRICT BOUNDARY
TALUKA BOUNDARY
ROAD
RAILWAY
RIVER WITH NALA
DETAILS ARE SHOWN ONLY WITHIN THE CIRCLE OF 5 MILES RADIUS
0 1 2 4 6 8
SCALE OF MILES
MAHARASHTRA CENSUS OFFICE, BOMBAY
G.P.Z.P. POONA.1964 WC-P 768-775.

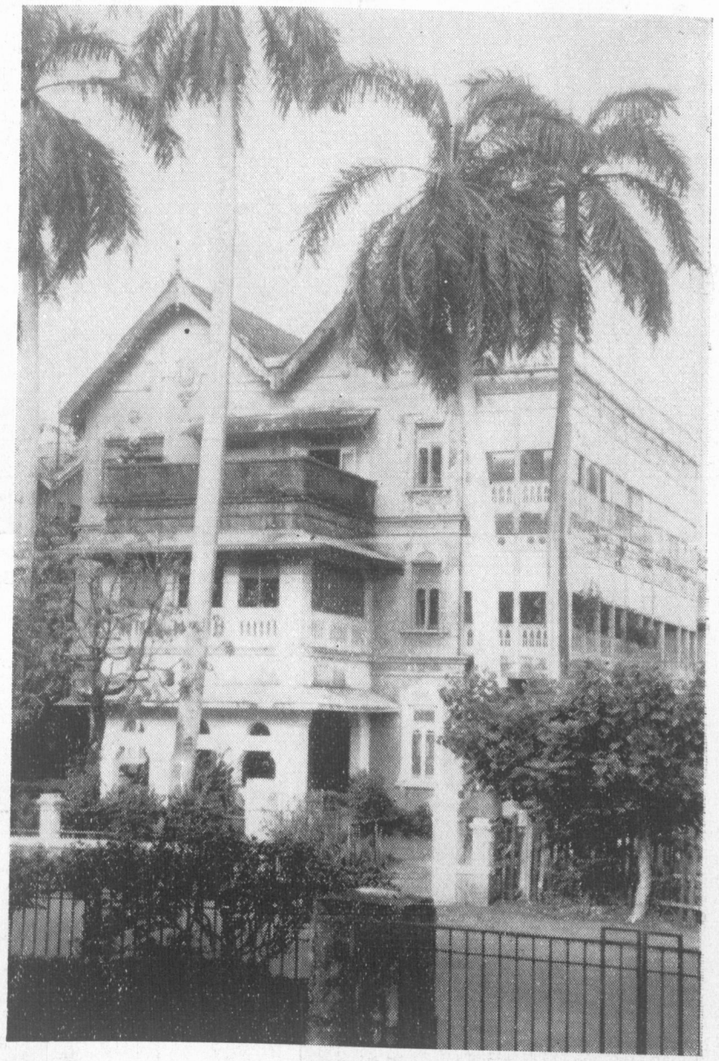
MAP OF THE VILLAGE

PIMPALGAON

TALUKA MANJLEGAON DISTRICT BHIR



G. PZ. P. POON

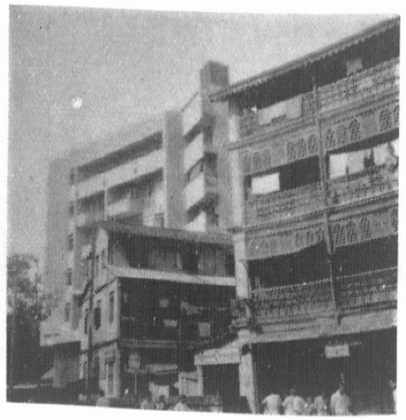


A well-to-do house built round about 1900 A.D.—Marine Lines, Bombay

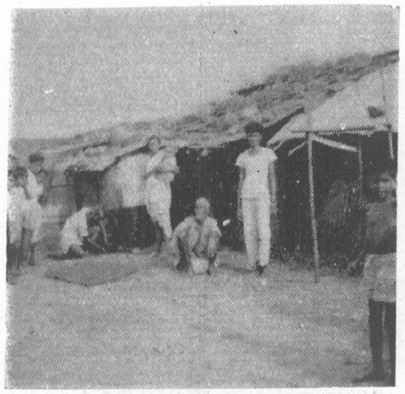
A modern 10-storeyed building—Pedder Road, Bombay

Huts in the Slum area at Worli, Bombay

Modern Shops and Dwellings
Sion, Bombay



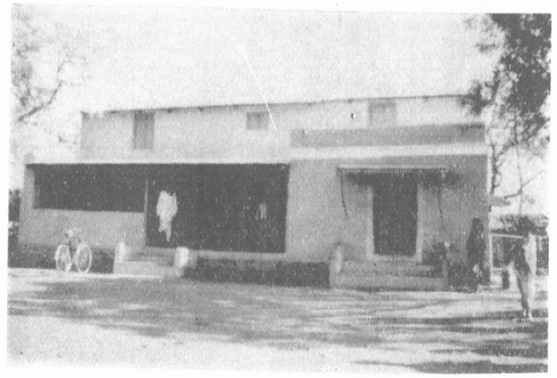
Modern flats by the side of old Shastri
Hall Chawl, Tardeo Road, Bombay



Dwellings in the Slum area
Dharavi, Bombay

Carpenter's Workshop-*cum*-Dwelling
Dharavi, Bombay

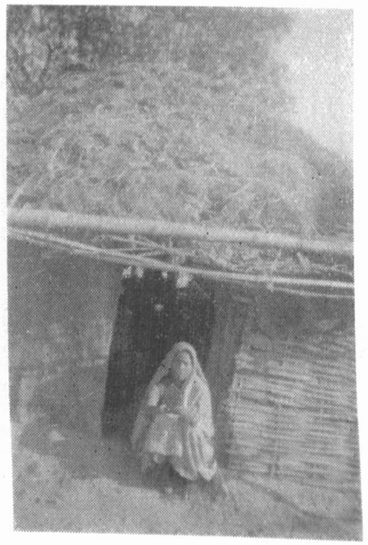
Shops and Dwellings in Girgaum, Bombay



A pacca House in village Sawlikheda, taluka Melghat district Amravati

A Shop-*cum*-Dwelling in Mahim, Bombay

A dwelling in village Sonegaon, taluka Wani, district Yeotmal
Walls of mud; Roof partly corrugated iron sheets and partly tiles



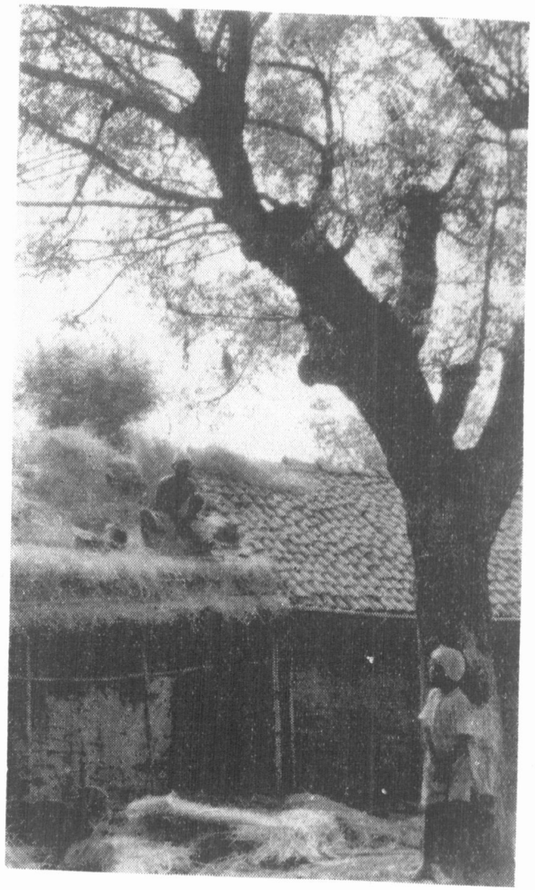
A Katkari hut in village Poshera of Mokhada taluka in Thana District

Walls of reed and Roof of grass

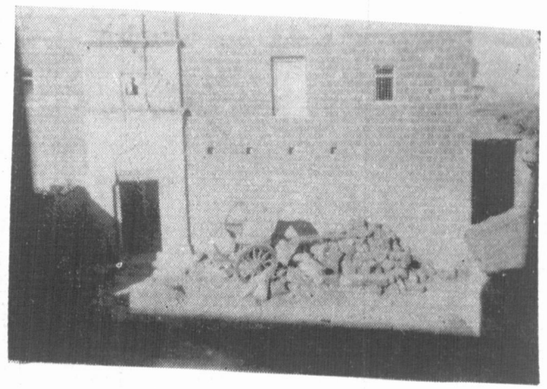
A House of a Kawar in village Purada taluka Gadhchiroli, district Chanda

Houses in a well-to-do village near Poona City

A poor man's dwelling from village Koregaon of Partur Taluka in Parbhani District
(Walls of cotton stumps and Roof of date leaves)



Repairing the roof
Village Wasali, taluka Jalgaon
district Buldhana



Two-storeyed house from village
Pimpalgaon Gadhave of Manjlegaon Taluka
in Bhir District

Walls of stone in mud with cement pointing;
flat roof of mud on wooden beams

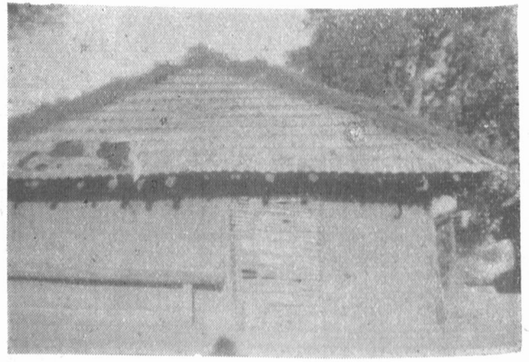
A House of a Maratha
Village Fetari,
taluka and district Nagpur

A House of a Mahar
Village Fetari,
taluka and district Nagpur

A Hut of a Thakur in a village near Jawhar
in Thana District

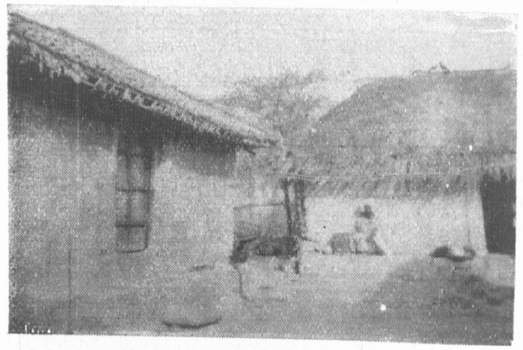
Walls of reed; Roof of tiles with
grass for the corner joints

A Malhar Koli's hut at Mahagaon
taluka Palghar, district Thana



A Hut of a Ka Thakur in village Mokhada
taluka Mokhada, district Thana

Walls of reed; Roof of tiles with
grass for the corner joints



Two houses of Andh Tribe in village Daheli
taluka Darwha, district Yeotmal

Mark the stone plinth, walls of mud and roofs of country
tiles in one and grass in the other

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Settlement patterns

The well-pronounced natural regions in Mysore State are the following :—

(i) Coastal region,

(ii) Malnad,

(iii) Semi-malnad,

(iv) Southern Maidan and

(v) Northern Maidan.

Dr. Learmonth of Liverpool University has divided the State into four main economic regions, namely, numbers (i), (ii), (iv) and (v) mentioned above and has further divided each main region into several sub-regions on the basis of certain characteristic physical features, rainfall, the nature of crops raised, etc. For the present note on the topics relating to the layouts of villages and house types in Mysore State, it is considered adequate to deal with the subject with reference to the five natural regions referred to above, as they cover all types of villages and houses commonly found in various parts of the State.

Layout of villages and locational patterns

The villages of Mysore State come under one or the other forms given below :

(i) Villages with isolated homesteads;

(ii) Villages with linear clusters;

(iii) Villages having several streets or lanes with linear arrangement of houses giving roughly a rectangular shape or a square shape to the village;

(iv) Villages of type (iii) together with shapeless clusters situated in one or more portions of the village.

The first type, namely, villages with isolated homesteads are widely prevalent in the two coastal districts of South Kanara and North Kanara, where the terrain is uneven and the houses are mostly situated in or near the cultivated fields to enable the occupants to look after their cultivation effectively. The houses of cultivators will therefore generally be in the valleys. The houses of those pursuing other occupations like agricultural labour, etc. will be located in elevated places such as the slope or the summit of hillocks. The distance between one house and the other ranges from a few hundreds of yards to a furlong or more depending upon the extent of land held by the dwellers. This picture is true of the Malnad regions also such as in Coorg, Hassan, Chikmagalur and Shimoga districts. A special feature in these areas where isolated homesteads are found is that for each village, or, if the villages are very small for a group of two or three villages, there will be a small bazaar in the nature of a rendezvous. The villagers gather in such places either for commerical or for recreational purposes. Public places like schools, places of worship, etc., will be located at important centres of the village where, by virtue of their location, the villagers will be able to gather without any difficulty. In these villages for the purpose of easy identification the village will be divided into innumerable hamlets, often not recognised in the village records, but easily known to all in the locality as a matter of course. The households are recognized by various family names or other names of a descriptive nature. Communication in these types of villages is generally inadequate. The foot paths are the

most numerous. It is noteworthy that in the villages of this type, often, there are more number of hotels than are generally found in the maidan villages of similar size, because it is difficult for the villagers to gather at any one central point. Even in these villages, occasionally, a few clusters are found here and there. Notional maps of the villages mentioned below are enclosed as typical of the category of the villages with isolated homesteads :

(i) *Bellare.*—Puttur Taluk, South Kanara District, which according to Dr. Learmonth comes under coastal Malnad;

(ii) *Naravi.*—Belthangadi Taluk, South Kanara District (This region is described as dissected hill country in the coastal region);

(iii) *Thannimani.*—Mercara Taluk. Coorg district (This region is referred to as South Malnad where the rainfall is heavy).

In the other economic regions of the State the most common type is that where the villages have several streets and the houses are found on either side of the street. This type is also found in some of the areas in the coastal region and Malnad region. In this type the number of streets or lanes which exist in a particular village depends upon the number of castes and the total population of the village. The streets or lanes sometimes bear the name of the predominant caste found in a particular street. In many of the villages, in the past, the locational pattern often used to be on the basis of caste, even though in certain streets persons belonging to several castes also used to live side by side. The present trend, however, is to construct houses with reference to the availability of space irrespective of the locality and considerations of caste. The residential area of the village fixed up quite long ago, probably at the time of the first settlement, remains in most of the cases constant and as such except in such villages where extensions are formed by acquisition of lands in the neighbourhood, in all the other places, there is very limited scope for development of the village and consequently, there is an acute congestion in a large number of villages in the State. Houses are now built up in vacant spaces which originally formed some sort of a compound and as a result the villagers who have got cultivation do not have adequate area for backyards. The houses in all these regions generally abut on the streets and only some of them possess backyards. As regards the streets, while some of them are as old as the village itself, there are a few others which have come into existence in more recent times, as and when the development of the village necessitated either on account of the pressure of population or due to certain other factors like the introduction of a new bus service, etc. Some of the streets will be roughly parallel to one another, while a few others will be perpendicular to one or the other, thus giving some sort of interconnection. It is to be noted that most of these streets are formed without any sanctioned village plan and as such there is a good deal of variation in the matter of the width of roads, their location, etc. It is in the recent decades that we find the Panchayats exercising a sort of control regarding construction of houses and the layout of new streets and colonies.

A common feature which is observed in all the regions where the houses are found in groups is, that persons belonging to scheduled castes generally live exclusively and often their houses are located either in a corner of the village or sometimes even a little away from the village. Persons belonging to other castes do not build houses in the localities where Harijans live. Besides, the Harijans generally have separate drinking water wells for their use and in olden days it was in fact a policy of the Government to construct separate wells and in some places open separate schools also for them.

With regard to the location of temples in the villages the villagers have certain traditions to observe. The temples are located at important centres of the village taking into consideration the convenience of the votaries and the availability of space for the congregation togather, etc. Secondly, the temples ought to face either east or north. Similarly, in the matter of the location of the other public places in the village such as schools, recreation centres, community halls, etc., central places in the villages are invariably selected.

In some of the districts of the Southern Maidan region such as Mysore, Bangalore, Mandya, Kolar, Tumkur, etc. there are a large number of irrigation tanks which exist just at the outskirts of the village providing facilities for the villagers to utilize the water for various domestic purposes also. In some of the villages there are also separate tanks for drinking water.

In the matter of the layout of villages one of the most important points which the founders of the village have taken into consideration with great foresight is the availability of water at all times in the year for the needs of the residents as well as for the cattle. There are innumerable villages which are located on the banks of rivers, streams or near spring ponds.

There are very few villages in the State which have houses in linear clusters only. Most of the villages as already described are those which have a number of streets depending on the population and as such, the village finally takes an irregular geometrical shape in its outer boundaries, though sometimes they also take the form of a rectangle or square. There are also villages where shapeless clusters of houses also crop up in one or the other corner, generally belonging to persons of low economic group. Such types of villages develop when the population of the village has increased very much and there is not much space left within the village limits.

Notional maps of the following villages situated in the other economic regions are also enclosed :

Village	District	Economic region to which the village relates
1 Gorur	Hassan	Semi Malnad
2 Keladi	Shimoga	Central Malnad
3 Iggalur	Bangalore	Southern Maidan
4 Holalu	Bellary	Northern Maidan
5 Sirwar	Raichur	Northern Maidan

House types

The buildings of the State can be broadly classified into two kinds according to the nature of the ground plan and roof. They are buildings with :

(i) rectangular ground plan with flat roof; and

(ii) rectangular ground plan with sloping roof.

The buildings coming under the first type are found in large numbers in the districts, where the rainfall is about 25″ or less. Appendix I gives the names of the districts where most of the houses have flat roof.

In the first type, namely, buildings with rectangular ground plan with flat roof, the materials used for the roof vary according to the economic condition of the persons to whom the houses belong. Persons with limited means construct the roof using such materials as twigs, reeds, bamboo matting and they also add courses of leaves in order to prevent the earth from dropping in through the interstices of the reed mats. A layer of earth is then spread over and very often it is also plastered. To allow the smoke to escape, 2 or 3 earthenware pipes made by the local potter are set side by side in a line in the roof. Besides these the roof has a number of small squares. Similar openings at different places on the

This obtains practically throughout Marathawada and Northern Malnad—A. M.

top are provided for purposes of ventilation and each is covered with a broken earthen vessel during the rainy days. People who are more affluent provide stone slabs setting them together using lime mortar or cement. It has to be, however, stated that more than 75 per cent of the dwellings having flat roof are those put up with mud and other materials like reeds, etc. The use of slabs for roofs is however, more common in the districts of Kolar, Gulbarga and portions of Bangalore, etc., on account of the availability of such slabs in the vicinity.

In the districts referred to in Appendix II, the second type of buildings, i.e., those having rectangular ground plan with sloping roof are more predominant, for the obvious reason that in these districts the rainfall is moderate to heavy. In the coastal districts and in the Malnad regions where the rainfall is quite heavy ranging from 120″—250″ the houses are provided with steep inclined roofs. In the other districts like Mysore, Mandya, Bangalore, etc., where the rainfall is much less, there is another type of inclined roof where it is made up of 4 slopes. These houses are locally called 'Thottimane' with a verandah in front which serve as an open place for the people to sit, squat and even sleep with the advantage of very good ventilation and inside the house they also get the benefit of sufficient ventilation, as a quadrangular open place in the middle of the house is formed where all the four slopes project downwards. In this type of house the villagers get good accommodation though they may not have sufficient number of rooms. As the cultivators are more particular of such extensive open space for keeping their agricultural implements, produce, etc., besides also tying the cattle on one side of the house, they are not very particular about securing privacy. Big cultivators belonging to the Vokkaliga community in particular own buildings of this type which are very accommodative. While the doors fixed at different places for these buildings are sufficiently big, the windows existing, if any, are small. It is for this reason that certain portions of the house even in this type are ill-ventilated. The roofs of the houses of this type are invariably covered with semi cylindrical country tiles prepared by local potters and they are readily available at all times. For houses having two inclined planes locally called "Kavaligemane" country tiles as well as Mangalore tiles are used, depending upon the economic condition of the people concerned. The word "Mangalore tile" is a general word and it does not necessarily mean that they are tiles prepared in the tile factories at Mangalore. There are other tile factories situated in different parts of the State manufacturing such pressed tiles which are also used by the people. While referring to the houses having inclined roofs, it is necessary to remember that a large number of them have roofs which are thatched with one or the other innumerable varieties of grass locally available. Even dried leaves of cocoanut palms, areca-nut palms, date palms and the dried sugar-cane leaves are used.

The materials used for the walls of the houses depend upon two main factors, viz.

(i) the availability of the materials used;

(ii) economic condition.

Taking the first factor into consideration it is found that mud walls are more predominant in the rural areas in the districts mentioned in Appendix III whereas in the districts mentioned in Appendix IV the stone walls are more predominant. In the construction of the stone walls even rich people do not generally use stones cut into sizes. They use only rough stones of uneven sizes which can be quarried easily and are therefore available cheaply in those areas. In the districts where walls are built of mud, the process of construction shows small variations which can be regarded as regional practices. In some districts mere lumps of mud are used after kneading them properly and walls are built allowing sufficient time after each course of 1′ or 1½′ height to dry up. In some areas, a frame is first constructed with split bamboo and mud filled into the interstices. These walls are

thin but strong.

Irrespective of the nature of the roof and the wall, a common feature which one notices is that most of these houses do not have any frontage but only possess a back-yard, if at all. An exception to this can, however, be found in the Malnad areas where open spaces can be found depending upon the location of the house. Houses in the Malnad regions are all scattered and do not abut on the streets as in the other regions. In certain places in Bijapur district the houses of the weavers invariably have a frontage for the purpose of setting up the warp, etc., in the course of their professional work.

The above description of the house types corresponds to those which are in the rural parts of the State. In the urban and the semi urban areas, new houses of modern designs with R.C.C. ceiling are coming up. But the general picture of the housing condition in the rural areas is not affected in any way by this change which is taking place.

From a perusal of the above it is seen that in the heavy rainfall regions of the Malnad and the coastal belt, houses will invariably have steep inclined roofs. In the Northern Maidan region houses with flat roofs are predominant. In the Southern Maidan region the roofs are moderately sloped as the rainfall in this region is not more than 30″. In the Semi Malnad region the houses partake of the characteristics of both the Malnad region and the Maidan region.

Sketches of a few typical houses relating to each economic region and belonging to persons of different income groups are enclosed.

ROOFS

APPENDIX I

Names of the districts where houses with rectangular ground plan with flat roof are predominant

1 Kolar
2 Chitradurga
3 Dharwar
4 Bijapur
5 Gulbarga
6 Raichur
7 Bidar
8 Bellary
9 Tumkur

APPENDIX II

Names of the districts where houses with rectangular ground plan with sloped roof are predominant :

1 Mysore
2 Mandya
3 Hassan
4 Coorg
5 South Kanara
6 Chikmagalur
7 Shimoga
8 Belgaum
9 North Kanara
10 Bangalore

WALLS

APPENDIX III

Mud Wall

1 Bangalore
2 Chikmagalur
3 Coorg
4 Dharwar
5 Hassan
6 Kolar
7 Mandya
8 Mysore
9 North Kanara
10 Shimoga
11 South Kanara
12 Tumkur

APPENDIX IV

Stone Wall

1 Belgaum
2 Bellary
3 Bidar
4 Bijapur
5 Chitradurga
6 Gulbarga
7 Raichur

Sketches of various types of houses in different ***Regions*** *of* ***Mysore State***

	Region	Names of villages where houses are situated	Taluk	District	No. of sketches
I	Coastal Region	(1) Molahalli	Coondapur	South Kanara	1
		(2) Coondapur	Coondapur	South Kanara	1
II	Malnad Region	Banavasi	Sirsi	North Kanara	1
III	Semi-Malnad Region	Gorur	Hassan	Hassan	3
IV	Maidan	(1) Kenchangudda	Sirauguppa	Bellary	2
		(2) Holalu	Hadagalli	Bellary	2
		(3) Nandigudi	Harihar	Chitradurga	2

Name of villages in respect of which Notional Maps are enclosed

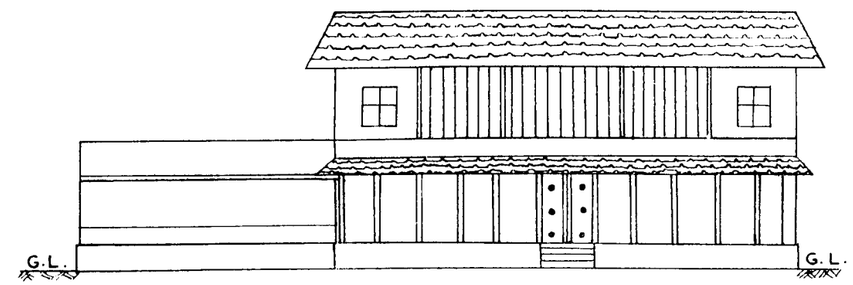
Sl. No.	Region	Name of village	Taluk	District
1	Coastal	Naravi	Belthangadi	South Kanara
2	Coastal	Bellare	Puttur	South Kanara
3	Malnad	Thannimani	Mercara	Coorg
4	Malnad	Keladi	Sagar	Shimoga
5	Semi Malnad	Gorur	Hassan	Hassan
6	Maidan	Sirwar	Manvi	Raichur
7	Maidan	Holalu	Hadagalli	Bellary
8	Maidan	Iggalur	Channapatna	Bangalore

MOLAHALLI VILLAGE

COONDAPUR TALUK

SOUTH KANARA DISTRCT

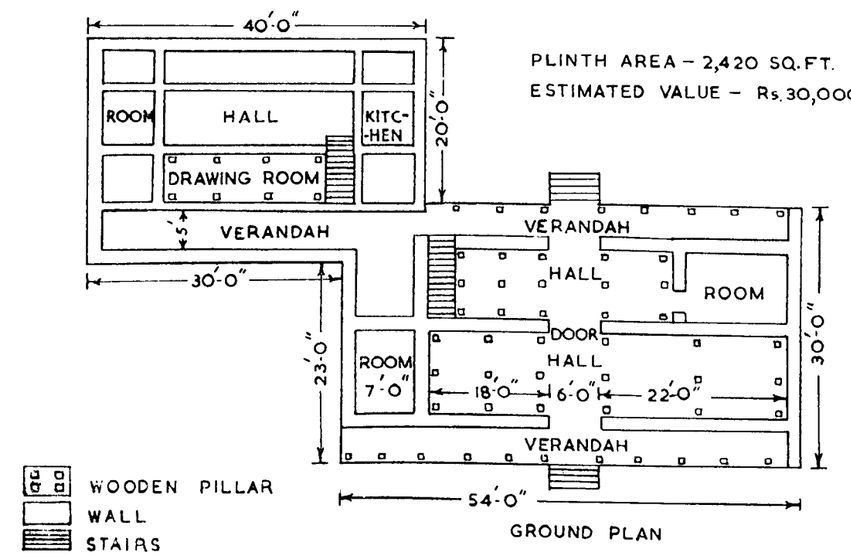
A HOUSE AT MOLAHALLI VILLAGE



FRONT ELEVATION

PLINTH AREA – 2,420 SQ. FT.

ESTIMATED VALUE – Rs. 30,000



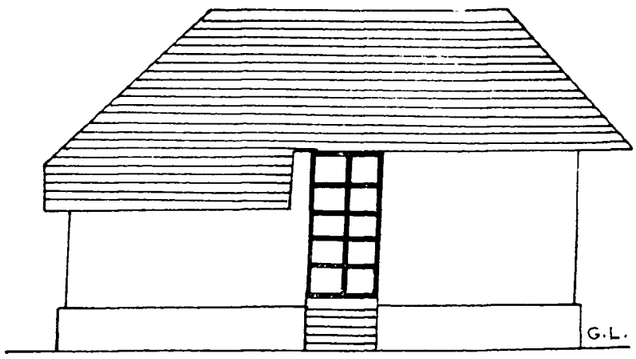
GROUND PLAN

COASTAL REGION, MYSORE STATE

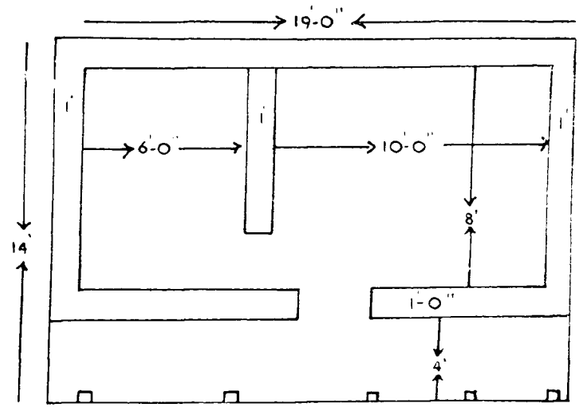
COONDAPUR

SOUTH KANARA DISTRICT
MYSORE STATE

PLAN OF A THATCHED HUT



FRONT ELEVATION



GROUND PLAN

▭ PILLAR

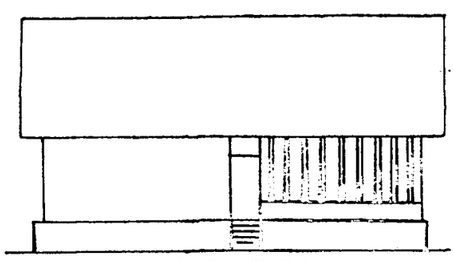
TOTAL PLINTH AREA - 266 Sq. Ft.
ESTIMATED COST Rs. 500/-

MALNAD REGION, MYSORE STATE

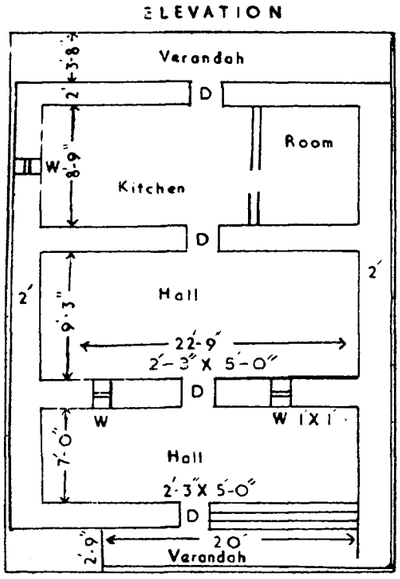
BANAVASI VILLAGE

SIRSI TALUK
NORTH KANARA DISTRICT

PLAN OF THE HOUSE BELONGING TO
SHRI DEVARA MANGLANNA



ELEVATION



PLAN

SCHEDULE

1	PLINTH AREA OF THE BUILDING : 792 Sq Ft.
2	FOUNDATION : BOULDERS IN MUD
3	SUPERSTRUCTURE : MUD MASONRY
4	PLASTERING : MUD PLASTERING
5	DOORS : JUNGLE WOOD FRAME AND SHUTTERS D = 2'-3" X 5'-0" COUNTRY FIXTURES
6	WINDOWS : JUNGLE WOOD FRAME AND SHUTTERS W = 1' X 1' COUNTRY FIXTURES
7	TRELLIS WORK : JUNGLE WOOD BATTENS
8	ROOFING : COUNTRY TILED OVER BALLIES
9	FLOORING : MURUM FLOORING
	APPROXIMATE COST AT LOCAL CONDITIONS : Rs 4·00 np PER Sq. Ft. (i.e) Rs 3,168·00 np.

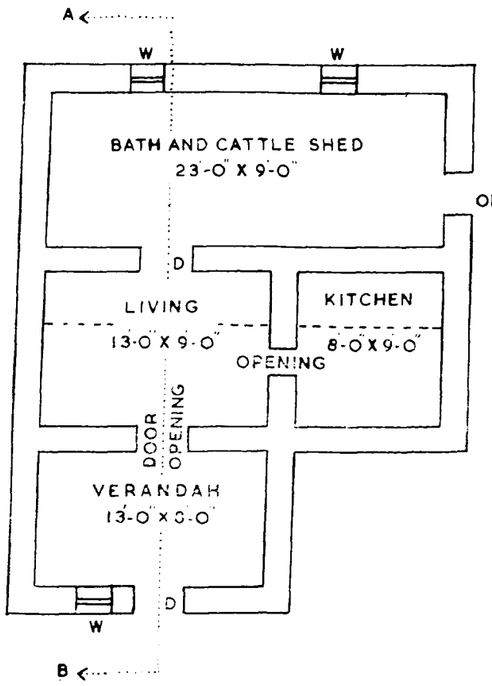
SEMI-MALNAD REGION, MYSORE STATE

GORUR VILLAGE

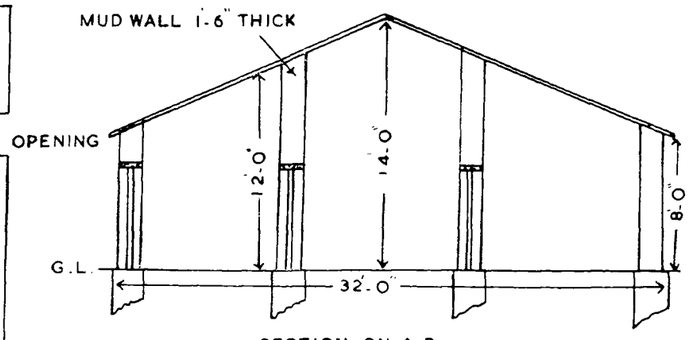
HASSAN TALUK

HASSAN DISTRICT

PLAN OF THE HOUSE BELONGING TO SMT. PUTTAMMA



GROUND PLAN



SECTION ON A B

LEGEND

D: DOORS 3'-0" x 6'-0"

W: WINDOWS 2'-0" X 2'-0"

WALL: MUD WALL 1'-6" THICK

ROOF: COUNTRY TILES ON BAMBOOS

NO ROOMS TO THE BUILDING

PLINTH AREA: 23'-0" X 26'-0" 598 Sq.Fts.

APPROXIMATE COST Rs. 1,800-00 np.

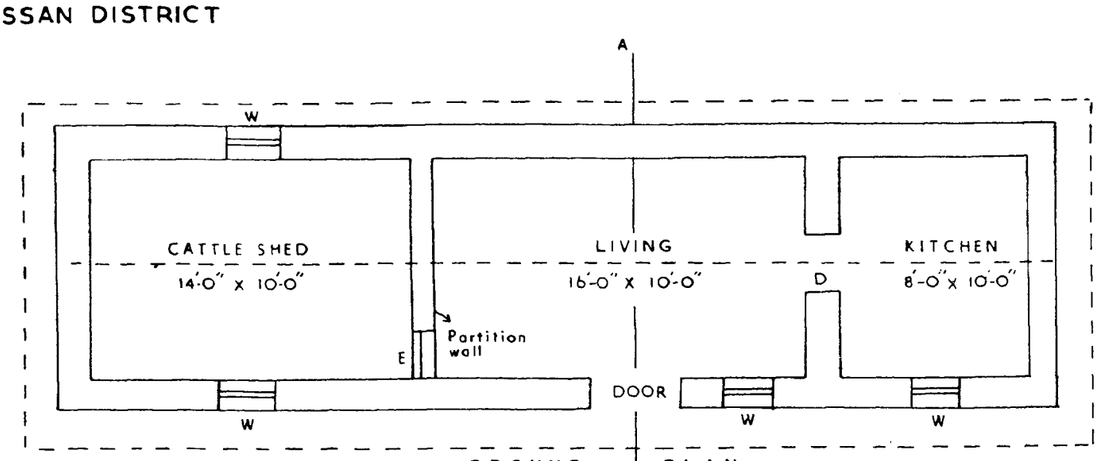
SEMI-MALNAD REGION, MYSORE STATE

GORUR VILLAGE

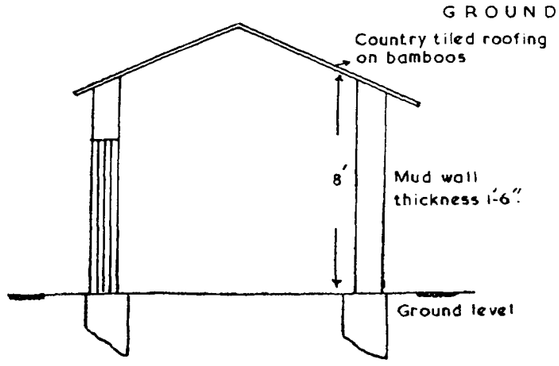
HASSAN TALUK

HASSAN DISTRICT

PLAN OF THE HOUSE BELONGING TO SHRI KAMBIAH



GROUND PLAN



CROSS SECTION ON AB

LEGEND

D- Door 3'-0" x 6'-0"

W- Windows 2'-0" x 2'-0"

WALL THICKNESS: 1'-6" Mud Wall

ROOFING: Country tiled on bamboos

ROOMS: No rooms to the building

PLINTH AREA: 43'-6" x 13'-0" = 565 sq. ft.

APPROXIMATE COST: Rs. 1,200/-

E- Entrance to Cattle shed

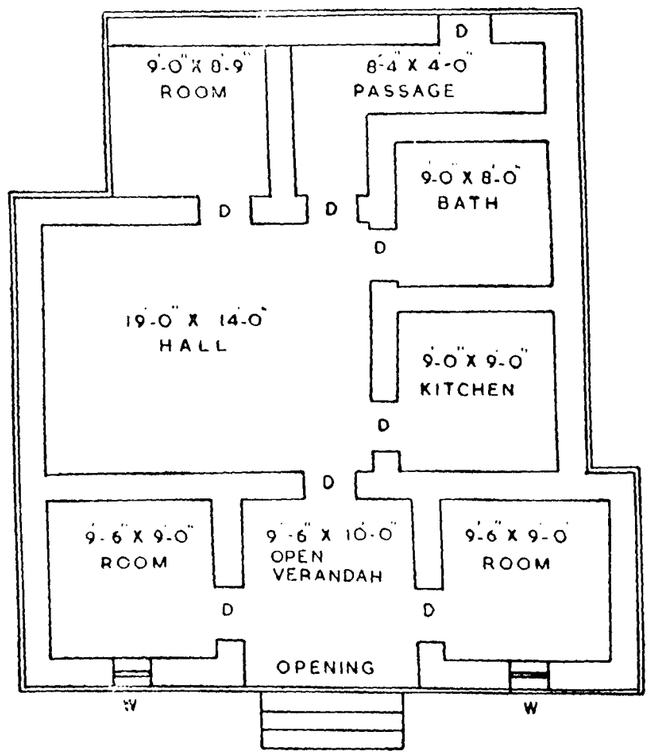
SEMI-MALNAD REGION, MYSORE STATE

GORUR VILLAGE

HASSAN TALUK

HASSAN DISTRICT

PLAN OF THE HOUSE BELONGING TO SHRI THIRUMALACHAR



GROUND PLAN

D - DOOR :- 3'-0" X 6'-0"
W - WINDOW - 2'-6" X 2'-0"
WALL :- MUD 1'-6" THICK
SUPER-STRUCTURE :- MUD
HEIGHT OF WALL :- 9'-0" Ft.
ROOF :- COUNTRY TILES ON JUNGLE WOOD RAFTERS
PLINTH AREA :- 1292 SQ. FT.
APPROXIMATE COST :- Rs. 4,500-00 np

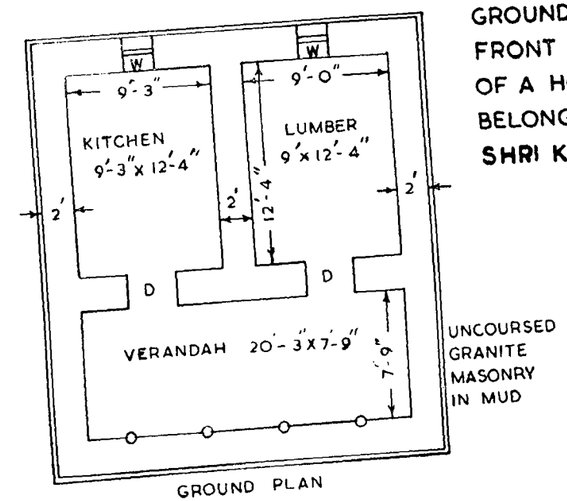
MAIDAN REGION, MYSORE STATE

KENCHANAGUDDA VILLAGE

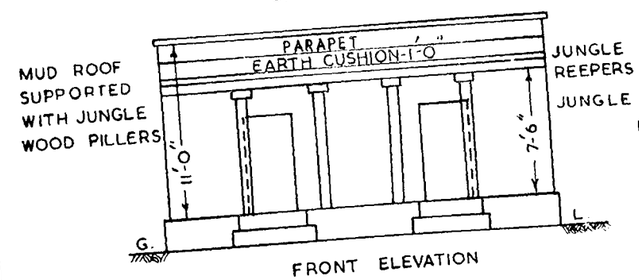
SIRAGUPPA TALUK

BELLARY DISTRICT

GROUND PLAN & FRONT ELEVATION OF A HOUSE WHICH BELONGS TO SHRI KALIKAI ERANNA



GROUND PLAN



LOCAL COST :- RS. 1,300

INDEX

D :- 3'-0" x 6'-0"
W :- 1'-10" x 2'-2"

FRONT ELEVATION

DETAILS :-

FOUNDATION :- GRANITE UNCOURSED IN MUD TO A DEPTH OF 2'-0"

BASEMENT :- HEIGHT OF 1'-0" IN MUD WITH UNCOURSED MASONRY

FLOORING :- MUD FLOORING WITH COWDUNG PLASTERING

SUPERSTRUCTURE :- WITH UNCOARSED GRANITE MASONRY IN MUD

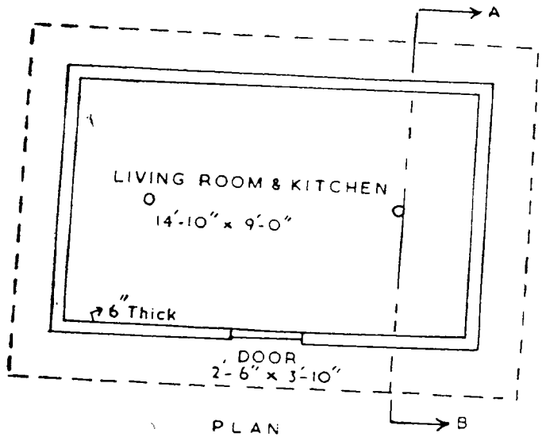
ROOFING :- WITH MUD CUSHION SUPPORTED WITH JUNGLE REEPERS AND ON JUNGLE BEAMS ON JUNGLE WOODEN PILLERS

MAIDAN REGION, MYSORE STATE

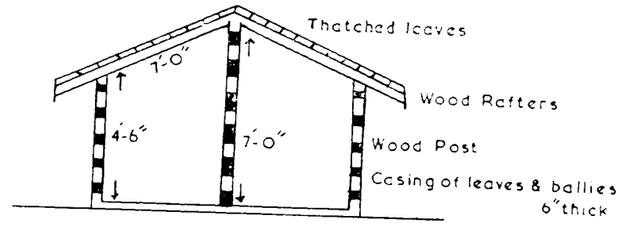
KENCHANAGUDDA VILLAGE

SIRAGUPPA TALUK
BELLARY DISTRICT

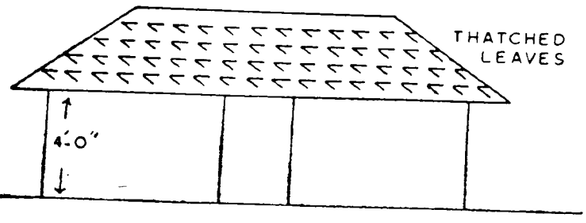
PLAN OF A HUT BELONGING TO
SHRI LINGAPPA ALIAS BADABA



PLAN



SECTION ON AB



FRONT ELEVATION

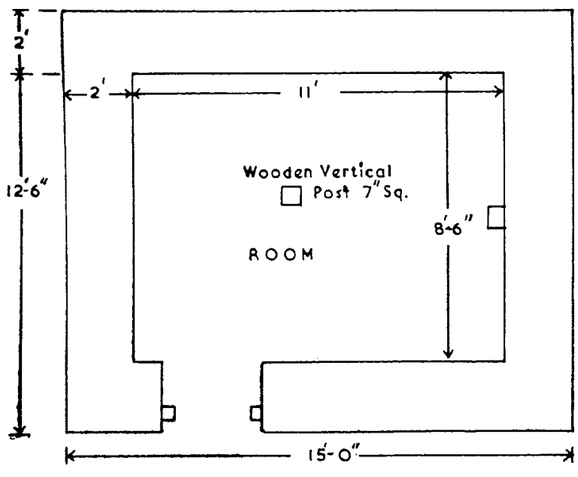
COST OF HUT - Rs 30/-

MAIDAN REGION, MYSORE STATE

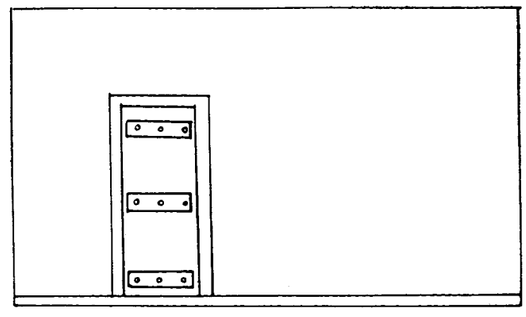
HOLALU VILLAGE

HADAGALLI TALUK
BELLARY DISTRICT

PLAN OF THE HOUSE BELONGING TO
SHRI SANNA NINGAPPA



PLAN



FRONT ELEVATION

INDEX

DOOR - D: 3'-0" X 6'-0"
MUD-ROOFING (FLAT)
WALL: ROUGH FIELD STONE IN MUD MORTAR 2'X7'-6"
APPROXIMATE COST: Rs. 700·00 np.

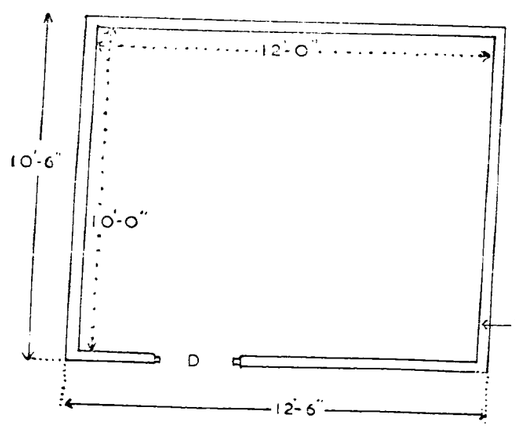
MAIDAN REGION, MYSORE STATE

HOLALU VILLAGE

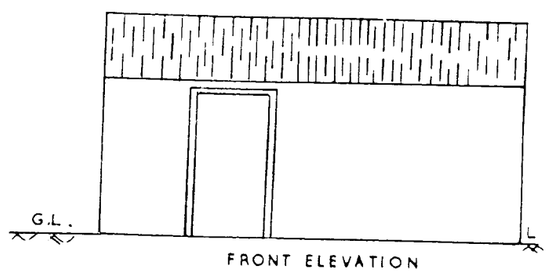
HADAGALLI TALUK

BELLARY DISTRICT

PLAN OF A HOUSE BELONGING TO
SHRI EARAPURADA YELLAPPA



PLAN



FRONT ELEVATION

3" THICK JAWAR STRAW WALL 4'-9" HIGH
AND 2' HIGH GABLE.

DOOR-D: 2'-6" X 4'-4½"

ROOFING IS OF JAWAR STRAW (PITCHED)

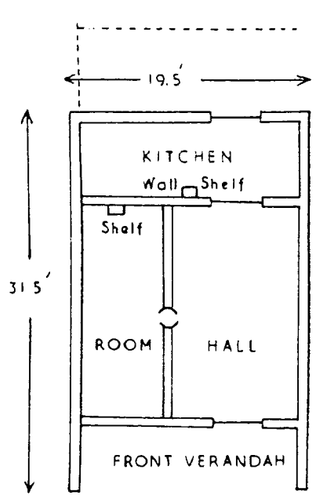
COST: Rs. 80·00 np.

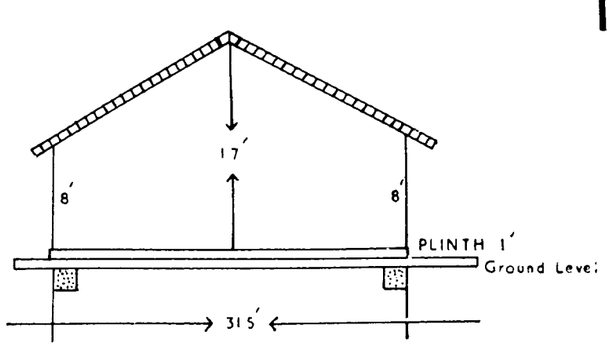
MAIDAN REGION, MYSORE STATE

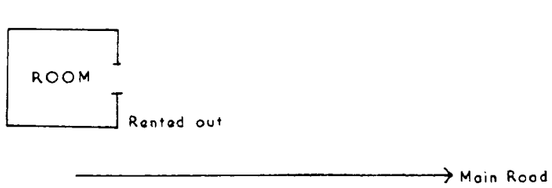
NANDIGUDI VILLAGE

HARIHAR TALUK
CHITRADURGA DISTRICT

PLAN OF THE HOUSE BELONGING TO
SHRI BASAPPA, A CULTIVATOR







MATERIAL USED

WALL : Triangular and also rectangular mud lumps

ROOF: Mangalore Tiles

PLINTH: Pebbles and mud

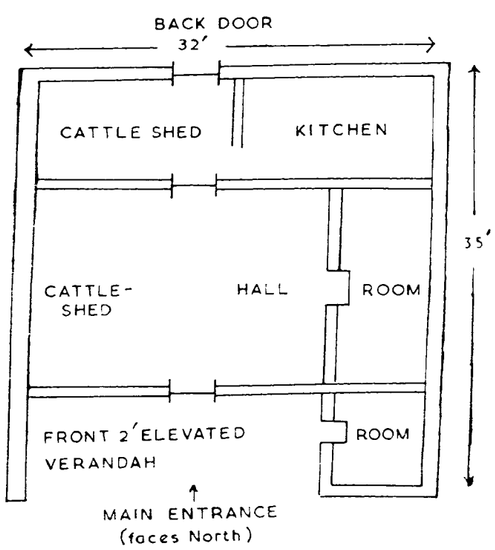
DOOR : Wooden plank

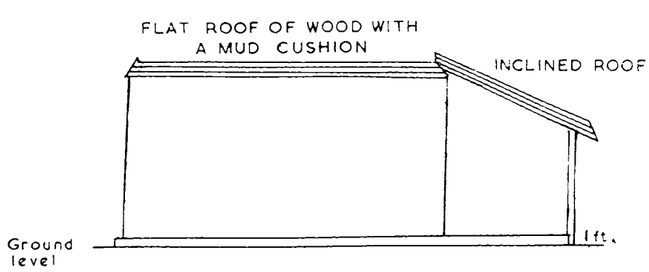
MAIDAN REGION, MYSORE STATE

NANDIGUDI VILLAGE

HARIHAR TALUK
CHITRADURGA DISTRICT

PLAN OF THE HOUSE BELONGING TO SHRI RUDRIAH, THE VILLAGE PATEL

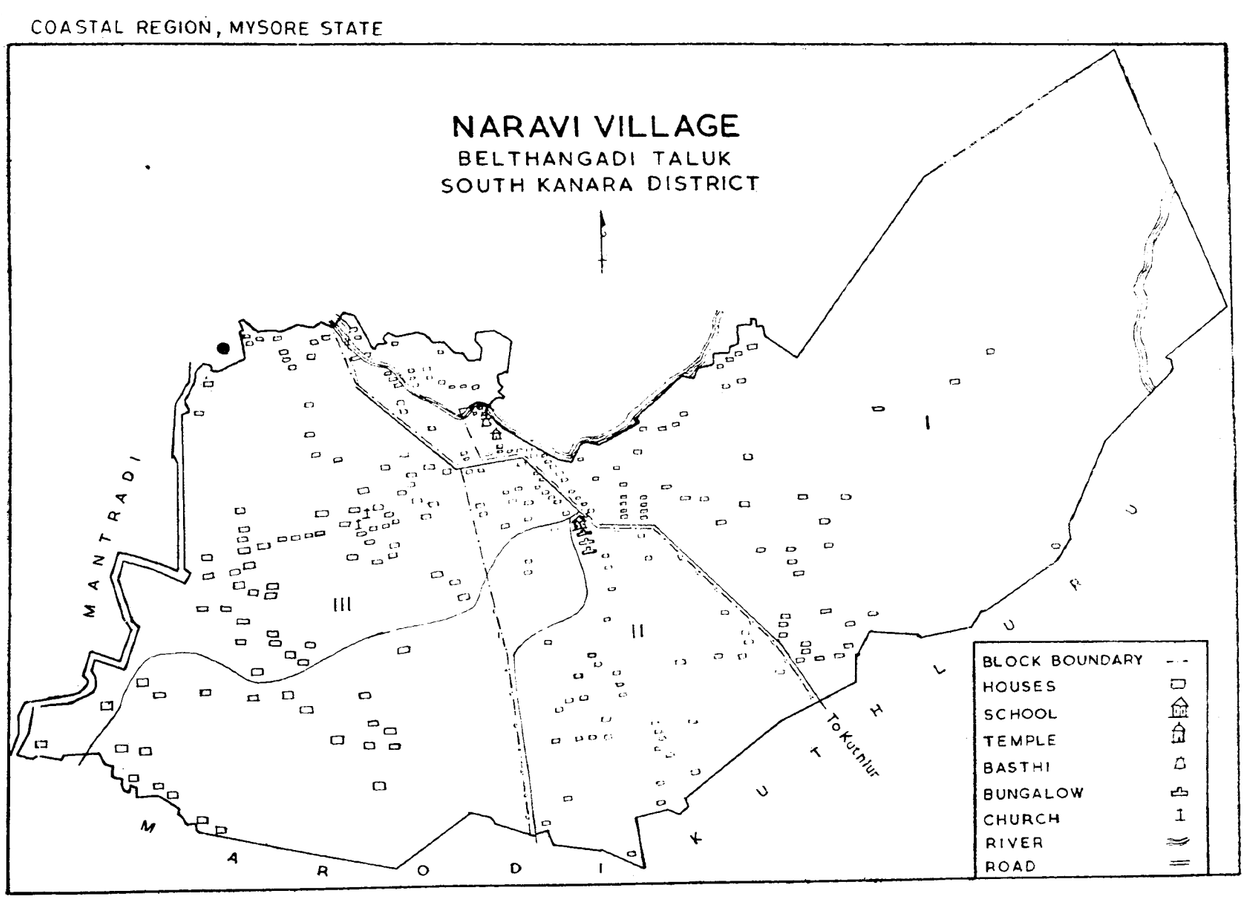




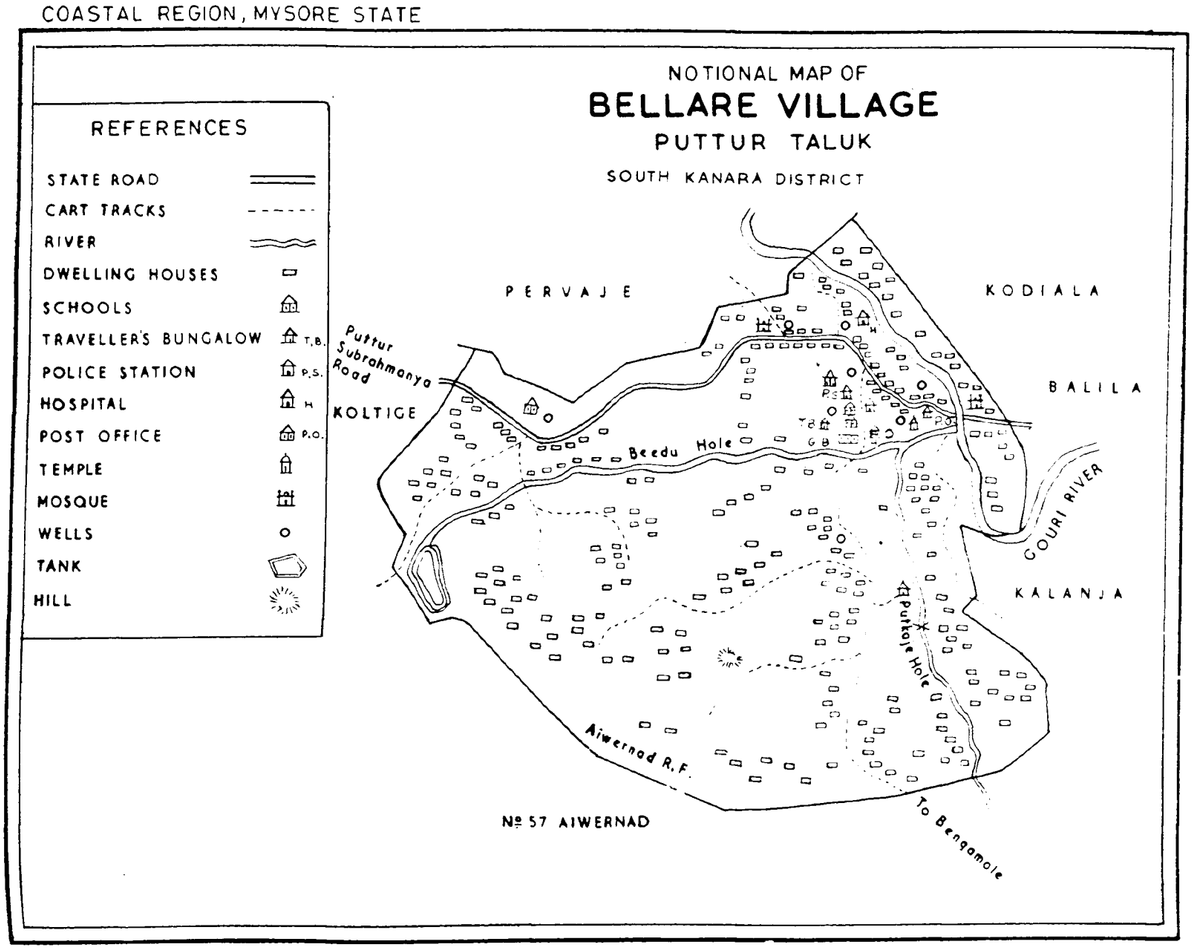
MATERIAL USED

WALL : Stones of irregular shape and size.
ROOF : Flat - Mud and Grass inclined Terraced
PLINTH: Height 1 ft. ordinary mud and pebbles
DOOR : Wooden planks 2 1/4″ thickness

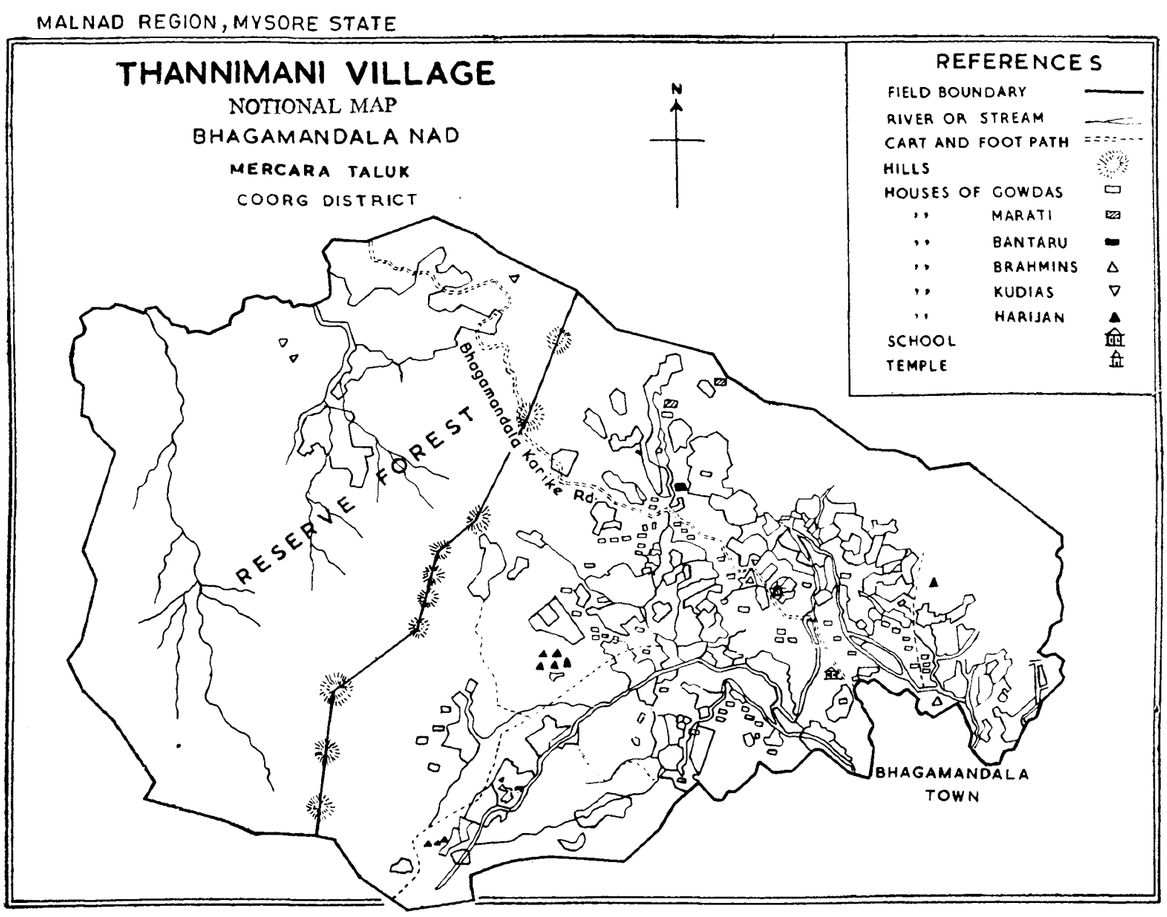
COASTAL REGION, MYSORE STATE



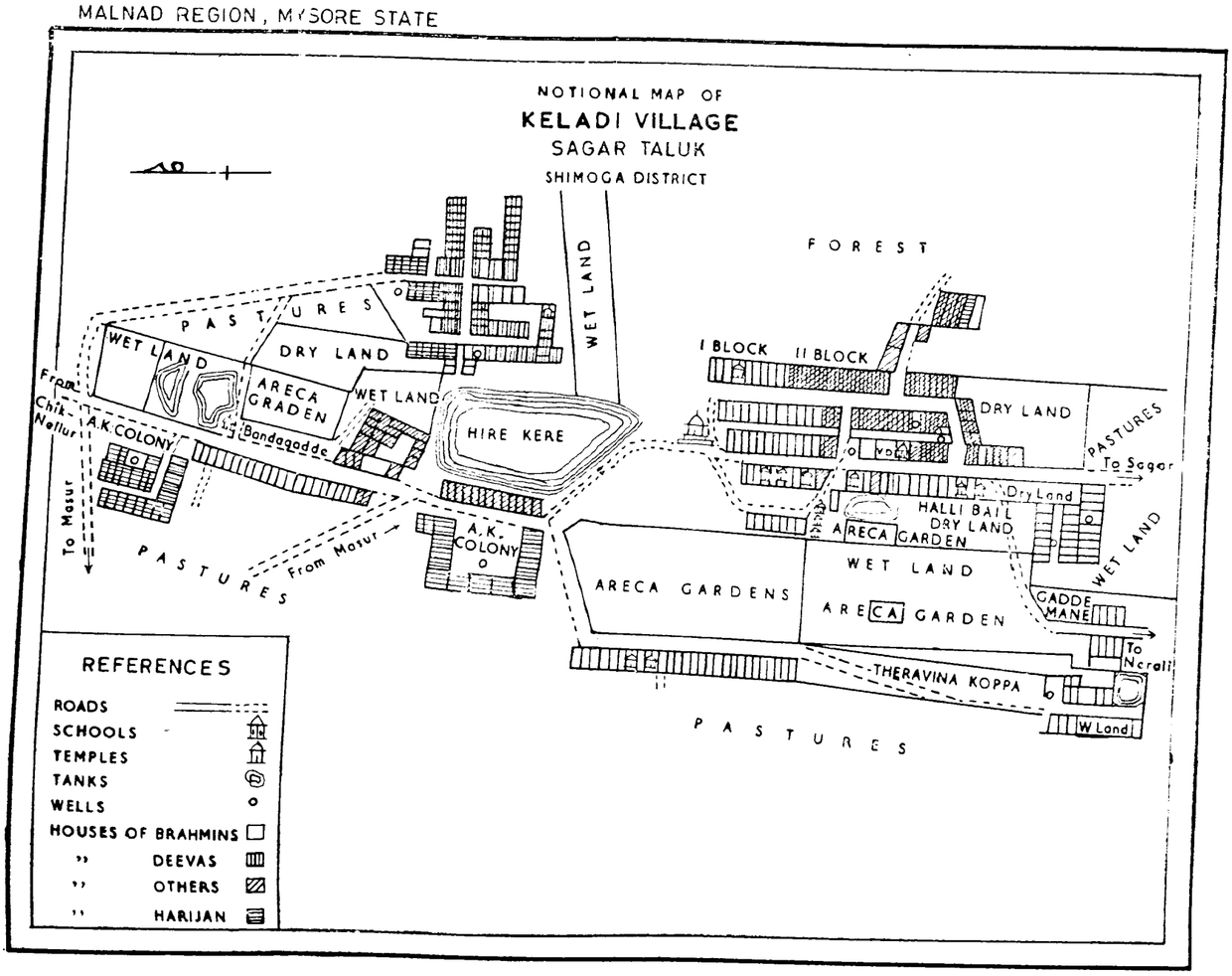
COASTAL REGION, MYSORE STATE



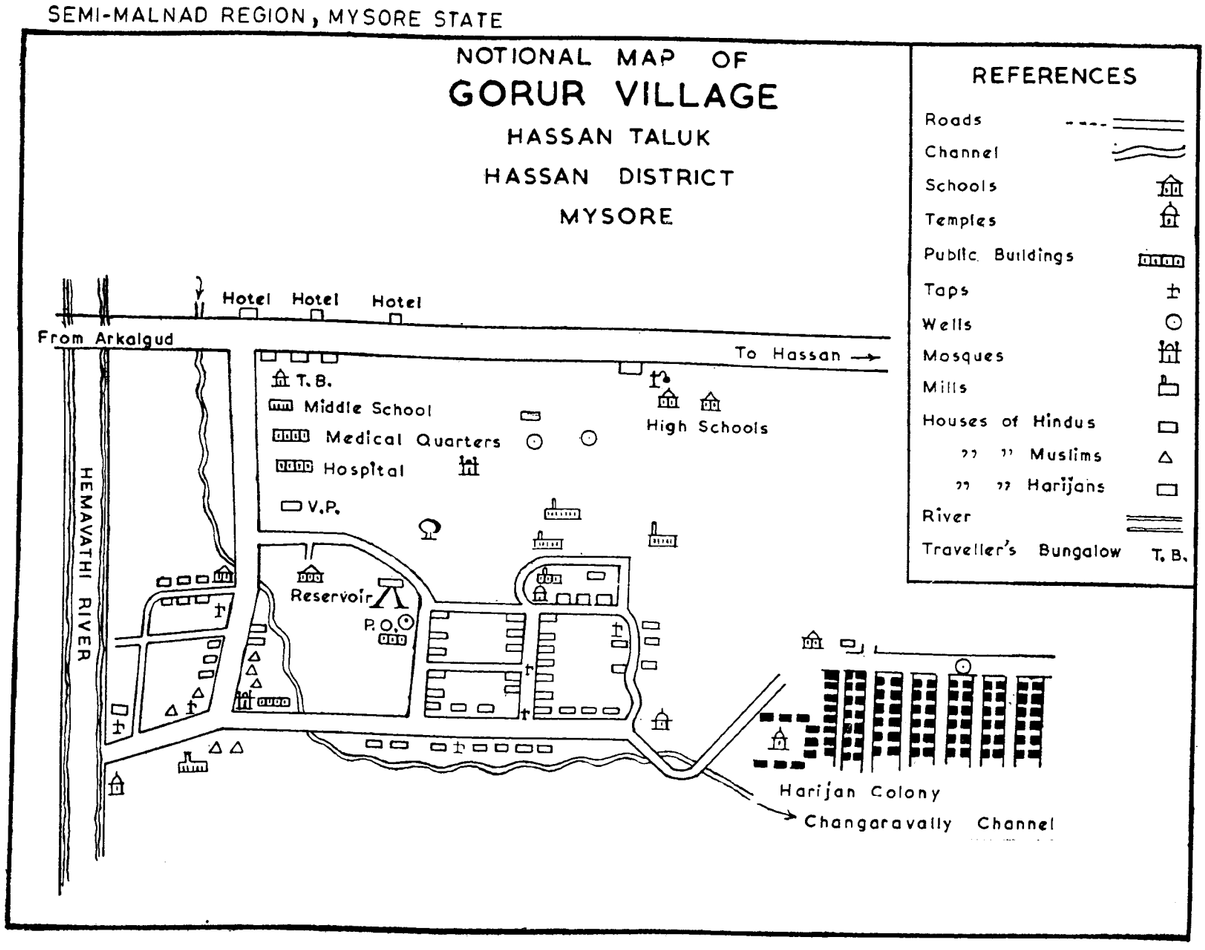
MALNAD REGION, MYSORE STATE



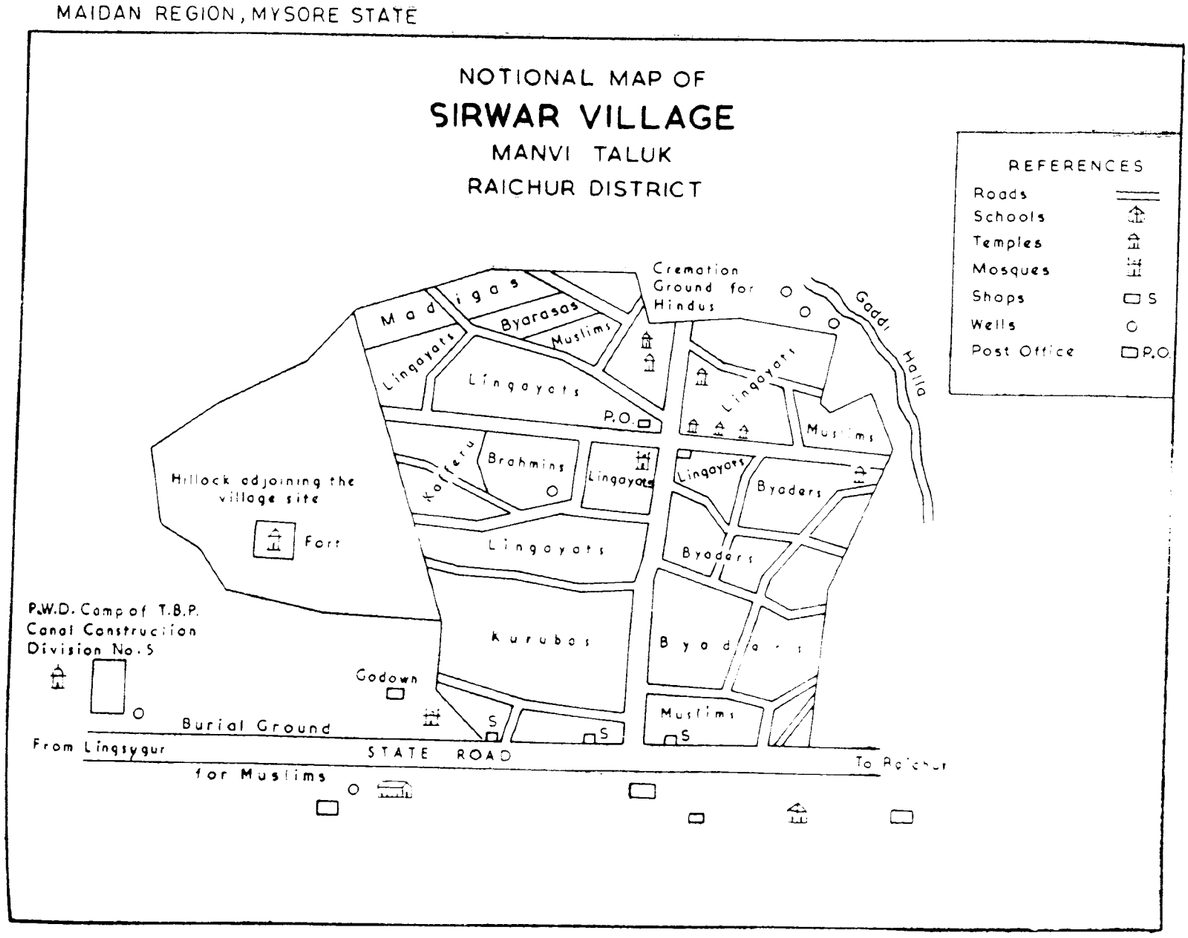
MALNAD REGION, MYSORE STATE



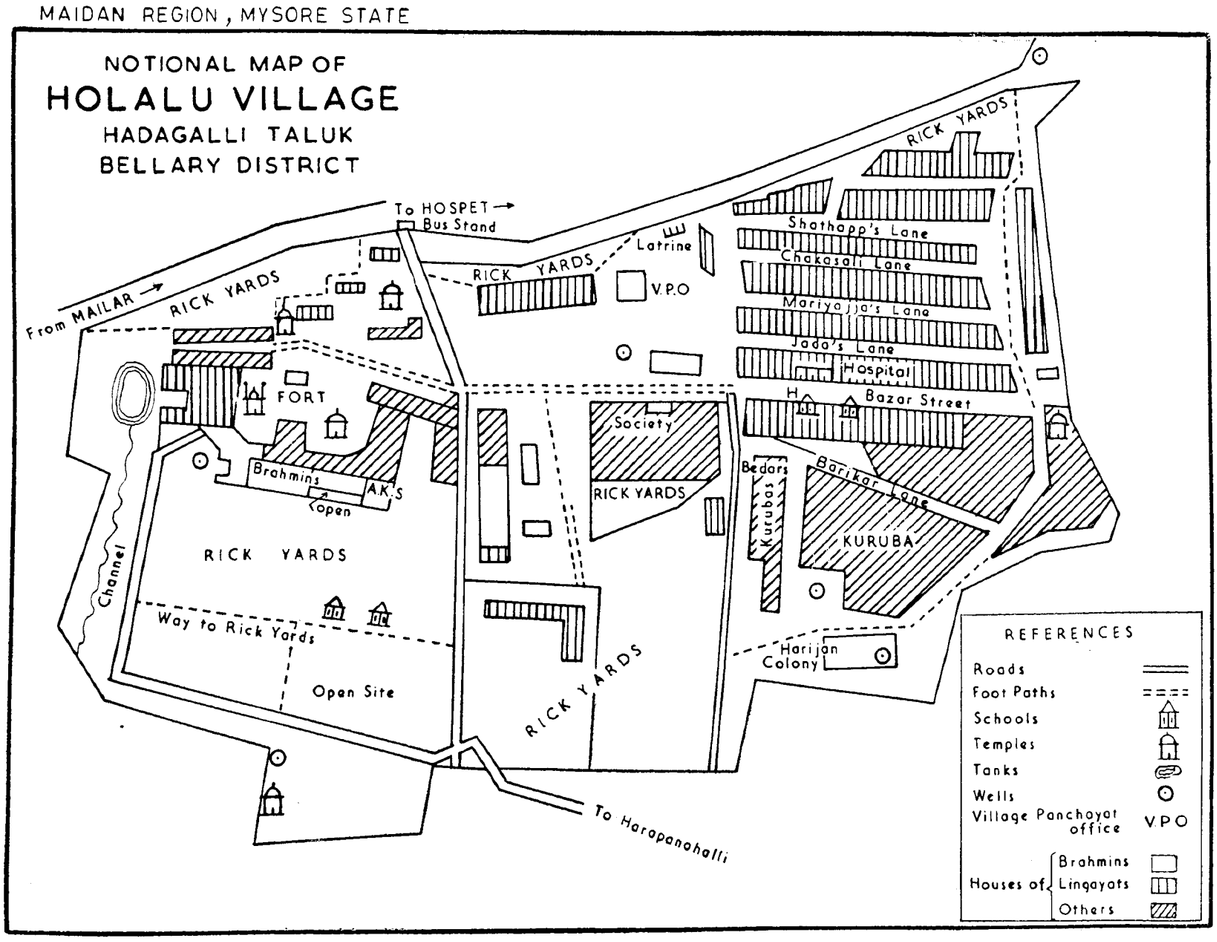
SEMI-MALNAD REGION, MYSORE STATE



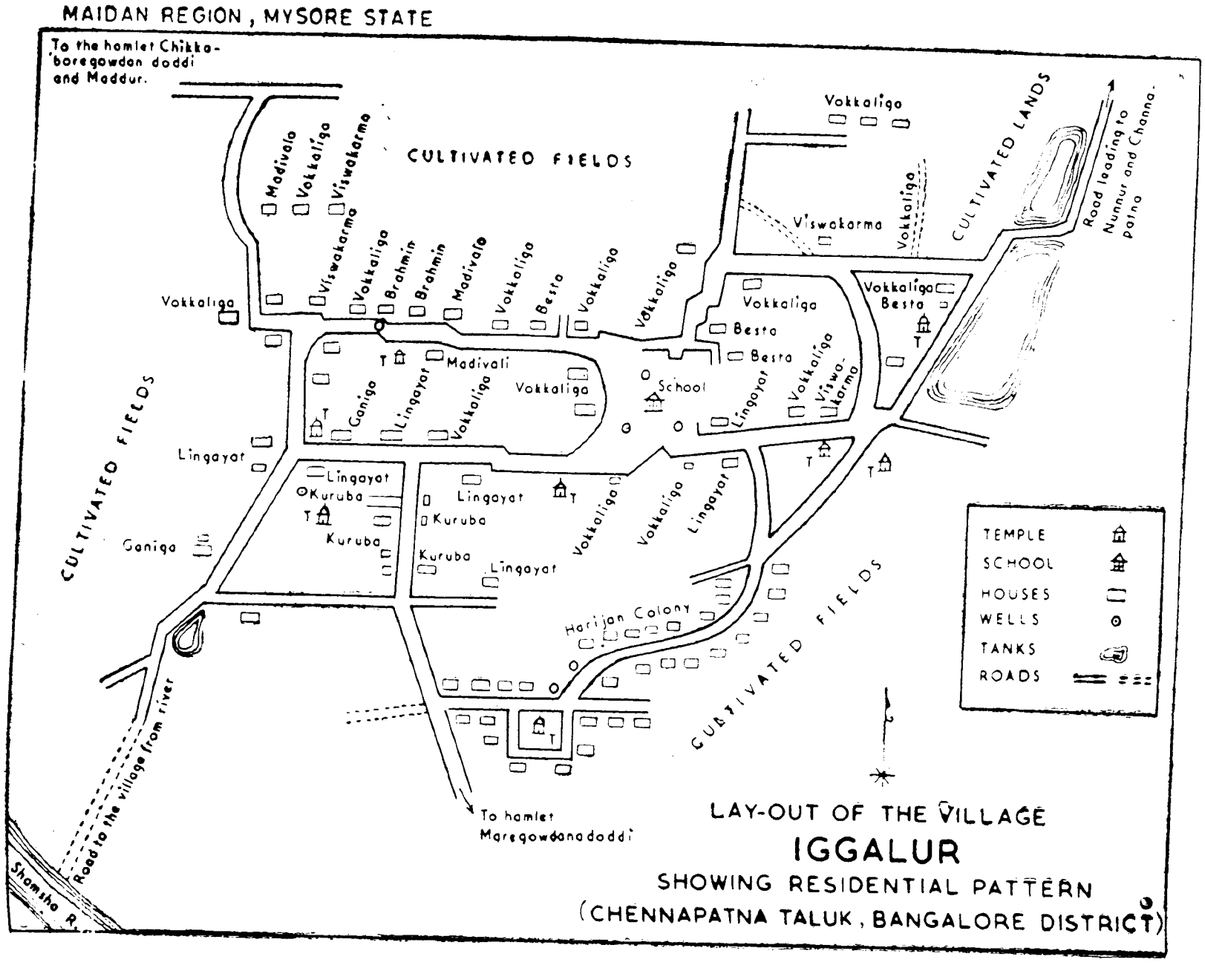
MAIDAN REGION, MYSORE STATE



MAIDAN REGION, MYSORE STATE



MAIDAN REGION, MYSORE STATE



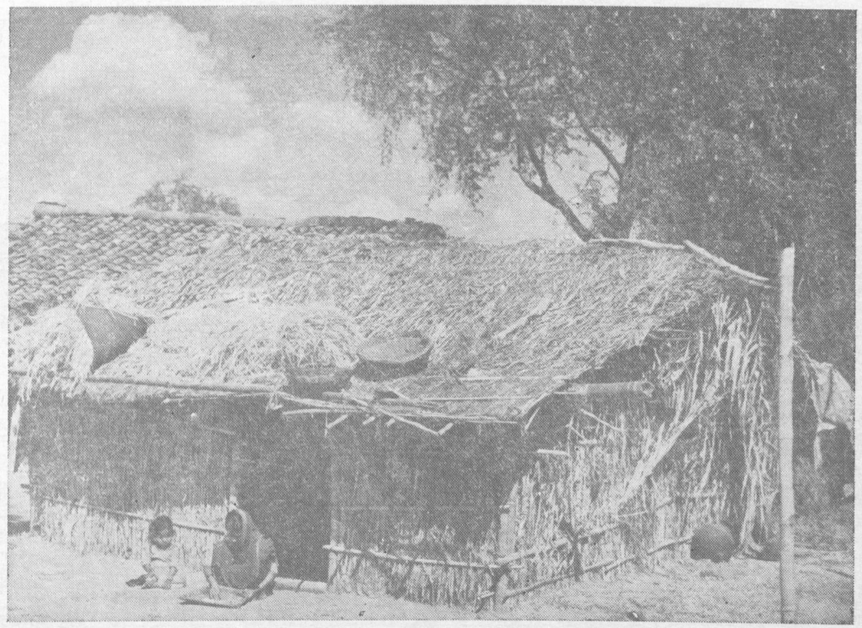
LAY-OUT OF THE VILLAGE

IGGALUR

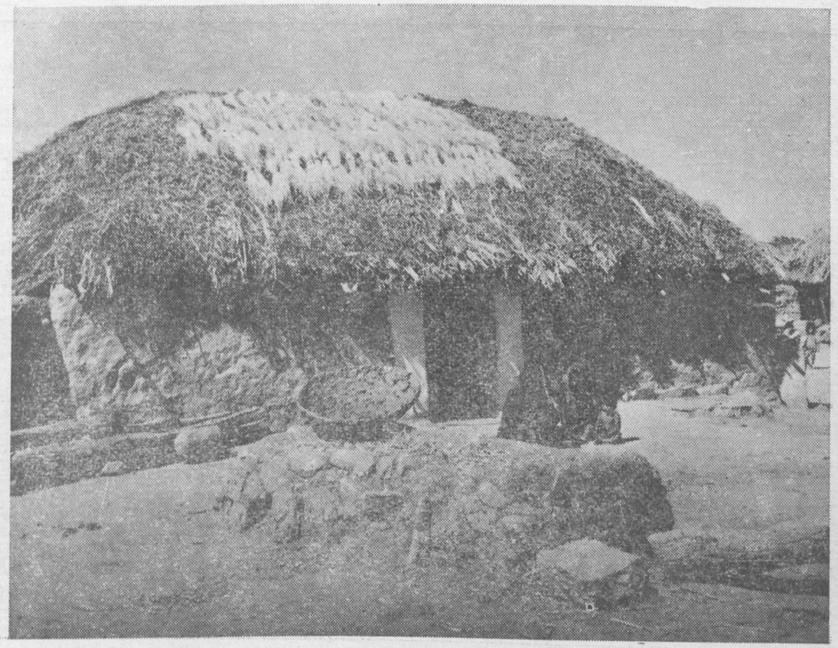
SHOWING RESIDENTIAL PATTERN

(CHENNAPATNA TALUK, BANGALORE DISTRICT)

TYPICAL RURAL HOUSES



Walls of Jowar stalk and thatched roof



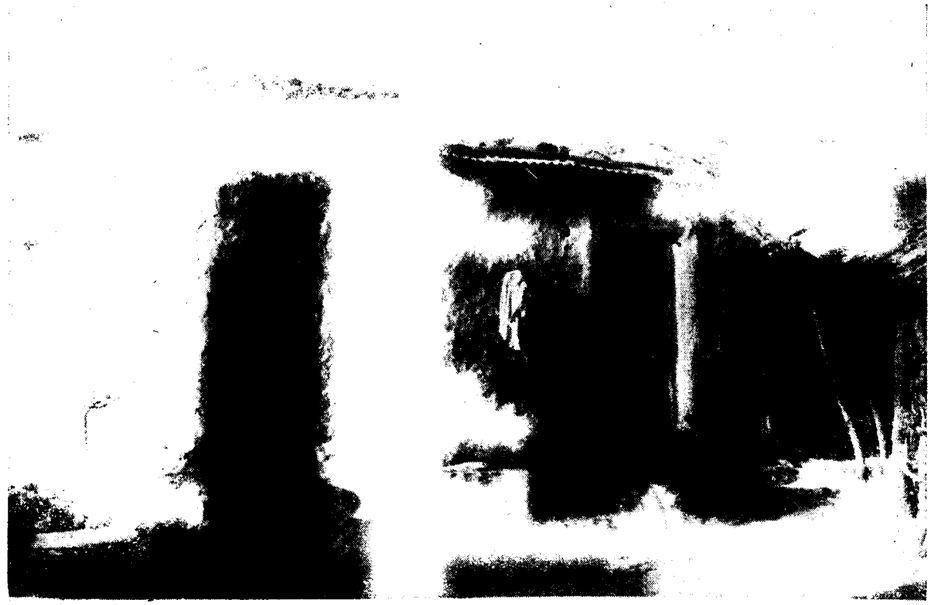
Mud walls and thatched roof

TYPICAL RURAL HOUSES

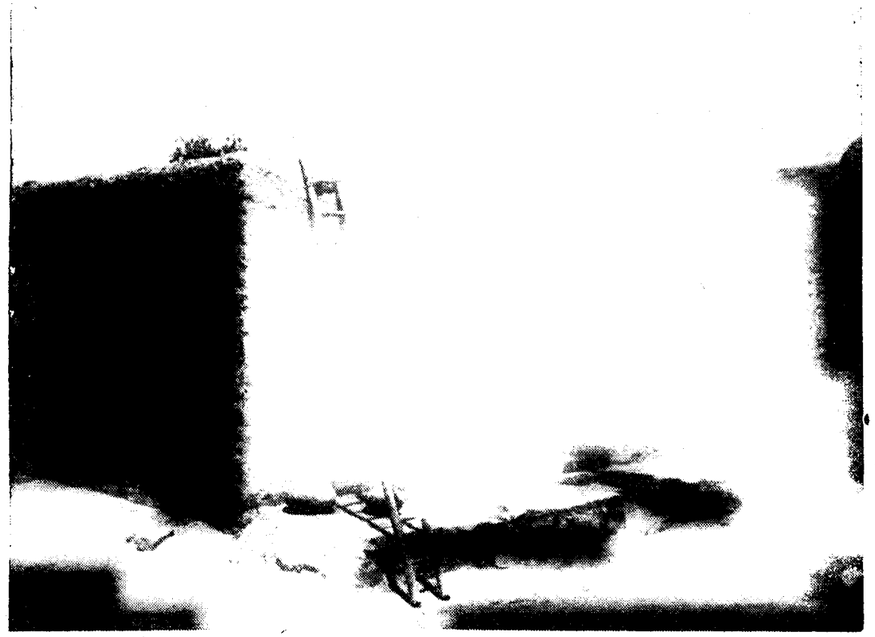
Mud walls with country tiled roofing

Mud walls with Mangalore tiled roof

TYPICAL RURAL HOUSES

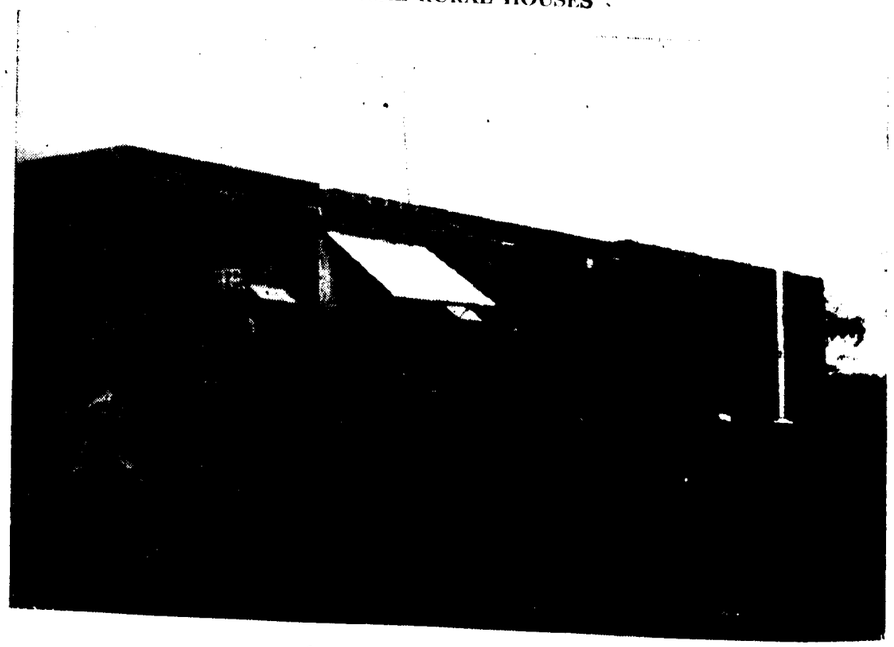


Stone walls with mud plaster and flat mud terrace



Stone walls with flat mud terrace

TYPICAL RURAL HOUSES



Stone walls with Shabad stone slab roof

Storeyed house with brick walls and Mangalore tiled roofing

ORISSA

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Natural regions of Orissa

Orissa may be broadly divided into two natural regions, namely, the Orissa Coastal region and the Orissa Inland region. The extensive coast line of Orissa runs from Bhograi police station in the north up to Berhampur police station in the south, and the administrative districts of Balasore, Cuttack and Puri, and the plains portion of Ganjam District situated along this line comprise what is called the Orissa coastal region. The inland region comprises the rest of the territory in the State, that is, the extensive hinterland spreading over the three well defined physiographical sections of Orissa, namely, the Northern Plateau, the Eastern Ghats and the Central Tract. The administrative districts of Mayurbhanj, Keonjhar, Sundargarh, Sambalpur, Bolangir, Kalahandi, Dhenkanal, Baudh-Khondmals and Koraput, and the western portion of Ganjam District, which used to be termed as Ganjam Agency, comprise this latter region.

The coastal region is formed largely of several river basins of alluvial soil with a large content of clay. These make good crop land, though subjected annually to ravages of floods. There is not much of forest growth in the region. A narrow belt of saline soil with patches of marshy land extends all along the coast line of this region. The inland region has a striking difference in this respect. The whole of the Northern Plateau and a portion of the Central Tract contain red soil. This soil is poor for plant life but is good for building purposes. There are deposits of iron ores, manganese, lime-stone and a large variety of other minerals in this area, as a result of which many industrial centres have been established here. The middle and the southern portions of the Central Tract have brown soil, and there are large and thick forest growth in the area. The Eastern Ghats too are full of jungles, having red rocky soil. A large portion of Mayurbhanj District in Simlipal hills range, the whole of Keonjhar District except the Baitarani river-basin in Anandapur Sub-division, Bonai Sub-division of Sundargarh District, Rairakhol, Deogarh and Kuchindla Sub-divisions of Sambalpur District, Titlagarh and a portion of Patnagarh Sub-division of Bolangir District, and the entire districts of Dhenkanal, Baudh-Khondmals, Kalahandi and Koraput, and also the portion of Ganjam District previously known as Ganjam Agency, are all covered with forests, at most places thick and reserved. Bordering the coastal region, there is a long stretch with a width varying from 30 to 60 miles extending right from south-west corner of Koraput District up to northern portion of Balasore District, that is made of laterite soil, with laterite stones occurring here and there on the surface or at slight depths. Though all the rivers flowing in the coastal region also flow in the inland region, the problem of water is keenly felt in the latter, whereas in the former, it is not so acute. The mean height of inland region above sea level is much greater than that of the coastal region. The soil conditions in inland areas also account for scarcity of water, whereas in the coastal areas water can be had at 15 to 20 feet depth, involving a cost of not more than two to three hundred rupees for a well. Generally speaking, there is not much difference in the range of annual rainfall in different districts. However, most of the inland districts get a little more rainfall than the coastal districts.

With the outline of the two broad natural regions in the State and their distinguishing natural conditions as above, an attempt may be made to find out the patterns of location and the layouts of villages, and the distinctive types of houses in both the regions of Orissa.

Locational patterns

Selection of a village site is confined to a good vantage-ground, both in the coastal region and in the inland region. But the criteria of vantage-grounds differ in each of

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these regions. In the coastal region, the most important consideration in the location of a village is the nearness to fertile arable lands. As a result, villagers are attracted towards the areas which have good irrigation facility and natural fertility of land.

In the inland districts the attachment for cultivated lands is less pronounced. Villages spring up at centres of industry and commerce. Non-agricultural pursuits are more remunerative in inland districts than agricultural occupation. This accounts for the difference in the choice of village sites in the two regions.

Another marked difference in the location of village sites arises from the consideration whether a locality is subject to inundation and whether facility of water sources is good. In the coastal districts which are subject not only to floods from innumerable rivers but also to inundation from undischarged storm water, the selection of a village site naturally is confined to the portion of the village which has higher elevation than nearby lands. The low lying lands are utilised for cultivation and up-lands for the village site. But in the inland region where the floods are not much of a terror, and where, on the other hand, the villagers are haunted by the scarcity of drinking water, the selection of village site is confined to the portion of the village which has comparatively low water level. The location of the village site in the low land facilitates availability of water at lesser depths. The high lands in the village are set apart for cultivation of crops fit to be grown on such land.

In the coastal region, villagers are attracted towards river banks while in the inland region they are attracted towards the hills. The perennial rivers in the coastal region are good as source of water and as lines of communication. Moreover the fish-eating habit of the coastal people is prone to be satisfied by living on the banks of rivers. On the other hand the inland districts choosing to locate their village site on the hill slopes or on the foot of the hills derive benefit by nearness to the hill which yields fuel and timber for use of the villagers and sometimes facilitates hunting of wild animals for food and game. The hills also provide edible fruits, roots and tubers for the sustenance of the inhabitants. The forests on the hills also provide employment to the villagers in cutting trees and removing of timbers, and in building forest roads, etc. Where shifting cultivation is popular, the house sites are located on the hill slopes.

A common feature in the locational pattern of villages in the coastal and the inland regions is provided by the proximity to important lines of communication, such as roads and railways. In the absence of any special attraction for location of the village elsewhere, the villagers naturally choose to be close to an important road or a railway line for the convenience of their movement as well as for transport of food crops and other necessities of life.

Patterns of layout

The layout of a village naturally reflects the caste and barrier ridden society that is ours. In this respect, both the regions behave in identical manner. Ordinarily the villages have one or more hamlets each. Different communities sometimes like to live separately in different hamlets. In both the regions, people of higher castes claiming superior status in the society such as Brahmins, Karans and others stay together separately. The hamlet they reside in is considered the main hamlet of the village (*basti*). In the district of Puri, Brahmins live exclusively in separate hamlets which are called "sasans". Similarly the lower caste people, whose profession is considered to be unclean, are made to reside in separate hamlets, at some distance away from the site of the main village. The people of intermediate castes often live together in one or more hamlets in the same village. In this respect, however, the villages in the coastal region exhibit a greater degree of polarisation than those in the inland region. That is to say, whereas in this region, the people of intermediate castes often live together, in the coastal region, the people of various castes in the intermediate range stay in separate hamlets. This is so because the section of people who came into contact with outside society earlier, claim a greater degree of social sophistication than their inland brethren. Sometimes a definite tendency is observed of the people of various communities trying to live in compact areas along with their castemen even in the same hamlet. However, in some villages in both the regions which were surveyed, people of some higher castes such as Brahmins and Karans were found living together side by side with people of intermediate castes. This represents rather a degree of social mobility and cohesion achieved in recent years.

Notwithstanding the sectional divisions in the layouts of villages, a broad outstanding feature distinguishes the layout patterns of the two regions. That is, in the coastal region, the houses are laid out more or less in compact areas forming the hamlets. Sometimes the houses would be arranged in rows on the two sides of a village road or a lane; some other times these would be clustered round and round about certain central points often a place of worship or a distinguished family having ancient tradition, etc. There would be one or more number of wells for use by those rows or clusters of houses. And these would make the particular hamlet. At a good distance from it, often with fields, tanks etc., in between, there would be another hamlet. On the other hand, the layouts of the villages in the inland region exhibit a definite tendency towards scatter. Many a tribe in that region practises what may be called the compulsory separation of families on marriage of the young. That is, no sooner a young man is married than he separates himself with his wife from his parents and brothers and sisters, and finds himself a new house. Separation is not looked down upon in this region, whereas it is definitely looked on with disfavour in the coastal region. As a result, a village would consist of practically a large number of houses scattered here and there, with small plots of land around each house for cultivation. Sometimes a hamlet may consist of not more than a couple of houses. This phenomenon, however, is practically absent in the coastal region.

The problem of water as mentioned earlier, is more keenly felt in the inland region than in the coastal region. Accordingly, the inland region has only one or two wells located usually at some central place in the village, thereby enabling all the villagers of various hamlets to draw water therefrom. But in the coastal region, one or two or even more number of wells are to be found in each hamlet. In some villages of Cuttack and Balasore Districts, each family owns its separate well. Besides, it is a common practice in Balasore, Cuttack and Puri Districts to acquire a small house site and to dig earth in a corner to form a pond for supply of bathing and drinking water and also for rearing small varieties of fish. The earth, which is thus dug out is utilised for construction of the walls and verandahs of the dwelling house. Thus in one operation, three purposes are fulfilled with remarkable economy, namely, a dwelling house is built, the water supply is assured and an item of food is kept handy. This phenomenon of a large number of small ponds, often a cause of malaria, in the layout of a village in the coastal region is completely lacking in the inland region.

Grazing grounds are invariably marked out generally in the fringes of the villages in the coastal region whereas in many inland villages, such grazing grounds simply do not exist, as there is no need for it, in such cases the nearby forests serve the purpose well.

In the coastal region, schools, at least of the primary level, are found in many of the villages. These are situated in the common grounds of the villages at convenient sites. The inland region comparatively lacks in this facility. However, what it lacks in this respect is more than made up in common village houses to be found extensively. At many places, these are used as dormitories for the bachelors, and also as meeting places for the elders. These dormitories are inextricably linked up with the way of life of the tribals, who inhabit a large part of the inland region. Besides dormitories, there are also village deities in each village in that region. And all these would be situated either at the centre or at either end of the village. The hold of the community over the individual's life in the coastal region is not so strong, and it is quite common to find many villages without such common public houses and also sometimes without village deities.

There is one more distinguishing feature. In the layouts of the villages in the coastal region, one would find a large number of trees grown by the villagers either in their own plots of land or in extensive groves close to village site. Some of these are fruit trees and some are meant for fuel. Rows of trees will also be found by the side of village streets. In the district of Puri, almost all the villages have a large number of cocoanut trees, which grow luxuriantly in the coastal belt. The villages would appear as if lost in green groves, much inviting to the harassed soul of the troublesome days. This scene would be wholly absent in the villages of the inland region. The villagers there get their supply of fuel from the nearby forests, and if there are no fruit trees in their village, they appear to miss nothing.

House types

A large majority of houses in both the regions is of *kaccha* type. 89.5 per cent of houses in the coastal region have walls composed of grass, leaves, reeds, bamboo, timber and mud. The corresponding figure of *kaccha*-walled houses in the inland region is 89 per cent. About the roof-materials, the inland region, however, has an edge over the coastal region. Whereas 94.9 per cent of houses in the coastal region have roofs composed of grass, leaves, reeds, straw, wood and bamboo, only 70.7 per cent of houses in the inland region have such roofs. This deficiency in the inland region is made good by a larger proportion of tile-roofed houses which constitute 26.2 per cent against the meagre 2 per cent in the coastal region.

In the inland region, the summer is very hot and fire accidents are frequent. The villagers as a safeguard against accidental fire, prefer to build tiled roofs which are safer than thatched roofs. In the coastal region where the season is not so oppressive, coolness of the house is ensured with a thick thatch. A few wise villagers also provide a double roof in order to avoid fire accidents. The lower roof is made of timber-plates and bamboo with thickly coated earth, and affords protection if the upper structure made of straw is in fire.

Tile-roofed houses are found in considerable number in the districts of Kalahandi, Sambalpur, Sundargarh and Bolangir. Many of these structures are rickety and leaky as the economic condition of the builders does not permit better type of houses. However, some rich peasants and landlords build double and triple storeyed tile-roofed buildings. For such a multi-storeyed structure, foundation is not laid deep as the soil is rocky, but stability is obtained by building the upper storeys in successive smaller sections by reducing the dimension from all four sides. The ground floor keeps cool in summer, while the upper-most storey is good for sunning in the extreme winter weather. The people in middle income-ranges, slightly better than the poor sections, build tiled roofs with layers, on the exposed upper surface, of fine sand mixed with lime in suitable proportions, so that it imparts durability to the roofs. Many Government quarters specially for subordinate staff, in the districts of Ganjam, Koraput, Kalahandi, Keonjhar and Mayurbhanj are of permanent walls in brick and cement mortar, but with the above mentioned type of tiled roofs.

Brick or stone-built houses of permanent character are found in some considerable number in urban areas in both the regions. Many *pucca* houses are found in both the regions, which are quite old and shabby looking. However, modern type of houses with neatly plastered walls and cement concrete roofs are also found in both the regions. So far as the coastal region is concerned, a few such houses are located at Cuttack and the nearby industrial centre at Chowdwar and quite a good number at the New Capital, Bhubaneswar. In the inland region, such houses are found in and around the industrial and commercial centres like Sambalpur, Burla and Rourkela.

A good many of the houses built of laterite stones are located in the coastal region, mostly in the district of Puri and also in the industrial township at Chowdwar in Cuttack District. A few such houses are also found in the inland region in the districts of Ganjam and Koraput. This common characteristic of the two regions is due to the existence of the belt of laterite soil extending from Koraput to Balasore lying in both the regions at their border.

In the sea-coast belt of the coastal region, there are the light structure of houses with "Jhatimati" walls. In the inland region, there are also a large number of small and light types of houses but these are somewhat different. The soil of the coastal region being clayish, is very suitable for the purpose of building of *kaccha* house. The extensive paddy lands around yield a lot of straw. Accordingly the typical house of a cultivator in a coastal district is one having straw and thick mud walls with an elaborate thatch. It keeps the house cool and comfortable during summer. In Balasore District, where straw is more plentifully available, the thatch often is of 12 inches thickness. It gradually thins down towards Cuttack and Puri Districts and the plains-portion of Ganjam District. Where the household lives in a joint family necessitating large houses, the thatch is naturally made thin for purposes of economy. Whereas thicker thatches, as in Balasore District, require renewal once in 3 to 4 years, the thinner thatches in the Cuttack-Ganjam belt need renewal every year. The houses in Ganjam District have thatches as thin as only 3 inches. The inland region has red or brown soil in most parts and paddy crop is less plentiful in this region than in the coastal region. There is, therefore, greater scarcity of straw in the

inland region, where a relatively lesser number of houses have thatched roofs and a good number have tiled roofs. The houses in the inland region have lavish utilization of forest materials, namely, timber and bamboo, which are cheaply and readily available. In rural areas of Baudh-Khondmals District, the number of houses with walls of timber, bamboo, leaves, etc., is fairly high. In Kalahandi, Koraput, Dhenkanal, Keonjhar, Sundargarh and Ganjam Districts, such houses are also seen, though to a lesser extent. Such houses sometimes have walls made of knit split bamboo screens.

Flood is a recurring menace in the coastal region. The houses in the coastal region accordingly have high plinths. The inland region does not have this problem. Accordingly the plinths of houses in those areas are low. The Project areas of Dandakaranya in Koraput District have houses without any plinth whatsoever. The houses in the Central Tract, belonging usually to the tribal people, have no plinths.

The coastal region is relatively more advanced economically than the inland region. The number of one-roomed and two-roomed houses is larger in the inland region, whereas, the number of three-roomed, four-roomed and five and more roomed houses is larger in the coastal region. That is to say, big sized houses are found more in the coastal districts than in the inland districts, large portions of which are inhabited by the poor tribals. In the coastal districts, each house generally has an inner courtyard, surrounded by walls on four sides and verandahs on one or more sides. In the western districts of the inland region, each house has a courtyard, but is not surrounded by walls on all sides. Dwelling houses in the coastal district of Ganjam are usually divided amongst the coparceners by apportioning the frontage and drawing almost parallel lines. The structure, therefore, ultimately becomes small in breadth but quite long. Three sketches of ground-plans of such houses, one of a coastal district, the second of a western district and the third of the district of Ganjam are enclosed.

I. *Photographs of Villages in Inland and Coastal Regions of Orissa*

Photograph No. 1

A Village in Inland Region

A distant view of village Penthabahal in P. S. Naktideul, District Sambalpur. It is located at the foot of a hill. It is a village of iron smelters and cultivators. The extensive paddy lands in the fore-ground give sustenance to the cultivators of the village while the hillock in the back-ground provides timber for making charcoal and iron ore for smelting purposes.

Photograph No. 2

A Village in Inland Region

Village Tarva in P.S. Purunakote, District Dhenkanal is situated on the slopes of a hill. The paddy lands which occur immediately after the village site are also on a sloping surface; ridging and terracing ensure retention of water during cultivating season. The extensive Reserved forests which surround the village on all sides, provide employment for the villagers in such work as cutting of trees, removal of timbers, building of forest roads, etc.

Photograph No. 3

A Village in Inland Region

Village Khuira in P. S. Paikmal, District Sambalpur, is on the extensive plains of Bargarh Sub-division. A range of hills, however, is visible at a distance of 2 miles. Roofs of residential houses are built of tiles in most cases and of straw in some cases. The villagers are fond of kitchen gardens adjoining residential houses. Cultivation is prosperous and the village is becoming congested with houses.

Photograph No. 4

Outskirts of a Village in Inland Region

Village Sonepur in P.S. Umarkot, District Koraput maintains a tamarind orchard close to the village site. There are such a large number of trees that it is possible to allot a tree or a number of trees to each family in the village. Tamarind is an important item of the daily food of the villagers and is available from these trees. The surplus is sold in the market.

Photograph Nos. 5(a) and (b)

A Village in Inland Region

Two different scenes of village Chandragiri in P. S. Mohana, District Ganjam. The village is situated in Agency tracts of Ganjam district which used to be unhealthy, inaccessible and thinly populated sometime back. Its characteristics are fast changing

particularly with development of communications and growth of resources of the population. Now the village is motorable directly from the District Headquarters which is 65 miles distant. Among the villagers, there are a large number of Scheduled Castes named *Pan*, most of whom are converted to Christianity. Some Tibetan refugee families have also settled there in recent years.

Photograph No. 6

A Village in Coastal Region

The view of a lane in village Saraswathipur, P. S. Pipli, District Puri. The village is noted for luxurious growth of cocoanut trees. Each family owns cocoanut trees, from one or two in case of a poor family to a large grove in case of a wealthy family. While cultivation of paddy provides staple food for the year, the odd expenses are met from the sale proceeds of cocoanut.

Photograph No. 7

A Village in Coastal Region

Scene of a village street in Sukinda P. S., Cuttack District. All the roofs are thatched, but thinly, requiring annual replacement. Some villages in the coastal region grow clumps of bamboo for making frame-work for the thatch. This particular village has however enough to spare for elaborate fencing.

Photograph Nos. 8(a), (b) and (c)

A Lake in Coastal Region

These are the scenes of the Chilka lake in Puri District, as viewed from three different spots.

II. *Photographs of typical houses in Inland and Coastal Regions of Orissa*

House No. 1 (Photograph No. 9)

A typical house in north-western districts of Orissa (Inland Region). It has a rickety tile-roof, low plinth and no window. A tile-roof is more suitable than a straw-roof in localities afflicted with fire accidents. Such accidents are frequent in the inland region.

House No. 2 (Photograph No. 10)

A typical house of a *pahi-praja* (non-resident cultivator) in Central Orissa. The paddy lands provide straw for the roof while the extensive bamboo plantation in the Reserved forests nearby enable walls to be constructed of bamboo cheaply and conveniently. The investment is small, and the whole structure can be abandoned as soon as cultivation work is over. A *pahi-praja* is a cultivator of lands in an uninhabited village. The village in which the cultivated lands are located has no permanent inhabitant. The cultivator comes there in the beginning of the season, erects a temporary house as in the photograph, lives there for 4 months or so till the harvest is made, and then departs.

House No. 3 (Photograph No. 11)

A typical house in a rehabilitation colony in Dandakaranya (Koraput District). The roof is quickly built of corrugated iron sheets, while walls are improvised by bamboo screens fitted against frames of sized timber. The plinth which is cemented, practically has no height above the ground level as the locality has poor rainfall, and there is no risk of the plinth being inundated.

House No. 4 (Photograph No. 12)

The house of a Harijan (Scheduled Caste) in Bolangir District (Inland Region). It has low plinth. The height of walls is four feet only. There is no window, but ventilation is obtained by leaving a gap between the wall and the roof. The house contains no valuables and so the meagre structure is not intended to ensure security against theft.

House No. 5 (Photograph No. 13)

A single-roomed house made of masonry walls and plinth and straw thatching is typical for use as a Community Reading Room in prosperous villages of Puri (Coastal Region).

House No. 6 (Photograph No. 14)

In certain localities of the Coastal Region, namely in Khurda, Bhubaneswar and northern Cuttack laterite stone is available in plenty. The photograph shows a house built of laterite stone but plastered so cleverly as to conceal the building material but the extensive compound walls expose the true character of the material utilised for construction.

House No. 7 (Photograph No. 15)

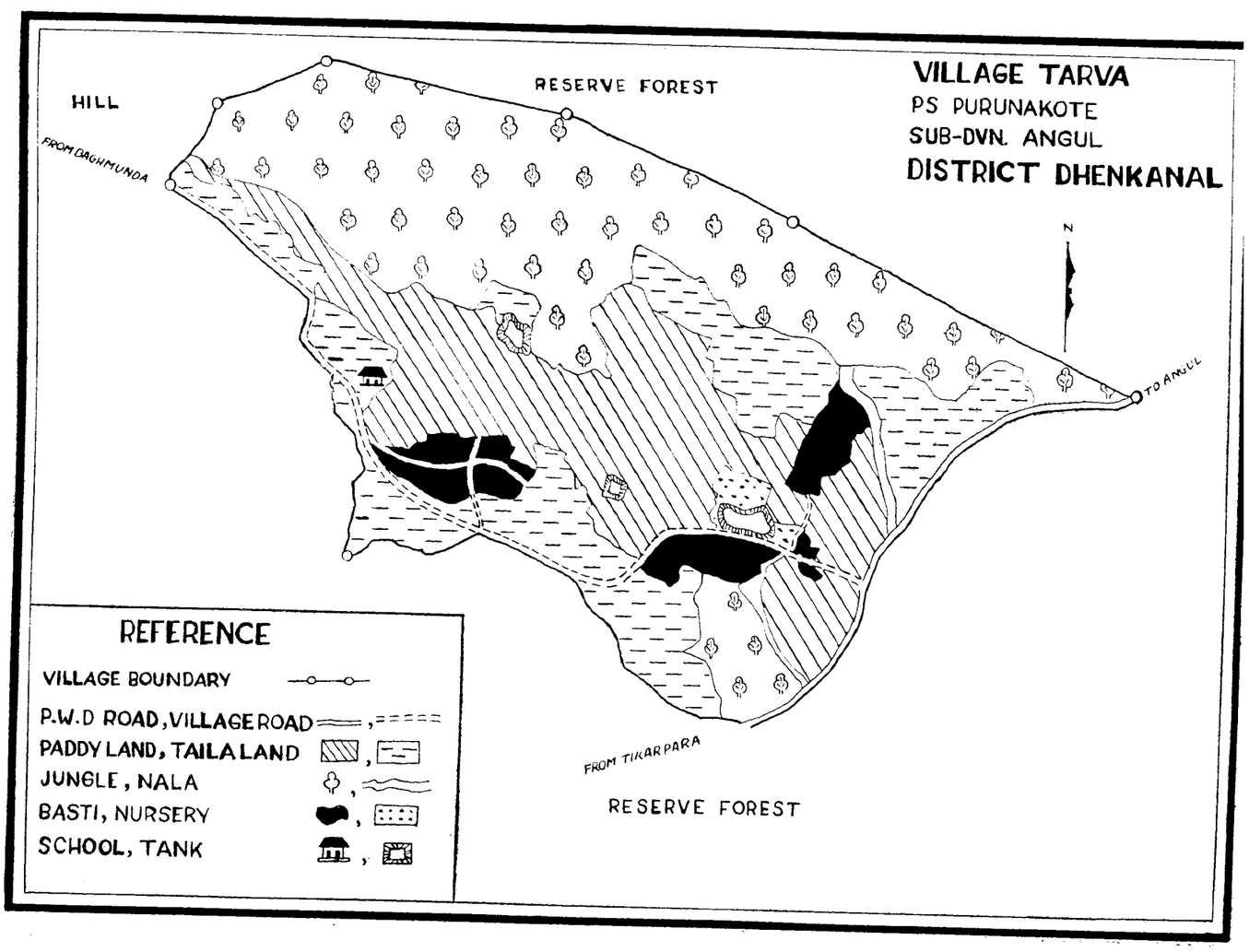
A typical house of a cultivator in Balasore (Coastal Region). Strong and thick mud walls with elaborate and thick thatch keep the house cool and comfortable.

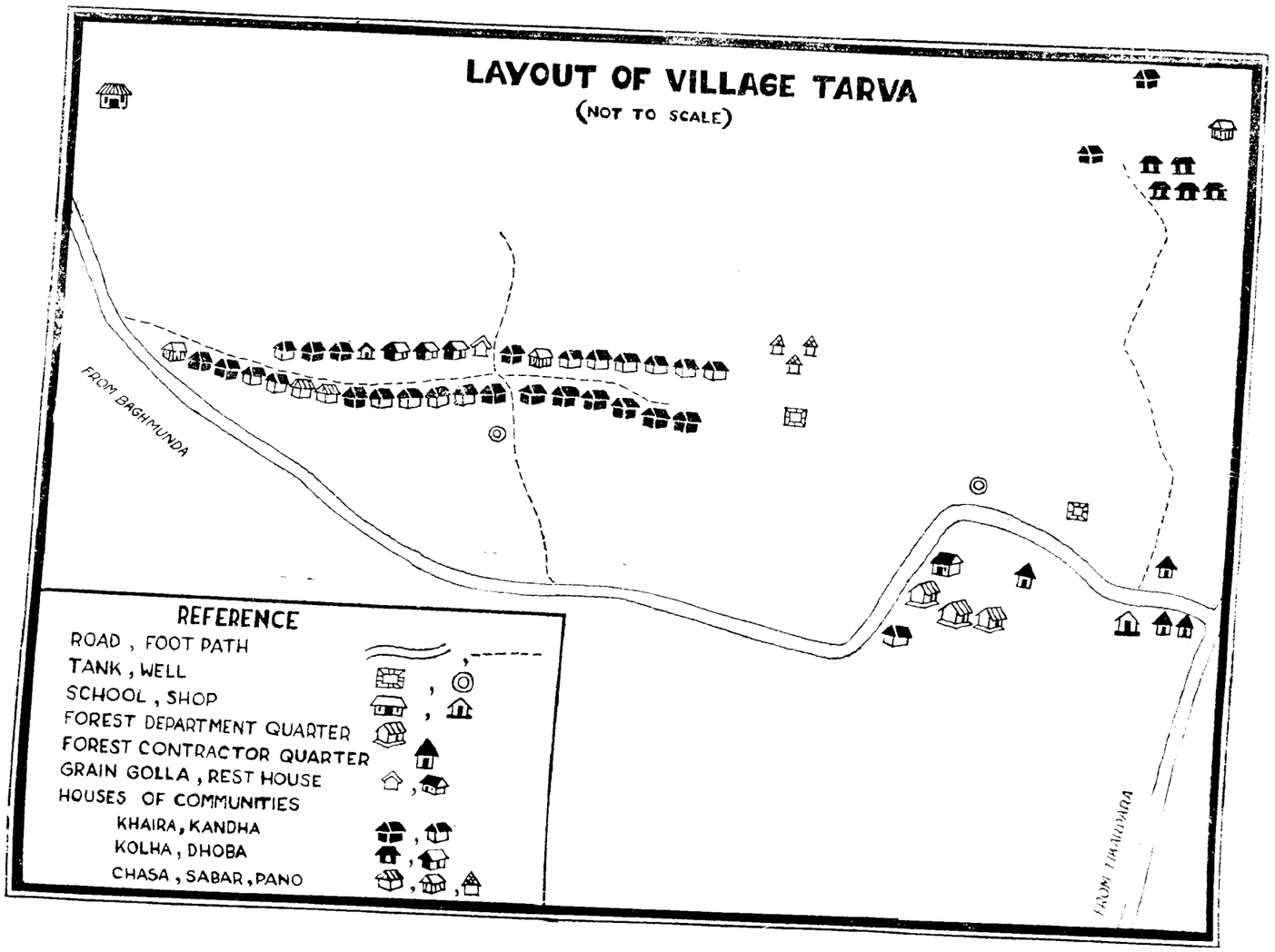
House No. 8 (Photograph No. 16)

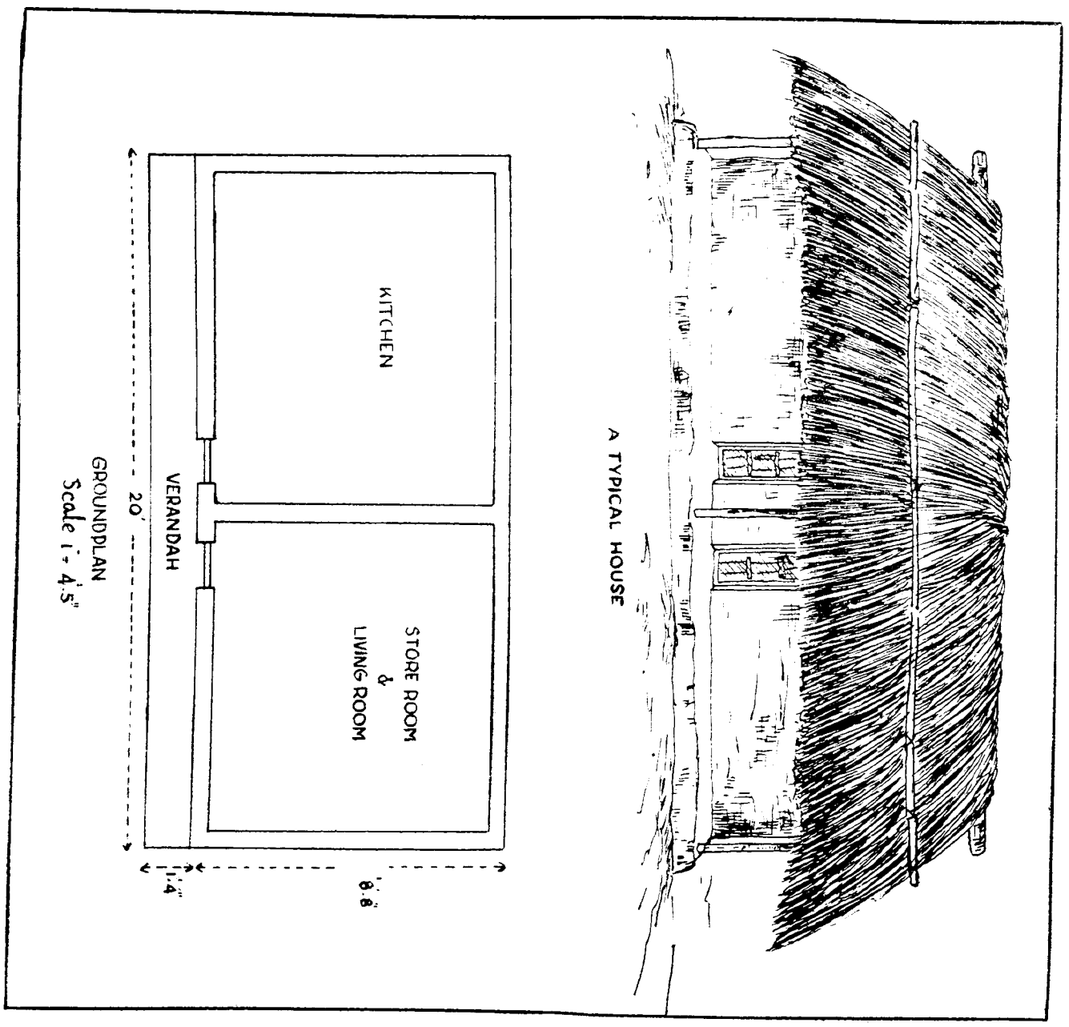
A house of a joint family in Puri (Coastal Region). The need for economy has made the walls and the thatch quite thin. But the plinth is high as protection against flood.

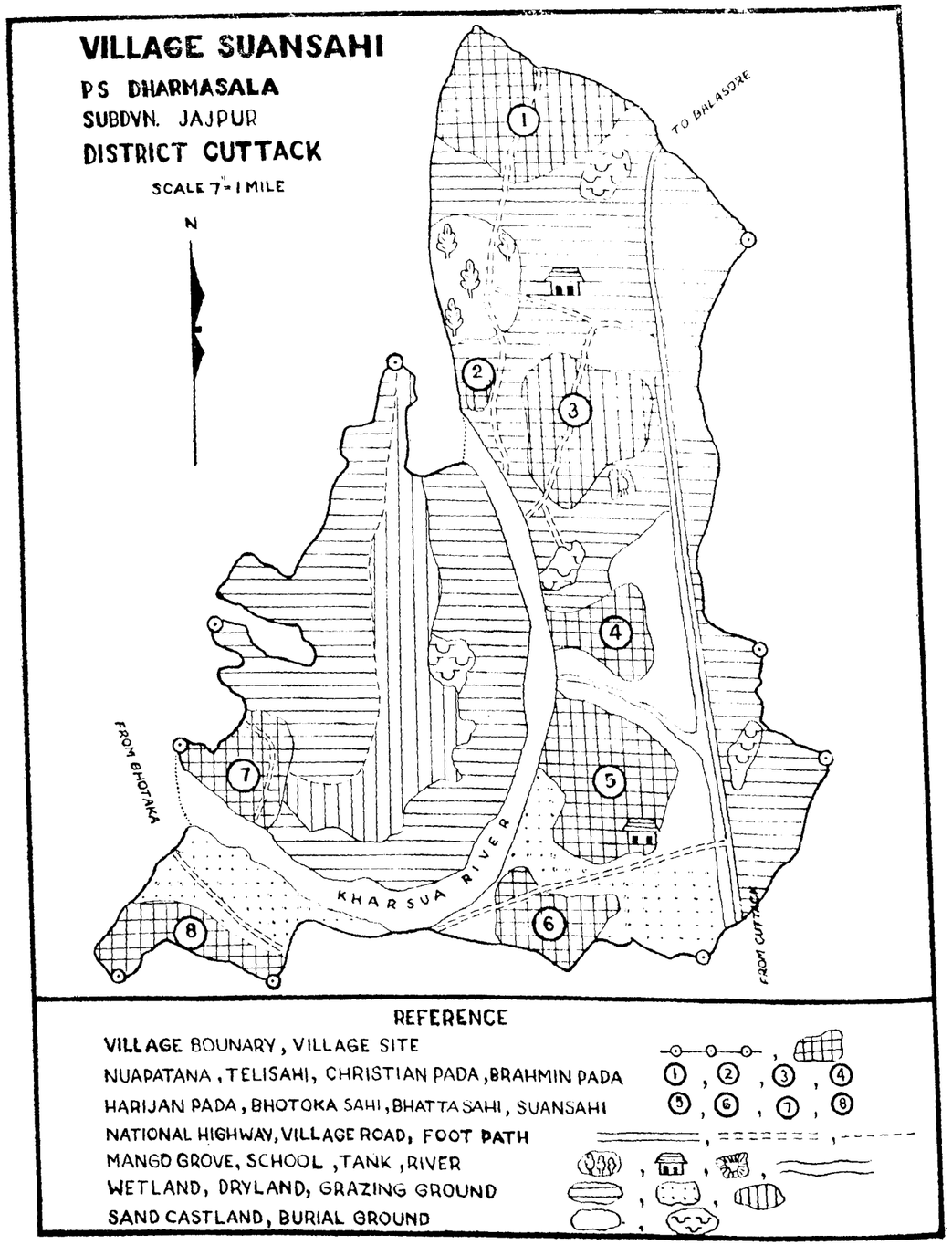
House Nos. 9 and 10 (Photograph Nos. 17 and 18)

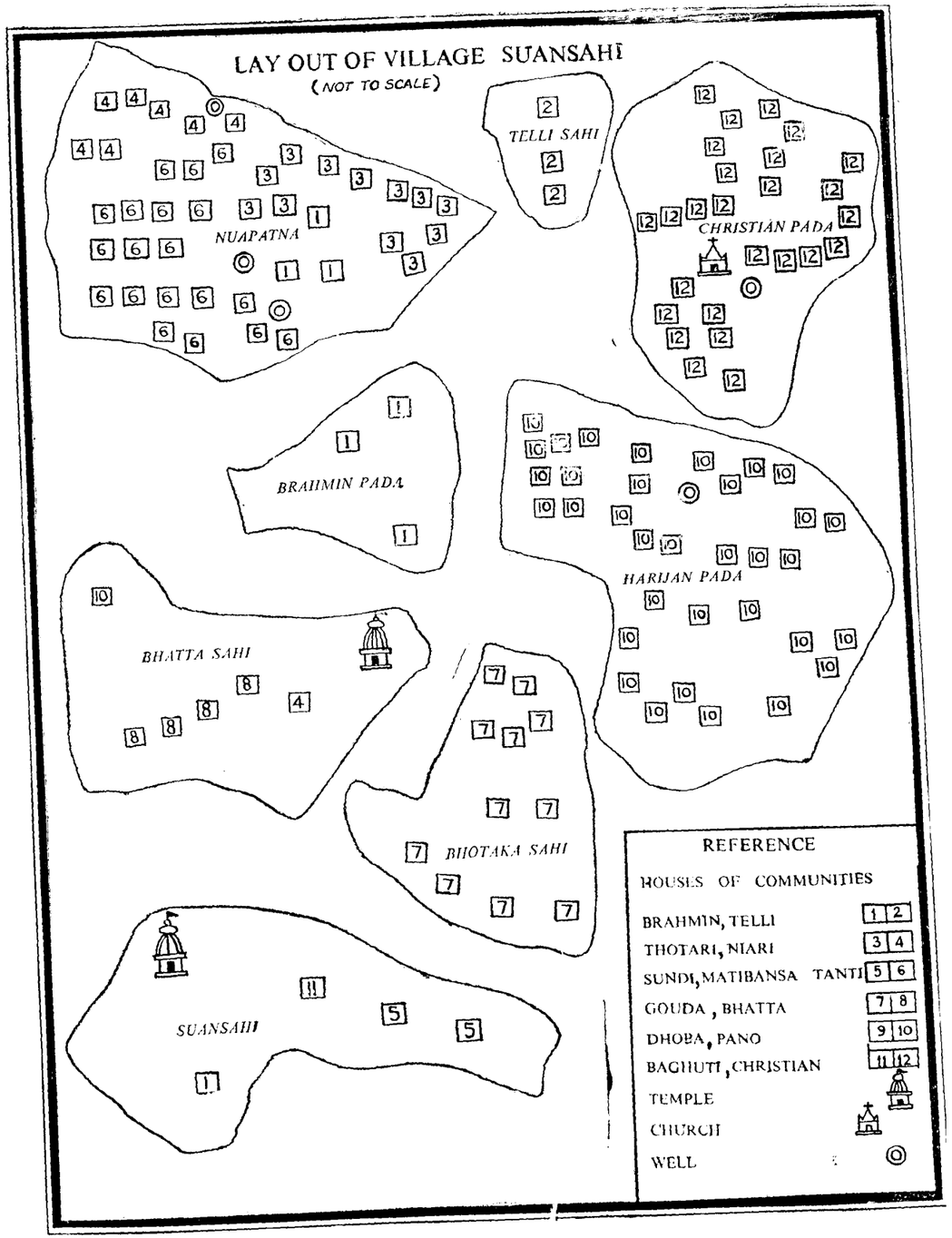
Houses of pig graziers (Ghusuria Scheduled Caste) in Balasore District (Coastal Region). They are made of a frame-work of twigs covered over with palmyra palm leaves which are available in the locality. The structure ultimately may take the shape of a cone or a dome, according to builder's choice. There is only one single entrance which is low, compelling stooping posture in entering or exit.

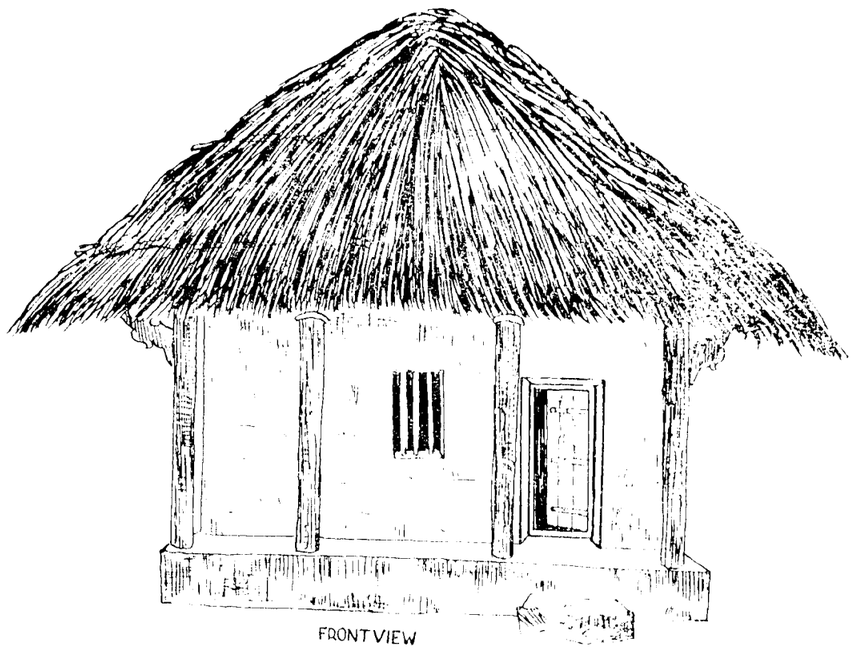

VILLAGE TARVA
PS PURUNAKOTE
SUB-DVN. ANGUL
DISTRICT DHENKANAL
HILL
RESERVE FOREST
FROM DAGHIMUNDA
TO ANGUL
FROM TIKARPARA
RESERVE FOREST
N
REFERENCE
VILLAGE BOUNDARY
P.W.D ROAD, VILLAGE ROAD
PADDY LAND, TAILA LAND
JUNGLE, NALA
BASTI, NURSERY
SCHOOL, TANK


LAYOUT OF VILLAGE TARVA
(NOT TO SCALE)
FROM BAGHMUNDA
FROM TIMAGIDA
REFERENCE
ROAD , FOOT PATH
TANK , WELL
SCHOOL , SHOP
FOREST DEPARTMENT QUARTER
FOREST CONTRACTOR QUARTER
GRAIN GOLLA , REST HOUSE
HOUSES OF COMMUNITIES
KHAIRA, KANDHA
KOLHA , DHOBA
CHASA , SABAR , PANO

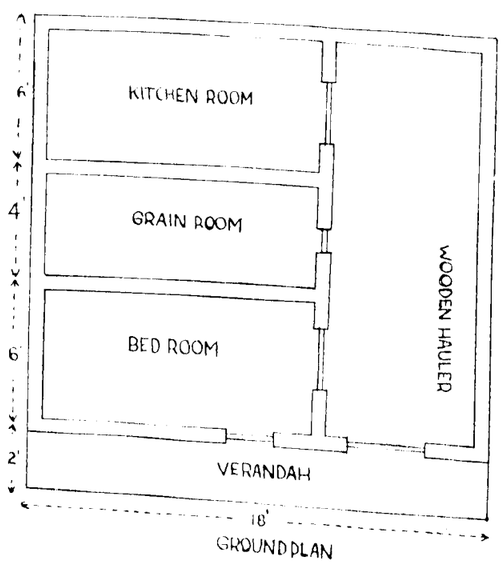

KITCHEN
VERANDAH
STORE ROOM
&
LIVING ROOM
20'
1'4"
8'8"
GROUNDPLAN
Scale 1" = 4'5"
A TYPICAL HOUSE


VILLAGE SUANSAHI
PS DHARMASALA
SUBDVN. JAJPUR
DISTRICT CUTTACK
SCALE 7"=1 MILE
N
TO BALASORE
FROM BHOTAKA
KHARSUA RIVER
FROM CUTTACK
REFERENCE
VILLAGE BOUNARY, VILLAGE SITE
NUAPATANA, TELISAHI, CHRISTIAN PADA, BRAHMIN PADA
HARIJAN PADA, BHOTOKA SAHI, BHATTA SAHI, SUANSAHI
NATIONAL HIGHWAY, VILLAGE ROAD, FOOT PATH
MANGO GROVE, SCHOOL, TANK, RIVER
WETLAND, DRYLAND, GRAZING GROUND
SAND CASTLAND, BURIAL GROUND


LAY OUT OF VILLAGE SUANSAHI
(NOT TO SCALE)
NUAPATNA
TELLI SAHI
CHRISTIAN PADA
BRAHMIN PADA
HARIJAN PADA
BHATTA SAHI
BHOTAKA SAHI
SUANSAHI
REFERENCE
HOUSES OF COMMUNITIES
BRAHMIN, TELLI
THOTARI, NIARI
SUNDI, MATIBANSA TANTI
GOUDA, BHATTA
DHOBA, PANO
BAGHUTI, CHRISTIAN
TEMPLE
CHURCH
WELL



FRONT VIEW



GROUND PLAN

Scale 1 = 6'

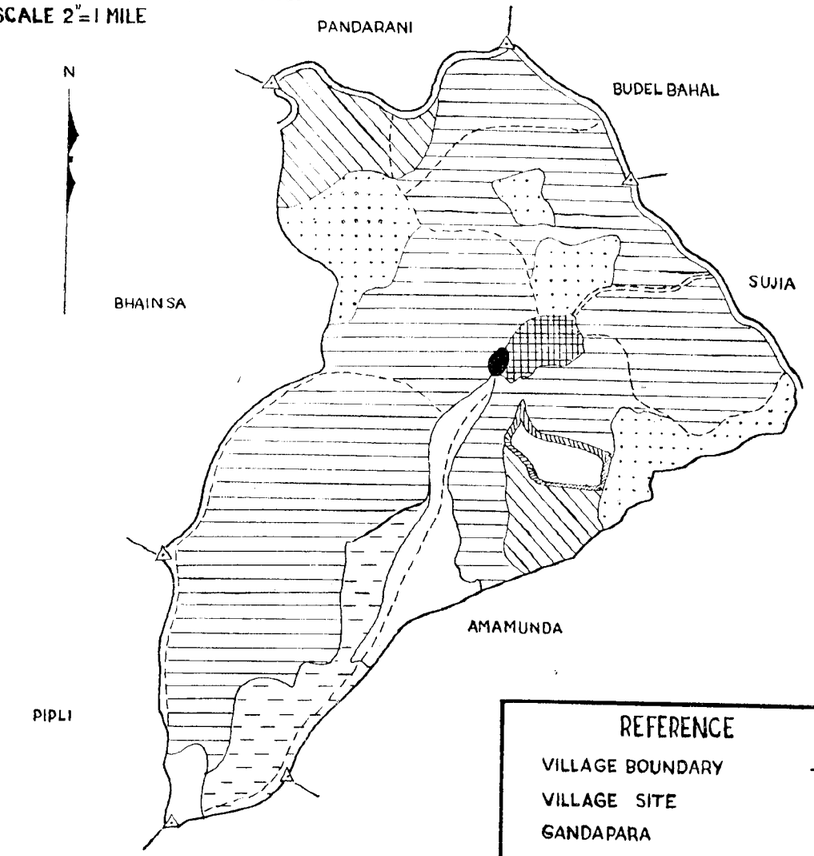
VILLAGE MANHIRA

P S LOISINGHA

SUBDVN. SADAR

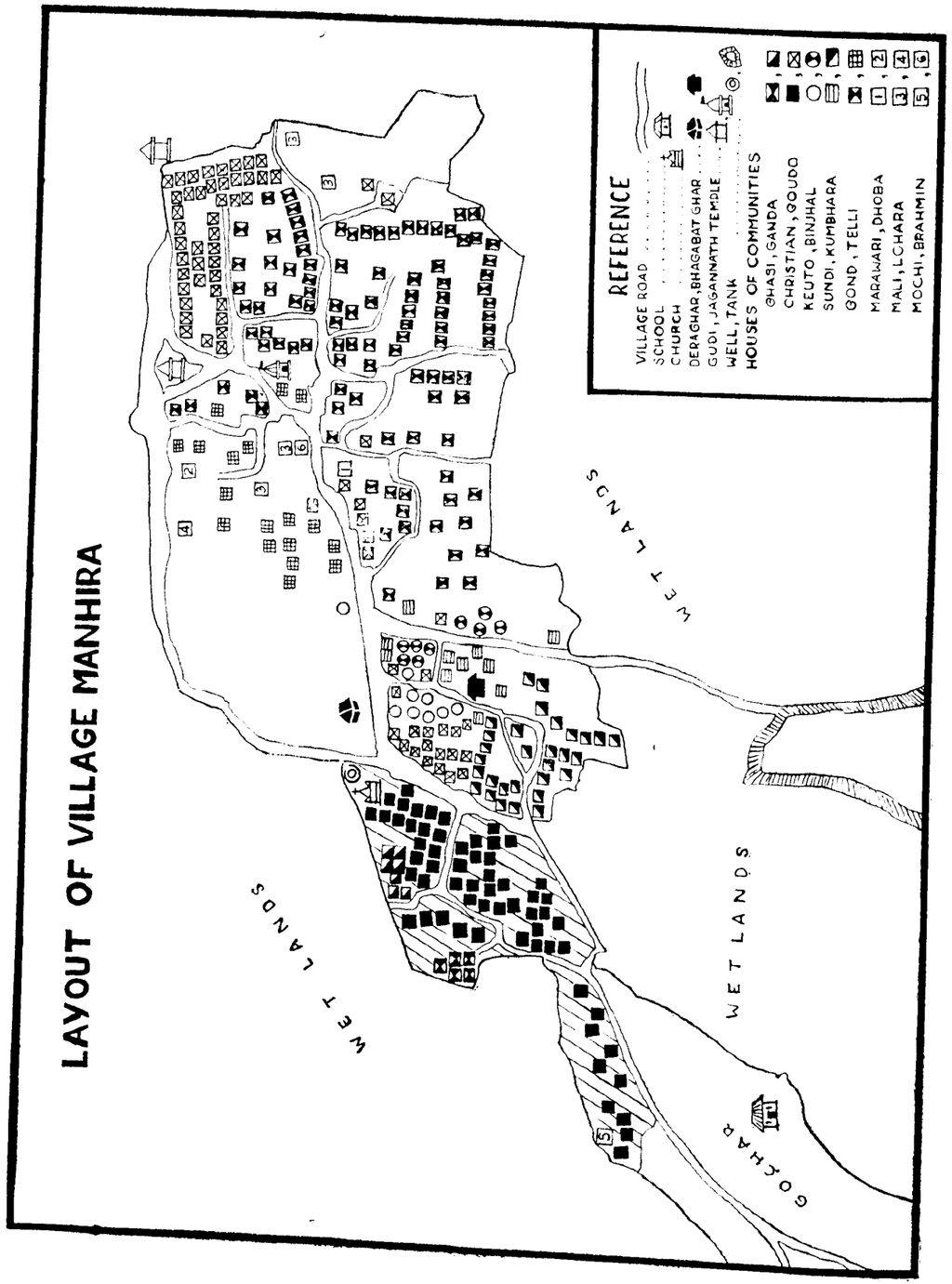
DISTRICT BOLANGIR

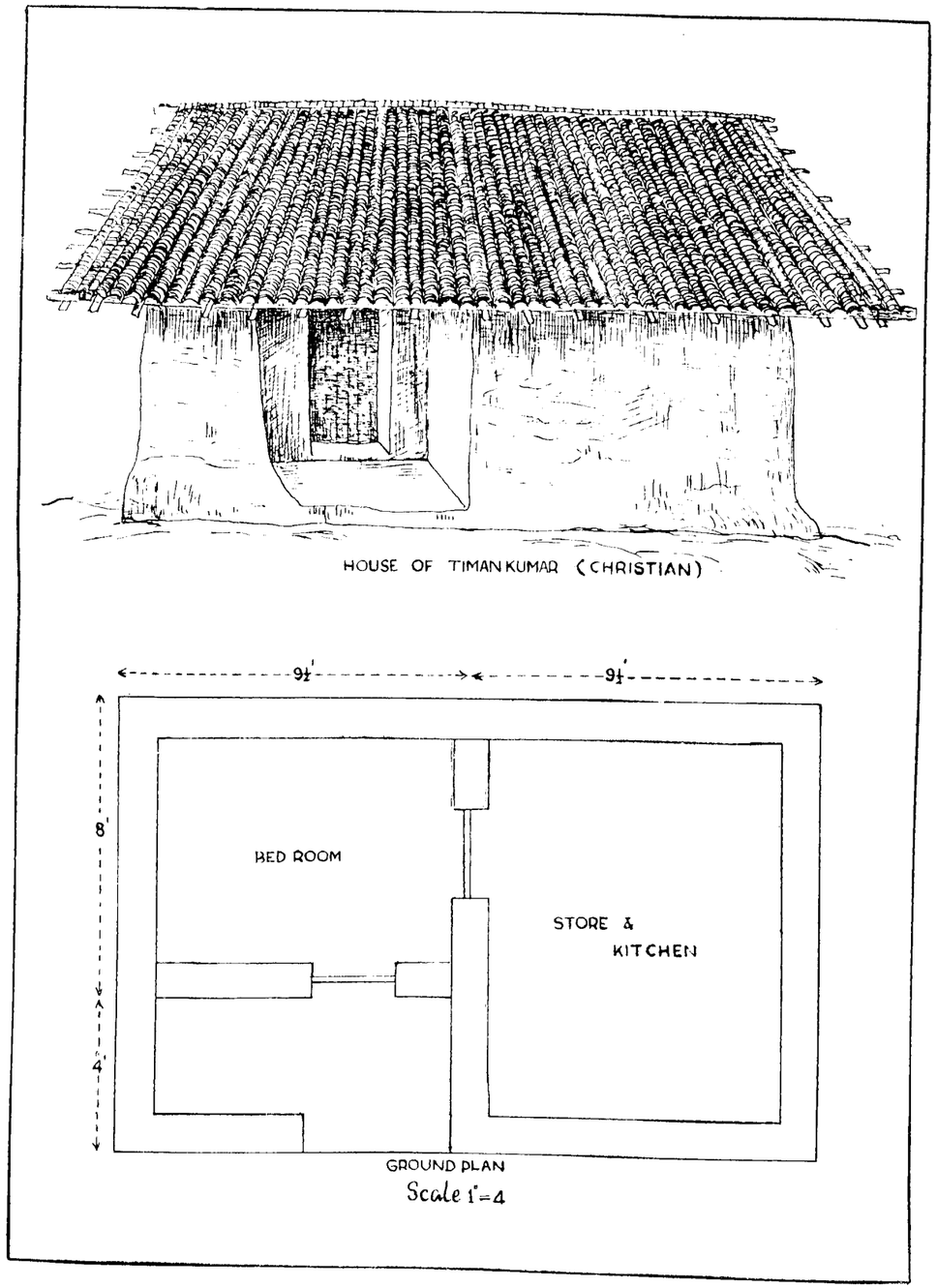
SCALE 2" = 1 MILE

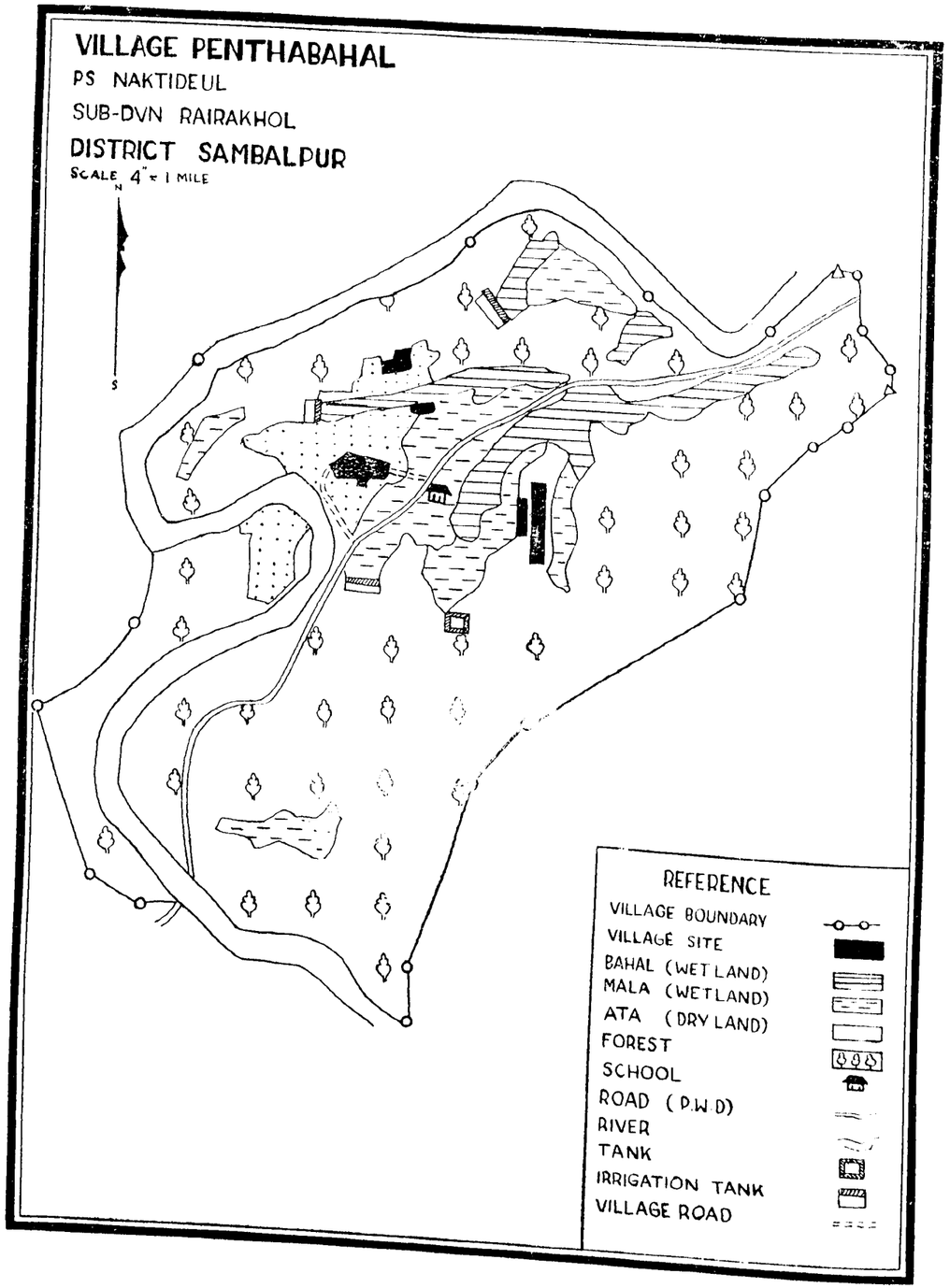


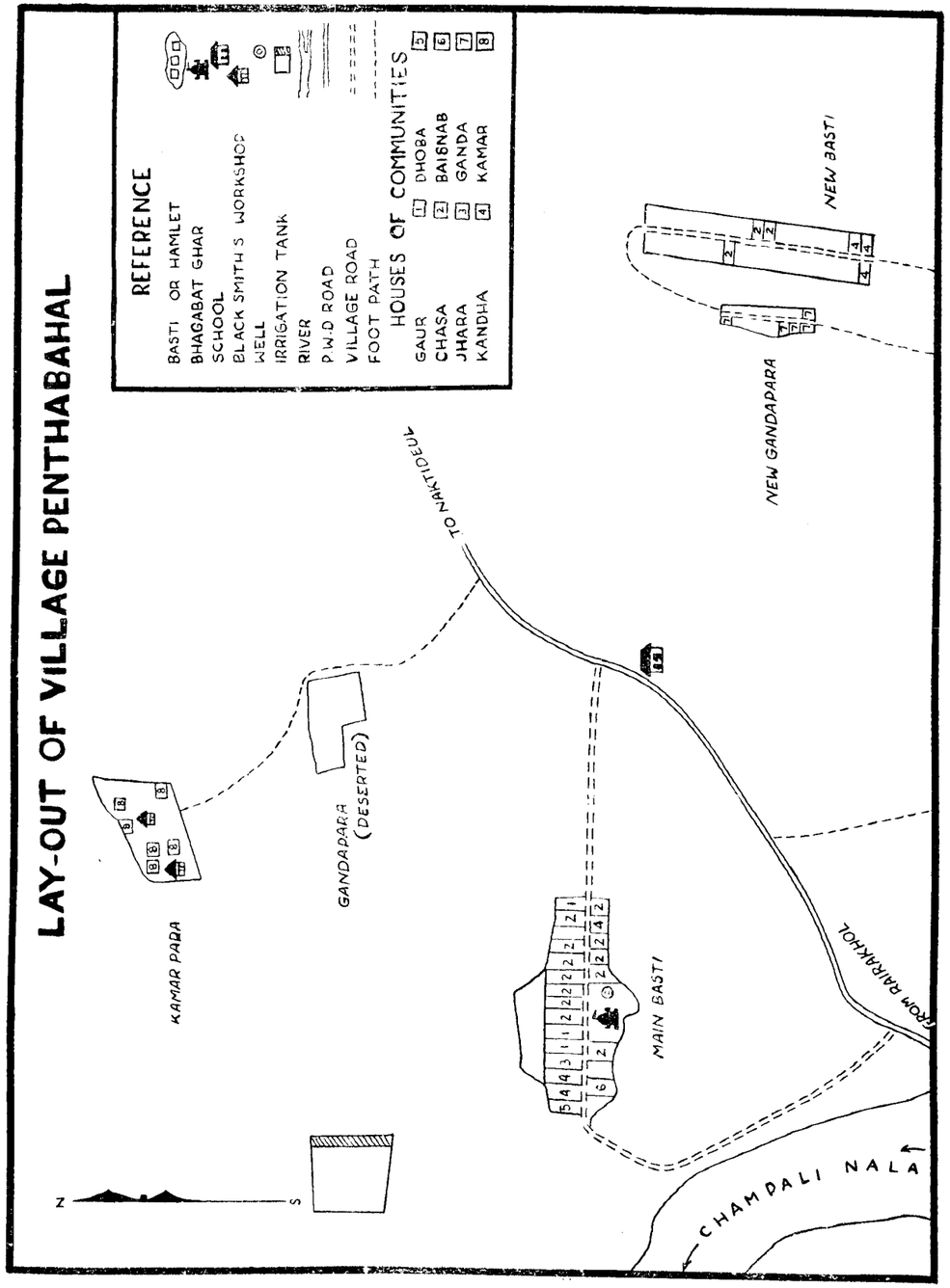
REFERENCE

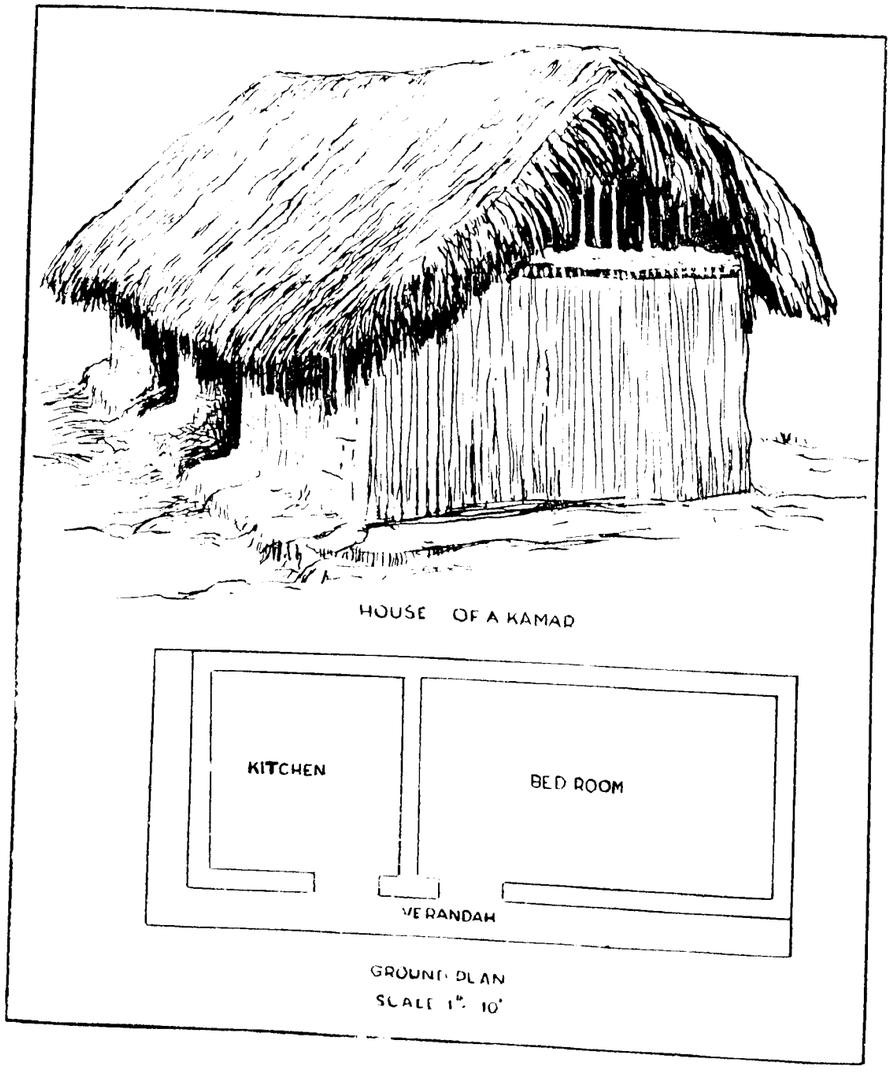
- VILLAGE BOUNDARY
- VILLAGE SITE
- GANDAPARA
- BAHAL (WETLAND)
- BERNA (WETLAND)
- MAL (DRY LAND)
- AAT (DRY LAND)
- GOCHAR
- RIVER, TANK
- VILLAGE ROAD
- FOOT PATH

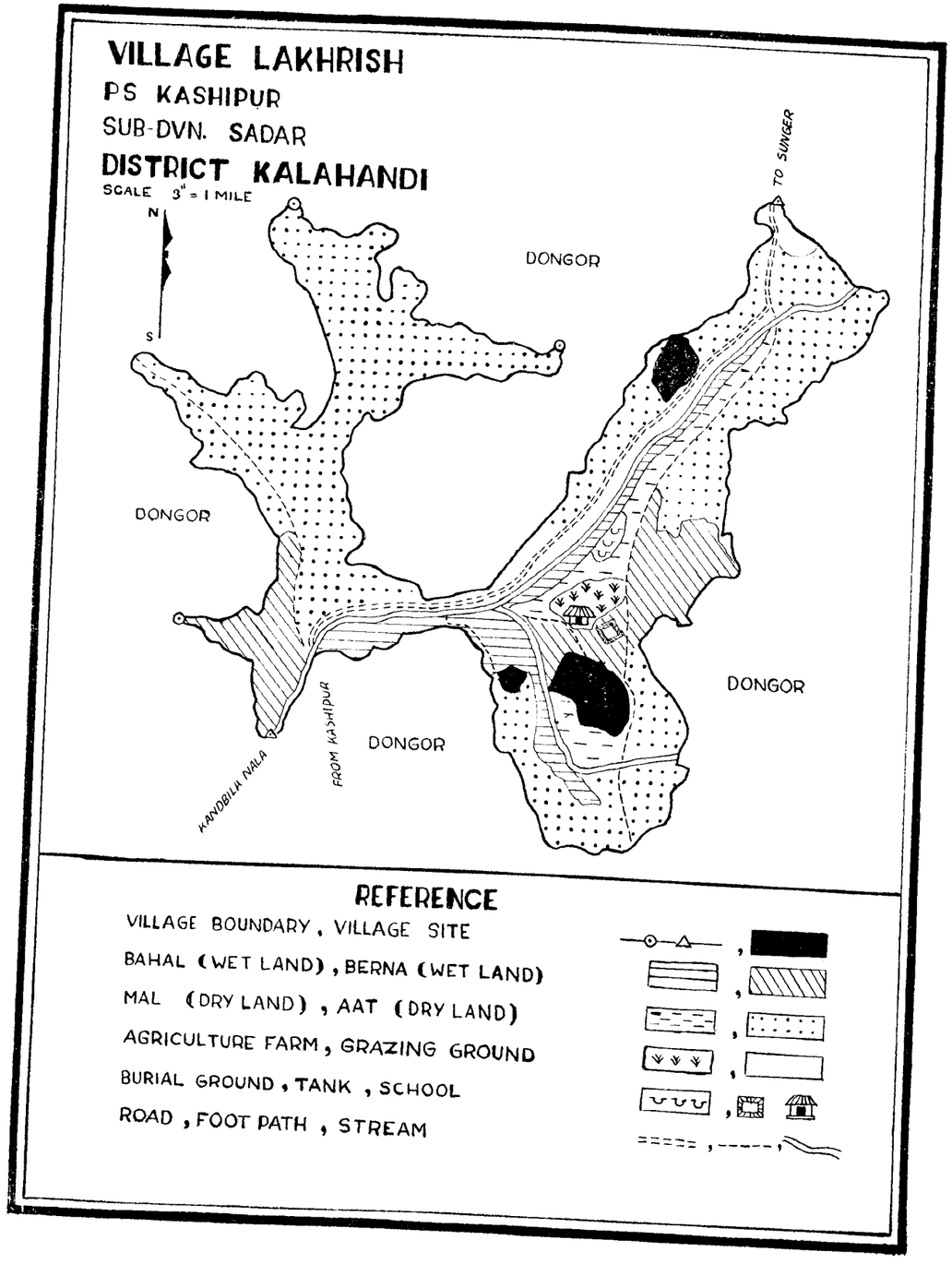

LAYOUT OF VILLAGE MANHIRA
REFERENCE
VILLAGE ROAD
SCHOOL
CHURCH
DERAGHAR, BHAGABAT GHAR
GUDI, JAGANNATH TEMPLE
WELL, TANK
HOUSES OF COMMUNITIES
GHASI, GANDA
CHRISTIAN, GOUDO
KEUTO, BINJHAL
SUNDI, KUMBHARA
GOND, TELLI
MARAWARI, DHOBA
MALI, LOHARA
MOCHI, BRAHMIN
WET LANDS
WET LANDS
WET LANDS
GOCHAR

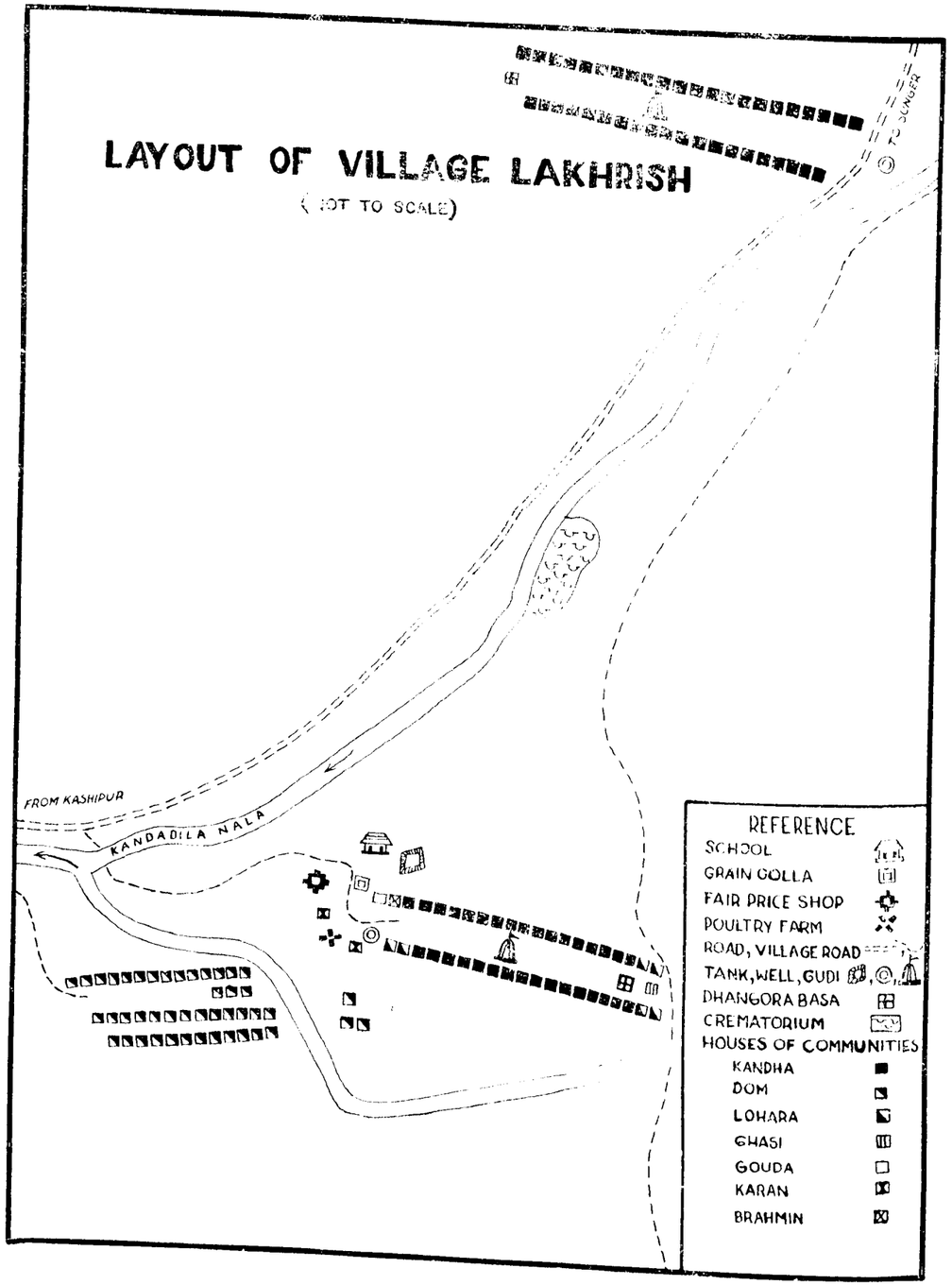

HOUSE OF TIMAN KUMAR (CHRISTIAN)
9½'
9½'
8'
4'
BED ROOM
STORE &
KITCHEN
GROUND PLAN
Scale 1"=4

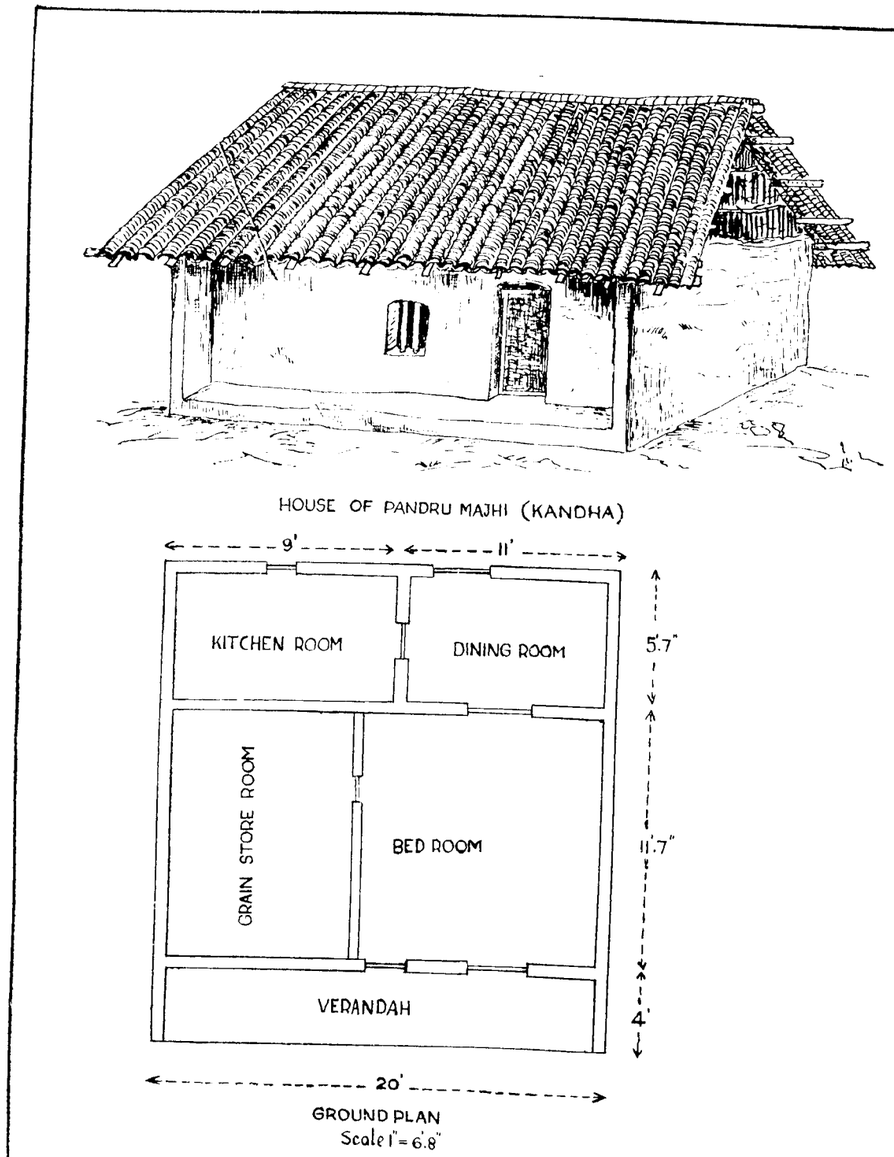

VILLAGE PENTHABAHAL
PS NAKTIDEUL
SUB-DVN RAIRAKHOL
DISTRICT SAMBALPUR
SCALE 4" = 1 MILE
N
S
REFERENCE
VILLAGE BOUNDARY
VILLAGE SITE
BAHAL (WET LAND)
MALA (WET LAND)
ATA (DRY LAND)
FOREST
SCHOOL
ROAD (P.W.D)
RIVER
TANK
IRRIGATION TANK
VILLAGE ROAD

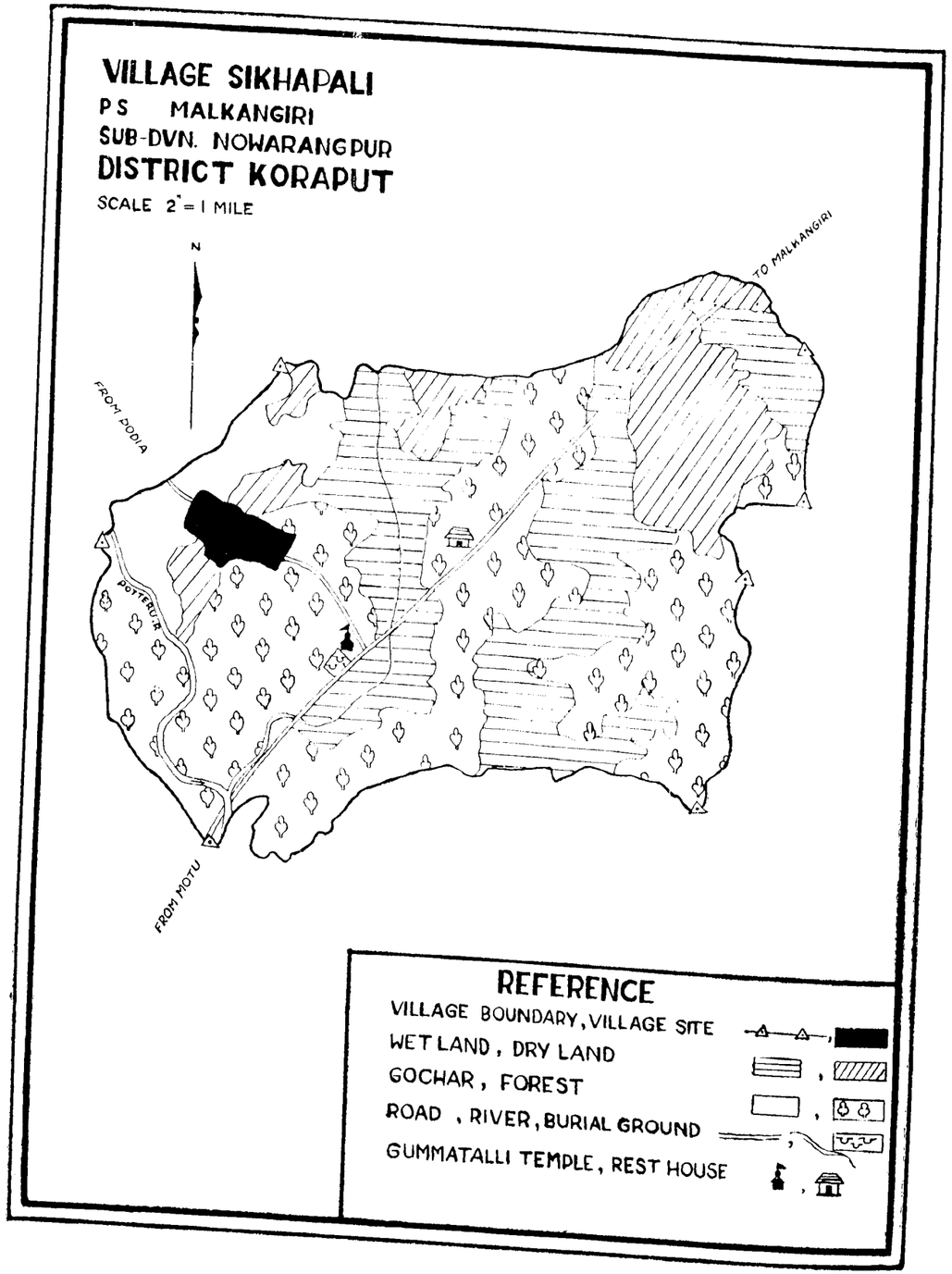

LAY-OUT OF VILLAGE PENTHABAHAL
REFERENCE
BASTI OR HAMLET
BHAGABAT GHAR
SCHOOL
BLACK SMITH'S WORKSHOP
WELL
IRRIGATION TANK
RIVER
P.W.D ROAD
VILLAGE ROAD
FOOT PATH
HOUSES OF COMMUNITIES
1 DHOBA
2 BAISNAB
3 GANDA
4 KAMAR
5
6
7
8
NEW BASTI
NEW GANDAPARA
TO NAKTIDEUL
GANDAPARA (DESERTED)
KAMAR PARA
MAIN BASTI
FROM RAIRAKHOL
CHAMPALI NALA
N
S

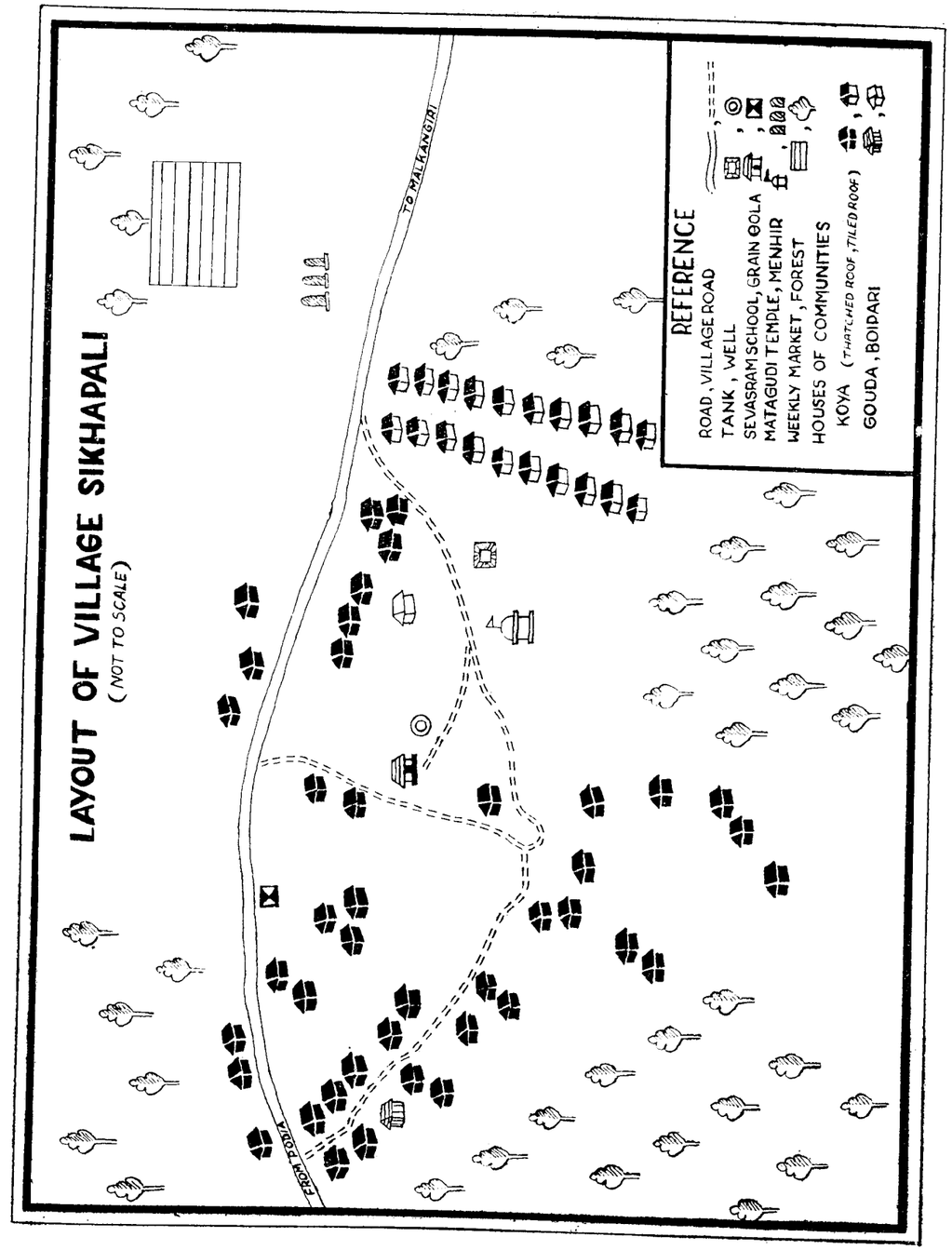

HOUSE OF A KAMAR
KITCHEN
BED ROOM
VERANDAH
GROUND PLAN
SCALE 1" = 10'

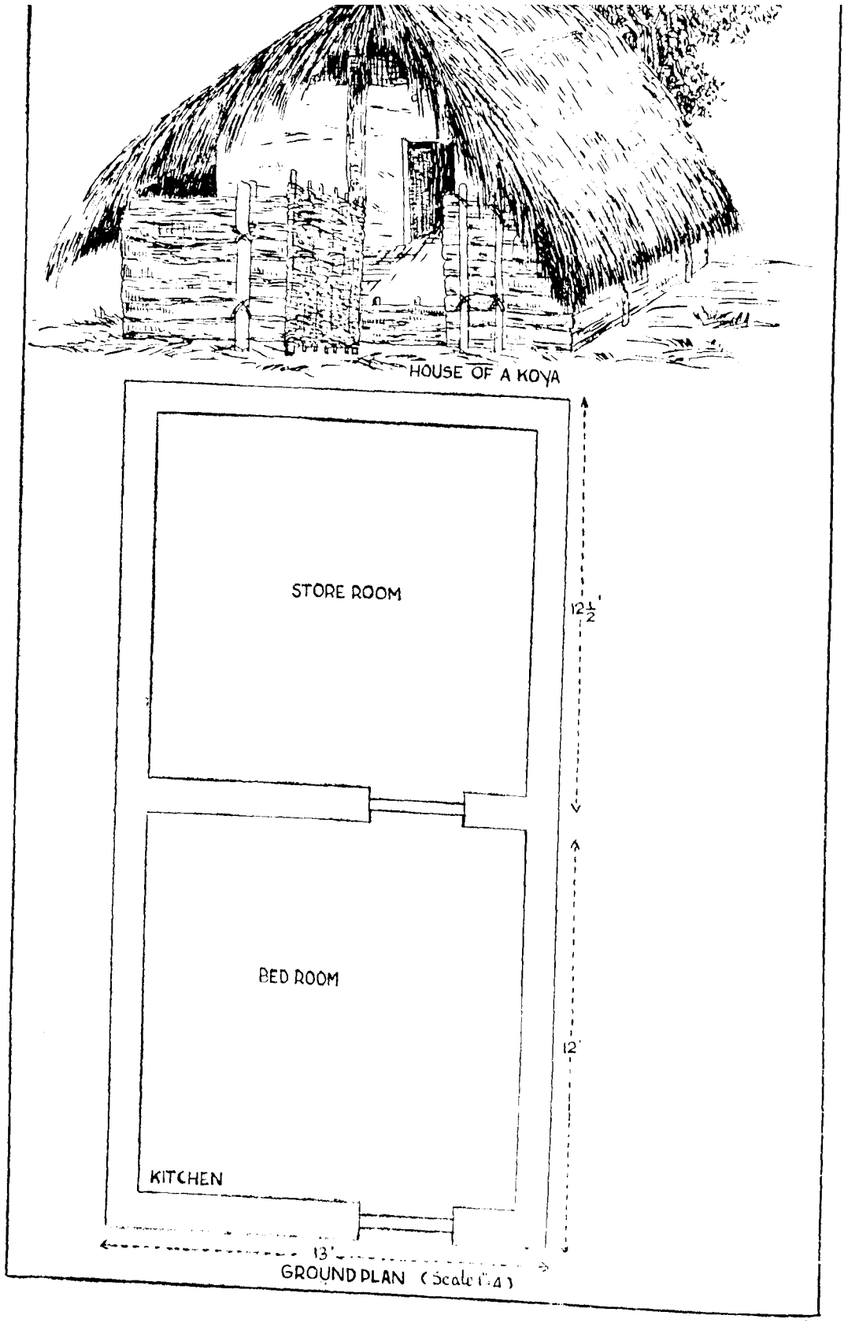

VILLAGE LAKHRISH
PS KASHIPUR
SUB-DVN. SADAR
DISTRICT KALAHANDI
SCALE 3" = 1 MILE
N
S
DONGOR
DONGOR
DONGOR
DONGOR
TO SUNGER
FROM KASHIPUR
KANOBILA NALA
REFERENCE
VILLAGE BOUNDARY, VILLAGE SITE
BAHAL (WET LAND), BERNA (WET LAND)
MAL (DRY LAND), AAT (DRY LAND)
AGRICULTURE FARM, GRAZING GROUND
BURIAL GROUND, TANK, SCHOOL
ROAD, FOOT PATH, STREAM


LAYOUT OF VILLAGE LAKHRISH
(NOT TO SCALE)
TO SUNGER
FROM KASHIPUR
KANDABILA NALA
REFERENCE
SCHOOL
GRAIN GOLLA
FAIR PRICE SHOP
POULTRY FARM
ROAD, VILLAGE ROAD
TANK, WELL, GUDI
DHANGORA BASA
CREMATORIUM
HOUSES OF COMMUNITIES
KANDHA
DOM
LOHARA
GHASI
GOUDA
KARAN
BRAHMIN

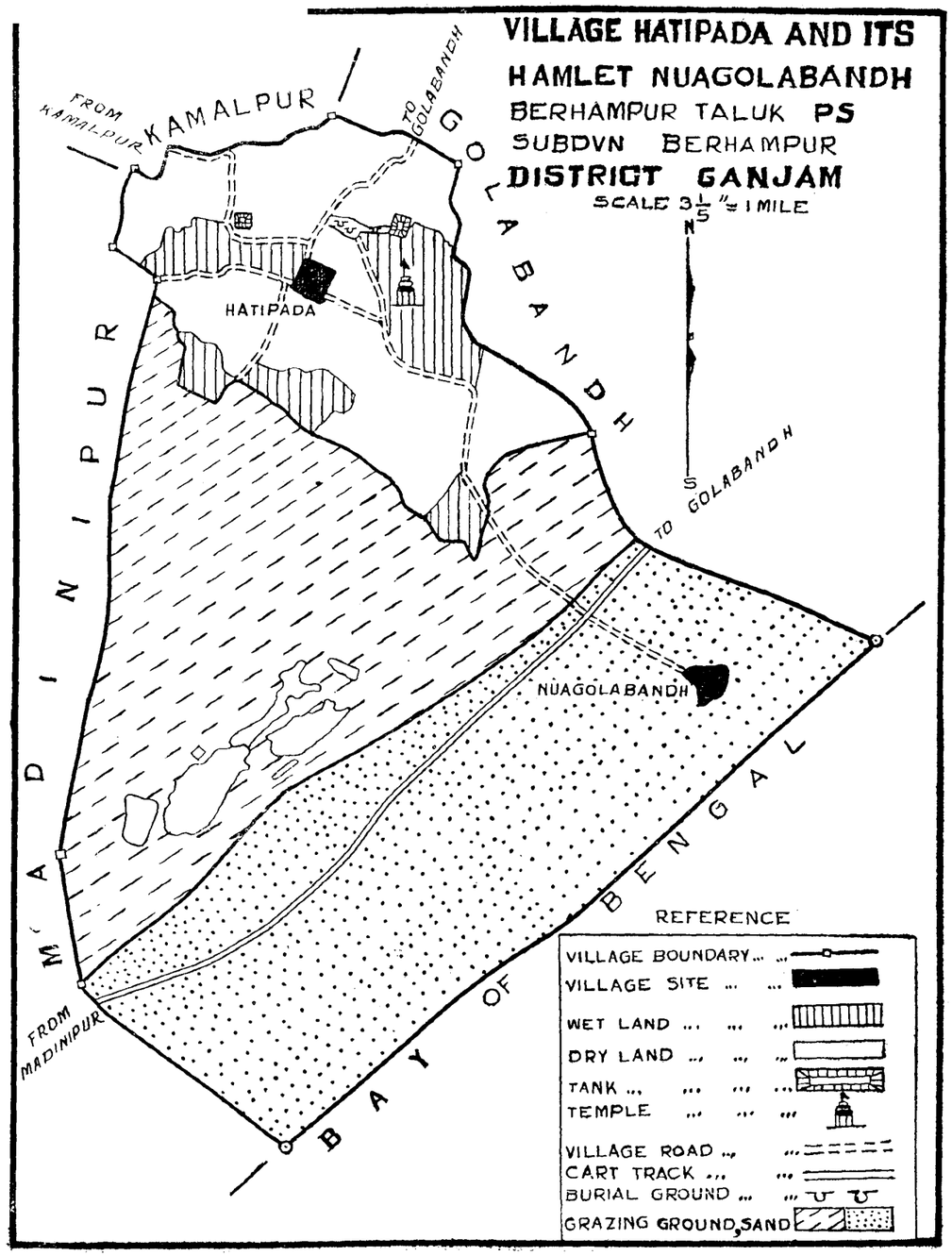

HOUSE OF PANDRU MAJHI (KANDHA)
9'
11'
KITCHEN ROOM
DINING ROOM
5'.7"
GRAIN STORE ROOM
BED ROOM
11'.7"
VERANDAH
4'
20'
GROUND PLAN
Scale 1" = 6'.8"

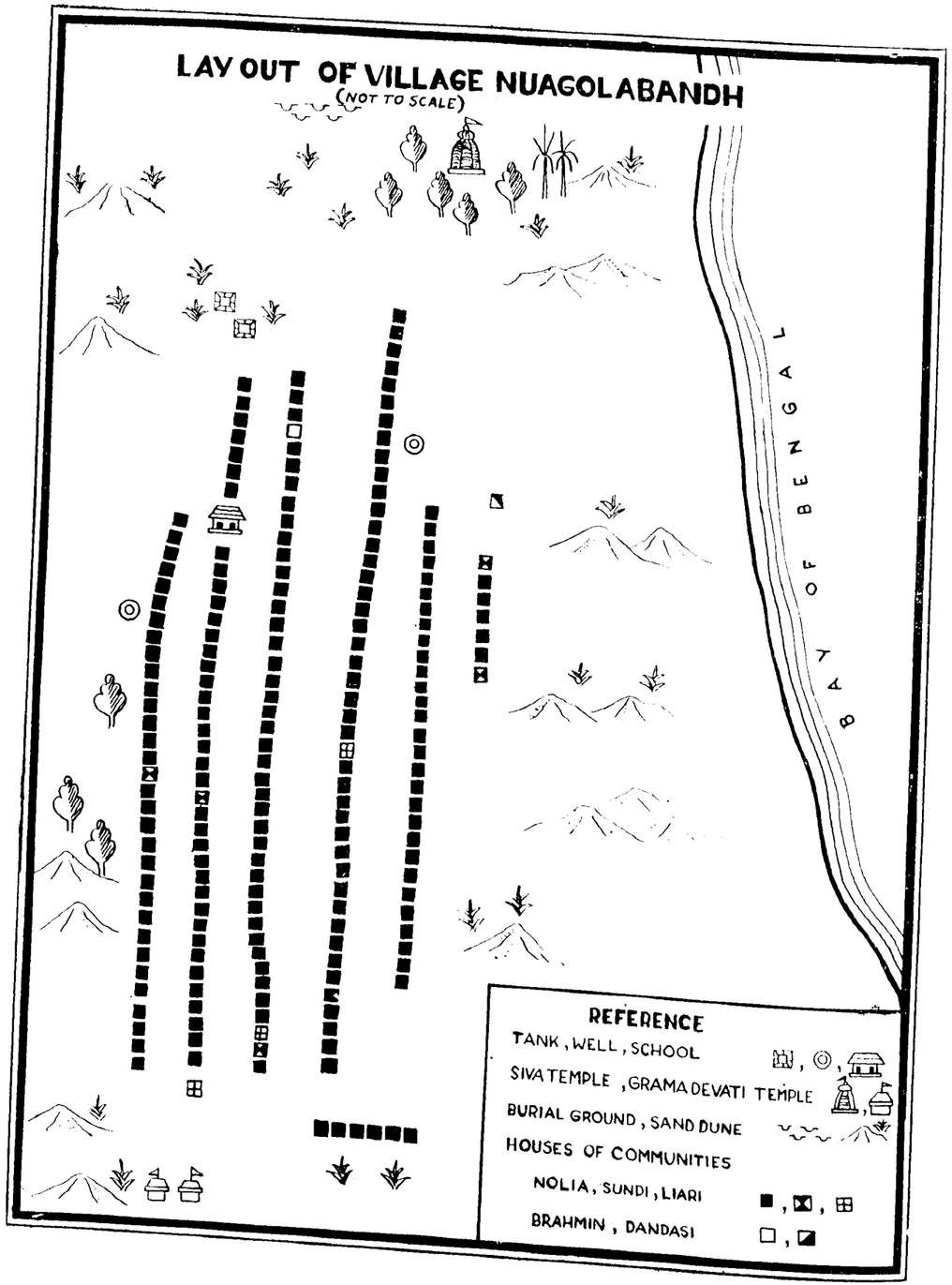

VILLAGE SIKHAPALI
P S MALKANGIRI
SUB-DVN. NOWARANGPUR
DISTRICT KORAPUT
SCALE 2" = 1 MILE
N
TO MALKANGIRI
FROM DODIA
POTTERUR
FROM MOTU
REFERENCE
VILLAGE BOUNDARY, VILLAGE SITE
WET LAND, DRY LAND
GOCHAR, FOREST
ROAD, RIVER, BURIAL GROUND
GUMMATALLI TEMPLE, REST HOUSE

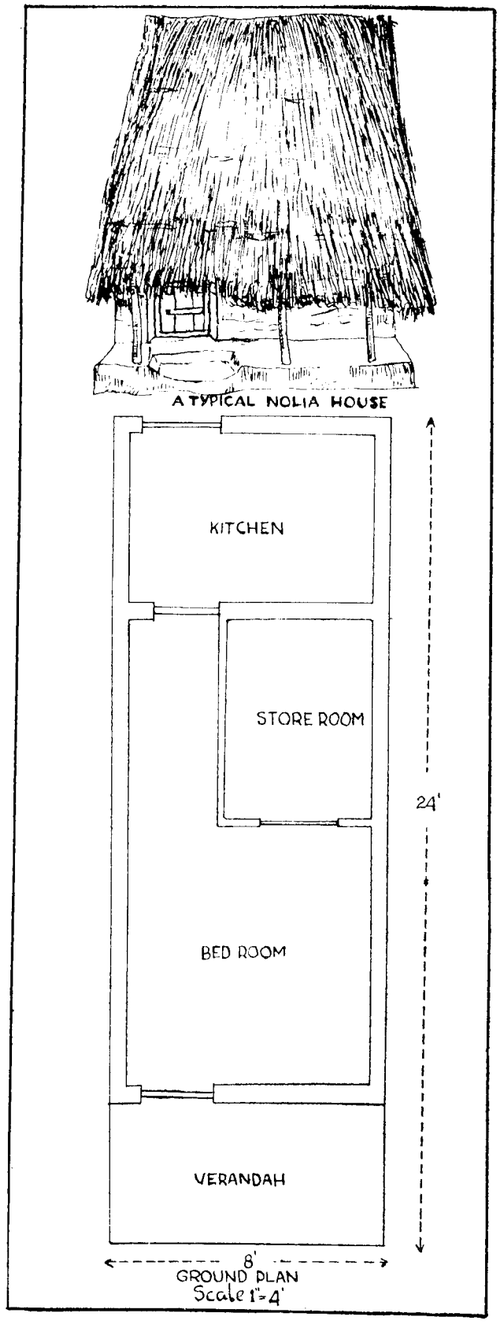

LAYOUT OF VILLAGE SIKHAPALI
(NOT TO SCALE)
TO MALKANGIRI
FROM DODIA
REFERENCE
ROAD, VILLAGE ROAD
TANK, WELL
SEVASRAM SCHOOL, GRAIN GOLA
MATAGUDI TEMPLE, MENHIR
WEEKLY MARKET, FOREST
HOUSES OF COMMUNITIES
KOYA (THATCHED ROOF, TILED ROOF)
GOUDA, BOIDARI

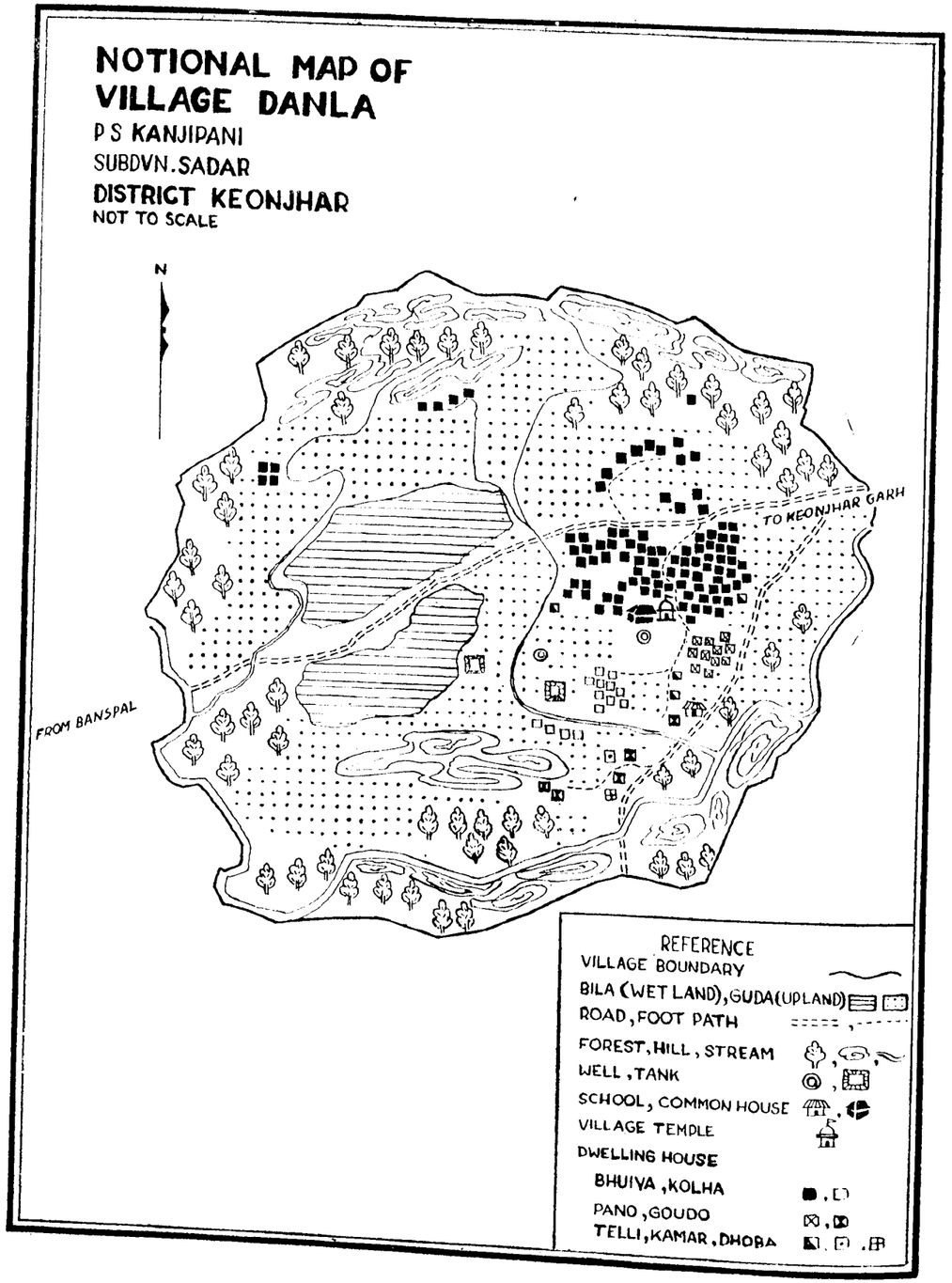


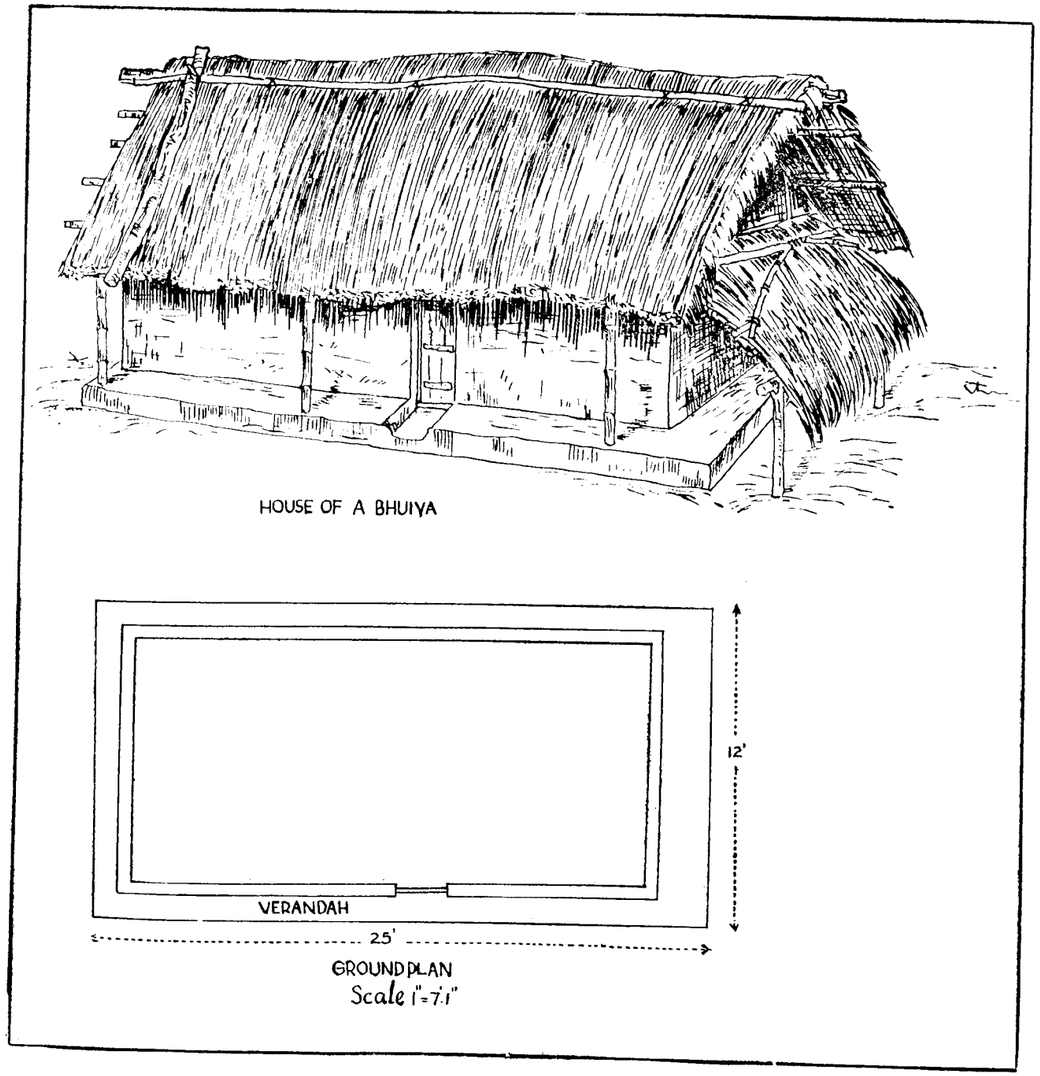
GROUND PLAN (Scale 1"=4')

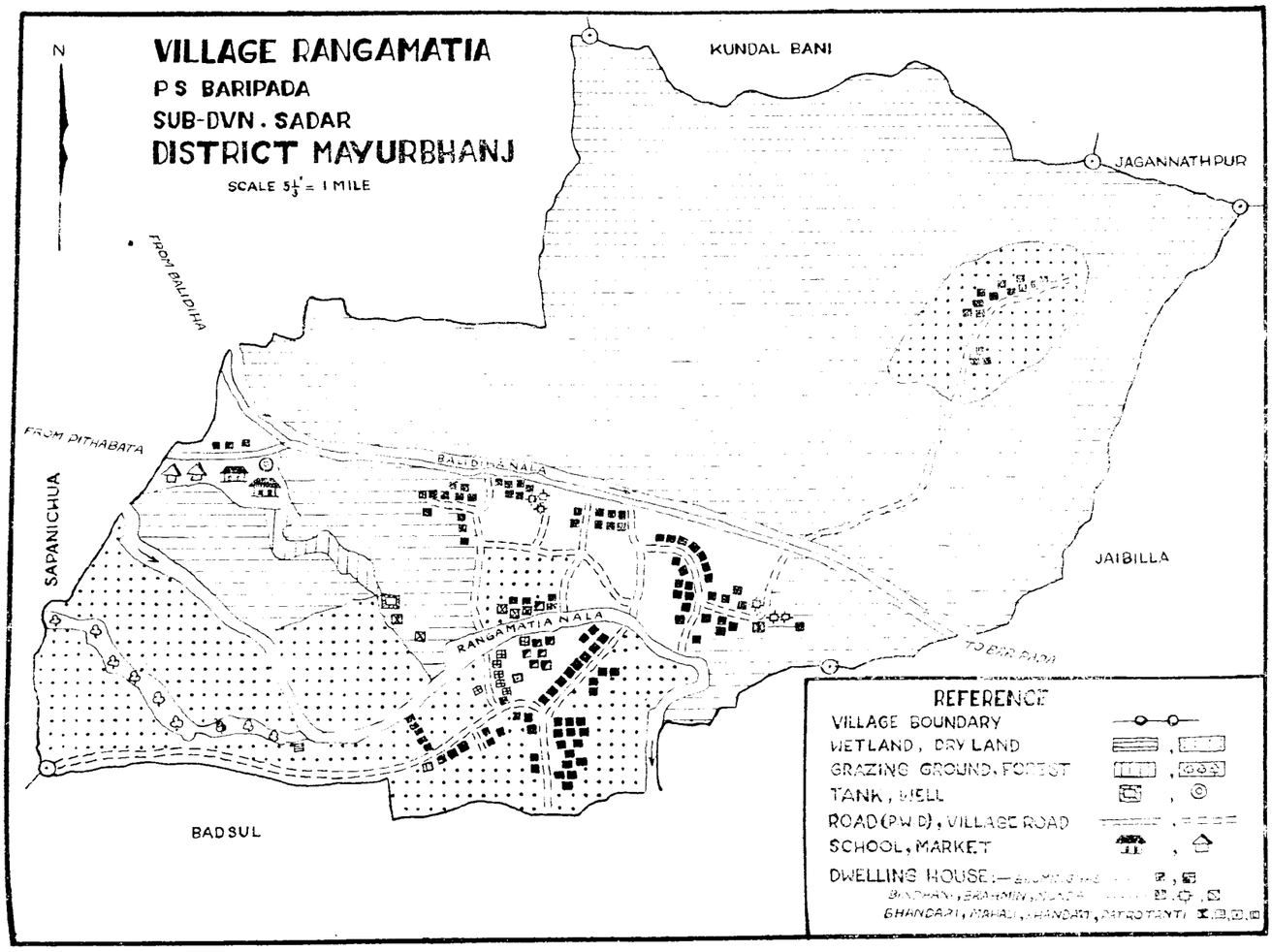


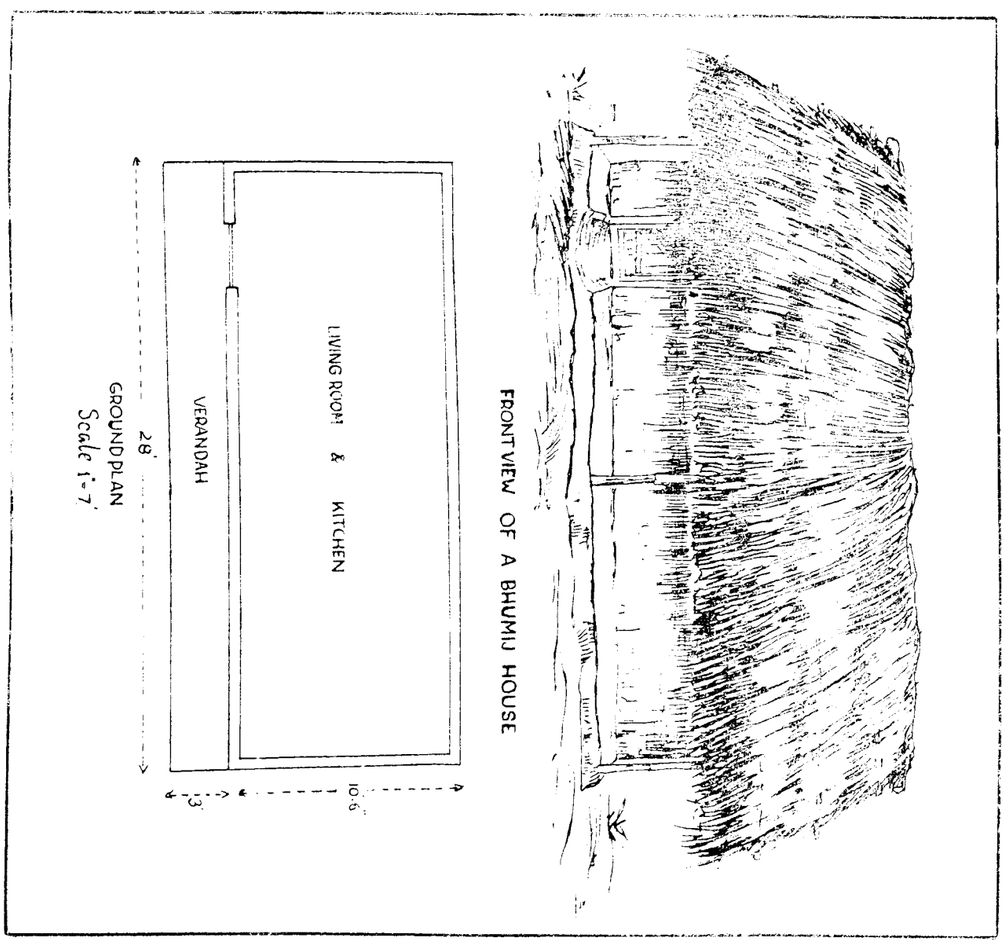

LAY OUT OF VILLAGE NUAGOLABANDH
(NOT TO SCALE)
BAY OF BENGAL
REFERENCE
TANK, WELL, SCHOOL
SIVA TEMPLE, GRAMA DEVATI TEMPLE
BURIAL GROUND, SAND DUNE
HOUSES OF COMMUNITIES
NOLIA, SUNDI, LIARI
BRAHMIN, DANDASI

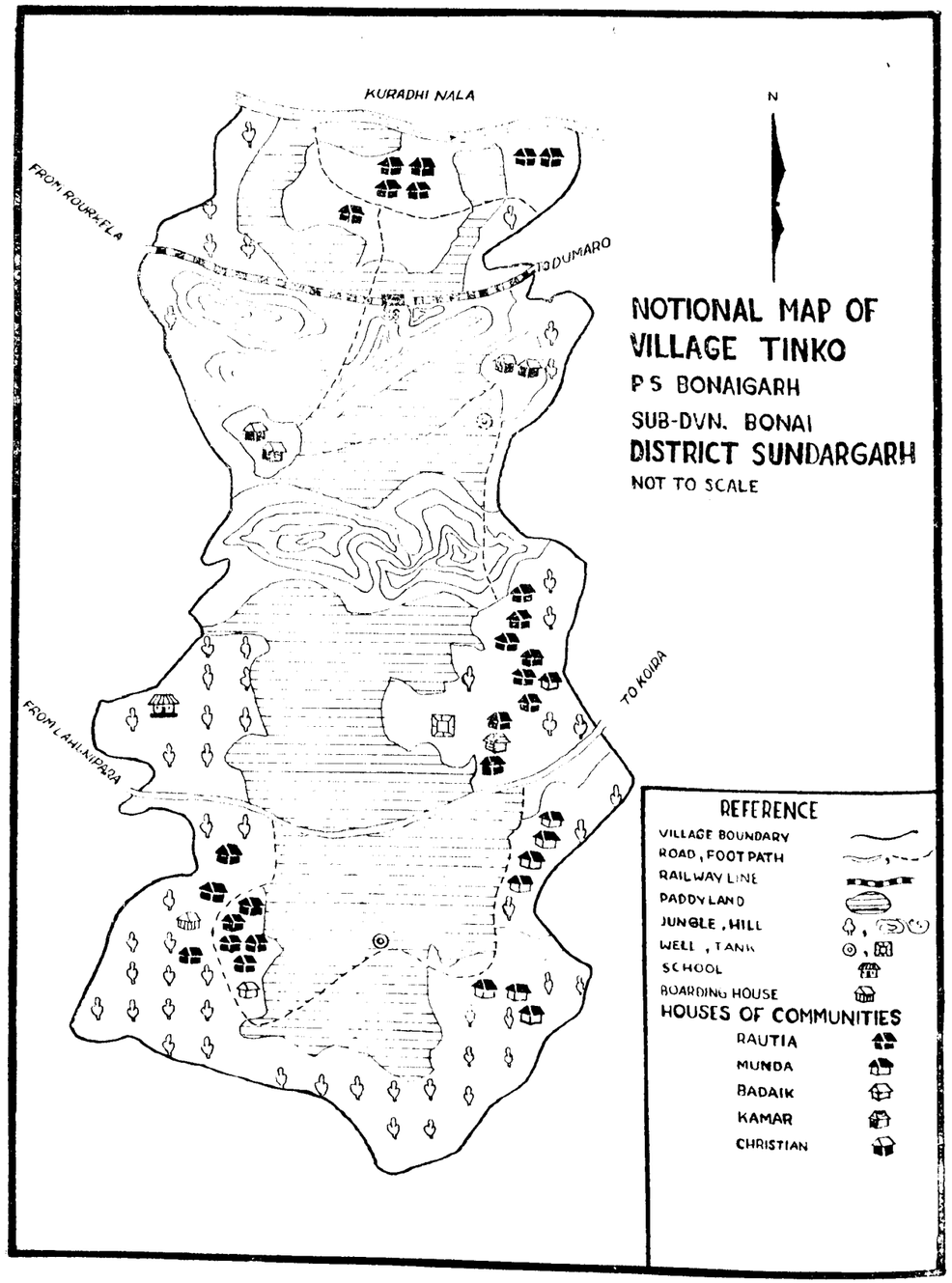

A TYPICAL NOLIA HOUSE
KITCHEN
STORE ROOM
BED ROOM
VERANDAH
24'
8'
GROUND PLAN
Scale 1"=4'

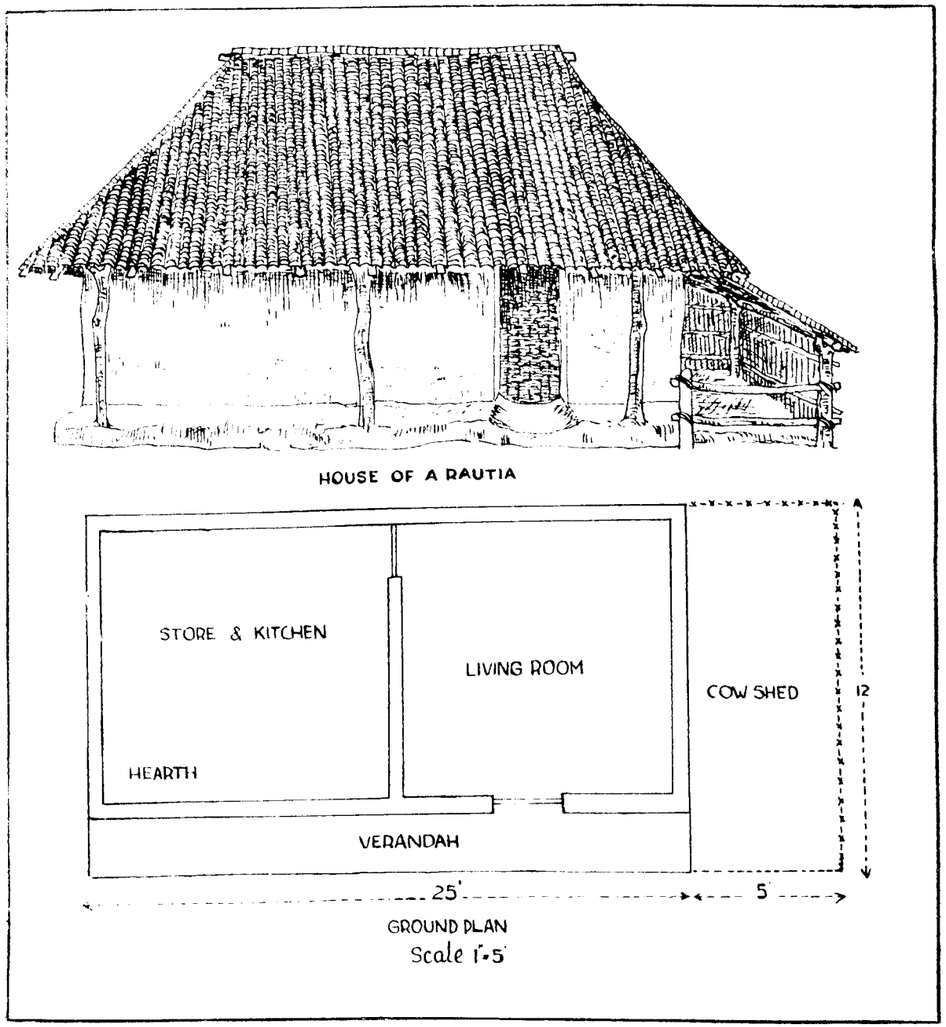

NOTIONAL MAP OF
VILLAGE DANLA
P S KANJIPANI
SUBDVN. SADAR
DISTRICT KEONJHAR
NOT TO SCALE
N
TO KEONJHAR GARH
FROM BANSPAL
REFERENCE
VILLAGE BOUNDARY
BILA (WET LAND), GUDA (UPLAND)
ROAD, FOOT PATH
FOREST, HILL, STREAM
WELL, TANK
SCHOOL, COMMON HOUSE
VILLAGE TEMPLE
DWELLING HOUSE
BHUIYA, KOLHA
PANO, GOUDO
TELLI, KAMAR, DHOBA

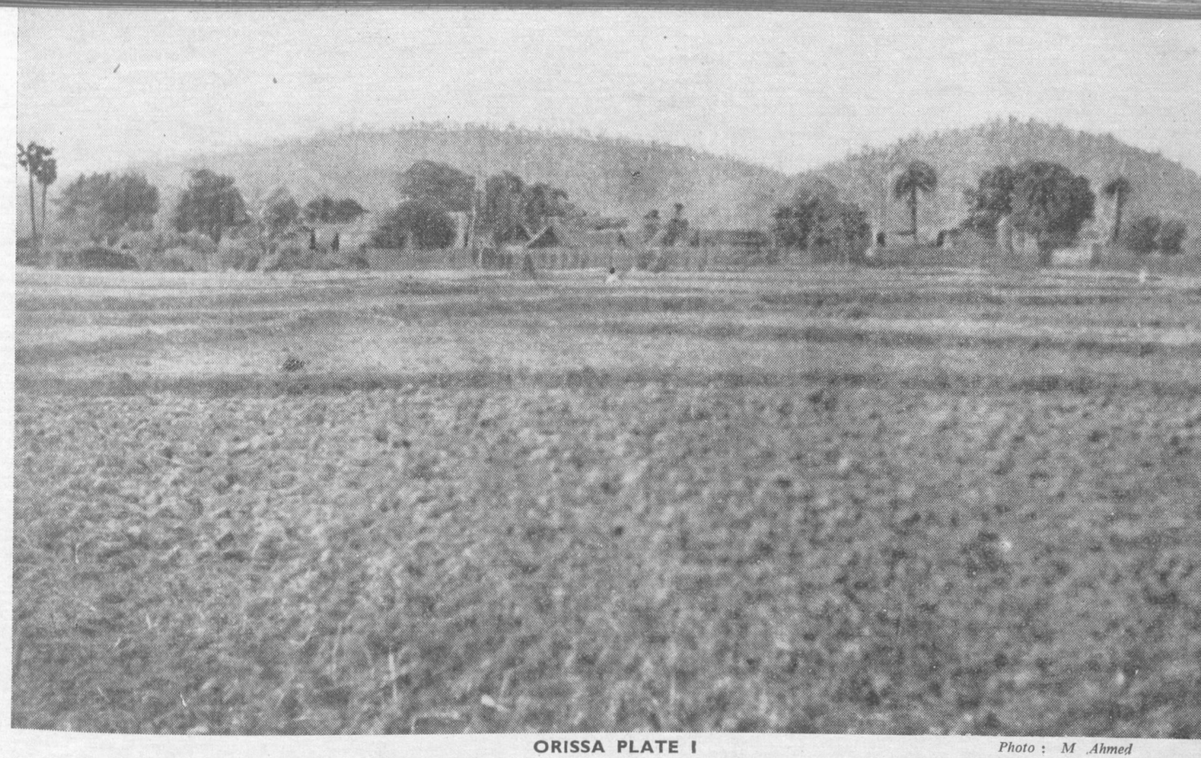

HOUSE OF A BHUIYA
VERANDAH
12'
25'
GROUND PLAN
Scale 1" = 7.1"


VILLAGE RANGAMATIA
P S BARIPADA
SUB-DVN. SADAR
DISTRICT MAYURBHANJ
SCALE 5½" = 1 MILE
N
KUNDAL BANI
JAGANNATHPUR
FROM BALIDIHA
FROM PITHABATA
SAPANICHUA
BALIDIHA NALA
RANGAMATIA NALA
JAIBILLA
TO BIRPADA
BADSUL
REFERENCE
VILLAGE BOUNDARY
WETLAND, DRY LAND
GRAZING GROUND, FOREST
TANK, WELL
ROAD (P.W.D), VILLAGE ROAD
SCHOOL, MARKET
DWELLING HOUSE:—
BHANDARI, MAHALI, CHANDAN, PATROTANTI


FRONT VIEW OF A BHUMIJ HOUSE
LIVING ROOM & KITCHEN
VERANDAH
28'
10'-6"
3'
GROUND PLAN
Scale 1"=7'


KURADHI NALA
FROM ROURKELA
TO DUMARO
TO KOIDA
FROM LAHLAIPADA
N
NOTIONAL MAP OF
VILLAGE TINKO
P S BONAIGARH
SUB-DVN. BONAI
DISTRICT SUNDARGARH
NOT TO SCALE
REFERENCE
VILLAGE BOUNDARY
ROAD, FOOT PATH
RAILWAY LINE
PADDY LAND
JUNGLE, HILL
WELL, TANK
SCHOOL
BOARDING HOUSE
HOUSES OF COMMUNITIES
RAUTIA
MUNDA
BADAIK
KAMAR
CHRISTIAN


HOUSE OF A RAUTIA
STORE & KITCHEN
LIVING ROOM
COW SHED
HEARTH
VERANDAH
12
25'
5'
GROUND PLAN
Scale 1"=5'



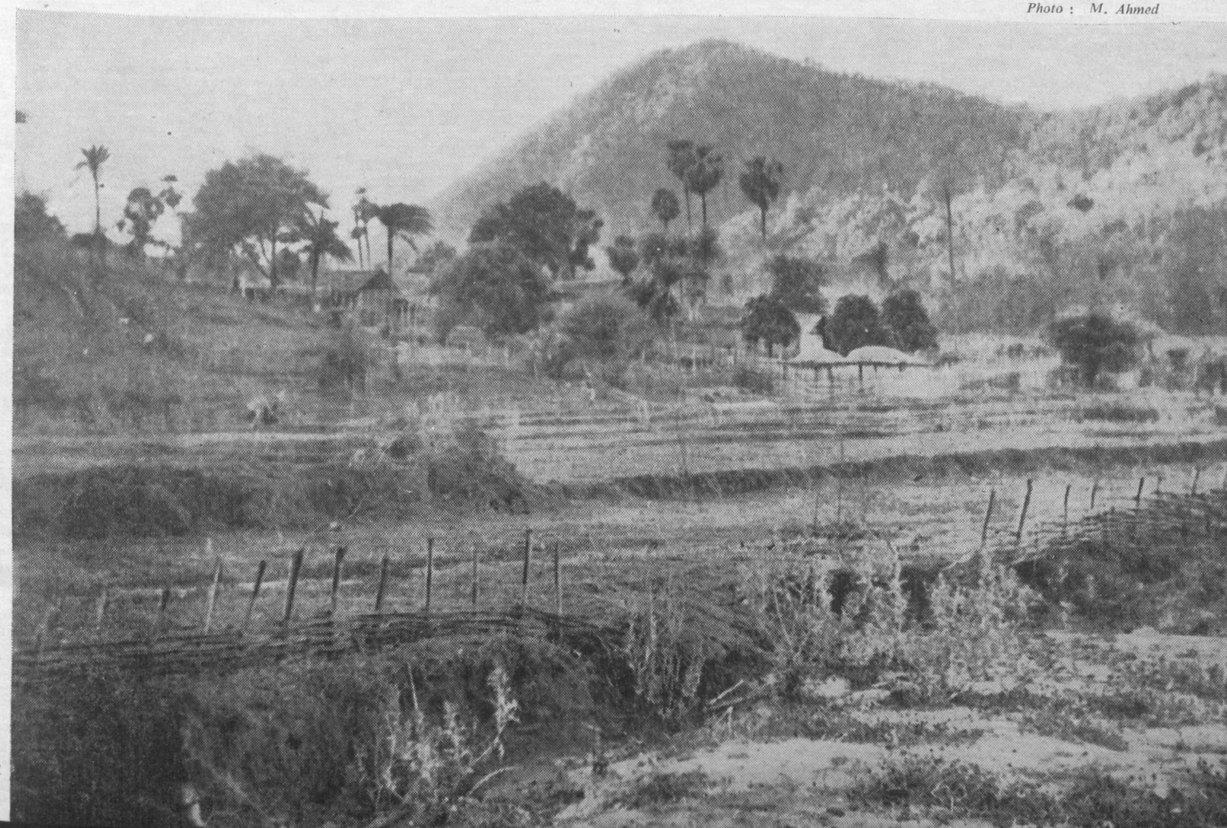
ORISSA PLATE I *Photo : M Ahmed*

VILLAGES IN INLAND REGION OF ORISSA

Above : A distant view of village Penthabahal in district Sambalpur, which is a village of iron-smelters and cultivators. It is located at the foot of a hill. The extensive paddy lands in the fore-ground give sustenance to the cultivators of the village while the hillock in the back-ground provides timber for making charcoal and iron-ore for smelting purposes.

Below : Village Tarva in district Dhenkanal is situated on the slopes of a hill. The paddy lands which are spread around the village site are also on a sloping surface : ridging and terracing ensure retention of water during the cultivating season. The extensive reserved forests which surround the village on all sides provide employment for the villagers in such work as cutting of trees, removal of timbers, building of forest roads, etc.

Photo : M. Ahmed



ORISSA PLATE II

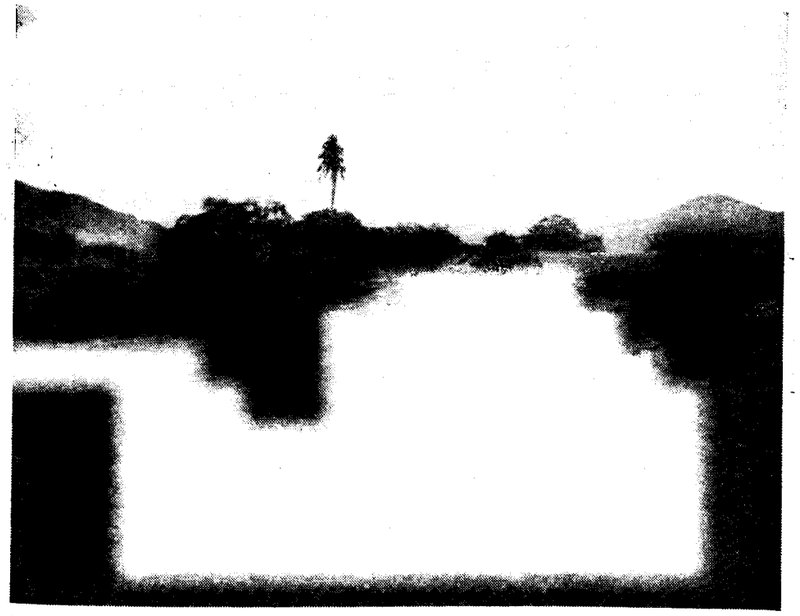
VILLAGES IN INLAND REGION OF ORISSA

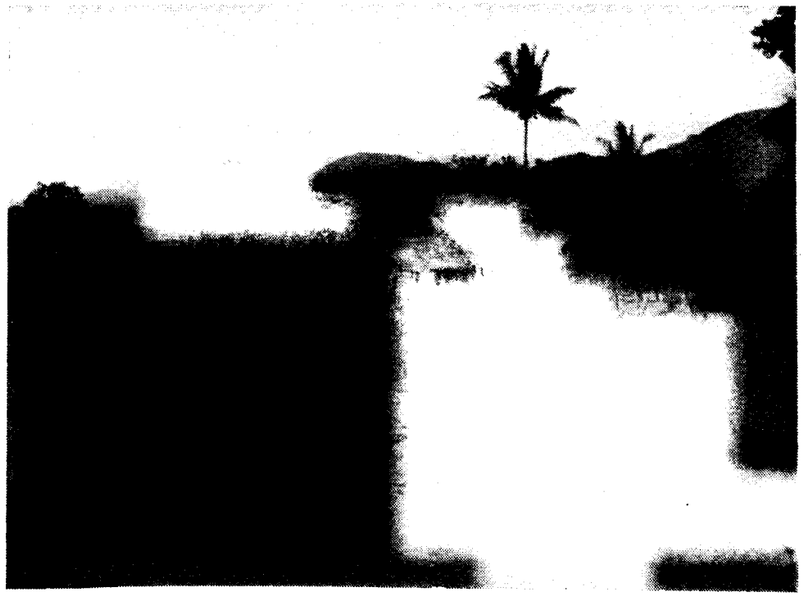
Photo : M. Ahmed

Above : Village Khaira in district Sambalpur is in the extensive plains of Bargarh subdivision. A range of hills, however, is visible at a distance of 2 miles. Roofs of residential houses are mostly tiled but some are also of straw. The villagers are fond of kitchen gardens adjoining residential houses. Cultivation is prosperous and the village is becoming congested with houses.

Below : The outskirts of village Sonepur in district Koraput maintain a tamarind orchard close to the village site. There are so many trees that it is possible to allot a tree or a number of trees to each family in the village. Tamarind is an important item in the daily food of the villagers and is available from these trees. The surplus is sold in the market.

Photo : M. Ahmed





Photos : M. Ahmed

A VILLAGE IN GANJAM DISTRICT, ORISSA

Two different scenes of village Chandragiri in district Ganjam. The village is situated in the Agency tracts of Ganjam district which used to be unhealthy, inaccessible and thinly populated some time back. Its characteristics are fast changing particularly with the development of communications and other resources. Now the village is motorable directly from the district headquarters which is 65 miles away. Among the villagers, there are members of Scheduled Castes, named Pan, most of whom are converted to Christianity. Some Tibetan refugee families have also settled there in recent years.

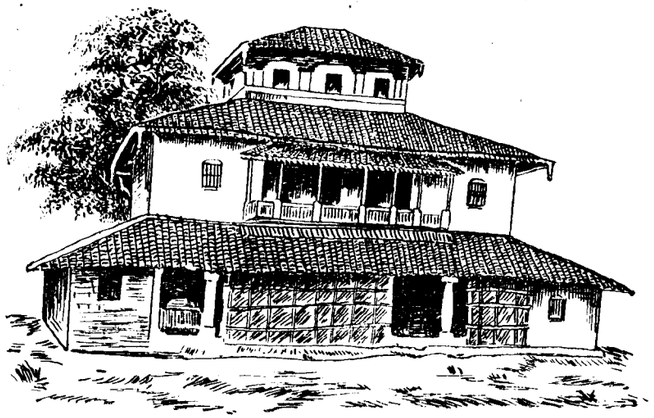
Photo : M. Ahmed

VILLAGES IN COASTAL REGION, ORISSA

Above : The view of a lane in village Saraswathipur in district Puri. The village is noted for luxurious growth of cocoanut trees. Each family owns cocoanut trees, from one or two in case of a poor family to a large grove in case of a wealthy family. While cultivation of paddy provides staple food for the year, the odd expenses are met from the sale proceeds of cocoanut.

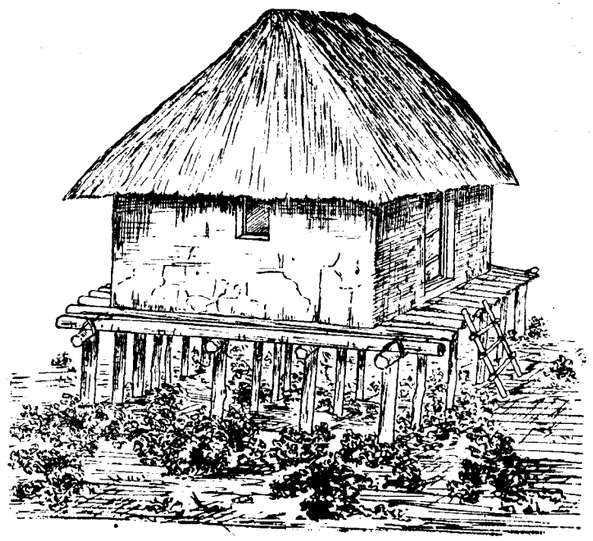
Below : Scene of a village street in Sukinda PS, Cuttack district. All the roofs are thatched, but thinly, requiring annual replacement. Some villages in the coastal region grow clumps of bamboo for making frame-work for the thatch. This particular village has, however, enough to spare for elaborate fencings.

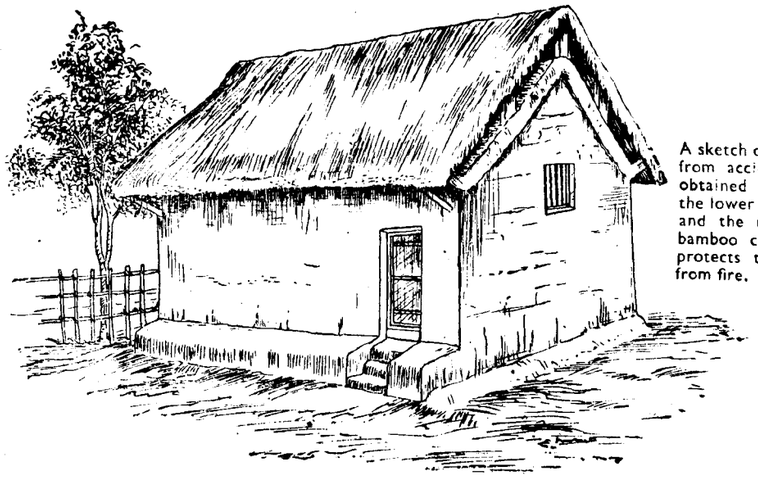
Photo : M. Ahmed



A sketch of a multi-storeyed building in north-western districts of Orissa. Foundation is not deep because the soil is rocky ,but stability is obtained by building upper storeys in successive smaller sections, by cutting off from all the four sides. The ground-floor keeps cool in summer which season is generally oppressive in these districts, while the uppermost storey is good for sunning in the extreme winter weather.

Sketch of a house in a flooded area in the coastal region. The plinth is high above the ground level, erected by a number of wooden posts or timber planted on the ground. The floor of the house is built at a height varying from 3 to 5 feet according to the usual flood level in the locality. The walls are light and thin, locally called ' jhati-mati ' walls, made of twigs with earthen plaster on either side. The thatch is also light being made of a thin layer of straw on bamboo frame.





A sketch of a typical house in localities suffering from accidental fire. Protection from fire is obtained by making double roof over the house, the lower one being thickly plastered with mud and the upper one being the usual straw and bamboo combination thatch. The upper roof protects the house from rain and the lower roof from fire.

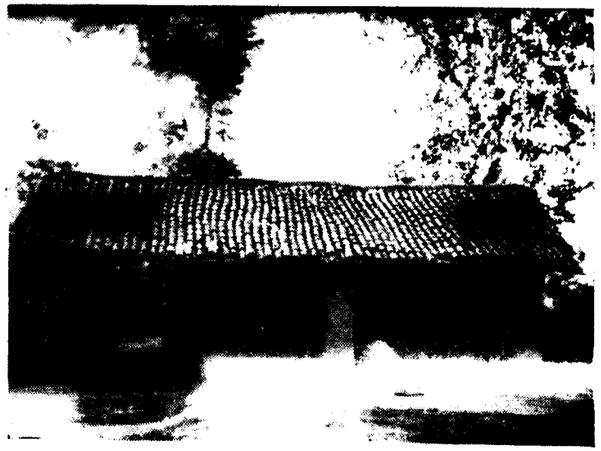


Photo : M. Ahmed

A typical house in north-western districts of Orissa. It has a rickety tile-roof, low plinth and no window. A tile-roof is more suitable than a straw-roof in localities afflicted with fire accidents. Such accidents are frequent in the inland region of Orissa.

A typical house of a pahi-praja (non-resident cultivator) in Central Orissa. The paddy lands provide straw for the roof while the extensive bamboo plantation in the Reserved forests nearby enable walls to be constructed of bamboo cheaply and conveniently. The investment is small, and the whole structure can be abandoned as soon as cultivation work is over. A pahi-praja is a cultivator of lands in an uninhabited village. The village in which the cultivated lands are located has no permanent inhabitants. The cultivator comes there in the beginning of the season, erects a temporary house as in the photograph, lives there for 4 months or so till the harvest is made, and then departs.

Photo : M. Ahmed

Photo : M. Ahmed

The house of a Harijan (Scheduled Caste) in Bolangir district (Inland Region). It has a low plinth. The height of walls is four feet only. There is no window, but ventilation is obtained by leaving a gap between the wall and the roof. The house contains no valuables and so the meagre structure is not intended to ensure security against theft.

Photo : M. Ahmed

A typical house in a re-habilitation colony in Dandakaranya (Koraput district). The roof is quickly built of corrugated iron sheets, while walls are improvised by bamboo screens fitted against frames of sized timber. The plinth which is cemented, practically has no height above the ground level as the locality has poor rainfall, and there is no risk of the plinth being inundated.

A single-roomed house made of masonry walls and plinth and of straw thatching.

Photo : M. Ahmed

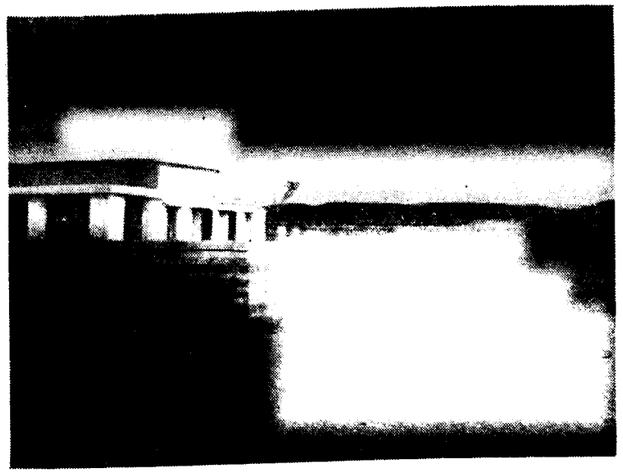


Photo: M. Ahmed

In certain localities of the coastal region, namely, in Khurda, Bhubaneswar and northern Cuttack, laterite stone is available in plenty. The photograph shows a house built of laterite stone but plastered so cleverly as to conceal the building material but the extensive compound walls expose the true character of the material utilised for construction.

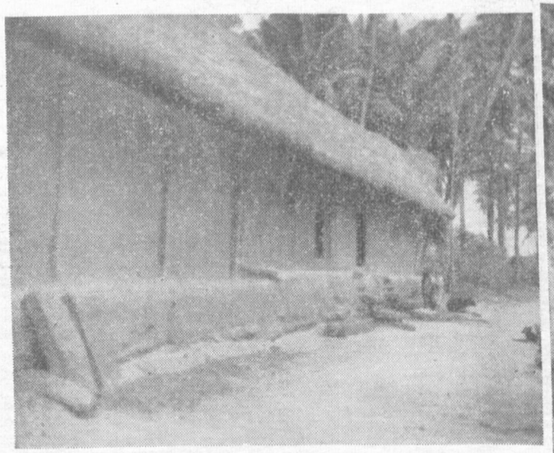


Photo : M. Ahmed

A house of a joint family in Puri (Coastal Region). The need for economy has made the walls and the thatch quite thin. But the plinth is high for protection against flood.

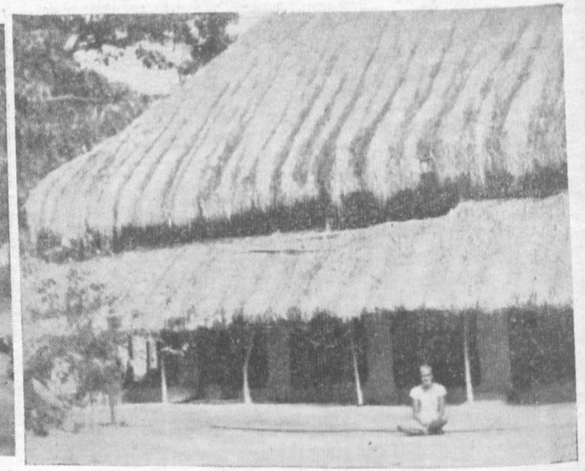
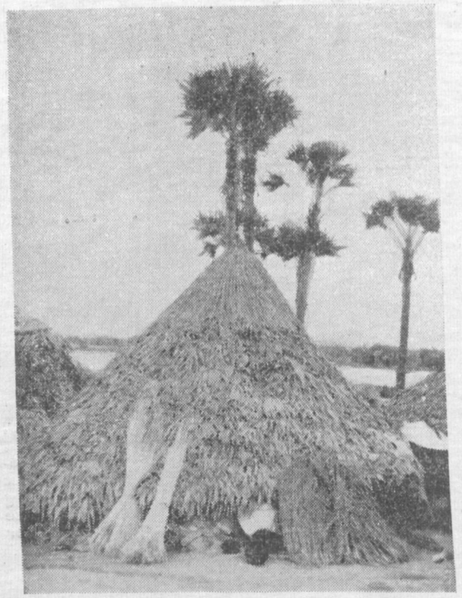
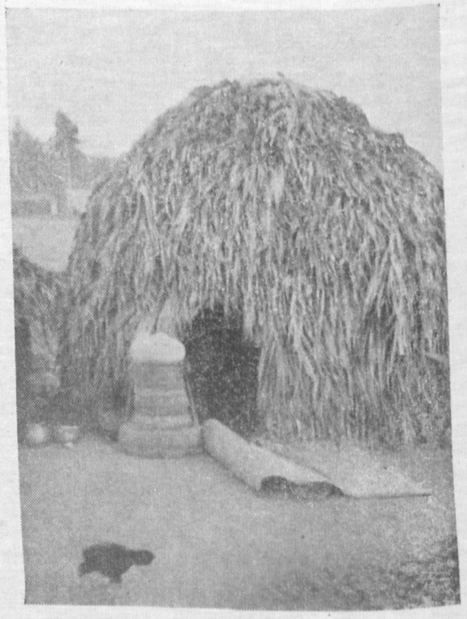


Photo : M. Ahmed

A typical house of a cultivator in Balasore district (Coastal Region). Strong and thick mud walls with elaborate and thick thatch keep the house cool and comfortable.





Photos : M. Ahmed

Houses of pig graziers (Ghusuria Scheduled Caste) in Balasore district (Coastal Region). They are made of a frame-work of twigs covered over with palmyra palm leaves which are available in the locality. The structure ultimately may take the shape of a cone or a dome, according to the builders' choice. There is only one single entrance which is low, requiring persons to stoop when entering or leaving.

PUNJAB

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Independent accounts from various officers who spent years in Punjab villages, make a very interesting reading. They suggest that the basic pattern of Punjab villages has remained unaltered during the last eight or nine decades : and this can be expected in an underdeveloped country where tradition still holds sway. This, however, does not mean that the conditions have remained absolutely static. The two World Wars have had a great educating effect on the rural population in Punjab from where more than half of the Indian Defence personnel were drawn, and which on this account, has been described as the 'Sword Arm of India'. These soldiers after serving in the different war-theatres returned home with broader outlook and fresh ideas. With the money they saved during service they built *pucca* houses, with rat-proof floors, ventilators in walls, and in some cases, chimneys in the kitchen. They introduced the use of furniture of the Western style (chairs, teapoys and almirahs), glass-tumblers and chinaware, and hurricane lamps and even Kitson lamps. In the twenties ' and thirties' power-driven mills made ingress into villages and gradually put the hand- *chakkis* out of use. These introductions relieved the housewives of the drudgery of plastering the houses with cow-dung and mud at frequent intervals and producing *atta* for the daily use, and brought some mirth in rural houses.

The practice of storing foodgrains for over a number of years was given up, because with the improvement in communications local famines became a thing of the past, and with the extension of canal irrigation, droughts did not bring that severe misery. This change, while reducing the losses resulting from long storage, exposed the villagers to the hardships resulting from crop failures. All the same it vacated some space in houses previously devoted to storage of foodgrains and at the same time reduced infestation from rats and insects.

The unhealthy practice of tethering animals and storing animal feed in the same rooms as occupied by human beings at night, has almost disappeared. On the other hand, wherever possible, animals are kept at a little distance from the main residence. Cow-dung is increasingly preserved as manure in pits, outside the *abadi*. The village streets are being paved according to a set programme, and drains are being constructed to carry off the refuse water from houses. With the gradual development of civic sense people will learn to keep the streets clean. There has also been a remarkable improvement in the supply of drinking water, both as a result of Government spending large sums of money for this purpose, and the people devoting better care to the drinking wells. Where the depth to water is not prohibitive and the soil is not rocky, hand-pumps are being installed within the house compounds.

There has been a rapid increase in recent years in the number of institutions in the form of schools, dispensaries, post and telegraph offices, *panchayat-ghars* and community centres. Many shops now stock books and stationery, medicines and several other articles which previously could be bought only in towns.

Electrification is making a tremendous advance. Practically all towns have been electrified. Besides, by March, 1961 some 2,800 out of 21,000 villages in the State had been served with power for light, irrigation and industry. As a result machine-based crafts are expanding out into rural areas and the use of mechanical appliances is becoming popular. This process will gain still further fillip in the near future, since within the Third Five Year Plan 4,000 more villages will be electrified.

As compared with fewer but larger rooms in old houses the new houses have more rooms of moderate size : such houses are easier to maintain and provide better comfort and privacy. The use of bricks, cement and iron is on the increase. Brick kilns are to be seen in larger number in rural areas, where the older men observe greater employment of masons and carpenters for house construction.

As a result of consolidation of holdings, in areas where the holdings are comparatively large the tendency for the farmers to have their abode on farm is on the increase, and in some cases they take alongwith them the farm workers. This is a welcome

change since not only does it enable their families to live in open air but it goes for better looking after of the fields. In localities where the holdings are small, the tendency still persists of huddling together in smaller and smaller apartments, since shifting to the fields means so much less land for farming.

The improvement in roads and linking up of villages with the highways, have stimulated the use of bicycles. This cheap mode of conveyance is put to very good use by the sturdy Punjab villager. He has become more mobile. He now goes over long distances for daily work, transports milk to the town by this contrivance, and also affords a joy ride to his wife and children.

Notes on houses in villages selected for socio-economic survey during the 1961 Census.

Village Tandi, in Lahaul and Spiti District

This village lies on the main Kulu-Ladakh road, inhabited by hardworking people. The climate is marked by extreme cold, and very low rainfall. Out of twenty houses in the village, six are three-storeyed, seven double-storeyed, and another seven single-storeyed. The plinth area of a house is generally 45′ × 40′.

The ground floor of the building, called *po* has generally four rooms which are used for stalling animals, and storing cow-dung and fodder. The second flat, called *nipuri* is used for living. The room called *srelsa* is the sitting place during summer. The room at its back, called *tandoor*, has the family hearth in the centre and a chimney to take off the smoke. The food is cooked and eaten here. The third room is for the guests, and the fourth for the family to sleep. Besides, there is a latrine and a bathroom. The latrine is a small room with a hole in the floor from which excreta drops to the ground in an enclosure. Dry cow-dung and earth is sprinkled on the night soil every day and is removed at the time of manuring the fields. The third storey, called *srumpuri*, generally has two rooms where cow-dung cakes, wood fuel, and grass shoes are stored. It is also used for sleeping during the summer. Some households install a handloom in one of the rooms in the top flat.

The walls are of stone laid in mud mortar and plastered on the inner sides. Wooden rafters are laid horizontally in the stone walls at height intervals of some three feet to impart strength to the walls. Floors in all storeys are *kaccha*, and the plinth is about a foot high from the ground. The height to the ceiling of the first storey is seven feet and that of second and third storeys is eight feet. The roofs are flat since sloping roofs are liable to be blown off by the strong winds in this area. Flat roofs are useful also for spreading grass, grains, vegetables and meat to dry in the sun. Ventilators are not provided as the ceilings are low. The recent houses have glass-panelled windows. The old houses do not have windows, but contain holes in the upper roof for light and air, and are covered up with stone slabs when it rains.

Village Lara, in Lahaul and Spiti District

The area is characterised by extreme cold and dry climate. The various portions of a typical house which is two-storeyed, are :—

(i) *Yokhan*, the ground floor, for living in winter.

(ii) *Yarsa*, the general name for the upper storey for living in summer.

(iii) *Chhum*, the store room in the ground floor.

(iv) *Trah*, the room for hey and grass.

(v) *Makhang*, a hall in the upper storey for guests, and for community drinking.

(vi) *Chhokhang*, a room usually in the upper storey for the deity.

(vii) *Chhaksa*, the latrine in the upper storey, it is a small room of 6′ × 4′ with a hole in the floor. It has a similar room on the ground floor where cow/mule-dung etc., is collected. The lower room has an opening about 2′ high from the floor, which is closed temporarily with stones during winter.

(viii) *Hom*, an open space on the upper storey.

The houses face the east in order to catch the rays of the rising sun, provided the lay of the land permits. There is no arrangement for bathing. The rooms are ordinarily 10′ × 8′ except the *makhang* which is 16′ × 15′. The ceiling is some six feet high. The roof usually consists of shrubs arranged on a log of poplar tree, with a thick layer of earth on the top. Ventilation is through a square opening in the roof, and cross ventilation is scrupulously avoided. Floors are *kaccha*, and the plinth is two or three feet raised from the ground.

Village Dalash, in Kangra District

This village lies at an elevation of some 6,000 feet in wooded mountains. Most of the houses are two-storeyed and face east. Each storey has two rooms some 30 feet long and 15 feet wide. The two rooms on the ground floor are used for tethering cattle, and storing fodder and fuel, respectively. The second storey is called *pand* with two rooms for living. The *pand* has a projection used for sitting in the summer. A trench hearth (*githa*) is dug in the centre of one of the two upper rooms, and is paved with stone-slabs and walled with earth and cow-dung. Charcoal is burnt in this hearth in winter for heating. Some houses have a middle storey which is used mainly for storing domestic goods and for sleeping in winter. The kitchen might as well be on the top of the second storey. All houses have small courtyards in front, paved and walled with stone-slabs.

A small wooden staircase is fixed outside the house leading to projections of the upper flat.

Buildings have a plinth of about one foot. Earth and stones are spread on the ground floor, but in the case of shops the floor is made of wooden planks. The floors in the upper storeys are also of wooden planks. The slanting roof consists of beams supporting rafters and thick slate slabs. The height to the roof varies from 16 to 24 feet.

Only eight houses in the village have separate bathrooms. There are no latrines in the buildings.

Village Karnathu, in Kangra District

This village belongs to the *Gaddis*, who specialise in sheep rearing in high hills. It lies on a slope studded against a high mountain which receives heavy rain and is very cold in winter. In most of the hill villages the houses are scattered, but in this village they lie on a small area, with side-walls touching one another. Houses are two or three-storeyed, with only one room in each storey. The room on the ground floor is called *iwan*, on the first floor *mandae*, and *borh* on the second floor. Besides, there is an attic on the top storey below a triangular roof. *Iwan* is generally constructed on the lower slope of the hill side so that if viewed from the back of the building, *mandae* or *borh* appears to be the ground floor. *Iwan* is generally used for tethering livestock, and stacking fodder and firewood. In new constructions which have separate arrangements for stalling animal, away from the residential building, *iwan* is used as men's room where they sit with friends and guests. In some houses of recent construction, a room called *obri* is partitioned off *iwan* and used for storing clothes and food-grains. *Mandae* is used for the same purpose as *obri* in *iwan*. A wooden staircase is fixed in *iwan* and *mandae* leading to upper storeys. *Borh* is really the living place. A corner or *borh* is used as kitchen and dining room. The facade of *borh* extends outwards and contains two or three windows for light and air, and it is here that members of the family mostly sit and sleep. *Talri*, the attic is used for keeping spare luggage.

The dimensions of the rooms are generally 25′ × 15′. Plinth is about four feet high. Floors are *kaccha* except in ten houses. Courtyards and streets are paved with stone slabs. The height to the top roof from the ground floor is between 19 and 25 feet, according as the house is two or three-storeyed. Houses have windows but no ventilators. An adjustable slate piece in the roof serves as the sky-light.

No house has a regular bathroom or latrine. A corner of *borh* or *mandae* is paved with stones for taking bath and an outlet is provided in the wall for outflow of water. The first, second and third floors are made of unsawn rafters overlaid with *sarkanda* and earth, respectively. The top roof is made of stone-slates laid slantingly on bamboo sticks and wooden beams. Walls are made of stone and mud while windows and projections are of *chil* (*Pinus longifolia*) or *tuni* (*Cederla serrata*).

Village Chadhiar, in Kangra District

This village is located on the top of a cliff, not very rainy, but very windy. The houses are scattered in small groups, some down and some up the slope. They are built of sun-baked bricks; stones are used in the foundation. Roofs are of rectangular slate slabs. Almost all residential houses are double-storeyed. On the ground floor there are two rooms, known as *uan* and

obri; the former is bigger of the two. The upper storey consists of only one big room known as *bour*. *Uan* is more airy and is the main living room. *Obri* is used as a store; it is dark since the door from the *uan* is the only passage for light and air.

The stair case is fitted in the *uan Bour* is put to various uses, the most important being to cook and eat meals. During winter some members of the family sleep in it also.

Village Dharamkot Randhawa, in Gurdaspur District

This is an old village, a part of which was washed away by the Ravi, and has been rebuilt with Government help, on a more suitable spot. A majority of the inhabitants follow business and crafts, and the village consequently has an urban look.

All the houses are *pucca*, but mostly single-storeyed. The higher castes—Khatris, Brahmins and Rajputs—have spacious houses consisting of five to as many as ten rooms : one used as drawing room, the other as kitchen : the third as a store or stock room, the fourth for cattle, the fifth for fodder, and the other rooms for living. Most houses have separate compounds with a big gate. Some houses have a *deodhi* or portico, and most of them have verandahs on the two adjacent or parallel sides of the courtyard inside the house.

The Jat Sikhs are comparatively poor and their dwellings contain only 3 to 6 rooms, half of which are occupied by cattle, fodder and agricultural implements. The houses of the Christians and Mahashas, though *pucca*, consist of one to three rooms, without a verandah.

The village is electrified and it is only 20 per cent of the houses mostly of scheduled castes, which do not use electric light. There is a growing tendency for building *pucca* houses. The new site has houses with open compounds, verandahs, and bigger rooms with windows and ventilators. In the old hamlet the houses are in narrow zig-zag lanes, and are built of small-sized bricks, laid in lime and mortar, and generally have no open compound. The old buildings are generally double or triple-storeyed, but the new houses are single-storeyed. The front portions of the old buildings usually have paintings of human figures, animals, deities, and creepers, which have been discarded in new houses.

Village Gaggar Bhana, in Amritsar District

This is a canal-irrigated village in the plains, of Sikh Jats. The village habitation has a cluster of adjoining houses. The main entrance to a house leads into an open courtyard with rooms across or along one side. There is a verandah in front of the main living room called *suffa* or *dalan*. Rooms of the size of 10′ × 15′ or 12′ × 12′ are constructed behind the *suffa*. *Suffa* is double the size of these rooms. Cooking is done in one corner of the courtyard adjoining the verandah, and is partly sheltered.

The houses of the Mazhbis and other menial classes are small and lack in comfort. They have neither windows nor ventilators. The residential house of a poor farmer consists of one to two rooms of the size of 10′×15′ or 10′×12′ a *suffa* (hall) in front of the rooms, with or without verandah, but a courtyard. Cooking is done in one corner of the courtyard in a partly roofed shelter or in the open.

The well-to-do agriculturists live in more spacious and better type of houses of *pucca* bricks. There are two to three rooms of the size 15′ × 15′ or 12′ × 15′ each with a verandah in front, and the *suffa* (hall). Two doors are provided to enter the *suffa* and one window is fitted in the middle of the side wall to admit air and light. Roof holes are kept in the back rooms to admit light. A room of 15′×12′ with or without an open verandah is generally constructed on the upper storey approached by a staircase or a wooden ladder. Besides, there is a separate kitchen and store in one corner of the courtyard.

Facilities for taking bath exist only in a few houses. Everybody, irrespective of age, sex and caste, goes for answering the call of nature to the fields and bathes in the canal except during winter.

Separate arrangements for tethering the cattle in *baras* or cattle-sheds adjoining to the residential house are made by the well-to-do farmers. More frequently the outer corner of the family courtyard is used for this purpose.

There are in the village 306 residential houses, out of which 193 houses are built of clods of mud dug out from the village ponds. Th village was elec rified in 1958, but only twenty household s have obtained connections so far. Hurricane lanterns are

the chief means of lighting the houses. Fifty new residential houses have been constructed during the last ten years. Out of these newly built houses, ten are *pucca;* nine are constructed of mixed material (mud and bricks) and thirtyone are entirely mud walled.

There is a marked difference between the old and new type of dwellings. *Suffa* (hall) in the old type houses is being replaced by two smaller rooms. In new houses the rooms are constructed along the side of the courtyard and not behind it to admit air and light in the back rooms. In new houses provision is also made for a kitchen, a bathroom and a drawing-room. The use of iron and cement is on the increase.

Village Ladwal, in Kapurthala District

This small and backward village lies in a riverain tract. Thirtyone households live in 29 houses. There is only one *pucca* house, 26 are *kaccha,* and two are grass huts. People do not make *pucca* houses because of the fear of floods which became an annual feature from 1954 to 1958. The solitary *pucca* house was constructed in pre-partition days. Out of thirty-one households, thirteen live in one-room dwellings, nine in two-room, seven in three-room and two in four-room dwellings.

The houses are plastered with mud twice a year, once before and then after the rainy season. The plinth is level with the ground but in some cases it is higher by about a foot.

Village Tanuli, in Hoshiarpur District

This village belongs to the Jats and *Ramgarihas*. A portion of its cultivated area has been laid waste by the hill torrents (*chos*). The houses are flat roofed and built of bricks, cement and mud. Generally, a verandah is constructed in front of the rooms and a kitchen is attached to the verandah. There are two or three rooms, besides a *baithak,* with the well-to-do families. The farmers of moderate means have only one room of 15′×10′, with a verandah in front and used also for cooking. Six well-to-do Jat families have constructed double-storeyed houses. There is only one room and a verandah in the upper storey.

The *Ramgarihas* are mostly carpenters and they are fairly in large number in this village. Their houses are better planned because of their association with house construction. The houses of eight families have separate bedrooms, drawing-rooms, and stores. The room on the upper storey is primarily for the guests. The floors of their houses are cemented, and built on a high plinth to prevent flood water from entering the house.

Out of the total number of 172 houses in the village, 140 houses are *pucca* and 12 houses are double-storeyed. Thirty-two houses are *kaccha* which are of the Harijans. The tendency to construct *pucca* houses is on the increase. Twenty households have installed hand-pumps in their premises, and are provided with bathrooms. However, no house has a latrine.

Village Babehar, in Hoshiarpur District

This village has hot and humid climate. The land is rocky and some of its families have members serving the army. Out of a total number of 129 houses, 76 are used for residence, and of these as many as 70 are *kaccha* and only six are *pucca*. Only one house is double-storeyed, and three houses have brick floors.

An ordinary house occupies 2·5 *marlas* of land (63 sq. yards). On entry through the gate there is generally some open space. Behind it there are two rooms in a row, each of the size 12′×15′. The roofs slope on both the sides and are built from stone slates, *khar* or reeds, tiles, known as *khaprel* or tin sheets. The height to the roof varies from 9 to 12 feet. Some households have separate rooms for animals, but in most cases animals and human beings pass the night together in winter.

The houses, unlike plain houses, are ventilated through the walls, but some have no ventilation at all.

Village Haleemwala, in Ferozepur District

This big village is hot, dry and sandy, and partly irrigated by a canal. All dwellings here are mud-walled and flat roofed. Sufficient open space is provided in front of every house. Rooms are generally constructed in the rear of the compound. More than half of the households live in one-room houses, with *chappras* (huts) in front as additional accommodation for summer. The well-to-do families have two or three rooms of the dimensions of 18′ × 10′ or 15′ × 10′. Temporary cattle-sheds of *sarkanda* are constructed in the compounds in winter and they are dismantled and the

material is burnt as fuel in *tandoors* in summer.

A plinth of one foot is considered sufficient to avoid dampness of *kaccha* floors and to keep out water that collects in the family compounds during rains. The roof is 8 to 10 feet high, and consists of wooden rafters supported on beams with a *sirki* (*munj* mat) a thick layer of *sarkanda* and covered with mud.

All dwellings are single storeyed except one of a *Bauria*, which has a small room on the top. There are only three *pucca* house, six mixed (*kaccha-pucca*) and the rest are *kaccha*. There is no provision for indoor latrines. An enclosure of reeds or *sarkanda* is made in one corner of the compound where ladies take bath.

Village Jogewala, in Ferozepur District

This village is in the cotton growing tract, and of late it has been affected by water-logging. Except for three houses which are of baked brick and cement lining, all buildings are of mud or unburnt bricks. There is one double-storeyed building in the entire village. The houses of Jat or *Ramgariha* Sikhs have three or four rooms with a courtyard behind it. The front room (*dalan*) is used for tethering cattle, or for sitting purpose if a cattle-shed is provided separately. At the rear end of the courtyard are two rooms. One of these rooms contains household goods and agricultural produce and the other is used for living. Utensils are arranged in the wall shelves, and one side of the courtyard near the front room is a covered kitchen. The other side contains a *hara* for simmering milk.

Where the ground level is low, the plinth is raised by three to four feet, otherwise it is only one foot high. Floors are mud-plastered, and only in three *pucca* buildings they are brick laid. Roof is some 12 feet high but with the appearance of water-logging this height is now reduced by two feet in new constructions, in order to reduce pressure on the foundations. The roof is constructed generally of beams and rafters of *kikar* wood which are covered with a thin layer of *sarkanda* reeds and a coating of mud. Only one house has a roof with a lintel, and another four have brick-lined top. In buildings with *pucca* facade iron barred ventilators have been provided, but in the *kaccha* houses a small gap is left in the wall above the doors for admitting air and light.

Out of 83 households in the village, only 7 have regular bathrooms in the houses but none a latrine. *Kaccha* house are plastered twice a year, in *Phagan* and then in *Asarh* *Pucca* buildings are white-washed after two to three years.

The village was electrified recently and one house has got electric connection. Ten houses were constructed during the last ten years and of these three are *pucca*. Even the new *kaccha* constructions are more attractive, mostly built of sun-dried bricks instead of mud clods; their walls are thinner than in old constructions, though less durable. While in the construction of roofs in the old buildings unsawn trunks of tree and unsmoothened branches were used, the roofs of new constructions contain shapely beams and rafters and *sirki*. The new houses have been provided with windows and ventilators.

Village Bara Bhai Ka, in Bhatinda District

This is a progressive village of Sikh Jats. Its climate is hot and dry. It is irrigated partly by a canal and partly by tube-wells, and people have taken to mechanised cultivation and animal husbandry, zealously. The house are lined along the streets. Generally, there is a doorway at the entry of the house, big enough for loaded camels and bullock-carts to pass through. The spacious room along the doorway is generally for the cattle. The courtyard is an essential part of the homestead of agriculturists, used for drying agricultural produce, tethering animals, taking bath, splitting wood and storing the fodder. The residential portion at the back of the courtyard generally consists of only one commodious room called *subat*, and it has a verandah in front of it. In a corner of the courtyard is the kitchen with an enclosure of mud-wall to provide privacy.

In the houses of poor farmers, there is no gate and the courtyard is enclosed by a *kaccha* wall at the back of which are constructed one or two living rooms. It may have a verandah in front of the living rooms and, of course, an open kitchen in the fair weather, the roofs of the dwellings are flat, and for getting up to the roof wooden ladder or mud staircase is provided.

The well-to-do farmers have a separate cattle-shed and an attached room for keeping the animal feed. In residence there may be three or four rooms.

Residential accommodation is inadequate in the case of *Mazhabis*, *Chamars*, *Jhiwars*, *Kumhars* and the barber families. Their houses are constructed of sun-dried bricks or mud, and consists mostly of one room, with or without a verandah. In many cases there is a common courtyard for a group of houses.

Houses lying at low level are constructed on high plinth. *Kaccha* houses have mud-floor, and some *pucca* houses have brick-floor. Ten to twelve feet is the usual height to the roof and perforated cement slabs are fixed in the walls of *pucca* houses, but in *kaccha* houses holes are provided in the roof for air and light. Twenty-one houses (10·1 per cent) have a room in the upper storey : 3·4 per cent of houses are of *pucca* bricks, 30·7 per cent are built of mixed material, and 65·9 per cent are of sun-dried bricks or mud clods.

Sixty per cent houses, numbering 125, have thatched roofs, and forty per cent have baked or sun-dried bricks on the top. The timber used in house construction is of *kikar* (Acacia arabica) and *shisham* (Dalbergia sisu).

People go to the fields to answer the call of nature. Some houses have enclosures around the hand-pump where women take bath, but more commonly one corner of a room is paved with bricks for the purpose. Men bath in the open, in the canal or near hand-pumps.

Kaccha houses are plastered twice a year in the months of *Jeth* and *Kartak*, *Pandoo mitti* (soft clay) is used for white-washing the inside walls of the rooms. *Pucca* dwellings are white-washed generally near the Diwali or on marriage occasions.

In new houses, instead of one big room several smaller rooms are constructed and these are along a side of the courtyard and not at the back which is the usual thing for old houses. Kitchen is now generally built as a regular room. Girders and cement are used to a larger extent, as also *kail* and *deodar* timber. The *sirki* ceiling is being replaced by tiles, and the holes in the roof and walls by regular ventilators and windows.

Village Miran, in Hissar District

This village lies in a hot and dry tract with comparatively large agricultural holdings, so that the families are comparatively better off financially.

There are three main types of dwellings. One type of houses consists of four rooms and a courtyard. The front room is generally 21′ × 12′, and is used as the sitting room and for stalling cattle during winter. Then there is the courtyard (*angan*), a portion of which is partitioned for use as kitchen. A room, next to the courtyard, is the main living-room. Two smaller rooms at the back of the living room are used for keeping household goods and fodder for the cattle. A majority of the families live in such a house.

The second type of house is more commodious, with five or six rooms of different sizes. The front portion of the house has two rooms, one for the cattle-shed and the other a sitting-room. This is followed by the courtyard and at the back is the main living room for ladies called *saal* and it is flanked by two small rooms in which grains and household goods are kept. Such houses are very few.

Both the types of houses mentioned above have flat roofs with mud on the top. A third type of houses has slanting roofs of thatch. The front room with a sloping thatched roof is generally 12 feet wide and 18 feet long. It is followed by the courtyard and then by two rooms of varying size. These rooms also have thatched roof and are known as *khudi*.

Some 36 per cent of the houses have walls built of mud clods. Seven per cent have baked bricks, and the remaining 57 per cent have partly baked bricks and partly sun-dried bricks. 95 per cent of the houses are single-storeyed. Floors are mostly *kaccha*. Roofs are constructed at a height of 12 to 15 feet, and the rooms are fitted with windows and ventilators.

Bricks are prepared by the villagers themselves from clay known as *kali mitti*, which is beaten finely and made into a thick paste with water. It is pressed into a mould and the bricks are laid in the sun to dry. When dry they are then baked in dung-cakes. Alternate rows of bricks and dung are arranged in a pile, and fired. The process of baking is over in a day when the bricks are picked out. They are gene-

rally made in May and June when the weather is dry and villagers have free time.

Construction is undertaken mostly during January, February, and early March—the season when farmers and labourers are free. Compound walls are always made from clods of mud. An improved method is to beat with wooden hammers wet earth thrown in between two wooden planks. Such compact walls are stronger and more durable. The local *jand* and *kikar* provide the required timber, and for better type houses *seal* beams are bought from Hissar or Bhiwani.

Village Kunran, in Sangrur District

Kunran is a prosperous village of Sikh Jats in a hot, dry and sandy tract. It has 166 houses, of which 12 are double-storeyed. 14 per cent of houses have walls of baked bricks; 43 per cent of sun-dried bricks; 41 per cent of clods and in the remaining 2 per cent the walls are made of reeds. Similarly the roofs of 11 per cent houses have baked bricks on the top, 28 per cent have partly mud and partly bricks, 59 per cent have mud plaster, and the remaining 2 per cent have roofs of thatch (chhappar). Fortytwo per cent of the households, mostly containing five persons live in one-room houses. About one-third of the households live in houses having two rooms each. Eighteen per cent of the households live in three-room houses. Seven per cent of the households reside in houses comprising four or more rooms.

The houses touch one another, along narrow and crooked lanes. The entry to about 40 per cent of the houses, chiefly of farmers is through an arched door which opens into a hall. Both men and beasts pass through this one gate, and commonly use this hall.

In some of these halls mangers are provided on one side and on the other side men sleep during winter. Behind the hall is a courtyard, and across the yard there are two or three living rooms for living and for storing household goods and food grains. In one corner of the courtyard the kitchen is provided. When the front hall is used exclusively by human beings, the animals are kept in one of the hind rooms in winter nights. In some houses there is no front room but the gate opens into the compound in front of the back rooms. The artisans and shopkeepers utilise the front rooms of their houses as workshops or shops. The houses of the Muslims and Scheduled Castes have two or three *kaccha* rooms with a small courtyard in front. Three families live in huts built entirely of thatch.

Floors are generally *kaccha* and are given a coating of dung and mud periodically. Only eight houses have brick floors in the sitting apartment of men. In old constructions height to the roof is 12 feet, but in new houses it is usually 10 feet. The roofs are supported on beams and rafters of *beri* (*Zizyphus jujuba*), *kikar* (*Acacia arabica*), *shisham* (*Dalbergia sisu*) or *farash* (*Tamarix orientalix*) covered with *sarkanda* reeds, and earth on the top. In the recent constructions, however, *sarkanda* reeds are substituted by *munj* matting and a covering of burnt bricks. The beams and rafters in some twenty houses support thin planks of wood, and on the top layers of *sarkanda* reeds and earth. Only one house has roof of cement lintel. Windows and ventilators with iron bars fixed in them are a feature of the new houses. In old houses this purpose is served by holes in the roof. These improvised sky-lights are covered with earthen pitches turned upside down to keep off rain and dust storms. In some houses square holes are provided in the front walls just above the entrance gate.

The walls of the *kaccha* houses ar eplastered once a year in the month of June when days are long and people are free from *rabi* harvesting. After the monsoon the walls are given a thick coat of mud and dung from outside, and of a diluted mixture of dung and grey earth from inside. Floors are given a thin plastering of dung and mud twice a month. In *pucca* houses the walls are white-washed after three or four years.

Village Karia, in Mahendragarh District

Karia lies in a backward tract. Prior to Independence the land owners were mostly Muslims who migrated to Pakistan and the allottees from the West Punjab did not find the place comfortable. It has all the characteristics of a desert, and the farmers, mostly tenants of absentee landlords, live from hand to mouth.

The standard of comfort in respect of houses here is very poor. The *kaccha* walled and thatch roofed dwellings do not provide sufficient accommodation to all family members, so some male members take shelter

under *chhappars* which are used also by cattle.

There are 44 residential houses in the village of which only 3 houses consist of 3 rooms and two houses have four rooms each. Out of 28 families of *Saini* community, 15 having strength of 97 persons are poorly housed in single-room dwellings. Eleven families, comprising 43 males and 33 females, have two-room accommodation. One *Saini* family of 10 members has 3 rooms, and another five-member family lives in 4 rooms. Only three families of *Chamars*, out of 16, have housing accommodation varying from 3 to 4 rooms each. Ten families comprising 33 males and 27 females are badly housed in two-room dwellings. Three *Chamar* families consisting of 18 persons, are miserably accommodated in single-room houses. All the residential houses have been constructed on a uniform pattern and are built of mud and sun-dried bricks and have *sarkanda* roofs.

Paoli, a covered gateway where the guests are also lodged opens on the lane. Behind it is a small *angan* (courtyard) on one side of which there is living-room of the size of 15′ × 10′, or 20′ × 8′. A verandah or *chhan* of thatched roof sloping towards the courtyard serves the multi-purpose of chopping fodder, storing firewood and agricultural implements. In some houses, a small enclosure of mud or *sarkanda* is constructed in one corner of the courtyard for cooking. The thatched roofed structure in the upper storey is used for storing firewood and dry fodder. Floors of all the houses are *kacha*, occasionally plastered with mud mixed in wheat straw and dung. All single-storeyed dwellings are constructed of thatched roofs. The average height of single-storeyed houses varies from 8 to 10 feet. The construction materials for the roof are beams, rafters, bamboos, *sarkanda* and strings of *munj*. Windows and ventilators are not provided in the walls, to avoid the scorching heat waves in summer and piercing cold wind in winter. In some houses small venti-holes are provided in the outer walls about one foot below the roof for air and light.

The roofs of single-storeyed houses slope towards the family courtyard, but the double-storeyed houses are of flat roofs at the first floor. Sixteen houses of *Sainis* and four houses of *Chamars* are double-storeyed.

Foodgrains are stored in square shaped mud receptacles, capable of holding 10 to 25 maunds, and are constructed by the housewives in one corner of the living room.

Cattle are generally penned in *paoli* (covered gateway) in winter and rains. Twelve households have constructed separate enclosures for cattle. In summer, cattle are tethered under the shade of trees.

No new house was constructed in the village during the last ten years. Thatched roofs are replaced after five years. There has been no change in the housing pattern during the last twenty years.

Reproduced from Appendix III of the Report Part I, Vol. XV, Punjab & Delhi.

Census of India, 1921

L. Middleton, I.C.S. & S.M. Jacob. I.C.S.
Superintendents of Census Operations, Punjab

MEAN SCALAR DISTANCE

Let us find the mean scalar distance of a triangle.

ABC from the Apex A

The value is given by

$$S = \frac{\int\int r^2\, d\theta\, dr}{\int\int r\, d\theta\, dr} \qquad \text{(A)}$$

integrated over the area of the triangle.

The limits of r are 0 and p sec θ, for $0 < \theta < \beta$

The limits of r are 0 and p sec θ, for $0 < \theta < \alpha$

where α and β are the angles which the perpendicular p makes with the sides AC and AB

Call the area of the triangle A, then

$$\overline{AS} = \int_0^{\beta}\int_0^{p\sec\theta} r^2\,dr\,d\theta + \int_0^{\alpha}\int_0^{p\sec\theta} r^2\,dr\,d\theta$$

$$= \int_0^{\alpha} \frac{p^3\sec^3\theta}{3}\,d\theta + \int_0^{\beta} \frac{p^3\sec^3\theta}{3}\,d\theta$$

$$= \frac{p^3}{3}\left[\int_0^{\alpha}\sec^3\theta\,d\theta + \int_0^{\beta}\sec^3\theta\,d\theta\right]$$

Now $\int\sec^3\theta\,d\theta = \int\sec\theta\,d\tan\theta$

$= \sec\theta\tan\theta - \int\tan\theta\sin\theta\sec^2\theta\,d\theta$

$= \sec\theta\tan\theta - \int\sin^2\theta\sec^3\theta\,d\theta$

$= \sec\theta\tan\theta - \int d\theta\sec^3\theta + \int\sec\theta\,d\theta$

$\therefore\ 2\int\sec^3\theta\,d\theta = \sec\theta\tan\theta + \log\tan\left(\frac{\pi}{4}+\frac{\theta}{2}\right)$

Thus $AS = \frac{p^3}{6}\left[\sec\alpha\tan\alpha + \sec\beta\tan\beta + \log\tan\left(\frac{\pi}{4}+\frac{\alpha}{2}\right) + \log\tan\left(\frac{\pi}{4}+\frac{\beta}{2}\right)\right]$

$= \frac{p^3}{6}\left[\sec\alpha\tan\alpha + \sec\beta\tan\beta + \log\tan\left(\frac{\pi}{4}+\frac{\alpha}{2}\right)\tan\left(\frac{\pi}{4}+\frac{\beta}{2}\right)\right]$

If the triangle is isosceles $\alpha = \beta$, and the mean scalar distance is then

$$S = \frac{p^3}{3A}\left[\sec\alpha\tan\alpha + \log\tan\left(\frac{\pi}{4}+\frac{\alpha}{2}\right)\right]$$

Now we have for triangles formed by joining the terminals of a side to the centre the following values of α

Figure	α	sec tan α	log tan $\left(\frac{\pi}{4}+\frac{\alpha}{2}\right)$	sum of colums 3 & 4	$\frac{P^3}{A^2}$	$\frac{3\bar{S}}{\sqrt{A}}$	$\frac{S}{\sqrt{Q}}$
1	2	3	4	5	6	7	8
Hexagon	30°	0·666667	0·5493061	1·215973	2·279507	2·771819	0·377197
Square	45°	1·414214	0·8813736	2·295588	1	2·295588	0·382598
Equilateral triangle	60°	3·464102	1·3169577	4·781060	1/2·279507	2·097410	0·403647

Now call Q the whole area of the figure, *i.e.* Q = 6 A for the hexagon.
= 4 A for the square.
= 3 A for the triangle (equilateral).

For a circle from the centre $\bar{S}/\sqrt{Q} = 0{,}376126$.

Returning to the general formula, a graphic method of determining the mean scalar distance, applicable to an irregular boundry, will be developed.

We have,

$$\bar{S} = \frac{\int\int r^2\,d\theta\,dr}{\int\int r\,d\theta\,dr}$$ integrated over the whole area of the figure.

Let O be the point from which the mean scalar distance is to be determined.

Let P be any point in the boundry.
Let Q be a point on OP (produced if necessary) such that.

$OP^2 = L.OQ^2$

Then if 0Q = R, we get $3r^2 = 2L\ R\ \delta\ R$

$$S = \frac{\iint_\delta^a L\,R\,d\theta\,dR}{\iint r\,d\theta\,dr}$$

Where the integrals extend over the outer and the inner curves respectively.

Calling Δ^1 the area of original curve.

Δ^- the area of constructed curve.

$$S = \frac{2}{3}\frac{\Delta^-}{\Delta}L$$

and the mean scalar distance can at once be obtained planimetrically.

Let L be the unit of length on which OP is measured

$$L = \frac{OP^3}{OQ^2}$$

and where OP=0Q we get
L=OP—0Q

In order to calculate graphically the mean scalar distance for any contour from any point, it will suffice to measure the area of two curves in the same unit and multiply two-thirds of their quotient by the distance adopted as unity for which the two radii vectors are equal.

The contours of 4 villages together with the semi-cubical curve for the calculations of the mean scalar distance are shown in the attached diagram. The relative data for these and 2 other villages are given in the statement below, and the figures in column 7 of this statement show that the shape of the village boundary and the position of the abadi, is far from being as favourable to agricultural operations as they might be.

Village	District	Tahsil	Area in sq. miles	0·377197$\sqrt{A}$ Mean scalar distance for hexagonal boundry of (A)	Actual mean scalar distance $\bar{S}a$	% efficiency of shape & position of abadi $\frac{So}{Sa}\times 100$	Remarks
1	2	3	4	5	6	7	8
1 Juglan	Hissar	Hissar	8·7324	1·114617	1·498937	74·3	
2 Rambah	Karnal	Karnal	6·0986	0·931677	1·037739	89·8	
3 Sundah	Ambala	Ambala	1·6473	0·483944	0·579858	83·5	
4 Maina	Rohtak	Rohtak	3·1430	0·657832	0·718351	91·6	
5 Sunet	Ludhiana	Ludhiana	2·8618	0·637840	0·689661	92·4	
6 Ladhemali	Jullundur	Jullundur	1·1372	0·402092	0·445322	90·3	

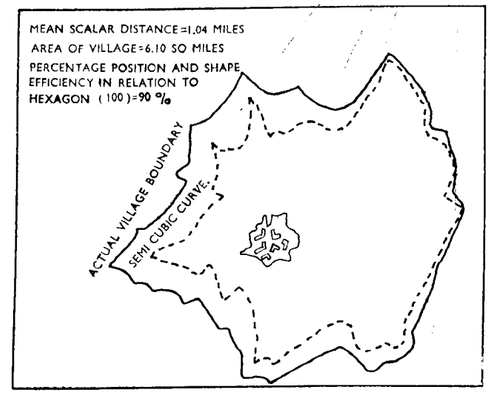
DIAGRAM SHOWING ACTUAL VILLAGE BOUNDARY AND CURVE WHOSE RADIUS VECTOR IS THE SEMI CUBE

OF

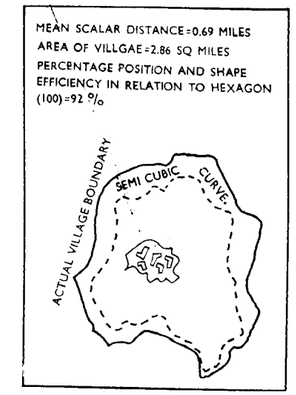
THAT OF THE BOUNDARY FOR THE DETERMINATION OF THE MEAN SCALAR DISTANCE.

SCALE:- 1 INCH TO 2 MILES.

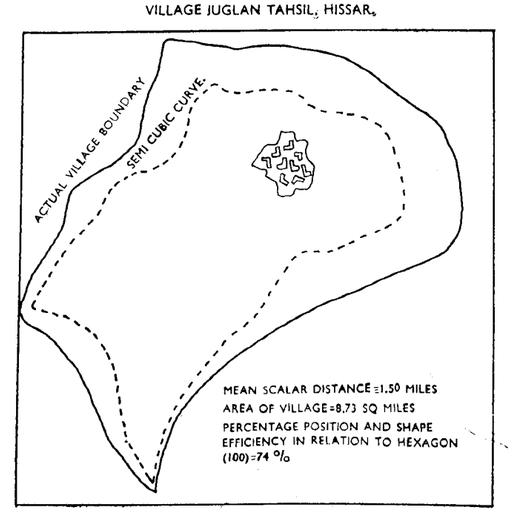
VILLAGE RAMBHA TAHSIL, KARNAL.



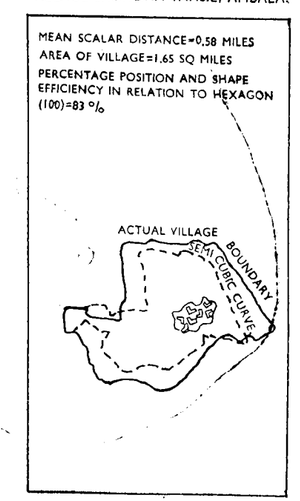
VILLAGE SUNET TAHSIL, LUDHIANA.



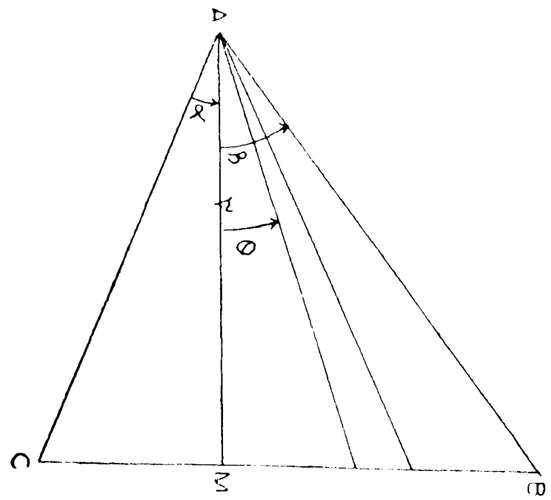
VILLAGE JUGLAN TAHSIL, HISSAR.

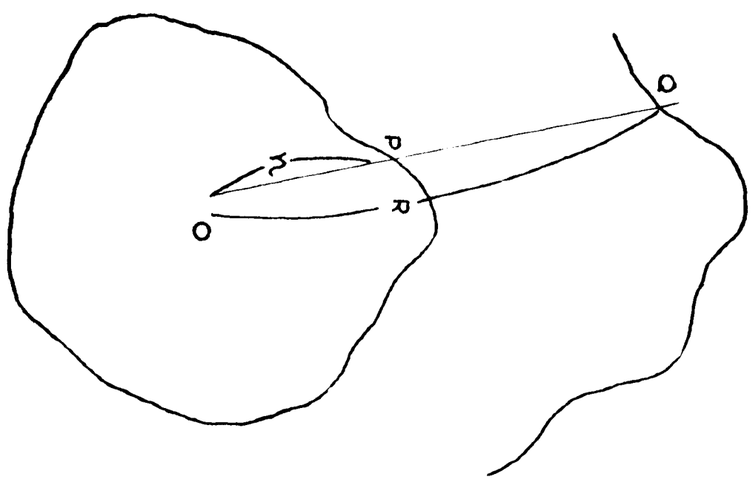


VILLAGE SAUNDHA TAHSIL, AMBALA.



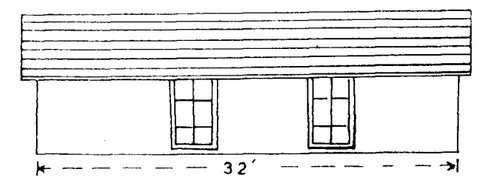
Sketch—*Showing semi-cubical curve for the calculations of the mean scalar distance.*



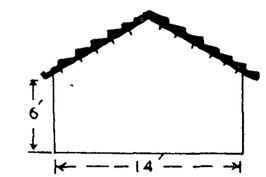


HOUSE OF A SEPOY. MOST OF THE TIME HIS MOTHER AND WIFE LIVE IN IT. ONE BIG ROOM, NEATLY MUD-WASHED WITH THATCH ON THE TOP, CONTIGUOUS TO A CATTLE-SHED WHICH IS ALSO SLEPT IN OCCASIONALLY. THERE IS A SMALL COURTYARD AT THE BACK.

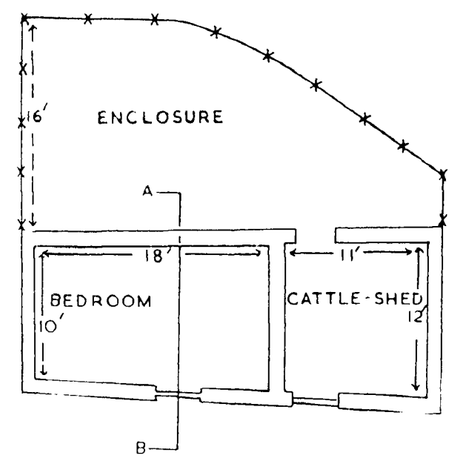
(VILLAGE MAHSA TIBBA, IN SUB-MONTANE TRACT OF AMBALA DISTRICT)



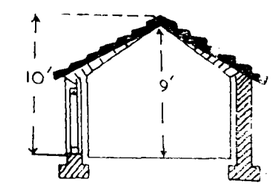
FRONT ELEVATION



SIDE ELEVATION



PLAN

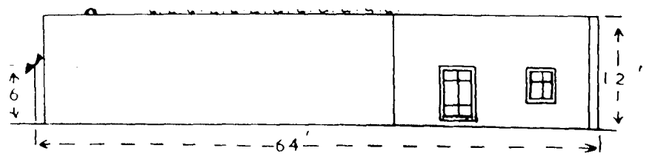


SECTION ON AB

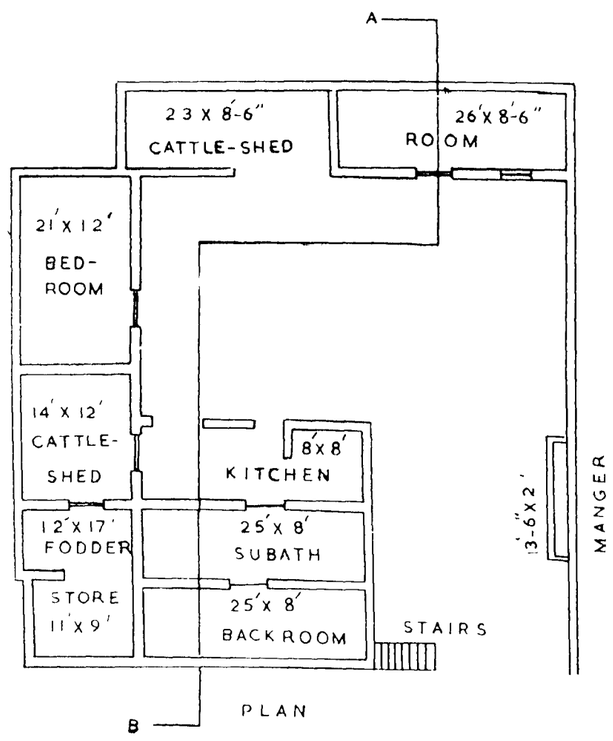
SCALE 1″: 10′

HOUSE OF THE LAMBARDAR AND PANCH OF THE VILLAGE. HIS TWO SONS CULTIVATE 4½ ACRES OF LAND AND ANOTHER SERVES IN THE ARMY. A FAMILY OF 15 PERSONS, FOUR MARRIED COUPLES SHARE 4 LIVING ROOMS, A KITCHEN, TWO CATTLE-SHEDS, A FODDER STORE AND A COURTYARD EXCEPT ONE ROOM MADE OF BURNT BRICKS, THE ENTIRE CONSTRUCTION HAS MUD WALLS AND SLANTING ROOF OF THATCH

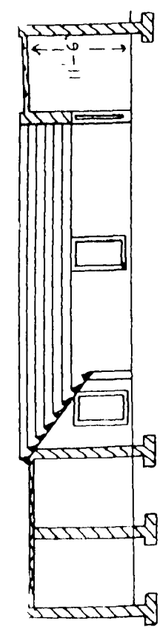
(VILLAGE MAHSA TIBBA, IN SUB-MONTANE TRACT OF AMBALA DISTRICT)



FRONT ELEVATION



PLAN

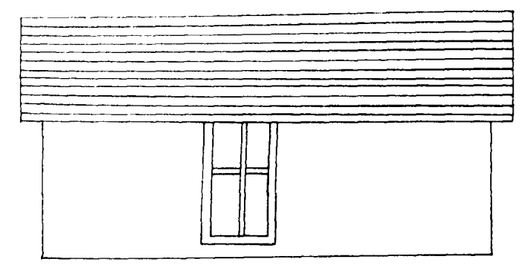


SECTION ON AB

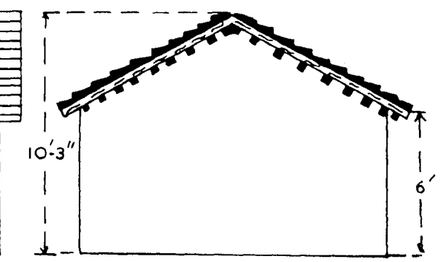
SCALE 1" : 16'

HOUSE OF A CASUAL LABOURER LIVING WITH HIS WIFE, MOTHER AND TWO SISTERS, IN ONE ROOM FLOOR AND WALLS OF MUD AND SLANTING ROOF OF THATCH

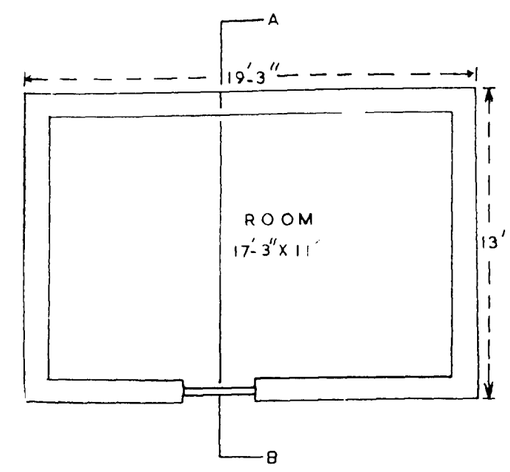
(VILLAGE MAHSA TIBBA IN SUB-MONTANE TRACT OF AMBALA DISTRICT)



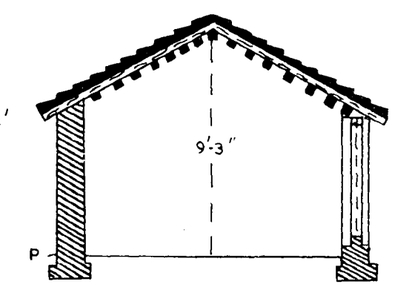
FRONT ELEVATION



SIDE ELEVATION



PLAN

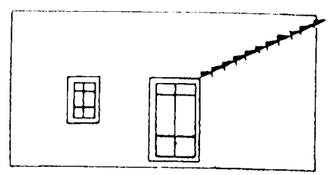


SECTION ON AB

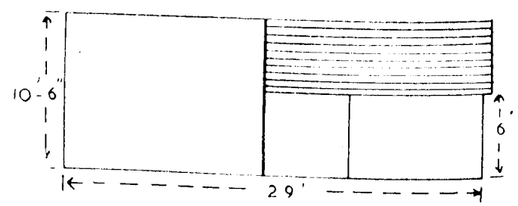
SCALE 1" : 6'

HOUSE OF A SMALL TENANT FARMER. A FAMILY OF 7 PERSONS LIVES IN ONE COMMODIOUS ROOM MADE OF MUD-CLODS AND THATCH, SOME OPEN SPACE IN FRONT, AND A CATTLE-SHED.

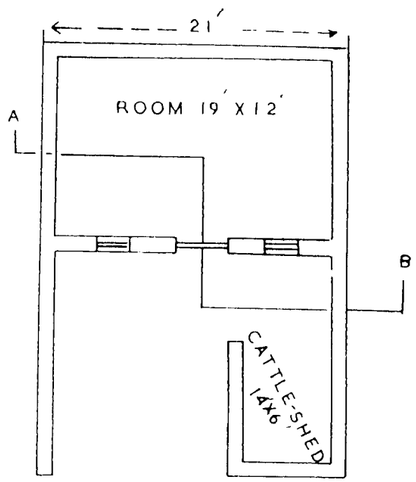
(VILLAGE MAHSA TIBBA, IN SUB-MONTANE TRACT OF AMBALA DISTRICT)



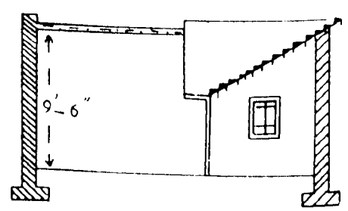
FRONT ELEVATION



SIDE ELEVATION

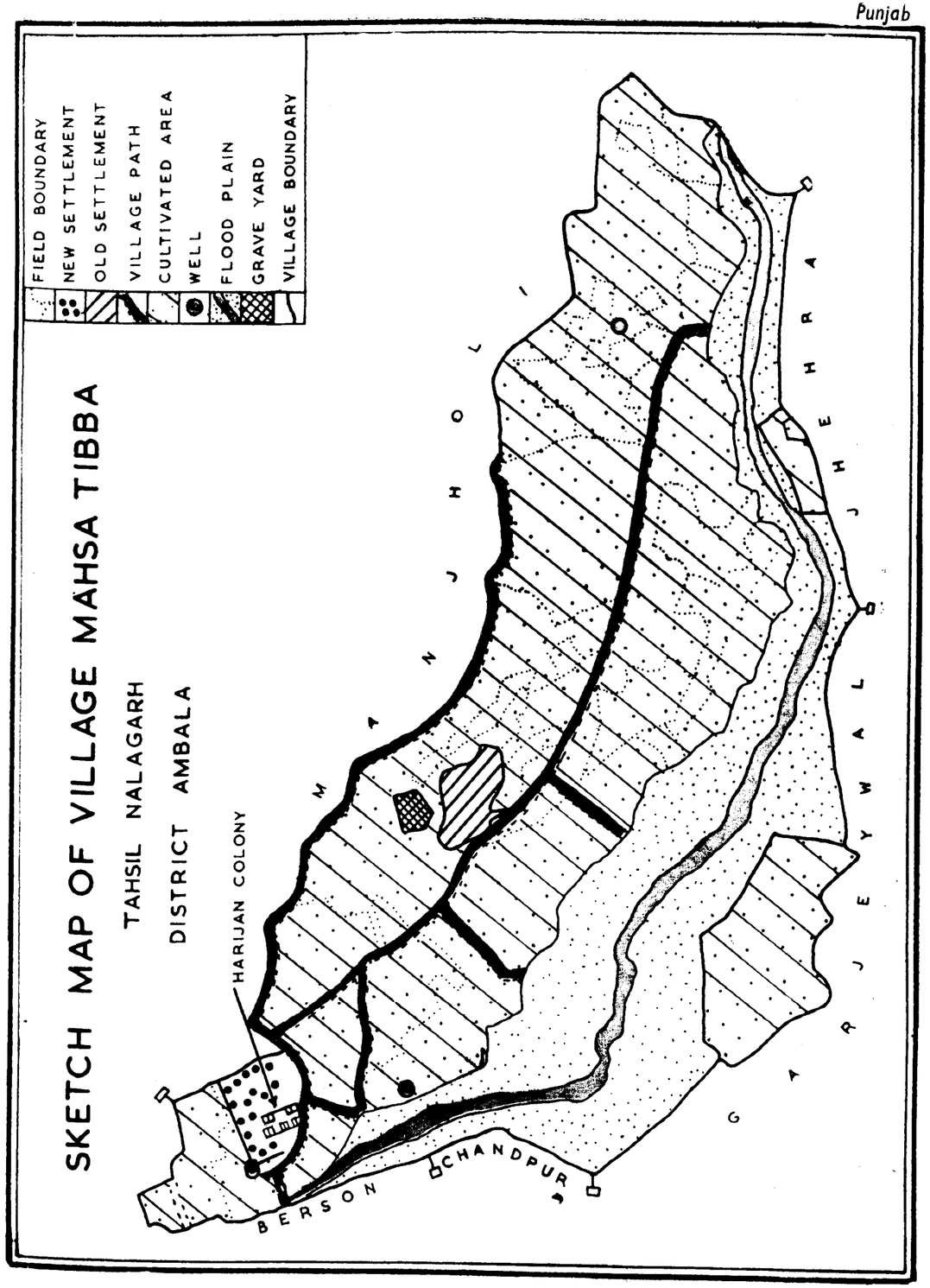


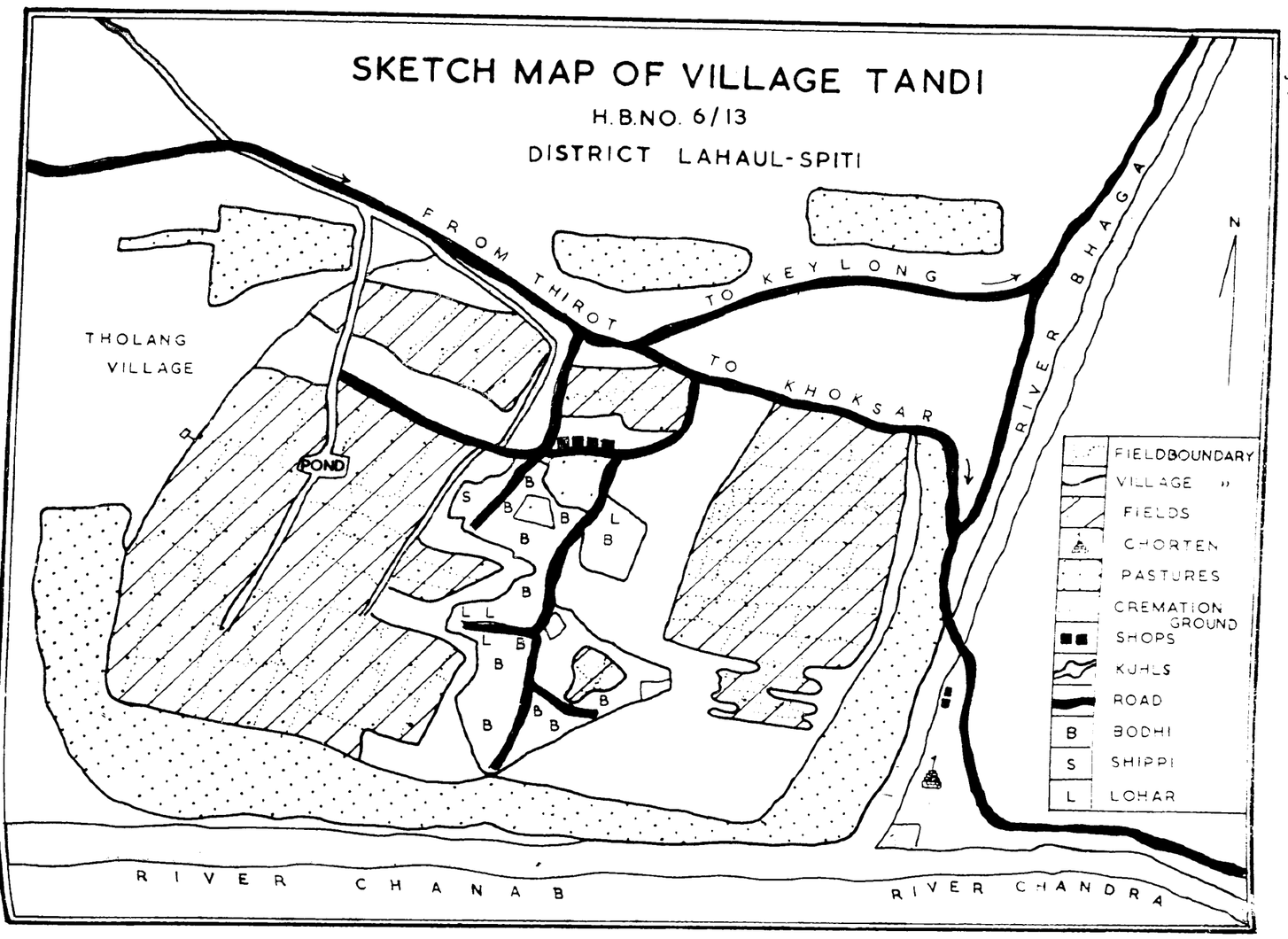
PLAN

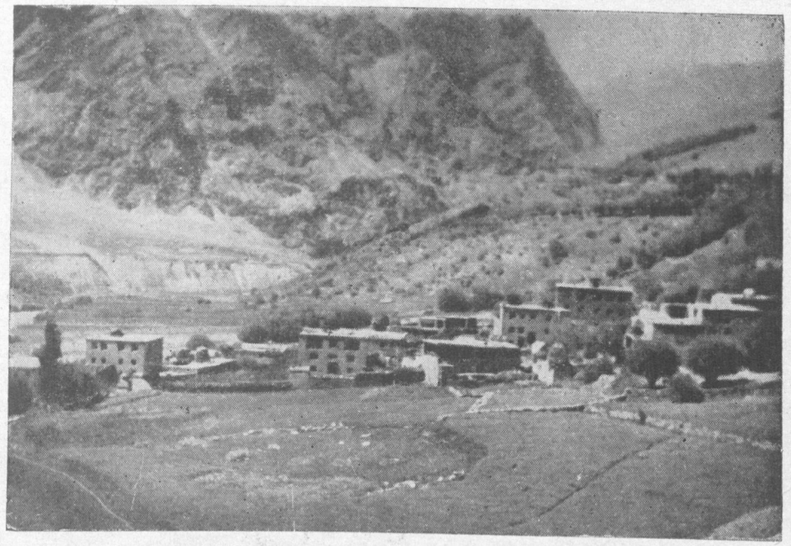


SECTION ON AB

SCALE 1" : 10'

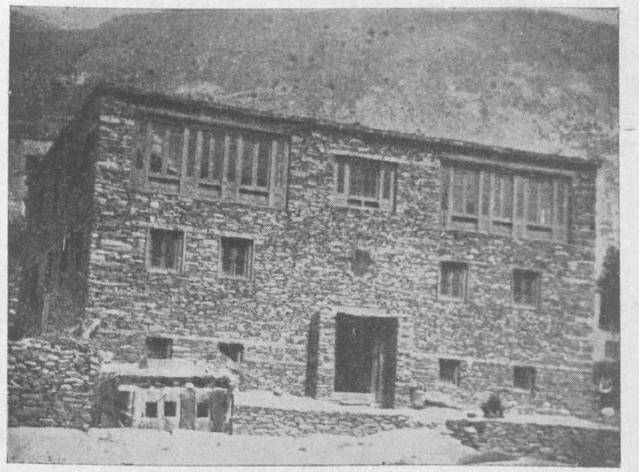


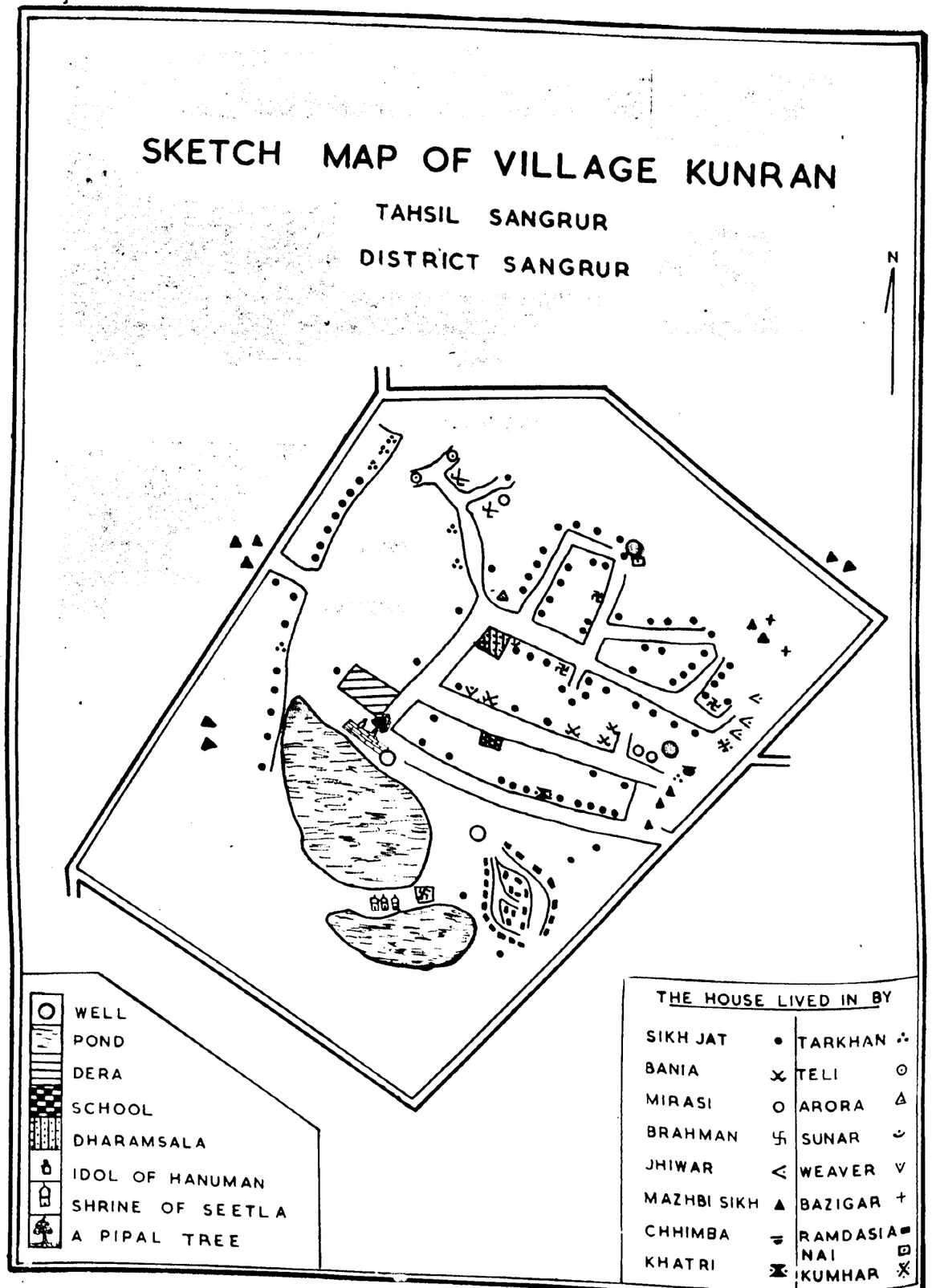

SKETCH MAP OF VILLAGE TANDI
H.B.NO. 6/13
DISTRICT LAHAUL-SPITI
FROM THIROT TO KEYLONG
TO KHOKSAR
THOLANG VILLAGE
POND
RIVER BHAGA
RIVER CHANAB
RIVER CHANDRA
N
FIELDBOUNDARY
VILLAGE "
FIELDS
CHORTEN
PASTURES
CREMATION GROUND
SHOPS
KUHLS
ROAD
B BODHI
S SHIPPI
L LOHAR



View of village Tandi in Lahaul and Spiti District, at an elevation of 10,000 feet. It is located against a hill which protects it against severe cold winds.

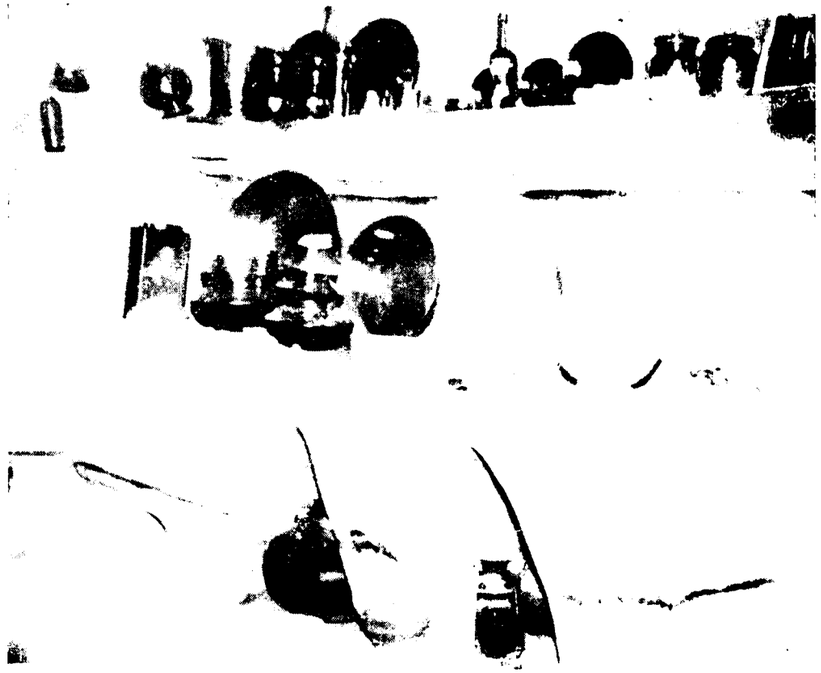
A three-storeyed house of a well-to-do farmer. The ground floor accommodates animals; the first floor is the apartment for living; and cow-dung cakes and fuel are stored in the second storey. The walls are of stone slabs, kept in position by rafters placed vertically at intervals. The roof is flat since rainfall is scanty and the box-type building is best suited in this wind-blown area. The house faces east, and the doors and windows are low.



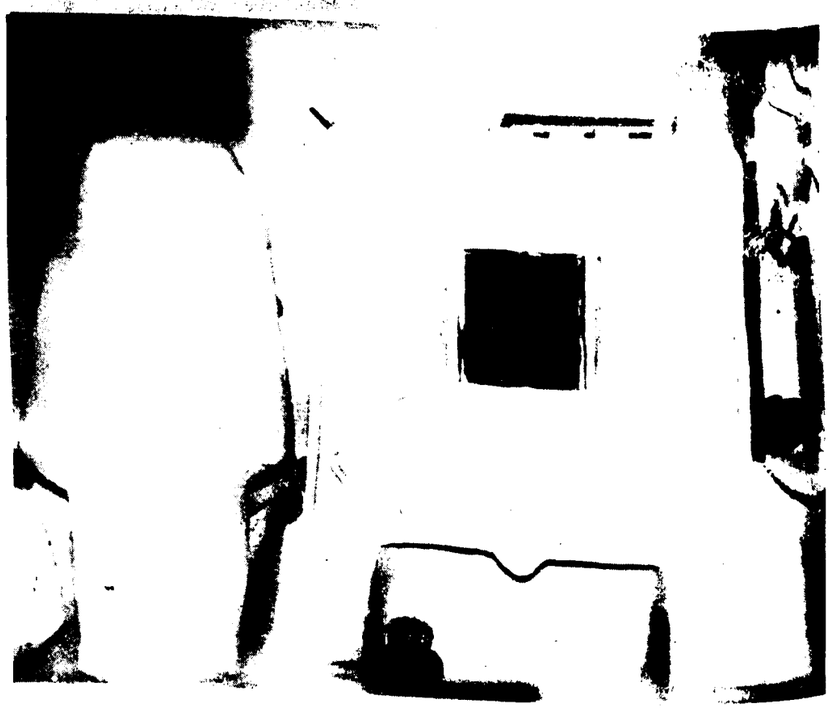


Decorations on the outer walls of the house of a shop-keeper in village Chetru (Kangra District).

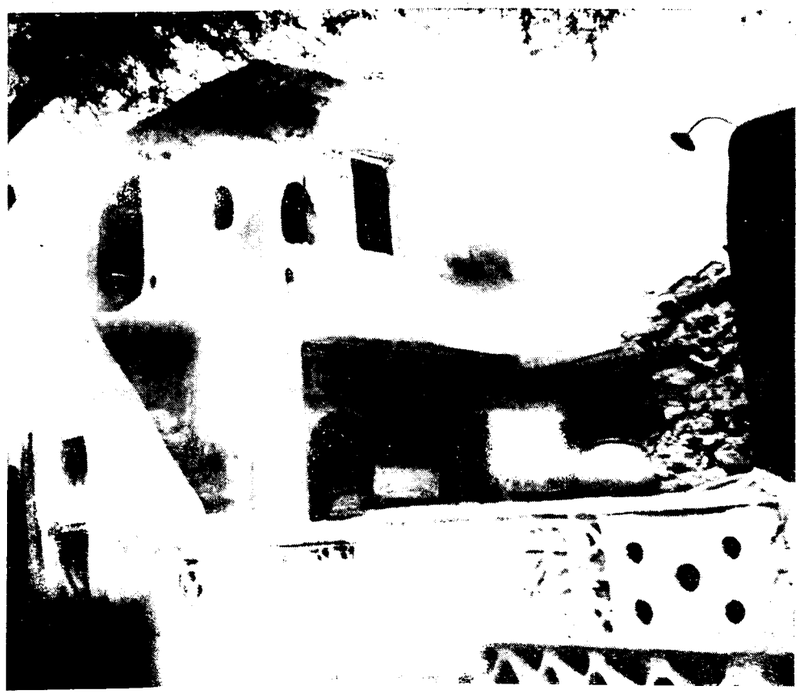
Decorations done by grown-up children in the house of a Jat family in village Babehar (Hoshiarpur District).



Utensils arranged on shelves made from clay by the house-wife in the house of a Jat family in village Tehang (Jullundur District). In a niche is an earthen pitcher full of lassi (butter-milk).



Inside the house of a Mazhbi Sikh in village Bhindi Saidan. Two earthen receptacles are for storing food-grains: the one on the left is called bharoli, and the one on the right, kothi. The earthen pitcher with a pot contains ghi. On the top of bharoli are a wicker basket and a pira (low stool).



Two-storeyed, electrified, mud-house of a well-to-do farmer of village Bhindi Saidan, in Amritsar District.

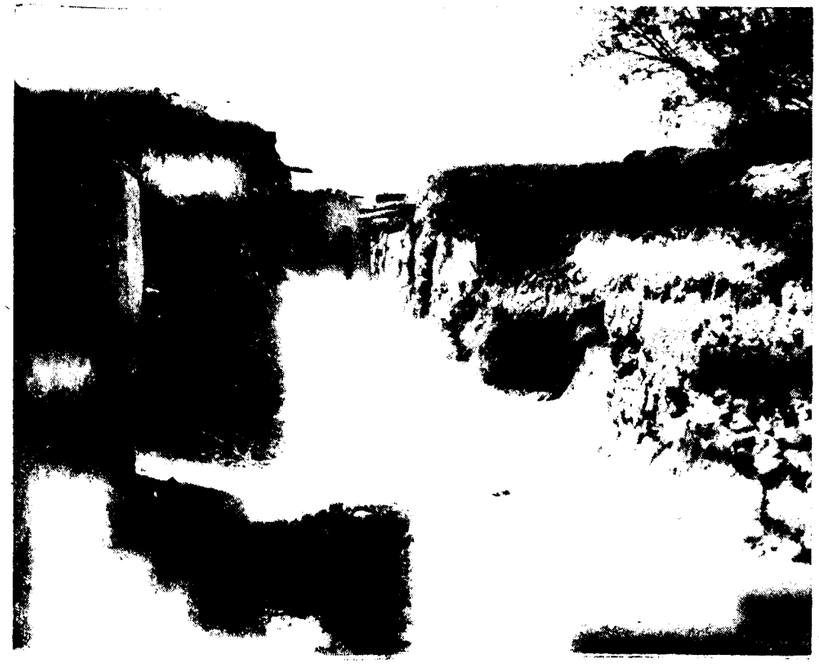
One-room thatch hut of an agricultural labourer working with the farmer whose house appears above.

House of a well-to-do Jat farmer in village Mundlana (Rohtak District). The walls are of structural stone.

House of a Jat peasant in Bara Bhaika (Bhatinda District). Note the cots used for sitting and sleeping, and a low wall marking off the kitchen.

A street in Tchang. A prosperous village in Jullundur District. Note the paved street with an open drain in the centre.

A street of Bhindi Saidan, a backward village in water-logged area of Amritsar District.

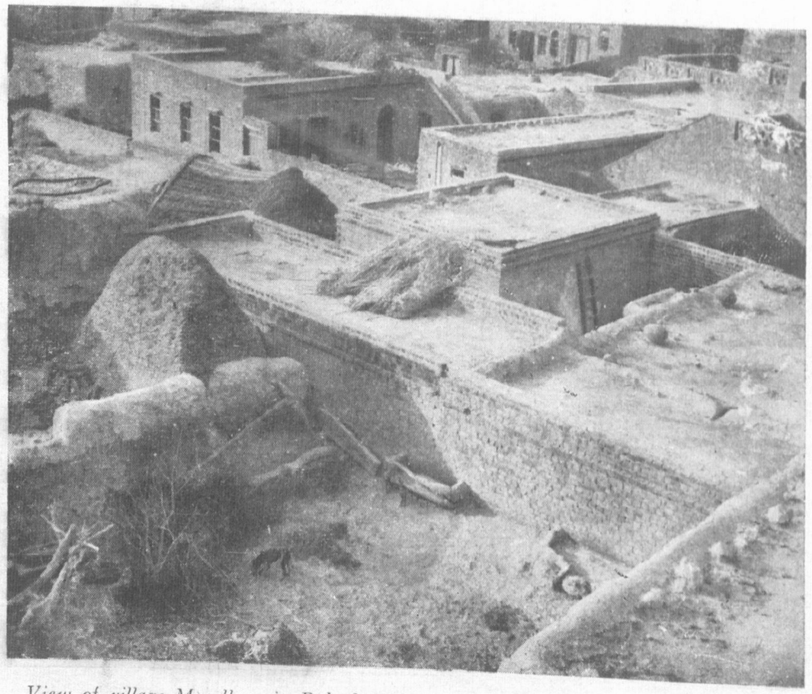


A house in village Chetru (Kangra District)—hill region with heavy rains. Note the sloping slate roofs projecting on the walls. The house belongs to a Rajput with a substantial agricultural holdings.

Another house in village Chetru. The owner is a farmer who also keeps cattle for the sale of milk. The ground floor is occupied by animals and the first floor by human beings.

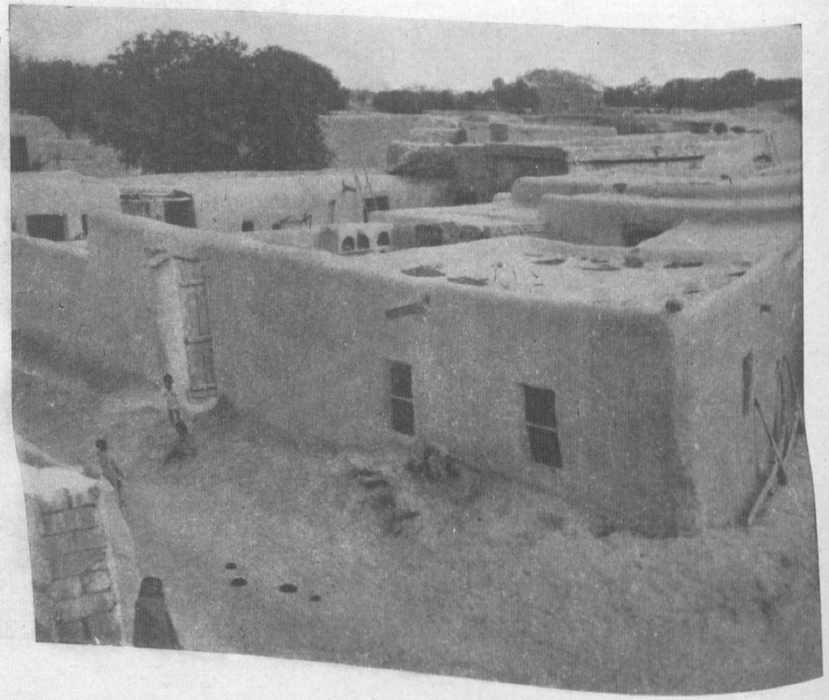
View of a portion of village Jogewala in Ferozepur District. A hot dry tract. Note the flat roofs, and dry fodder stacked on house-tops.

View of village Bhindi Saidan in Amritsar District. The Walls are mostly of mud, plastered with cow-dung and wheat-straw.



View of village Mundlana in Rohtak District. Walls are mostly of burnt bricks, and roofs are flat and mud-plastered. Towards the left there is a mound of cow-dung, stored for kitchen fuel.

View of village Bara Bhaika in Bhatinda District. Entrance gates of houses are unusually high in order to admit the camels which are commonly in use in the area.



RAJASTHAN

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Studies made in connection with the Socio-Economic Survey of certain selected villages have shown that the bulk of the village communities have generally settled almost in the centre of their revenue areas while a portion settles around it at what are called the hamlets of the village. The exceptions to this general rule are, however, found in the arid areas of the State where the settlements occur only at places within the village boundary where drinking water, which is very scarce in such areas, is available, and in the hilly and forest areas largely inhabited by the tribals where instead of a compact settlement isolated homesteads situated at places quite apart from each other are found.

Hamlets are usually found in case of villages having a large revenue area, a large proportion of agricultural population, a good soil, and irrigational facilities. Thus, hamlets are not generally found in the arid areas and are a feature of the fertile zone.

The main settlement (Abadi) and the hamlets (Dhanies) are always located nearest to the agricultural land. Thus, if in a certain village there are patches of hills, forests, barren lands etc.; the population ignores such areas and settlements are favoured near culturable lands.

Only in the case of a few large villages, linear clusters of houses either rectangular or square with regular streets and byelanes are found. In the bulk of the villages, however, only shapeless clusters with irregular streets are seen. Scattered clusters of houses without streets are a feature of the tribal areas. Isolated houses scattered in the midst of cultivated fields are found, as already stated, in the case of areas where there are good irrigational facilities to enable the cultivators to raise double crops.

House types

It has already been stated that the use of different materials for building the houses mainly depends upon their local availability; and the type of structure is closely related to the climatic conditions obtaining in the various regions. Thus, physical geography of the area plays a very important role both in the constructional and structural aspects of the houses.

The Geographical Background

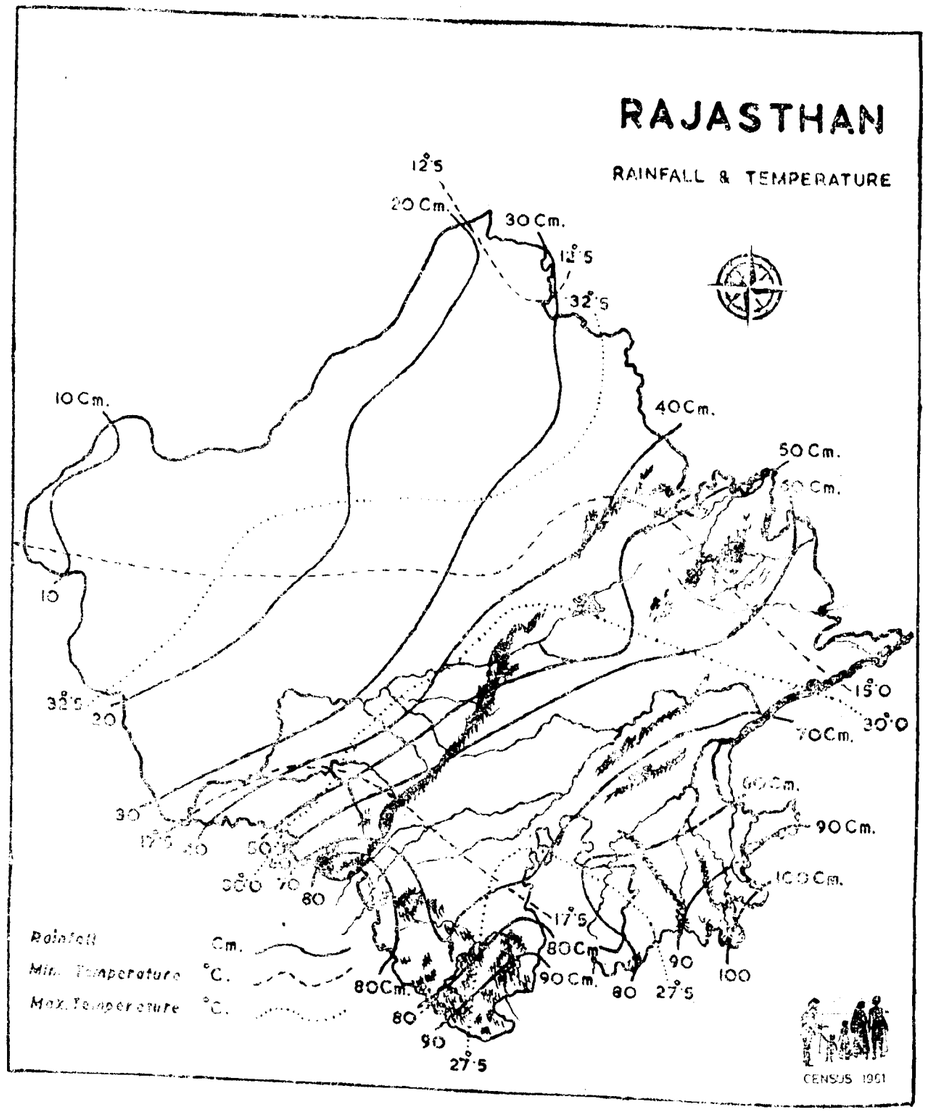
The hill system

The geography of Rajasthan is dominated by the ancient Aravalli hill system which intersects the State almost from end to end running in north-easterly and south-westerly direction. Looking at the physical map of the State one can observe this range near Khetri 28°0′: 75°51′) in Jhunjhunu district. The hills are more prominent in the south-west and the following peaks are important—Babai 2,594 ft.; Kho 3,212 ft.; Raghunathgarh 3,450 ft.; and, Taragarh 2,855 ft. The range passes just to the west of the Sambhar salt lake and spreads over a wider area from Ajmer onwards, where it forms itself into several parallel ranges. It then occupies a width of about 30 miles and splays out to the south and south-east towards Udaipur, Dungarpur and Banswara districts. The main range which proceeds in a south-west direction terminates near the south-east corner of Sirohi district and the highest peak in this part is called 'Guru Shikhar' 5,650 ft. located in the famous hill station of Mount Abu.

Physiographic Units

3. The Aravallis—the oldest mountain chain of India extending over a length of about 430 miles—divide the State into two distinct physiographic units :

(i) Area consisting of almost three-fifth of the State and about 60,000 sq. miles lying to the north-west of this range which consists of wastes of the Thar, the great Indian desert, and the semi-desert regions. The only river system that flows in this area is the rain-fed stream Luni, which rises in the Aravallis south-west of Ajmer and after flowing for about 200 miles, is lost in the marshy



Runn of Kutch. Its water is sweet up to Balotra but lower down it becomes progressively saline till it turns into brine. Most of the villages in this region cannot be considered as fixed habitations as their permanency depends entirely on the supply of water in the wells which is constantly sinking or turning brackish, with the result that as soon as it dries out or becomes undrinkable the village is deserted for a better site.

(ii) The rest of the area, the northern and north-eastern part of which consists of fertile plains, and, the southern and south-eastern areas consisting of plateau full of hill ranges, and stretches of forests traversed by rivers, such as the Chambal, Banas, Kali Sind, Parbati and Banganga, having wide valleys, fertile lands and areas of good soil.

Soil

The area lying to the north-west of the Aravalli range is sandy, ill-watered and unproductive. It is dotted, however, with numerous hillocks of small elevations and there are isolated patches of scrubby and stunted vegetation. But even in this region those to the east are a little fertile, changing from sandy to clayey in character. The second region lying to the south-east of the Aravalli range is fertile, and contains a variety of soils such as sandy-loam, clay-loam, clay, etc. The rainfall is sufficient and several rivers run through this part.

Rainfall

North-western Rajasthan is outside the path traversed by the main body of the monsoon currents originating from the Bay of Bengal. The south-west monsoons originating from the Arabian Sea also do not meet with any major obstruction in the State as the alignment of the Aravallis is parallel to the direction of these rain-bearing winds. The little precipitation which the south-west monsoon causes is only on the slopes of the hills and thus the area to the west of the Aravallis does not derive much benefit from either of these currents.

This particular factor is primarily responsible for the entire climatic pattern obtaining in the State.

About 90 per cent of the rainfall in Rajasthan occurs during the monsoon period that is June through September, 5 per cent during the cold weather December to February, and the balance (5 per cent) during the other 5 months. It is estimated that about 34,300 sq. miles of the State get an annual average rainfall of 10 cms. to 25 cms., about 52,000 sq. miles a rain of 25 cms. to 50 cms. while the rest of Rajasthan gets more than 50 cms. of rainfall, the south and south-eastern part getting an annual normal rainfall of 75 cms. to 100 cms. As one proceeds north-west, from the slopes of the Aravallis towards the Thar, the mean annual rainfall decreases steadily from about 63 cms. to 13 cms., the rainfall at Jodhpur being 38 cms. and at Barmer 25 cms.

In the desert region, although the average rainfall is quite low, quite heavy falls in a day have occurred. In some places in the desert, rainfall equal to or up to 1½ times or even more than this amount has been recorded in a single day. It should, however, be mentioned that though these heavy falls are much less in amount than the heavy falls that occur in the south-east part of Rajasthan, where the rainfall is much higher, the ratio of these to the annual average is very considerably higher.

One of the most characteristic features of the climate of Rajasthan is the great extremes of temperature. The winter is quite cold and, at many places, the temperature sometimes falls below the freezing point and frost occurs. On the other hand, heat during summer is intense and scorching. The desert area in West Rajasthan is the hottest region in India. Owing to the dryness of the atmosphere, the nature of the soil and lack of vegetation, the change of temperature from day to night is sudden, very large and trying. The period from December to February constitutes the cold season, January being the coldest month of the year. In this month the mean maximum temperature ranges from 25.5°C at Ganganagar to 22°C at Bikaner, 22.8°C at Jaipur and Ajmer, 24.4°C at Jodhpur and 25.5°C at Jhalawar. The mean minimum temperatures vary from 3.3°C at Ganganagar to 7.7°C at Ajmer, 8-10°C at Jaipur, Bikaner, Jodhpur, Barmer and Jhalawar, and to 10.5°C at Kota. While these are the means on individual days, the temperatures vary considerably. At this time of the year, cold waves cover parts of the State and temperatures fall sometimes

2°C to 4°C below freezing point particularly in the north-western parts. Temperatures start rising by the middle of March and the hot season prevails during the period April to June. May is generally the hottest part of the year, though very high temperatures prevail in June also. The mean maximum temperature in May is 40.5°C to 42.2 C over most parts of Rajasthan with the mean minimum at 24.0°C to 26.6°C. On account of the dryness of the atmosphere, the clear skies and the sandy nature of the soil there is rapid radiation of heat soon after sunset and the heat of the day rapidly dies down with the result that even when the maximum temperature during the day is very high, the minimum temperature at night is considerably low.

Heat waves sometimes occur causing the day temperatures to shoot up considerably above the normal. Ganganagar has thus recorded a maximum temperature of 50.0° C, Jodhpur, Bikaner and Barmer 49.0°C, Jaipur and Kota 47.8°C and Jhalawar 46.6°C. In the midst of the great desert, temperatures reach as high as 51.6°C. The scorching heat and the hot winds make the days very trying but an occasional dust storm brings about sudden fall in temperature and some of the thunder storms of the season culminate in rain which bring welcome albeit temporary relief from the scorching heat.

With the onset of the monsoon showers, weather brings down the heat of the summer. But the northern portion of the desert still continues to be hot though less than before and temperatures as high as 46.1°C have, sometimes, been experienced even in July. After the withdrawal of the monsoon by the second week of September, a short second hot season is not uncommon which may extend up to the middle of October. The weather then gradually starts cooling and the cold season commences in December.

Winds

Winds travel over the region unimpeded throughout the year but are very powerful in the desert region and the velocity attained during the monsoon is sometimes as high as 40 miles per hour. Due to the extreme aridity, the denuding action of the winds is so great that one can observe it in its polishing action on the few out-crops of solid rocks in the desert, as for example, on the sand-stone in Jodhpur and Mallani. They are generally stronger over the western desert and semi-arid region than over the areas further east; Jodhpur, Barmer, Bikaner and Ganganagar recording higher wind speeds than Jaipur, Kota or Jhalawar. Winds are strongest in June and lightest in November. During the cold weather, winds are generally light. Hot and dust raising winds are experienced more or less throughout Rajasthan during the summer but in the desert tracts of the west they are more violent than in the south-eastern regions where there are wood lands and vegetation. After the withdrawal of the monsoon, winds die down considerably and in October and November are again very light and highly variable. The maximum velocity of wind that may be expected in the Rajasthan area is about 85 miles per hour.

Dust-storms

Dust storms are most frequent in the arid regions of the west, decreasing progressively over the semi-arid region and regions with more rainfall. Ganganagar has on an average 27 days of dust-storms in a year and Bikaner 18. At Jodhpur the number of days is 8 and it progressively diminishes towards the east and south, Jaipur having 6 days, Kota 5 days and Ajmer and Jhalawar 3 days each. The maximum number of dust-storms occur in June in north-western districts and in May in the south-eastern areas. After June, the number of these storms diminishes rapidly except in north-west where they continue even up to September.

Thunder-storms

Thunder-storms occur more frequently over the eastern half of the State than the western. Jhalawar and Jaipur each have 40 to 45 thundery days in a year, Ajmer and Kota 30 to 35 days, Jodhpur about 25 days and Bikaner and Barmer about 10 days. Very few thunder-storms occur in Ganganagar. Most of the thunder-storms occur during the period May to September, particularly in June and July.

To sum up, the geography of the State has divided it into two distinct parts, one consists of the dreary and desolate arid and semi-arid regions of the west and north-western parts of the State; and the other composed of the plains of the east and the plateau of the south and the south-east, each having a different type of climatic

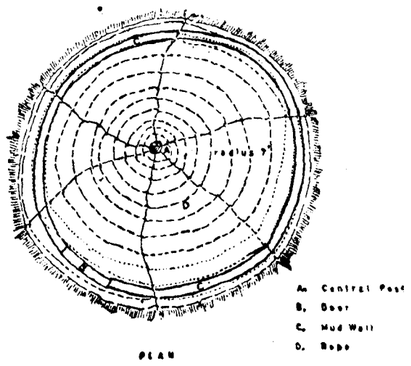
conditions, rainfall, temperature, wind and weather phenomena such as dust-storms and thunder-storms. These different sets of climatic conditions and weather phenomena obtaining in these regions have a definite bearing on the cropping patterns. Thus, scanty rainfall in the arid zone produces only the scrubby bushes of 'Akra' and other stunted vegetation which grows in that region. In the semi-arid regions, on account of a slightly better rainfall, trees of '*Babul*' and '*Khejra*' grow in abundance. In the plain and plateau region of the State where the rainfall is plentiful there are woodlands, dense forests and good vegetation. The climate has a bearing on the soil conditions also. In the arid and semi-arid zones the soil is sandy which on account of the periodical winds which blow from the west towards the east drift large quantities of sand, deteriorating continually the character of the soil. There are large exposures of the Vindhyan formations and the Delhi system of rocks which have endowed this State with a variety of excellent building materials one of which is the red sandstone—a choice of the Great Mughals for the construction of beautiful monuments like the Red Fort and the Jama Masjid of Delhi and the Fort at Agra. The Rashtrapati Bhawan and the Central Secretariat at Delhi are recent examples of constructions of the same material. Other stone deposits range from red and fawn coloured sand stones of the Vindhyan series to the excellent white marble at Makrana extensively used in the Taj. Quartzites, flagstones, free stones and slabs are obtained in large quantities from the Alwar and Ajabgarh series.

Impact of geography on house types

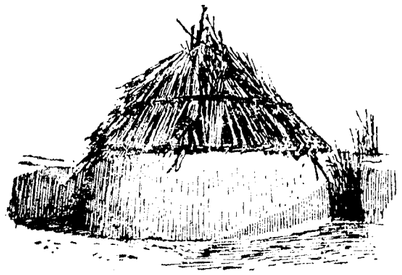
The geography and the resultant climate and cropping pattern determines to a large extent the use of the materials in the construction of houses and their structural details in a particular region. This is, however, not true of the houses of the rich who can afford to make costly 'Pucca' houses anywhere they like.

Thus, speaking for the overwhelming majority of the houses those are located in the rural areas of the State, we find that in the arid and sandy areas the usual form of dwelling is what is locally known as a 'Jhonpa'.

The diameter of the circular 'Jhonpa' is usually about 3 to 4 yards. It will be interesting to describe the construction of such a house. A peg is fixed at the desired place and tying a string by this peg and taking the required length, usually about 1½ to 2 yards as a radius, a circle is drawn by the fore-finger of the hand. The foundation is then dug along the circle about a foot deep and a wall of mud or unburnt bricks raised about 5 ft. to 7 ft. high.



In the case of the construction of walls by mud the work is done stage by stage. Mud mixed with pieces of grass is placed in the required quantity and given shape of a wall. Only about a foot of wall is raised every day and only after it gets dried up another foot of mud wall is added on the top of it. The construction of walls thus normally takes about a week's time.



A strong central pole about 7 to 10 ft. long, called 'Thampi' or 'Thambla', is then fixed up right in the centre. Thin wooden sticks, called 'Vali', are arranged in such a way that while one end rests on the circular wall, the other end is tied to the central pole. This frame is then thatched with local grass, called 'Sime' or 'Kheepda' or 'Dat' or 'Dedo' and the stalks or stems of 'Bajra' tied firmly by strings in several concentric circles.

Sometimes this frame is covered with straw and 'Kelus' (earthen tiles). The construction of roof takes another week. The construction of a 'Jhonpa' thus takes about a fortnight. Although there is only one small door in such a house, the thick mud walls and the scanty ventilation that is provided through the thatched roof keep the dwelling cool inside even when the temperatures are high outside. The roof is conical. Such a structure protects the house from possible damage by winds blowing in this region with great velocity and the heavy downpour that may sometimes occur. Usually, a household builds at least two 'Jhonpas'. While one is used for the purpose of living, the other is used as a kitchen.

A special construction by the side of the 'Jhonpas' is used for storing grain.

Construction of the 'Jhonpas' costs little. The roof is patched up and walls replastered with a mixture of mud and cowdung every year. The 'Jhonpas' are enclosed by a compound wall made of hedge of thorns to keep the animals away. It is a beautiful sight to see a desert village having a number of 'Jhonpas'.

To the nearer east of the desert in the semi-arid regions, where trees particularly 'Babul' and 'Khejra' are not scarce, there are two kinds of houses—'Ghar' and 'Padwa'. While the former has mud walls and flat mud roofs resting on wooden beams, the latter has walls of sun-burnt bricks and are covered with crude baked tiles on sloping roofs. Those with a shed roof are known locally as 'ekdhalia' and those with a gabled roof as 'dudhalia'.

A variety of house types is found in the region east of the Aravallis. In the area on the eastern slopes of the hills, the houses are usually made of mud with gabled roofs of rough tiles. In the hilly parts, abunding in forests, locally called the 'Bhakar', the dwellings of the Girasias, an important scheduled tribe of the State, consist of a frame work of local wood, the walls of split bamboos and grass, and the roofs of broad flat tiles. Most of the houses are built on a set pattern and consist of an outer and an inner room of the same length. While the former is comparatively narrow and is the place where cooking etc. is carried on, the latter is generally raised a step higher, and contains the years supply of grain, stored in hard mud-jars of various sizes, some over of six feet in height.

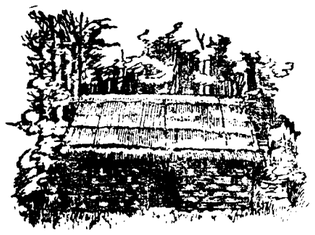
In such houses the roof is supported in the middle by a vertical wooden pole called 'Thambla'.

Two or more poles called 'Thambli' are fixed up at some distance on either side of the 'Thambla' to provide additional support to the roof. Ventilation is obtained by leaving some speace between the side walls and the thatched roof. The front side of the sloping roof is generally so extended as to form a projection or a hood. Besides there is what may be called an annexe of the house.

It is mainly meant for keeping the cattle and is locally called a 'Dagla'. It is a platform about 7 to 8 ft. high, constructed with wood or bamboo matting raised on wooden poles. While the cattle are kept below this structure, fodder is kept above away from the reach of the animals. It is also used for sleeping during the summers. Generally it is covered by a thatched roof so that one can also sleep in it during the rains. A crude ladder or a log of wood notched appropriately, called 'lesni', is placed beside the Dagla and is used to climb up the structure.

Further east in the area of Udaipur, Dungarpur and Banswara the houses are built of mud or of unburnt bricks, some have flat mud roofs supported on wooden beams, while others have sloping roofs of ill-baked tiles. The majority of houses are low and badly ventilated, and usually of a uniform pattern—a quadrangular enclosure with rooms ranged round the sides.

The Bhils, another important scheduled tribe who live in this area, build their huts on separate forested hillocks or ridges, thatching them in gable style of roofing with straw and leaves or with ill-baked tiles, while the walls consist of beautifully inter-woven bamboo-strips from the local forests or of mud and loose stones.



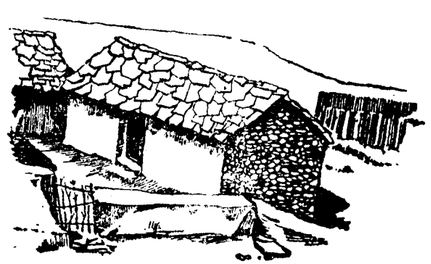
Such houses are called 'Tapras'. There are usually five wooden poles in each of its side walls. The central poles which are the highest are called 'Mobri'. A little smaller than these are the poles called 'Gai', which are put at some distance on either sides of the central poles. The rest of the poles, called 'Nevri', are short ones and are put at either ends. This ensures good drainage from roof.

Wooden beams are laid horizontally so as to connect the 'Mobri, Gai and Nevris' of one side to their opposite numbers on the other side. Bamboo sticks are then arranged on the three horizontal beams on either side of the gabled structure at right angles to them and fastened tightly. A network of split bamboos is then placed over the bamboo sticks parallel to the beams and is fastened securely.

Tiles are then arranged over this structure. The size of a 'Tapra' is generally 10′ × 20′ × 8′. A 'tapra' is usually a one-room tenement. It is often divided into two parts; the partition is effected either by construction of a small mud wall, 3 to 4 feet high, or by using the big bamboo containers covered with mud as a partitioning screen. This is done to provide necessary privacy to the inmates.

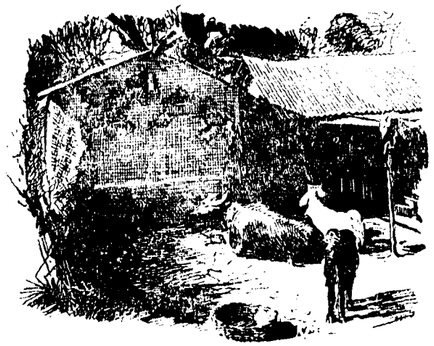
As in the case of the Girasias, the Bhil houses almost invariably have an annexe called 'Dagla'. In the rest of the region, the houses generally have mud walls and tiled roofs.

Wherever, however, stone is found in plenty, both the wall and the roof are made of stone.



Where suitable grass and leaves are available, the roofs are made of that material. In some parts of District Bharatpur, where the famous 'Khus' plants grow in abundance, the roofs are made of the twigs and leaves of this plant. Roofs are made sloping on either sides as the region receives plenty of rainfall. The amount of rainfall decides the angle at which the roofs of the houses in different parts of the region slope, greater the rainfall the greater being the sloping angles of roofs.

Except in case of one room tenements the entrance usually leads to a courtyard, round which are ranged the dwelling rooms. The number and size of the rooms correspond with the prosperity of the households. Sometimes cattle are accommodated in an improvised shed in a corner of the courtyard. The means of communication in this region are better developed as it is well-served by railway lines and roads. Consequently, movement of building material takes place on a larger scale and sometimes one finds the rural folk using corrugated iron-sheets for roofing. The use of such non-indigenous materials is, however, very limited.



Patterns of housing

The pattern of housing also varies with the environment and the nature of the region. Social factors too play no less important a part in their determination. Thus, it is found that in the villages in Alwar district, inhabited by the Meos, the houses stand close together, a high wall with one common entrance enclosing them all. In the villages inhabited chiefly by the Brahmins, the Jats and the Ahirs, the houses are not so closely grouped together and most of them have their own separate compounds. In the Gujar villages, the houses are scattered over a considerable area. The hill tribes of Girasias and Bhils live in more or less isolated huts at some distances from their neighbours, each hut has its independent enclosure. In the desert areas dwellings are set up at places where drinking water is available and protection from high winds can be secured. Speaking generally, houses are built with common walls.

Layout of houses

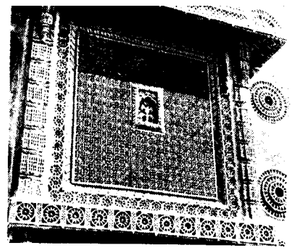
The layout of every house differs from another and depends mostly upon the financial resources of the individual household and there are no discernable patterns of layout which may be said to belong to particular districts. The most typical layout of a house consists of a portico-like structure, called 'Chabutri' in front. It is a multipurpose place used as a place for drying agricultural produce as a formal reception room, as a female gossip centre and as a sleeping room in the sultry rainy season. Behind this is the main and the only room, part of which is at the threshhold level and the remainder raised to one to two feet. While a part of the former section is used as a cattle pen, the latter is used as a living room where the inmates rest, take their food, entertain their guests, work during the day and sleep at night.

APPENDIX

RAJASTHAN

Style of Villages.—The style of village varies much with the nature of the country and often with the caste and the State. On the extreme east of the province, in the Northern parts of Bharatpur among the Meos the average village lies closely packed together; a high wall with one common entrance encloses in its compound the dwellings of several different families. In the Central Tehsils, inhabited chiefly by Jats, Ahirs and Brahmans, the houses are not so closely packed together and most of them have their own separate compounds. In the Gujar villages in the south, on the other hand, the houses lie scattered about at considerable distances. In this one State again the type of house varies from mud one-storeyed huts with flat or thatched roof, to two-storeyed stone houses with roofs of large slabs of red stone, found nearer the hills. In Dholpur, on the other hand, which is very like Bharatpur in other ways, there is said to be little difference between the villages of the different castes. The houses are built of mud or stone, and have flat roofs in some parts and sloping in other. Taking next the extreme opposite western side of Rajputana, namely Sirohi, the houses are generally closely packed together, except those of the Rebaris (the great shepherd caste) and the hill tribe of Grasias, who live in widely scattered hamlets. Again in the South in the Bhil States the Bhils in most parts live in more or less isolated huts at some distances from their neighbours, each having its own separate enclosure. In Banswara the 'Rebaris' and 'Banjaras' villages can be recognized generally by their thatched huts which are circular in shape. Houses of mud, brick, bamboo and grass are all found. In the desert States, again, the style of village and house varies more with the locality than the caste. In the sandy tracts the houses are more isolated and often built of reeds. In the more fertile parts and where material is available the houses are found closer together and more substantially built. It may thus be said that nearly every style of village and of house, single-storeyed, two-storeyed, flat roofed, sloping roofed, tiled, thatched, stone slab roofed, with or without compounds, standing alone or wedged closely to its neighbour, with walls of brick, reeds, mud, clay, stone, bamboo, may be found in these Provinces. But, in nearly all, the lower or depressed castes are compelled to live in either a separate quarter or outside the village altogether.

Rajputana and Ajmer-Merwara 1911
Page 29.

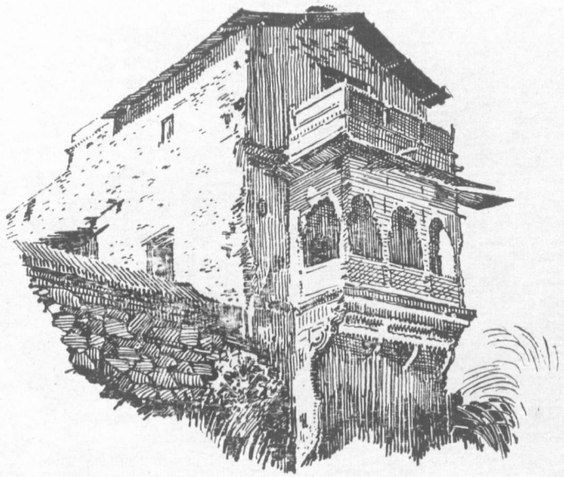


SKETCHES DRAWINGS & PHOTOGRAPHS OF HOUSE TYPES

RAJASTHAN is known far and wide as a land of palaces and citadels. The photographs published on picture-postcards, in albums and newspapers, and film-shorts, travelogues, etc. have in a large measure contributed to the forming of this impression, and it is not wholly unreal. ★ ★ ★ ★ Dwellings of the poor and the not-so-poor in the state show a wide variety in style, lay-out as well as in the material used depending upon local geographical factors and their easy availability. ★ ★ ★ ★ ★ In the following pages an attempt is made to portray this variety through sketches, drawings and photographs.★ ★

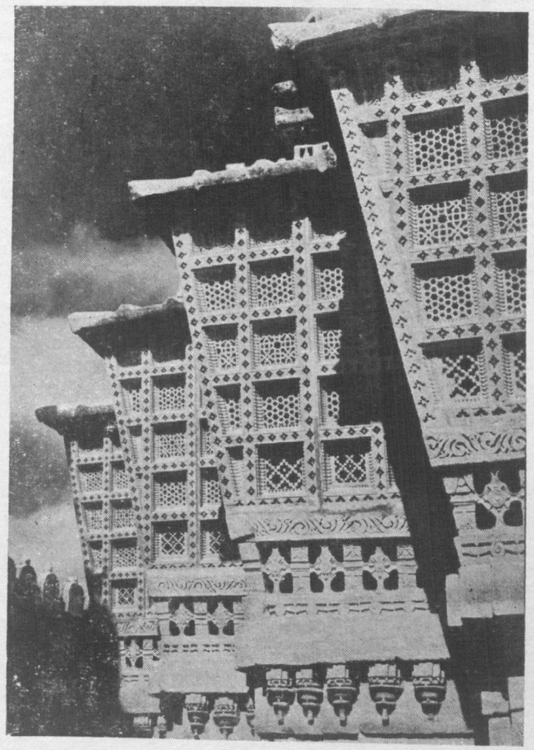
Sketches & Drawings . . .	L. R. Pendharkar
Photographs . . .	P. C. Acharya
	B. R. Gulati

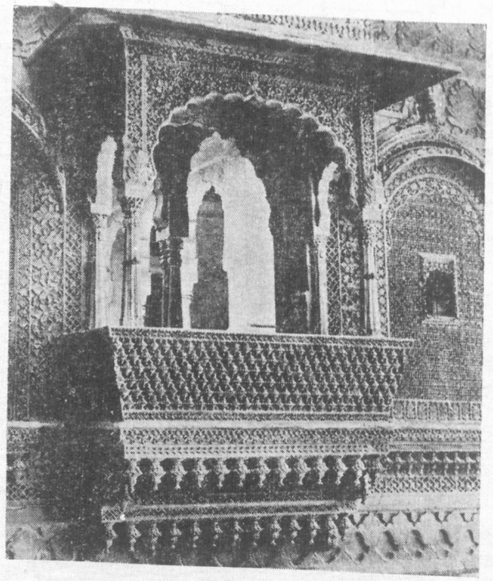
This section and all the maps in this report are printed at the Jubilee Block & Printing Works, Jaipur.



A balcony from a 13th century Rani's palace in a fortress. Rough stone walls and formal carving give it strength and beauty. The ugly roof is a comparatively recent addition. Compare it with the delicate work shown below.

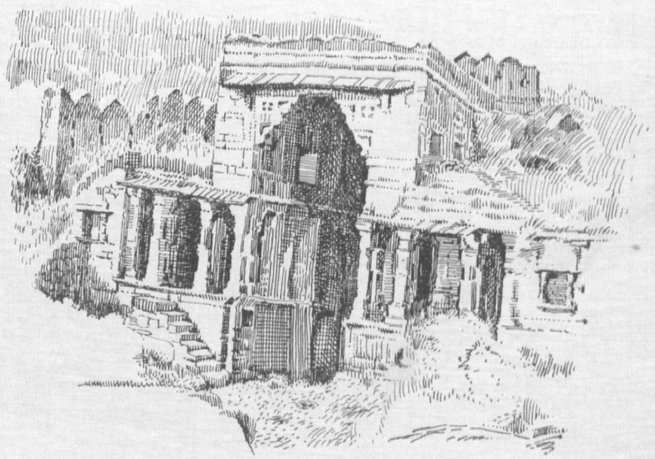
The citadels and *gadhis* of minor princes and *jagirdars*, once centres of power, are now crumbling down. In contrast, some of the residences of the same potentates are in good condition. The carving and *jali* decorations are as fresh to-day as they were when made centuries ago. The material is not necessarily locally obtained as the owners could afford to import whatever they desired. Labour was cheap and often had not to be paid for at all. These and the following drawings and photographs show the great contrast.

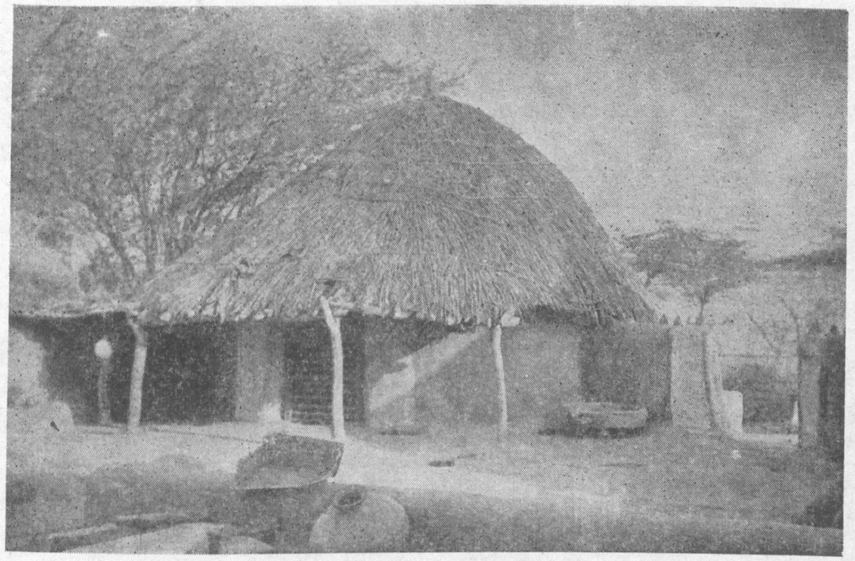




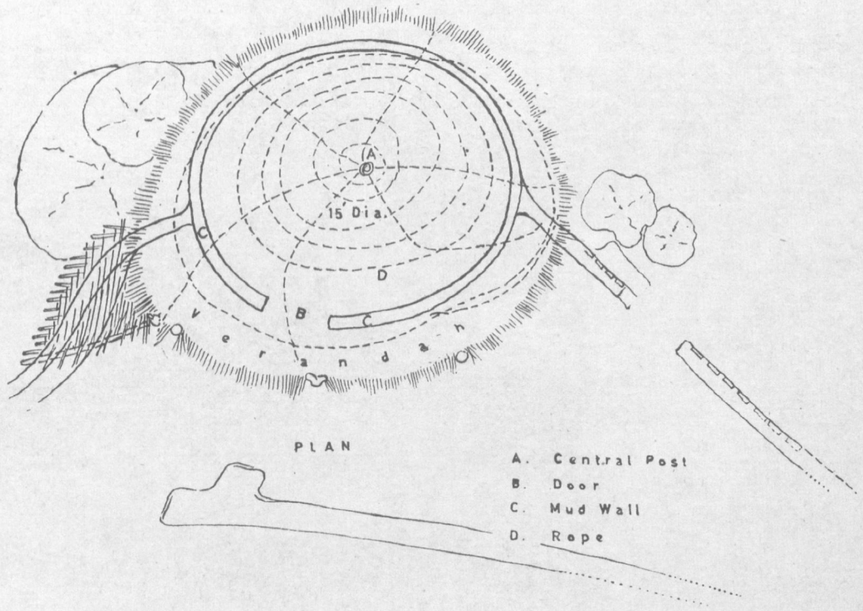
Carved in red sandstone, this part of an edifice is even today as much in use as it was when erected centuries ago, ...

. . . while the mighty fortress gate shown below, high enough to permit a tall elephant with hawdah on to pass through, is overgrown with wild grass and crumbling.

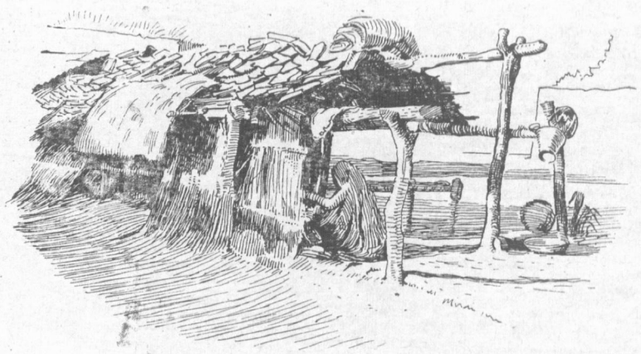




A conical structure with a verandah incorporated without disturbing the general plan of the hut.



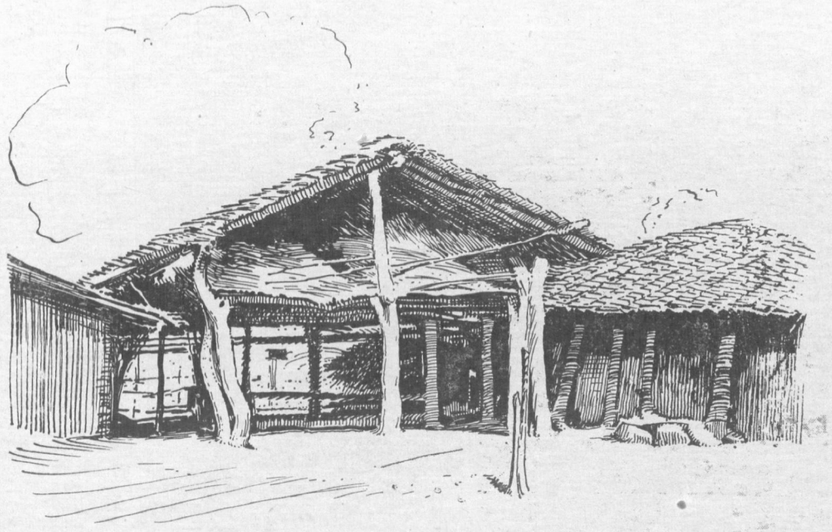
DWELLINGS IN HILLY REGIONS



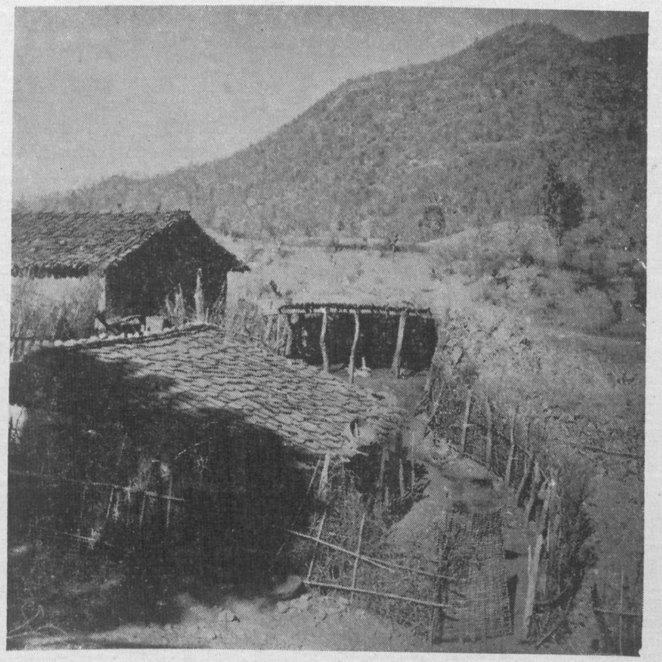
An apology for a hut in the forest tribal area.

In the tribal areas the villagers build their shelters with roofs made of weeds and reeds and walls of bamboo matting. A slightly better class of huts have flat clay tiles.

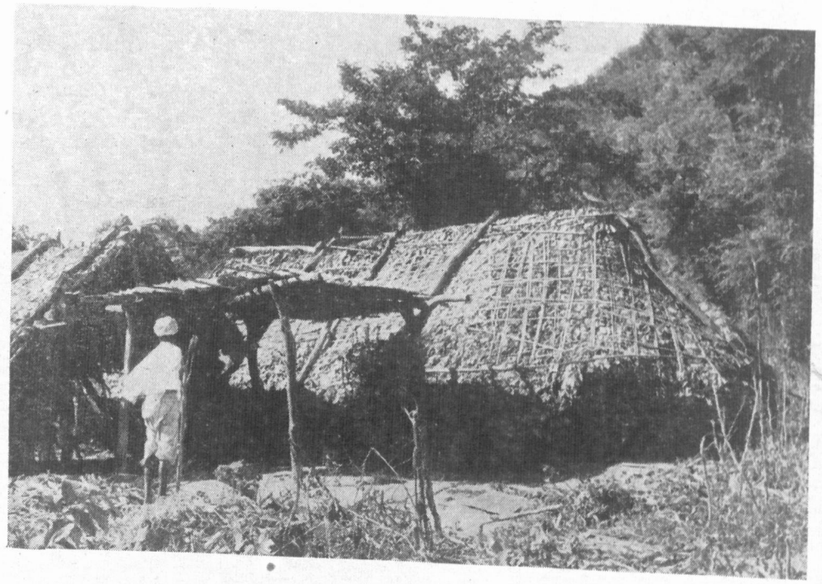
A *dagla* type house of a Bhil. The ground-floor is used as an enclosure for cattle at night, the first floor is his living 'room'.



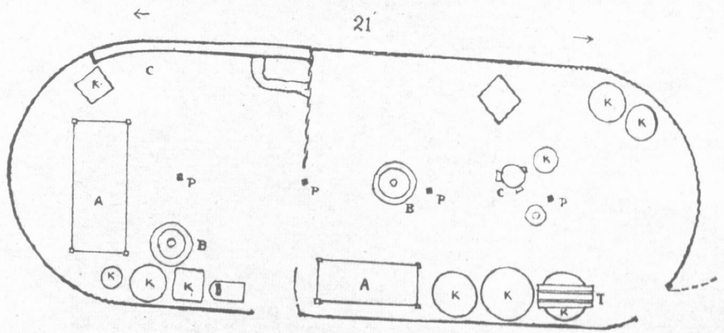
Daglas of Bhil households. The above sketch shows a better type *dagla*. It joins two Bhil houses of sturdy construction.



The picture along-side shows the stockade which invariably runs round these huts.

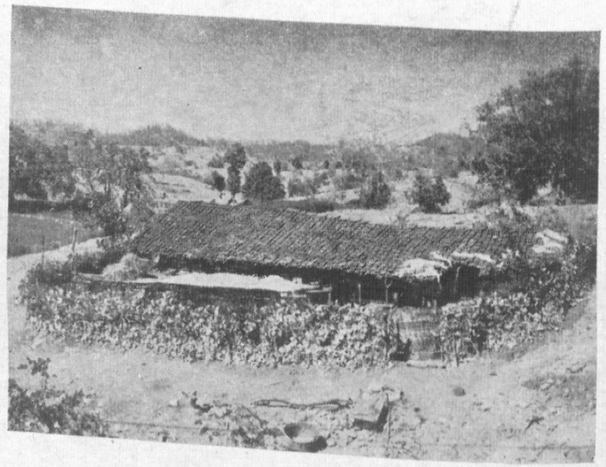


A typical hut of a Girasia. It has low wall, about 3′ high, made of bamboo matting, and a roof of leaves, twigs etc.



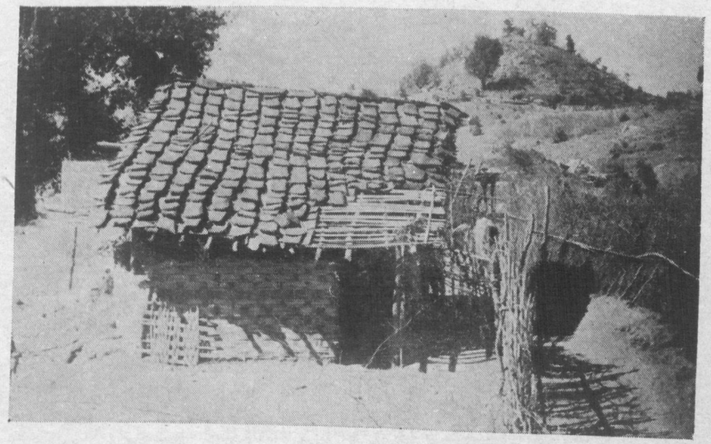
A – a cot
B – grinding stones
C – hearth
K – kothis
P – main poles
T – a tin trunk

A view of a house protected by a stockade. *Daglas* cattle-sheds, etc. can be seen easily.



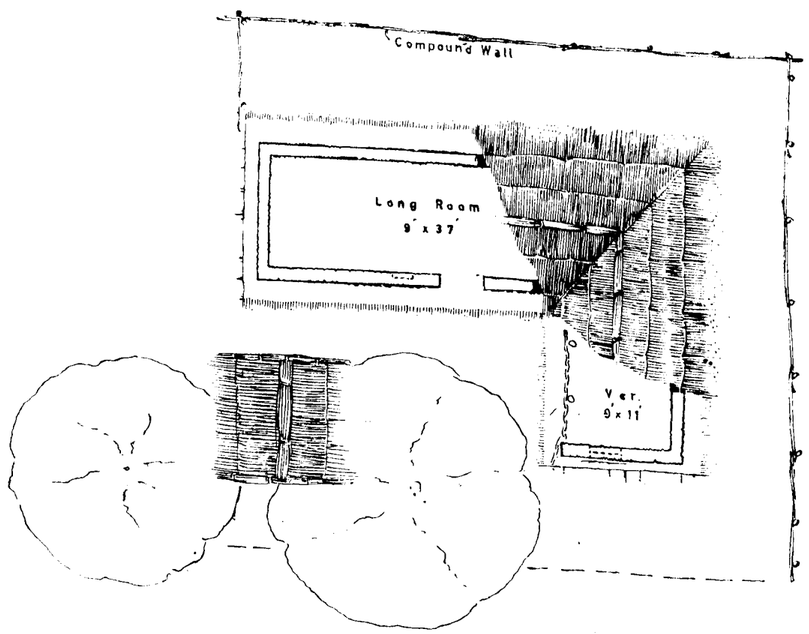
The cottage of a poor forester in Rajasthan - all of bamboo stripes and unplastered. He too has a *dagla*.

The picture alongside shows a neat one-room tenement.



HOUSES IN PLAINS

The huge cot-like covered seat in the yard is used to receive guests.

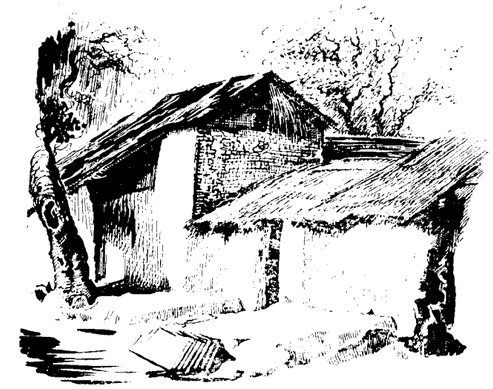


The houses in the plains have many a time walls made of unbaked clay, and roofs covered with weeds, grass, leaves, etc. where available stones are used in erecting walls, mud being used as cement. Doors and brackets are often slightly carved. Walls are sometimes white washed.

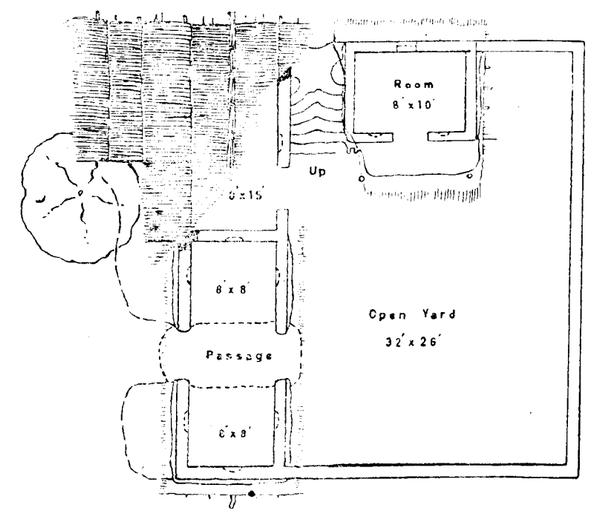
The *tibari* or porch-like structure adjacent to many dwellings, shown alongside, is used for diverse purposes.

A couple of huts. The one in the foreground is an improvised affair.

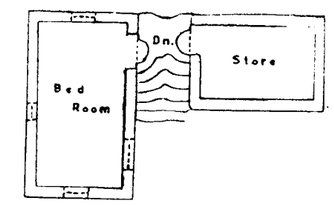
Mark the brackets and the curved tiles which are set in some sort of a cement. They show an improvement over other structures.



Two views of the only two-storeyed house in a village surveyed.



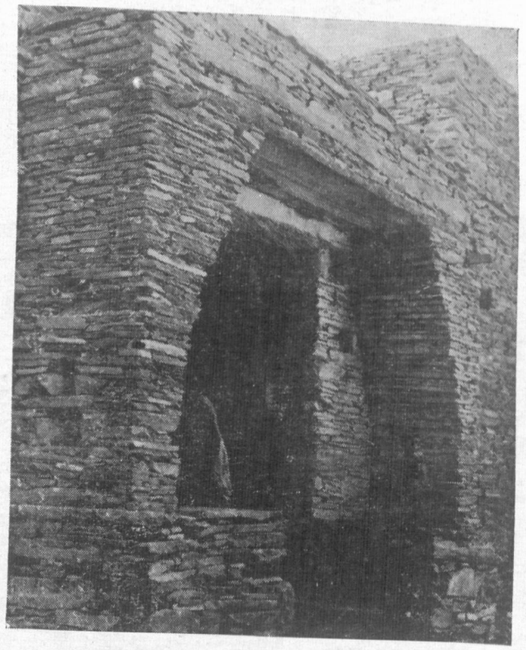
GROUND FLOOR PLAN



FIRST FLOOR PLAN

The roof is thatched and the walls are of baked bricks.

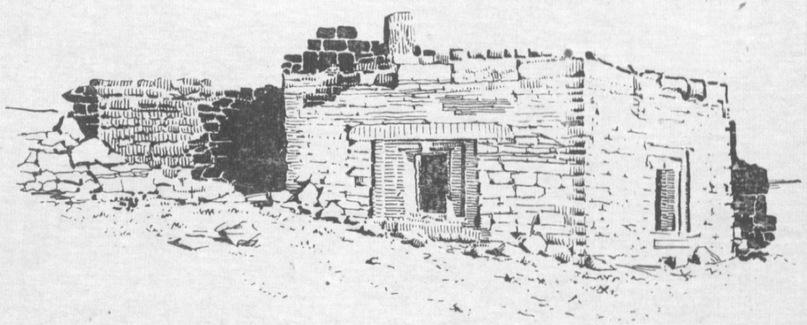
NEAR QUARRIES

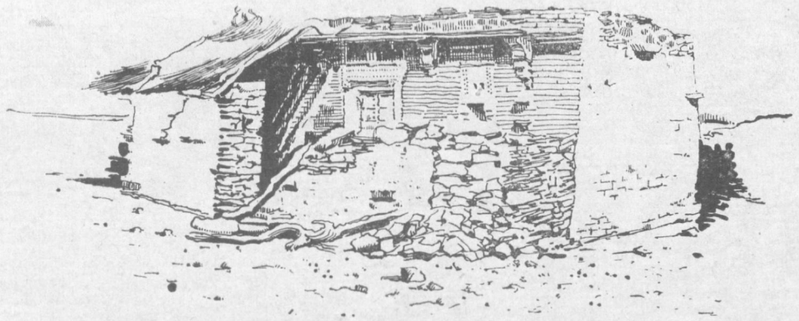


Some villages are located so near stone quarries in regions where less or no wood is easily available. Houses are made entirely of stone chips and irregular slabs, wood being used for making doors only.

Door way of a two-storeyed house built entirely of stone.

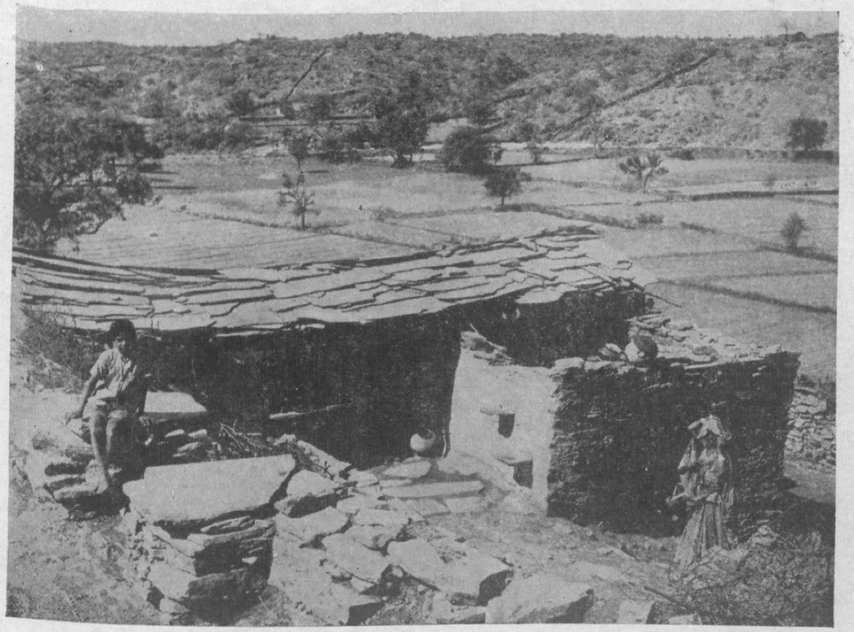
Another structure of stone blocks. The roof is pukka.



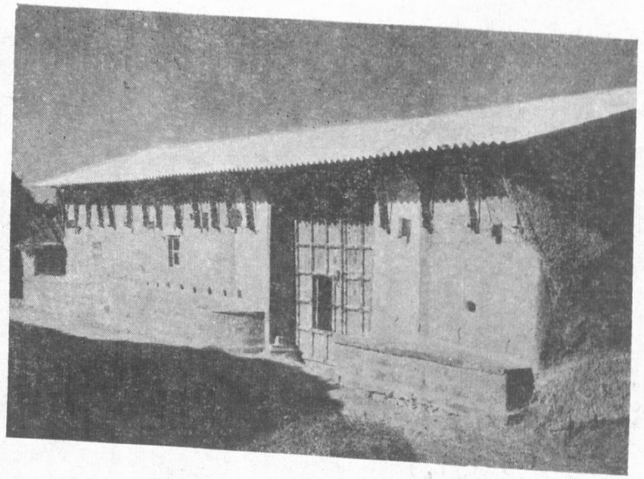


Not a rich man's house though made entirely of stone and clay. The temporary shed, sought to be made outside, contains some wooden rafters.

The roof of the hut below arrests the attention of the viewer by its use of irregular stone slabs obtained near by.

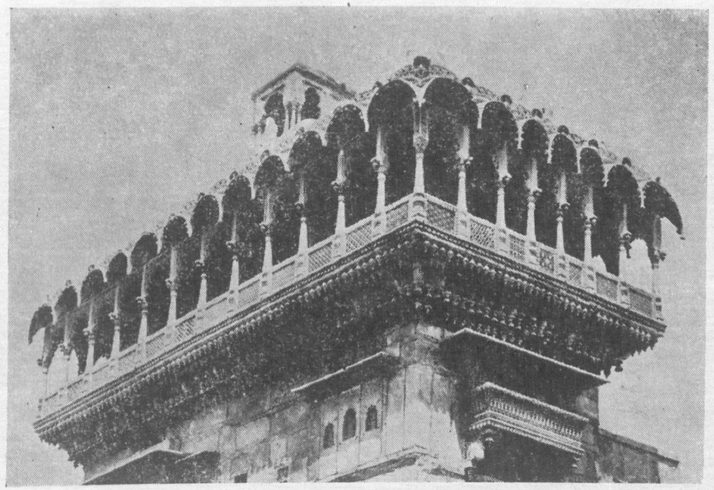


URBAN INFLUENCE



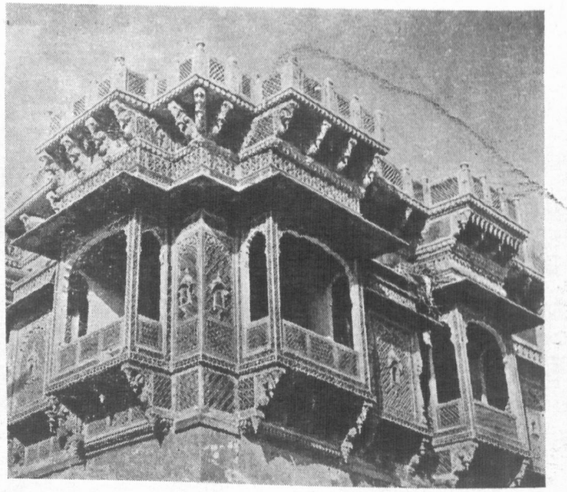
In villages which are near cities and towns, the dwellings of some show distinct marks of modern life. Corrugated iron sheets are largely in evidence.

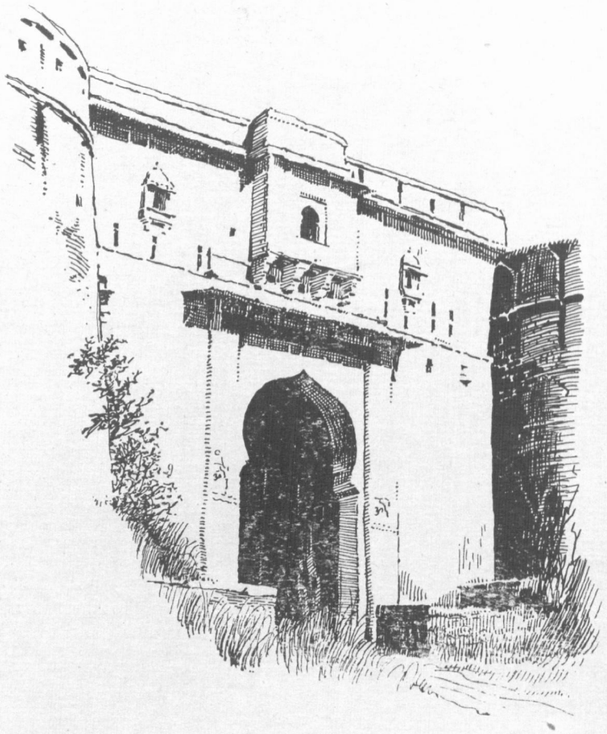
The soaring yellow stone apartments of a sirdar in western Rajasthan.



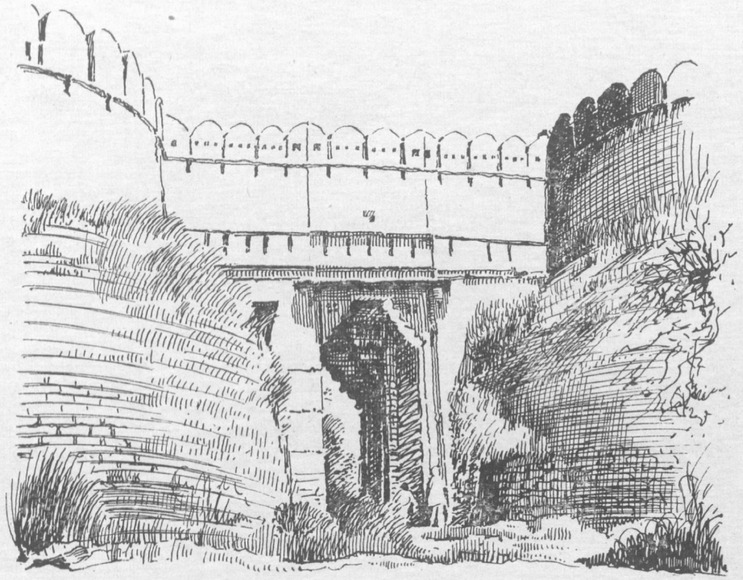
The deserted residence in a castle belonging to a jagirdar.

A rich man's house.

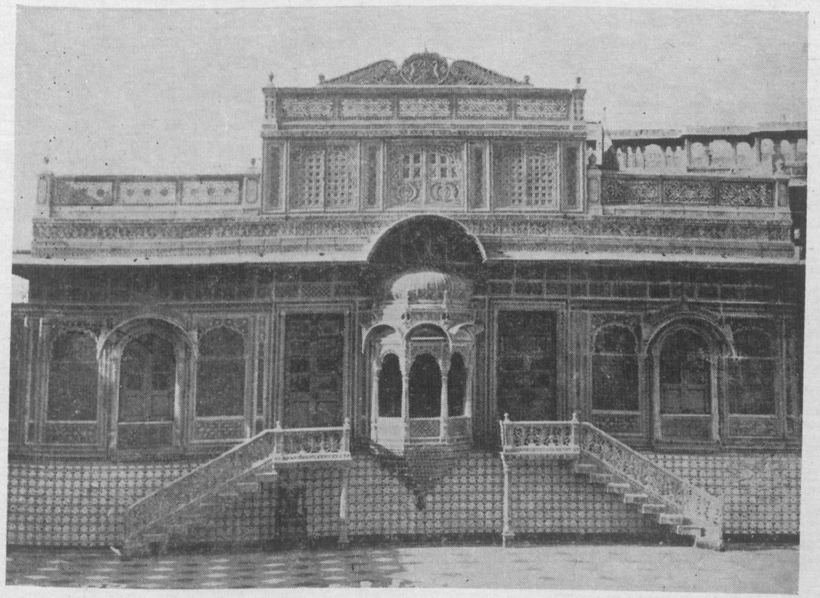




A poor jagirdar's residence.

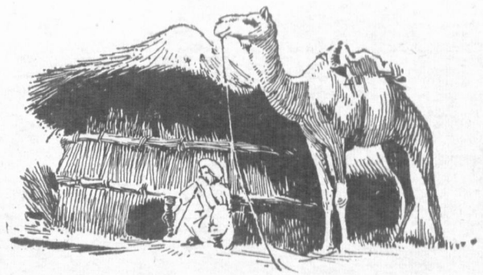


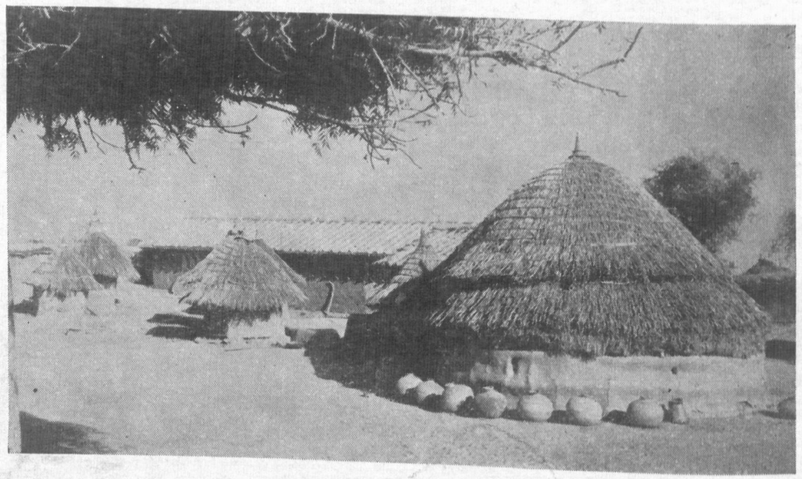
An elaborately carved gateway of a centuries old citadel and the mansion of a rich merchant.

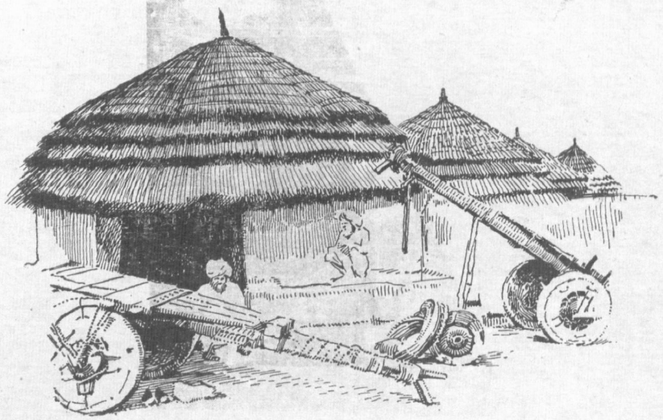


COTTAGES IN ARID WASTE LANDS

But the age of princes and jagirdars is now over, and democracy of humble people has taken its place.







Conical huts with one or more thatched roofs, and mud walls are a feature of the sandy regions of the State.

UTTAR PRADESH

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Regions	House Types
1. *Himalayan Districts*	
Uttar Kashi, Chamoli, Pithoragarh, Tehri Garhwal, Garhwal, Almora, Naini Tal and Dehra Dun.	Walls of stone and sloping roofs of slate, etc. (Non-hilly portions of Dehra Dun and Naini Tal districts have types of houses as at no. 2).
2. *Middle Districts of Northern Tarai*	
Rampur, Bareilly, Pilibhit, Kheri, Bahraich and Gonda.	Walls of mud and sloping roofs of grass, leaf, etc.
3. *North-Western and Central Districts of the Ganga Plain having low rainfall*	
Saharanpur, Muzaffarnagar, Meerut, Bulandshahr, Aligarh, Mathura, Agra, Etah, Mainpuri, Bijnor, Budaun, Moradabad, Shahjahanpur, Sitapur, Hardoi, Lucknow, Unnao, Rae Bareli, Bara Banki, Farrukhabad, Etawah, Kanpur and Fatehpur.	Walls of unburnt bricks or mud and flat roofs of clay and miscellaneous material.
4. *Eastern Districts of the Ganga Plain and the Vindhyan Hills and Plateau of the South*	
Allahabad, Pratapgarh, Sultanpur, Faizabad, Basti, Gorakhpur, Deoria, Azamgarh, Jaunpur, Ghazipur, Ballia and Varanasi.	Walls of mud and sloping roofs of tiles.
Jhansi, Jalaun, Hamirpur, Banda and Mirzapur.	

A NOTE ON SETTLEMENT PATTERN OF VILLAGES AND HOUSE TYPES

A revenue *mauza* which forms the unit of revenue records is a demarcated area of land. It may be totally uninhabited or may have habitation. A revenue *mauza* with a number of human dwellings is usually called a village. Houses in a village may be scattered or may be in the form of an assemblage. There can also be several assemblages within the limits of a *mauza*. Each of these is strictly a hamlet, but the hamlet which takes its name after the *mauza* is loosely called the main village and the remaining ones only are called hamlets.

Villages were formed as man took to a settled agricultural life and side by side carried on rearing of cattle. Every village besides human dwellings has tracts of cultivable land, pasture-land and unculturable waste. In Uttar Pradesh 87.1 per cent of the population is rural and there are 112,624 inhabited villages strewn all over the State. In agriculturally prosperous areas villages are compact. If in such areas dwellings become scattered, it shows that agricultural prosperity has declined. "Scattered type of occupation is an index of agricultural deterioration in old areas of settlement where otherwise the compact village is the general type."[1] Growth of size is another index of agricultural prosperity. "In the old settlement if the village has not been enlarged, this means that the progress in agriculture has not kept pace and people must have migrated to surrounding areas where means of livelihood are available. Contrary to it, big villages have prosperous agriculture with the result that people have kept on dwelling in the same spot."[2]

1. Principles of Human Geography by Blache P. Vidal, Page 101.
2. India's Population Problem by C. B. Mamoria, Pages 167-168.

Whenever a new settlement was contemplated, a convenient place was selected, but at times an inconvenient spot had to be chosen. "Potable water, defensible site and fertile soil are the main factors which determine the location and size of villages. Land forms climate, vegetation and communications also determine village sites. Potable water is obtainable from a spring, a well, a reservoir, a stream or a canal. So where these are found at the outskirts of a sand-dune, a mountain ridge, a river bend, a raised ground in a marshy land, a lake etc., hamlets and villages are established"[1]. Since cultivation is the mainstay of the village economy, every effort was made to bring under cultivation the maximum extent of land, subject, of course, to the need of producing more and the availability of resources to exploit the land. In the earlier stages, when land was plentiful in comparison to demand, dwellings could be constructed on cultivable land. But with the passage of time, population increased resulting in greater pressure on land and hence *abadi* sites were located on cultivable land only when unculturable land was not available.

Superstition is another factor playing an important part in the location of *abadi*. No one would like to inhabit a place with unhappy and unpleasant associations in the past. For example, the *Tharus* in district Kheri who live in villages located in the forest belt of the *Tarai* Region vacate a site as soon as the place is visited by an epidemic leading to deaths on a large scale. Thus the site of their original settlement is subject to constant change.

Proximity to fertile land and a good source of water supply are also important factors determining the selection of *abadi* site. A fairly large number of village and town settlements are located by the river side but at an elevation to avoid the risk of floods. Violent floods are a deterrent to the construction of dwellings in the vulnerable area. However, in some cases people continue to live in villages visited by floods annually, because the area of land liable to floods is too large to be left unpopulated. In Ballia, Deoria, Azamgarh, Ghazipur and some other districts of the eastern Uttar Pradesh, for example, people go on living in the *diar* and other areas inundated by flood water every year. They are vacated when the rivers are in spate and the danger to life and property is imminent, but are reoccupied when the flood recedes. "Save where the tract is too wide and too distant from the unsubmerged land to be cultivated therefrom, villages do not exist; where settlements upon the ground are necessary, the cultivators live in thatched huts with walls of wattle which can be removed in the event of an inundation, these settlements having the distinctive names of *chhapras*"[2]

In the hill areas, the availability of sun is another factor determining settlement. The sunny side of the hill is naturally more populated. Also the land on a hill should be such as can be terraced without much difficulty. The shelter of a forest or a large number of trees is also necessary for protection of houses from avalanches and landslides.

Land in the vicinity of area which is water-logged or covered with stagnant pools is not selected for habitation. The *Tarai* belts in the Himalayas remained sparsely populated for long due to its damp and malarial climate. Only after the successful implementation of malaria-eradication programme the *Tarai* is getting populated. Lastly, areas difficult of access are sparsely populated.

When the site has been selected, the question of allocation of land to settlers for the construction of houses arises. At this juncture caste plays the most important role. Members of the same caste usually congregate at one place and build houses close to each other. *Harijans* are mostly assigned an isolated area on the outskirts of the main settlement so that the traditionally high-caste people are not 'polluted.' This arrangement still persists. Any deviation from the established practice is on account of the change in the attitude of the traditional high castes towards the lower castes as a result of reform measures and the force of circumstances. So great was the influence of caste in ancient times that the intermingling of residential houses of the upper and the lower castes was a rarity.

Houses in villages are not usually scattered. Contiguity and compactness ensure safety and social life. Where handicaps imposed by nature are too powerful to be eliminated through human endeavour houses are of necessity dispersed. On the hills there

1. Ibid. page.166.
2. Gazetteer of Ballia, 1907.

is dearth of level land and scattered houses exist. In the case of forest or *Tarai* villages houses are built of materials such as straw, grass, reed and wood which are liable to catch fire easily. Such houses are, therefore, situated at a distance from each other, so that, if fire breaks out, it might not spread to other houses.

While selecting land for *abadi* surplus land is reserved so that more houses could be constructed when population increases in the course of time. On many occasions vacant space is not subsequently available to a caste in continuation of the existing block, and hence another *tola* or group of houses of the same caste comes into existence. A plot of land is set apart for serving as a cremation-ground as far as possible by the bank of a river or a pond. An open place is often left for use as a market-place or a common meeting ground on the outskirts of the village. Then there is village pasture having deep roots in the village economy.

While most of the villages were inhabited predominantly by the agricultural people with representatives of other professions and ranks to complete the village economy, some of the villages were also founded to serve military ends. Quite a few served as halting places where unserviceable animals and vehicles could be left and new ones obtained. Such villages to begin with were simple in character and were occupied by a particular class of persons. In course of time, these grew into composite villages where all classes of people, irrespective of caste and profession, lived together as a corporate unit. Such simple antiquated villages are still found in the remote and backward parts of the State.

Dr. Acharyya recounts the salient features of a general village in ancient India thus: "Each village is surrounded by a wall made of brick or stone. Beyond this wall there is a ditch broad and deep enough to cause serious obstructions in the event of an attack on the village. There are generally four gates at the middle of the four sides and as many at the four corners. Inside the wall, there is a large street running all round the village. There are two other large streets, each of which connects two opposite main gates. They intersect each other at the centre of the village, where a temple or a hall is generally built for the meeting of the villagers. The village is, thus, divided into four large blocks by streets which is again sub-divided into many blocks by streets which are always straight, and which run from one end to the other of a main block. The two main streets crossing at the centre have houses only on one side facing the street. The ground floors of these houses on the main street consist of shops. The surrounding street has also houses on one side. There are mainly public buildings, such as schools, colleges, libraries, guest-houses, etc. All other streets generally have residential buildings on both sides. The houses high or low are always uniform in make. The drains (*Jaladhāra*, i.e., water passages) are made towards the sloping of the village. Tanks and ponds are dug in all the inhabited parts and located in such quarters as can conveniently be reached by a number of inhabitants. Temples of public worship as well as the public commons, gardens, and parks are similarly situated. The people of the same caste or profession are generally housed in the same quarter. The best quarters are generally reserved for the Brahmans and the artist classes. The habitations of the Chandalas as well as the places for cremation are located outside the village wall (in the north-west in particular). The temples of fearful deities such as Chamunda are also placed outside the wall."[1]

1. Mānasarā, Dr. Acharyya's Summary pp. 8-9.

With the passage of time conditions of war and uncertainty subsided and fortified villages which were founded with a self-defence bias came to be replaced by convenient and accessible villages. Conscious planning is almost conspicuous by its absence in the development of villages in this State. With the growth in population, there was an uncontrolled and wanton construction of houses according to necessity.

The portion of Uttar Pradesh falling in the area of the Gangetic plain is the region of the Shapeless Agglomerate. The western part of the State is characterised by villages belonging to shapeless cluster, while in eastern Uttar Pradesh both the shapeless and dispersed clusters are found side by side. In the north-western portion of the State comprising the hill districts of Uttar Kashi, Chamoli, Pithoragarh, Tehri Garhwal, Garhwal, Almora, Naini Tal and Dehra Dun the rural settlements are of composite orders belonging to Dispersed Clusters and Isolated Homesteads. Villages lying in the south of Mirzapur district and in the south-east of Allahabad district are formed of Isolated Homesteads. Villages belonging to Linear

Assemblage and Linear and Square Agglomerate are almost absent.

Himalayan Region—In the Himalayan region villages are usually small. The settlement is usually located on an airy spur, halfway up the sunny side of the hilly slopes, with terraced plots for cultivation all round. Fields are usually situated at a considerable distance from human habitation. Outpost quarters, locally called *chhaonis*, are set up in the distant fields to serve as sheds for cattle and temporary residence during agricultural operations. A village situated near the top of the hill is called a *dhar*. Scheduled Castes live in a separate cluster either on the outskirts or at a lower level. For selecting a site availability of water in the vicinity is an important consideration. Generally there are two sources of water, one for high castes and the other for the low castes. Since the *abadi* site is not level but slopy, houses are constructed at varying heights. Some lanes are paved with stones. Other lands and footpaths are strewn with *bajri*. The villages generally wear a rugged and clumsy appearance.

In villages of Jaunsar-Bawar (Chakrata tahsil) of Dehra Dun district the distribution of houses within the *abadi* is according to lineage. Originally every family reserved surplus space inside and about its house. On its division more huts for new units were built close to the ancestral house. Thus families having a common ancestry have a common home, locally known as a *bhera*.

Most of the villages consist of dispersed clusters and isolated homesteads. The life in the dispersed type of villages differs from that in the nucleated type. "Isolated houses or hamlets are tiny foci incapable of exerting any attraction comparable to that which centralises cultivated fields about the clustered villages on great plains. In its large aspects the appearance of the landscape resulting from such forms of establishments is characteristic of an entirely different type of agriculture, of another mode of life, and of a totally different arrangement from that of clustered villages."[1]

Gangetic Plain—The northern fringe of the Gangetic Plain is *Tarai* and *Bhabar*. The *Bhabar* is the piedmont zone skirting the Outer Himalayas where rivers suddenly flatten out and deposit the coarser boulders and gravels. In this tract, 20 miles wide in the west and narrowing eastwards, smaller streams except when in spate are lost. They reappear after some distance and deposit their finer material. A marshy tract covered with jungle and long grass has been formed, called the *Tarai*, stretching in a thin belt from Saharanpur to Deoria. In the *Tarai* and *Bhabar* most of the cultivators have their homesteads on their fields. In forest villages the population consists mainly of *taungiya* settlers and forest workers such as grass-cutters, sawyers, lumbermen, etc. The villages in the forest tract are mere clearings in the jungle and are seldom of a permanent character. Very few of them are of any antiquity. Village sites are scattered and *mauzas* cover a large area. Houses are usually of grass or wattle. As land is plentiful houses are constructed at a distance from each other. Besides the villages mentioned afore, there are especially settled villages of the *Tharu* and *Bhoksa* communities.

The villages of the Gangetic Plain outside the *Tarai* are of a permanent character. All districts of the West Plain[2] Allahabad district of the Central Plain[3] and Bahraich district of the East Plain[4] consist mostly of villages which can be called 'shapeless agglomerates' in appearance.

Most of the districts of the Central and East Plains have mixed types of villages, viz., 'shapeless agglomerates' and 'dispersed clusters.'

In the Upper Doab the habitation sites when viewed from outside look like a lofty mud-walled enclosure pierced by a few openings. In the Lower Doab they are irregular clusters of mud-huts built round the large brick dwellings of the *ex*-zamindars.

In Rohilkhand the usual type consists of a cluster of mud-built huts round the better dwellings of *ex*-zamindars.

1. Principles of Human Geography, Page 301.

2. West Plain comprises all districts of Rohilkhand Division, all districts of Meerut Division except Dehra Dun, and Farrukhabad and Etawah districts of Allahabad Division and Kheri district of Lucknow Division.

3. Central Plain comprises Kanpur, Fatehpur and Allahabad districts of Allahabad Division, all districts of Lucknow Division except Kheri, and all districts of Faizabad Division except Bahraich and Gonda.

4. East Plain comprises Bahraich and Gonda districts of Faizabad Division, all districts of Gorakhpur Division, and all districts of Varanasi Division except Mirzapur.

In the eastern districts they consist of small collection of mud-houses erected on an elevation, especially where the country is liable to inundation.

Hills and Plateau—This Natural Division comprises all the districts of Jhansi Division and Mirzapur district of Varanasi Division. Villages of the districts of Jhansi Division as well are more or less 'shapeless agglomerates'. They are situated at a much greater distance from each other than in the Gangetic Plain. Cluster of houses are perched on elevated sites. Their substantial nature lends an air of solidarity and strength. Villages situated on hillocks present a fort-like appearance. In areas intersected by streams 'dispersed clusters' are found. Villages of Mirzapur district differ from those in the same Natural Division. In a thin belt in the middle of the district, 'dispersed clusters' exist, while in the remainder of the district villages consist of 'isolated homesteads.'

Villages by size of population

The following table shows the average village population in India and the various States :

India and States	
INDIA	634
Andhra Pradesh	1,097
Assam	426
Bihar	629
Gujarat	824
Jammu and Kashmir	452
Kerala	9,117
Madhya Pradesh	394
Madras	1,749
Maharashtra	792
Mysore	695
Orissa	354
Punjab	763
Rajasthan	523
Uttar Pradesh	*571*
West Bengal	685

The average village in Kerala has a very high population (9,117). Madras (1,749) and Andhra Pradesh (1,097) are other two States having a high average village population. The villages of Uttar Pradesh with an average population of 571 persons are more populous than those of Orissa (354), Madhya Pradesh (394), Assam (426), Jammu and Kashmir (452) and Rajasthan (523).

The following Table shows the average village population in the State and natural divisions :

State and Natural Divisions	Average Village Population 1951	Average Village Population 1961
Uttar Pradesh	489	571
Himalayan	150	179
West Plain	632	759
Central Plain	558	642
East Plain	470	535
Hills and Plateau	456	555

In the Gangetic Plain villages get smaller from the west to the east. Those of the Himalayan Division are the smallest.

The districts having the largest average village population are all in the West Plain, viz., Meerut (1,455), Muzaffarnagar (1,351), Mathura (1,036), and Agra (1,005). Those having the lowest average village population are in the Himalayan Division, viz., Garhwal (142), Almora (156), Pithoragarh (158) and Tehri Garhwal (175).

The following Table gives the percentage of villages of various sizes in the State and the natural divisions :

State and Natural Divisions	Percentage of Villages with Population of: Above 5,000	2,000 to 4,999	1,000 to 1,999	500 to 999	Under 500
1	2	3	4	5	6
Uttar Pradesh	0·3	3·4	11·4	23·1	61·8
Himalayan	0·0	0·2	0·6	4·1	95·1
West Plain	0·6	5·7	15·9	29·1	48·7
Central Plain	0·2	3·6	14·0	27·7	54·5
East Plain	0·2	2·6	10·4	23·4	63·4
Hills and Plateau	0·3	3·3	11·1	21·9	63·4

The number of villages with a population of 5,000 and above has considerably increased since 1951. The main reason for this is the change in the definition of urban areas, as a result of which many Town Areas treated as urban in 1951, have come under the category of villages.

Size and distribution of hamlets

Hamlets spring up either as habitations of persons belonging to one caste living

separately from others or as homesteads of cultivators who wish to live close to their fields for convenience of agricultural operations. Increase in the number of hamlets is not only the sign of increase in population but also of settled times. In olden days, when the times were troubled, people used to live close together in compact sites and there was little dispersal. With the improvement in the law and order situation hamlets grew in number as more and more people found it easy and safe to live in the proximity of their fields. The following Table gives the number of hamlets per inhabited village and the average hamlet population in the State and the natural divisions treating the main village also as a hamlet :

State and Natural Divisions	Hamlets per Inhabited Village		Average Population per Hamlet	
	1951	1961	1951	1961
Uttar Pradesh	2·30	2·32	212	246
Himalayan	1·09	1·20	138	149
West Plain	1·79	1·77	353	430
Central Plain	3·36	3·33	166	193
East Plain	2·66	2·69	176	199
Hills and Plateau	1·51	1·62	301	342

The Central Plain has the largest number of hamlets (3·33) per village followed by the East Plain (2·69), the West Plain (1·77), Hills and Plateau (1·62) and the Himalayan (1·20) Divisions. The number of hamlets per village has not shown any increase in the West and the Central Plains since 1951. In the Himalayan Division there are practically no hamlets except in Dehra Dun district, where the average is 2.3 per village. Similar is the case with the Hills and Plateau Division. Only Banda district is an exception where the average number per village is 3·2. the marked feature of this region is that the black-soil area has an insignificant number of hamlets due to its unhealthiness while the red-soil area has a greater dispersion in small settlements. In Bijnor, Saharanpur and Meerut districts the *abadi* is concentrated in large sites with little dispersion. Mathura (2·1), Agra (2·7), Etah (2·5), Mainpuri (3·2), Farrukhabad (2·8), Etawah (3·0) and Kheri (2·8) districts of the West Plain, however, have a considerable number of hamlets. In the East Plain Gonda (6·0) and Bahraich (4·5) are prolific in this respect. The remaining districts have between 2 and 3 per village. The Central Plain has by far the largest number of hamlets per village, the districts having more than 3 hamlets per village being Sitapur (3·2), Rae Bareli (4·5), Bara Banki (3·3), Faizabad (3·8), Sultanpur (4·1) and Pratapgarh (4·0).

The average population per hamlet in 1961 is 246 as compared to 212 in 1951. It is the lowest in the Himalayan Division on account of a low average density. Though the number of inhabited sites is large, the houses are not huddled together. Hamlets of Pithoragarh (127), Garhwal (133), Dehra Dun (135) and Uttar Kashi (138) districts have an average population of less than 140. Hamlets of the West Plain & Hills and Plateau have a large population. People perforce had to live together in large compact sites because of insecure conditions that prevailed in the 18th century. The average population per hamlet exceeds 1,000 in the districts of Meerut (1,295), and Muzaffarnagar (1,068) of the West Plain. Next to them are districts Bulandshahr (788), Saharanpur (650) and Mathura (503) of the West Plain and districts Hamirpur (688) and Jalaun (507) of Hills and Plateau in which the average exceeds 500. Hamlets in districts Etawah (240), Mainpuri (248) and Farrukhabad (250) of the West Plain and Mirzapur (260) and Banda (231) of Hills and Plateau are, however, small, having less than 300 persons. The population of the Central and East Plains is well dispersed. Districts Sultanpur (134), Pratapgarh (139) and Faizabad (143) of the Central Plain and Gonda (116) of the East Plain have small hamlets with an average population of less than 150.

Types of houses

Houses can be classified into three types named below, following the pattern of the *Peasant Life of India* :

1. with rectangular ground-plan and horizontal roof,
2. with rectangular ground-plan and inclined roof, and
3. with circular ground-plan and conical roof.

Rectangular floors and flat roofs

Such houses are limited to regions having an annual rainfall below 100 cm. (40″ approx.). Such houses are even more prominent in areas where rainfall is less than 60 cm. They occur widely in Jammu, the Punjab, western Uttar Pradesh, Rajasthan excluding Aravalli hills, central Maharashtra, eastern half of Mysore and the greater part of Andhra Pradesh.

In Mysore the courtyard is generally at the back. In Uttar Pradesh and parts of Rajasthan it is mostly in the centre and serves as a working place for the women of the household. Rooms are built about it on the outside. In Maharashtra even though a central courtyard exists the arrangement of rooms is different. A compound wall is first built and rooms are constructed continuously along its inner side. In other parts of the country the courtyard can be in the front or the back or the centre.

Districts of Uttar Pradesh which have predominantly rectangular rooms and flat roofs in rural areas are Bijnor (south), Moradabad (south), Budaun, Rampur (south), Bareilly (south), Pilibhit (south), Shahjahanpur, Saharanpur (west), Muzaffarnagar, Meerut, Bulandshahr, Aligarh, Mathura, Agra, Etah, Mainpuri, Farrukhabad, Etawah and Kheri (south-west) of the West Plain; Kanpur, Fatehpur, Sitapur (west), Hardoi, Unnao, Lucknow, Rae Bareli, Bara Banki, Sultanpur (north-west) and Pratapgarh (south-west) of the Central Plain. The flat roof is built of wooden beams, planks, stalks, bamboo, twigs, dry leaves and matting on which prepared clay is spread. Final touches are given with cowdung to make the upper surface smooth. Arrangement is made for draining the rain-water from the roof by fixing a *parnala* (outlet) made of tin (in some cases of wood or of baked clay) at one corner of the roof. The upper edges around the roof are sometimes covered with grass or other matter for protection against heavy showers. If the kitchen is covered, a hole is provided in the roof as an outlet for smoke, which is covered with a piece of broken earthen pot as a precaution against rain-water.

Flat roofs of brick-and-lime are rare in rural areas as only the well-to-do can afford them. Tahsils having more than 10 per cent roofs of this kind are Kichha (Naini Tal), Roorkee (Saharanpur), Mathura and Chatta (Mathura) and Firozabad (Agra). Only *pucca* roofs in tahsil Kichha are made of brick-and-lime. Others are sloping roofs of grass, leaf, reed, thatch, wood or bamboo.

In most of the districts mentioned under flat-roofs house walls are made of mud except in Muzaffarnagar, Meerut (part), Bulandshahr (part), Aligarh (part), Mathura (part), Etah and Mainpuri (part) where the unburnt brick is the chief wall material.

Rectangular houses

In the Himalayan region the slanting roofs are mostly of slate. In other places they are of thatch or tiles. The framework of the thatch is usually wood or bamboo often with reed matting. Straw or grasses of various kinds are put on it. Alternatively, semi-cylindrical or flat tiles are placed on the framework. "It is interesting that, as one travels from Bengal towards the north-west, straw for thatching first gives place to wheel-made semi-cylindrical tiles in Bihar. Farther west, in eastern Uttar Pradesh, for instance, flat hand-made tiles become increasingly frequent, until in Rajasthan the flat tile alone is employed unless the roof becomes a horizontal one of beaten earth and boards."[1]

In Uttar Pradesh the roofs consist of two inclined planes which meet in a ridge. Hipped roofs of four inclined planes are rare. Nor are the convex roofs typical of West Bengal found. Roofs in hill districts, namely, Uttar Kashi (part), Chamoli, Pithoragarh (part), Tehri Garhwal, Garhwal, Almora, Naini Tal (Naini Tal tahsil) and Dehra Dun (Chakrata tahsil) are usually of slate. In Dehra Dun (Dehra Dun tahsil), Saharanpur (east), Bijnor (north), Naini Tal (plain portion), Moradabad (north), Rampur (north), Bareilly (north), Pilibhit (north), Kheri (excluding south-west), Sitapur (east), Bahraich, Gonda (excluding east), Basti (north), Gorakhpur (north-east) and Deoria (north) roofs are thatched with grass, leaves, etc., because of their easy availability. All these lie in the sub-Himalayan belt of the West and East Plains. In Faizabad, Sultanpur (excluding north-west), Pratapgarh (excluding south-west) and Allahabad of the Central Plain, and Basti (excluding north), Gorakhpur (excluding north-east), Deoria (excluding north), Azamgarh, Jaunpur, Ballia, Ghazipur and Varanasi of the East Plain the roofs are mostly tiled.

In the Hills and Plateau Division also, tiled roofs are the most common except in

[1]. Peasant Life of India: Page 9.

the central portion of Mirzapur district where thatches of straw, grass, leaf, etc., are prominent.

In the Himalayan Division the courtyard is usually in front and in Bundelkhand portion of Hills and Plateau Division it is usually in the centre. In the remaining districts where sloping roofs predominate the courtyard is sometimes in front and sometimes in the centre, but the latter is the prevailing type.

Walls throughout the area of Uttar Pradesh in which sloping roofs are most common are made from mud, except in the Himalayan districts where they are made of stone.

Composite types of houses with rectangular ground-plans and flat or sloping roofs are found side by side in some of the districts of the State such as Meerut, Sitapur, Hardoi, Unnao and Bara Banki, which have a fair sprinkling of thatched houses.

Circular floors with conical roofs

They are found in some parts of Rajasthan, Bihar, Gujarat, Andhra Pradesh and Madras. They are not found anywhere in Uttar Pradesh.

Village housing projects scheme

The problem of rural housing is both complex and enormous. The vast majority of houses are hardly more than thatched huts lacking proper light and ventilation. Drains are absent, lanes are dirty and cattle-sheds are located in houses themselves. Thus there is insanitation all round. A tolerably decent living condition is a basic human need just like food and clothing.

The solution of the problem obviously lies in inhabiting new villages according to a proper plan and replanning the existing villages to the extent possible. The Ministry of Works, Housing and Supply of the Government of India made a provision of Rs. 10 crores in the Second Five Year Plan for rural housing. The sum was meant for setting up housing projects in 5,000 selected villages, which would act as a source of inspiration to other villages. Improvement of housing and physical reconstruction of villages were to be taken up as long-term programmes spread over a period of 10 years. The Government of India advanced loans to the States up to 50 per cent of the cost of construction of a house subject to a maximum of Rs. 1,500.

The scheme came into operation in 1958-59. A *Rural Housing Cell* was set up under the overall control of the Town and Village Planner. The staff consisted of an Executive Engineer, an Assistant Architect, an Assistant Town Planner besides other technical and clerical staff. A Control Committee consisting of the Deputy Secretary, Housing Department, the Town and Village Planner and the Director of Panchayats was also appointed to look after this work.

The target for the Second Five Year Plan was 850 villages and for the Third, 500. For various reasons progress did not fulfil expectation. Up to the end of December, 1963 only 240 villages could be covered. The achievements during this period were as follows :

Year	Number of persons to whom Loan was sanctioned	Number of Houses completed	Number of Houses under construction
1958-59	439	–	21
1959-60	1,463	99	997
1960-61	1,796	486	1,698
1961-62	1,607	543	2,830
1962-63	41	202	2,279
1963-64 Upto 31-12-63	125	500	1,928

Thus out of the 5,471 persons to whom loans under the Scheme were sanctioned up to the 31st December, 1963 only 1,830 persons completed their houses within this period.

APPENDIX

UTTAR PRADESH

The village corresponds to the revenue *mauza* and consists usually of a central inhabited site, with a tract of cultivated land around it. In the western district the villages usually consist of single compact groups of houses, a relic of the precautions taken against Sikh invasion in the eighteenth century. In the centre and east hamlets are more common. These usually consist of the homestead of a landlord or large tenant, built for greater convenience in or near his holding, round which cluster the houses of his farm servants; or else of the residences of some despised caste which is not suffered to dwell in the village itself. Unless there are other circumstances, as in the west, one may usually take it that the better the land available for agricultural purposes the greater the probability of the existence of hamlets, as the tenants prefer to live near their holdings which also require more care. It must be clearly understood that the result of this is that the "census village" (i.e. the revenue *mauza*) may represent a single inhabited site, or two or more detached hamlets amongst which its population is divided.

The area included in the *mauzas* (i.e. the lands belonging to a particular village) is frequently very extensive, and the population required to cultivate it is consequently also large. In such cases, if the central site is adhered to, and hamlets are not found, the village will grow so populous that in most countries it would be considered a small town. Its inhabitants have no urban occupations themselves, but these large villages become convenient centres for itinerant merchants and rural artisans. The place therefore grows still larger, and in time special sanitary precautions become necessary. In practice this amounts to bring the place under the provisions of the Village Sanitation Act (Act II of 1896). As soon as this has been done, the site thought still a village is on the way to becoming a town.

14. (2) *Country towns*—The next dividing line is passed when the non-agricultural population grows so large that the chaukidari (village watchman) cess becomes too small to pay for sufficient watch and ward. Act XX of 1856, which permits of the raising of a house tax for the payment of watchman of a better class, is imposed : as such a tax is never levied from a merely agricultural population its existence is evidence that the place is more or less urban in character. As the town increases in its non-agricultural population, it may become a notified area or a municipality; the two differ in degree rather than kind, for only certain provisions of the Municipal Act are applied to the notified area. It then loses all trace of its former connection with the revenue *mauza* and indeed its boundaries usually include two or more such *mauzas* or a part of them.

The case of Karwi-Tarauhan notified area well exemplifies the growth of a village into a town. Karwi and Tarauhan are a village of some 1,400 acres, and a decayed township respectively, lying about a mile apart. Tarauhan had been a village but had grown under Maratha dominion (this place lies in Banda district), and subsequently was the headquarters of a British tahsil. Karwi grew considerably under the influence of Government (which had a frontier cantonment there from 1808 to 1818), and of a Maratha family related to the Peshwas. When the Manikpur-Jhansi branch of the Indian Midland Railway (now Great Indian Peninsula Railway) was built in 1889, greater extensions were made and bazars were built, some of them on the lands of neighbouring villages. The place became a fairly busy trading centre, and in 1895 was brought under Act XX. The two places were connected by straggling houses and Tarauhan began to share the prosperity of its neighbour. By 1907 there was practically but a single site and the whole was amalgamated into a notified area. The typical country town therefore is an exaggerated village with a certain non-agricultural population attracted by the convenience of its site. If favourably situated for trade, it may grow considerably; but as a rule its trade all lies in its own immediate vicinity. But whether it becomes a trading centre or not it never loses its agricultural character completely, and even its trade is normally subservient to the agriculturists of the neighbourhood of which it is the centre, and often the traditional centre.

15. (3) *Cities and urban communities*—The larger towns have a totally different origin. As Mr. Baillie said when discussing the subject in the report of 1891 (an account which I have freely used), in India "the town attracts the trade and not the trade the town." The chief cause which in

England produces towns is absent; though there may be a city or two that owe their inception to industry, the majority do not. In this province most large towns were built by different rulers for political or strategical reasons or to satisfy a passing whim Lucknow owes its birth to the dislike of Asaf-ud-Daula for Fyzabad; Agra was Akbar's capital; Fyzabad, Jaunpur, Bareilly, Shahjahanpur, Farrukhabad, Rampur, Moradabad, Saharanpur, Budaun, Amroha, Sambhal, Bahraich, Banda, Shahabad were all foundations of some Muhammadan potentate or other; the descendants of the original founder and his nobles in many cases still form the local aristocracy. Other towns owe their importance to religion: Benares, Allahabad, Ajudhya, Muttra, Bindhachal and Hardwar are all centres of pilgrimage, as, to some extent, is also Gorakhpur. Meerut and Jhansi (though the latter was originally the capital of a Hindu State) are creations of the British Government. Cawnpore is the only first rate place in the province the origin of which is due to trade alone. But if other causes made the towns, yet trade is the cause which has maintained them. Lucknow, Benares, Agra, Allahabad, Bareilly, Meerut, Moradabad, Rampur, Koil, Saharanpur, Jhansi, Muttra, Hathras, Etawah and Amroha are all at present commercially important either as industrial and manufacturing centres, or centres for the collection and distribution of produce, whatever other advantages they may also possess. Lucknow, for instance, has industries of its own, both Indian and European, is a large railway centre, and is also the capital of Oudh. Benares depends chiefly on its pilgrims, who give the same sort of impetus to trade as the summer visitors do to the trade of Brighton and Scarborough. Agra was always a distributing centre, of sugar and tobacco for Central India and Rajputana, and salt, cotton, *ghi* and stone for the districts lying north of it; it is now so more than ever. Its old native industries have decayed but modern industries have replaced them. Allahabad is a place of pilgrimage and the headquarters of Government; Bareilly is a centre of the sugar refining industry; and so on. Of the rest, Farrukhabad, Mirzapur and Ghazipur are instances of places once commercially important, which have been ruined by the advent of the railway. Farrukhabad used to have a considerable trade by water and the Grand Trunk Road, but the East Indian Railway passed it by and diverted its business. It is now a junction of two lines and matters may improve; but at present it is known to be losing steadily by emigration to bigger marts. Mirzapur was a mart as early as 1760 to 1770, so Tieffentaller tells us; and from 1800 to 1850 was the most important trading centre in Upper India. It had an important Custom house[1], the cotton of the Deccan and the grain of the Doab came through it on the way to Calcutta, whilst sugar, piece goods and metals were sent up country. Its importance lay in the fact that it was the highest point on the Ganges to which big steamers could travel. But when the East Indian Railway reached and passed it in 1864, it began to decline; its brass utensils, shellac and carpet industries alone save it now from ruin, whilst Bindhachal lends it importance as a religious centre. Ghazipur was the Mirzapur of the northern districts before the advent of the railways; it has now been steadily decaying for year and by the wish of the local authorities it is not even classed as a city at this census. Jaunpur was a capital city, long since decayed, for it has no commercial importance, no trade and no industries to speak of. Budaun is a place that with the advent of the railway should grow in importance. Sambhal has a considerable export trade; it is an old and decayed town that may revive. Gorakhpur is simply a collection of villages, a glorified country town whose area consists chiefly of huge green spaces. Though ranked as a city, its nature is rather suburban than urban. Hathras was a seat of an important Jat family and possessed a very strong fortress which was besieged and reduced in 1817. Its original position was due therefore to political and military considerations. But when the railway came it developed into a trading and industrial centre of the first rank and its factories are continually growing in numbers and importance. Lastly Cawnpore till 1778 was a mere village; then it became a frontier cantonment. In 1863 the railway reached Cawnpore, when it at once took its place as an important distributing centre. It is now the largest railway centre in the province, the junction where five lines of the first rank converge, and consequently its collecting and distributing trade is enormous. Not only so, but it has also become a great manufacturing centre; cotton, sugar, jute, woollen and flour mills, tanneries, leather, tent, brush, and cabinet factories, iron foundries, printing presses and chemical works all exist in Cawnpore.

(1) In Mirzapur Cemetry is the tomb of one H. Hope, B. C. S., died 1822. He was officiating Import Warehouse Keeper and Naval Store Keeper at Mirzapur.

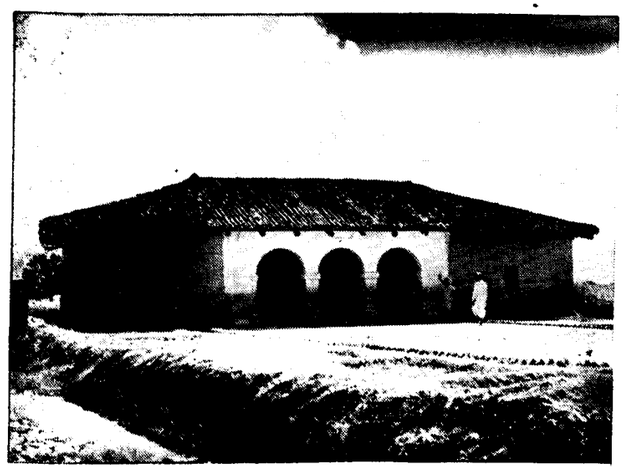
In brief, in India as elsewhere, it is true that "God did make the country side and man did make the city." Usually, it was not so much man as a man; the rulers built their cities to suit their convenience, their interest or their pleasure. The cities of course attracted trade. But when a fresh ruler's whim selected a new city, trade declined: the English and Dutch factories at Agra were closed when the Moghal court moved to Delhi; Fyzabad declined when Lucknow became the Oudh capital. Some cities however preserved importance as distributing centres, especially those on the great waterways. When the railways came they too lost importance, unless they became also railway centres, or possessed or obtained industries of their own. The railways operated to maintain the importance of most cities and actually made others. A few are akin to the watering places of England, where their wealth is due to a periodical influx of visitors, in this case pilgrims. But unless a city is lucky enough to possess such adventitious advantages as religious sanctity or position as a Government headquarters, trade and industrial enterprise alone can make it prosper in the present century.

United Provinces Report, 1911

E. A. Blunt Pages 23-25.

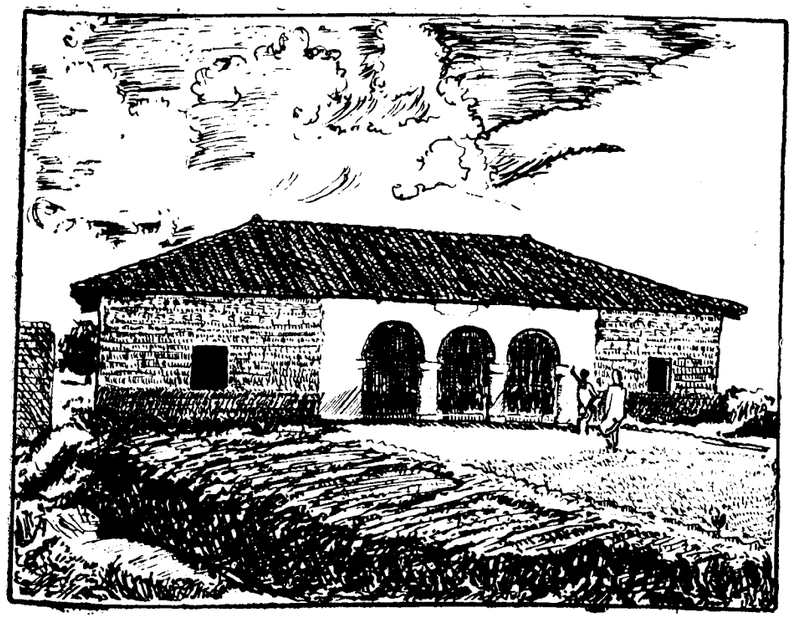
A kachcha *house in Village Rajderwa Tharu, Tahsil Balrampur, District Gonda (East Plain Tarai)*

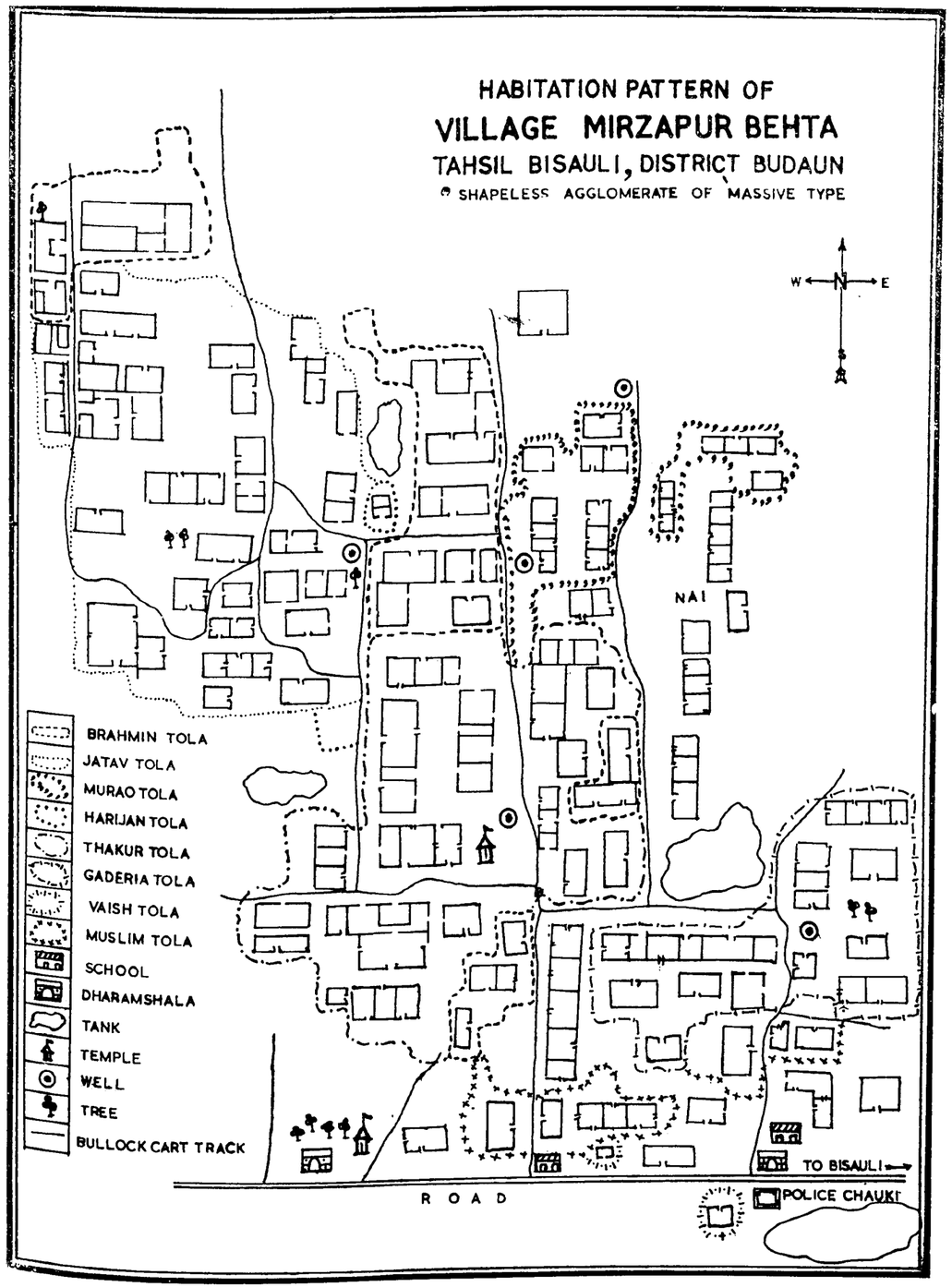
The walls are made of stems of arhar *and* ghatera *reed, plastered with clay and dung. The roof is made of thatching grass and wattle*

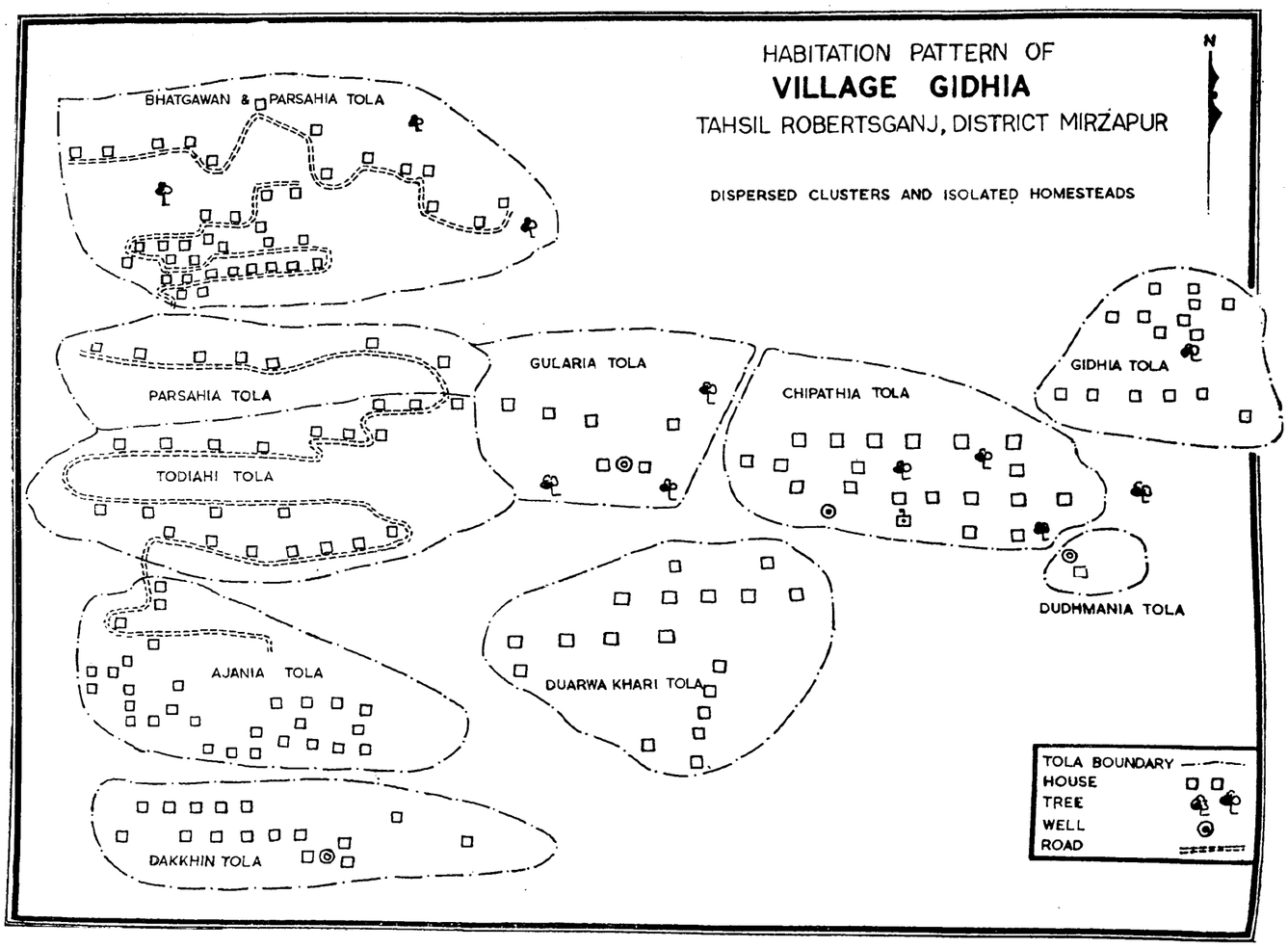


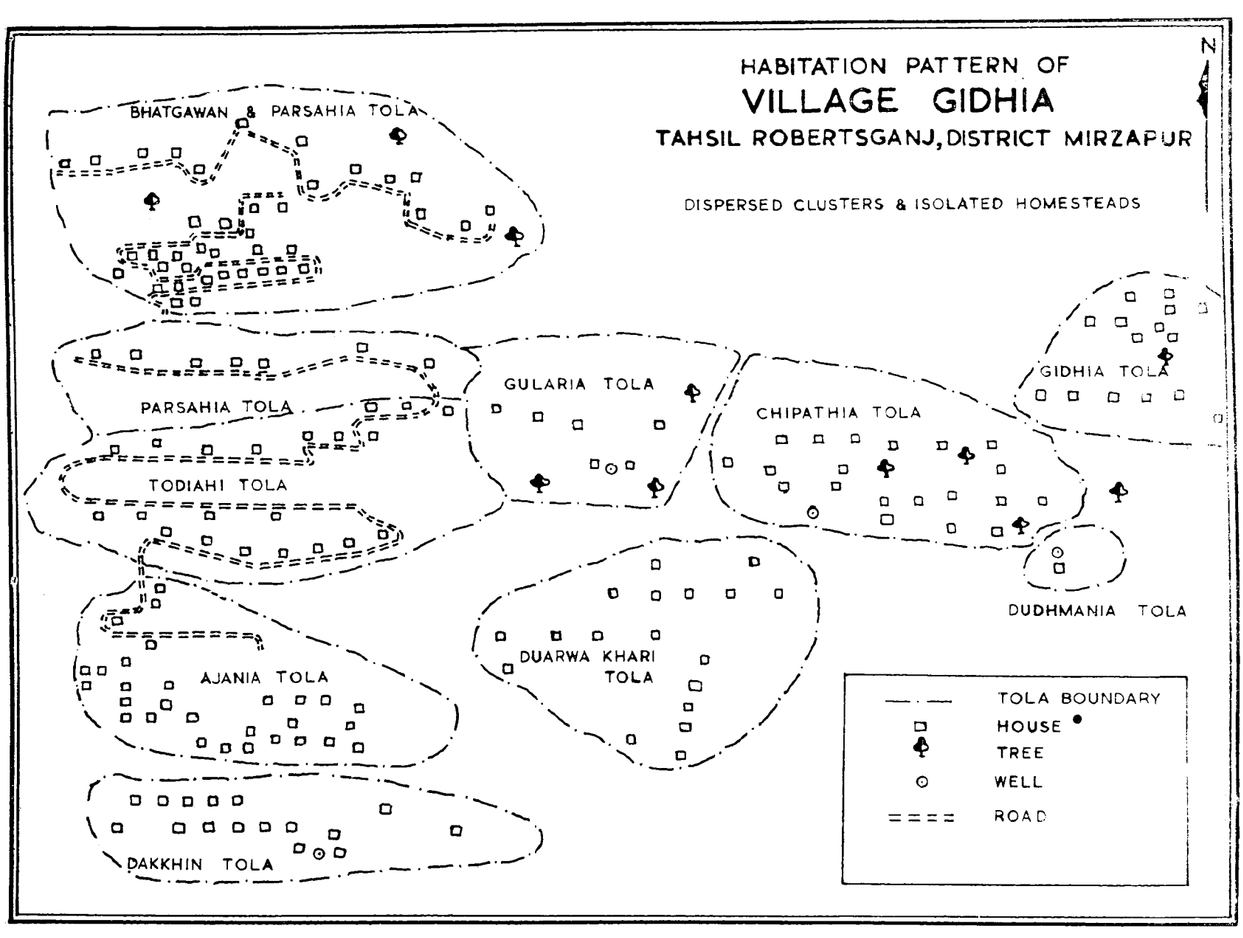
The Primary School Building in Village Mehdiganj, Tahsil and District Varanasi (East Plain)

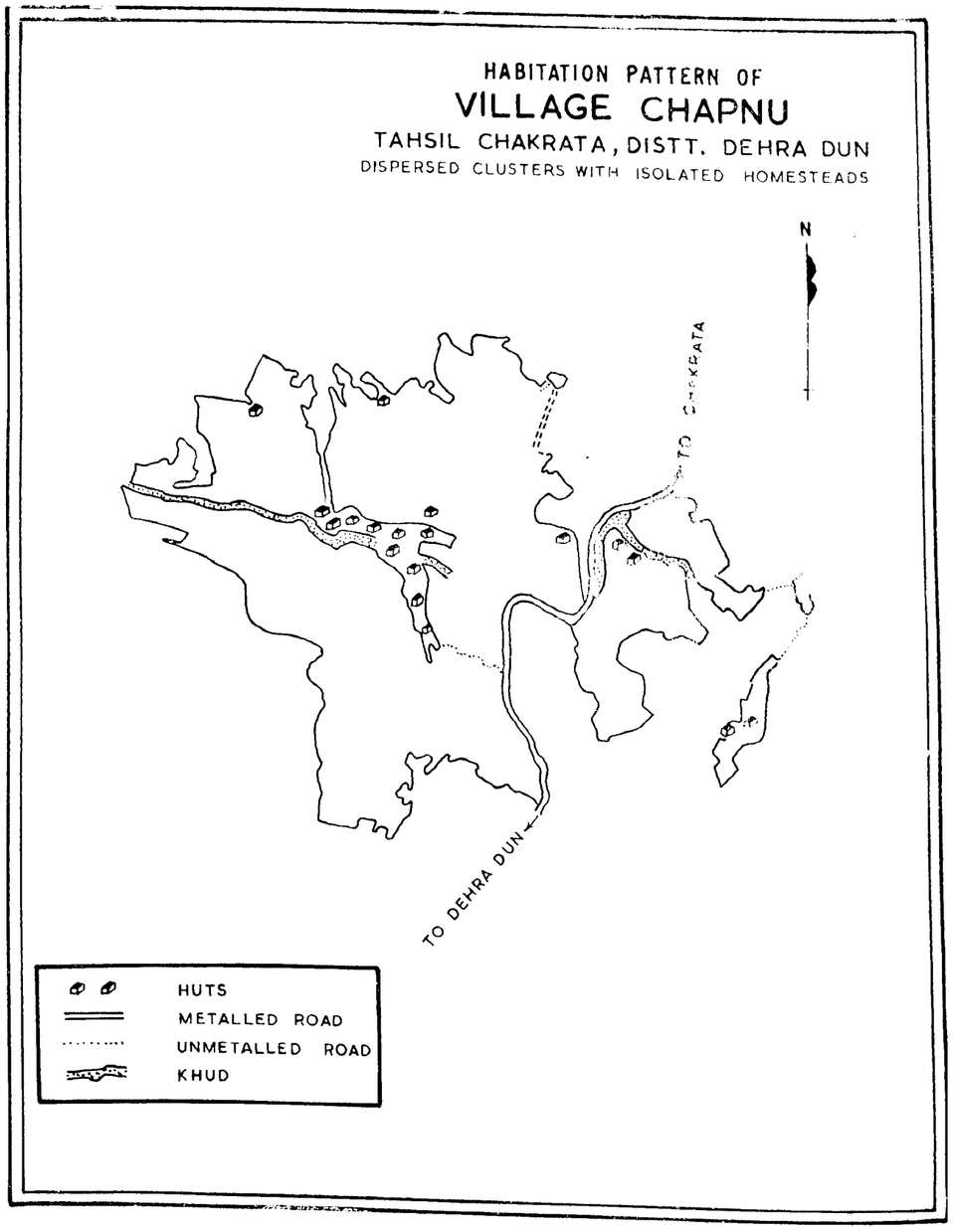
The building has a tiled roof and walls which are made partly of burnt-bricks and partly of clay and mud

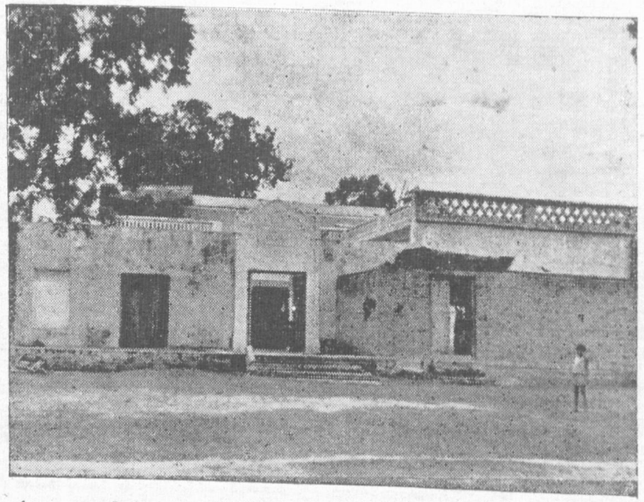



HABITATION PATTERN OF
VILLAGE MIRZAPUR BEHTA
TAHSIL BISAULI, DISTRICT BUDAUN
SHAPELESS AGGLOMERATE OF MASSIVE TYPE
W
N
E
S
NAI
BRAHMIN TOLA
JATAV TOLA
MURAO TOLA
HARIJAN TOLA
THAKUR TOLA
GADERIA TOLA
VAISH TOLA
MUSLIM TOLA
SCHOOL
DHARAMSHALA
TANK
TEMPLE
WELL
TREE
BULLOCK CART TRACK
TO BISAULI
ROAD
POLICE CHAUKI


HABITATION PATTERN OF
VILLAGE GIDHIA
TAHSIL ROBERTSGANJ, DISTRICT MIRZAPUR
DISPERSED CLUSTERS AND ISOLATED HOMESTEADS
N
BHATGAWAN & PARSAHIA TOLA
PARSAHIA TOLA
TODIAHI TOLA
GULARIA TOLA
CHIPATHIA TOLA
GIDHIA TOLA
DUDHMANIA TOLA
AJANIA TOLA
DUARWA KHARI TOLA
DAKKHIN TOLA
TOLA BOUNDARY
HOUSE
TREE
WELL
ROAD

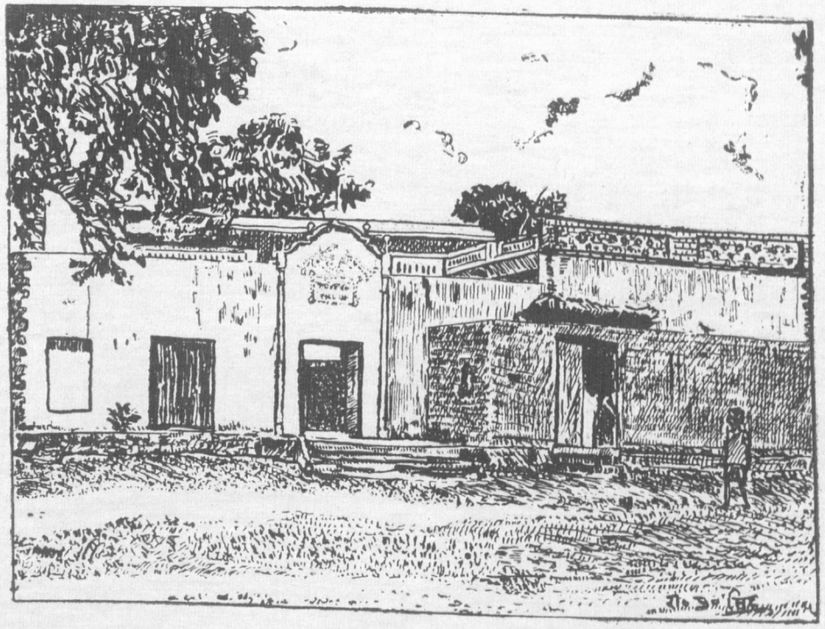

HABITATION PATTERN OF
VILLAGE GIDHIA
TAHSIL ROBERTSGANJ, DISTRICT MIRZAPUR
DISPERSED CLUSTERS & ISOLATED HOMESTEADS
N
BHATGAWAN & PARSAHIA TOLA
PARSAHIA TOLA
TODIAHI TOLA
GULARIA TOLA
CHIPATHIA TOLA
GIDHIA TOLA
DUDHMANIA TOLA
DUARWA KHARI TOLA
AJANIA TOLA
DAKKHIN TOLA
TOLA BOUNDARY
HOUSE
TREE
WELL
ROAD

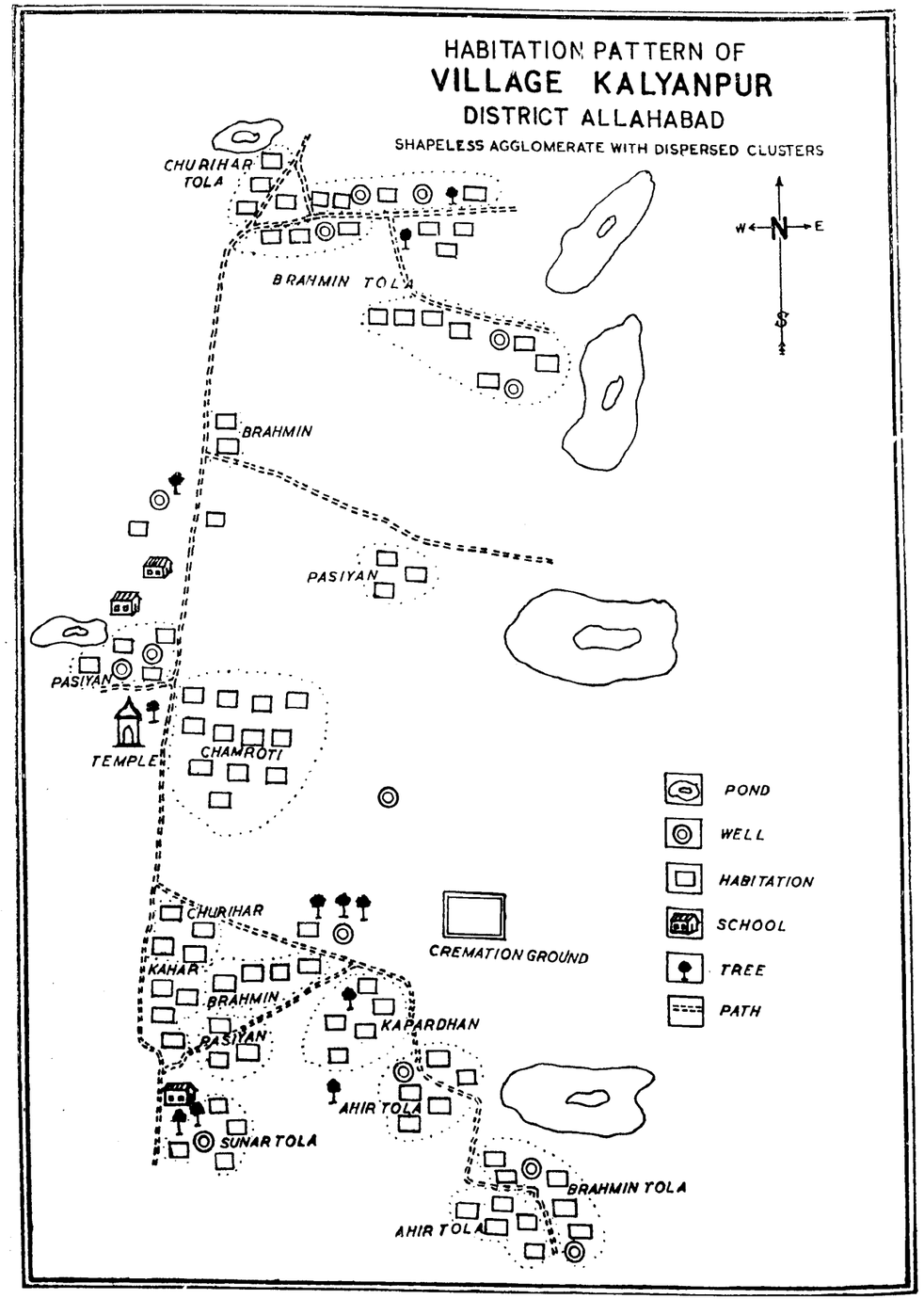

HABITATION PATTERN OF
VILLAGE CHAPNU
TAHSIL CHAKRATA, DISTT. DEHRA DUN
DISPERSED CLUSTERS WITH ISOLATED HOMESTEADS
N
TO CHAKRATA
TO DEHRA DUN
HUTS
METALLED ROAD
UNMETALLED ROAD
KHUD



A pucca *house in Village Mirzapur Behta, Tahsil Bisauli District Budaun*
(West Plain)

The walls and roofs are made of burnt bricks, some of these being Kakaiya *bricks which are thinner and broader than usual bricks*




HABITATION PATTERN OF
VILLAGE KALYANPUR
DISTRICT ALLAHABAD
SHAPELESS AGGLOMERATE WITH DISPERSED CLUSTERS
CHURIHAR TOLA
BRAHMIN TOLA
BRAHMIN
PASIYAN
PASIYAN
TEMPLE
CHAMROTI
CHURIHAR
KAHAR
BRAHMIN
PASIYAN
KAPARDHAN
AHIR TOLA
SUNAR TOLA
CREMATION GROUND
BRAHMIN TOLA
AHIR TOLA
W
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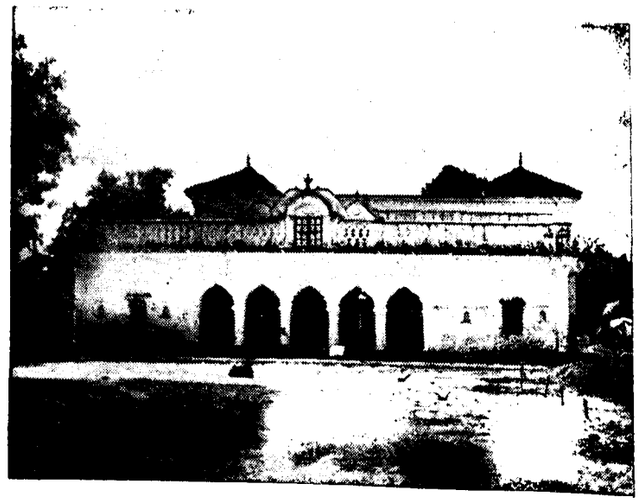
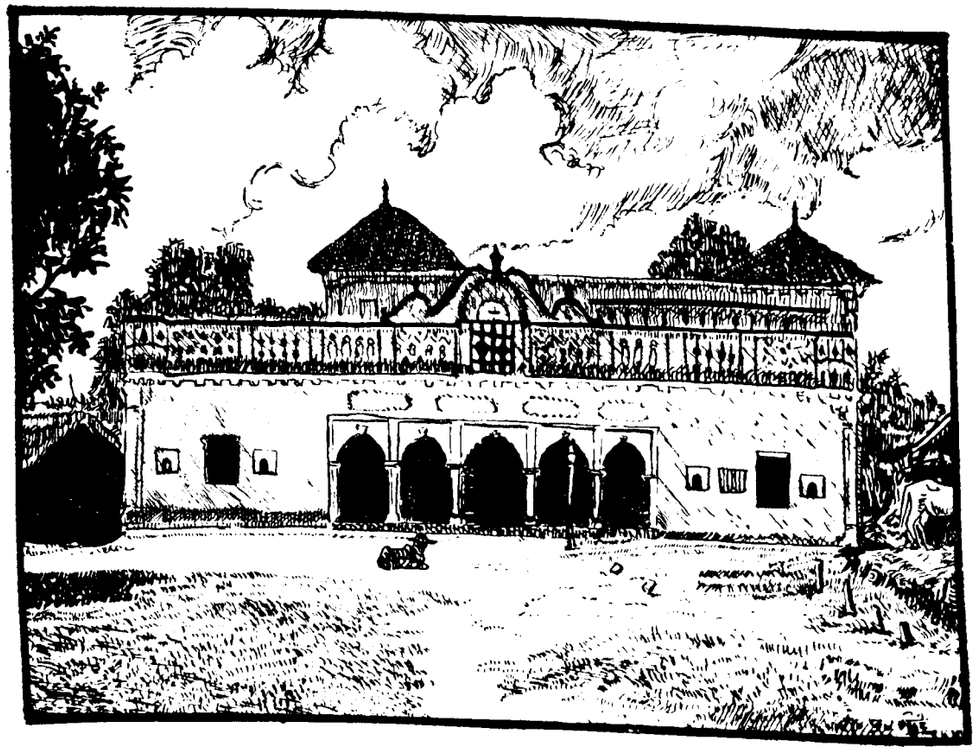
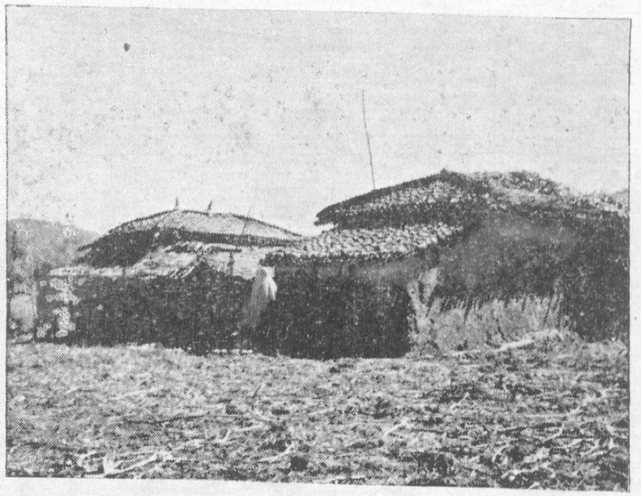
E
S
POND
WELL
HABITATION
SCHOOL
TREE
PATH



A pucca *house in Village Sumbha Dih, Tahsil Ghosi, District Azamgarh (East Plain)*

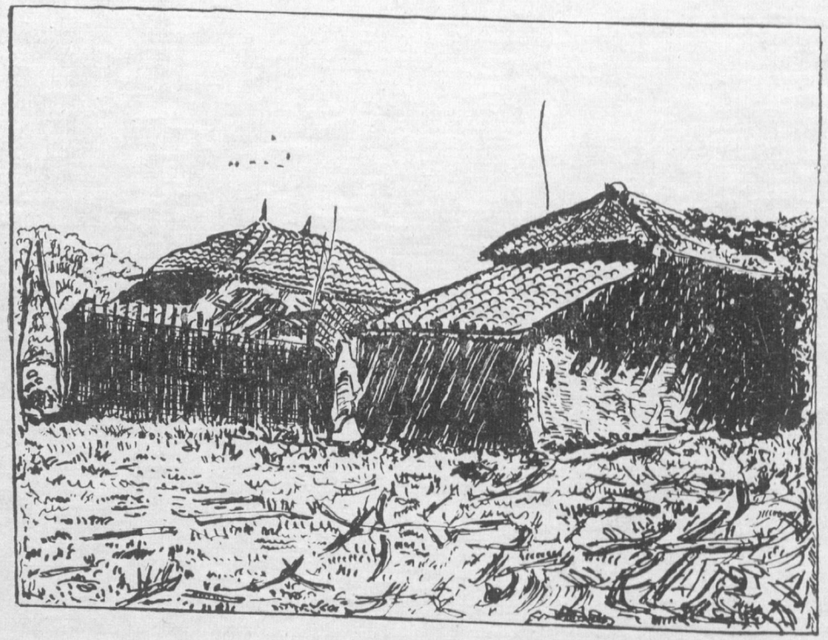
The roofs and walls are made of burnt bricks. The roofs of the upper storey are tiled





A kuchcha *house in Village Parsoi, Tahsil Robertsganj, District Mirzapur (Vindhyan Plateau)*

The house has mud walls and tiled roofs



WEST BENGAL

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

The Village and the House

[*From Farmers of India Vol. III : West Bengal by Asok Mitra*]

Except for villages in Darjeeling district, where on account of the hill slopes, the configuration of a village is immediately apparent to the eye, the ordinary Bengal village is invariably hidden in what appears from a distance as a large grove of trees. In Darjeeling, houses are strung up a hill on either side of the main road, which is often a mule path. It is usual to look for a small plateau or even land where the main market can sit on market days and where the houses of traders and the *Mandal* or the village headmen are situated. This level space also contains a make-shift reservoir often built with the help of the local authorities from which pipes lead down to the various parts of the village. Thus, in the Darjeeling hills villages are divided into segments roughly corresponding to the castes. The cluster of houses is surrounded by agricultural fields which are neatly terraced. Cattle-sheds form the core of the house because cattle are the only expensive property of the peasant. The whole village, therefore, takes the appearance of a flower, the terraced cultivation resembling the surrounding petals and the village the core. On account of the general poverty of the people, the houses are inexpensively built with bamboo, earth and corrugated iron sheets. Sometimes, tin obtained from kerosene packing tins and oil drums, is beaten out into long sheets and used for walls. The average house is small and designed to contain as much warmth as possible. Thus, frequently the kitchen forms the main room with the bed-rooms at one corner of the kitchen. The smoke inside the house can be both healthy and unhealthy. But the unfailing sense of beauty of the Nepali is betrayed in carefully tended geranium and dahlia pots in the meanest household which cannot afford even winter clothing, and in the shining brass and bell-metal and the long stemmed tea cups which hold the salted tea, the money for sugar being lacking, and warm the hands cold from working outside in the rain.

In the rest of the State the village generally consists of small groups of houses scattered through rice and jute fields : large compact villages where periodical markets are held, are usually found only on the banks of the rivers. The villagers live, more or less secluded, in detached homesteads, surrounded by a belt of fruit trees or bamboo thickets: the screen of trees and jungle secures that privacy which the Bengali likes for his domestic life. The oldest villages are almost invariably found on the banks of the rivers or in their neighbourhood, where there are ridges of comparatively high land and of considerable extent. Villages spring up on the river banks mainly on account of the availability of flowing water, wholesome for domestic use, and as a means of transport. The central basins between such ridges are swampy and unhealthy, but as the population increases and the village site becomes more crowded, the people build their houses further away from the river bank on mounds artificially raised in order to keep them above flood level.

The following account of their external appearance is reproduced from the volume of Hunter's Statistical Account of Bengal dealing with 24-Parganas :

"The dense mass of vegetation in which all Bengalis delight to shroud themselves, and which encircles the rich land-holder's palace as well as the peasant's hut, is everywhere more or less productive. It is composed of the materials for food or for building—the coconut, the bamboo, the jack tree, and the mango. There may be seen the slender stalks of the betel tree, and the towering stems of the coconut above them, their long arms waving in the breeze; on the other side, probably a thick garden of plantains, that curious link between the vegetable and the timber; in the background, an underwood of wild cane, twining itself round everything of firmer bulk and a little further on, an undistinguishable mass of thorn, creepers and underwood of every shape, length and denomination. The husbandman must have his fruit tree and his bamboo, which yield him a return for no expenditure of labour but that required for gathering and cutting, his protection for the womankind, and his shade against the fierce sun of April and

May. If he attains these primary objects, he is content, no matter how much miasma may be exhaled from the decaying vegetation, how much disease may lurk in that fair but deceitful mass of green foliage, how many reptiles and venomous snakes may be concealed in the unwholesome shades which surround his paternal inheritance. The sun, and gaze of the passing neighbour, must alike be excluded. Grant him this, and he will endure, with stoical fortitude, the periodical fever, the steamy heat of the rains and the foetid water which stagnates in the pools whence he has dug the materials for his homestead site (*bhita*), and which never feels the influence of the breeze and the light."

Almost the only community which builds its village differently from the other communities is the Santals. They afford a strong contrast in their choice of sites to the others. The Santals invariably select the highest and driest spot for their villages and carefully cut and keep down every particle of jungle in and about them, growing only a few useful trees in the long central road, either for shade, fruit or oilseeds. Each Santal's house is a complete little farm enclosure, holding the owner's dwelling house, granary, cow and pigeon-houses and pig-sty. Their villages extend in one long line, with houses built on each side of the road, the head-man's or *manjhi's* house being generally in the centre.

While the village assumes a uniform aspect all over West Bengal, houses vary considerably. But before one goes into a description of the different types of houses in various corners of the State, one would be interested in the vestiges of village organisation that still remains, especially in those villages which are tucked away from the mainstream of life. Almost in every large village or group of hamlets, there is a place called the *Baroaritala* which is reserved for the worship of the village deity, for the performance of *jatras* and for other entertainments. This *Baroaritala* has been invaded, wherever the National Extension Service has been working, by the Community Centre, a new structure which is invariably popular. The village school is seldom in the heart of the village but almost always at a corner of the village, almost outside it, on the road approaching the village. Until recently there did not seem to be much pride taken in the construction or appearance of the primary school but in the last decade, wherever primary or junior schools have been built, they have been the most outstanding and expensive buildings. New centres of interest have sprung up in the course of the last decade which are mainly the village offices of the chief political parties and where the Gram Sevak is resident, his house.

It has been observed that although villages have some uniformity of pattern throughout the State, houses tend to differ. Houses in Darjeeling district are mainly individual huts divided into compartments for the cowshed, the kitchen and the bed-rooms. The roof is now generally of tin. In Cooch Behar, the people live in thatched or tin-roofed huts with mat or grass walls and earthern floor. The huts here, as in the Duars of Jalpaiguri, are raised on bamboo posts or stilts. Generally these stilts are of *sal*. A householder ordinarily gets four huts arranged around a quadrangle, entrance into which is effected by one of the openings between every two huts, the remaining three being fully or partially closed by *tatis*, or walls of bamboo or *kasia* grass. Two of the huts are used as sleeping rooms, another as the kitchen and the fourth as the shed for cattle, some of which is possessed by almost every house-holder. One of the sleeping rooms has got, on one side of it, a *machan* or bamboo platform, raised two or three feet from the floor, enclosed on all sides by walls, leaving a small opening within the hut. Here grain is stored. There is only one door to the hut. This is closed from within a single mat-door, which turns upon a straight bamboo fitted into a bamboo socket, which in its turn is driven into the ground. There is generally no other opening in the hut and no window. The well-to-do men have houses of better quality erected on *sal* posts and furnished with wooden doors. Sometimes an extra hut, called *dari-ghar* is also built and is used by friends who may be staying for a night or so. In building a homestead, care is taken to have it bounded, wherever possible, in the north by betel-nut trees, in the south by compound, in the east by water and in the west by bamboos. Most homesteads have good betel-nut groves called the piper betal plant growing over them. In well-to-do houses, in addition to the houses in the quadrangle, and the *dari-ghar*, there are separate huts for the cattle and one or two *thakur-ghars* for the gods. The *dari-ghar* corresponds to North India's *baithakkhana* or sitting room where the farmer sits with his friends, conducts his business, receives

his guests, stores his jute or tobacco and where the servants and new-comers sleep in the night.

In the Upper Ganges plains, especially in the *barind* tracts, houses are usually built with thick mud walls and thatched roofs, the ceiling being of bamboos with mud laid on them. The outer wall is carried from one hut to the other so as to enclose all the huts forming the homestead, there being only one exit and the huts opening into a yard inside. Construction work is usually done by the cultivators themselves. The use of corrugated iron has greatly spread mainly owing to the extreme heat in the hot weather, and owing to the fact that at this season of the year, when the dry west winds blow, there are normally extensive fires, whole villages being regularly burnt down. The Santal house in these districts, as everywhere else, is the most picturesque and strangely sophisticated house that one can think of. In fact, it is to a Santal's house that one can, without the slightest feeling of embarrassment or inferiority, take a foreigner from the most advanced and prosperous country. The Santal's house is made of adobe or thick slabs of heavy clay, first shaped into blocks with the help of cowdung and chopped straw. The walls are made thick to keep the inside cool. Very little wood is used, large openings are kept in the wall of the living room to let in air and light. The bed-rooms have a small window to allow for light and ventilation and to keep in the warmth in winter and coolness in summer. Each house is a unit, composed of the *baithak*, the courtyard, the bed-rooms, the kitchen, the cattle-shed, the pig-sty, the pigeonholes and the threshing floor. A wall surrounds part of the house and into this wall are open ledges for people to sit on on an evening. The plinth of the wall projects outward to form another ledge for people to sit, squat on and take the sun and air. The entire household, including the courtyard, the threshing floor, the inner and outer walls, are scrupulously plastered with mud and cowdung and very intricate and pleasing designs are made by the slow wheeling circles with which the plastering is done by hand. The outer as well as the inner walls are decorated with bands of polychrome mixed with the mud plaster or lamp black or ash of straw to provide segments. Whenever the Santal can afford it, he keeps his roof thatch in proper trim. The Santal house is thus a wholly pleasing sight, inviting, restful and highly functional. With the house goes, of course, the spare furniture and the gleaming brass and bell-metal and the very cleanly kept polychrome water pots. All this, of course, goes with the marvellous grace and suppleness of the Santal physique, both male and female.

The vast majority of the villages in Purulia are small, villages containing 150 to 200 houses being, with a few exceptions, confined to the areas which are in fairly close touch with the railways and the industrial centres. In style there is a general homogeneity, the general arrangements being, as a rule, similar and the houses, though those of certain castes can usually be distinguished, differing but little in size and manner of construction. The earliest settler naturally places his house near the land he proposes to cultivate, and usually therefore on some ridge, or near the crest of a slope above and not far from the spot which he has selected or is likely to select later for a *bandh*. Often the village is a long straggling line of a single row of houses or a single street known as the *sadar kuli* with occasionally other rows or detached houses on lanes striking off from the main road at various angles according to the nature and lie of the ground. The absence of trees in the individual compounds as compared with the village in the Ganges delta, is another distinguishing feature.

In the Ganges Delta and in the West Bengal Plains the huts of the poorer classes usually have a framework of bamboo. After the bamboo framework has been set up, the floor is raised of mud, well rammed to the necessary height to afford protection from inundation. In some places the walls are made of mud, enclosing the uprights; in others plaited grass or matting or slips of bamboo are used instead of mud, and are sometimes covered again with a coating of clay and cow-dung. Sometimes the gable ends are left open at the top for ventilation, but generally they are closed up. In the low lands near the Ganges and the big rivers, the houses are temporary constructions. A light thatch and lighter walls suffice for the wants of the inhabitants, who remove their property, as soon as the river waters rise high enough to endanger their huts.

The shape of the roof against the sky-line varies considerably. In Jalpaiguri, the Rabhas build their roofs in the form of a semi-circular shell, either end of which rests on the upright walls of the house.

The houses fall under three main heads : *pucca* or houses having flat roofs of brick or masonry, *kutcha* or houses thatched with straw; and *khapra* or houses with tiled roof. The thatched houses may be divided into three classes, according to their thatching, viz., *ekchala, duchala and chauchala,* i.e., houses with one, two, or four thatches. These roofs are generally known outside the State and especially in architecture as the Bengal hut type with the curvilinear roof, locally named as *etong*. Here the ridge and cavelines are curved and the thatch is very thick. The reason for this style of architecture seems to be that in this part of the country the rainfall is so heavy that unless a very thick thatch is put on, water leaks through, especially along the corner beams of a *chauchala* or four-thatched house.

The ordinary house for a family in Purulia consists of three different mud-walled and thatched buildings, one of which is the sleeping apartment (*sobar ghar*) one a kitchen (*ranna ghar*) and one a cattle-shed (*goal ghar*), arranged on three sides of a quadrangle; on the fourth or open side is the *bari* or *bastu*, that is, an open plot of high level land on which are grown various *bhadoi* and *rabi* crops and vegetables for the consumption of the family. Behind one of the three huts is another plot of open land usually enclosed by mud-walls, which is the *khamar* bari or place for threshing corn and storing fodder and manure. The house, as a rule, has its back wall against the village street. The roof is of thatch varying from about 3 to 9 inches in thickness resting on a framing of *baitas* (sal poles) and brush-wood or split bamboos, supported on a rough timber framing of beams (*sanga*), king posts (*muri khunta*), ridge (*mudan*) and nips (*konach* or *kanr*). Well-to-do people often put a flat mud terrace, a layer of mud on a layer of jungle-wood planks, or bamboos closely packed, resting on cross-beams fixed on the walls, between the thatch and the floor, chiefly for protection against fire.

The poor men have little furniture. They sleep on the floor. In the north, some can afford the bamboo *machan* or platform, and in the south, the *wooden taktaposh*. Bell-metal is a speciality of Bengal, but brass also is used. A brass *lota* and one or two *thalas* or plates are often all the crockery that the poor possess. Food is cooked in *handis* or earthen pots. Water is carried in the northern districts in *bosh* or dried gourdshell but in other districts it is either carried in earthen pots or brass pots called *kalsi* or *ghara*. Bamboo-cane is extensively used for baskets or measures and for containing household articles. An indispensable item is the *dhenki* or the husking pedal for which a separate room is usually constructed called the *dhenki-ghar*. Another household furniture of importance is the *pira* which is a piece of wood about 4 feet long and 2 feet broad with very small legs underneath. This serves as a stool for men and washing plank for the women. Better classes have got regular stools, *moras* and even chairs.

APPENDIX

Village : RAJBALHAT

The *mouza* Rajbalhat (J. L. No. 6) is located in the Police Station of Jangipara in Serampore Sub-division of Hooghly district. The river Damodar forms its western boundary. Along the eastern bank of the river Damodar, there is an embankment and a canal flows through the mouza. A metalled road passes through the village connecting it with Atpur, a station on the Howrah Maidan—Champadanga Light Railway, and also with Haripal, a railway station on the Tarakeswar Branch of the Eastern Railway. Private buses carry passengers from this village to Atpur and Haripal Railway Stations. It takes a little over two hours to reach the village from Calcutta *via* Haripal.

The village is divided into 14 paras or settlements, 4 Chaks and a hamlet. Chaks are the char lands formed by the alluvial soil, deposited by the river Damodar after the recession of the floods. Rajbalhat proper is covered by 14 settlements only. As one approaches along the metalled road from north to south, one will first come across agricultural fields and then a series of shops on either side of it. On proceeding further one will reach the busiest part of the village. Just near the junction of a main road and a metalled road, the market is situated. This market forms the nucleus of the village. Majority of the settlements lies on the western side of the metalled road School, Liberary, Panchayat Office, Post Office and Charitable Dispensary will be 2 to 4 minutes' walk from the market. The village is predominantly inhabited by the Tantubaya (weaver) caste, the traditional occupation of which is weaving The names of the 14 paras are :

1 Dey Para
2 Jelia Para
3 Nandi Para
4 Bhar Para
5 Kumar Para
6 Seal Para
7 Das Para
8 Banerjee Para
9 Beney Para
10 Kundu Para
11 Moochi Para
12 Mari Para
13 Duley Para
14 Uttar Para

Seal Para, Bhar Para, Nandi Para, Dey Para and Kumar Para form a semi-circle along the metalled road. Except a few Kumbhakars, Moyras and Brahmins all the inhabitants of these settlements are Tantubaya by caste. Uttar Para, Das Para, Kundu Para and Naskar-danga (hamlet of Rajbalhat) situated at a little distance from the market place, are mainly inhabited by the Tantubaya caste. Other settlements are inhabited by other castes. The names of 4 Chaks are (1) Subar Chak, (2) Dafar Chak, (3) Badur Chak, (4) Brindaban Chak. Subar Chak is inhabited mostly by the Sadgopes, while Brindaban Chak is mainly inhabited by the Mahisyas. Muslims reside mainly in Dafar Chak and Badur Chak.

Water supply in the village is sufficient. There are 20 big tanks scattered all over. One of these tanks covers a very wide area. There are 30 tubewells for the use of the general public and there are 37 tubewells in 37 private houses. There are 15 masonry wells in 15 houses. People use the water of the tubewells and masonry wells for drinking.

There is no drainage system in the village. Rain water from the residential areas flows into the nearby ponds and agricultural fields.

The areas between the river Damodar and residential areas of Rajbalhat are occupied by agricultural fields.

There is no regular pasture in the village. Agricultural low lands are generally used as pastures for 5 to 6 months in a year after the harvesting season of Aman paddy.

There are very few trees in the residential areas. Except bamboo groves, Neem, Banyan and Babla trees are scattered here and there in the Chaks. There is no jungle in this village.

There are two graveyards. One is at Badur Chak and the other is at Dafar Chak. In the village there are five places where dead bodies of the Hindus are cremated. One of the cremation grounds is situated near a big tank, and three are situated in the Dey Para, in Banerjee Para, and at a place in between Uttar Para and Jelia Para respectively, while the fifth one is situated in Naskar-danga.

The localities where the Tantubayas reside are closely clustered. In some locali-

ties the houses are so closely clustered that there is hardly any space in between the two houses. The congestion of Seal Para near the market place can easily be compared with that of a town. The grouping of houses in Seal Para, Kundu Para, Monsatola (an extension of Seal Para), Uttar Para and Naskar-danga is massive and shapeless. Clustering in such a massive way in a village is a rare phenomenon. In Nandi Para, Bhar Para, Dey Para Kumar Para and Das Para the grouping of houses, though massive, has a definite pattern or shape. In these settlements a mud road is generally provided between two rows of houses. Scarcity of homestead land in Rajbalhat proper is the main reason of such congestion. Although there is sufficient land in the Chaks, the Tantubayas are reluctant to settle in the Chaks which are away from the nerve-centre of the village. In their opinion Chaks are the typical rural areas fit for the habitation of cultivators only. People of Rajbalhat proper think themselves more urbanised than the people who reside in the Chaks. It is interesting to note that the more the clusterings are away from the nerve centre of the village, the more they are dispersed in nature. In the Chaks there are isolated and shapeless clusters dispersed in nature and scattered here and there. The clusters in the Chaks are connected by narrow mud roads with the main roads of the village. In Rajbalhat proper the distance between the two clusters will hardly be as much as the width of a narrow mud road, while in the Chaks some of the clusters are separated by agricultural fields

The settlements of the members of the Scheduled Castes and the Muslims are situated away from those of the Caste Hindus. They settle themselves on the outskirts of the village. Perhaps in those days they were not allowed to settle near the localities of the Caste Hindus.

Weaving room is a must in a Tantubaya house. It is generally situated near the entrance of the courtyard. In some cases weaving rooms are under another shed in the courtyard of the house. Families possessing more than 3 looms have a separate workshop at some distance from the dwelling house. An average Tantubaya house consists of bedrooms, separate kitchen and a weaving room-*cum*-sitting place surrounded by a compound wall. Bedrooms and weaving rooms are generally under the same roof. But for the kitchen there is a separate structure in front of the bed room.

In most of the houses of the Tantubayas there is a place in the compound where there must be an altar with a sacred plant, Tulsi.

Tantubayas engaged in wholesale business generally possess modern types of house. Most of these houses are two-storeyed brickbuilt buildings with spacious, well-ventilated rooms. These houses consist of bedrooms, reading rooms, kitchen, store room, and office room-*cum*-parlour and a tubewell in the compound.

Except the weaving rooms, the houses of Sadgopes, Mahisyas, Kumbhakars, Muslims and Beneys are alike. Brahmins live in their old ancestral houses. Most of the houses are brick-built but in dilapidated condition.

The houses of the people belonging to the members of the Scheduled Caste consist of only one bedroom and open verandah of the bedroom where food is generally cooked, with no compound wall. There will be some open space in front of the bedroom used as courtyard. There is a distinct variation in plan, structure, shape and size among the houses of the Caste Hindus and of members of the Scheduled Castes.

Most of the houses are mud-built with roofs either of Corrugated Iron sheets or straw. Plinth of the mud-built houses is generally 2 to 4 feet in height. Walls are made of bamboo sticks plastered with mud. Most of the Tantubayas, Sadgopes, Mahisyas and Kumbhakars live in house having mud plastered bamboo sticked walls and Corrugated Iron sheet-roofs with four slopes. But the houses belonging to the members of the Scheduled Caste and the Muslim Community have walls made of bamboo sticks plastered with mud and roofs of straw with two slopes.

In most of the houses of the Tantubayas, Sadgopes, Mahisyas, Brahmins and Muslims there will be at least one door and 2 to 3 windows in each room. But in the houses of members of the Scheduled Castes the doors are made either of wood or, of bamboo sticks. One or two open spaces in the walls serve as windows as well as ventilators. The open spaces in the walls are generally curtained off with gunny bags in winter.

Bamboo and straw are available in the village. Corrugated Iron sheets, cement and other house-building materials are brought from outside by cart or motor truck. Bricks are generally made in the open field of the village and also burnt there.

Village : **PURANDARPUR**

The mouza Purandarpur bears the jurisdiction list No. 63 in the Suri Police Station in the Sadar Sub-division of Suri in the District of Birbhum. The Sadar Sub-divisional town Suri is situated only six miles away from the mouza towards the north. A bus route from Suri to Ahmadpur and Bolepur runs across the mouza. It is a metalled road from west to east and one can reach the mouza in a bus or a rickshaw from Suri Railway Station. The village is a very old one and popular belief goes that the village was set up some time in the fourteenth century and perhaps during the tenure of Purandar Khan, Commander-in-Chief of Hussain Shah.

The settlement-areas consist of several localities, viz., Musalmanpara and Baishnabpara in the north, Bagdipara, Santalpara and Haripara in the south, Muchipara in the east, Bauripara in the west and Dangalpara in the south-east. The Santals live in the southern border of the mouza, which is away from the main village. The localities have grown up near the metalled road. The agricultural fields have opened out beyond the localities.

Ring wells and tanks form the most important water sources in the mouza. Water available throughout the year from the tanks is used for the purpose of bathing and washing of clothes. Drinking water is provided by the ring wells. Sometimes the tank-water is also used for drinking purposes.

There is no drainage system in the mouza But the water or rain water generally flows into the low lands, i.e., agricultural fields or tanks.

The agricultural fields are on all sides in the mouza. But all these are beyond the residential localities. Most of the agricultural fields are found in the eastern and western parts of the mouza.

Cattle graze in the agricultural fields in the off season but generally graze in the fallow lands situated in the mouza and away from the mouza during the agricultural seasons. There is no jungle in the mouza.

A graveyard is situated two miles away from the mouza. Some people use their homesteads for burying their dead bodies. The burning ghat is also situated two miles away from the mouza.

Others

In the mouza there are one Agricultural Co-operative Credit Society and one Health Centre, the former being housed in a two-storeyed *pucca* house and the latter in one-storeyed *pucca* house. The residence of the Doctor of the Health Centre is housed on the first floor of the Centre's house. There are one High School, one Basic School and one Pre-basic School in the mouza. The High School is in a two-storeyed *pucca* building and the other two institutions are also in *pucca* houses. There is also one Government sponsored Rural Library which is accommodated in two rooms. One of them is used as a reading room. It is *pucca* house. The village is replete with temples dedicated to deities like Kali, Shiva, Radha-gobinda, Mahaprabhu, Lakshmi and Dharmaraj. There is also one mosque in the Musalmanpara.

The settlement of houses by the side of the metalled road is of linear type. The houses in Musalmanpara, Bauripara and Bagdipara form an agglomerate group. The houses in Muchipara, Haripara and Santalpara are in massive clusters. The houses in Dangalpara are agglomerate. The houses of the Baishnabas which are situated along a lane on the left hand side of the metalled road are of linear type.

Generally the houses are mud walled. Most of the households have one bedroom with a verandah, a corner of which is used as kitchen. They put the household deities, if any, in their bedrooms. There is no boundary wall round the house. The Tulsivedi is situated in the courtyard. The cows are kept in the small courtyard. These houses belong to the poorer section of the community.

The houses of the middle-class families consist generally of two or three bedrooms, a kitchen, a cowshed, a store-room and a sitting room. But in all cases deities find their place in a bedroom. The Tulsivedi is situated in the courtyard either in the middle or in a corner of the courtyard. These houses have boundary walls. Some two-storeyed houses are also found.

Most of the *kutcha* houses have plinth 2 ft. high from the ground level. But in the case of *pucca* houses it is about 3 ft. high.

The houses have generally four walls. The walls are made of mud in most cases. The walls of two-storeyed houses are also made of mud.

The roofs are made of straw and bamboo. Roofs of Corrugated Iron sheet are also found. The nature of roofs depends gene-

rally on economic status. The roofs have usually two slopes. But in some cases it is found that each slope has two parts—a front slope and a back slope.

Doors and windows are the only openings through which fresh air ventilates the rooms. A room generally has one door and one window.

Materials for *kutcha* houses are available in the village, while the materials for *pucca* houses are brought from the town, so also are the Corrugated Iron sheets.

Village : KAMNARA

The village Kamnara bearing J.L. No. 49 is located in Burdwan Police Station of Burdwan district. It is situated approximately 3 miles east of the city of Burdwan, the district headquarter, on the Burdwan-Katwa Road. The Burdwan-Katwa light railway crosses the village in its eastern portion running almost parallel to the road to Katwa at this place. Public buses and passenger trains ply along these routes. The principal village road, *kutcha* in nature, taking off from the Burdwan-Katwa Road crosses the railway line on its way and passes through the different parts and localities of the village.

Internal roads of the village are all *kutcha*. During greater part of the year they are dusty and during the monsoons they become extremely muddy and sticky. They are also full of ditches and potholes in some parts.

A small rivulet known as the 'Gour' flows through the village. It dries up in summer. On the other side of this rivulet lies the small hamlet "Mongira".

One striking feature of the village is that although this particular village is situated approximately 3 miles off Burdwan city, it is mostly rural in character. Its economy is purely agriculture-oriented.

Layout of the village and its locational pattern

If some one enters the village from the east, along the main village road which takes off from the Burdwan-Katwa Road, one comes across a cluster of houses inhabited by the Santals and situated in the strip of land lying between the railway line and the Burdwan-Katwa Road. After crossing the railway line and on proceeding further westward some more houses belonging to the Santals will be found. At a small distance from this cluster the houses of the Bauri families are located.

The central place and nerve centre of the village is known as "Ghoshpara" and this place is mainly inhabited by the Goalas or Gopes and a single household of the Ugra Kshatriya caste. Further to the west there are some houses of the Gandhabaniks followed by a cluster of houses of the Bagdis or Kush Meteys. A little further towards the north-west and almost on the boundary of the village, most of the houses of the Namasudras and Muchis are located.

The hamlet known as 'Mongira' is situated on the southern portion of the mouza Kamnara. This hamlet is mainly inhabited by the Ugra-Kshatriya families. Persons belonging to the Santal tribe and the Bagdi, Namasudra, Hari and Ahir castes reside in this area. A single Brahmin family and a single Bairagi family also live in this hamlet by the side of the houses of the Ugra Kshatriya families.

The grouping and distribution of houses in this mouza appear to have taken shape mainly on caste considerations. Caste has played a dominant role in the formation and pattern of settlement of the different localities. The members of a particular caste or tribe usually reside in a group and at a distance from the residence of other castes/tribes. The families belonging to the Scheduled Castes and Tribes such as, the Bauris, the Bagdis or Kush Meteys, the Haris, the Namasudra, the Muchis and the Santals have a cluster each far apart from those of the upper castes such as, the Ugra Kshatrivas, the Brahmins, the Bairagis, the Gandhabaniks and the Goalas.

The Namasudras and the Bagdis claim themselves to be the earliest settlers in the mouza and in a reminiscent mood they say that their arrival in the mouza dates back to two centuries.

There are about 8 fairly big tanks in the mouza and approximately 20 small ponds. The area of the tanks varies from 3 to 4 bighas and the area of the ponds ranges between 5 and 10 cottas. Most of the ponds dry up in the summer. Drinking water is provided by 5 public tube-wells. In addition, there are 2 tube-wells in the school compound and 8 private tube-wells. The supply of drinking water comes from the tube-wells and the water of the tanks and ponds is used for washing of clothes, bathing and cleaning purposes. Ponds are also used as sources of irrigation.

There is a well in the Santalpara but the Santals prefer to take water from the tube-well located in the school compound.

There is neither drainage nor any sewage system in the mouza. During the monsoon the internal village roads become extremely unsuitable for walking and ponds and tanks overflow.If the rainfall is heavy, the villagers themselves dig ditches for the proper outflow of the accumulated rain water.

The major portion of the agricultural land lies in the northern portion of the mouza. Quite a substantial area of the total land of this mouza is used for agricultural purposes. Kamnara is purely an agricultural village. Its different localities and the constituent hamlets are surrounded by agricultural fields.

No pasture or common grazing field for the livestock exists in this village. Cows generally graze on the strip of land by the side of the railway lines.

No village jungle except some 'Babla' groves can be seen in this village or the mouzas as a whole.

The common crematorium or burning ghat is situated just outside the village where the rivulet Gour somewhat widens. It is located near the Burdwan-Katwa Road.

As there is no Muslim resident in this village or in its hamlet, no graveyard can be found. But some of the Santals and Bauris, who are financially not well off, bury their dead bodies on their respective homesteads. Others among them who are well off to some extent burn the dead bodies mainly by the side of the railway line.

The Junior Basic School in the village is situated just beyond the cluster of houses of the Bauris. A "Siva temple" is located in the heart of the village and its deity is known as "Kameswar". It is said that the name of the village has originated from the name of its deity "Kameswara".

The office of the Co-operative Society is situated at Mongira.

The houses of different castes/tribes of the mouza are grouped in separated or isolated clusters. The distance between one cluster and the other is approximately 20 to 30 ft. Each cluster consists of houses belonging to, at least, 10 households. Specially the houses of the Goala and the Ugra Kshatriya families are placed in a linear form on either side of the road but the clusters of houses of the other castes are shapeless in nature. Within the cluster the houses in general are of massive type. Between one house and the other in the same cluster there is very little space.

House type—Plan—Two types of houses or dwellings can be seen in the village and in its hamlet. The plan of the dwelling of a well-to-do family is quite different in nature and structure from that of a poor family.

A family in somewhat affluent condition generally lives in a house consisting of one or two bedrooms, the kitchen, the outer room or 'Baithakkhana' a cowshed, a separate room for the deity and a paddy-husking room. Each house possesses an open courtyard facing the bedrooms. The deity or a Tulsi plant is a must in every household and it is situated in the family compound. The bedrooms are generally situated in the main part of the dwelling. The kitchen, the cowshed and the paddy-husking room are all located on different sides of the family compound. The outer-room is situated at the entrance of the house. A small kitchen garden may exist at the back of the kitchen. A 'Gola' or 'Marai' or granary is generally situated in the family compound. Often a boundary wall is built on four sides of the dwelling.

Houses belonging to some Goalas, Ugra Kshatriyas, Gandhabaniks and Namasudras are built according to the above-mentioned plan. But a poor family lives in a dwelling consisting of a single bedroom with a covered verandah which is used as kitchen. Such a household cannot afford to have any cowshed and the cows or goats, if any, are tied up in the open compound. Dhenki or the indigenous paddy husking pedal is placed either in a small shed on one side of the family compound or in the verandah of the bedroom. In such houses also a 'Tulsi' plant is observed in the courtyard.

The houses of the majority of the households of Kamnara are *kutcha* in nature. One or two *pucca* houses can be seen in this mouza. Thatched houses are the general types to be found in the mouza.

The plinth of the average houses is built of mud. It is generally 2 to 3 ft. high raised above the ground. The height of the plinth depends on the economic condition of the family.

An average house is 4 walled—one front wall, one back wall and two side walls. Walls of the majority of the houses are made of mud. But in some houses walls made of bamboo sticks can also be seen.

Roofs are made either of straw or of Corrugated Iron sheets (tin). A straw-roofed house has four slopes. The houses with

roofs of Corrugated Iron sheets have also the same number of slopes.

For a well-off and higher caste family one or two windows are generally fitted in the bedroom. But such a thing is quite uncommon to a house belonging to a poor household or to the Scheduled Caste and Tribal families. For them the front door serves both as entrance and ventilator.

Materials used for construction of different parts of the dwelling are obtained both from inside and outside the mouza. Straw and mud are obtained from the mouza itself but bamboo sticks, bricks and Corrugated Iron sheets are bought from places outside the mouza.

Village : KENJAKURA

The village Kenjakura bearing J.L. No. 89 is situated 15 miles away from the district headquarter of the district of Bankura. It is in the Police Station Bankura in the Sadar Subdivision. A bus route from Bankura Sadar to Molian runs by the eastern side of the mouza from north to south. After arriving at Bankura Railway Station on the South Eastern Railway one can avail oneself of the bus from a place at a distance of two miles or so. The road is metalled from Bankura town but five miles of the road upto the entrance of the village is unmetalled. The river Dwarkeshwar flows along the western border of the village.

The parts in the north-east and south-east of the village are the only settlement areas in the mouza. Here, the houses are concentrated thickly. The settlement areas consist of three localities, viz., Tantipara, Tamlipara and Bauripara.

There are seven ring-wells, four tanks and about twelve ponds in the mouza. The water is available throughout the year from the tanks or ponds. The villagers take their bath and wash their clothes in the tanks or ponds. Drinking water is provided by the ring-wells.

Kutcha drains are dug to let out the water that accumulates.

The agricultural fields lie in the western part of the mouza. The north-west and the south-west areas of the mouza are also used for agricultural purposes. Some ponds are found by the side of the agricultural fields and the villagers use these ponds as the source of irrigation.

There is no regular pasture in the mouza. Cows graze in the agricultural fields during the off season in particular and in the fields stretching out to the river in general.

There is no jungle in the mouza.

There is no grave yard in the mouza.

The burning ghat of the village is situated on the extreme western border of the village. It lies on the side of the river Dwarakeswar.

There are only two Primary Schools in the village. One was established in 1952 in Tantipara and the other in Tamlipara in 1954.

There are three temples of "Shiva" in the village, One of them belongs to a Tanti household. It was established about half a century ago. The other one is owned by the Chatterjee Brahmins. This temple was founded twenty-five years back. The last one established some forty years back is managed by the Tambulis. Any one can make offerings to the temples and no restriction on entry is imposed by the temple authorities.

The houses in the three localities of the mouza are of linear type. Besides these, some clusters of houses are found by the side of the village roads. These unplanned houses form a shapeless mass. In these shapeless clusters the Karmakar and the Lohar castes have assembled themselves.

The majority of the villagers are poor. They have only one bedroom with a covered verandah, where in the corner the household has improvised a kitchen. They have no separate cowsheds. Cows are tied up in the courtyard. But in every household there is a "Tulsi Vedi" in the middle or in the corner of the courtyard. There are no boundary walls around these houses. Those who have deities keep them in their bedrooms.

The middle class people have two bedrooms and a separate kitchen. The bell-metal workshops are attached to their residential houses. The workshops befront the road side. The surrounding walls are made of bamboo and straw. The deities are placed in the bedrooms. The "Tulsi Vedis" are situated in the courtyard. The well-to-do households possess bedrooms, a store room, drawing room, kitchen and cowshed. A covered verandah is also found in some houses. But in most of the houses of these people the household deities are worshipped in bedrooms. Each house has a compound, small or big, where "Tulsi Vedi" is situated almost in all the houses.

These houses are encircled by boundary walls.

Plinth *kutcha* houses are generally 1½ ft. high from the ground, but it is 3 ft high in case of *pucca* houses.

The houses are generally four walled. The walls are made of bamboo and straw. In some cases mud walls are also found.

The roofs are made of straw and bamboo. Corrugated Iron sheet is not very uncommon. The roofs have generally two slopes. But the roofs made of Corrugated Iron sheets are four sloped.

Ventilation is allowed by the doors and windows. *Kutcha* houses have usually no windows. The doors are wooden.

Materials of houses are supplied by the people from the neighbouring villages as no housing materials are available in the village itself.

Village : BEKO

The mouza of Beko bearing J. L. No. 20 is in the Police Station of Kashipur in the district of Purulia. The mouza is nearly 250 miles away from Calcutta and it takes one about nine hours and a half to reach the village directly from Calcutta. The only way to reach the mouza is a half-completed *kutcha* road from Adra to the village which is only at a distance of 2 miles from Adra, the Divisional Headquarters of the South Eastern Railway. The town of Adra has undoubtedly a great influence on the village and contributes in more than one way to its economy. The town provides the source of income for almost all the families in the village. The daily market and shops in the town meet the needs of the villagers. The town also provide the only link with Purulia, the District Headquarters, which is about 30 miles away from Adra. Buses and trains running to and from Adra are the only means of transport for the villagers for their journey to any place other than the neighbouring villages, hemming in on the boundaries of the mouza. The rivulet of Beko is away from the mouza by only a mile or so.

The mouza of Beko consists of only one village of the same name. The village may generally be said to be well-planned being divided into several clear-cut sectors by streets running from east to west or from north to south, some parallel to each other and some crossing each other. Every sector is named after the caste predominant in that locality. Accordingly there are 5 localities called—Bauripara, Kaivartapara, Goalapara, Kumarpara and Sardarpara. Bauri households comprise more than one-third of the total households. Kaivartas or Ghunias account for one-ninth of the total households. Besides these castes there are also some other castes. But they have not sufficient numerical strength to have a locality named after them.

The Goalas, Sardars and the Kumbhakars are the other castes worth-mentioning. One remarkable feature in respect of caste distribution in the village is that not a single Kayastha, Brahmin or Baidya family can be found in the village with the sole and lone exception of a sexagenarian village pedagogue, a Brahmin by caste who has migrated from a neighbouring village only recently to earn his living. Gandhabaniks proudly proclaim themselves to be the leading castes in the village.

Of the many roads in the village two are the most important and are locally called Majher Kuli or the Middle Road. One such road runs from north to south and the other from east to west crossing each other splitting up the village into four major sectors. There is a strip of the village projecting eastwards from its principal part. This strip is called the Kaivartapara or Ghuniapara. The Bauris have concentrated in this strip and also in the Bauripara in the eastern and the south western parts of the village. The Goalas have their dwellings on either side of the main road running from east to west but the majority of them live on the northern side of the road. This locality is called Goalapara. At the extreme northwestern part of the village the Kumbhankars have congregated to form a Kumarpara. In the same north-western part of the village there is also the Sardarpara dominated by the Sardars. On the main road starting from the remote northern end one will first come across the houses of the Gandhabaniks, and then of the Tilis. A few Sutradhar families also live on the eastern side of this main road. There is a single Dom family in the village.

The crossing of the two main roads running from north to south and from west to east forms the nucleus of the village. The village Primary School and the "Harimandir" are located at this place. Moving further southwards and then turning westwards one will find the 'Kali' temple owned by a Bauri family. This place is also a common

meeting place for the villagers. Moving along the main road further southwards one will find the "Battala" (place under a banyan tree) another place of congregation for the villagers. At the north-west part of the village there are a Sub-post Office and the village Charitable Dispensary housed in the same room. Near the Post Office there is another common meeting place for the villagers in a private house. In the Kaivartapara there is a Manasamela which is also another rendezvous for the villagers. It is note-worthy that the school ground adjoining the primary school is the only space available for playful children. There is no other open space in the village.

Water supply in the village is far from satisfactory. There is no tube-well in the village. There are only three wells—one near the Primary School, one in front of the Kali temple and the third one in the extreme southern corner of the village. The village has four big tanks commonly called "Bundh" by the local people and they are not exactly located in the village proper but just on the outskirts of the village. One of the tanks is just on the side of the village approach road from Adra, two are on the southern end of the village, and the fourth one is at the tail-end of the north-western part of the village. Tank water is usually used for bathing and washing purposes while drinking water is secured from the wells. There are also five or six wells in the village privately or jointly owned by some families. Besides, there is the natural flow of water from the meandering river Beko at a distance of nearly 2 miles from the village.

There is no drainage or sewage system in the village, neither any burning ghat or graveyard. There is no common pasture in the true sense of the term. But cattle are brought to graze on the lands adjoining the tanks. There is no jungle in or around the village. The residential areas of the village are surrounded by the cultivated lands forming the boundaries of the mouza. There is no daily market or "Hat" in the village. Village groceries meet the primary requisites of the villagers. Market and shops in Adra supplement the other essentials of the villagers.

A number of houses are built on a level higher than that of the street. A great majority of the houses have mud walls all around. Only the very poor among the villagers cannot afford to have them. Many of the houses are single structures partitioned into two or more rooms by mud walls or walls of split bamboo. On many cases rooms are arranged in two lines facing each other. In some cases rooms are built on all three sides, entrance to the house remaining vacant. A few families possibly touching the bottom income bracket are found to have only single rooms. A remarkable feature is that a number of families in all cases having a common ancestor—have only a common boundary wall. Open courtyards have almost universally a *Tulshi-mancha*. In some cases families have images of *Sannyasi thakur* (which is just some pebble smeared with vermillion) a form of worship peculiar to this locality. There is scarcely any room meant for exclusive use as kitchen. A corner of the verandah is sufficient in many cases for kitchen purposes. Bedroom-*cum*-kitchen system is also not infrequent. Granaries are conspicuous by their absence. A cowshed is generally attached to the main structure. Even in some cases cattle are given shelter on the verandah adjoining the bedroom. This is usual among many families who have not sufficient number of rooms. Every household has some opening to the street. Any two households have hardly a common passage. The village paths running through the courtyards of several houses are not to be found in this village. There is hardly any open space left between any two adjacent houses. In most cases they have a common boundary wall. Houses in a number of cases have kitchen gardens at the back of the house. Houses on the village boundary have agricultural fields adjoining the kitchen-garden. Many households have farm houses. On either side of the narrow village path houses are built in two continuous lines. Nearly half a dozen houses in the village are two-storeyed. The mud floor on the upper storey is supported by wooden planks which serve as joists. The rooms on the ground floor though dark are cool even in hot summer days, while those on the first floor are not spacious enough. These villagers have also an indigenous way of saving themselves from the outbreak of fire. A room is specially built with no outlet for ventilation and with a rather narrow entrance. This serves as the shelter for the family in case of an outbreak of fire. Households have earthen jars with an opening at the bottom, tied in a row to the sloping-end of the roof. These jars are the shelters for the pet pigeons of the household. The doors and outer walls of the bedroom almost universally have decorative designs painted on festive occasions. In the Kaivartapara there are only some

narrow lanes in between the houses. There are only three *pucca* buildings in the village. One of them is vacant while another is a palatial building in ruins and the other is the farm house belonging to the family of the Panchakotraj.

The plinth varies from house to house ranging from 1 foot to 5 feet, roofs have only one slope. In some cases the roof on the verandah has a separate slope. Walls are usually mud built. Only in a few cases the walls are made of split bamboo. Roofs are, in general, of straw. Only a few houses have tinned roofs and a still fewer have tiled roofs. Windows are all small and are high up in the wall serving as the only means for ventilation. Materials are all locally procured. Tiles and tins are purchased from Adra.

Village : BHUMIJ DHAN SOL

The mouza Bhumij Dhan Sol hearing J.L. No. 780 is situated in the Police Station Binpur in the Jhargram Sub-division of the district of Midnapore. The village is situated at a distance of 18 miles from the Jhargram Railway Station on the South-Eastern Railway and some 22 miles from the Midnapur town, the District Headquarters.

The landscape of the mouza is distinctly rural. There are widespread forest tracts consisting of trees like *Shal, Shegun, Mahua* etc. These forests encircle the village on the three sides. Formerly, these forests were very dense, but just on the eve of the abolition of the Zamindary system, the *zamindars* cut off the trees resulting in straggling forests.

The Lalgarh-Midnapur Road, constructed by the District Board, passes through the south of the village from the south-east (Midnapur) to north-west (Katapahari). At the south-west end of the village, the road is bifurcated, one towards Lalgarh (south-west) and another towards Katapahari (north-west). Buses ply along this road and the villagers usually avail themselves of this route in communicating with the outside world. Two other narrow muddy paths take off from this road.

This village is inhabited mostly by the members of the two Scheduled Tribes namely Lodhas and Bhumijes and only 2 or 3 households belonging to the Mahato and the Bagal castes.

Layout

The major portion of the village lies to the north of the District Board Road, while only a small portion lies to the south. The extreme northern portion of the village is full of jungles. Besides jungle, there are vast tracts of cultivable and fallow lands on all sides. The cattle usually utilise these fallow lands as their pasture. No place of public importance is to be found in the village except, of course, a Forest Ranger's office just at the approach to the village from the east. There is neither any school, nor any dispensary nor even a shop. "Hats" or markets are all outside village. There are two places of public worship—one in the Lodha huts and the other in the Bhumij huts.

There is no sewage or drainage facility. The sources of water are very meagre. There is no tank or pond in the mouza. The one tank that caters to the needs of this village is situated in the adjoining mouza of Saontal Dhan Sol, about a furlong away. The villagers usually go there and take their bath in the tank. As to the sources of drinking water there are only 3 wells, but there is no tube-well. There is neither any crematorium nor any burning ghat in the village. The people usually carry their dead bodies to the nearby jungle at Kashisole for cremation.

The Lodhas constitute the majority of the inhabitants. The Bhumij comes next in numerical strength. All the Lodhas are engaged either in forestry or hunting, some eke out their existence as agricultural labourers. The Bhumijes work as agricultural labourers and some of them are also engaged in cultivation.

Locational pattern

As one enters the village from the south-east, i.e., from the direction of Midnapur town one finds to one's left a small cluster of huts. These are all occupied by the Bhumijes. There is very little space in between one hut and the other. A little further on, one finds to the left another settlement. These huts are all arranged in haphazard manner. Here one finds considerable space in between one hut and the other. In this settlement the Mahatos and the Bagals live side by side with the Bhumijes.

The land lying on one side of the road is inhabited by the Lodhas, who maintain rigid exclusiveness in regard to forming their own settlement. No other caste or tribe is

allowed to reside very close to them. Their homestead lands are parts of the vast tracts of fallow lands, which again are nothing but an extension of the forest regions. According to the exigencies of Local circumstances, the Lodhas have established themselves on isolated homesteads. The houses are dispersed, there being considerable distance between one hut and the other. A little beyond the Lodha settlement one may see another small cluster of huts belonging to the Bhumijes. This cluster situated close to the jungles, is flanked by vast tracts of agricultural land on its two sides.

House types

The Mahatos and Bagals live in comparatively improved type of houses. The plinth is 3 to 4 ft. high. There is a separate kitchen for each household. The houses have usually mud walls and thatched roofs. The roof has four slopes. In one or two cases, mud walled houses with double roofs (i.e., two storeyed) are found with roofs of hay.

The houses of the Bhumijes have two to three rooms each. Their houses are not huddled together; there is a little open space between one house and the other. The plinth is in most cases 1½ ft. to 2 feet high and is built of mud. The walls are of two types, one being of mud and the other being of twigs. In some cases the twigs are plastered with mud. The presence of forest regions in abundance in the vicinity of the village makes the people use twigs as materials of walls frequently. In most houses there are no windows, but some square space is left open in the walls for ventilation. The average house is of much lower height.

In the houses of the Lodhas some peculiarity is observed. All their huts are dispersed and isolated from one another having considerable space in between the houses. There are a good number of circular or even squarish cottages with pointed and conical roof made of hay, while some roofs have two slopes. The walls of the majority of houses are made of twigs, while the thatching is usually of hay. Most of the huts are one-roomed having no windows or verandahs. The cooking is conducted in the courtyard. An average hut belonging to the Lodhas is of abnormally low height so much so that one has to enter the room by bending low.

The natural corollary is that an average Lodha hut is always dark within. No sunlight or air can enter into the rooms.

Village : TATPARA

The mouza Tatpara bearing J.L. No. 119 is located in Alipur Duars Police Station of Jalpaiguri District. It is situated 8 miles east of Alipur Daur town, the Subdivisional and Thana Headquarters. This mouza is linked up with its Subdivisional Headquarter by a *pucca* motorable road. The road passes through the mouza and thus divides the mouza into two parts. A *kutcha* District Board Road also passes through this mouza. These two roads are parallel to each other and both pass through the mouza from east to west. Private and public buses, rickshaws, cycles and bullock carts regularly ply along these roads.

The internal road of the mouza are all *kutcha* in nature. They are dirty and dusty during most of the time in the year. In monsoon they become muddy and unpliable.

The river 'Mulsing' flows by the northern side of the mouza and thus automatically forms the northern boundary of the mouza. The Assam-Link Railway line passes by the southern side of the mouza. The river 'Khatajani' almost dead now, flows by the western side of the mouza forming the western boundary of the mouza.

Persons belonging to the 'Rajbanshi' caste reside in large number in the mouza. It has also a large concentration of displaced persons from East Pakistan.

The mouza Tatpara is divided into 3 different parts—(1) Tatpara proper, (2) Bashpara—a hamlet and (3) Charaimohal —Refugee Colony.

The economy of the village is purely agricultural.

Layout of the village and its locational pattern

If one enters the mouza from the northern side, one first comes across a cluster of houses of the Rajbanshis. Proceeding further south the houses of some Muslim families will be visible. Their houses are grouped together. By the side of their houses some more houses of the Rajbanshis will be visible. Some Modak families also reside with them. They live in a separate cluster. A larger number of Rajbanshis live in two distinct and separate clusters in this area and their houses are situated at a distance from the houses of those already stated before. They live in houses as if

massed together. The houses of these families are situated on the northern side of the *pucca* road and the houses of these families constitute the settlement area of the hamlet 'Bashpara'.

After crossing the *pucca* road if one proceeds further towards the south, one comes across the houses of some Yogi and Modak families. Houses of some Muslim families are situated in a cluster at a distance from these houses. Proceeding still further towards the south an area inhabited by the Rajbanshi families will be seen. Some Modak families hailing from East Pakistan also reside in the area scattered here and there. Some more Muslim families live by the side of the *kutcha* road in a cluster.

By crossing the *kutcha* road one will come across a cluster of houses of the Modak and Kayastha families. Some isolated homesteads belonging to these two castes will also be seen up to the southern boundary of the mouza.

If anybody enters the mouza from the eastern side, he finds the houses of the refugee families belonging mainly to the Kayastha and Yogi Castes. It is said that this place was formerly the common grazing ground for the livestock of the mouza. But after the partition displaced families have settled here.

Water from the river 'Mulsing' is used for drinking, bathing and washing purposes. The bed of the almost dead river 'Khatajani', is used for cultivation for the greater part of the year.

No big tank is found here. Only 2/3 ponds are there in the mouza. But these too dry up during summer. Tube-well and ringwell are the main sources of drinking water.

After heavy rain the rain water accumulates in the low lying areas of the mouza.

The major portion of the agricultural fields of the mouza are situated on the western side. A substantial area of agricultural land is also situated in the southern portion of the mouza. Some portions of agricultural lands are also situated by the side of different settlement areas.

No village jungle can be seen in this area except some bamboo groves.

Persons belonging to the Muslim Community bury their dead bodies in reserved places by the side of their respective houses. Persons belonging to Hindu Community cremate their dead bodies by the side of the rivers.

Houses belonging to the residents of 'Bashpara' are generally of dispersed type and grouped into a small cluster. The difference between one cluster and another varies between 10 ft. and 80 ft.

Houses belonging to the residents of 'Tatpara' proper are generally of massive type and take the linear shape. In these areas houses are generally situated on both sides of the narrow lanes and in some cases on both sides of the road.

Houses belonging to refugee settlers are of dispersed type and some isolated homesteads are clearly visible. Their houses are not closely clustered but clustered in a scattered way. Most of the localities of the mouza as a whole are of mixed type depending neither on caste nor on occupation.

There is no permanent temple in this area. No mosque can be seen here. No hut or market exists here.

The public library is located in the central place of the village proper. A Primary School up to Class IV (special cadre) is situated by the southern side of the main *pucca* road. Mazidkhana High School is situated in the southern part of the mouza. Another school (primary) is located near the refugee colony. It is run by the Relief and Rehabilitation Department. There is also a Co-operative Society in the mouza.

House types

The majority of the people live in *kutcha* houses. The houses have walls of bamboo with roofs made either of straw or tin (Corrugated Iron sheet). Tin-roofed houses are few in number.

Every house whether owned by a rich or a poor man has some vacant space in front or in the rear portion of the house. The open space is used for Kitchen-gardens. '*Tulsimancha*' is seen in every household.

The Brahmin, Kayastha, Yogi, Modak and some wealthy Rajbanshi families generally live in bamboo-stick-walled and tin-roofed houses. But on the other hand, the families belonging to the Dhoba, Bairagi and Rajbanshi castes live in bamboo-stick-walled strawroofed houses.

A wealthy man's house consists of 1 or 2 bed rooms, one outer room or '*baithakkhana*, one room kept exclusively for household deity, one cowshed and one

kitchen room. In this area paddy-husking is not done by means of a *'dhenki'*. So no paddy-husking room can be seen here. A 'Gola' or 'Marai' is located in the open compound and surrounding it all the rooms are situated. In the open compound a tubewell or ringwell is located. Such houses are enclosed with bamboo stick walls. Muslims live in such houses.

A poor man's house consists of one bed-room with an open compound. The covered verandah of the house is used as kitchen. No cowshed is found there in such a house.

No *pucca* house is built in this area due to the nature of the soil.

Plinth of a house is generally 2 to 3 feet in height. It is in all cases made of mud.

Everybody lives in a house made of four walls—one front wall, one back wall and two side walls. Walls are generally made of bamboo sticks. In some cases mud plastered jute-stalk walls are also seen.

Roofs are made either of Corrugated Iron sheet or of straw. Poor families generally live in a straw-roofed house and wealthy families reside in a tin-roofed house.

In the houses of the well-to-do, one or two windows in a room can be seen. But it is quite a luxury in the houses belonging to the poorer section of the people. In their houses windows are totally absent and the front door of the room works as the only source of ventilation.

Straw-roofed houses generally have 2-4 slopes and tin-roofed houses in all cases have 4 slopes.

Bamboo-sticks and jute-stalks are locally avilable but Corrugated Iron sheets are brought from outside.

Village : PATIRAM

The mouza Patiram bearing J.L. No. 187 is located in Balurghat Police Station of West Dinajpur District. It is situated 8 miles off Balurghat Town, the Headquarters of the Sadar Sub-division and the District. The Atrai, the principal river of the district flows by the northern side of the mouza and thus eventually forms its southern boundary.

Two State Highways (1) Balurghat-Malda (S. H.-6) State Highway and (2) Balurghat-Kumarganj State Highway pass through the mouza. State run and private buses, taxi, rickshaws and bicycles regularly ply along these routes. It clearly indicates that the village with its hamlets is well connected with the outside world.

The mouza Partiram consists of (1) Patiram, the main village, (2) Barsapara, a hamlet, (3) Sahartali, a hamlet and (4) Neccha Bandar, a small hamlet. All the internal roads of the mouza are *kutcha* in nature and go out of commission in the monsoons.

Being accessible to an urban area like Balurghat, Patiram is well developed in regard to different cultural and educational activities. The percentage of literacy is quite remarkable in this village. The mouza exhibits many urban characteristics although its economy is agriculture oriented. Many displaced persons from the other side of the border have concentrated in this mouza.

This particular village has a history of its own. It is said that the village has derived its name from its overlord Patiram, the ruler of this area in the past.

Layout of the village and its locational pattern

In the village proper, the families belonging to the Muslim community live in the southern corner of the village. Behind the cluster of their houses the Rajbanshi families reside. Some houses of the Rajput, the Goala, the Kayastha and the Brahmin families are also located in this area. In the northern corner of the village proper, the houses of the Kayastha, the Bairagi, the Goala, the Baisya, the Hari, the Malakar and the Karmakar families are situated. In the eastern side of the village proper the persons belonging to the Muslim community mainly reside. Just by the side of the cluster of their houses the Baisyas, the Kayasthas, the Mahisyas, and the Sadgops have settled. The families of the Brahmin, Kayastha, Sadgope and Bania castes reside in the western portion of the main village. A cluster of Bagdi houses is also located in this area. The hamlet Barsapara is inhabited by the Santals only. They live not in a single cluster but in three different clusters. The hamlet Sahartali is mainly inhabited by the Santals and the Turis. The cluster of houses belonging to the Turis is at a distance from that built by the Santal families. The Turis live in a single cluster but the Santals live in two different clusters. The hamlet Neecha Bandar is mainly populated by re-

fugee settlers from East Pakistan belonging to the Mahisya, Kayashtha, Malo and Rajbanshi castes. Some Muslims also live in this area. The houses are situated on both sides of the road. The houses of the inhabitants of the main village are closely clustered. They are linear in form but house on either side are of massive type. The houses of the hamlet Barsapara are grouped into three separate clusters. The distance between one cluster and another is approximately 10 to 20 ft. The houses are of massive type. One cluster belongs to the Turi families and the other two to the Santal families. In the hamlet Neecha Bandar the houses are located on both sides of the road and are of massive type.

Approximately 17 tube-wells consisting of 10 private and 7 Government-*cum*-Union Board are the main sources of supply for drinking water. Moreover, there are 42 (12 public and 30 private) ring-wells in the mouza. Half a dozen tanks and about 25 ponds provide other sources of water. These ponds and tanks are used for cleaning, washing and bathing purposes. In some cases they are also used for irrigation purposes. River Atrai's water is also used for bathing, washing and cleaning purposes. In this particular mouza a "Deep Tube-well" run by diesel engine has recently been sunk by the Irrigation Department for providing irrigation facilities to the agriculturists.

There is no drainage system in this mouza. For this reason rain water at first accumulates in the different parts of the mouza and afterwards flows towards the river side.

Agricultural fields are mainly concentrated in the southern portion of the mouza. Quite a large area of agricultural fields is located at the eastern corner of the mouza. In some cases the houses of different localities are formed around agricultural fields.

No common pastures can be seen in this area but cows and buffaloes generally graze in the open fields in the off seasons and by the side of the river Atrai outside the mouza.

Except bamboo groves no jungle is to be found in this area.

The persons belonging to the Hindu community cremate their dead bodies at a place called "Dauga Tal" situated by the side of the river Atrai.

The Muslim inhabitants of the mouza bury their dead bodies at a fixed place, located at the eastern side of the mouza.

The Santals bury their dead bodies in and around their homesteads. After some time they take out the bones from the graves and throw into the Ganges.

There is a Multi-purpose Higher Secondary School and a Branch Post Office in the village. These two institutions are in the village proper. The Office of the Junior Land Reforms Officer of the Kumarganj-Gangarampur Police Station is also situated in this village. There are a public library and an office of the Mahila Samity. A Charitable Dispensary run by the District Board is located here and it provides free medical treatment to the inhabitants. The temple of Rasik Roy (local name of Lord Krishna) is situated in the central place of the mouza. Here, daily worship of the deity Radhagobinda takes place. The Temple of Bidyeswari Kali is located in this area also at the central place of the mouza. There is a mosque for the Muslims situated at the eastern portion of the mouza. Here each Friday and on special occasions Muslims offer prayer.

House types

Dwellings owned by the richer section of the people are quite different in nature from those built by the poorer section. Well-to-do families generally live in a mud-walled, tin-roofed house. A couple of families among them also live in *pucca* structures. The majority of the poor families live in mud-walled, straw-roofed houses. None among them even thinks of living in a *pucca* structure. Some of them live also in houses with walls of bamboo or jute sticks plastered with mud and roofs made of straw. As a rule, persons belonging to a higher social status live in houses better than those of persons belonging to a lower social status.

The house of a well-to-do family consists of the following : One or two bed rooms, one kitchen, one cowshed and one outer room. In some cases a separate room for religious purposes exists. Each household possesses an open compound facing the bed-room. The kitchen, the cowshed and the granary or Morai are located in the open compound. In every household the "*Tulsi* Plant" is placed in the family compound. In some cases tube-wells or ring-wells may be seen there. Most of such houses are surrounded by a boundary wall.

In a poor family the house consists of one bedroom with a covered verandah used as kitchen. Each household possesses

an open compound with a "*Tulsi* Plant" planted therein.

Families belonging to the Rajbanshi, Turi, Santal, Bagdi, Dhoba, Malo, Tyar and Hari Castes/Tribes live in houses with walls made of mud/bamboo stick/jute stick and with roofs made of straw.

Persons belonging to the Brahmin, Kayastha, Sadgope, Goala, Rajput, Bania, Bairagi, Karmakar, Kumbhakar and Mahisya castes usually live in brick/mud walled houses with roofs of tin or straw. Some among them live also in a house with roofs of concrete.

Plinth of a mud-walled house with tinned roof generally varies between 2 and 3 ft. in height. On the other hand, the plinth of a mud-walled, straw-roofed house varies between 1 foot and 3 ft. This is also observed in houses with walls of bomboo sticks plastered with mud and with roofs made of hay.

The houses have usually four walls—2 side walls, 1 back wall and 1 front wall. This is common to every house.

Roofs have generally two slopes in any thatched house. But a tin-roofed house has four slopes. In regard to *pucca* structures the question of slopes does not arise.

In any house of a poor family the front door of the room serves as the only means of ventilation. But the house of a family in an affluent condition has at least one or two windows in each room.

Materials used for construction of the different parts of the houses are generally supplied by local persons but the materials such as Corrugated Iron sheets (Tin) and cement are always brought from outside. Bamboo sticks, Jute sticks and mud are available in abundance in the locality.

Village : MADIA

The mouza Madia bearing J. L. No. 2 is located in the Police Station of English Bazar in the Sadar Sub-division of Malda district. The Manikchak Ghat—English Bazar State Highway passes through the village. People of the village visit the District Headquarters by State buses which ply regularly from Manikchak Ghat to English Bazar. The village is only 10 miles away from the District Headquarters. It takes one 40 minutes to reach the District Headquarter. One main unmetalled road which runs parallel to the State Highway in the east-west direction has divided the village into nearly two equal parts. Almost all the localities of the mouza are on the northern side of the main road. Several narrow unmetalled roads connect all the localities with the main road.

The village is of some antiquity. Frequent changes of the river course compelled the people to leave the riverside and settle on this site. The river Ganges is about 5 miles away to the south-west of the mouza.

In this mouza people of a particular caste or community concentrate in a particular locality. The Muslim localities are not inhabited by any Hindu member nor does a Muslim family reside in a Hindu locality. Hindu localities are also set up castewise with the exception of only the Kumbhakar locality where one will find a Brahmin and a few Kayastha families. There are altogether 9 paras or localities such as : (i) Dosad para, (ii) Mollah para, (iii) Momin para, (iv) Munsi para, (v) Goala para, (vi) Bind para, (vii) Singha para, (viii) Nagar Mondal para and (ix) Kumar para. The main road has passed through three localities—the (i) Dosad para, (ii) Mollah para, and (iii) Momin para from its approach from east to west. Nagar Mondal para is situated to the north of Dosad para. Kumar para is further to the north. Singha para is situated in the north-eastern corner of the village. To the north of Mollah para is Munsi para. Goala para is situated near the northern boundary of the mouza. Bind para is located to the north of Momin para.

There is no pond here. The river Kalindi in the village being a mile away on the north-western direction, people cannot use river water. The only tube-well of this village is situated at Bind para i.e., at the north-western corner of the village. The people of Mollah para, Momin para and Dosad para are fortunate enough to have public ring-wells near their houses. The other public ring-well is situated near the mosque, i.e., between Mollah para and Momin para. In other localities where there is no public ring-well people use private ring-wells and *kutcha* wells. Thus there are in all one public tube-well, four public ring-wells, eleven private ring-wells and six private *kutcha* wells.

Rain water from the residential area flows to the low lands between the State Highway and the mud road and accumulates just by the side of the State Highway.

Malda being famous for mangoes, mango trees are abundant. Groups of houses in the midst of mango trees form a picturesque landscape. Most of the areas of this village are interspersed with mango-groves. The field between the State Highway and main village road is thick with mango-gardens. Usually the field left between two clusters of houses is covered by mango-gardens. There are no extension of agricultural fields in this village. There is only a very small patch of agricultural field on the southern side of the State Highway.

There is no common pasture in this village. Cattle generally graze in the open grassy fields or in the mango gardens.

Except bamboo groves scattered here and there, there is no jungle or bush in the village.

There is no burning ghat or graveyard in the village.

There are one primary school and a mosque in the village. There is also a club room near Singha para. Except one wine shop, there is no other shop in this village.

In Dosad para, Nagar Mondal para, Momin para, Singha para and Goala para the system of grouping of houses is linear. Generally two parallel rows of houses are separated by narrow mud roads. In these localities houses are grouped in a definite pattern. But in other localities houses are grouped in a shapeless pattern. Specially in Mollah para where all the inhabitants are Muslims, the houses are closely clustered. Similar is the case with Bind para where all the people belong to the Scheduled Caste. In these two localities the open space between a number of houses forms the common compound. The main reason for such close clustering is that the people of the lowest income group live in these two localities. People of better economic means live in Munsi para and Kumar para. As the Munshis are very conscious of their high social position, they do not want to live elsewhere with other people. In Kumar para there are a few Kayastha and one Brahmin families. The houses of the Kayasthas are grouped together. The houses of the Kumbhakars are scattered here and there around the Kayastha houses.

The majority of the houses are not surrounded by any compound wall. The houses of the poor people consist of only one bedroom. There is neither a courtyard nor any separate kitchen. Food is generally cooked in the open verandah of the bedroom. People who are better off can afford to have separate kitchens in the courtyard in front of the bedrooms. Some people have separate kitchens in the courtyard, a cowshed outside the courtyard, a kitchen garden, and a small shed for storage of fuel. People who are well off have a 'marai' or storage room for paddy, a ring-well in the courtyard and a sitting room for visitors near the entrance of the main house in addition to the bedrooms, kitchens and cowsheds. The houses of the well-off people are surrounded by compound walls.

In case of houses having walls made of bamboo strips the area where the bedroom is generally constructed is raised from the ground by 2 to 3 ft. with mud. In mud-built houses the plinth is also generally 2 ft. to 3 ft. above the ground.

Bamboo stick closely tied together with split bamboo form the walls of most of the houses. In the houses of the well-off people walls are made of mud. There are a few houses with brick built walls without any plastering on them.

The roofing material is mainly provided by a kind of grass known as 'Ulu'. In the majority of the houses roofs are made of 'Ulu' grass tied with bamboo strips. There are only two slopes in the roofs of such houses. People who are better off use tiles and Corrugated Iron sheets as roofing material. In Dosad para destruction of their houses by fire led the poor to use tiles in the roofs. Tiled roofs have two slopes while tinned-roofs have 4 slopes.

In the majority of the houses there are no windows. Walls made of bamboo strips have sufficient space for ventilation. Houses made of bamboo strips have not got any wooden door. Doors of such houses are made of the same material as used in the walls. In mud built and *pucca* houses there are at best one wooden door and one to two windows per room.

All the housing materials are locally available. Bamboo groves are plentiful in this area. 'Ulu' grass also grows profusely here and there. Tiles are also available from a factory, situated nearby.

It is beyond the means of the majority of the people to live in the mud houses having compound walls, separate kitchens, cowsheds and bedrooms with proper doors and windows.

Village : HARHARIA CHAK

The mouza Harharia Chak, J.L. No. 58 is situated in Raninagar Police Station in the district of Murshidabad. It is located in an area which is generally locally known as 'Bagri'. Bagri is that portion of the land which lies on the eastern side of the river Bhagirathi. It is situated at a distance of 17 miles east of Berhampore town, the District Headquarter. The mouza itself is divided into 3 parts—(1) the entire portion of the village Harharia, (2) a large portion of the village Chak and (3) a small portion of the village Islampur (Natunpara).

The river 'Bhairab' flows by the western and southern sides of the mouza and eventually forms its western and southern boundaries.

A metalled road (State Highway) runs from Berhampore town to the Raninagar Police Station just touching the northern fringe of the mouza and from the same metalled road, another metalled road has taken its course towards Jalangi, which constitutes the border area with East Pakistan. Public buses and rickshaws ply along these two roads throughout the day. The nearest Railway station Berhampore Court is 18 miles away from the mouza. All internal roads of the mouza are *kutcha* in nature and full of small ditches. During monsoon it is said that the roads become unsafe for pedestrian as well as vehicular traffic.

The mouza Harharia Chak is an important silk-weaving centre. Weaving is the main occupation of the majority of the inhabitants. Its economy is, therefore, biased towards manufacturing industry.

Layout of the village and its locational pattern

There are many localities or paras in the mouza and most of them are congested. The different localities of the mouza as a whole can be described as follows—(1) Ramkrishnapur, (2) Biswas para, (3) Bazar para, (4) Behar para, (5) Mondal para, (6) Nath para, (7) Muslim para and Natun para of Islampur.

The majority of the inhabitants are Hindus and the rest are Muslims. No other community resides in the mouza.

If anybody enters the mouza from the north following the principal *kutcha* road, taken off from the State Highway, he comes across the locality known as Ramkrishnapur. Here the families belonging to Tantubaya, Poundra Kshatriya, Bairagi, Goala, Swarnakar and the Chamar castes reside. The families live in closely clustered houses. Proceeding further, he comes across the locality known as Biswas para where the houses of the Baisya families are situated. The houses of the Tantubaya, the Bairagi, the Dhoba, the Hari and the Yogi families are located in Bazar para, the business centre of the mouza. Proceeding further, one will come across the locality known as Behar para where the houses of the Tantubaya and the Bairagi castes are situated. Behar para is the most densely populated area of the mouza.

If one enters the mouza from the north following the second *kutcha* road which runs parallel to the first one comes across the locality known as Mondal para. In this area the houses of the Mahisyas the Napits, the Bairagis, and the Yogis are located. Proceeding further, the houses of the Yogi families with some other families belonging to other castes will be seen. The locality is known as Nath para due to the heavy concentration of the Yogis who usually add 'Nath' to their name as surname.

At the eastern corner of the mouza the houses of the Muslim community are situated. This locality is known as Muslim para. The persons belonging to the Muslim community also reside in Islampur-Natun para in a separate cluster from the houses of the persons belonging to the Mahisya, the Kumbhakar, and the Yogi families. 'Natun para' is situated in the strip of land lying between-Berhampore Domkal Road and Berhampore Jalangi Road.

Most of the houses of the inhabitants of Harharia Chak are closely clustered. The average distance between one cluster and another is 5 to 10 ft. This is mainly due to social customs and shortage of space in the mouza. The grouping of the houses has been formed on the basis of the status of occupation of the people concerned. The houses are situated on either side of the roads in a planned way. It has taken a linear form.

There are four or five small ponds in the mouza. They are used mainly for bathing, cleaning and washing purposes. In the entire mouza there are only two big tanks. The sources of drinking water are the river Bhairab, public and private tube-wells and ring-wells. Water from the Bhairab is also used for irrigation purposes.

There is no drainage system in the mouza.

Major portion of the agricultural land is situated on the eastern side of the mouza and some portions of the agricultural land are located on the southern side of the mouza.

No pasture exists in this mouza. Cows generally graze near the river banks.

There is no jungle in or outside the mouza.

Persons belonging to the Muslim community bury the dead bodies in the village Harharia and the persons belonging to different Hindu castes burn the dead bodies by the side of the river Bhairab.

As this mouza is somewhat urban in character, the houses are mostly *pucca* in structure. The Tantubaya families and the weavers' families belonging to different castes live in *pucca* structures. The nature of dwellings differs due to disparity in the economic conditions of the people.

The house of a well-to-do family consists of one or two bedrooms, one kitchen, one cowshed, one workshop, and one room specially earmarked for the household deity. There is an open courtyard facing the bedroom and in that open compound the 'Gola' or 'Marai' (Granary) is located. The bedrooms form the main part of the building. The kitchen and cowshed are situated by the side of the family compound and the workshops are constructed mainly on the road side. Some houses also possess an outer room or *Baithak khana* and a ring-well/tube-well in the compound and are surrounded by boundary walls.

The house of a poor family consists of a single bedroom with a covered verandah used as kitchen. There is an open compound facing the bedroom. No paddy-husking room or cowshed can be seen in these houses.

Latrines are found in some of the houses belonging to well-to-do households. The upper caste Hindus live in *pucca* houses but on the other hand the lower caste Hindus, and the Muslims in general live in *kutcha* houses. The persons belonging to the Mahisya, the Bairagi, the Subarnabanik, the Goala, the Napit, the Kumbhakar, the Yogi and the Brahmin castes live in brick/mud walled houses with tile tin-roof. Some of them also live in lime-brick roofed houses. Muslims live in bamboo/mud walled houses and the families belonging to the Chamar, the Dhoba, the Hari, the Pod, and the Kuri castes live in mud walled and tiled or tin roofed houses.

The plinth of each house is generally 2 to 3 ft. raised above the ground. The plinth of a *pucca* house is made of brick and the plinth of a *kutcha* house is made of mud.

All the houses of the inhabitants of the mouza are four-walled in structure. Every house possesses two side walls, one back wall and one front wall. Walls of the well-to-do families are made of brick but walls of the poor families are made either of mud or of mud plastered bamboo sticks. Roofs are generally built either of lime-brick or of concrete. Straw or tile provides the roofing material for a poor man's house. One or two windows in a room may be found in the houses belonging to the people of better economic means but it is not a common sight in the house of a poor man. The front door of the house works as the only source of ventilation in such houses. Tile roofed house has two slopes but houses with roofs of tin or straw have four slopes.

Materials which are used for construction of different parts of the house are sometimes supplied by the local people, and sometimes they are brought from outside. Bamboo sticks, bricks and tiles are available in the mouza but Corrugated Iron sheets and cement are supplied by outsiders.

Village : UDAYPUR

The mouza of Udaypur bearing the Jurisdiction List number 73 is in the Police Station of Santipur in Ranaghat Sub-division in the district of Nadia. The mouza is 54 miles away from Calcutta and it takes one two hours and a half to reach the place from Calcutta. The National Highway runs through the mouza and links it with Ranaghat, the Sub-divisional Headquarters, with Krishna Nagar, the District Headquarters and also with Santipur. The Railway Station of Phulia on the Santipur Branch-line of the Eastern Railway is in the mouza itself. On the northern side of the mouza is the newly established township of Phulia which has a great influence on

the lives and the ways of the villagers within the mouza. The mouza has three constituent villages—Pareshnathpur, Profulla Nagar and Bele Mati.

Pareshnathpur is the biggest component. It is split into several clusters of houses. There is a 'jol' or marshy stretch which geographically splits the village into two sectors. Households around the 'jol' are mostly of the Kayastha weavers. A few Ruidas and Kayastha families live on the eastern side of the 'jol'. On the western side of 'jol' under the shades of the trees there is a densely populated sector of the village with a slight predominance of the Sadgopes. There is also a locality called Station-para. It consists mostly of *pucca* buildings inhabited by the Sadgopes, Kayasthas and Brahmins. A part of the Station-para is called Gossain para because of its being inhabited by the Vaishnava Brahmins commonly called Gossains. While a major part of the village is on the northern side of the railway line, a strip of the village is on the south of the Phulia Railway Station which is dominated by the Yadavas.

At one end of Pareshnathpur is situated Profulla Nagar and is stretched on both sides of the railway line and on the northern side of the National Highway. It consists of two rows of households on either side of the railway line and the northern side of the National Highway. Of all the three villages it is of recent origin. Every head of the household in the village is a refugee from East Pakistan hailing from the district of Kusthia on the other side of the border. Namasudra families constitute by far a large majority in the village. There are also a few Sadgope families in the village. 8 families of Bindu or Brinda caste live in the Mondal para. The village has only three *pucca* buildings.

Bele Mati is quarter of a mile away from the Phulia Railway Station. The National Highway has split the village into two parts. Two castes, the Namasudras and the Yadavas, are dominant in the village. There are 6 or 7 Kumbhakar families in Palpara which is the name of a locality in Bele Mati. At one end of the village there is a concentration of the Dule and Tili families.

The Anchal Panchayat office is situated near the 'jol' in Pareshnathpur. On the southern side of the Railway Station, there is a Kali temple. A Kali temple privately owned by a Tili family and a Chandibari in the Gossain para owned by a Brahmin family are in the village. On the southern side of the Phulia Railway Station there is the daily market. There is a Primary School near the Railway Station housed in a *kutcha* building. In Profulla Nagar there is a Primary School housed in a *kutcha* building just on the side of the railway line. In Bele Mati there is a 'Haritola' with a small structure resembling a temple where devotional songs are sung. On the side of the National Highway there is the 'Battala' (the ground beneath a Banyan tree) which serves as a place of assemblage for the villagers. There is no Post Office in the mouza. The one in Phulia town serves the needs of the villagers.

Water supply in the mouza is definitely scanty in view of the large demand from the villagers. Because of the nature of the soil no well can be sunk or tank can be successfully excavated. There is only a big tank in Pareshnathpur near the 'jol'. There are also 3 tube-wells in Pareshnathpur, 5 in Profulla Nagar and 2 in Bele Mati. There are also a few privately owned tube-wells in every village. There is no drainage or sewage system in the mouza. There is no graveyard. The burning Ghat is 2 miles away from the mouza. There is no jungle in the vicinity of the village. There is no common pasture in the mouza. But cattle are allowed to graze in the open fields. Fallow land on the western side of the mouza also serves the purpose of pasture.

On the eastern side of the 'jol' in Pareshnathpur the agricultural fields constitute the village boundary. There are also a few agricultural fields near the railway line. In Profulla Nagar agricultural fields are on either side of the railway line and the National Highway. There are, besides, small strips of agricultural fields in the village. Agricultural fields lie all around the village of Bele Mati.

Houses in Pareshnathpur are in a compact mass on the wstern side of the 'jol'. On the eastern side they are dispersed. Households in Profulla Nagar form a rectangular cluster in the western part of the village. In the eastern part of the village there is a linear tendency. Houses in Bele Mati are of dispersed type.

Houses comprise of two or more single isolated structures. They either form a right angle or face each other. One of the structures is used as kitchen and the

rest as bedrooms. There is hardly any other use to which a room is put. Sometimes a part of the verandah is separated by wooden barriers for use as kitchen or place of worship. In between the structures is the courtyard. Many families have kitchen gardens at the back or front of their houses. Only a few families have granaries in the courtyard. Indigenous paddy-husking implements can be found in not more than half a dozen houses. Sometimes at one end of the house there is a structure with only a shed which is used as cowshed. Many households have raised platforms to be used as *Tulsi-mancha*. There is usually a common passage running through the courtyards of several houses. Only a few houses belonging to the Brahmins, the Kayasthas or the Sadgopes have boundary walls. The *pucca* buildings are, in general, occupied by these three castes. *Pucca* buildings are mostly single structures. *Kutcha* buildings have in most cases one or two trees either in the courtyard or at the back of the house. In Bele Mati *kutcha* houses are in most cases single structures which are partitioned into two or more rooms. In Profulla Nagar many households have only a single *kutcha* structure comprising only one room. There is hardly any variation on the basis of caste difference so far as house-types are concerned except, for the fact that *pucca* buildings mostly belong to the Brahmin or the Kayastha families or to the rich section among the Sadgopes.

The plinths are in most cases two or three feet high. In some cases it is only of little more than half a foot. Roofs have two slopes—one on the room itself and the other on the verandah. In a large number of cases, however, there is only a single roof which also covers the verandah, besides the room. Most of the houses, *pucca* or *kutcha* have one or two small windows. Both straw and tin provide the roofing material of *kutcha* houses. A number of houses has also tiled roofs. Walls are in most cases made of jute-stalks plastered with mud, tin and split-bamboo are the other materials next in order of importance. The sources of material are in most cases local. Only in a few cases are they fetched from outside the mouza.

Village : KODALIA

The mouza Kodalia bearing J.L. No. 12 is situated in Police Station Chinsurah in Hooghly district. Towards the south lies the town of Hooghly-Chinsurah which is the Headquarters of the Sadar Sub-division, of District of Hooghly and also of Burdwan Division. The important Railway Junction of Bandel on the Eastern Railway is situated at a little distance from it, to the north. The Grand Trunk Road runs along the east-skirt of the mouza. The main line of the Eastern Railway and the branch line to Naihati of the same railway run through the mouza. The town of Chandernagore is situated at a distance of about 2 miles from it.

The village is thus within the easy reach of the two municipal towns and an important railway junction. The village is easily accessible from outside and there are modern means of communication.

The proximity to important urban centres has not converted the village into an extension of the town. The landscape is rural with open fields, interspersed with tanks and vegetation. A District Board road runs through the mouza. The surface is not macadamized and is dressed with shingles. One enters the village along the road which takes off from the Grand Trunk Road and travelling a short distance one sees to the right the *Chandi Mandap*. On both sides of the road the brick-built houses can be found. Further on, a narrow muddy lane takes off from the main road. This lane, along which rickshaws usually ply is the only link between Kodalia proper and the hamlet, Loharpara. Further on to the south-west, the lane passes beneath the Bandel-Naihati branch line and reaches the hamlet of Loharpara. The *Sitalatala* is at the entrance to Loharpara. In the heart of it are situated the *Manasatala* and the *Bhairaber Than*. There is also a *Barwaritala* at the extremity of Loharpara where the above lane meets the Hooghly Station Road.

There are agricultural fields on the northern side of the village, some mango groves here and there and marshy pools on both sides of the railway lines. There is no drainage or sewage facility in the village. There are some tube-wells and a considerable number of tanks which are the sources of water supply.

As one enters the village along the District Board Road (from the G.T. Road), one comes across the houses of the more well-to-do households. These are built of brick and mortar having flat *pucca* roofs. There are several two storeyed and three storeyed buildings on both sides of the road. Thus, these buildings form a linear cluster with a regular street between parallel rows of houses. Most of these houses have separate kitchens and cowsheds. Some of these houses have orchards and open compounds in front of them. These houses except for 2 households of the Kayasthas belong to the Brahmins, Sadgopes and the Baidyas.

A little further on, a narrow lane takes off from the District Board Road and goes north-west. The houses of the Bauris and Bagdis are situated on both sides of this lane. These houses belonging to the poorer section of the people are mud walled with roofs thatched with straw. Most of these houses have no plinth, so to say.

Proceeding along the narrow lane, the houses become few and far between and to the right, one sees a few newly constructed single-storeyed houses belonging to the Kayastha and the Baidya castes. All these houses have some orchards, kitchens and gardens. A little further to the left of the lane, a cluster of some 10 or 12 huts belonging to the Bauris is situated. These are all mud walled houses with thatched roofs. The lane crosses the Naihati-Bandel Railway Line and one sees the Railway Welding Plant in front. Following this lane further, one sees, to the left, the Office of the Inspector of Works which is a two storeyed building. On the three sides of this office the railway quarters are situated. Most of the employees, being Class IV ones, are provided with single roomed brick-built flats with roofs of asbestos sheets. Each of these quarters is occupied by one or two households of the Harijan, Kurmi, Dosadh, Rajwar, Mallah, Sau, Dhoba, Ambati, Bhuiya, Pasi, Ramani, Kahar and the Bhar castes.

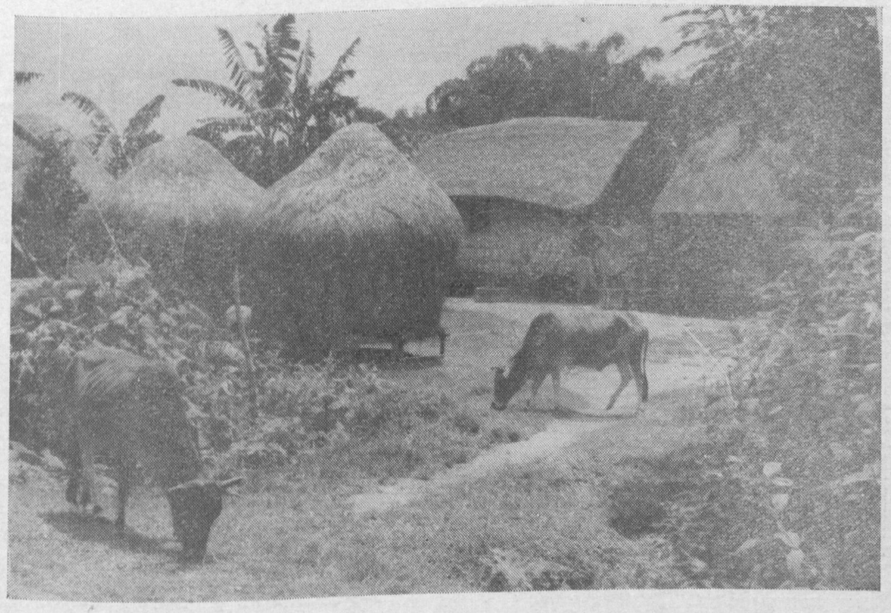
Following this lane further, one enters Loharpara which may be regarded as a hamlet. The Loharpara is occupied mainly by the new settlers—the majority of them being the Lohars—closely followed by the non-Bengali Brahmins and Rajputs.

The huts of the Lohars are huddled together and form a massive conglomeration, so much so, that each hut is inseparably connected with the other. Most of these huts have plinths, barely one foot high. The walls are made either of bamboo wattles or of mud. The roofs of most of these huts have one or two slopes made either of tiles or straws. The huts, in most cases, comprise 1 to 2 *cottahs* of land, sometimes even less.

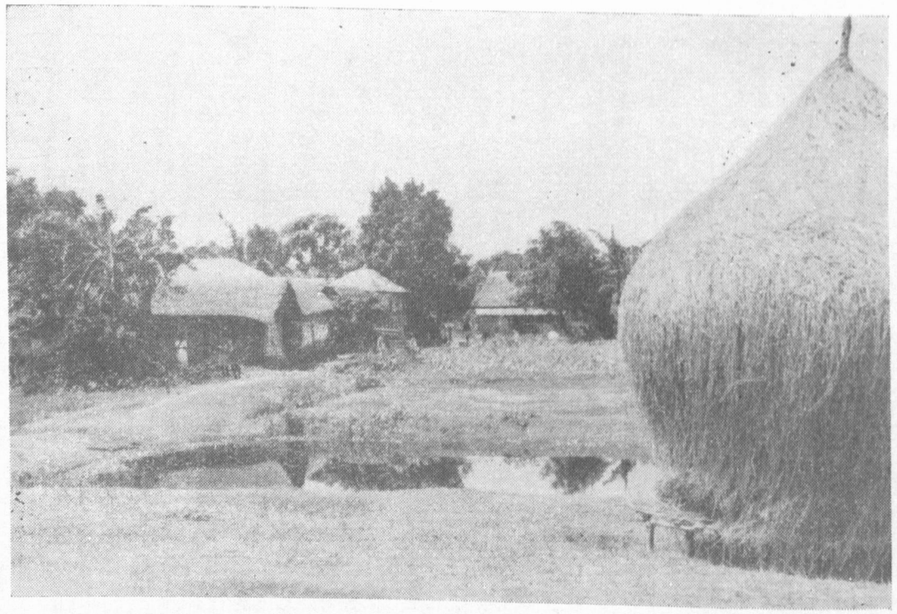
The non-Bengali settlers have maintained some distinction in the matter of housing and have some elbow room. True, their settlement also forms a hive of massive huts, but their houses are not so closely clustered together as those of the Lohars. Some of them are fortunate enough to have brick-built houses; but the majority of them live in houses having tiled roofs and walls made of bamboo plastered with mud.

To sum up, the whole mouza can be divided into several clusters of houses. First, there is Kodalia proper which is inhabited by the well-to-do households belonging to the Upper Castes. The housing condition in Kodalia proper bespeaks the economic well-being of the inhabitants. The houses are mostly *pucca* having considerable space in between one house and the other. These houses can be favourably compared with those in the neighbouring towns. But in the hamlet of Loharpara, the houses are either tiled or straw-roofed ones and are huddled together. We may attribute this poor and unhygienic housing condition in Loharpara to the relative economic backwardness of the people of the area.

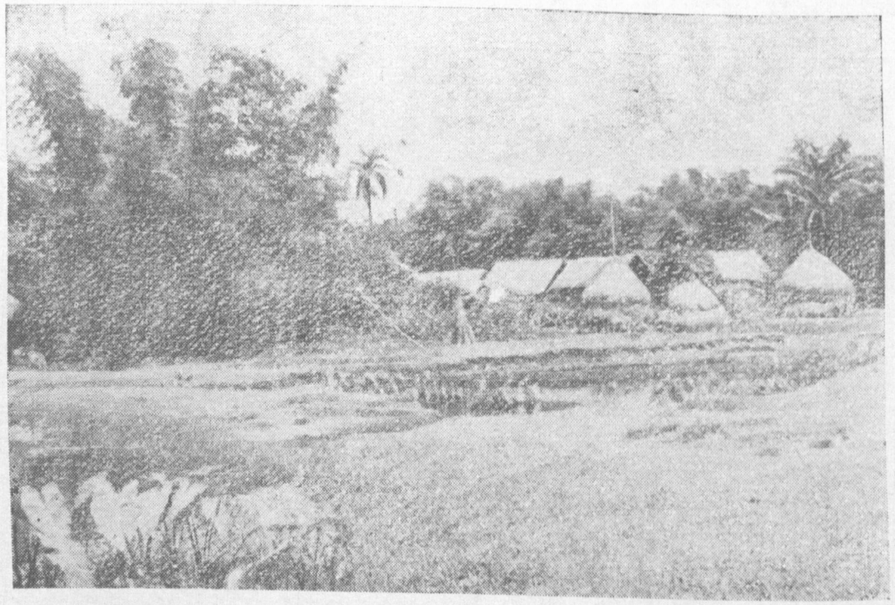
RAJBANSHI VILLAGE : Hari Mandir (Temple) and Uttar Mandlaghat Panchayat in the Village Mandlaghat



RAJBANSHI VILLAGE : House types in Jhakoapara : Mandlaghat



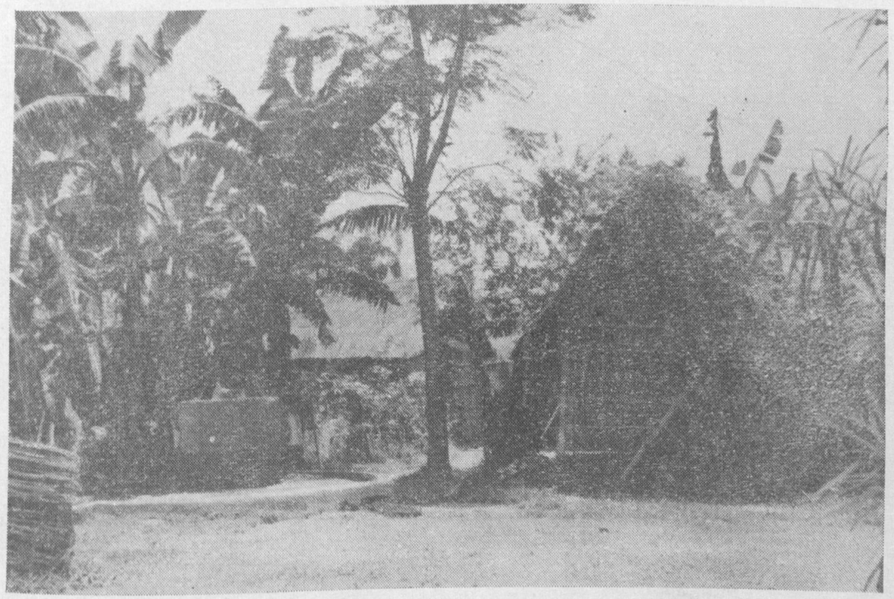
MANDLAGHAT, RAJBANSHI VILLAGE (P.S. & DISTT. JALPAIGURI): Showing small irrigation tank and the straw heaps. Mandlaghat Pradhanpara : Residence of Shri Sabduram Sarkar and others



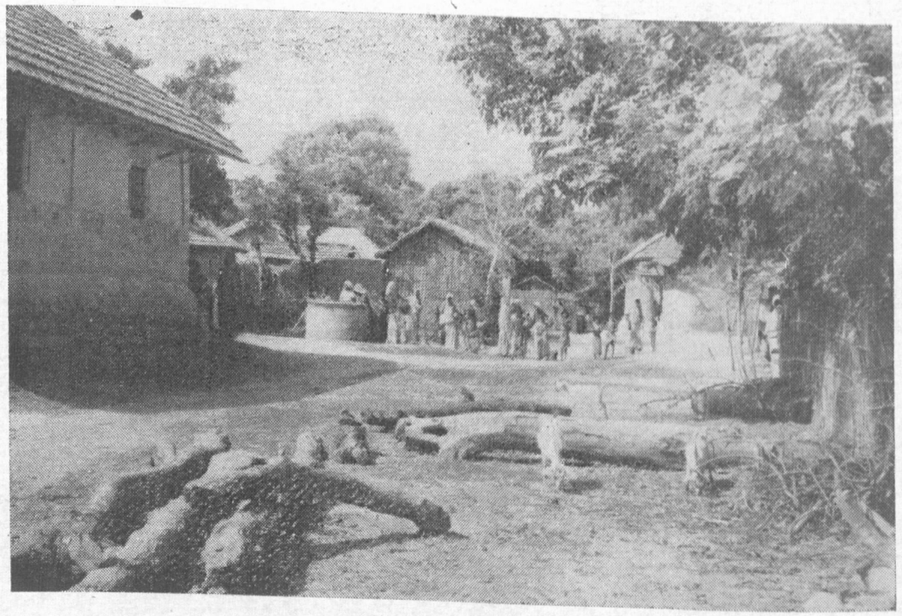
MANDLAGHAT VILLAGE : Showing the house types with land under cultivation

JHAKOAPARA VILLAGE (P.S. & District JALPAIGURI): Inhabited by the Muslims local and the Rajbanshis. The Photo shows Primary School : Houses and the cultivable land with cultivation of Jute crops and arecanut gardens.

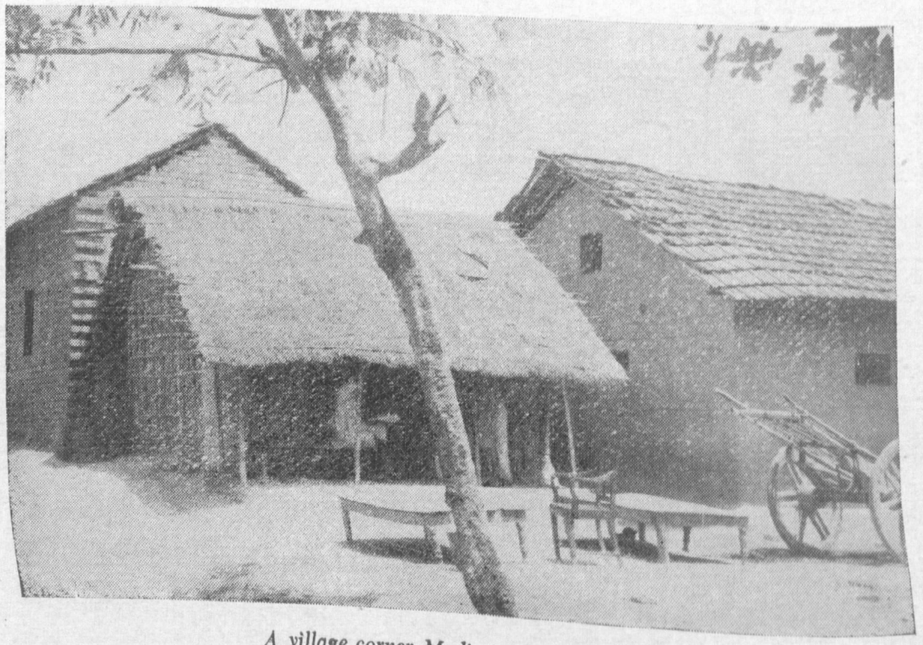
Distant view of the village Mandlaghat (P.S. & District Jalpaiguri) showing the houses with land under cultivation and the jungle resources alongwith bamboo groves etc. in the back ground and cultivation of jute in the front.



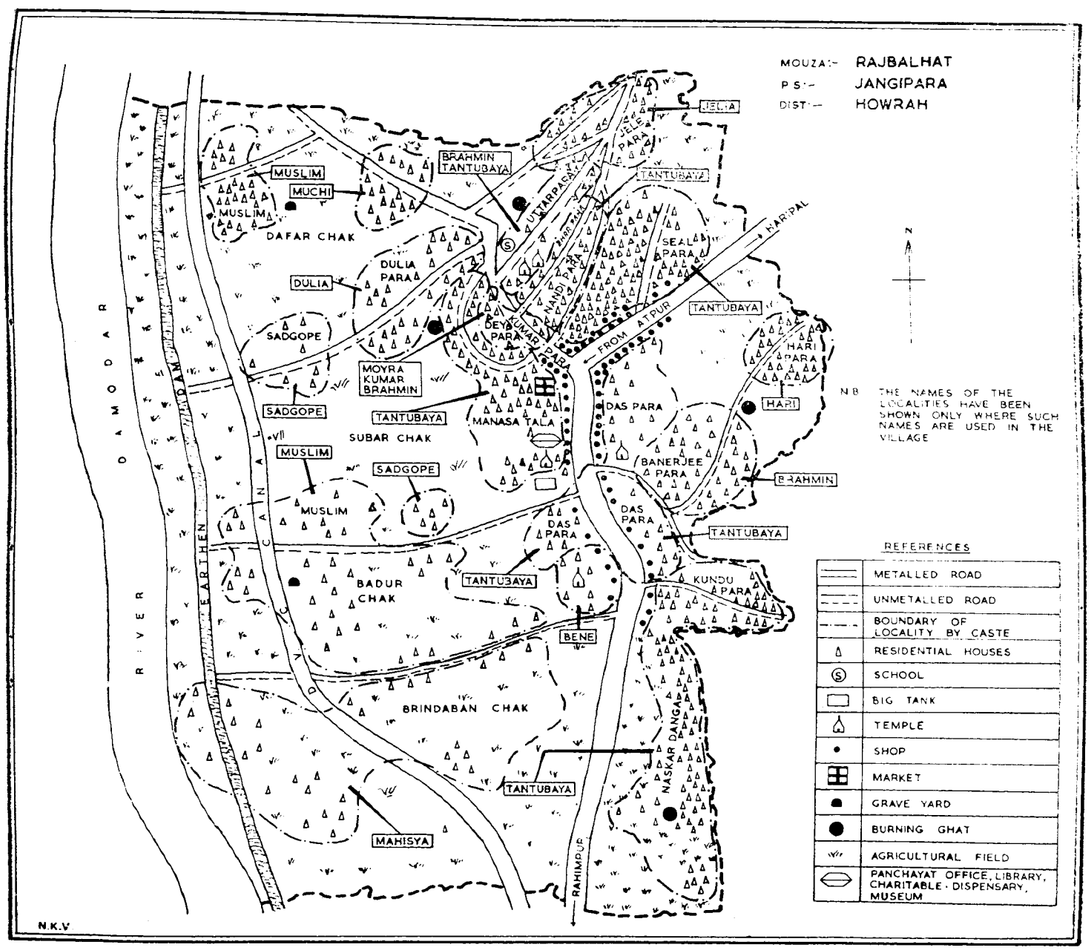
Residence of local Rajbanshis with banana cultivation in kitchen garden

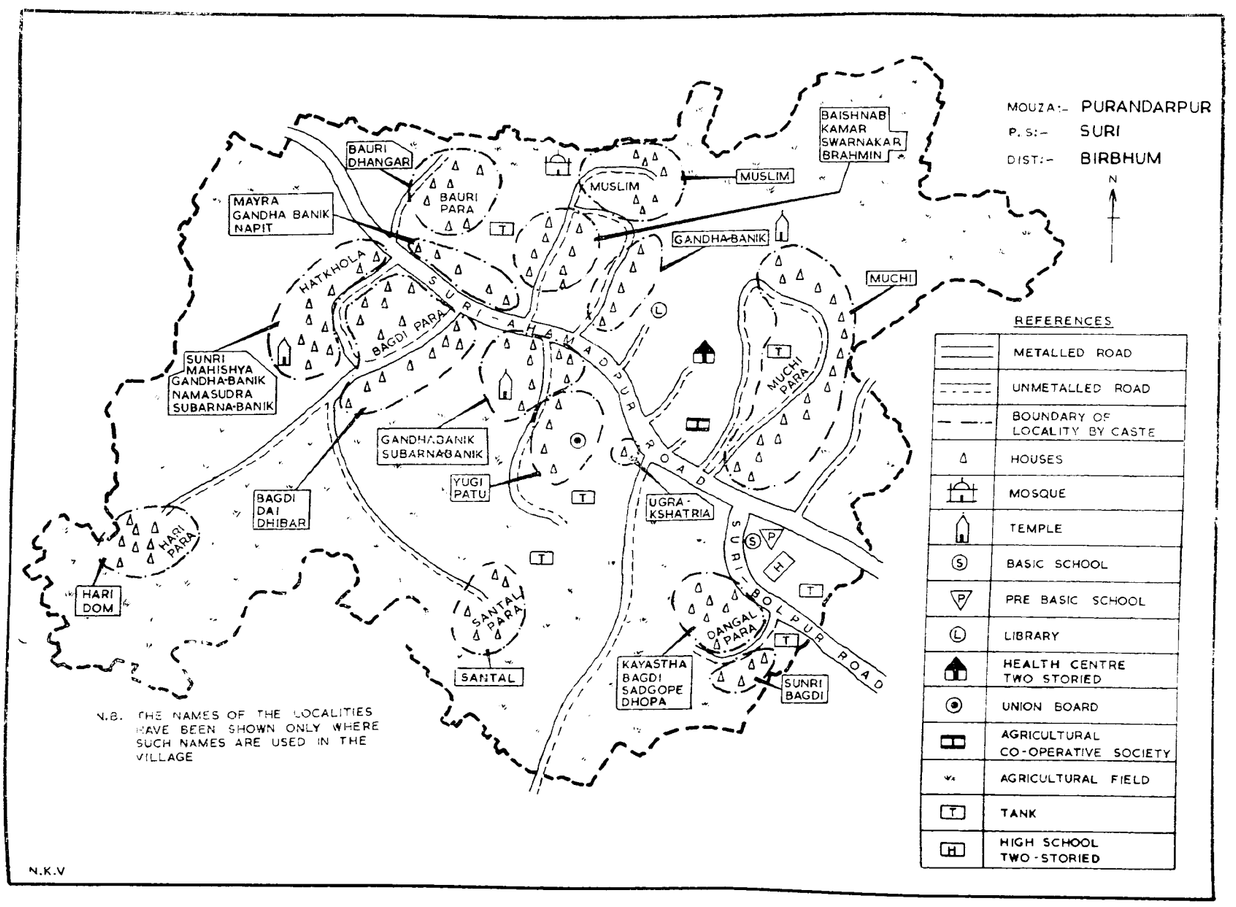


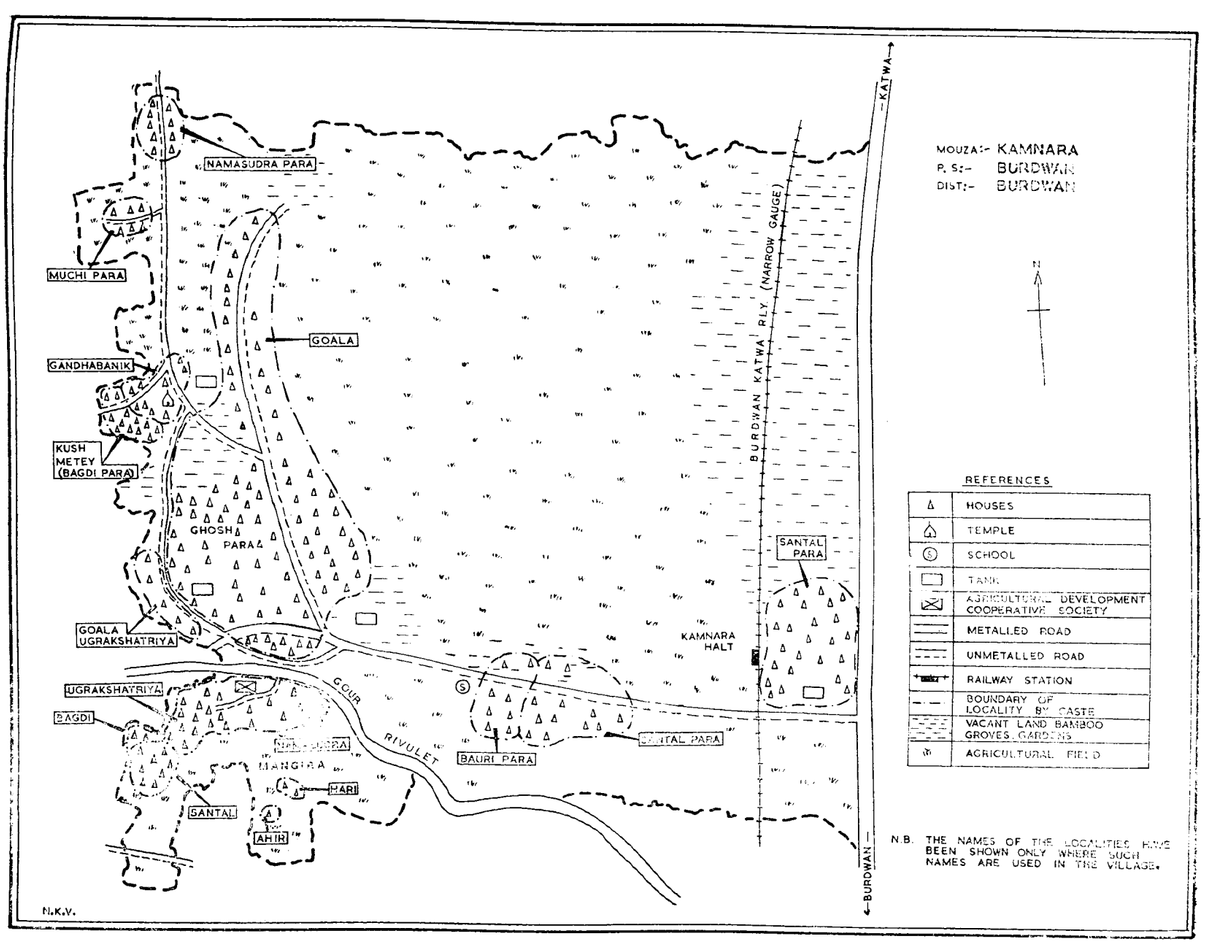
A village well at Madia in District : Malda.

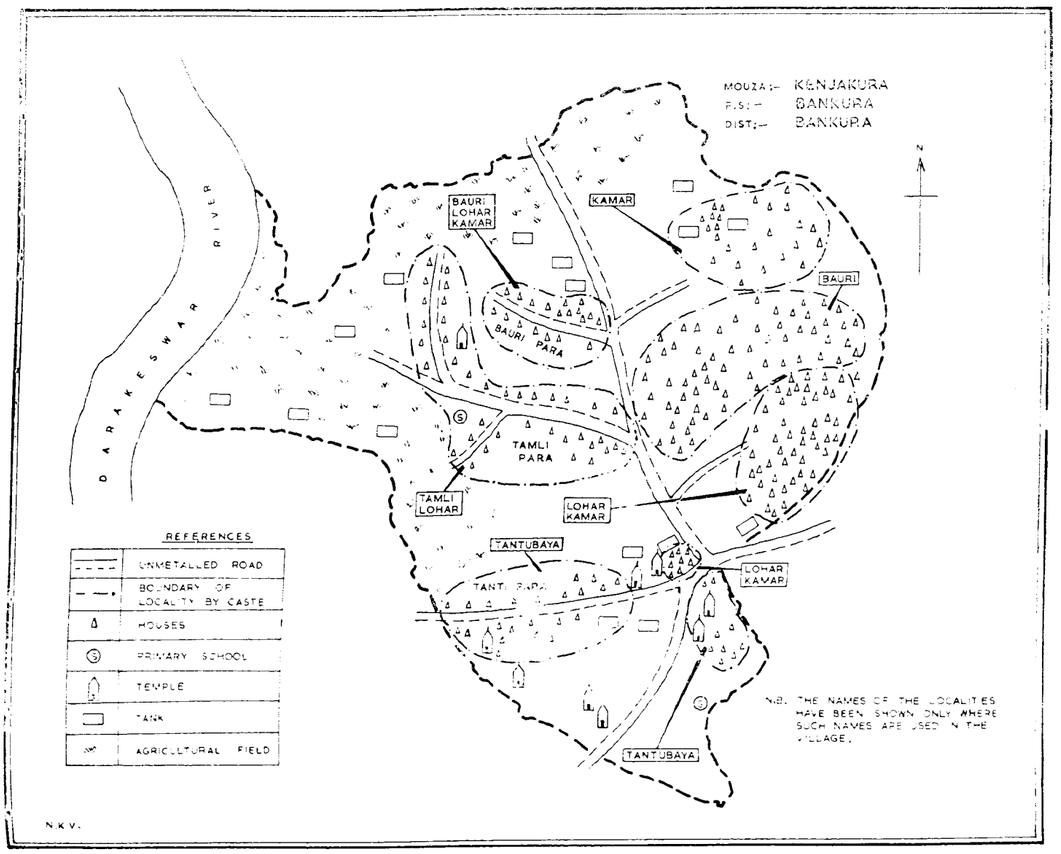


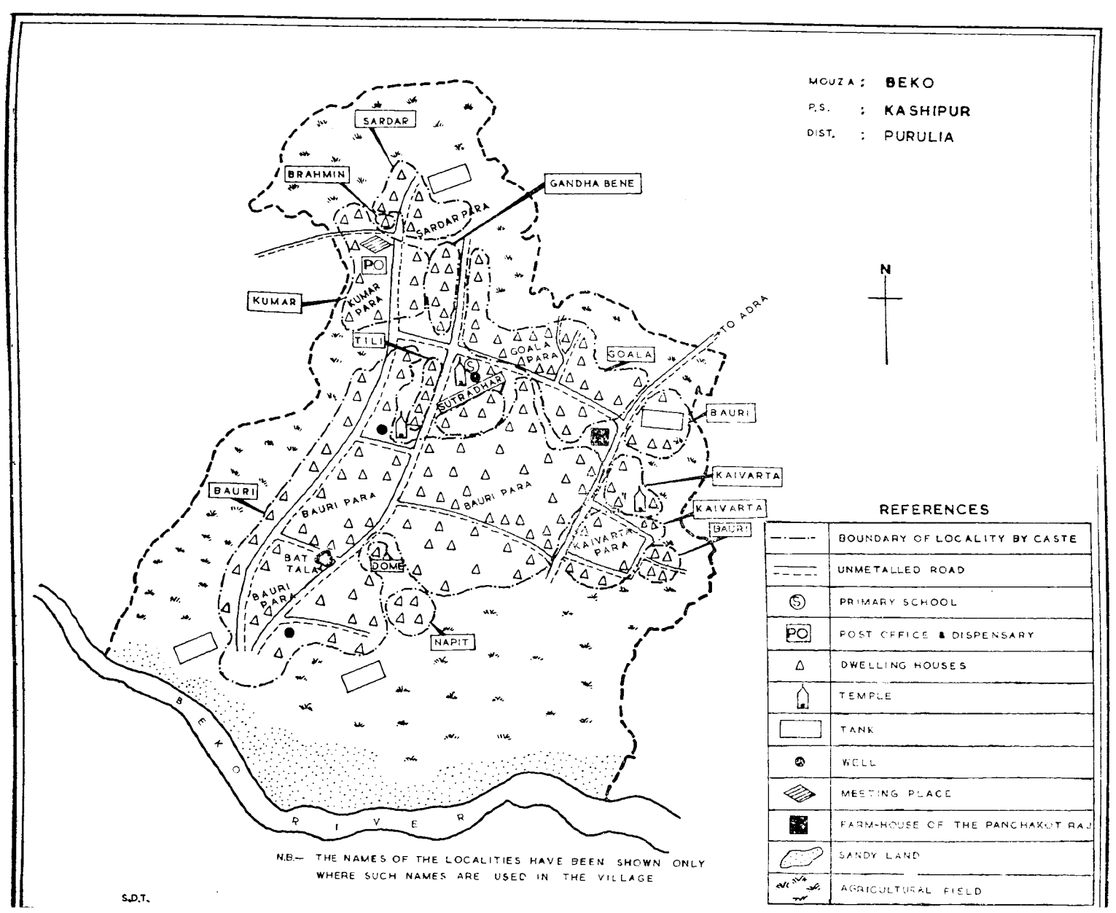
A village corner Madia in District : Malda.

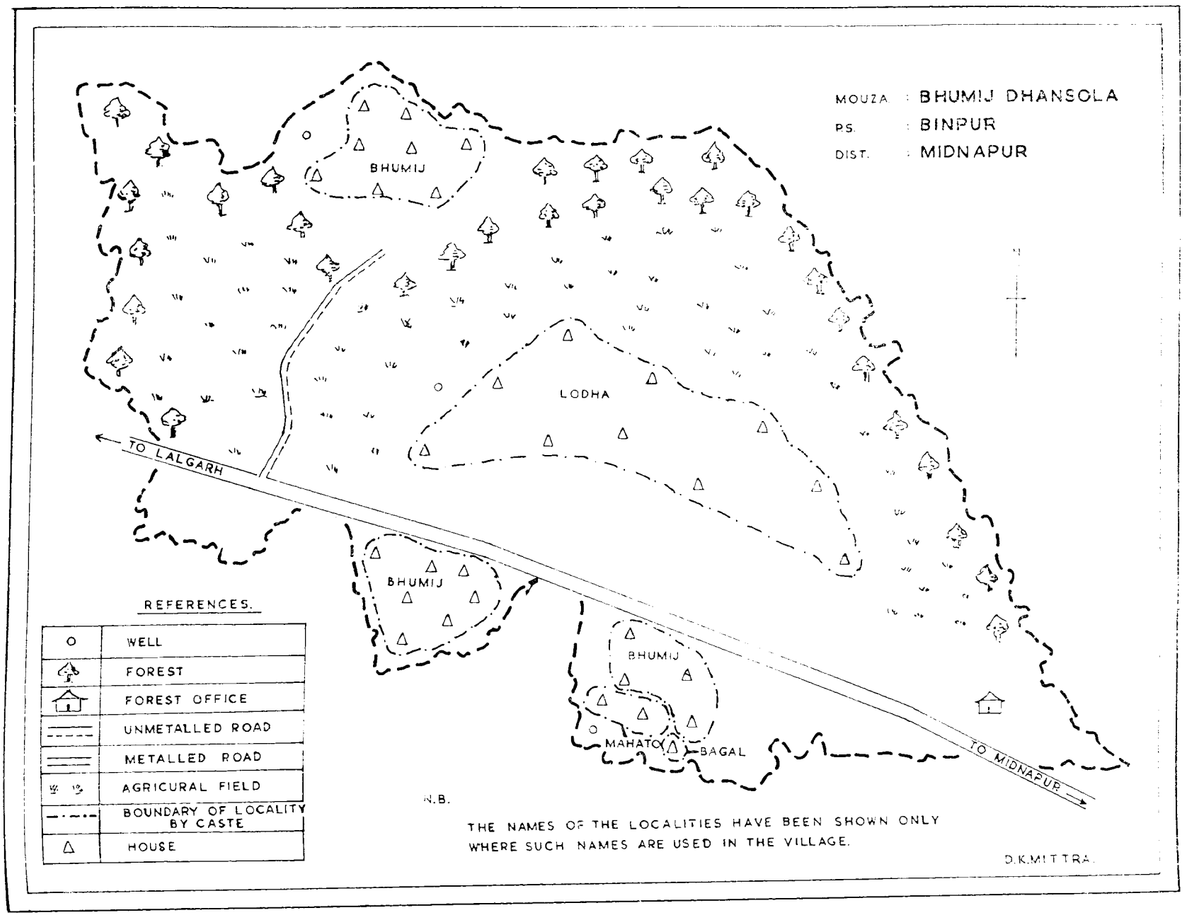

MOUZA:- RAJBALHAT
P.S:- JANGIPARA
DIST:- HOWRAH
N.B. THE NAMES OF THE LOCALITIES HAVE BEEN SHOWN ONLY WHERE SUCH NAMES ARE USED IN THE VILLAGE
REFERENCES
METALLED ROAD
UNMETALLED ROAD
BOUNDARY OF LOCALITY BY CASTE
RESIDENTIAL HOUSES
SCHOOL
BIG TANK
TEMPLE
SHOP
MARKET
GRAVE YARD
BURNING GHAT
AGRICULTURAL FIELD
PANCHAYAT OFFICE, LIBRARY, CHARITABLE DISPENSARY, MUSEUM
DAMODAR
RIVER
EARTHEN DAM
JANGIPARA
BRAHMIN TANTUBAYA
MUSLIM
MUCHI
MUSLIM
DAFAR CHAK
DULIA PARA
DULIA
SADGOPE
MOYRA KUMAR BRAHMIN
SADGOPE
TANTUBAYA
SUBAR CHAK
MUSLIM
SADGOPE
MUSLIM
BADUR CHAK
TANTUBAYA
BRINDABAN CHAK
MAHISYA
TANTUBAYA
DEYA PARA
MANASA TALA
DAS PARA
BANERJEE PARA
DAS PARA
TANTUBAYA
BENE
KUNDU PARA
NASKAR DANGA
RAHIMPUR
FROM ATPUR
HARIPAL
SEAL PARA
TANTUBAYA
HARI PARA
HARI
BRAHMIN
TANTUBAYA
JELIA
TANTUBAYA
N.K.V

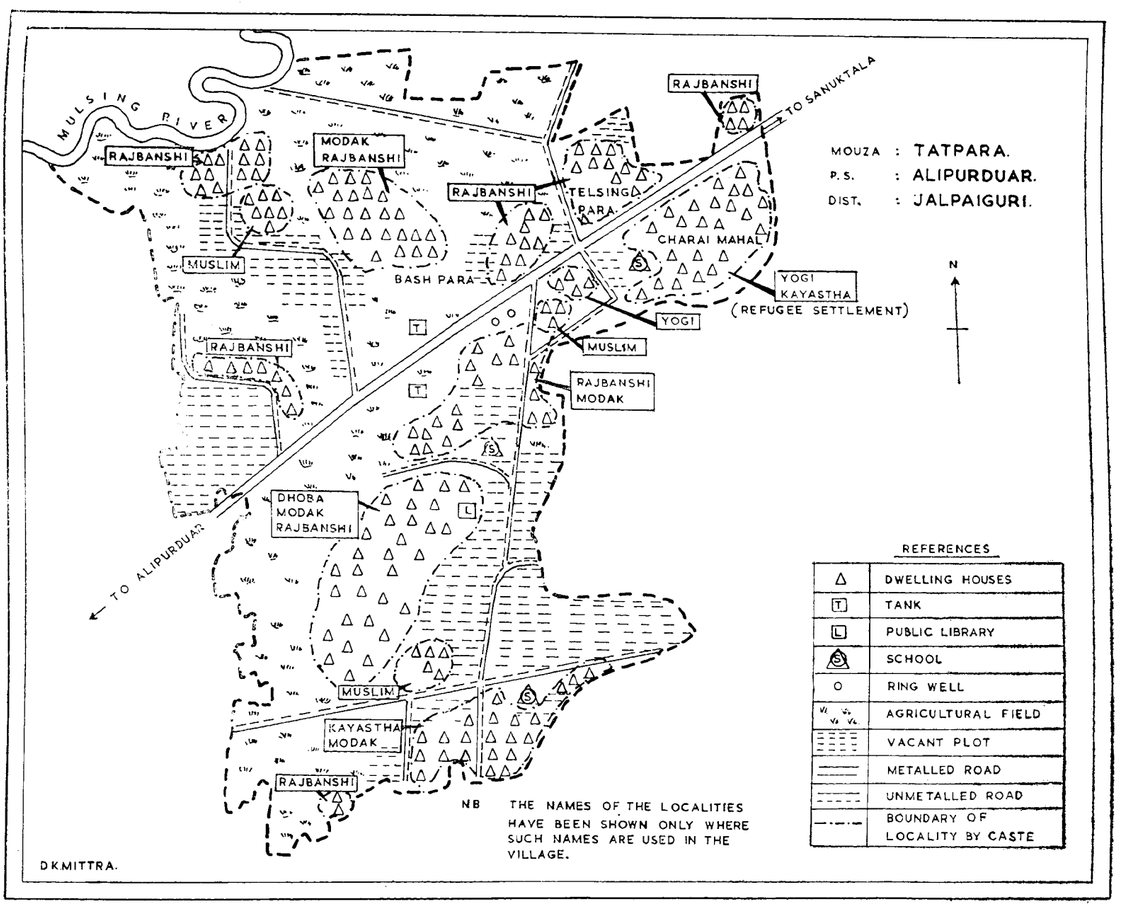

MOUZA:- PURANDARPUR
P. S:- SURI
DIST:- BIRBHUM
N
BAISHNAB KAMAR SWARNAKAR BRAHMIN
BAURI DHANGAR
BAURI PARA
MUSLIM
MUSLIM
MAYRA GANDHA BANIK NAPIT
GANDHA-BANIK
HATKHOLA
BAGDI PARA
MUCHI
MUCHI PARA
SUNRI NAHISHYA GANDHA-BANIK NAMASUDRA SUBARNA-BANIK
GANDHA-BANIK SUBARNA-BANIK
YUGI PATU
BAGDI DAI DHIBAR
UGRA-KSHATRIA
HARI PARA
HARI DOM
SANTAL PARA
SANTAL
KAYASTHA BAGDI SADGOPE DHOPA
DANGAL PARA
SUNRI BAGDI
SURI-BOLPUR ROAD
REFERENCES
METALLED ROAD
UNMETALLED ROAD
BOUNDARY OF LOCALITY BY CASTE
HOUSES
MOSQUE
TEMPLE
BASIC SCHOOL
PRE BASIC SCHOOL
LIBRARY
HEALTH CENTRE TWO STORIED
UNION BOARD
AGRICULTURAL CO-OPERATIVE SOCIETY
AGRICULTURAL FIELD
TANK
HIGH SCHOOL TWO-STORIED
N.B. THE NAMES OF THE LOCALITIES HAVE BEEN SHOWN ONLY WHERE SUCH NAMES ARE USED IN THE VILLAGE
N.K.V

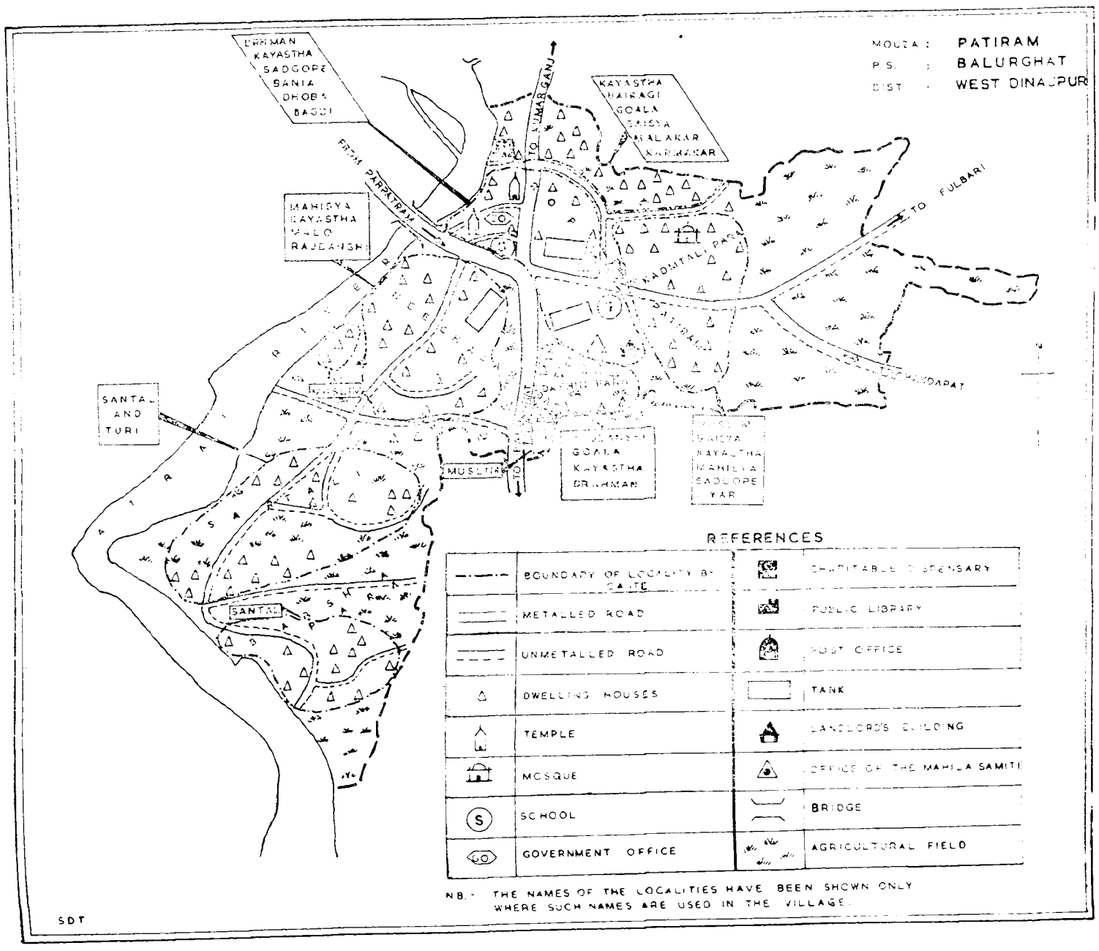

MOUZA:- KAMNARA
P. S:- BURDWAN
DIST:- BURDWAN
N
NAMASUDRA PARA
MUCHI PARA
GOALA
GANDHABANIK
KUSH METEY (BAGDI PARA)
GHOSH PARA
GOALA UGRAKSHATRIYA
UGRAKSHATRIYA
BAGDI
MANGRA
HARI
SANTAL
AHIR
COUR RIVULET
BAURI PARA
SANTAL PARA
KAMNARA HALT
SANTAL PARA
BURDWAN KATWA RLY (NARROW GAUGE)
KATWA
BURDWAN
REFERENCES
HOUSES
TEMPLE
SCHOOL
TANK
AGRICULTURAL DEVELOPMENT COOPERATIVE SOCIETY
METALLED ROAD
UNMETALLED ROAD
RAILWAY STATION
BOUNDARY OF LOCALITY BY CASTE
VACANT LAND BAMBOO GROVES, GARDENS
AGRICULTURAL FIELD
N.B. THE NAMES OF THE LOCALITIES HAVE BEEN SHOWN ONLY WHERE SUCH NAMES ARE USED IN THE VILLAGE.
N.K.V.

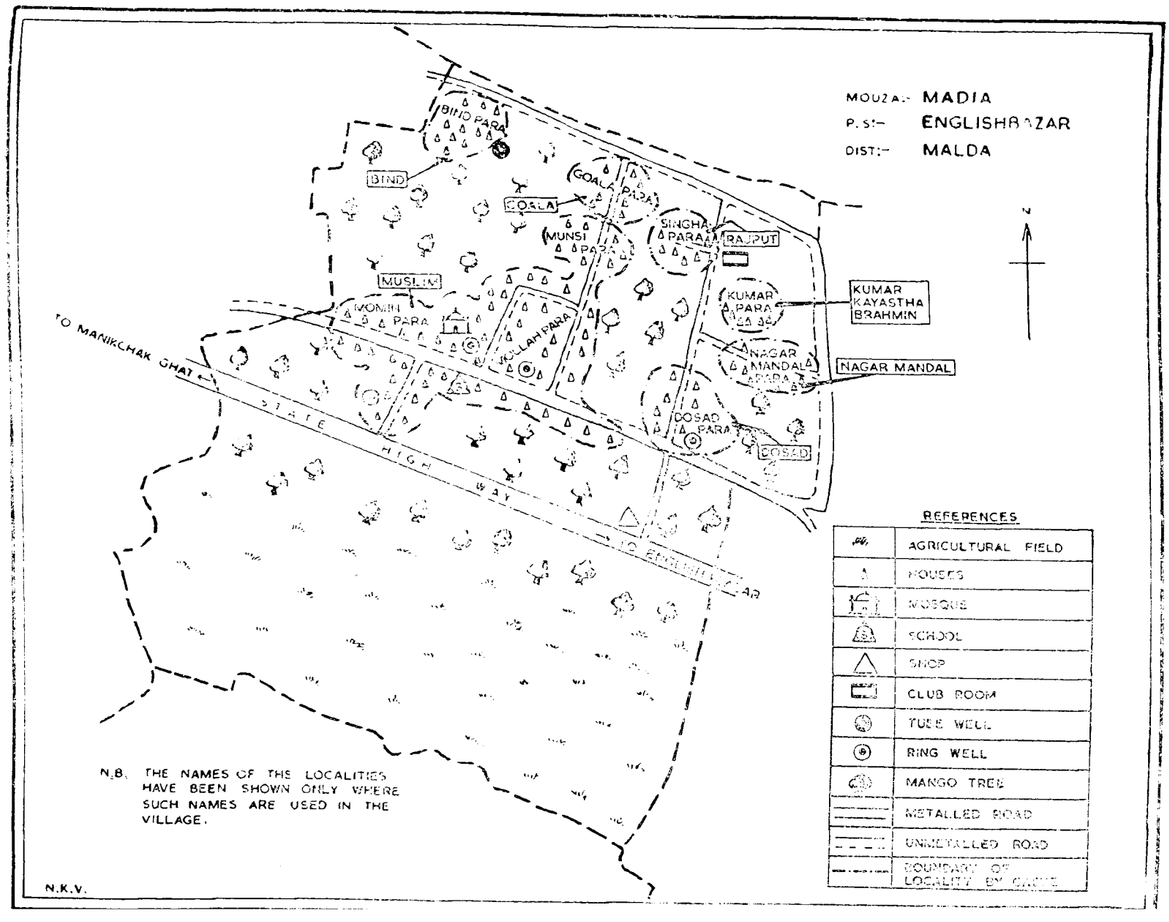

MOUZA :- KENJAKURA
P.S. :- BANKURA
DIST. :- BANKURA
N
DARAKESWAR RIVER
BAURI LOHAR KAMAR
KAMAR
BAURI
BAURI PARA
TAMLI PARA
TAMLI LOHAR
LOHAR KAMAR
TANTUBAYA
TANT PARA
LOHAR KAMAR
TANTUBAYA
REFERENCES
UNMETALLED ROAD
BOUNDARY OF LOCALITY BY CASTE
HOUSES
PRIMARY SCHOOL
TEMPLE
TANK
AGRICULTURAL FIELD
N.B. THE NAMES OF THE LOCALITIES HAVE BEEN SHOWN ONLY WHERE SUCH NAMES ARE USED IN THE VILLAGE.
N.K.V.

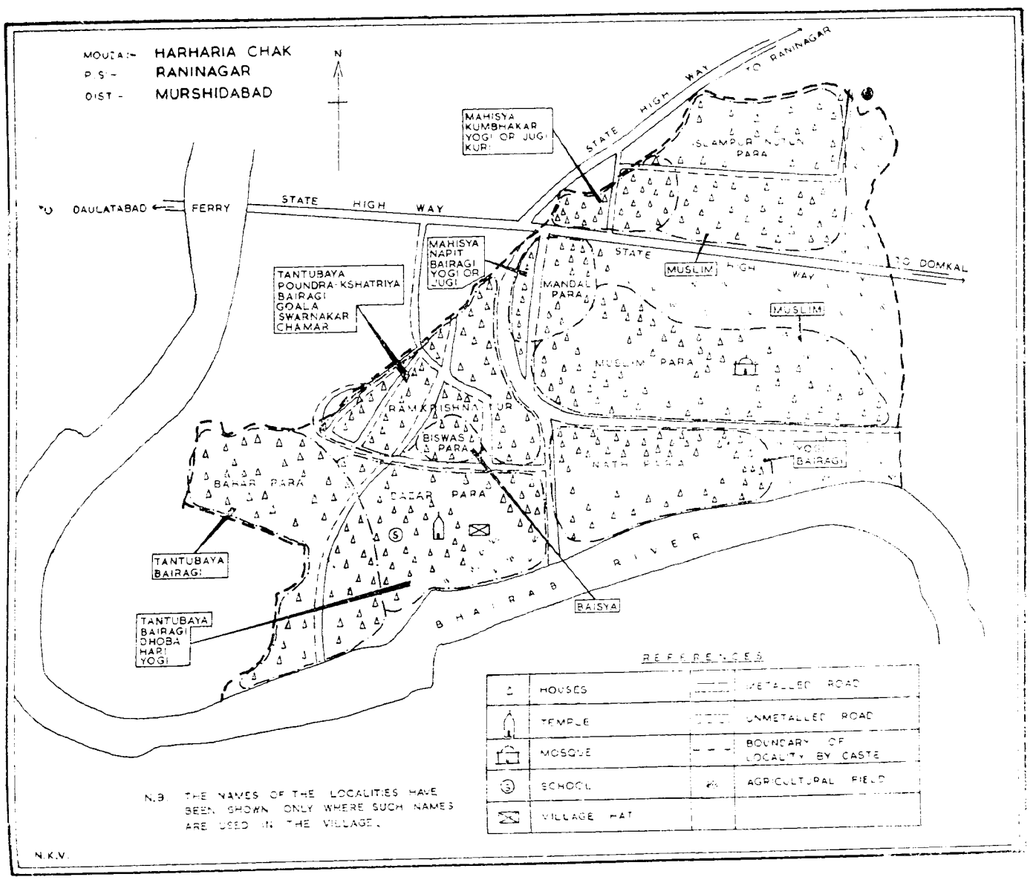

MOUZA : BEKO
P.S. : KASHIPUR
DIST. : PURULIA
N
SARDAR
BRAHMIN
GANDHA BENE
SARDAR PARA
PO
KUMAR
KUMAR PARA
TILI
GOALA PARA
GOALA
TO ADRA
SUTRADHAR
BAURI
KAIVARTA
KAIVARTA
BAURI
BAURI
BAURI PARA
BAURI PARA
BAT TALA
DOME
BAURI PARA
KAIVARTA PARA
NAPIT
BEKO RIVER
REFERENCES
BOUNDARY OF LOCALITY BY CASTE
UNMETALLED ROAD
PRIMARY SCHOOL
POST OFFICE & DISPENSARY
DWELLING HOUSES
TEMPLE
TANK
WELL
MEETING PLACE
FARM-HOUSE OF THE PANCHAKOT RAJ
SANDY LAND
AGRICULTURAL FIELD
N.B.- THE NAMES OF THE LOCALITIES HAVE BEEN SHOWN ONLY WHERE SUCH NAMES ARE USED IN THE VILLAGE
S.D.T.

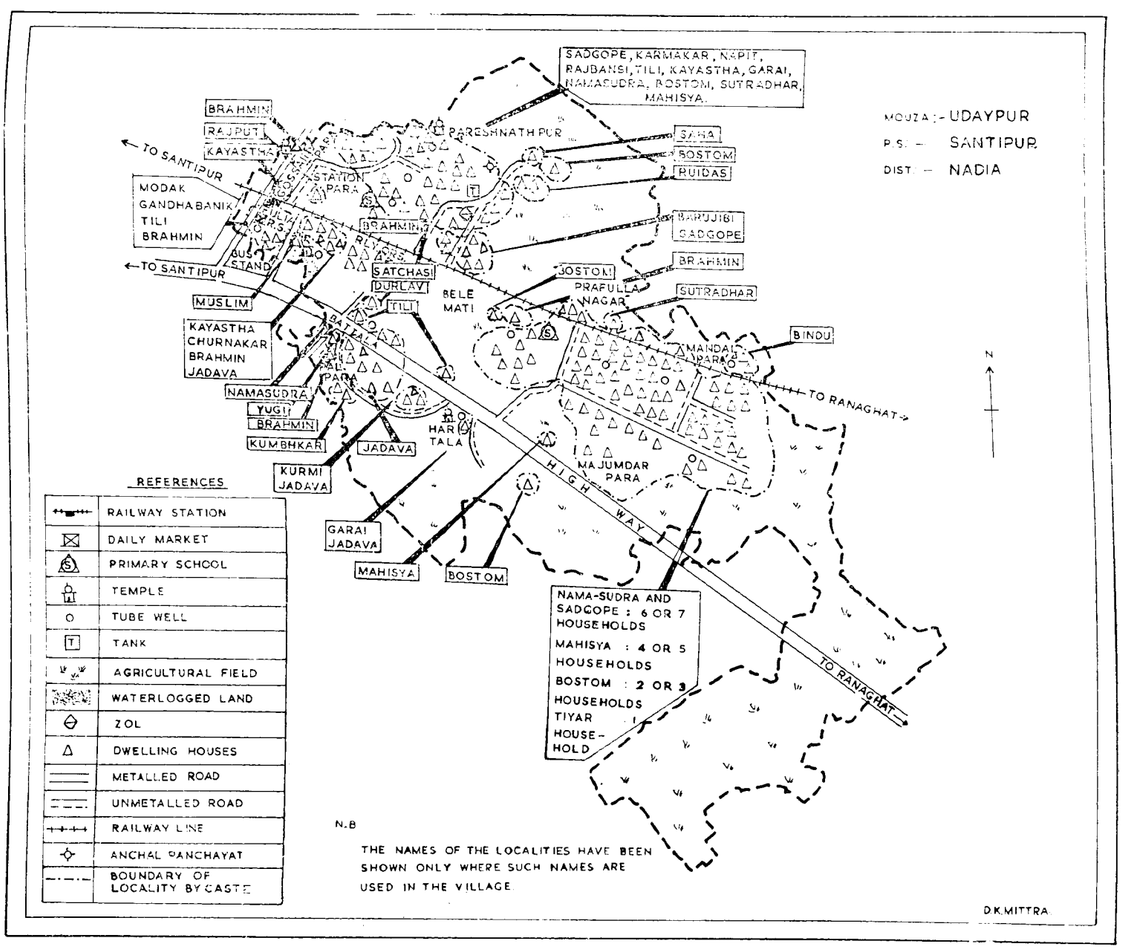

MOUZA : BHUMIJ DHANSOLA
P.S. : BINPUR
DIST. : MIDNAPUR
BHUMIJ
LODHA
BHUMIJ
BHUMIJ
MAHATO
BAGAL
TO LALGARH
TO MIDNAPUR
REFERENCES.
WELL
FOREST
FOREST OFFICE
UNMETALLED ROAD
METALLED ROAD
AGRICURAL FIELD
BOUNDARY OF LOCALITY BY CASTE
HOUSE
N.B.
THE NAMES OF THE LOCALITIES HAVE BEEN SHOWN ONLY WHERE SUCH NAMES ARE USED IN THE VILLAGE.
D.K.MITTRA.

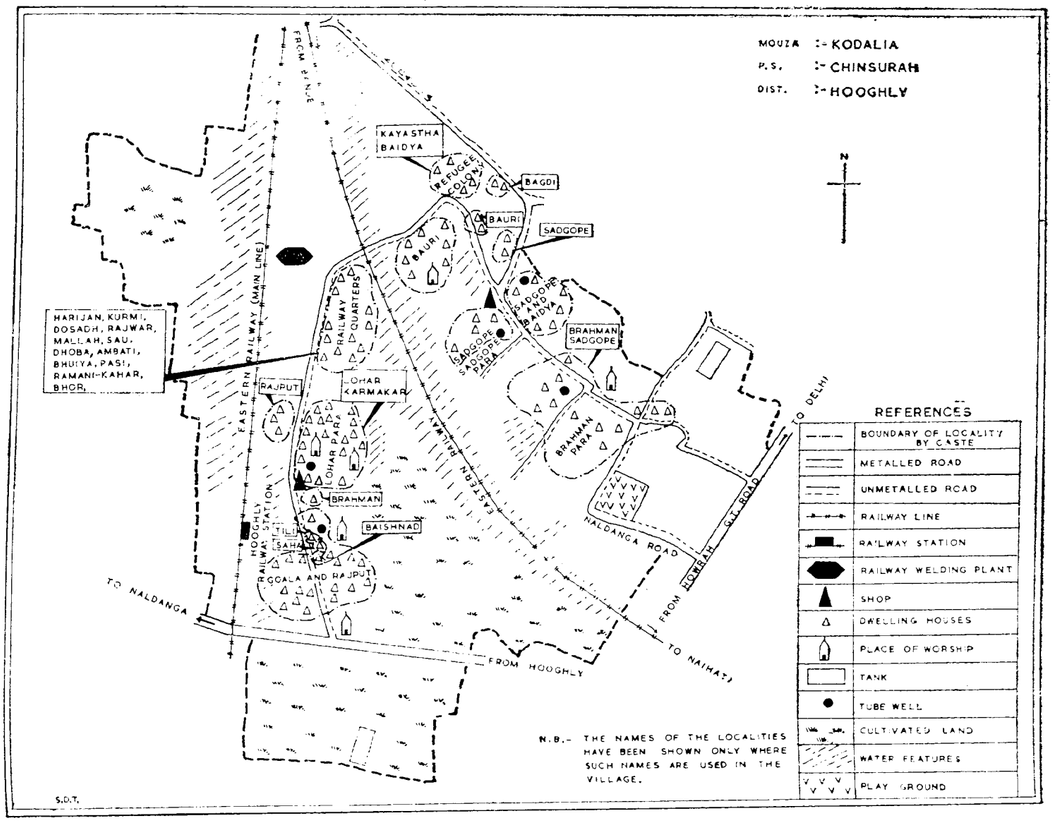

MULSING RIVER
RAJBANSHI
MODAK RAJBANSHI
RAJBANSHI
TELSING PARA
RAJBANSHI
TO SANUKTALA
MOUZA : TATPARA.
P.S. : ALIPURDUAR.
DIST. : JALPAIGURI.
CHARAI MAHAL
MUSLIM
BASH PARA
YOGI KAYASTHA
(REFUGEE SETTLEMENT)
YOGI
MUSLIM
RAJBANSHI
RAJBANSHI MODAK
DHOBA MODAK RAJBANSHI
TO ALIPURDUAR
MUSLIM
KAYASTHA MODAK
RAJBANSHI
N
REFERENCES
DWELLING HOUSES
TANK
PUBLIC LIBRARY
SCHOOL
RING WELL
AGRICULTURAL FIELD
VACANT PLOT
METALLED ROAD
UNMETALLED ROAD
BOUNDARY OF LOCALITY BY CASTE
NB THE NAMES OF THE LOCALITIES HAVE BEEN SHOWN ONLY WHERE SUCH NAMES ARE USED IN THE VILLAGE.
D.K.MITTRA.


MOUZA : PATIRAM
P.S. : BALURGHAT
DIST : WEST DINAJPUR
BRAHMAN KAYASTHA SADGOPE BANIA DHOBA BAGDI
KAYASTHA BAIRAGI GOALA SAISYA KALAKAR KARMAKAR
MAHISYA KAYASTHA MALO RAJBANSHI
FROM PARPATRAM
TO KUMARGANJ
TO FULBARI
KADMTALI PARA
SANTAL AND TURI
MUSLIM
GOALA KAYASTHA BRAHMAN
SANTAL
REFERENCES
BOUNDARY OF LOCALITY BY CASTE
METALLED ROAD
UNMETALLED ROAD
DWELLING HOUSES
TEMPLE
MOSQUE
SCHOOL
GOVERNMENT OFFICE
CHARITABLE DISPENSARY
PUBLIC LIBRARY
POST OFFICE
TANK
LANDLORDS BUILDING
OFFICE OF THE MAHILA SAMITI
BRIDGE
AGRICULTURAL FIELD
N.B.- THE NAMES OF THE LOCALITIES HAVE BEEN SHOWN ONLY WHERE SUCH NAMES ARE USED IN THE VILLAGE.
SDT


MOUZA:- MADIA
P.S:- ENGLISHBAZAR
DIST:- MALDA
BIND PARA
BIND
GOALA
GOALA PARA
MUNSI PARA
SINGHA PARA
RAJPUT
MUSLIM
MOMIN PARA
ALLAH PARA
KUMAR PARA
KUMAR KAYASTHA BRAHMIN
NAGAR MANDALA PARA
NAGAR MANDAL
DOSAD PARA
DOSAD
TO MANIKCHAK GHAT
STATE HIGH WAY
TO ENGLISHBAZAR
N
REFERENCES
AGRICULTURAL FIELD
HOUSES
MOSQUE
SCHOOL
SHOP
CLUB ROOM
TUBE WELL
RING WELL
MANGO TREE
METALLED ROAD
UNMETALLED ROAD
BOUNDARY OF LOCALITY BY CASTE
N.B. THE NAMES OF THE LOCALITIES HAVE BEEN SHOWN ONLY WHERE SUCH NAMES ARE USED IN THE VILLAGE.
N.K.V.

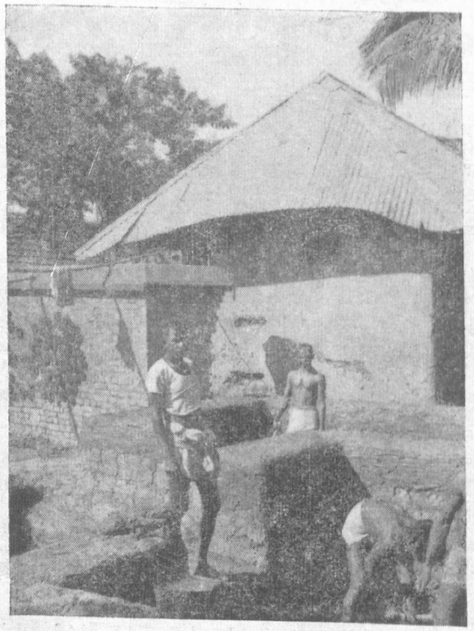

MOUZA :- HARHARIA CHAK
P.S. - RANINAGAR
DIST - MURSHIDABAD
N
TO RANINAGAR
STATE HIGH WAY
MAHISYA KUMBHAKAR YOGI OR JUGI KUR.
ISLAMPUR NUTUN PARA
TO DAULATABAD
FERRY
STATE HIGH WAY
MAHISYA NAPIT BAIRAGI YOGI OR JUGI
TANTUBAYA POUNDRA-KSHATRIYA BAIRAGI GOALA SWARNAKAR CHAMAR
MANDAL PARA
MUSLIM
TO DOMKAL
MUSLIM
MUSLIM PARA
RAMKRISHNA PUR
BISWAS PARA
BAIRAGI
BAHAR PARA
BAZAR PARA
TANTUBAYA BAIRAGI
TANTUBAYA BAIRAGI DHOBA HARI YOGI
BHAIRAB RIVER
BAISYA
REFERENCES
HOUSES
TEMPLE
MOSQUE
SCHOOL
VILLAGE HAT
METALLED ROAD
UNMETALLED ROAD
BOUNDARY OF LOCALITY BY CASTE
AGRICULTURAL FIELD
N.B. THE NAMES OF THE LOCALITIES HAVE BEEN SHOWN ONLY WHERE SUCH NAMES ARE USED IN THE VILLAGE.
N.K.V.


SADGOPE, KARMAKAR, NAPIT, RAJBANSI, TILI, KAYASTHA, GARAI, NAMASUDRA, BOSTOM, SUTRADHAR, MAHISYA.
MOUZA :- UDAYPUR
P.S. - SANTIPUR
DIST - NADIA
BRAHMIN
RAJPUT
KAYASTHA
TO SANTIPUR
PARESHNATHPUR
SAHA
BOSTOM
RUIDAS
MODAK GANDHABANIK TILI BRAHMIN
STATION PARA
BRAHMIN
BAPUJIBI SADGOPE
BRAHMIN
TO SANTIPUR
SATCHASI
DURLAV
TILI
BELE MATI
BOSTOM
PRAFULLA NAGAR
SUTRADHAR
MUSLIM
KAYASTHA CHURNAKAR BRAHMIN JADAVA
BINDU
MANDAL PARA
TO RANAGHAT
NAMASUDRA
YUGI
BRAHMIN
KUMBHKAR
JADAVA
HARI TALA
KURMI JADAVA
MAJUMDAR PARA
HIGH WAY
GARAI JADAVA
MAHISYA
BOSTOM
NAMA-SUDRA AND SADGOPE : 6 OR 7 HOUSEHOLDS
MAHISYA : 4 OR 5 HOUSEHOLDS
BOSTOM : 2 OR 3 HOUSEHOLDS
TIYAR HOUSE-HOLD
TO RANAGHAT
REFERENCES
RAILWAY STATION
DAILY MARKET
PRIMARY SCHOOL
TEMPLE
TUBE WELL
TANK
AGRICULTURAL FIELD
WATERLOGGED LAND
ZOL
DWELLING HOUSES
METALLED ROAD
UNMETALLED ROAD
RAILWAY LINE
ANCHAL PANCHAYAT
BOUNDARY OF LOCALITY BY CASTE
N.B
THE NAMES OF THE LOCALITIES HAVE BEEN SHOWN ONLY WHERE SUCH NAMES ARE USED IN THE VILLAGE.
D.K.MITTRA

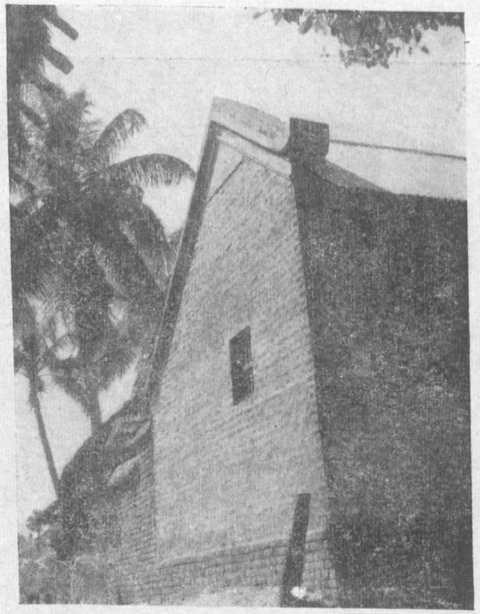

MOUZA :- KODALIA
P.S. :- CHINSURAH
DIST. :- HOOGHLY
N
KAYASTHA BAIDYA
BAGDI
BAURI
SADGOPE
BRAHMAN SADGOPE
MARIJAN, KURMI, DOSADH, RAJWAR, MALLAH, SAU, DHOBA, AMBATI, BHUIYA, PASI, RAMANI-KAHAR, BHOR.
RAJPUT
LOHAR KARMAKAR
BRAHMAN
BAISHNAB
GOALA AND RAJPUT
BRAHMAN PARA
EASTERN RAILWAY (MAIN LINE)
RAILWAY QUARTERS
HOOGHLY RAILWAY STATION
NALDANGA ROAD
GT. ROAD
TO DELHI
TO NALDANGA
FROM HOOGHLY
TO NAIHATI
REFERENCES
BOUNDARY OF LOCALITY BY CASTE
METALLED ROAD
UNMETALLED ROAD
RAILWAY LINE
RAILWAY STATION
RAILWAY WELDING PLANT
SHOP
DWELLING HOUSES
PLACE OF WORSHIP
TANK
TUBE WELL
CULTIVATED LAND
WATER FEATURES
PLAY GROUND
N.B.- THE NAMES OF THE LOCALITIES HAVE BEEN SHOWN ONLY WHERE SUCH NAMES ARE USED IN THE VILLAGE.
S.D.T.

A Mud-walled House with roof of Flat Tiles

A Mud-walled Thatched roof House



A Mud-walled Structure with C. I. Sheet roof



A Brick-walled House with roof of C. I. Sheets

DELHI

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

The Union Territory of Delhi comprising of 573 square miles of area is by far the smallest among the States of India. Although there are not many physical variations in the Territory, yet by taking into account the various local physical variations, the whole of its area can be divided into five different types. They are :

1. Khandarat (ruins and boulders)—The
2 Kohi (hilly)
3 Khadar
4 Bangar and
5 Dabar

1. Khandaat (ruins and boulders)—The dominating physical feature of the Union Territory is the Ridge, the last spur thrown out by the Aravallis towards the rich and level plains of the country. The Ridge almost reaches the water's edge at Wazirabad village, then runs parallel to the Jamuna river encircling Shahjahanabad and extending to the western side of New Delhi, where on one of its spurs are situated the Central Secretariat and the Rashtrapati Bhavan. It then runs towards the Qutub and Mehrauli, where it throws out numerous branches, some of which extend into the Gurgaon District and others push eastward again towards Jamuna. The whole space between the river and the Ridge, a triangle with apex at Wazirabad and the base extending between Tughlakabad and Mehrauli, has been the site of the various cities and bears the name of Khandarat i.e. ruins and boulders.

As is obvious from the foregoing paragraph, most of the area under 'khandarat' is characterised by the Ridge. It includes 32 villages with a total acreage of 22,495. Some of these villages have now been urbanised.

2. Kohi (hilly)—Towards the south of the Union Territory are the hilly tracts (near Mehrauli and Tughlakabad) which are known as Kohi. This tract contains some 44 villages with a total area of 74,009 acres. The main physical characteristics of this area is its comparative inaccessibility as also the presence of gorges, ravines etc., in it.

3. Khadar—Khadar is low lying land around the river and its chief physical characteristic is that whenever the river is in spate, the whole of its area gets flooded and remains so until the water of the river recedes. In 1954, an earthen embankment was constructed on the eastern bank of the river in order to save the towns and villages on that side from the menace of recurring floods, with the result that several villages on that side are no longer affected by floods. But we have still included them in the category of Khadar for convenience. The area consists of 101 villages with a total acreage of 75,011 acres.

4. Bangar—Bangar is the level plain and is considered as the most fertile of all the lands available in the Union Territory. Being level land there are a number of canals (tributaries mainly of the western Jamuna canal) which irrigate a considerable proportion of the Bangar land of the Union Territory. It covers 54 villages with a total acreage of 102,340 acres.

5. Dabar—A substantial portion of the Union Territory is covered by a depression near the town of Najafgarh and has come to be known as Najafgarh Jheel (lake). Rain water from the western side of the Ridge and also from the nearby districts of the Punjab accumulates in this depression during rainy season and flows into what is known as the Najafgarh Jheel. This region has rather stiff soil. The primary difference between this and khadar is that whereas Khadar land is flooded only when the river is in spate, in Dabar the land being in depressions, gets flooded by somewhat stagnant water during rainy season.

The Dabar area of the Union Territory consists of 97 villages with a total acreage of 91,743.

The distribution of all the villages of the Union Territory according to their physical characteristics is provided in Annexure I of the note.

Locational pattern of villages

The major portion of the Union Territory is interpersed with a number of national and State highways. The more important amongst the highways connecting the Union Territory with other States in the

to the habitation site of the village or a little bit away from it, but for all practical purposes part and parcel of the village. Such cases are few and far between and are to be found mostly in the Dabar, Khadar and Bangar tracts of the Union Territory. The satellite habitations usually crop up when some nomadic people come and want to settle down in a village either for good or for a considerably long period. They are usually not allowed to settle down in the village habitation but are given a piece of land outside the habitation for purposes of constructing their huts. We came across four such instances. In the first case, the Saperas (snake charmers) have come to settle down at Mithepur, a village near Badar Pur. The villagers gave them a site a stone's throw from the habitation site and they have constructed their thatched huts or mud houses there. Similarly the Govars have come and settled down at Sultan Pur Mazra and they too have been allotted house sites near the village habitation site. The Badis have adopted Ghalib Pur as their permanent headquarters and they have also been given house sites near the village habitation. Such instances may also be found in some other villages, although it is not a very common feature.

Two villages where entirely different type of residential pattern was observed are Bihari Pur and Sher Pur, on the Khadar belt on the eastern side of the Jamuna. In fact these two villages until recently were located just near the Jamuna and with the coming up of the earthen embankment to their east, they had become all the more vulnerable to floods. In view of this, the Delhi Administration provided the inhabitants of these villages with alternative house sites on the western side of the embankment. Cash loans were also provided to them for the construction of their houses. Here the Administration has allotted house sites to people taking into consideration their caste, in rows, running parallel to each other. Thus the Gujars of Bihari Pur have two rows of houses, built entirely on similar pattern; others have one row each. These two villages are well planned and three more villages whose case is similar are expected to shift to the eastern side of the embankment in the near future.

House types

In the following paragraphs an attempt is made to study the house types available in the various physical tracts of the Union Territory.

A study of the house types can be made from various angles like the purpose for which a particular structure is being used, the manner in which it is being used, the type and kind of materials used in the construction of the same etc. It may be stated at the very outset that in case of the type and kind of material used in the construction of *kuccha, pucca* or mixed type of structures, there are several variations not only as between the various physical tracts of the Union Territory, but also in each of the physical tracts and even in the same village. As for the differences in the use of the type and kind of construction material between the various physical tracts, it is primarily due to the availability of the materials and also to a certain extent because of local physical characteristics. For example, the *pucca* houses in the hilly tracts of the Union Territory are mostly constructed with stone and mortar while in the other tracts burnt bricks with mud/sand and cement are commonly used for the purpose.

According to the purpose for which the various residential structures are used, it will be useful to divide them into two different categories viz. the *ghar* (residential structures) and *baithaks* (men's sitting room-*cum*-guest house). It may, however, be pointed out at the outset that a particular building may be, and generally is, used for more than one purpose. For example, a residential structure (ghar) may include a *baithak* (men's house) and cattle-shed; even a shop may also be housed in a residential structure and so on.

Ghar (Residential structure)

A *ghar* in a village is the place where all the members of a household live; food is cooked and served; and where all the household effects are kept. As the married females in villages generally observe *purdah*, no males except members of the household have free access into it. The male outsiders can, however, enter it either with the prior permission of the members of the household or when they are accompanied by one of them.

Again, an overwhelming proportion of *ghars* in the rural areas have one to three rooms, those having more being exceptions. It may also be added here that whether a *ghar* has one room or more rooms, it is seldom that rooms are used exclusively for

one purpose. For example, even where a *ghar* has say 4 rooms, there is no separate sleeping room, kitchen, store room or sometimes even for housing cattle etc. All the rooms may be used for any of these purposes. Of course, when a room is being used for storing chaff and/or foodgrains, it may not be used for other purposes. But even this is not always the case. For those households who have got *baithaks*, the ghar is by and large the domain of the females, for the male members of the household mostly sit, rest and sleep in the *baithak* only, visiting their *ghar* only to take their meals or to sleep at night.

Baithak (Men's Sitting Room-cum-Guest House)

A *baithak* is meant exclusively for the use of the male members of the household who generally spend their spare time sitting, gossipping and sleeping in the *baithak*. No females, even of the household, are expected to visit the *baithak* except on some purpose and are in no case expected to sit there.

All male visitors to the household (including the near relations) are always taken to the *baithak* and are housed there. Incoming marriage parties are also housed in the *baithaks*.

The *baithaks* besides being men's quarters also serve as guest houses. As such they are generally *pucca* and better constructed than the residential structures. Besides they are generally cleaner and better furnished than *ghars*.

As womenfolk observe *purdah* from all elderly males, people who wish to construct a *baithak* for their household usually select a site for it a bit away from their *ghars* or residential structures, for otherwise the women of the household will always have to face the inconvenience of coming before males sitting in the *baithak* and of covering their faces.

Cases where the households have no separate *baithak* are the general rule, for all the households cannot afford the luxury of separate *baithaks*. In such cases one of the outer rooms of the house is usually used as a *baithak* and the room/rooms at the back are utilised as *ghar*. In cases where the household does not even have this facility, it usually utilises the village *chaupal* for the purpose or with the consensus of the owner uses that person's *baithaks*.

The households owning cattle usually make some makeshift arrangement for housing them in the residential structure itself. Very few people have separate cattle sheds for the purpose. Those who have *baithaks* usually house their cattle in the enclosure of the *baithaks*. But generally the arrangement made for the cattle are far from satisfactory. The co-existence of men and cattle-heads in the same room is not very rare.

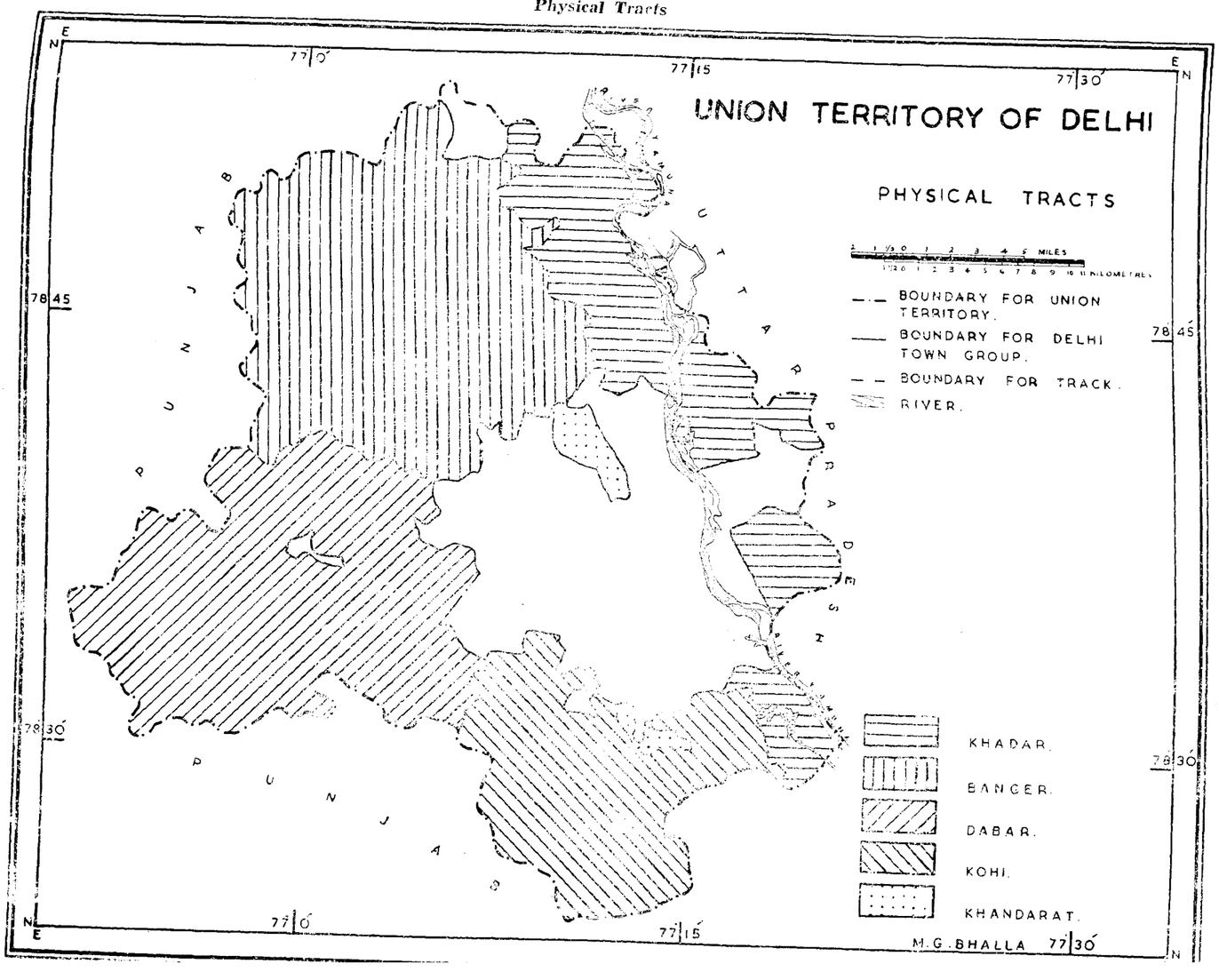
Although this is the general situation as obtaining in all the villages of the Union Territory, yet deviations from this rule are also to be found especially in the case of the well-to-do households who are constructing new structures for their use.

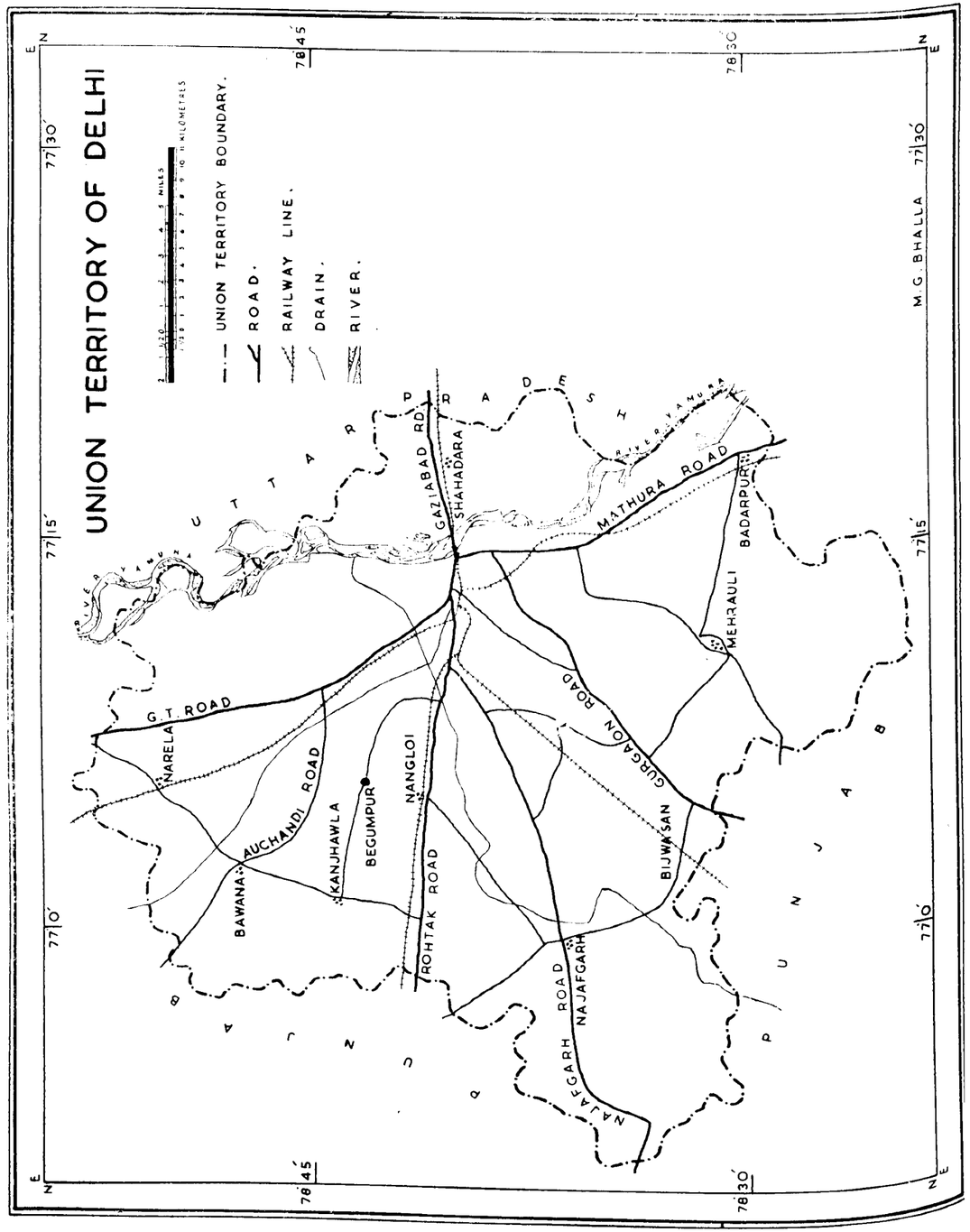
Whereas there has almost been no change so far as the *kaccha* huts or mixed type of houses are concerned, the *pucca* structures that are coming up now are in several ways an improvement over their earlier counterparts, especially in respect of amenities. For example, whereas the old ones are, with the exception of a few, ill-ventilated, dark and dingy, without any provision for further expansion of the structure or even in the matter of drainage etc., the new ones coming up are now being constructed after taking all these matters into consideration.

Until recently the houses were not constructed according to any specifications but were constructed keeping in view two things; first, the amount of money available and, secondly, the existing requirements. The rest was left to the ingenuity of the mason in charge of the construction. But at present the things are a bit different. The prospective houseowner first discusses all the details with the mason and then orders the construction to commence.

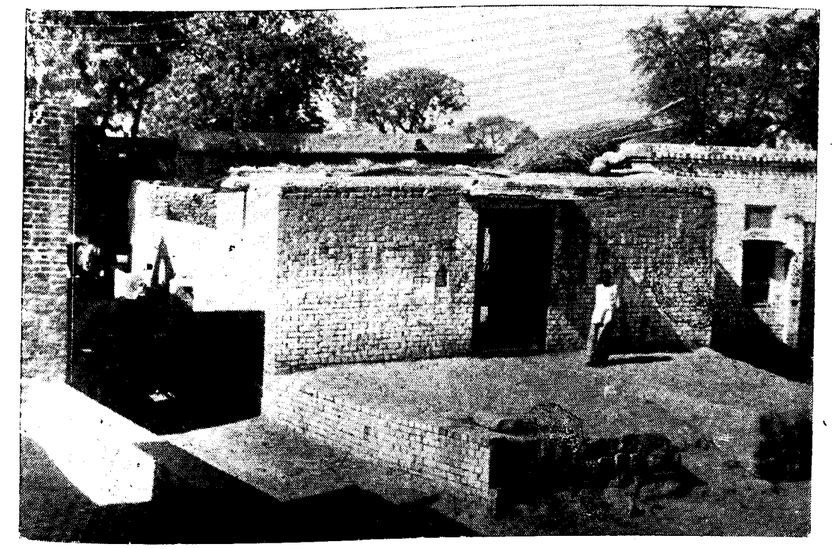
Some of the basic amenities are still conspicuous by their absence in the villages. They have no bathrooms or latrines. Leaving aside a few exceptions, none of the houses in rural areas has this facility. All menfolk as well as womenfolk defecate out in the fields. While menfolk usually take bath at the well or in the open, the womenfolk make do with some sort of improvised bathrooms or may even take bath in one of the living rooms of the house.

Union Territory of Delhi
Physical Tracts

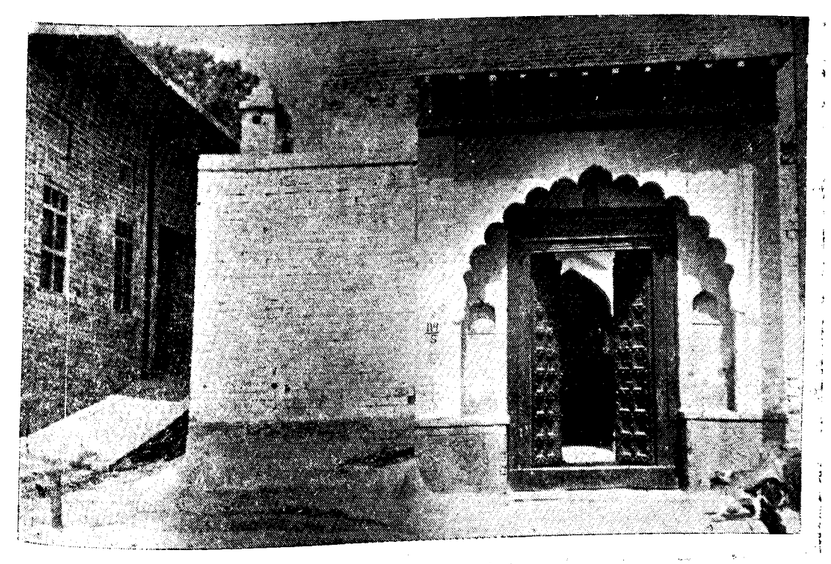




Bhalsua Jhangirpur village
DELHI

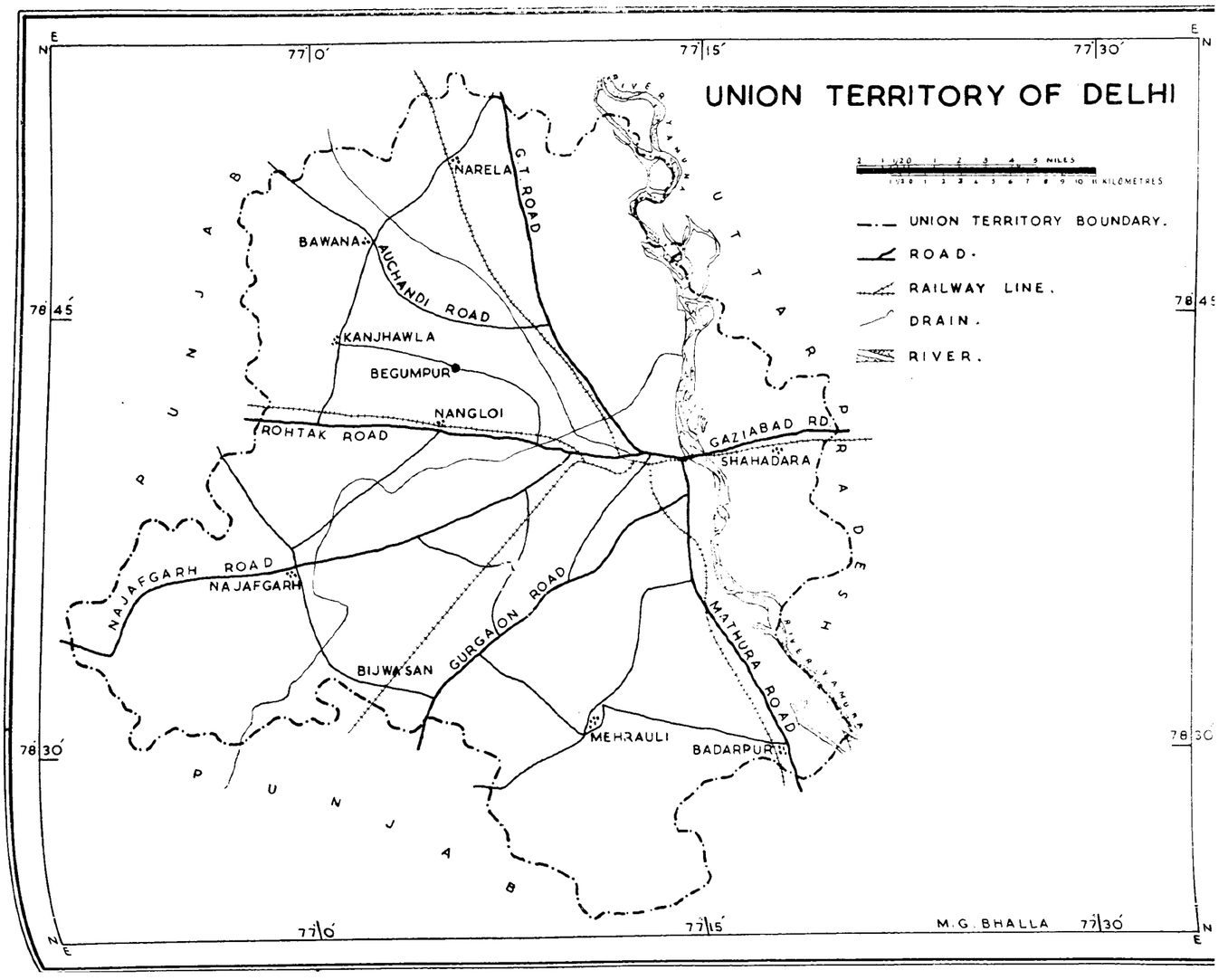


A kuccha-pucca (mixed) house.
The walls are made of burnt bricks while the roof is made of wooden planks and mud.

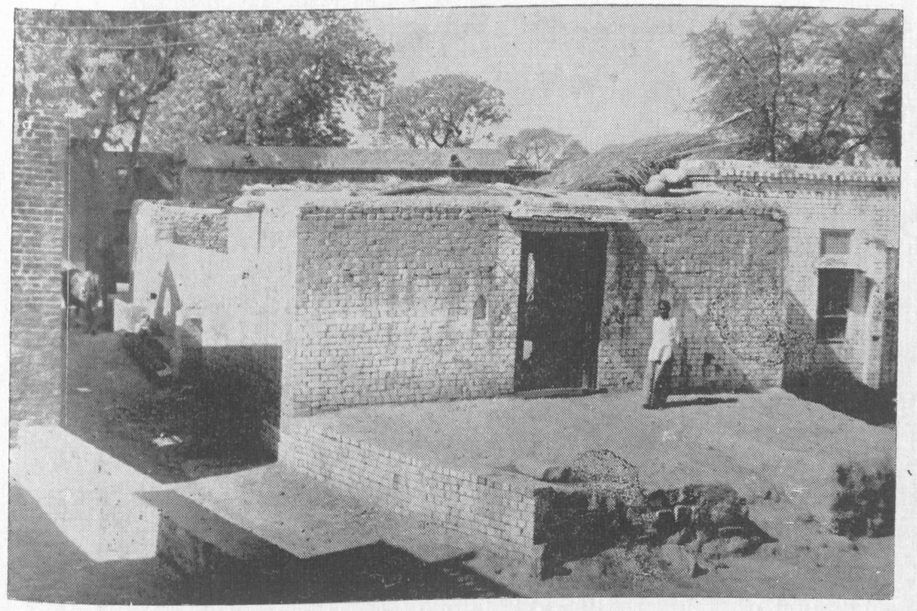


The old and the new.
The nature of construction of Pucca structures has considerably changed in recent years especially in respect of ventilation, drainage etc.

Union Territory of Delhi



Bhalsua Jhangirpur village
DELHI



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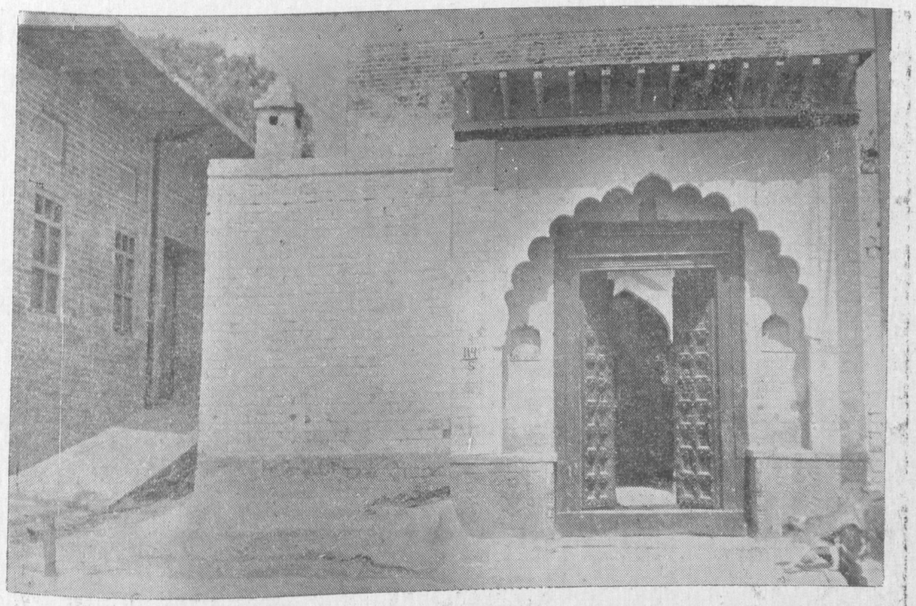


The old and the new.
The nature of construction of Pucca structures has considerably changed in recent years especially in respect of ventilation, drainage etc.

Bhalsua Jhangirpur village
DELHI

Near all household effects of a poor family.

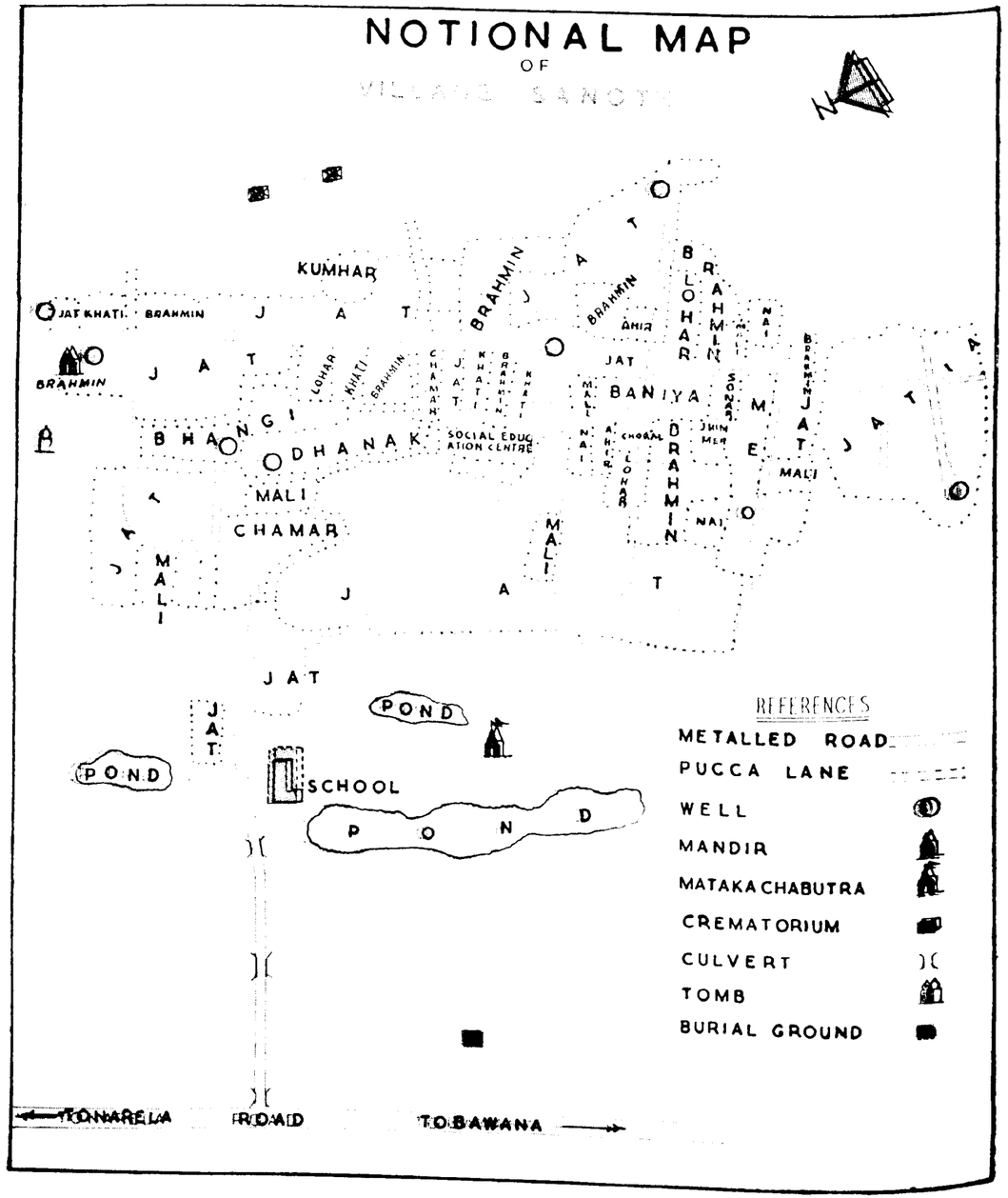
The household utensils of a middle class family.

Village Sanoth
DELHI

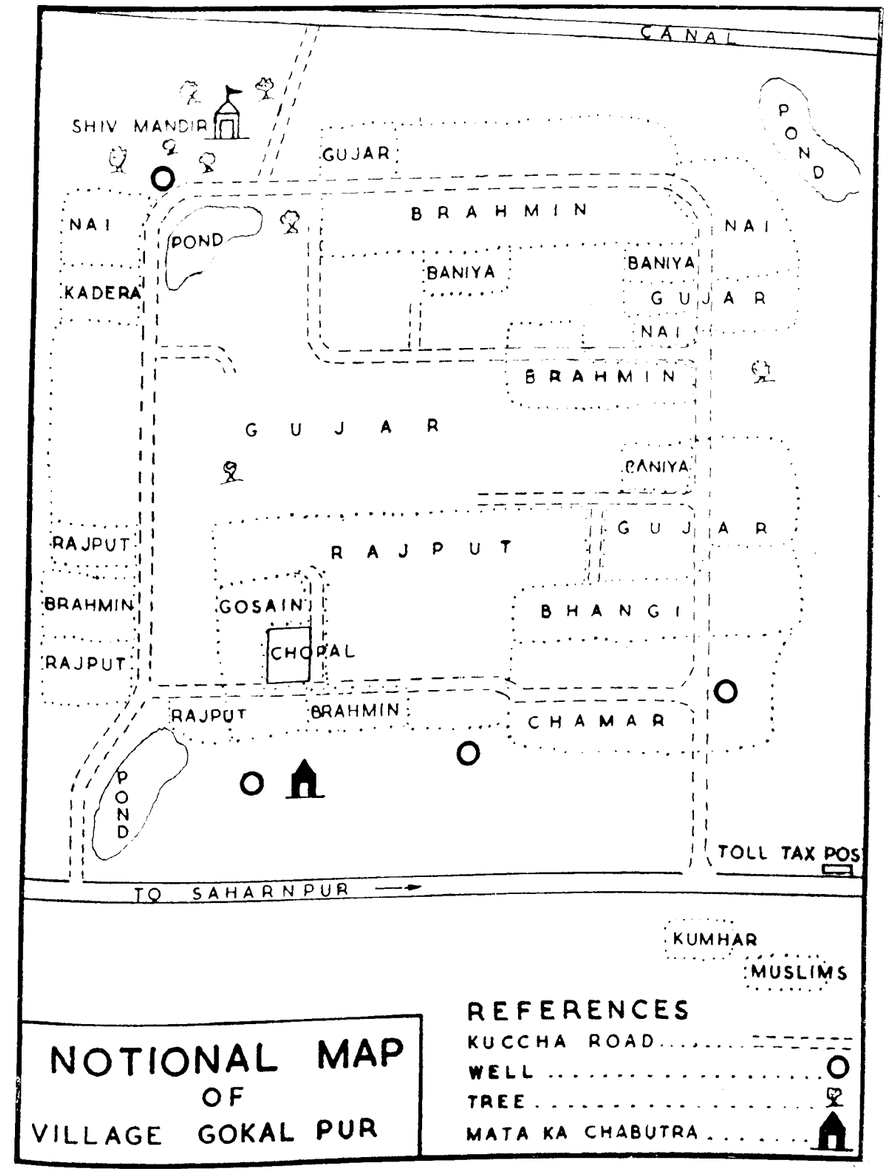
The village scene of Sanoth

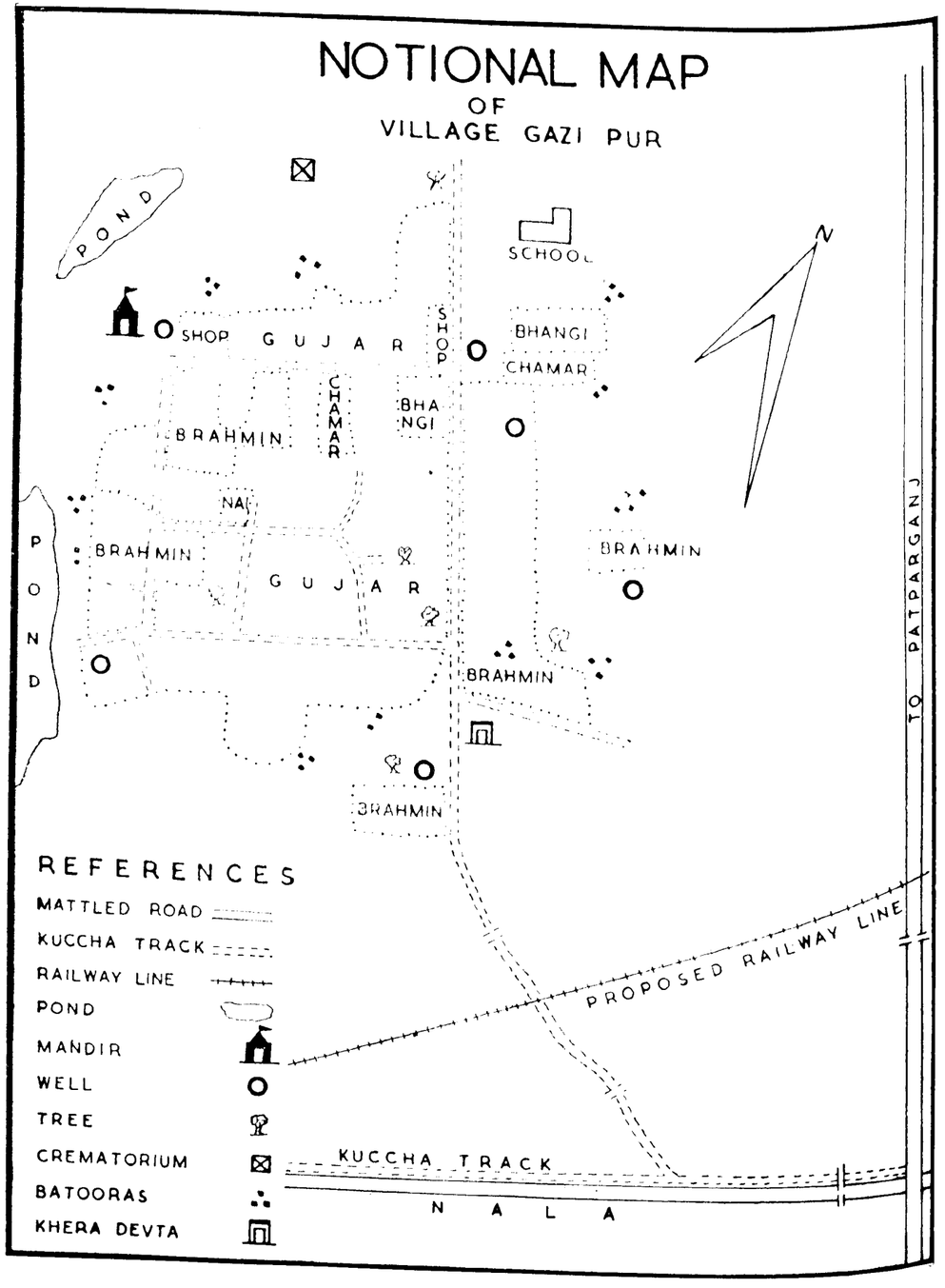
Residential structure of a Bhangi family

DELHI



Notional Map of Village Gokalpur
DELHI




NOTIONAL MAP
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KUCCHA TRACK
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POND
MANDIR
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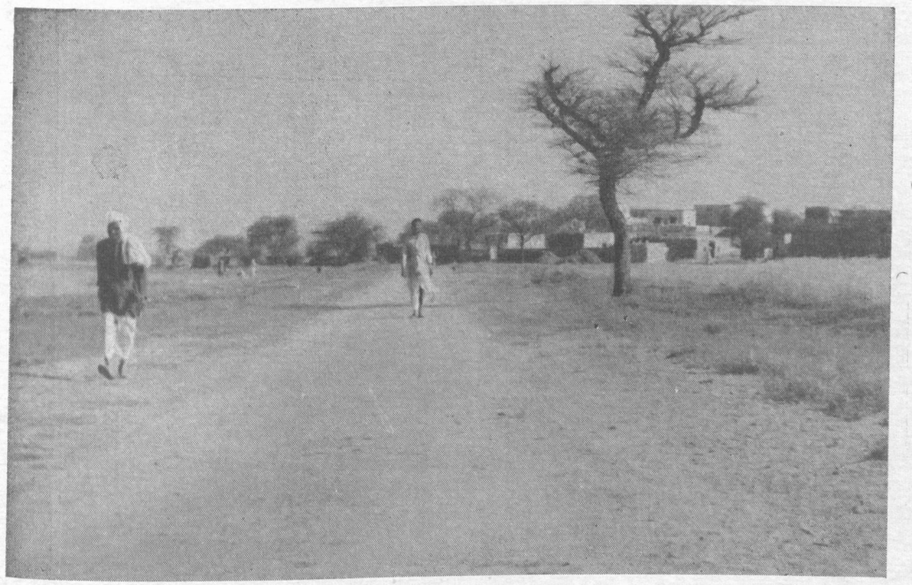
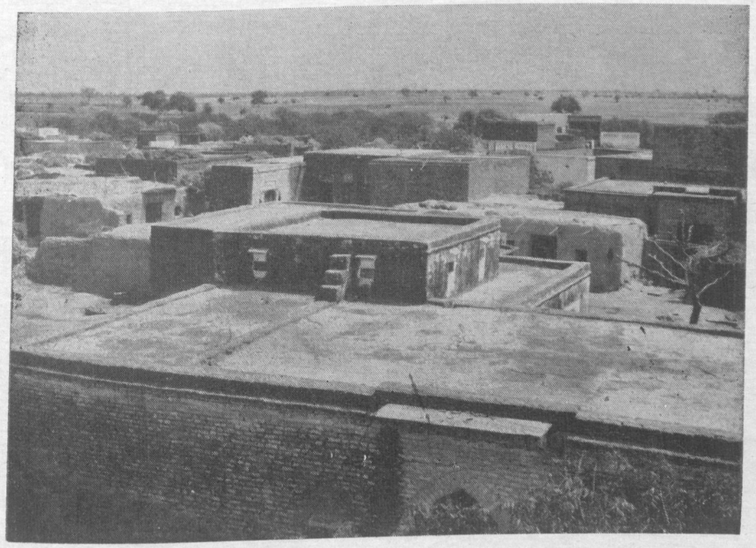
KHERA DEVTA
PROPOSED RAILWAY LINE
KUCCHA TRACK
NALA

Begumpur Village

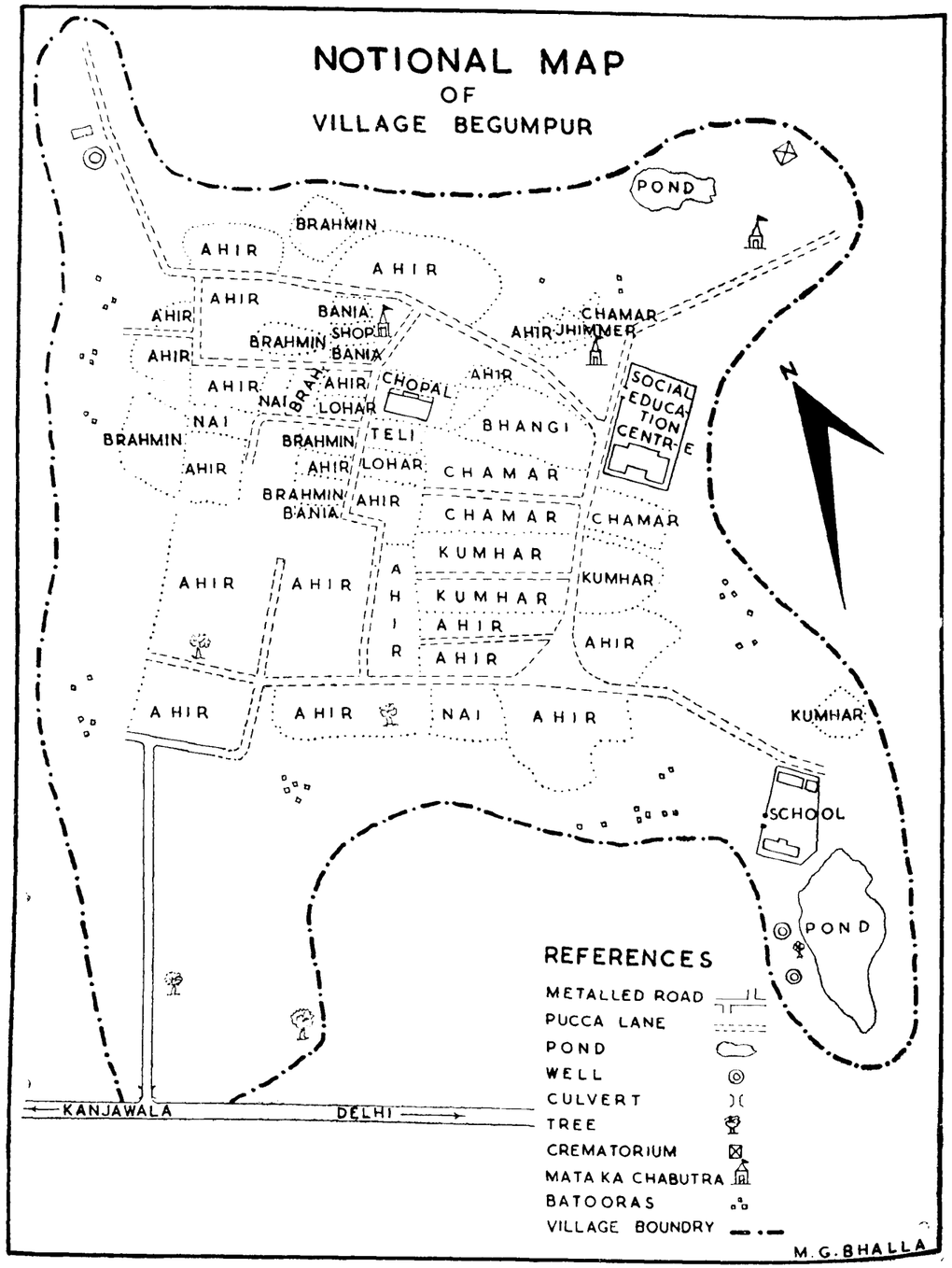
DELHI



Approach road to the village



A view of the village from a house top



HIMACHAL PRADESH

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Village : CHERGAON, *Tehsil* : ROHRU, *District* : MAHASU

Residential pattern

The houses are built haphazardly. As we approach the village, we see some white-washed houses on both sides of the road. In the main village, a number of closely built houses are there on the left. On the right, the houses are not so dense. In the upper part there are narrow streets which converge on the main path at different points. One can easily pass through these narrow alleys. There are no drains and water stagnates. Below the path the portion is a bit cleaner.

There is no distinction in the residential pattern of houses of *swarans*. The Scheduled Castes have separate settlements. They have built their houses in both portions of the main village. But three of them have built their houses adjacent to the houses of the *swarans*.

The houses are double-storeyed and more or less similar. The houses of *swarans* and *harijans* have differences in respect of size and the former are more commodious than the latter. The houses have slate roofing. One of the elders introduced his portion of Chergaon as the 'Lower Bazaar'.

House types

Houses are designed on the traditional pattern in Chauhara Valley. They have slate roof. The houses are double-storeyed some with small room(s) *pand* in between the two storeys. These exclude houses or buildings belonging to Government Institutions.

Construction.—Generally no plinths are built. The terrain is not flat. Walls are about 1½ feet wide made of stone and beams of wood. No mud mortar is used. When the door frames are fixed, *gur* is distributed among the labourers, near relatives and friends. The first storey is about 6′ or 7′ high. The stones used in the construction of the house are variety of shale. These are rectangular and uniform. Wood is used in the walls. Thick wooden beams are placed at short intervals in the walls after layer(s) of stones. This is to make the house durable and to keep it warm during winter. Dressed stones are used in both sides of the wall. In between the gaps, small uneven stones are filled.

Doors.—The doors made of *diar* wood are about 3½′ × 4½′ in dimension. The door shutter is thick. It is made of one piece of wood about 2″-3″ thick. The doors are quite low. These are provided with a latch opened from outside.

The door handle or locks are ornate. Many long curved keys are used. The main door of the house need not face in any particular direction. This depends on the house site. The door facing east is considered better.

Second Storey.—After the ground floor is completed, work starts on the second storey. The floor is made of *diar* planks.

The ground-floor and the second storey are called *goshal* and *bawad*. In *goshal* cattle are kept while *bawad* is a room used as a sleeping room, kitchen, store all into one.

Pand.—In some houses, a small space between the ground floor and second storey is provided. This is covered from all sides and is only about 4½′ high. Entrance to this room locally called *pand* is through a small trap door in the floor of the *bawad*. *Pand* is a closed, dark and dingy sort of room and has a small hole for light called mord. The family retires to it in winter months because of the cold weather.

Roof.—The gabled roof is laid over a structure of wooden beams. The covering material is slate. A new Government Primary School building has Corrugated Iron sheet roofing. One building of the Fisheries Department and one hut of the Forest Rest House have roofs of shingle. The Forest Rest House roof, is made partly of wooden planks and partly slates.

Tong.—A wooden verandah known as *tong* extends into three or four directions. In some Rajput and Thakur families *tong* is covered with carved planks. These have small windows.

Finishing Touch.—After construction work is completed, walls are plastered with mud from the inside. The outer walls are given a coat of *shukla mata* which is a form of white-washing.

Kothar.—Every house must have a store room called *kothar* or *kotha* in their own dialect. *Kothar* is constructed close to the house. In some cases it is constructed in the ground floor next to the *goshal*. In *kothar* there are four big compartments for storing grains. Other foodstuffs are stocked in small *kotheries* built in the kothar. The big compartment is 10′ to 15′ in depth and 2′ × 2′ in dimension. *Kothar* is kept locked and the key is with an elder of the family. A separate *kothar* is made to keep grain safe against outbreak of fire.

Kitchen.—Some have separate kitchens. In others food is cooked and served in a corner of the living room. The walls and the ceilings get sooty. These rooms have no windows but only small doors. The rooms are dark and inside is stuffy.

Bath.—There are few baths or latrines attached to houses. The shopkeepers or Government buildings have these facilities. The villagers bathe either in a verandah or in the open. In summer, women bathe under the trees by the flowing *kuhl*. They do not bathe too often in winter. Whenever they do, it is with warm water at night in the open.

Different parts of a house

Local name	English name
Bihad	Space between two rooms in upper storey
Bawad	Room in a upper storey
Brani	Wooden beam
Chand	Space between roof and ceiling
Chapper	Roof
Choti	Roof beams
Dar	Door
Darpaichi	Door frame
Dehad	Lower beam of door frame
Goshal	Cattleshed in lower storey
Handiyara	Nitches for utensils
Makoti	Bee-hive
Mord	A small hole or say Window in *pand*
Pand	A small room between *Bawad* and *Goshal*
Sangol	Staircase
Shangdi	Latch
Teeray	Nitches
Tiri	Window in room
Tong	Verandah
Wad	A closed *tong*

Village : RAJANA, *Tehsil* : RAMKA *District* : SIRMUR

Residential pattern

The houses in upper Rajana are closely built compared to lower Rajana where houses are built on a slope on both sides of the *kuhl* known as *banda*. In upper Rajana, the houses are so closely built that it becomes difficult for outsiders to find their way about at night. The houses in the village are approached through narrow and zig zag paths.

In upper Rajana the houses of Rajputs and Kolis are intermingled except those of Brahmins who have built their houses at a higher level. A majority of the Koli houses are found below *kuhl* in lower Rajana whereas Rajputs dominate in the remaining portion. No Brahmans live in lower Rajana. Badhis and Lohars own their houses in lower portion of the village. Chamars have separate residential houses from the main *abadi*.

House types

Houses are designed on the traditional pattern. One house is made of cement and concrete and is well ventilated. Others are made of stone, mud and timber. The houses

are identical in style but may be smaller or bigger. The gabled roofs are covered with slates and the doors are very small. In the three houses belonging to Rajputs, the doors are more than five feet. The house construction is mainly influenced by the climatic conditions and Rajana being cold, the houses have minimum ventilation and thick walls to keep rooms warm during winter.

Village : MAINGAL, *Tehsil* : CHAMBA, *District* : CHAMBA

Residential pattern

31 households are scattered all over the Mohal in 13 hamlets. Except Maingal hamlet which has 7 houses closely built, other hamlets have been named after one or two houses. Maingal hamlet inhabited by Brahmans is surrounded by gujjar hamlets on three sides. Bhalala lies hundred yards to the North, Thritha 50 yards to the south and Gandera and others 300 yards towards East.

The houses have been built up on the slopes without any planning. The narrow zig zag paths connect these hamlets. Before every house, a small courtyard has been planned, where grains are spread for drying. Cattle are tethered in the courtyard in fair weather. One or two trees of wild appricot or peach stand in the compound. This gives shade to the cattle.

House types

Houses are single storeyed. Alla Ditta has made the only new double-storeyed house recently with the grant given by the Social Welfare Department. The housing pattern of Muslim Gujjars and Brahman Gaddis have several minor differences. Gaddis have separate cowsheds, Gujjars tie their cattle under the same roof in another room. Gujjars do not have any windows, Gaddis do. The characteristic feature of the houses here is that they have only one entrance. This is because of the cold climate.

The dwelling of a Gujjar is known as *Kotha* rectangular in shape with mud roof. The tendency among Gujjars in this mohal is to live separately. The houses have been built adjacent to their fields. A *kotha* has two rooms with one entrance. In one room cattle are kept while the second room is a multi-purpose room. Kitchen is separated by a slightly raised platform and by a small *dhaffi* wall. No windows or ventilators are provided. The inside is stuffy and smoky due to constant fire. The stuffy atmosphere is due to the presence of numerous buffaloes in the adjoining room with no ventilation. Then there are mosquitoes and flies. We may call these dwellings unhygienic and filthy.

Houses of Gaddis in Maingal hamlet have been built one behind the other. Their houses have windows and are comparatively open and clean. They have separate cowsheds and kitchens. The roofs are made of stone and mud.

Material

For construction, timber is obtained from the forest department. The villagers are critical of the forest department officials in regard to grant of trees. The timber is procured at zamindari rates.

The villagers are not to worry about stones. Small rectangular stones are found nearby.

Labour

The material is collected through collective efforts known as *Saret*. For this, men of different communities join hands in collecting the material for a house. No wages are paid to working men in kind or cash. Due to their tight economy, people revealed that work like sawing of timber, digging foundations, construction of walls and laying of roof are carried out by the house owner with the help of relatives and neighbours. Even the door frames and wooden beams are chiselled by them. It is very rare that paid labour is engaged. Sharwan Gaddi is reported to have engaged labour from Kakala village 4 miles away. He paid Rs. 2 for a labourer and Rs. 5 for a carpenter or mason.

Doors are of thick wooden planks. Some of them have made carvings of flowers or animals. For windows, removable wooden planks are used as shutters to close or open them. Nails and bolts are bought from Chamba.

The dwellings here have no bathrooms or latrines. People go out. Hearths are made of clay in one partitioned room in a corner. They are plastered with liquid clay almost every day.

After constructing the walls and laying the roof, the last stage comes of plastering the house with mud. A thick plaster of brown mud known as *gunret* is applied. When this dries, a coat of white mud known as *makol* or *gunret* is given from inside and outside. Even doors and window planks are coated with *makol* or *gunret*. The floor inside the rooms is given a thick coat of mud. The coating of walls takes place once a year. In some houses, we have seen a few line drawings of a gun or a tree on the walls.

When the work finishes, extra material left out is dumped near the house.

The Different parts of a house in local terms are :—

Gujjar dialect	Gaddi dialect	English version
Bandi	*Gaini*	Cowshed
Booa	*Dawar*	Door
Chhat	*Chhat*	Roof
Choki	..	Place where namaz is held
Chhohla	*Chool*	Hearth
..	*Dehray*	Where families deities are kept
Ghanadi	*Ghanad*	Bee-hive shelf
Jagi	*Gadoji*	Place where water pitcher is kept
Kataila	*Kataila or Fatta*	Wooden seat
Killa	*Killa*	Wooden peg for tying cattle
Kand	*Kaand*	Wall
Khurli	*Khurdi*	Place before the cattle for grass
Kunada	*That*	Wooden vessel for giving water to cattle
Murgikhano	*Kukdobru*	Poultry pen
Neeh	*Necun*	Foundation
Oongan	*Ootolu*	Smoke outlet in kitchen
Podi	*Podi*	Stairs
Patda	*Falta*	Wooden seat
Passairi	*Gaihad*	Place under the extended roof
Pithi	*Ootolu*	Sky light
Rasolu	*Rasolu*	Kitchen
Seedh	*Manj*	Wooden stairs
Sheeri	*Nas*	Horizontal wooden beams supporting roof
Thamb	*Thamb*	Vertical wooden beam supporting roof

Village : DEVI KOTHI, *Tehsil* : CHAURAH, *District* : CHAMBA

Residential pattern

In mountainous region much of the land is unsuitable for cultivation. Large tracts are covered with dense forests while the slopes are often steep where cultivation becomes difficult. In many places the soil is too poor. The hamlets and villages are seen wherever there is a small piece of land sufficient to support a few families. Somewhere a lonely house may be standing on a slope with no space for more. They are larger at the bottom of the valleys than on the slopes where the soil is poor and less productive. In the higher mountains care ought to be exercised in selecting sites to avoid risks of falling rocks and avalanches. Though precautions are taken accidents occur. Land slides too constitute a danger which must be considered while selecting site for houses or village. A hundred years ago an entire village near Tisa was destroyed by a big land slide. After this lands were utilised by the State regime for growing forests near Bhanraroo. These jungles

show that there were once cultivated fields. Such land slides have to be crossed on the way to Devi Kothi.

Perhaps it was not considered advisable by villagers to house the whole population in one locality for fear of natural calamities. Three places were selected, Dhariala, Loharka and Devi Kothi. They all form one revenue estate.

House types

There is one specific pattern of houses. With the exception of a few, houses are, single storeyed. These are constructed in a terrace formation. Roof of one house below serves as a courtyard for the other above. Most houses are *kutcha* built.

Roofing and Sloping.—The roofs are flat except in four cases where they are gable ended and sloped. These four buildings are the Forest Rest House, Forest Guards Quarter, the temple building of Chamunda Devi and a shop-*cum*-residence. The houses look like square or rectangular boxes.

The entire dwelling structure consists of one room or one room and a verandah open from one side. The one single room is used by the whole family. The family including guests and livestock live in this single room, This is, in fact, sleeping room, sitting room, kitchen and cattle-shed all combined into one. On the one side of the verandah, opposite to the entrance a handloom is fixed.

There is scarcity of land and they use flat roofs for threshing and making hay. The scarcity of slates compelled them to make extensive use of clay on the roofs. Due to abundance of timber, wooden material is used. The roof is made of rafters, ferns, bhojpatras, pine needles and clay.

There is no difference between the houses of Scheduled Castes and others. Economic factor and personal taste decide the difference. Even today a house of a Bawal in the income range of Rs. 50 and Rs. 75 may be better than the house of a Brahman in the same income group. The same house will be inherited by his sons and they may have to remain content with it or make changes now and then. A house is not a thing which can be changed, squeezed, or expanded with every slight change in economic or social status.

Houses of the poor usually consist of four walled one room and one entrance. Ventilation is not provided. The hearth is made in the centre of the room. Cattle are generally kept on one side of the room. Storage vessels are kept on the other side of the room.

The main entrance of the house faces east or west but never downwards or upwards towards the hill. It never faces north or south as that is considered inauspicious.

If the room is big then a wooden partition divides it. The roof is also supported by four wooden and stone retainers from inside at the corners of the room. These retainers are locally known as *tholas*. Wooden poles may be placed inside in case of bigger ceilings to support the roof.

Since the room serves as cattle-shed also, the place of the cattle is marked by a rough sort of wooden railing. A smoke outlet *ougoon* is provided in the roof. In the case of a wooden wall a long beam is placed on the ground. The wooden planks are fixed to the bottom and the top beams to form a wall. About 50 per cent houses have one wooden wall. There is no bathroom. For keeping water pots and utensils a shelf like place is provided quite close to the entrance and this is called *gharyani*.

Structure of the House

Local name	English version
Khai or maniyad	Trenches for laying foundations
Bhit	Kacha floor
Chanai Kand	Stone-*cum*-wooden wall
Shan	Ceiling
Tham	Wooden poles to support the beams
Thola	Wooden-*cum*-stone pillars, erected in the corners of the room
Nas	Beam
Beeh	Outer verandah type room
Ghar	Inner multi-purpose room
Gooala	Cattle portion provided in the room
Ougoon	Outlet for smoke and light provided in the room
Chhai	A triangle shaped outlet for smoke and light provided in a wooden wall

The temple of Chamunda Devi has been constructed on a six feet high platform *chauki*. Between the temple and outer wall over the platform a corridor about 4 feet wide has been provided to move round the temple and this is known as *mandap*.

General sizes of various parts in a house

Floor	20×18 feet
Door	6×3½ feet
Roof	25×22 feet
Height of wall	9 feet
Size of cattle's pen	20×6 feet

Village : BRAHMAUR, *Tehsil* : BRAHMAUR, *District* : CHAMBA

Residential pattern

Brahmaur is a congested village and has little scope for expansion. The village has been built up on the slopes reaching the Chaurasi area and the houses are not systematically planned. Houses have been built wherever sites were available. Somewhere there is a mushroom growth and somewhere the houses are spaced apart. The lanes and bye-lanes are narrow, occasionally paved and mostly untidy. Each household has a courtyard paved with slates which is also used as *Khalyan* and is enclosed by a parapet wall about 2 to 3 feet high. In fair weather, cattle, goats and sheep may be tethered in the courtyard. The courtyard is used for sunning the grains, cutting firewood and other domestic chores, besides serving as a gathering place for the women to sit and gossip. The houses are generally two to three storeyed high although a few of the houses have 4 storeys. Due to shortage of building space, the emphasis is, therefore, on building multi-storeyed houses. The lower storey consists of one room called *obra*. The *obra* has a sort of verandah in front of it and a staircase (*Manjhi, Paran* or *Sanari*) in the verandah leads to the first floor called—*bhor*. Similarly a staircase in the first floor leads to the second floor called *mandeh*. In some cases where the *obra* has no verandah, the staircase leads to the first floor from within the *obra* just near the entrance called *dwari*. The *obra* is used for keeping the cattle, but if big enough, it is also used for residing. Sometimes it is partitioned, a portion being used for cattle and the other for residing. Agricultural implements are also stored in the *obra*. If the *obra* becomes too small for the livestock, then additional space is provided by constructing a cabinet called *ora* of rough and uneven planks of wood, just outside the *obra*. Instead of regular ventilators, small round or triangular holes called *tohlu* are provided in the walls which let in some light and fresh air without creating draught. If the house is only two-storeyed high, the *bhor* over the *obra* is the main room of the house. This is a living room, sleeping room, sitting room, store-room and kitchen all rolled into one. In one corner of this *bhor*, a small space is paved with stones and an outlet provided for waste water. This is called *chara* and household utensils are cleaned here. This is where people bathe. A separate bath-room is never provided. Similarly no latrine is attached to the house and all go out to fields. The hearth is fixed in a corner of the *bhor*. The people are unaware of the use of chimneys and a loosely fixed slate in the roof is shifted to serve as an outlet for smoke. Whenever it rains or snows, the slate is replaced. Near the hearth is a small platform *charyali* about 1½' high, used for keeping utensils and pitchers of water. Along side the hearth is a structure called *harpur* where food is kept warm by the heat of the hearth. The *bhor* has a verandah running full length in front of it. It is called *dragra*. Generally it is an open verandah, but a portion of it may be closed and the space used for storing grass. The *dragra* is a wooden construction. It is used for basking in the sun and for other purposes. If the house is three-storeyed high, the second floor is called *mandeh*. In that case, the *bhor* is used as a store-room and *mandeh* as the living room and the kitchen. Generally the *mandeh* has also a *dragra* running in front of it, but in quite a good number of cases, the *mandeh* is built over the *bhor* and its *dragra* to have quite a spacious room.

Sometimes the third storey is not fully completed and it is left open on two sides to give it a verandah like shape. This is called *sal* and is used for storing grass, fire-wood. No cupboards or cornices are provided in the rooms, but niches or tiru are provided to keep the family idols and *Nags*.

Changes

During the course of investigation, three new houses were being built. The plinth was at a higher elevation than the *angan* (courtyard) and the *obra* has invariably a verandah before it. The plastering of the walls and pillars was being done in cement. Windows with iron bars were being provided in the walls. The inside of the new houses were being white-washed, and roofs provided with ceilings. No varnish or paint is used.

Village : GIJARI, *Tehsil* : THEOG, *District* : MAHASU

Residential pattern

The 60 houses of the village are indiscriminately situated. The houses are dominated by the village temple.

House types

Three-storeyed houses are common. Very few households have separate kitchens. A room in the upper most storey of a house serves as a kitchen-*cum*-store or as a kitchen-*cum*-sleeping room. No both room are provided in many of the houses. People take bath in the open or in a side of the verandah. Verandahs of about three to four feet width are common. The ground floors of the houses are used as cattle-sheds.

The houses in general are ill ventilated, and doors are small in size. Rough slates are used for roofing. A small hole in the roof, which can be shut or opened by a sliding slate, serves as a smoke outlet and sky light in a room.

Timber, stones and slates are all that one needs mainly and these are collected from near about. Paint, varnish and window panes are being used in new constructions.

In a majority of houses the facing and the main gate is kept towards North and North-East. The reason being that the wish of the *devta* is such and is respected and anyone not doing so would incur his displeasure. In case of those rare houses which have their main gates towards South and West, special permission is obtained from the local priest and he undertakes to appease the deity in case of displeasure by special worship.

The village blacksmith and carpenter assist in the iron work and designing and preparing of wooden frames. But as far as the question of collecting of stones, timber and slates is concerned a member from each household assists. A day is fixed and villagers go to the nearby jungles and khuds to bring timber, slates and stones. The nearby slopes are desolate and completely denuded of trees. In the local dialect mutual co-operation for construction work is known as *bowana*.

Artistic wood-work and pleasing rose flower motifs on some of the wooden ceilings have been observed both designed and executed by the village carpenter.

Masons from neighbouring villages of Ghund and Mathli are engaged as there are no local masons. They are paid in cash and in kind. Their daily wages being Rs. 2 besides free meals. The blacksmiths of Balson have a wide reputation for their talent in iron work. Nails, handles, etc., are made by them with their rudimentary and traditional tools from iron obtained from Theog or Simla. These blacksmiths are also endowed with the artistic skill of making statues and execute this delicate work in a most absorbing manner. The work of such a nature demands great patience and adaptness.

A type of white clay, locally called *makol*, found at Karailli, a few miles from Gijari is used invariably by all the households for whitewashing.

Village : SHAKRORI, *Sub-tehsil* : SLONI, *District* : MAHASU

Residential pattern

The houses have come up in no regular way. There are no proper lanes and the cluster of houses are linked with each other through rough and ill marked passages and very often one has to cross some fields or water channels to get from one house to the other. Previously Rajhera and Berh on the eastern part of the village were a residential area. Rajputs and Brahmans lived in Rajhera and Berh respectively.

House types

Generally the houses are *kucha*, having an attractive mud plaster and built on a rectangular plan using mud and stone. More than half of the houses are two storeyed, and the rest are single storeyed. There are 12 houses of the Scheduled Castes, many of which have thatched roofs. The houses of the *swarns* have roofs of slates, iron sheets. They have started having glass windows and ventilators. The *obras* or the cattle-sheds have straw roofs. During the last decade slates and iron sheets have come up for more use. There is dearth of timber in the village. The timber and slates have to be brought from far off places at market rates when one has to build a good house. Slate is brought from Kufri (20 miles) where there are slate quarries or from Pangna in Karsog Tehsil (22 miles). The farmers prepare windows and doors mostly from *tuni* and *kikar* trees growing in their own lands. The rafters for the roofs sometimes have to be of bamboos. The mud plaster is generally bilious yellow, or light-brown, the colour of the local *matti*.

The ground floor portion of the house can be divided into two part, viz., *biyoon* and *akhal*.

Biyoon—These are the rooms in the back of the ground floor and are used for sleeping during hot summer months; or for use by the women during their unclean days; or else, for keeping foodgrains and other things. In some houses, one of the rooms in the *biyoon* is also used as an *obra* and in this cattle are kept. Child birth also takes place in *biyoon*.

Akhal—This is a big verandah at the entrance in the ground floor and is used by women for stitching, sewing and spinning purposes. *Paura* and *kothris* are the rooms above *akhal* and *biyoon*. While one of the *kothris* is used as a rasoi or kitchen, rest are used as bed rooms. Entrance to the upper storey is through *akhal* where a *pauri* (staircase) connects it to the *paura*.

The villagers have local names for different parts of the house.

Thani (Courtyard).—Portion of land facing the front of the house

Ota.—Portion of wall above the plinth

Dwar.—Door

Bee or Akhli.—Verandah, in the lower storey. In this the staircase is located which provides entrance to the rooms in the upper storey

Biyoon.—Rooms in the lower storey

Pauri.—Staircase

Paura.—Verandah above the *Bee* or *Akhal*

Dwari.—Window

Kothri.—Rooms in the upper storey

Merh.—Floor

Chhaman (Attic).—Space between roof and ceiling

Chhaper.—Roof

Sharota.—A wooden log with notches cut in it providing steps, used as a ladder.

Construction

No large stones or bricks are used while erecting the walls. A wooden frame 1½ ft. wide is prepared and laid on the spot where the wall is to be erected. A mixture of moist earth, small stones and clay is poured into the frame to the top level. The filling is beaten with wooden beaters by the members of the family. This is left to dry for a day or so and in the meantime the other portion of wall is prepared likewise. The wooden frame is again fixed on the dried portion of the wall erected and filled with the mixture referred to above and beaten with the wooden beaters. The walls of the house or the rooms are thus raised to the roof level. Doors, windows and ventilators are fixed, as the construction progresses. Sometimes, bamboo sticks, split horizontally, are also inserted in the walls during construction and these serve against possible burglaries.

Thus the construction of the *bhit* (wall) is akin to the construction of the concrete wall, where the latter is poured in the frame, with the only difference, that the concrete is allowed to act by itself while the moist mixture of earth pebbles and clay here is made to set by manual labour. The rafters are laid length-wise for corrugated iron sheet, slate or thatched roofs. In case a second storey is built wooden planks are used which serve as the floor of the second storey. Just about 2 to 3 feet below the roof a sort of ceiling locally called *chhanan* is constructed. This provides ample space for strong household things. The house is plastered with a mixture of clay and cow-dung from inside and outside and in some cases mud wash or white-wash is done by local *mitti* known as *makol*. The carpenters and masons are paid daily wages of Rs. 2 to 3 plus meals and tea.

An auspicious day is fixed for *griha-pravesh*, when *havan* is performed and *navgrehas* (Nine Planets) are worshipped. This ceremony is known as *grehasni* and a feast is given to friends and relatives. It is after *grehasni* that the family moves into the new house.

Dogris.—Some villagers, whose lands are far off from main *abadi*, have built farm houses or *dogris* near their fields. They live there during the working season as they find it convenient to work more and also keep a watchful eye on their growing crops. *Dogris* are alike in structure to the dwelling houses in the main *abadi*, except that the accommodation in the former is rather limited. In 3 or 4 cases, the purpose behind constructing the *dogris* was the same as mentioned above, but they have now been converted into regular dwelling houses. This was necessitated because of the increase in size of some families who found it difficult to live in their old house together. They have their ration from the common produce of crops though their kitchens in the *dogris* and the *abadi*, where they now live regularly, are split up.

Khair Kattha House.—Recently a Lohar has constructed a house of bamboo strips and date palm leaves. It has a thatched roof that cost the Lohar only his labour. He managed to get the material free. This type of house is generally used by *kattha* contractors and the Lohar picked up the construction technique from them.

Obra.—It is a cattle-shed built on a rectangular plan. The entrance to the *obra* is through a small door in the front. No other ventilator is provided to this structure except that some air passes in from the small openings near the thatched roofing. The roofs are thatched with grass brought from Moongna (neighbouring village-5 miles). Sometimes these are also thatched with wheat straw. The thatch is generally replaced every 3rd or 4th year. The wall construction process of the *obra* is the same as used for regular dwelling houses.

Village : PANGRA, *Tehsil* : KARSOG, *District* : MANDI

Residential pattern

The villagers have built their houses on a rocky spur near their fields and all the houses are tightly grouped together. Besides the main *abadi*, mostly inhabited by Mahajans and Brahmans, the village has as many as eight *pattis* each inhabited mostly by one caste of *harijans*. Thus *Kolis* live mostly in Ghengli, *Chamars* in Dhungru and *Chanals* in Tharu. *Kolis*, because of their absolute majority over other *harijans* have their houses in separate and segregated *pattis*. The Mahajans and Brahmans who had shops in the main *abadi* started spreading towards the bridge on Pangna *Khad* by the side of the mule track which connects the village with the motor road. The reason for the shopkeepers to shift towards the bridge is the expansion of their families. Formerly, they built the structures by the road side only from business point of view but later on, some of them also shifted their residences to the shops where they had accommodation on the upper storeys for the purpose.

The settlement of the Brahmans and Mahajans in the newly constructed shops-*cum*-flats is quite akin to the settlement of agriculturist communities in the *dogris* or farm houses near the fields, far away from their original residence in the village. The *dogris* are primarily built with a view to

looking after their fields during the crop seasons but later the families, as they grow in size, have to divide and shift their permanent residence.

Besides the houses belonging to the inhabitants, there are Government buildings, like the Public Works Department rest house, the school building, Patwar-khana, Police Post Gramsewak hut and the Overseer's quarter, all built within the village. All these buildings except the rest house and the school building are of recent construction.

House types

There are 93 residential buildings at Pangna, each accommodating one or more households. Broadly speaking there are three types of houses which are to be found in the village under study. Most conspicuous are the *chauki* style houses. There are in all eight such houses scattered all over the village and they all belong to the Mahajan community. The next ones are the shop-*cum*-flats of which there are eleven in the village. All the rest are ordinary type single and double-storeyed houses. There is no structure, except the remanent of an old fort, having more than two storeys. There are fifteen modern type buildings, if these may be called so on account of glazed windows. The rest of the houses have been built in traditional pattern. The floors of five shops have been cemented.

The lower storey of a house is called *obra* or *gwain* in the local dialect and in the ordinary type of residential houses, this is used exclusively as cattle-shed. The *chauki* style houses have separate cattle sheds attached to them. Similarly, in the case of shop-*cum*-flat type houses, separate cattle-sheds have been built, wherever needed.

The rooms in upper storey are called *baud* and are used for living purposes.

Comparatively older houses have square rooms of the size 10′ × 10′, 12′ × 12′ or 16′× 16′. A few newer ones, however, have rectangular rooms of various sizes like 10′ ×12′ or 12′ × 16′.

Chauki types

A *chauki* style house has a square courtyard in the middle and rooms all round the courtyard. In Pagna these houses are double-storeyed. The entrance is from the ground floor through *praul* which is a sort of small room of the size of ten feet by ten feet. From *praul* one enters *bih* or the verandah on the ground floor. There may be from two to three rooms on each of the four sides of the verandah, which surrounds the square courtyard or *angan* paved with stone slabs. In the middle of the courtyard two to three feet high, round or rectangular, a pedestal to suppot an earthen pot for growing the sacred *Tulsi* plant is erected.

From one of the corners of the verandah, a staircase leads to the upper storey. This upper storey has the same arrangement of rooms as those in the ground floor. That is, if there are six rooms on the ground floor there must be six rooms on the upper storey also. Similarly *paura* or verandah of the upper storey is also equal in size to that of the ground floor. All the rooms of a *chauki* style house have separate doors from the verandah and are also sometime connected with one another from inside. 'Paura' or the verandah of the upper storey has a regular fencing on the outer side in various designs. The doors of the *chauki* type houses are also carved in exquisite and traditional designs. It is not necessary for all the four wings of the house to have regular rooms. The wing which does not have any regular room is called *naswal*. Again, instead of a regular room in the upper storey, a balcony like structure, called *banglu* in the local dialect, is also built which has a facing on the outer side of the house. *Banglu* is used to a greater extent during winter season when the women sit and gossip there during the sunny days. In the *chauki* type of houses where joint families reside separate rooms are reserved to be used as kitchens. But there is no particular outlet provided in the kitchens for the passage of smoke. However, the slates on the roofs are arranged in a loose manner so that the intervening spaces serves as outlet for smoke. Due to this reason all the walls of the kitchens are always found to be coated with thick layers of soot.

Relatives and informal guests are generally entertained inside the kitchen, whereas strangers and acquintances may be entertained in the verandah or in one of the rooms. In some cases where the big joint families have now split up but still live in

the same house separately there may not be any separate kitchens for them all and they may use one of the rooms falling to their respective share as kitchens. Every house has a living room called *baithak*, but most of the time of all the family members either spend their time in the kitchen or in the *banglu*.

Shop-*cum*-flat houses

These are two storeyed structures. The ground floor is used as a shop while the upper storey is used for living purposes. The shop is usually about fifteen to twenty feet in length and eight to ten feet in width. The commodities for sale are arranged in built-in wooden shelves. The shelves are decorated with various types of pictures of Gods and Goddesses. Every shopkeeper worships all these pictures by offering incense in the morning and also in the evening. Behind these shelves is the store of the shop. Stairs either from the inner side or from out sides the shop of from both lead to the upper storey which may contain two to four separate rooms and a verandah called *paura* a sort of porch for the shop.

Other types

All these houses are double-storeyed, except five which are single storeyed. This double storeyed house contains equal number of rooms in both the ground and the first floors. The ground floor is invariably used as *guain* or cattle-shed, while the upper storey is used for living purposes. Number of rooms on each storey may vary from two to six. In some cases four rooms (two on each storey) are built in a row and one room on each storey is added to this structure at right angle, thus forming a 'L' shaped structure. Such houses have verandah or *pauras* on both the wings, open in majority of cases and are locally called *Gunia*—which incidently is the name given to a 'L' shaped tool of mason-*cum*-carpenter to judge whether the two walls are at right angle or not. Here also provision of a separate kitchen depends upon the number of households residing in a building and number of members in a particular household. Large families, with small number of rooms are obliged to utilize one of the living rooms as kitchen.

There is no bath or latrine provided to any type of building in Pangna. People go out in the neighbouring fields near the Pangna Khud. A house in which there is a separate kitchen has often a small space in a corner of the kitchen paved with slates and serves as the bathing place and for washing the utensils. This space is known as *Chala* in the local dialect. The space between the ceiling and roof of some of the rooms, which is approached by a portable wooden staircase, is used as a store for spare articles like utensils, fuel etc., of the household concerned. The entrance to the space is through three feet square opening in the ceiling locally called *'rangar'*.

Material for roofing of residential houses is slate. Older houses and those owned by poorer classes of people have irregular thick slates while the newer ones have regular shaped superior quality slates on their roofs. Slates are purchased from the Government quarry at Jaun—a village lying at a distance of about 2 kms. from Pangna. Small slate quarries, owned by different households, also exist within the Pangna village.

All the houses are built with mud, timber and stone. *Chanai* or the method of construction is simple. Walls are built in dry stone masonry with beams of wood at regular intervals without applying any mortar and when the building is complete these walls are coated with a thick layer of clay. The wooden beams serve as binders otherwise the entire walls is likely to crumble down under its own weight. This is the common practice followed in hills where stone is used instead of bricks. *Duar* or doors of the older type of houses are from 3½ feet to 5 feet in height and about three feet in width. No windows, are provided in these houses. A space of one cubic foot is provided inside the walls in every room for keeping lamps or other small articles there. These spaces are called *teeras*. In some cases they may also be triangular in shape. Thickness of the wall varies between eighteen and twenty-four inches.

The comparatively newer type of houses which are very small in number contain doors of some six feet in height and also have *duaris* or windows in all the rooms for ventilation. These windows also have iron bars in a number of cases. Size of a *duari* or window is generally three feet by two feet.

After the collection of the requisite material in quantities, the construction of the

house is undertaken. People do most of the construction work themselves employing one or two carpenters, who also work as masons. Five to seven families of such masons live in the neighbouring villages of Charkari, Galiyong, Kaniog, and Rubara. The wages paid to the carpenters-*cum*-masons are Rs. 2·50 to Rs. 3·50 per day, and those paid to the unskilled labour are Rs. 1.25 to Rs. 1.50 per day, plus meals.

Villages : KUPHA, MALET, PARMAS and DHAMOH
Sub-tehsil : PANGI, *District* : CHAMBA :

Residential pattern

Rajputs, Brahmans, *Aryas* and *Lohars* are the residents of the villages. Although the main concentration of the Rajputs is in Kupha and Thamoh and that of Brahmans in village Parmas, the *Aryas* and the *Lohars* have also constructed their houses side by side. Similarly Rajputs and Brahmans also live in village Malet, although the *Aryas* have a good number of their houses there.

All houses are herded together along the mountain side—generally facing either east or south. No lanes or by-lanes exist.

The construction of houses has been greatly influenced by the severe winters. Generally double-storeyed houses are constructed each storey having one room used for all purposes i.e. cooking, sleeping and storing grain. In addition to this the ground-floor is also used as a cattle-shed. In winter, this single ground-floor room serves both the household members and the livestock. A few villagers have built houses with more rooms.

It being difficult to get flat ground, the upper-storey is not built congruous to the ground-floor. The roof of the lower storey is often used as a yard for the upper storey where grain, fodder, clothes, odds and ends are dried in the sun.

Pattern of houses

The upper-storey which is called *mahala* or even *bukhaari* is smaller than the ground-floor and is quite airy. The usual dimensions of the upper-storey are 12′×25′×10′. Sometimes a small verandah is also added with the dimensions of 10′×5′×10′.

Koth

The usual dimensions of the ground-floor —*koth* are 24′×33½′×10′. The *Pangwals* do not have a separate cattle-shed. The room on the ground-floor *koth* serves this purpose also.

In the sides of the *koth*, about six feet away from the wall 3½ feet high wooden fence is fixed which serves to mark the pen for the goats, sheep and cattle. This is known as *gawail* and *aaghal*.

Shinkal

The entrance to the ground floor is through a 3′×6′ small door known as *shinkal*. The only ventilator which serves as an outlet for smoke is of the dimensions of 3′×3½′ fixed with wooden bars. The *chullah* is fixed in the centre of the room.

During winter, the entire *Pangwal* family moves to the ground-floor. The livestock is herded into the open *gawail* or *aaghal*.

With the heat emitted by the *chullah* and by the cattle and the household members, the temperature rises considerably and in the cosy warmth of the room, they are able to pass the dreary winter months with the few clothes.

When summer approaches, the livestock is sent to the pastures and the villagers shift to the upper-storey. The ground-floor is used then for storing household goods.

House construction

The main material used for constructing the houses consists of stones, wood, *bhoj patras* and *kangsi* grass. These are locally available. For the first day, all the villagers join in free labour and in turn the owner invites them to meals. Ghee is served to one's heart's content. For all other days, wages are paid at the rate of Rs. 5/- per day.

Preference for a house site is given to a place which is near the fields, water-source, and is sunny. The household then invites the village elders who examine the suitability of the soil for the house.

When the walls of the ground storey are raised to requisite height two big wooden logs called *nias* are laid on the walls. The *nias* laying is a special occasion in the construction work. A ram is sacrificed in a special ceremony. For this, the villagers are collected and the two *nias* (logs of wood) dressed to proper size and shape are brought from the forest. It is known as *daar lagana*.

After this ceremony, the roofing of the ground floor, in other words flooring of the upper storey is done. Wooden rafters are laid across the *nias* and the entire roof is covered with small thin wooden boards called *faat*. The *faat* are covered with a typical grass known as *kangsi*. Over *Kangsi*, sheets of *bhojpatra* are laid and on that fine clay is evenly spread and beaten to a level surface. The roof has a slight slope to drain away water. A small hollow bamboo piece is attached to the slope of the roof, so that the water is smoothly drained away and may not seep into the walls.

When the ground floor is completed, the work starts on the upper-storey and is completed in the same way.

Local names of the different part of a house are :—

Local name	English Version
Aaghal	Pen
Bhojpatra	The leaf and bark of birch tree
Bukhaari	Upper storey
Daar lagana	To lay the wooden beam
Faat	wooden boards
Gawail	Pen
Kangni	A typical grass
Koth	Ground floor
Mahala	Upper-storey
Makole	A typical clay used for white-washing the houses
Manyadrakhna	To lay the foundation
Naal	Drains
Nias	Wooden beam
Shinkal	Dorr
Udhaan	Chullah

Village : MOGINAD, *Tehsil* : NAHAN, *District* : SIRMUR

Residential pattern

The residential houses are on plain ground except in *puarla bas* where the houses have been laid on the gentle slope of a low hill. In *nichla* and *uparla bas* there are small narrow lanes. The houses are constructed in rows of three or four with some space in between them.

Houses in the village are rectangular in shape. The roofs are thatched except a few which have Corrugated Iron sheets or mud as the roofing material. Houses in most cases have two rooms which are used as a kitchen and a living room and there is a verandah in front of the rooms which too has a thatched roof. Some banana trees are grown here and there in front of houses.

House types

Three types of houses are seen in the village.

1 *Pacca* house with Corrugated Iron roof or mud roof

2 *Pacca* house with chhappar

3 *Kutcha* house with *chhappar*

The houses are single-storeyed. There is no consideration for keeping the main door of the house towards North, East or West but generally the doors are not kept facing South as it is considered inauspicious.

Members of a household sleep in the room or verandah, as convenient. In a few families which have spacious accommodation, they use separate rooms. In the houses, having *chhappar* roof, kitchens are in the verandahs properly covered. Due to inadequate smoke outlets, the walls and ceilings are covered with dark soot. Some skill is required in constructing a *chhappar* though it appears to be very simple. *Khar* grass is abundantly available in the vicinity of the village. Bamboo and maljin (a creeper) which are used for making roof frame and to tie the grass so as to keep it together, are also available. *Khar* grass is cut from the jungles in December and January when it is dry. The women-folk and sometimes men collect the grass. The *maljan* is a long rope like creeper and after

cutting is kept under water for at least a week to make it more durable and pliable. Once the bamboo frame is fixed on the roof, the grass is spread. Two layers of grass are spread over the bamboo frame. The inner layer is one inch thick and the outer layer is six to nine inches. After laying the grass, it is pressed with long thin bamboo strips and tied with *maljin*. The grass is spread over the roof by four to six persons and the spreading work starts from the lower portion upwards. Sometimes this is also done on the ground and the *chhappar* is bodily lifted over the walls of the house and tied to the beams. The construction is completed in one or two days. *Chhappar* roofs are very cheap and for a house having two rooms and one verandah, the cost is about Rs. 30/-. Thatch grass is replaced after four or five years. Bamboo is replaced after a period of about twenty years. The outer ends of bamboos are tied to the iron hooks fixed in the wall. This is a precaution against the *chhappar* being blown off in a storm.

The advantages of chhappar roof are :—

(i) That this type of roof is economical to families having limited resources.

(ii) The *chhappar* can be completed in a shorter period.

(iii) When the old *chhappar* is replaced, it is used as manure in the fields.

But there are two main draw backs.

(i) That the *chhappar* is to be changed after every four to five years.

(ii) This material is likely to catch fire easily.

The houses are whitewashed twice a year with *makol* on the eve of Diwali and Baisakhi. Rough drawings of peacock and flowers in cheap colours are also done on the walls. Designs may be painted by elderly women of the household.

Local name	English version
Rasoi	Kitchen
Kood	Cow-shed
Kotha	Room
Chhappar	Grass roof
Sawara	Verandah
Kiwar	Door
Galouchi	Pitcher stand
Ado	A small shelf in the wall.
Tham	Big poles supporting Chhappar
Modian	Ridge of Chhappar
Badondh	Bamboo frame made for Chhappar
Balli	Ridge pole

Village : KOT, *Tehsil* : SARKAGHAT, *District* : MANDI

Residential pattern

The village has a scattered habitation roughly forming three groups of houses located on three hillocks, all sloping down towards the Bakar Khad, in the south. No main street exists. The three hillocks are inter-connected with several rough footpaths.

All the communities stay there. The Scheduled Castes communities have their houses slightly away from the Rajputs and Brahmans.

The Rajputs and Brahmans have double-storey houses with slate roofs, the Scheduled Caste communities, excepting a few have singlestorey houses, with thatched roofs.

House types

The houses of the village may roughly be classified in two categories according to the material of the roof—slate or thatched. One house has got Corrugated Iron sheets roof. The houses having slate roofs are better built in every respect and are more commodious. It all depends upon the economic standing of the owner.

Maximum use of mud is made in all houses. There is an acute shortage of timber in the region. As such bamboo is used extensively. The average life of a house at Kot is fifty years.

Usually the foundations of houses are dug two to four feet deep. *Bhitwali*

Chinaie, i.e, matkanda wall, has been the mode of construction of walls in a large number of houses, which are about one and a half feet thick. To construct this type of wall two wooden planks equal to the length of the wall are fixed apart and the inner space is filled with mud. This mud is then rammed with wooden hammer till it is pressed. Later, these planks are removed and used to make the upper portion of the wall likewise. In this way, the entire wall is completed.

These days mud-bricks of 12″×4″×3″ are used. To prepare these clay is collected, beaten and sieved to make a thin powder. Then it is kneaded with water. Small pebbles are mixed. Finally, through a wooden mould (12″×4″×3″) bricks are cast. As is customary in this region, these bricks are not baked but are simply dried in the sun and used for constructing the walls. The brick-wall is coated with a thick layer of mud.

In the region, round stones are abundantly found in a river-bed. These stones are collected, chiselled to a rectangular form and are then used for constructing walls. These days, the first two feet of the height walls are preferably made with stones and the rest by mud or bricks. Six houses have stone-walls upto the ground-floor.

The slates for roofing are brought from Kangra and Dharamsala. The cost of slates was about Rs. 25 per hundred. This includes transport charges.

Generally, double-storeyed house consists of four rooms.

House construction and ceremonies connected with it

A site is selected to build a house generally nearer to the fields.

When the plot has been selected, the village *pandit* is called. He gives the auspicious time and date of starting the work. The village *pandit* is again invited. He performs the *havan* on the plot. When the ceremony is over, the household distributes *halwa* among those who have assembled at the time of *havan* and later on in the village.

When all this is over, the construction work starts. The foundation is dug about two to four feet deep and filled with round stones. The entire plot is levelled to start the construction of the house.

The usual dimensions of a house are 33′-9″×15′-6″ and 20′ high. The dimensions of the house are marked on the plot. The mud-walls are constructed in the typical manner already described, with the normal thickness of about 1½ feet. Provision is made for two rooms in the ground-floor. Two doors and four windows of the dimensions of 5′-6″×6′-6″ and 2′×3′ are fixed as construction of walls progress.

When the walls have been raised to a certain height, the floors are laid. The village *Bhanjara* is called. He prepares the bamboo strips for the floors. First of all wooden beams slightly larger than the original length of the room are laid across the walls. The bamboo strips are placed across the walls. The bamboo strips are placed across the beams. The entire surface is covered with about 1½″ thick layer of mud. The ground-floor is completed and work starts on the upper-storey.

The walls of the upper storey are raised and the process of constructing the walls is the same as for the ground-floor. Here again the doors and windows of the sizes of 3′-6″×6′-6″ and 2′-3″ are fixed. In the back of the house, right in front of the doors, two windows are also fixed. All the rooms are inter-linked with one another. The upper-storey is linked with the ground-floor with stairs.

In the final stage, the *Bhanjara* prepares a net of bamboo strips for the roofs, which in the local dialect is called *bainj*. Along with other villagers, the household nails the rectangular slates of the dimensions of 6′×12″ on the roof. A ceiling of bamboo strips is also fixed under the roof.

Then the house is ready. The price of a house generally ranges between Rs. 2,000/- to Rs. 3,000/-. The *Bhanjara* who prepares the bamboo strips for the house is paid five pathas of grains and two times meals during the course of work. The bamboos are collected from the nearby jungle.

Although it is the village mason, who constructs the houses, but *Jawari* system also prevails. All villagers come to assist

the owner in the house-construction. The owner in return serves them meals, tea and tobacco. The mason is paid Rs. 2/8/- to Rs. 3/4/- a day plus meals. Carpenters are also paid like that.

In the houses of the poor men, who cannot afford the slates, thatched roofs of the grass are laid on bamboo strips.

For whitewashing the houses, a sort of greyish clay, which is sufficiently available in the village is used. This clay is dug, separated from rubbish and dissolved in the water. The solution is used for white-washing the houses.

Window-panes, varnishes, paints and other modern building materials have been used in some houses.

Cattle-sheds.—The cattle-sheds are called by the name of *gohar*. They are generally built away from the houses. The normal dimensions of a *gohar* are 13′×15′×15′. It has one door of the size of 3′-6″×6′-6″ and a small ventilator of the dimensions of 1′×1½′. The roof is generally thatched and walls are of mud.

Local names of the different parts of a house

Following are local names of the different parts of a house :—

Local name	English version
Ghar	House
Bethak	Drawing room/living room
Duar	Door
Challa	A place used for washing the utensils
Rosoie	Kitchen
Gohar	Cattleshed
Ohri	Store-room

Village : BASAL, *Tehsil* : SOLON, *District* : MAHASU

Residential pattern

The main habitation is at Basal proper encircled by eight hamlets. Except Masri, the north is practically uninhabited. Here villagers have their jungles and grazing lands. The habitation extends from west to east covering the southern side also.

The Rajputs and Brahmans live in all the hamlets except Deoli-ki-ser and Gadhela. These are in habited by *Kolis* and *Chamars*. The *Bhatras* live in Ber-ki-ser with Rajputs and Brahmans. In the rest of the hamlets, *Swarns* and Scheduled Castes stay together. The Scheduled Castes built their houses slightly away from those of *Swarns*.

The houses are herded together. There is one road which links Chamba-ghat on the Kalka, Simla motor road with the village. Lanes and by-lanes in the shape of village-paths, often passing through the agricultural fields, exist, linking one hamlet with the other. Fields encircle each habitation.

House types

Generally houses are single-storeyed with flat mud roof. They face east or west so that the villagers may get sufficient sun. There is no proper ventilation in old houses except small holes in the wall here and there. Ventilators and windows have been provided in the new houses.

On an average a house has three rooms—one living room, another store-*cum*-guest room and the third a kitchen, attached to the living-room.

There is a verandah in front of the rooms. Cattle-sheds are built apart. Small courtyards are provided in front of the houses, where grass and fuel are stored. They use it as *Khalyan* also for threshing the grains.

Material.—The housing material consists of stones, mud and timber. Stones are abundantly available in the village. They are brought and chiselled into proper shape. For mud, the villagers, dig the nearby ground and take out clay. The timber is brought from the Kakrol-ka-Jungle.

Masons.—In the village, there were two famous masons Safroo and Jaggu Ram. They were the old residents of the village and were believed to have attained high perfection in the work of house-constructions. Safroo charged two rupees per day as his wages and the daily rates of Jaggu Ram were Rs. 1/8/-. As the construction work continued throughout the year in the village, they remained very busy. Now there are many masons. Some of them are outsiders.

Village : BATAL, *Tehsil* : ARKI, *District* : MAHASU

Residential pattern

The village is situated about two miles away in the south of Arki. The Simla Arki-Kunihar motor road passes by.

The main habitation of the village is on a flat level ground, where houses look huddled together, and quite near to them in the western direction, there are some houses scattered over the gentle slope of the hill. Some villagers live a little away in two *pattis* of the village; named Rehd and Pokhtu. The village is mainly inhabited by Brahmans.

House types

The majority of the houses are double-storeyed and cattlesheds are separate. Some families keep their goats and sheep in the ground-floors of the residential houses. The majority of houses have Corrugated Iron sheets roofs. *Khaprail* is also found. Some roofs are thatched.

The houses are approached through foot-paths and narrow lanes. The tendency of building houses contiguous to each other has created congestion. Doors are kept facing the East and West and rarely towards the North but no door is kept facing towards the South.

The walls are of mud, with thickness varying between 1½ feet to 2 feet. The houses are rectangular in layout and have a *beeh* with two rooms interlinked in the ground floor and similar accommodation in the upper-storey.

Beeh—This is a big room in the ground floor usually 20 feet to 30 feet in length. It is used for sleeping or for use by women during their period of mensurations. Agricultural implements and many other odds and ends are kept in the *beeh*. Shoes are invariably put off in *beeh* before entering the upper-storey.

Obra—Rooms inter-linked with the *beeh* are called *obras*. In some houses *obras* are used for keeping cereals. Child birth also takes place in the *obra* and in a few cases, cattle are also kept there.

Paura—A big room right above the *beeh* is called *paura*. It is approached through stairs from *beeh*. *Paura* is quite airy with windows in the front. This is used as a sitting room and guests are ntertained in there. This also serves as a sleeping room during summer.

Bawri—Rooms inter-connected from *paura* are called *bawri*. These rooms are used for sleeping and culinary purposes. Small windows provide light and air.

The material for house construction is available locally. For roofing, Corrugated Iron sheets are procured on permits. It is a general complaint of the people that they experience great difficulty in procuring timber from the Forest. Lade-ki-Banye is the nearest forest from where they get timber. Doors and windows are prepared from *tuni* wood which is found in their own

lands. *Kakar* and *kher* wood is their second preference for doors.

Construction.—After the foundation has been filled with stones, a wooden frame of planks is erected and filled with moist clay. Then it is rammed till it becomes hard and compressed. This work is done by the members of family including women and often relatives also lend a helping hand. The walls are erected to the roof level keeping necessary space for doors and windows. For this, a carpenter is employed. The height of the front and back walls is less than those of the side-walls because the roofs are gabled. At the apex, a wooden beam is placed which serves as the ridge beam. Wooden rafters are then fixed and complete frame prepared on which the corrugated iron sheets are laid. In case of *'khaprail'* or thatched roofing, the wooden frame is thicker than what it is in the case of Corrugated Iron sheets roofing.

Ceiling.—In the lower storey, planks of either *kher, kakar* or *tuni* are used for flooring over which thick layer of mud is beaten to make it smooth and strong. Ceilings of the lower storey are comparatively of unseasoned wood. In the ground floor, no window is kept neither in the *beeh* nor in the inter-connected rooms and household goods are mostly kept in there as these rooms are considered safe.

Karanchi or Chhat.—The space left in between the ceiling and the roof of the upper-storey is called *Karanchi* or *Chhat* and it is used for storing of articles.

Gaiwaini.—Cattle-shed is separate from the residential house. This is known as *'Gaiwaini'*. The attic of the cattle-shed is used to store grass.

After completion of the house, the walls are plastered with clay and the floors with cow-dung plaster.

Local names of different parts of houses are :—

Local name	English version
Dewal	Door steps
Darwaza	Door
Neev	Foundation
Ohra	Rooms in the ground floor
Chhat	Roof
Pairee	Stairs
Kandh or Bheet	Wall
Dwari	Window

Village : DEOLI, *Tehsil* : BILASPUR SADAR, *District* : BILASPUR

Residential pattern

The population has settled in five parts of the village. They are two hamlets, the main village, south western sector of the revenue estate across the Alikhad and a family at the top of a ridge. Bhanjra, Doomna have constructed houses along the Alikhad. *Chamars* live in Bakhail and Saryali. *Julaha* families live in Deoli as well as in the south-western part of the village. The village is inhabited by Rajputs, *Julahas* Brahmans, Domnas, Lohars, *Bhanjras, Sunars, Chhimbas* and *Bohras.* One *Daola* family lives along a rivulet. There he runs a *gharat.*

House types

The dwellings have gabled roofs thatched or of slates. Mostly, the houses are double-storeyed with an inside staircase. Closed verandahs are towards the front in most houses. There are windows.

In some houses there is a triangular shaped garret which they call *tarchhotta.* Baskets, agricultural implements and surplus pitchers are kept in the *tarchhottas.* There is no difference between the houses of the different castes. Economics factor is, however, the main point in determining the structure of houses. A well-to-do family may have a good house.

Material .—In most of the houses locally available material is used. Such as grass reeds for thatching, stones, sun-dried bricks, bamboos and timber. Galvanised iron sheets have also been used for

roofing. Slates are brought from Suket area of Mandi District. Iron handles, screws, nails and bolts are available with local shopkeepers. Dressed stones are used. The timber of *simbal* and mango tree is used for doors. Timber of *pipal* and *ber* trees is not used. *Makol* or *goloo,* a white clay is used for white-washing. Cow-dung mixed with clay is applied on the walls and floors for giving a smooth finish. Occasionally, say once a week, the floors of all rooms are plastered with cow-dung. The use of cement is becoming popular.

Cost of material.—The farmer feels that cost of material is high. One bamboo costs Rs. 1.25 paise and it requires 150 bamboos to cover a roof of 30×22 ft.

Construction.—The foundation is dug some two to three feet deep. The walls are raised with stones set in clay mortar in the ground floor. All walls of the second-storey are invariably of sun-dried bricks fixed with mortar. Poorer farmers do not use stones. Dressing stone costs much. They would prepare walls, whether of the ground floor or the first floor of sun-dried bricks. Along the front wall a platform about 1 foot high and 1½ feet wide is raised. This serves as a set to lash in the sun.

In the ground floor barred windows are provided. In the first floor well-to-do families may have windows with wooden shutters. The poor families dispense with shutters. In winter they put a curtain of gunny bags or bamboo strips on the open windows to protect themselves from wind and cold. The roofs in most cases are thatched. However, these are of slates in the main village.

By convention, the main door of the house faces the east or the west. But not the north or the south. To keep the door towards the south is considered inauspicious.

Well-to-do families build separate cattle-sheds near their houses. Poor families may built sheds attached to their houses. In a few cases cattle were kept in rooms occupied by members of the family. During day time the cattle are tethered in the courtyard.

Workmen for construction of houses are engaged from the village. The skilled labourers belong to *Chamar* and *Doomna* castes. A skilled worker charges Rs. 3.00 per day besides food. The unskilled labourers come from all sections and one is employed @ Rs. 2.00 per day. Carpenters belong to *Doomna* and *Lohar* castes. Thatching of roofs is performed by *Bhanjara* craftsmen.

Jowari or mutual help is rendered by the neighbourers, friends and relatives. Due to shortage or costly labour one would call his dear and near ones for help. During house construction, they come to the house and help in bringing stones from the *khad,* preparing bricks or doing any other labourious work. Food is served during *jowari* days.

Village : KANUM, *Sub-division,* POO, *District* : KINNAUR

Residential pattern

As a tradition rather than a rule of the *illaqua Negis* have separate *abadies* from *Kolis, Lohars* and *Ores* (Carpenters). There are caste divisions among the Kinnaur Tribe too. The housing settlement of the lower caste is at some distance from those of the *Swaran* castes.

The Scheduled Castes live at the bottom of the village and towards the sides. The top *abadi* situated sharply on the slopes is of *Negis.* First of all on the eastern direction from the village is Lundup Gamfel Gunfa, a beautiful Buddhist monastery, where the Head Lama resides with his disciples. Down towards the Sutlej River sprawls the village in three compact blocks. The houses of *Doomangs* (*Lohars*) are on one side of the bottom of upper Kanum and on the other side at the bottom are 3 households of *Deoti* Chamang who are side to be the original inhabitants among other *Kolis* (Chamang). The rest of the houses of *Kolis* are on the extreme bottom.

On the western direction above the present Hindustan Hoet Road, there is a Public Works Department rest house, a small shop and a building which was lately constructed for Panchayat Ghar. It has for the time being been allotted to the High School. Along the road side there is a small hotel opened about 3 years ago. Besides the Lundup Gamel Gunfa on the top there are three temples in the village. Lochi Lama temple is in the upper Kanum and the temple of village deity Dabra is in the central Kanum amongst the thickly populated area of the village. The Buddhist library where books written in Tibetian script are kept is called Kanjur Gunfa and is nicely situated in a clean and tidy locality where there is no congestion of houses. Beside the Kanjur Gunfa a double-storeyed house designed on modern style was under construction. *Kuhls* are the main sources of water supply in the village. One *Kuhl* serves the upper Kanum and another serves the central and lower localities. Main source of these *Kuhls* is the *Kanum Khud* locally called *'Gattang Lungja'*. Literally Gottang means *gharat* in the local dialect and Lungfa means *Khud*. On the steep stoney and slippery banks of this *khud* are eight *gharats* all of them being managed by *Ores* (carpenters).

It is an interesting feature of residential pattern in the village that some of the villagers who are comparatively well off have their cattle-sheds apart from their residential houses. The cattle sheds too are three-storeyed high like the residential houses but the difference between the cattle-shed and residential houses is that cattle-sheds are open on the front, especially the upper-storey. The entrance is from the side doors. The residential houses are not open and airy and have small windows, rather holes, which are quite insufficient to provide enough light and air. 3 Negis in the village who are economically well off have constructed their houses a bit on modern designs by providing ventilation and separate baths. One house recently constructed has glazed windows. It it is a common feature of the residential pattern of the village that they have dry laterines in every household on one side in a corner of the first floor. It is called *Chhakcha* by the people. Much less to speak of courtyard, growing flowers and green vegetables, even the small patches, foot paths and narrow streets are not all well kept.

House types

The housing pattern is conditioned by climate. The houses in Kanum follow the general pattern adopted throughout Kinnaur. The structure is either square or rectangular in shape having flat roofs and arranged in tiers one above another. With a few exceptions the houses of the village are in three compact blocks presenting a beautiful view of the otherwise straggling conglomeration of houses from the opposite direction.

Out of a total number of 113 buildings only 15 are two-storeyed and all the rest are three-storeyed. The building material consists of stones, timber, *burche* (local bushes), *bhojpattar*, all locally available. Stones and timber are required for walls whereas *burche* and *bhojpattars* are used for roofs. The walls are constructed in a framework of wood filled in with dry stone masonry. Plaster is seldom used and the material of which the walls are made of is easily noticeable at first sight .

Mostly the houses in the village face the south and whenever a new house has to be constructed the Lama has invariably to be consulted about the direction that the entrance to the house should face.

The structural description of a typical house at Kanum is as follows :

It is a three-storeyed house and stands erected on a piece of land which is steep. The foundation of the house was said to be 2½' to 3' deep and it is filled with stones. Due to slope, there is no plinth and walls of the house have been raised direct on the foundations. The material used for walls is dry stones filling the frame work of wooden beams which are either of *deodar* or *chilgoza* wood. These wooden beams vary in thickness but generally a standard of 6" thickness is used to strengthen the dry stone masonry. Neither mud nor any other plaster has been used on the outer portion of the walls, though a thin plaster of local clay has been used on the inner side of the walls after construction, obviously to fill the chinks as a protection against cold. It is very difficult to distinguish the plaster because thick deposits of soot, unrelieved by even occasional white washing, have completely blackened the walls. Of late, in a very few cases, the people have started

whitewashing their houses both from inside as well as from outside.

The ground floor called *bong* is kept for tethering cattle. An open level space though not very wide has been kept and is enclosed by breast high walls. This serves as a courtyard. In the centre of the ground floor a small door serves as entrance. The length and breadth of the room is 20' × 14'. The height is about 9'. One has to bow considerably while entering the room. Except the little door there is no other ventilation and it is pitch dark inside.

The doors and their frames and the front portions of the wooden supper structures have been fashioned by the local *Ores* and are decorated with carving of peculiar designs not exactly geometrical. The carvings represent flowers, animals or imaginary figures which apart from revealing the skill of the craftsmanship of the carpenters, beautify the house.

The ground floor is not interconnected with the first floor. On the right side of the floor, there are wooden stairs which lead to the first floor called *ghunsa pathang*. The entrace to the *ghunsa pathang* is through *tonkhang tonang* (a wooden narrow verandah). The size of the door and room in the first floor are similars to that of the *Bong*. During winter *ghunsa pathang* is used both as cooking and living room. The family puts up in this big room with little or no pretentions to privacy. In the centre of the room a fireplace square in shape is kept and *lodang* (a three legged iron *chullah*) which is portable is used for cooking. It provides warmth to the family who sit around it. The floor of the *ghunsa pathang* is made of wooden planks. There are two pillars in the room which supports the roof of the upper-storey. On the back wall of the *ghunsa pathang* two small rectangular holes called *teenang* have also been kept for light and air. The narrow balcony outside, which is hardly 3' in width is used for basking and towards the left there is a dry latrine (*chhakeha*).

The upper-storey, the summer residence of the family, is called *thoring pathang* and its structure is different both from the *Bong* and the *ghunsa pathang*. It has to be approached either through wooden stairs from *ghunsa pathang* or direct from the roof of an adjacent small store. The door is on the side facing towards the East and structure also differs. The front portion is all made of wooden supper-structure of 2" to 3" thick planks and in the centre it is kept open to provide air and sunshine. On entering the *thoring pathang* on the right side there is a small cabin called *tiuna pathang* for storing water. The length and breadth of the upper flat is consistant with those of the lower *pathangs* with the difference that it is divided into three portions (i) a rectangular big hall of 20' × 14' called *forting*, (ii) *bizurath and* (iii) *guim* where odds and ends and kitchen utensils are kept during summer. But for small *teenang* which provide little air and light, the *guim* is dark and suffocating. The floor of *forting* is of local earth. This is rugged and is not as smooth and pleasant as the mud floors of clay are found in lower hills or plains.

Ceilings are not fitted to the roofs. The unseasoned wood used commonly is seen in the *ghunsa pathang* and *thoring pathang*. The floor of *ghunsa pathang* is of planks. These are comparatively clean and keep warm in the severe winter.

There is a flat mud roof on the house, called *khayap* locally. Layers of *bhojpattar* (*shakpang*) *and local bushes are spread* over thick wooden planks. On this frame is laid a layer of earth, six to eight inches thick to form the roof.

The earth on the roof is compact and properly rammed, laid in graduated processes. First of all, mud which is called *phating* is carefully spread and beaten by small wooden flat clubs called *teput*. The masons and others press the mud by walking about on the roofs, sometimes children are invited to play on the roofs under construction. After the mud layer is smooth and thoroughly pressed water is sprinkled. The beating and pressing process continues till the roof is considered strong enough to hold back the rain and snow. In heavy rains the mud roofs leak. During winter the snow is immediately shoveled down from the roofs as soon as it stops snowing to avoid leakage from the melting snow and roof-collapse under the heavy weight of the accumulated snow. Bath rooms are uncommon. A bath is considered somewhat unnecessary.

Village : CHAUNTRA, *Tehsil* : JOGIN DARNAGAR, *District* : MANDI

Residential pattern

The pattern of house construction is mainly influenced by Kangra district. The houses are double-storeyed with a front verandah. Both the floors have verandahs. Being in the open and spacious valley, there is no dearth of land for constructing houses. The main *abadi* of the village is in lower Chauntra. Houses are scattered in groups of two to three. Every house has a spacious courtyard. Suds have houses of *chouki* type with shops in one of the wings. Other houses have a 'L' or 'U' shaped layout. Such houses belong to the villagers having average means. These are Brahmans, Rajputs and a few of Scheduled Castes. Among peasantry many have modest houses with a straight layout.

For keeping the cattle, there is a separate cow-shed to one-side of the house. This cow-shed is a small structure with thatched roof. Except a few houses which have been built new, houses are semi-*pucca*.

Sites are preferred near the fields where water is available. The soil being sandy loam and porous, the foundation has to be dug deep. The depth varies from 4 to 5 feet.

The foundation is not dug further, if a hard layer or rock is struck at a lower depth. The width of the foundation varies from 2 to 2½ feet. After digging the foundation, the bed is watered and rammed thoroughly. This makes it compact and even. Then up to 9 inches to one foot thickness, the foundation is filled with boulders. These boulders are available from Bajgar *Khad* and other *nallahs* nearby. This layer of boulders is again rammed thoroughly. The foundation is sometimes dug before rains and kept open to the weather for the season. This secures a maximum firmness to the foundation. On an auspicious day, foundation stone is laid. Then the shaping of the structure starts. The thickness of the wall upto the ground level and sometimes upto plinth level is kept the same as the width of foundation. But now, masonary work in the foundations in off-sets is being preferred. This system is economical and facilitates the structural work. Ordinarily dry masonry is used. The plinth level varies from 9 inches to 18 inches. When the masonry work upto the plinth level is complete, the room portions in between four walls is filled up with flints, pieces of stones and brick-bats to bring the surface in level with the walls which have already been raised upto plinth level. Then door frames are placed wherever necessary. Placing of the frame of main door is marked by minor rituals. A red *mauli* is tied to the frames and *Gur* is distributed to the workers. The mason, incharge of the construction gets a turban and money depending on the means of the owner. The masonry work is continued after leaving gaps for the doors. When the walls are raised upto window level, the window-frames are placed. One window suffices for each room. At various stages of the wall construction, care is taken to provide lintels, small openings and niches. The villagers find it difficult to get structural stone. This is found in a limited quantity. They extensively use sun-dried bricks. The stones are used for construction of outer walls of the ground-floor. For the inner walls in both the floors and the outer walls of the 1st floor, bricks are used. The standard size of the brick is 10″ × 5″ × 2½″. This can vary. Bricks are made with moulds by the villagers. They are dried in the sun. Thickness of the outer walls is 1½ feet. The interior walls are sometimes of single brick.

When the construction is complete upto the first floor level a *shateer* is placed across each room on the shorter span, so that half of the thickness of the walls at centre serves as bearing of the *shateer*. This is followed by placing the wooden or bamboo *karian* over the *shateer*. The floor height of walls varies from 7 to 8 feet in the ground and 6 to 7 feet in the first floor. Then starts the construction of four walls of the first floor. After fixing the door and window frames, these walls are raised upto the roof level. Postponing the construction operations in the interior of the house, rofing is taken up first. The houses in the village have gabled roofing with slopes. For roofing trusses are not provided. Instead, two rafters and a beam between them are fixed. In many of thatched roofs there are rafters of bamboo poles instead of timber. One end of the rafter is fixed on the ridge pole with a notch. The other end rests on the wall and with sufficient projection towards the gable end.

Purlins are fixed on rafters. The specing of the purlins varies according to the length and breadth of the slates used. To avoid leaks a lap of 2″ to 3″ is given at the joints. The slates used are procured from Kanhyara quarry near Dharamsala. Slates are also available at Jogindernagar where they are transported from slate quarries in Mandi district.

The work in the interior of the house is then taken up. The ground floor is *kutcha*. In the first floor both mud and wooden floorings are found. In the ground floor, the natural bed is watered and rammed thoroughly, so that it becomes firm and compact. Then the space is filled in with waste material and earth upto the plinth level. A thick coating of *Gara-mud* mixed with cow-dung is then given. When this dries another layer of cow-dung is given. Similarly walls are plastered with *gara* and cow-dung and then whitewashed with *makol*. Sometimes walls upto window height are coloured with *losti*.

Chauki type.—A chauki type house has a rectangular or square paved courtyard enclosed from three sides and in some cases all the four sides by double-storeyed wings of a house. All wings have verandahs facing the courtyard. Entry to the house is through a room called *praur* in the ground floor. A stair-case at one corner leads to the 1st floor. The arrangement of the rooms in both the floors is the same. If the ground floor has 4 rooms, the 1st floor has the same number of the rooms of same length and breadth. In case there is no room in one of the wings of a house, that wing is called *naswar*. All the rooms of a *chauki* have separate doors through the verandah. These rooms are inter-connected inside. The verandah in the 1st floor has wooden railings. In such houses, there are separate kitchens mostly in the upper-storey. The houses of 'L' shaped layout are of the same type with the difference that such houses have only two wings and entry to the house is direct through the verandah of the ground-floor.

In a family house with straight layout there are usually one to two rooms in the ground-floor and only one big room in the 1st floor. There can be two rooms in the 1st floor. The breadth of the rooms of the ground-floor varies between 12′ and 15′ and length between 15′ and 20′. Entrance to the house is through a verandah in the ground-floor. Each room has a separate 5′×3′ door with a 2′×1½′ window. In some there are small round holes instead of proper windows. In one of the corners of a room in ground floor, a stair-case is provided. It connects ground floor with the first floor. The portion of roof with steeper slope of such a house is thatched whereas slates are used for the flatter portion.

The inmates occupy the lower floor, the upper is used as a lumber-room or store room for grains. During the rains the upper room is used for cooking. In many cases it is used as a sleeping room. There is no separate kitchen. The rooms are kept clean. The lower portion of inner walls are plastered with red or light coloured earth known as *losti*. The front space is kept tidy and clean, encircled by a hedge maintaining privacy.

The local names for the different parts of the house are :—

Different parts of a house

Local name	English name
Angan	Courtyard or the portion of land facing the front of the house
Bala	Rafters
Bharti	Stone filling in the foundation
Bheen	Ridge of the verandah in the ground floor
Bhit	Door
Birang	Wooden railing in the verandah of the first floor
Chhaprur	Cable end
Chokathha	Window frames
Dharwan chhat	Gabled roof

Dwari	Window
Dwar sakha	Door frames
Gara	Mud mortar
Karyan	Joists
Lada	Ridge pole
Lakore	Nitches
Maidg	Mud plastering
Newn	Foundation
Oata	Verandah in the ground floor
Obra	Rooms in the ground floor
Paura	Verandah in the first floor
Phare	Wooden planks
Praur	A room in the ground floor, through which one can enter the chauki house
Sangha	Stair case
Thamb	Posts supporting the first floor
Trusses	Kainchi
Wan	A big room in ground or first floor with no front wall

LACCADIVE, MINICOY AND AMINDIVI ISLANDS

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

House types and village layouts

Layout of the village—The pattern of distribution of the houses is the same in all islands except Minicoy where the houses are arranged in linear pattern on the two sides of the foot path. On other islands normally houses are found uniformly scattered around the centrally located excavation. There are no roads in the island except foot paths of about 6 feet wide which connects the habitational areas. Except bicycle no other conveyance is used on the islands.

On most of the islands the habitational areas are confined only to certain regions. For instance on Agathi the houses are scattered through the northern portion of the island. The southern portion consists of a long narrow strip almost 2 miles long and an average breadth of about 100 yards. This narrow southern portion is over-grown with jungle and contains only scattered cocoanut trees. It may be because of this peculiar physical feature of the islands the habitational area is not spreading to this narrow region. Similarly on Chetlat majority of the houses are situated at the central region. The houses of the earliest settlers are also located on this area. On Kadamath the Southern third of the island is uninhabited and on Kavarthi there are no houses on the Southern half of the island. The habitational area of Kalpeni is also confined to the broad Southern end. Coming to Minicoy even though the island is more than 6½ miles long only two miles long area in the middle is inhabited. The houses are scattered uniformly throughout on the remaining islands.

The inhabitants of all islands are all Muslims. But, paradoxically however, they still maintain caste system in majority of the islands. But this caste system does not have any bearing on the settlement pattern of the households. The houses of the low caste people are situated interspersed with the houses of the high caste people.

Settlement pattern of the houses of Minicoy is different from other islands. Here the houses are grouped to form definite villages known as *attiries*. There are altogether 9 *attiries* which are situated close to each other. The names of the *attiries* are as follow :—

1 Bada
2 Aumugu
3 Bodu attiri
4 Remmedu
5 Saidival
6 Aloodi
7 Funhilol
8 Kudahi, and
9 Pallissery

In addition to the 9 *attiries* mentioned above there is a leper colony which is situated a little away towards the north from the original residential area. The famous Minicoy lighthouse is situated nearly 2 miles away towards South from the *attiries*. The residences of the officials working in the lighthouse are situated around the lighthouse itself. There are foot-paths of about 6 to 10 feet wide running throughout the *attiries* and extend upto the leper colony towards the North and lighthouse towards the South. Here also except bicycle no other conveyance is used.

As in the case of other islands here also distinction of Castes is maintained. There are four castes in this island—Manikfan, Thakkrufan, Thakkuru and Ravery. Ravery and Thakkuru are working class and occupy lower rungs of social hierarchy. They are living enblock in Pallissery, Funhilol, Kudahi and Bada attiries. The attiries of Bada, Aumugu, Remmedu and Bodu attiri are also partly occupied by Thakkurus and Raveries. The higher caste people are seen predominantly inhabited in Saidival, Remmedu, and Aloodi. The lower caste people do not either sit or eat with the upper class people and in the matter of drinking water, Manikfans have got their own wells and tanks which are not accessible to the lower caste people except Thakkrufans who are considered to be number two in social status.

The houses are arranged in linear pattern along the two sides of the foot paths so as to form definite streets. The general pattern of the houses, whether it is of high caste or low caste, rich or poor is one and the same. Ordinarily a house consists of a long verandah runs down the outside from which the rooms open. A prominent

feature in each room is a large swinging couch and a mosquito curtain within which the inmates are forced to shelter themselves from the hordes of mosquitoes that infest the island. A kitchen is constructed separately in front or behind the main building. There will be a stage like portion on one side inside each room where provisions and other household things are kept in apple-pie order. In and around the houses are always neatly kept. Beddings, washed clothes, furniture etc., are arranged in each house as seen generally in exhibition stalls.

Houses are generally thatched with plaited cocoanut leaves. Some houses are roofed with zinc sheets which were taken out from the ships wrecked near the island long ago. Thatched houses are being tiled gradually and this number is increasing day by day.

Each attiri has a club for men and its corresponding *varangi* for women. The men's club house is an unpretentious affair, sometimes an ugly corrugated iron structure simply furnished with one or two large swinging *divans* on which the men can sit and swing themselves as they talk.

Unlike the club building of men, the *varangi* of women is beautifully built. The men provide all the money and labour required for the construction of the building. The walls are often neatly panelled in wood or are tastefully decorated with painted designs and the whole building shows more real artistic taste and perfection of execution than is usually to be met within the buildings on the mainland. There are also separate bathing tanks for women.

In addition to the residential houses there are also a number of commercial establishments in Minicoy which are situated interspersed with the residential houses. In their general shape they also look like the residential houses.

Compared to the other islands mosques in Minicoy are few in number. But they are well built and beautifully decorated. Some of the mosques are even electrified. Here there are two Jumah mosques as there are two groups of people belonging to two different schools of thought.

The various building structures found in each island can be classified into three groups. Under the first category we can include Government offices, schools, Hospital or dispensary, Dak bungalow, Wireless station, sub-treasury, Meteorological observatory, building of the Co-operative Society and residential houses of the Government officials who stay in the island. Buildings which accommodate religious institutions like mosques and *Madrassas* can be included under the second category. The houses of the native islanders come under the third category.

The buildings which come under the first category are generally well built structures. The walls of these buildings are made of rectangular coral lime stones which are cut out from the lime stone quarries of the island. Their plinths and walls are plastered with cement or mortar. Almost all of them are having either tiled or asbestos roofs. Some of the buildings are even built solely by concrete. Wooden structures like rafters, beams, frames and shutters of doors and windows are made of timber which are brought from the mainland. Sometimes rafters are made of the trunk of cocoanut palms and in such cases they are acquired from the island itself. Similarly for making mortar lime stones which are available in plenty on the island are utilised. The floors of these buildings are cemented or tiled. These buildings are constructed under the technical guidance of qualified engineers according to the plans drawn by the Government architect. In all the islands these buildings are constructed almost close to each other and they stand segregated from the residential houses of native islanders.

Coming to the building structures of the native islanders it can be seen that they generally use only materials that are available locally for the construction of their houses. Coral lime stones are cut from the quarries according to the desired size and these stones are used for the construction of plinth and walls. The rafters of the roof and the frames of the doors and windows are made of the trunk of cocoanut palms. Majority of the buildings are having thatched roofs and for thatching plaited leaves of cocoanut palms are used. The walls and sometimes the floors are also plastered with mortar for which lime is obtained by burning lime stone.

Rooms of some of the houses, especially the houses of rich people have ceiling. But here also the beams are made of the trunk of cocoanut palms and wooden planks

spread over the beams are made of timber of bared fruit tree. All the above mentioned facts show that the use of different materials for building the houses mainly depend upon their local availability.

Double-storeyed buildings are seldom found on the islands. The few double-storeyed buildings that are found today were introduced only recently. They are owned by rich people and the necessary materials required for the construction such as tiles, timber, cement etc., were brought from the mainland.

The structural pattern of the residential houses of the natives found in all islands are more or less the same. All the houses are rectangular structures with four sloped roofs. In case of rich people the houses are found surrounded by a tall fencing of about 6 feet high made of plaited cocoanut leaves. Sometimes fencing is also found associated with the houses of poor people but in this case it is made only to cover the backyard, bathroom, latrine, shed for storing firewood and cocoanuts, cattle-shed in case of persons who own cattles, etc. are all found situated within this fencing.

The walls of all houses are constructed with rectangular slabs of lime stone which are cut from the quarries. The walls, plinth and floors are generally plastered with mortar.

The roofs are very low and the rooms are generally dark due to bad ventilation. Each house has a spacious front room which opens into a corridor. On either side of the corridor are situated bed rooms, store room and kitchen. The number of bed rooms in each house usually depends upon the number of married women present in the family. Each married woman is provided with a bed room in which she sleeps with her visiting husband. All the bed rooms and front room are provided with raised platforms called *Kayyala* which are used as the cots. The two raised platforms round in the front room are used by old women and children to sleep in the night time. Women also use this place for conducting daily prayers. Two narrow raised platforms are found in front of each house which provide sitting place for outsiders. Each house contains one storeroom and one kitchen. Kitchen is generally spacious and in case of rich people, contains two sections, one for cooking and the other for storing rice during monsoon.

The majority of the houses are without an inner ceiling. A few houses, however, have ceiling which are made by spreading wooden planks over narrow beams made of the trunk of cocoanut palms.

Some of the houses of rich people are having tiled roofs and the number of houses having tiled roofs are increasing every year. Some of the economically backward people still live in huts having walls made of plaited cadjan leaves.

In addition to the residential houses and religious institutions there are found in all islands commercial establishments which are situated interspersed with the residential houses. The buildings look exactly like residential houses and they are also constructed in the similar pattern as that of the residential houses.

All the houses face towards North or South and never towards West. This arrangement is made to save the inmates from the hazards of rain and wind which sweep the islands during monsoon.

In every island except Minicoy there are three public mosques to which all the islanders resort on particular occasions. These are the Jumah, Mohidin and Hujra mosques. There are besides many small private mosques, out of all proportion in number to the inhabitants, each with its little tank and grave yard. On Minicoy there is no Hujra mosque. The Mohidin and Hujra mosques are also known as Ratheeb mosques. In all islands Jumah mosque and Ratheeb mosques are well built structures having tiled roofs and cemented floors. The mosques of Kavarathi are better built than those on other islands and many of them have beautifully carved pillars. The islanders are noted for their skill of carving in both wood and stone. The Jumah mosque of this island is a large building and possesses the largest tank of any mosque in the islands. Hujra mosque of Kavarathi island stands unique in the field of carving. This mosque is a living example of the skill of carving of the islanders in wood. Another important mosque in this island is the Mohidin mosque which is also famous for its carved pillars. All these buildings were constructed by the islanders themselves.

The Jumah mosque of each island is situated at the centre of the habitational region. Similarly, the Ratheeb mosques

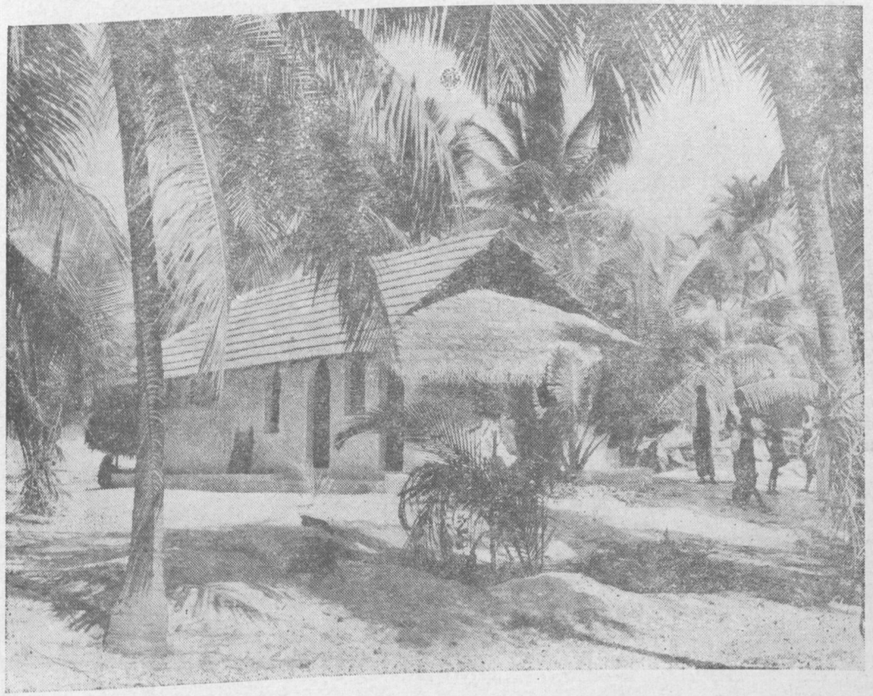
also occupy a central position in each island. But the prayer mosques are distributed sporadically among the residential houses.

In general shape all mosques look alike. They are rectangular structures having four sloped roofs which may be either tiled or thatched. Some of the important mosques like Mohidin mosque at Kavarathi and Jumah mosque at Ameni are double-storeyed buildings each having a gable in front of the upper roof.

Water sources—As mentioned elsewhere, in all islands water level can be reached at a depth of 6 feet. Islanders dig out wells for extracting drinking water. For cleaning purposes there are separate ponds for males and females. All ponds used by males are attached with the mosques.

Wells are of two kinds, one step well and the other drawing well. Most of the wells found on the islands are step wells. These step wells are found scattered all over the island. Now islanders are becoming conscious of the unhygienic condition of step wells and have started replacing step wells with drawing wells.

Mohidin mosque of Ameni Island excepting tiles only locally available materials are used for its construction. It also represents the typical shape of an Island mosque.

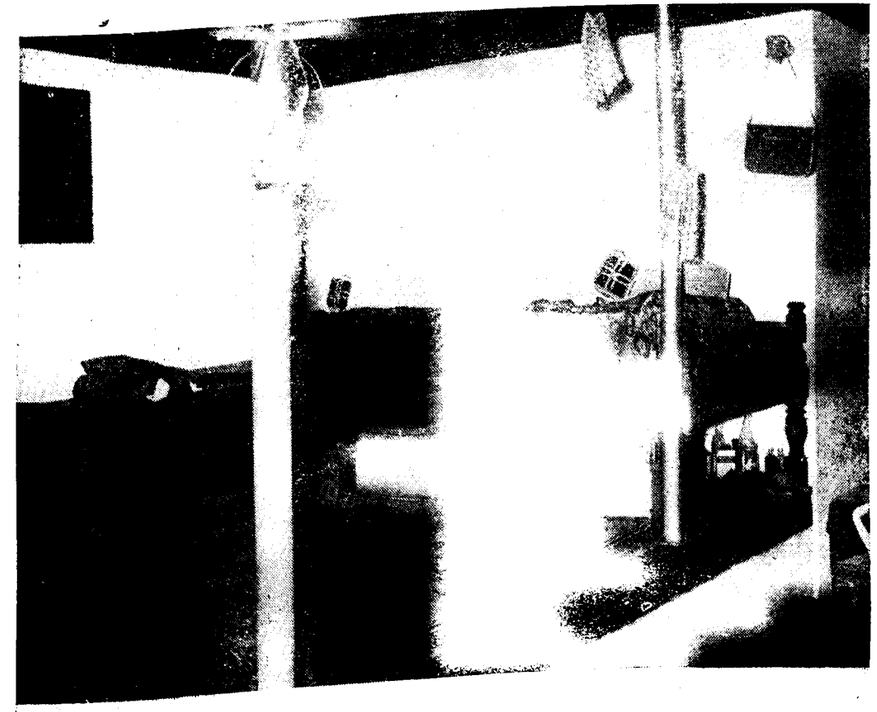


An ordinary prayer mosque at Kavarathi Sea-worn coral stones from the beach are used for the construction of walls.

A portion of the Attiri of Minicoy Island showing the clustering of houses.

A typical lane of the Attiri of Minicoy Island.

Hajra mosque of Kavarathi Island. Note the intricate carving on the pillar and on the ceiling. This mosque is a living example of the skill of carving of the islanders in wood.



Interior of a room of a well-to-do family of Minicoy Island. Note the luxurious furnishing and apple-pie order of arrangement of different objects.

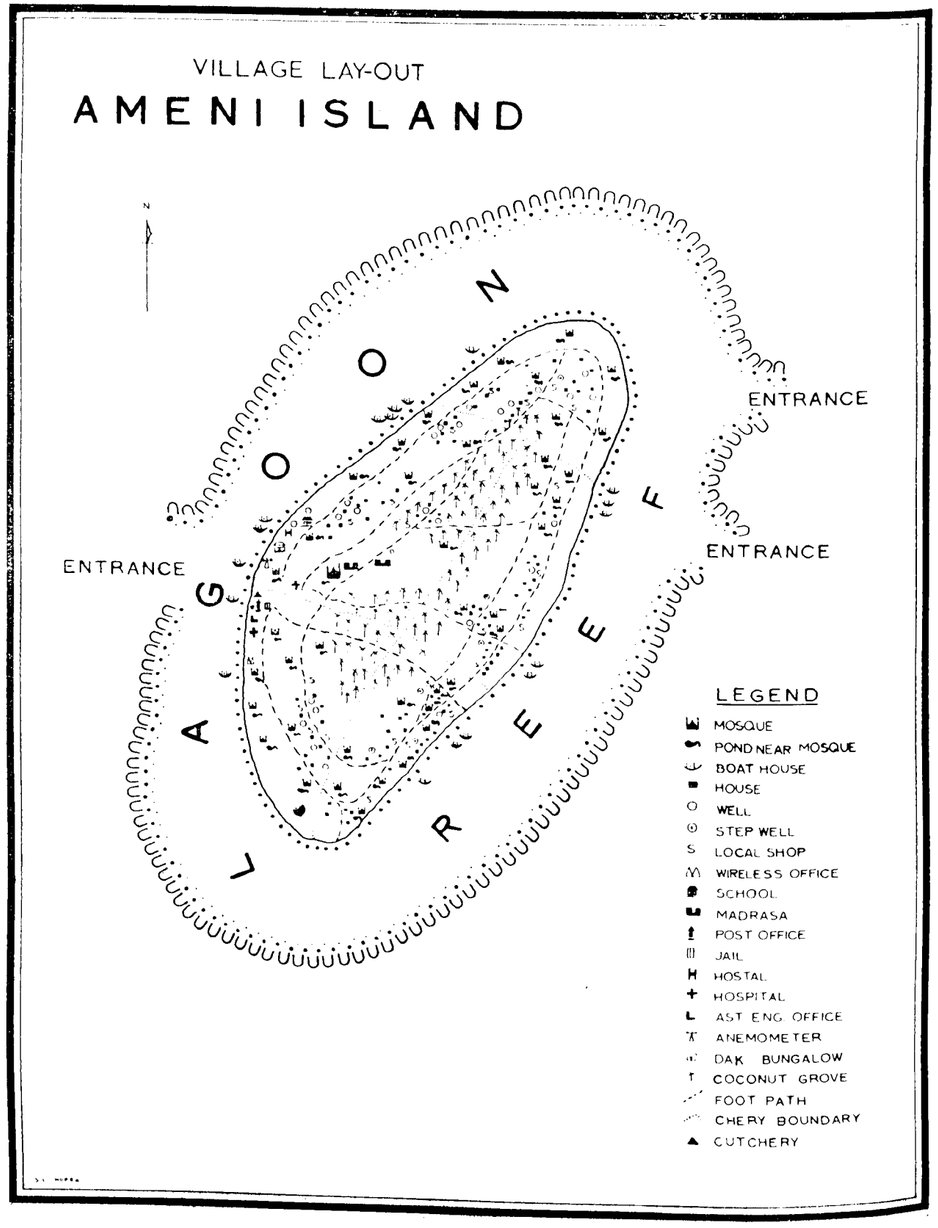
A double storied building of Ameni Island. It is owned by a native islander who runs a departmental shop in the building.

A small hut of a low caste family of Ameni Island. Doors, windows and walls are all made of plaited coconut leaves.

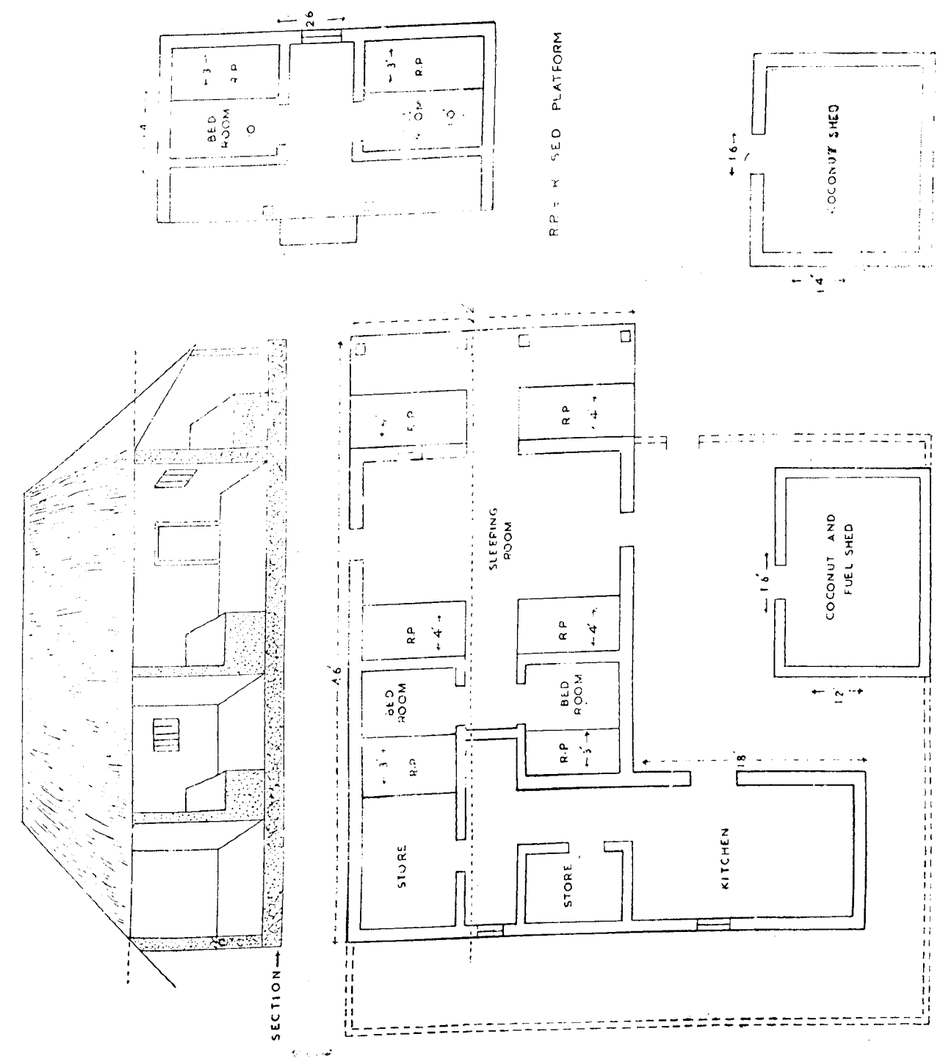
Coir training-cum-production centre at Kavarathi Island. The entire structure is constructed by using timber and plaited of coconut palms.

VILLAGE LAY-OUT

AMENI ISLAND



GROUND PLAN AND CROSS SECTION OF THE HOUSE OF A RICH FAMILY



MANIPUR

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Though Manipur is divided into different Sub-divisions for administrative purposes, topographically Manipur can be divided into two broad regions viz., (1) the Hills and (2) the Valley.

The house types, layouts of villages, etc., in the Valley where the inhabitants are predominantly Manipuri Hindus are found more or less similar in all the Sub-divisions of the Valley. Hence, we shall study the Valley as a whole.

1. *Hills*—For want of sufficient data and informations it will not be possible to give a detailed description of the house types, layouts of villages, etc., of the tribal villages in all the Sub-divisions of the hills. However, a few aspects which are common to most of the hill tribes are mentioned below. In the hills, each of the sub-groups of the Nagas or the Kukis represents a homogeneous ethnic unit so far as the type of settlement is concerned. Their villages are located at the foothills or on table-lands; but due to the scarcity of habitable space, all the houses are huddled together within those available spaces. Since the inhabitants of the hill region depend on the plain for getting consumption goods and other basic domestic articles, selection of a site very much depends on its proximity to a main-road or any such advantage. All the tribal villages in the hills are not found to be situated close to one another. In most cases, there is some distance from one village to another. Since water and cultivable land are the chief needs of the tribes, their villages are conveniently located near hill-streams and arable hill-slopes. In almost all the tribal villages in the hills, houses are built in a row and there are at least two such rows of houses in a village, and the communal path runs between them. It is however, not rare to find a few stray houses at the out-skirts of the village. The tribals construct their houses facing the east or any other direction taking care to see that they can get enough sunlight. If the village has any chief, the house of such a chief occupies the central portion of the village. The Kuki houses are built about three feet high above the ground on stilts, while the Nagas build their houses on raised or unraised ground. Most of the houses have a rectangular shape and two sloping roofs.

2. *Valley*—Concentration of human habitation is found in those areas watered by the two important rivers of Manipur viz., the Imphal river and the Nambul river. Irrespective of their castes, all the Vaishnava Manipuris settle together in their villages in the valley. As a result of geographical advantages, villages of the plain cover a wide area. If we regard Khwairamband bazar which is the principal market of Manipur as the central zone for our purpose, the villages lying around it upto a distance of about 3 or 4 miles are situated close to one another being only separated from one another by either a river, a main road, or a narrow field. In the case of villages located at remoter areas, vast paddy fields generally demarcate the village boundaries.

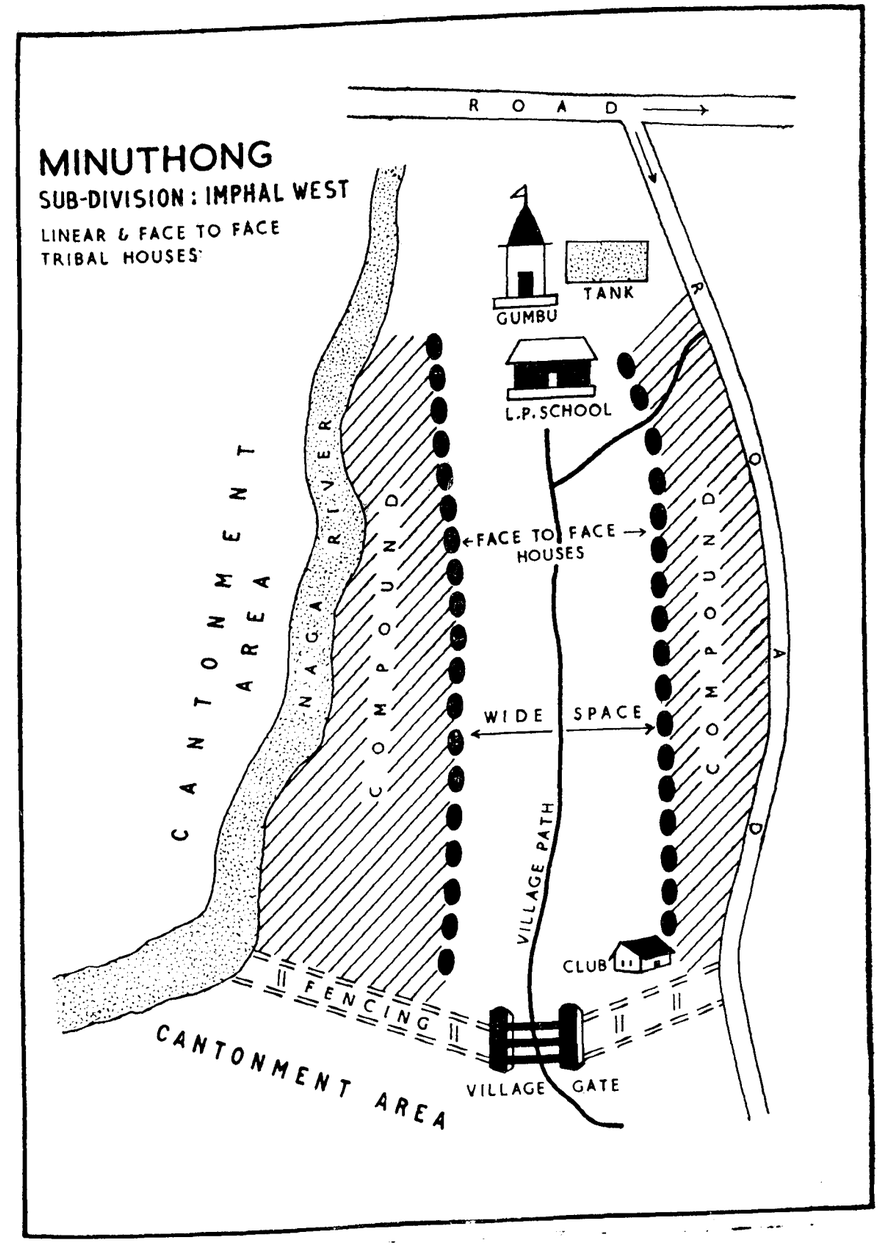
Houses in the plain are constructed within well-defined compounds. Generally bamboo groves and shrubs grow along the boundaries of the family-compounds. Streets or lanes run intersecting the villages of the plain. Though houses situated along one side of a village-thoroughfare are built more or less in a row, a majority of the houses do not conform to any specified pattern. But as regards the site of the residential house within the family-compound the space left in front of the house is generally bigger than the space left in the rear. Every Manipuri Hindu maintains a courtyard known as 'sumang' in front of the house. As for a Brahmin family, a temple is also constructed in front of the house and beyond the courtyard. Besides the temple, a 'mandap' which is a big house is generally constructed where villagers assemble and perform many religious functions. The frontal part of most of the Manipuri houses faces the east. Some face the south or the north but not the west.

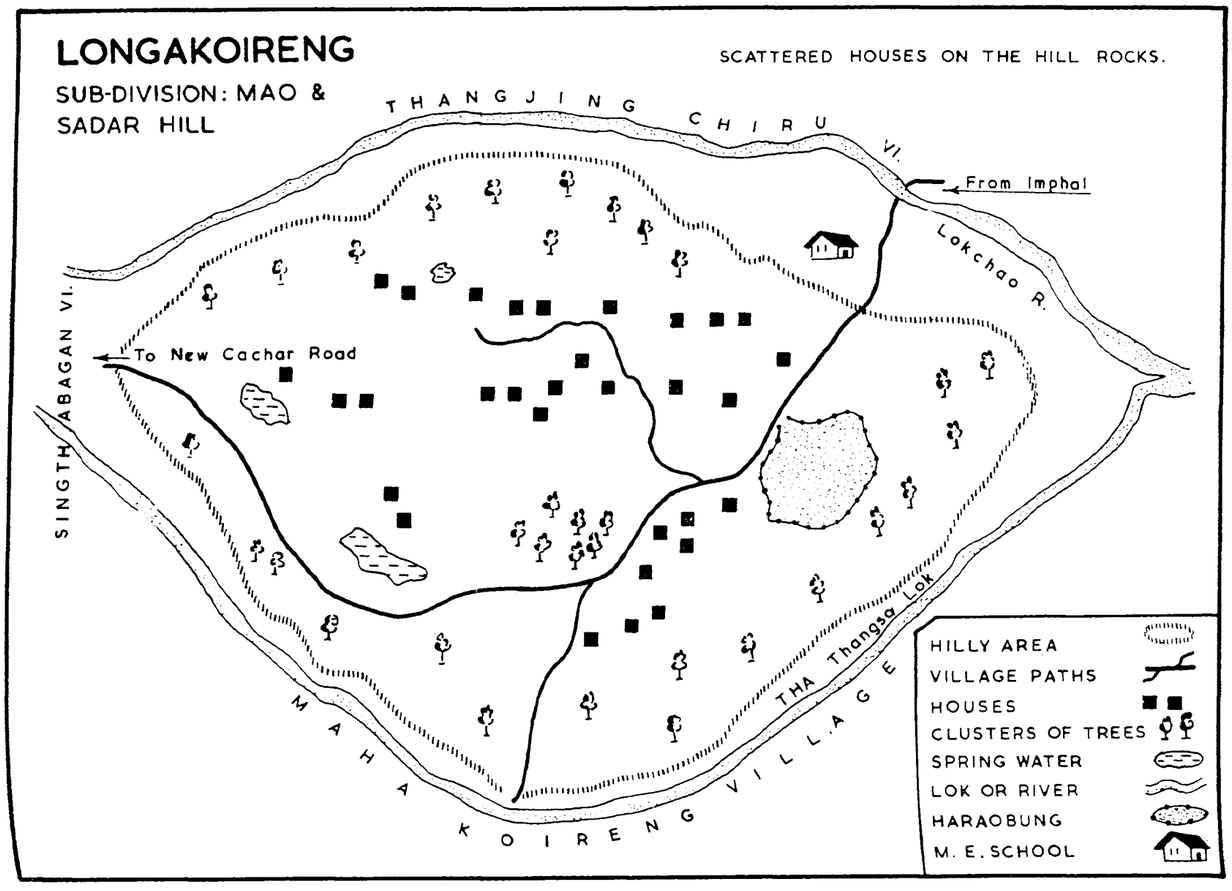
Every Manipuri house in the plain has an earthen plinth foundation of a rectangular shape. The height of the plinth may vary

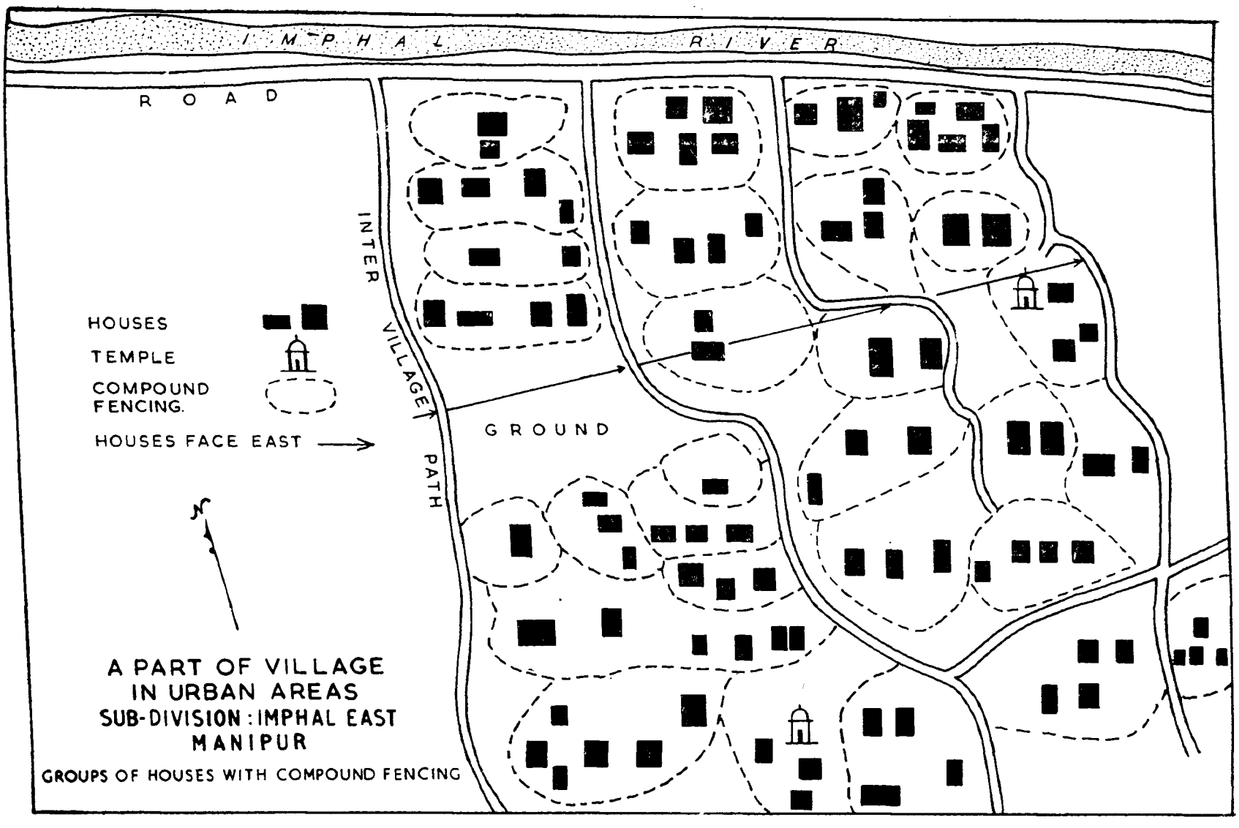
from about one foot to three feet or so. All the houses have a verandah on the front side but partitions inside the house are generally absent. The materials used are wood, bamboo, 'e' (imperata cylindrica) and 'singut' (sacchrum sponteneum). Walls are plastered with a mixture of mud, cow-dung, and chopped straw. Houses may have either two or four sloping roofs. Houses having four sloping roofs must have two gables, one at each end of the house. Houses having four sloping roofs are the traditional residential house which is known locally as the 'yumjao' meaning the 'big house'. A house having only two sloping roofs is called 'sangoi' in Manipuri. With the exception of the main entrance door and a back door, windows are rare in such houses.

The house types described above are found in the whole of the Imphal valley. However, in the urban-oriented areas of the valley, in addition to 'yumjaos' and 'sangois', many other houses having brick-foundations, brick-walls, and Corrugated Iron sheet roofs are also seen here and there. Such houses, which may be called 'modern' according to the Manipur standard, are built in the 'yumjao' and 'sangoi' styles as well as in their modified styles by providing more windows and sometimes with glass-panes. Double-storeyed houses are not uncommon in Imphal, but modern flats displaying modern architectural designs are still a rarity in the whole of Manipur.

Villages of Muslims, tribals, and other backward classes living in the valley are situated at some distance from one another as well as from the villages of the proper Manipuri Hindus. But their house types do not differ at all from that of the Manipuri Hindus.




LONGAKOIRENG
SUB-DIVISION: MAO & SADAR HILL
SCATTERED HOUSES ON THE HILL ROCKS.
THANGJING CHIRU VI.
From Imphal
Lokchao R.
SINGTH ABAGAN VI.
To New Cachar Road
THA Thangsa Lok
MAHAKOIRENG VILLAGE
HILLY AREA
VILLAGE PATHS
HOUSES
CLUSTERS OF TREES
SPRING WATER
LOK OR RIVER
HARAOBUNG
M. E. SCHOOL


IMPHAL RIVER
ROAD
INTER VILLAGE PATH
GROUND
HOUSES
TEMPLE
COMPOUND FENCING.
HOUSES FACE EAST
A PART OF VILLAGE
IN URBAN AREAS
SUB-DIVISION: IMPHAL EAST
MANIPUR
GROUPS OF HOUSES WITH COMPOUND FENCING

TRIPURA

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Settlement pattern and hut types

Tripura is a frontier Territory, situated on the boundary of East Pakistan and comprising a large portion of hilly tracts. Its shape from north-east to south-west approximates to that of an obtuse angled traingle, broader at the middle than at the upper and lower extremities. The surface of the country undulating and broken by frequent low hills covered with forests. There are six principal longitudinal ranges of hills increasing in height towards the East. These ranges are situated at an interval of about 12 miles and run north to south. There are long and varied valleys of the rivers of Tripura extending over a network Sub-division and formed of deep alluvial deposits of extreme richness and excellently suited to the growth of bumper crops. The surface of the valleys is covered by various streams which pouring down from the hills during rainy season made for themselves passages to rivers through the fertile soil.

The hills have risen abruptly and slopes have eased gradually near the top which are nearly flat—a peculiar feature of the Tripura hills. The principal hill ranges beginning from the east are Jampai (highest point. Be'ting Sib, 3,200′ and Jampai 1,960′), Sakatlong (highest point Shakan, 2,578′), Longtharai (highest point, Phingpur 1,581′), Atharamura (highest point Jhariamura 1,500′ and Atharamura 1,432′). These hills form watersheds from which the drainage pours down west into the river Meghna of East Pakistan by the river Khowai, Juri, Manu, Dhalai, Howrah, Longai and Gumti and South west into the Bay of Bengal by the rivers Feni and Mohori.

90·98 per cent of the population in this hilly territory live in 4,932 villages and paras. Such villages and paras are of different population sizes. Villages with population of less than 200 are in the largest proportion (73·8 per cent), while those with population of 200 to 499, 500 to 999, 1,000 to 1,999 and 2,000 to 4,999 are 15·3 per cent 7·4 per cent, 2·9 per cent and 0·6 per cent respectively. Villages of larger population sizes have grown in the plain while in the hilly tracts villages or paras of the smallest type are seen generally. It is interesting to study the physical form taken by a village.

At the time of houselisting and housenumbering, notional maps of villages showing (i) boundary, (ii) roads, streets, lanes and tracks, (iii) tanks and ponds, (iv) other important land marks e.g., temple, mosque, river, drains etc. and (v) sequence of census houses were prepared by enumerators so as to facilitate housenumbering in definite directions and their physical verification and identification at the enumeration stage. Although these notional maps do not show the physical features in all their aspects and cadestral survey of villages is yet to be finalised, the different forms taken by village can be discerned from the notional maps.

Of 4,932 inhabited villages, 10 (0·2 per cent) villages are inhabited exclusively by persons belonging to Scheduled Castes, 2,525 (51·2 per cent) by persons belonging to Scheduled Tribes alone, 65 (1·3 per cent) by person belonging to both Scheduled Castes and Scheduled Tribes, 454 (9·2 per cent) by person belonging to Scheduled Castes and others, 907 (18·4 per cent) by persons belonging to Scheduled Tribes and others, 298 (6 per cent) by persons belonging to others i.e., excluding Scheduled Castes and Scheduled Tribes) and 673 (13·7 per cent) villages inhabited by a mixed population belonging to Scheduled Castes and Scheduled Tribes and others.

Settlement patterns

Viewed from the angle of topography and characteristics of the settlement patterns and also hut types Tripura may be arbitrarily divided into hilly region and plain. The former runs from Dharmanagar Sub-Division to Sabroom embracing greater parts of the eastern Sub-divisions and its extremities merge with Assam hills in the north and Chittagong hills in the south while the plain prevails in the western part from north to south.

The north western and south western borders of Tripura are demarcated from East Pakistan by Sylhet, Comilla and Noakhali whereas the north eastern border

is bounded by Assam hills and the south eastern by Chittagong hill tracts of East Pakistan. Further, it is interesting to note that the hilly region is mainly inhabited by the tribal communities while the plain is inhabited mostly by people of other communities. Even after partition of Bengal and after a large exodous of people from East Pakistan, the situation does not seem much disturbed, because migration in the north eastern and south eastern part of Tripura accumulated mainly the tribes due to concentration of tribes of religion other than Islam beyond these frontiers whereas north western and south western sub-divisions and western portion of eastern sub-divisions witnessed immigration of people other than tribe from Noakhali, Sylhet and Comilla. People from these places seldom moved further east of the territory in the north and south save by the force of circumstance as they found the plains of north west and south west Sub-divisions approximated their original habitation in East Pakistan more closely than the hilly region of Tripura. Further, such habitation afforded the pursuit of their original occupation namely plough cultivation more easily. Drawn by similar reasons, tribal refugees, concentrated in the north east and south east hilly part of the territory.

Settlement pattern does not show much variation in the tribal villages. Households are built either on slopes or top of hillocks and rarely in the plain. There are number of huts found clustered together in one place giving the residential pattern a distinct agglomerate look and each of these clusters is known as 'Parah' or 'Punji'. Again huts are constructed around an inner courtyard, the entrances of huts face the inner courtyard. There is no regular path but a number of bridle paths connect these huts with one another and also with the main road or path which leads to the neighbouring bazar, health centre, Tehsil headquarters.

In the mixed villages households are seen scattered and it is usually observed that in such villages tribal households clustered as usually in the slopes of hillocks while non-tribal households are spread over their agricultural land or are situated in the outskirt singly or in a group, thus giving the whole village an agglomerate but scattered pattern.

Purely non-tribal villages are situated in plains or undulating lands and in such cases households are either distributed over their agricultural field or built at places adjoining to their agricultural land. In the former cases households are more or less scattered whereas in the later cases households are built all along on either side of the main village path thus giving the village as a whole a linear type of settlement pattern.

Selection of habitational sites in all these cases are based mainly on the following consideration.

(i) Easy availability of water supply,

(ii) Proximity of habitation to food sources and

(iii) Protection from the attack of wild animals and natural catastrophies etc.

Hill tops and slopes are generally preferred by the tribals because of habitation in dry soil, protection from animal and supervision of the cultivated land either in valleys or slopes of adjoining hills while settlement in the plains at the outskirt or in the midst of agricultural land affords smooth supervision of their agricultural field and easy availability of water both for drinking as well as irrigation purposes.

In addition to the generalised but most common patterns described above, a perusal of the notional maps reveals other types of villages in this territory which can be placed under four sub-groups as follows :—

I. *Modifications of dispersed pattern:*

1/34/40 (*a*) Dispersed clusters
1/29/26 (*b*) Dispersed clusters on either sides of the village roads
2/2/93 (*c*) Shapeless clusters
5/5/5 (*d*) Shapeless clusters on one side of the Cherra
9/1/18 (*e*) Shapeless cluster of houses on both sides of the road
9/4/5 (*f*) Shapeless cluster belonging to the massive type where there is no good road
9/5/7 (*g*) Dispersed arrangement along the road
8/3/142 (*h*) Shapeless cluster of houses on both sides of Cherra
10/3/1 (*i*) Shapeless clusters on one side of the village tracks
7/1/15 (*j*) Dispersed clusters along water courses

II. *Modifications of linear patterns :*

1/31/28 (*a*) Linear clusters on one side of the road
4/1/151 (*b*) Linear cluster on both sides of the road
9/3/6 (*c*) Linear cluster of houses either on one side or both sides of almost parallel village tracks branching off from the main road

10/2/6 (*d*) Linear cluster in an elongated form

III. *Modifications of agglomerate patterns :*

1/1/15 (*a*) Agglomerate with straight roads running parallel or at right angles to one another
9/5/88 (*b*) Rectangular cluster with straight roads running parallel or at right angle to one another

IV. *Modifications of Isolated type :*

1/35/44 (*a*) Isolated house
3/1/18 (*b*) Isolated groups of houses
9/7/156 (*c*) Isolated groups of houses intercepted by jungles

In course of examination of the maps it has been found that instances are not rare when it becomes difficult to classify them in one category or another. The above sub-groups can be placed under the following four orders :—

(1) Shapeless cluster or agglomerate with roads not forming an integral part of the design. These are mostly of the dispersed type inasmuch as a village shows an assemblage of discrete clusters of comparatively small size. They may be on both sides of the roads or along the water courses isolated by hills, jungles or fields. There is also existence of villages of the massive type without any road except foot-tracks.

(2) Linear cluster or assemblage either on one side or on both sides of almost parallel village tracks branching off from the main road. Linear cluster in an elongated form is also seen in a small proportion. This type is noticeable mostly in tea garden areas, new colonies set up by the Rehabilitation Department of the Administration and in villages which have been improved under development projects or newly grown.

(3) Rectangular cluster or agglomerate with straight roads running parallel or at right angles to one another : These are mostly seen in the plains, particularly in Sadar and Belonia Sub-divisions.

(4) Isolated houses or groups of houses interspersed by jungles, hills or lungas forming one village for purposes of census or collection of rent or taxes. Almost 50 per cent of the villages are of this type and these are mostly in the hilly areas.

Hut types

Regarding hut types, there is nothing worth-mentioning in villages located in the plains and inhabited by people of non-tribal communities. Hut types are very similar as found in villages of East Pakistan namely two sloped gabble roofed and four sloped tarja or mud-walled hut built either on low or high plinth i.e., 6" to 1½". Wall meterials as already mentioned are bamboo, wood and tarja. The first two materials are used mainly for the construction of the framework of the hut while the last one is used for wrapping the wall. Thatching of roof in majority of these huts is done with 'Chan grass' and Corrugated Iron Sheet is used for a few. Tarja is nothing but the local version of bamboo mats woven in diagonal or oblique twill pattern. Occurrence of mud-walled hut is very rare, the reason of which is not far to seek. Firstly bamboo is grown abundantly in this territory, hence construction of hut with this material is cheap and secondly plain lands are often flooded during rainy season hence repair of damage caused in the mud-walled hut entail heavy expenditure. It has further been observed that in these villages high plinth huts are built on higher elevation than huts of low plinth which are built on low land, the reasons of which may again be attributed to the occasional flood and marshy condition of the place.

Plinths are gradually replaced by piles or stilts as one moves from plain to hill. Huts are invariably two sloped thatched with 'Chan grass' and walls are made of 'tarja'. Not only the hut type is different but the people occupying the hut are also different. The question therefore, arises whether piles appear because the people are different not only in physical appearance but also in customs and habit. The answer partly conforms to this question because it bears tradition of the tribes but at the same time it suggests that adoption of piles is absolutely essential for erection of huts on slopes due to number of reasons. At the outset slopes do not provide requisite space and also smooth surface for the construction of plinth huts; these defects are however, amended by the construction of stilts and laying down of platform over these for the building of hut proper. Further it has some protective value because such construction saves the inhabitants from the attack of wild animals and also reduces resistance afforded to the passage of water which rolls down the slopes in large volume with great force after every shower which may appear innocent in the plains. Had these huts been

constructed on plinth, these would have been swept away by the rushing water, if not wholly removed, at least damaged to such an extent as to put the inhabitants often into great inconvenience. This type of hut is locally known as 'Tong Ghar' and the distribution of which can be traced as far in the north upto Khasia and Jayantia hills, while its southern limit is lost in the Chittagong hill tracts of East Pakistan. Although pile huts on stilts are also found in other parts even in the plains of this territory, it appears that its distribution is mainly through a particular belt. In the construction of stilt hut tradition plays a great part as is evident by the fact that often solitary or a few stilt huts are seen in the plains in midst of plinth huts, being occupied by members of tribal community. It is quite apparent that in such circumstance pile huts can have any practical utility or have environmental necessities except that poultry and livestock can be housed, under the house and in the space created by the stilts.

Detailed description of different types of representative huts of villages of the territory

1. Rectangular ground plan with inclined roof :

(a) *Stilt hut (Tong Ghar)*

This is the most representative type of huts of the territory. As mentioned earlier, it is mainly constructed and dwelt in by the Tribals mainly the Riangs, the Kuki, the Halam and the Chakmas and the Mags. A typical 'Tong Ghar' is built on a bamboo platform (Machang), erected on piles of stilts 4-6' in height. The hut is two sloped (gabled) and thatched with 'Chan grass'; and the walls of which are made of bamboo splits. It is rectangular in shape measuring 18' × 14' × 10' in length, breadth and height respectively. The ground plan is rectangular and very simple which varies from 250—400 sq. ft. in front of the 'tong ghar' the bamboo platform is prolonged which is covered with a portico. This portion of the hut is used by the tribals for receiving guests and friends and for weaving by their women folk. Similarly the rear is prolonged likewise but this portion unlike the front is not covered with roof or portico. This portion is used for washing of clothes, utensils and for other household work. The livestock are kept usually under the platform (Machang), but well-to-do tribals have separate sheds for this purpose.

Entrance to the 'tong' house is through a single rectangular door measuring 4' × 3' and a sort of ladder (a log of wood) with notches cut into it is used for climbing in o the 'tong' houses through the door. There is another rectangular outlet at the back side of the 'tong'. The 'tong' is normally used both for cooking and for sleeping purposes and there are 4 low dunnages at four corners, each of which is used by the members of the family as cot. In the centre of the hut lies the fire place, besides which there is a high dunnage on which household utensils, stored water etc. are kept. On the four walls of the hut there are projections in the form of shelfs which are used for keeping different household utensil, weapons of ware and chase, agricultural implements etc. Now-a-days many 'tong' huts are seen partitioned into chambers according to the necessity.

(b) *Two sloped hut (Do-Chala) and four sloped hut (Char-Chala)*

In the general construction and also plan both two sloped and four sloped huts are alike. The difference is only in the roof. In the former case the roof is gabled and two-sloped while in the latter case it is four sloped. These two types differ from the pile hut in the fact that the former types are built on plinths and the latter one on piles. The plinth height veries from 1' to 2'. Building materials are bamboo and wood for the framework of the hut with mud and 'tarja' for the walls. 'Chan grass', tiles or Corrugated Iron sheets are used for roof.

The ground plans of these huts are rectangular and the areas of these huts vary from 200 to 400 sq. ft.

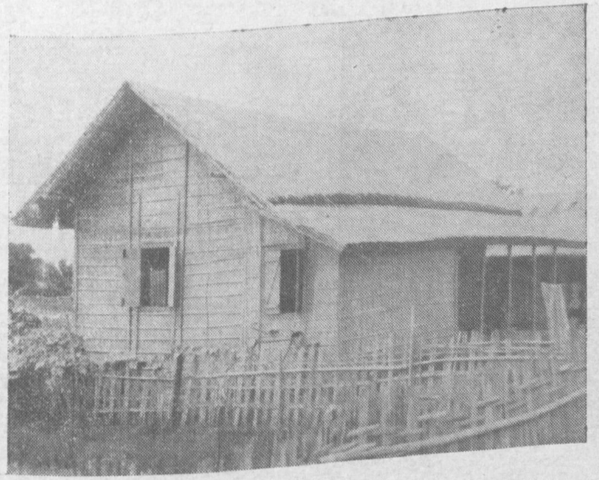
A typical two sloped or four sloped hut may be single room house or partitioned into a number of rooms. These huts are always associated with separate kitchen, cow-shed granary etc., within a hedged or fenced compound.

2. Rectangular ground plan with flat or hemispherical roof :

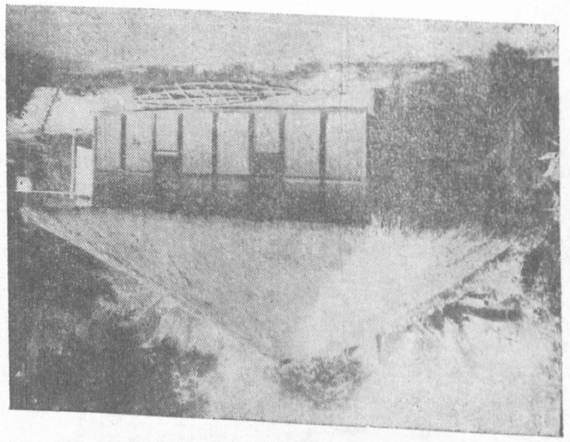
Huts of these types are not usually constructed for dwelling purposes but for cow-shed, granary and hay-stack. In the plain almost all the well-to-do families possess these huts one or another within their household compound. The ground plan is rectangular and the roof is either flat or hemispherical or semi-circular thatched with 'chan' leaves or straws. Walls may or may not be present and are invariably made of bamboo splits and reeds without any covering of bamboo mats or mud plasters.

Two sloped 'Tarja' hut on stilts (Tong Ghar)

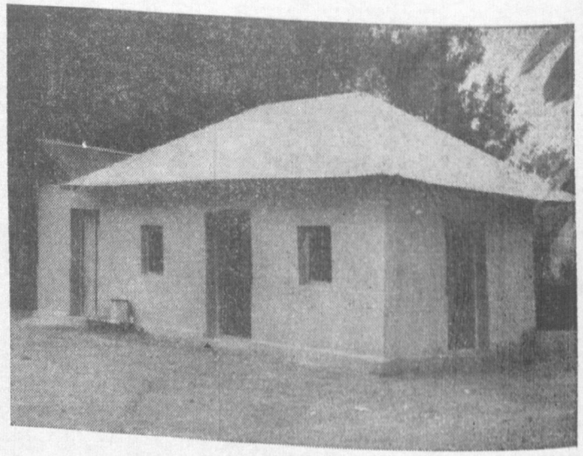
Hemisphenical roofed 'Tarja' walled hut on high plinth.



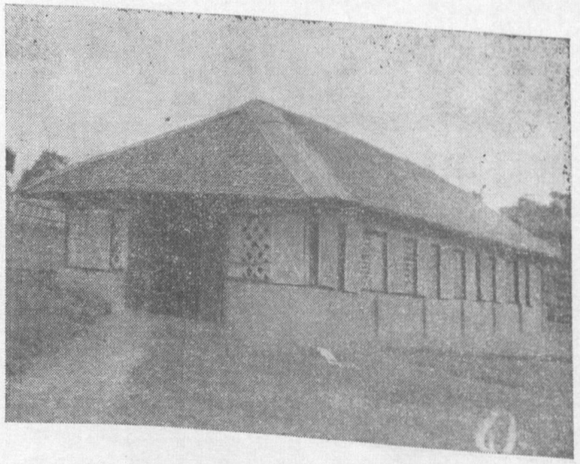
Two sloped 'Tarja' hut on low plinth.



Four sloped 'Tarja' hut on low plinth.



Four sloped mud hut on low plinth.



Four sloped 'Tarja' hut on low plinth.

NORTH-EAST FRONTIER AGENCY

HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

I SUBANSIRI FRONTIER DIVISION

Apatani house

The houses are raised on high piles on both sides of a narrow street in a systematic manner, leaving hardly any space between two houses. There are assembly platforms, within the village. Small narrow bye-lanes diverge from the main street and lead to the groves of the jungle. Houses may be constructed on both sides of these bye-lanes. No clanwise lane or street exists.

However, from the standpoint of planning, no social custom or religious belief is connected. Unlike the Dafla houses, an Apatani house is not long enough to accommodate a number of households. Houses huddle close to each other, giving the roofs of the houses a view of a continuous pyramidal chain from a height. Not all houses are fenced into demarcated area of the house.

The houses are raised on wooden piles a few feet above the ground. Both sides of the houses are extended to fenced in open verandahs. The front verandah is called 'Blago' and the back one 'Uko'. The house consists of a main hall and two verandahs. From the main hall at the front side a small portion is separated by bamboo-woven partition which is called 'Blachi'. One or two sets of mortar and pestle rest in the 'Blachi' which is mainly meant for grinding, husking and winnowing the paddy and a part of it is also used for keeping poultry. The floor of the house is reached by an upright notched tree trunk at the verandah from the ground at both sides of the house.

The width of the house varies from 12′—18′ and the length depends on the number of hearths within it. But in a Apatani house the number of hearths is limited to a maximum of three. Generally, unlike the Daflas, they are not polygenous in general. However, after the son's marriage, he may have a separate establishment under the same roof of his father's house unless, either he or his father can afford to construct a new house either for the father or the son.

The material used are crude gifts of nature growing in abundance in the nearby jungles and groves, and apparently commonsense is applied to build a strong and durable house. Bamboo, crude wooden planks, cane, paddy straw, etc., are the common raw materials.

The roof is made of dry paddy straw, cane leaves or thatching grass growing in wasteland. Due to constant smoke inside the house and lack of ventilation the ceiling becomes black in the course of time. Below the roof, is a long ceiling made of flattened bamboo where articles of occasional use are kept. Walls are made of multiple layers of mat made of flattened bamboo, where no window exists for ventilation. The only ventilation is provided by the two doors facing each other. The doors are exits to the 'Blachi'.

The floor is made of flattened bamboo. The fire place is a rectangle of about 3′-4′ in the middle of the house, if the number is one. Earth, filled in wooden tray is supported, on the floor, where portion of floor according to the size of the tray is detached. Stones are placed in the middle of the fireplace as tripod to be used as oven. The fireplaces run in line, in case two or three are there. On the sides of the fireplace mats are spread, leaving free passage on one side in line with the two doors. The free passage is called 'Milo Ingyo'. The front side inside the house is called 'Ago Apung' and the rear is 'Ura Apung'. The wall opposite to the free passage is called 'Dugya'. Wooden trays are hung on lofts in series for drying fire wood, millet etc. Utensils are mostly kept round the hearth, scattered here and there. Cane baskets, bamboo chutes, tubes, hollowed bottle gourd etc. are hung on the wall inside or on the loft over the fireplace. The house is never tidy and things are not kept in a systematic manner.

They construct latrines called 'Neka'. The device is functional and serves a variety of purposes. It functions as a slop basin, rubbish bucket and at the same time latrine. There are two narrow doors both at the front and back, and outside the wall runs a narrow shelf along the length of the house, below which there is a fenced in enclosure where pigs eagerly await the droppings from above. Outside the house, a shrine is erected during 'Mlokko' festival afresh each year.

The granary, usually lies outside the village for fear of catching fire. If the

household has ample grounds, the master may choose to construct his granary behind his house.

Bangru house type

There is not much of dissimilarity between the Dafla and Bangru house types except for the width of Bangru houses, which is comparatively large. The houses vary from 2 to as many as 4/5 kitchens (chulas). The construction is of bamboos, logs and thatch. A big log sliced would serve as a door. Normally there are no windows. In a few houses, however, I have observed small door like windows on the one side of the house (as shown in the sketch), in addition to the two doors. The average height from the earth is about ten feet. The inside flooring is of bamboos, in between the roof and floor, a portion (about 5 feet high from flooring) is like a 'machang' and serves as a store room. In a corner on one side of the house there is a small room with a door (which normally stores their property, deogonti, etc.).

Solung house type

Solung houses are on mountain slopes, are very small with one kitchen each, and from the construction it appears, they have more been constructed to pass nights and chilly days than for permanent shelter. Though the solungs (until recently slaves) do not change their settlements frequently, yet as most of the time they are out hunting, collecting "tasse" or bamboo-shogts, their stay in the house is not long.

Unlike Bangru houses, Solung houses are of bamboos and "tasse" leaves criss-crossed forming the side walls.

Solung houses have no upper or side store rooms (they possess nothing worth storing). There are no windows.

Locational pattern

There is no specific locational pattern, houses being constructed as per availability of flat space. The houses in a village vary from as many as 16/18 to 1/2. The main criterion for a village is availability of land for cultivation and "tasse" plantation.

Brief descriptive note on village layouts

The village Ramsing falls under Taliha Administrative Centre of Daporijo Subdivision of Siang Frontier Division. The Divisional and Subdivisional headquarters are at Daporijo and Along respectively.

This village is situated on the slope of a hillock on the left bank of the river Subansiri and at an altitude of 2,500 ft. approximately above the sea level. The village may be approached from Taliha and Daporijo by porter track only. Distance from Taliha and Daporijo to the village is 6 and 27 miles respectively. The track is maintained by the Central Public Works Department. The nearest school and dispensary are at Taliha and the nearest Post Office is at Daporijo.

The total inhabited area covers an area of 2 acres. There are ten houses consisting of 25 families with a population of 114 persons. Out of total 25 families 19 belong to the Mara clan, 3 belong to the Tali clan, and the remaining 3 belong to three different clans, Nipung, Yogia and Konya. Families belonging to different clan may reside under one roof. Each household has its separate granary. Granaries are constructed apart from the main dwelling house. For recreation there is one volleyball playground. There are 4 water sources. Except one water source which is used in winter days, all others are in use throughout the year. None has got a permanent homestead area. After 3 or 4 years a house is reconstructed and one is at liberty to select suitable land as all the inhabited area is common village land.

Descriptive note on house construction prevalent in Taquin villages of Daporijo Subdivision of Subansiri

Houses are generally bamboo structures. Where bamboo is not available in plenty, wooden posts are used. For tying twine prepared out of bamboo and cane is used. For thatching, leaves of banana and screwpine and local 'Tako' are used. No other material is used for house construction.

The life of such houses being 3 to 4 years, construction of new houses is an important recurring feature for which people remain busy during winter days. House construction is done on community basis. Due to the absence of any means of transport all materials are collected from the jungle and transported by human beings to the village. Lighter loads such as leaves and cane strings are carried by tying a band strap around the forehead and heavier loads are carried on the shoulders. Females help only in transporting lighter loads.

Before the construction of the house starts, the site has to be selected. For this they examine a particular place by divination. They sacrifice a lot of eggs for

this purpose. After the site is selected, construction starts. There are no directional preferences. Houses are like barracks as one house accommodates more than one family. Each house has two slopes.

The surface of the land being undulated and on slopes of hillock, the level for the floor is obtained by driving bamboo stilts. The shortest stilts are on the hillside and the longer ones are away from it. On these stilts are tied bamboo beams. On this solid framework, mats of thick bamboo splits are placed to form a floor. The platform is of rectangular shape. The size of the platform varies from house to house. Another rectangle of smaller dimensions extends to front and left. Towards the right side runs a small corridor. The large platform forms the main house. It is walled on all sides. The material used for walling is bamboo. An woven frame of split thin sticks of bamboos is made and later banana sheaths are inserted in it. There is no window. There are more than two to four doors on the main platform. The front door has a ladder leading down to the ground. The ladder is made of a wooden log bearing notches. The verandahs are made by placing bamboos to form a floor.

After constructing the main platform, (ceiling and all side walls), thatching is undertaken. First of all rafts are provided on both sides resting on purlin and later the roof is thatched with dried banana leaves or Tako leaves which are tied to the bamboo frame by twines of bamboo strips. The purlin and posts are supported by cross beams. The vertical poles are also supported by cross beams.

The pigsty is constructed at the rear of the main platform. The floor of the pigsty is a little lower than the floor of the house. The walls are of bamboo or wooden planks and no separate roof is laid as the main house roof covers this portion also. A bamboo mat is spread as a roof over the pigsty with holes in it which serve the purpose of latrines. The floor of the pigsty is constructed by putting bamboo or rough wooden hewn planks. The walling of pigsty is constructed by tying bamboos. Upper Tagins generally construct the pigsty on the ground floor.

The main feature of the hall is the fireplace. Generally the number of fireplaces represents the number of families residing in a house. The fireplaces are approximately in square shape 2'—4"×2'—6". After the complete floor is constructed, the floor is cut, covered with thin sticks and earth. The usual depth of the fireplace is kept one and a half feet. A perimeter of wood is made which prevents the bamboo floor from catching fire. Three stone slabs of 9" to 10" height are fixed vertically in the earth to make an oven. Over the fireplace there are three trays suspended one over the other. The lowest tray is made of three or four sticks tied together with cane and this is used for smoking fish and meat. The next tray higher to it is a bigger one with a mat. This is used for drying paddy and other grains. The third tray, which is a bit higher to the next one is also a bamboo mat and used for keeping utensils. The one next to the constantly burning fire gets its bottom quite pitched.

The main entrance to a Tagin house is by the front right-most corner or through the covered portico. The front side verandah, called 'Jerji', is used for keeping paddy husking apparatus, water containers (long bamboo tubes), firewood. This place is also used for sitting and doing craft work as weaving and making bamboo or cane articles. The right side verandah called 'Neka' has usually a width of 3 feet and is used for keeping fowls in bamboo—made cages known as 'Peter'. The left side verandah called 'Tungre' has a breadth of 8 feet. This portion is used for sitting and receiving guests. A door is provided in the rear side wall which lead to the pigsty called 'Gumre'. In the rear side the extended portion of usual breadth 2½' called 'Peray' is used for keeping fowls.

Inside the main house the fireplace called 'Merung' serves the purpose of a kitchen. The places around the fireplace are used for sitting and sleeping. There is no fixed rule as to which side one can sleep. Husband and wife sleep on one side and the children are allowed to occupy the other side. If any guest comes, he is allowed to occupy the side facing the front door. The front side called 'Odung, is generally meant for guests. The portion between two fireplaces called 'Niasu' is also used for sleeping. The portion facing the pigsty called 'Nioding' is also used for sleeping. By the side of wall, a store room called 'Ereng' is provided. Here the vats used for storing homebrewed beer are kept.

Besides, some baskets containing edible things are kept. The side wall is decorated by keeping skulls of deer, jaws of domesticated pigs, horns of domesticated mithuns killed on occasions such as sickness, marriage, etc. Below them are stacked bamboos and flowers made of bamboo shavings used at the time of sacrifices. This place is also used for keeping arms such as bows and arrows, daos, etc. This portion is called 'Biagu-Ratem'. A look at the Biagu will give away the householder's prowess and economic status.

There is no provision for smoke outlets. When all the ovens are in use, the inside of the house is filled with smoke. It takes considerable time to clear through the splits of bamboo wall. The smoke is a preservative of bamboo against weevils.

II LOHIT FRONTIER DIVISION

I. Mishmi village layout and location pattern

Mishmis are individualists by nature and live at a distance from each other. This individualist attitude resulting in the formation of small villages has its origins in blood feuds, but is also due to lack of sufficient flat ground or favourable hillslopes for constructing many houses. The villages have some *jhum* land near about. But in most cases, cultivable land exists at a distance of a few miles. This is found only in small patches at each place.

A village consists of houses which are neither in a row nor in a line. The village springs up according to availability of space and kinship. Houses do not face each other.

The village has no drainage system. It is cleaned by rain water.

Drinking water is procured from nearby rivers from mountain streams or springs. The waterpoint is sometimes a long way off from the village.

A reason for keeping their cultivable land far from the village is that domestic pigs and mithuns can cause damage to growing crops.

There is no boundary to a village, but on one side each village has a bamboo fencing and a gate through which persons can enter.

Though there is no hard and fast rule to construct houses clanwise, it has been found that people of one clan generally cluster in the same area.

Due to lack of enough flat land, large village with many houses, have them constructed on slopes, right from the top down to the bottom so that the village looks like a pyramidal beehive.

There are broad tracks or roads in the village and foot-paths are used by the people.

Houses in a village are not in a row although they are adjacent to each other. Houses are about 500 yards apart from each other. There is no hard and fast rule as to where the houses are to be constructed. The houses are long ones, made of bamboo, wood, cane and with thatch grass roofing.

Houses are basha type and have partitions. Each room is occupied by a married couple or relatives. Houses are oblong in shape and have bamboo structures standing on wooden or bamboo stilts fixed in the ground. The whole house stands on a wooden or bamboo structure. It has a portico in front where people sit and talk after work. There are steps made of bamboo, or wood fixed on one side, slanting below the platform. The floor is made of bamboo tied with cane or wire. The superstructure is of bamboo with plank or bamboo walling. The roof is of thatch grass. The forward compartment next to the portico is used as a latrine and the first room at the entrance is used by guests. Mishmi houses rarely have windows. The long house has one corridor stretching all along the house from the entrance to the extreme end. Persons enter the rooms along this corridor. In some houses, there are exits in the middle and people enter from there. Most of the houses have a floor space of 45′×15′ partitioned into the required number of rooms depending on the size of the family. There is a hearth in each room where different groups cook their food. Pigs are kept under the house and serve as scavengers. The granary of each house is situated close by and is a separate small out-house where the harvest produce is stored. The Mishmis like all other tribals often store their valuables buried deep in the grain. The poultry are kept in small hencoops on either side of the entrance.

The inside of each house has its walls decorated with the horns of mithuns, buffaloes, pigs, cows etc. slain at feasts and these are evidence of the importance of the man.

No one with any knowledge of Mishmi etiquette would dare to enter from the exit side.

The entrance door to the house is known as Manthang (Miju), Haga (Digaru) and the exit door as Mangung (Miju) Ngung (Digaru). The houses invariably have a gentle incline towards one side. This is to keep the house firmly standing against prevailing fierce winds and to prevent people sleeping round the fires inside at night from rolling into the fire when they have had a little too much apong. In each house there is an inner overhead loft on which all extra food stuff is kept. It has a ladder leading up to it. Big bamboo containers are placed against the walls inside.

There is a small cradle-like platform suspended above each fire. Meat is kept on it for preservation by smoking. Chillies, tea, and salt in hollow bamboo containers are also kept here.

III LOHIT FRONTIER DIVISION DIBANG VALLEY

II. Idu Mishmi

Dibang Valley is the land of villages. There is not a single township except Roing and Anini which is the administrative centre rapidly growing up. The villages are located along the course of the main rivers, the Dri, Mathun, Talon, Dibang, Ithun, Ahui, Emra and Sissiri. For obvious reasons of water supply and cultivation they keep close to hillslopes on the rivers particularly in the upper ranges in Dibang Valley. In recent years, owing to the establishment of the administrative centre at Roing, some villages have cropped up to avail themselves of modern facilities.

Idus are very selective in choosing a village site. Normally they like the sunny or eastern sides of hillslopes. They scrupulously avoid slopes susceptible to landslide and those which do not get sunshine due to overlooking high peaks.

The guiding principle of selecting a village site is the availability of building materials such as bamboo and sungrass. A supremely important precondition is the water source to ensure a constant supply of water.

The second factor which also influences the selection of a village site is the availability of cultivable land on which enough food can be grown. This explains why villages sprawl up within short distance of each other in Upper Dri valley and also in Ithun valley whereas in other places of Dibang valley one would scarcely find such congestion in location.

Thirdly, a social factor that has great bearing on village locational pattern is the age-old social custom of vendetta. Due to this custom of retaliatory killing a village of one clan hostile to another does not cultivate in the same zone.

A family consists of husband and wife and also children so long as they do not attain marriageable age or are married off. The son will break away from the family unit of his father as soon as he marries. He wants to be completely dependent on himself which includes his wife. Under the circumstances the primary consideration for selection of a village site is to ensure natural protection and cohesion. The number of houses varies considerably from village to village. A clan inhabiting a village gradually expands to split up into several villages which satisfies their individualistic pride. And what is more is the fact that fresh cultivable areas are also to be brought into the picture to provide food for the growing population.

In this process a peculiar village pattern system has developed in upper Dibang valley where one would find a village comprising of as few as even one house and another village comprising of twenty to thirty houses.

Layout of villages

The villages are laid out rather haphazard. They do not follow any discernible plan or principle. This may be due to the hilly terrain and undulating surface. The village is a medley of huts without any plan.

House types

All houses of a Idu Mishmi village are for dwelling. There is no building for any other purpose in the village.

Granaries are found in almost all Mishmi villages, close to their houses. They are constructed on poles put up higher than the ordinary dwelling houses. They are closed from all sides with a single door in front.

Wooden planks are used for the floor, the walls are made of split bamboo matting. The roof is thatched on bamboo framework. Round wooden discs are placed to each pier just where the floor begins to keep away the rats from spoiling the grain.

Apart from these, there is no other construction which can be found in the village.

Idu Mishmi house is made of logs and bamboo tied with bamboo or cane ropes. The floor and walls are made of split bamboo matting. The roof is of the dochala type with thatches placed on the framework of bamboo and beams. The dwellings are constructed on a raised platform three to four feet above the ground. In the front there is a small verandah. Idu Mishmis are a polygamous tribe. The length of the house depends on the number of wives a man has. There will be a small room for each wife inside the house. The entrance door in the front is on the left side. The door is made of wooden plank. There is a small narrow apartment near the entrance which is used as a latrine. Then there is a big room in which the guest and bachelor members of the house generally sleep at night. In the middle of the room there is a fireplace on top of which a bamboo machang is hung for drying meat etc., and to keep fuel. After the big room the small rooms begin. There is a corridor which leads to each small room. Each room has a window on its right side, with a hearth in the middle. Outside each window there is a small platform provided with wooden planks where the hen-coop is kept. The left side wall of the house has no openings. There is another door at the rear which leads out of the house. Pigs are kept underneath the latrine. The pig pen is closed from all sides by bamboo walls.

Building material is available in the jungle. The site of the house is selected by the householders themselves. Villagers and relatives help in constructing the house. The household has to spend on 'U' (home-brewed liquor) and pigs to entertain the villages who contributed their labour.

III. Padams

1. *Locational* pattern of villages.—Padam villages are located in semi-plain areas of Dambuk and foothill areas of Roing. Out of eleven Padam villages seven are located on the main road between Roing and Sadiya. The remaining four villages are situated on the plains of Dambuk. Originally Padams of Dibang Valley belong to Damroe area of Siang Division. They have migrated to these areas mostly in search of better cultivable land and after emancipation from slavery.

The guiding principle of selecting a village site is the availability of cultivable land. Padams are good at growing paddy and vegetables. They are very keen on permanent cultivation. So the flat land of Dambuk and Roing areas has an added charm as village sites.

The second factor leading to the selection of village site is communication. As Padams are good at growing paddy and vegetables, they like to dispose of the surplus produce in markets. Market and communication are considered as determinants of village sites. Padam villages are therefore raised around the administrative centre and line of communication.

2. *Layout of villages*—The residential pattern of Padam villages in the Dibang Valley is well planned and the houses are aligned in a row. Each house maintains a distance of thirty to forty feet from the other. There is no clan cluster of houses.

In striking contrast to Idus, Padams enjoy a real community life and do not like the Idu's isolation. This explains why Padam villages are thickly populated and in recent years modern ideas of building houses in alignments suitable for model village have gained ground.

House types

Almost all houses in a Padam village are for living except one or two. Each village has a Moshup, a bachelor male dormitory. It is generally situated in the centre of the village. It is a long hall open in all sides. Most of the villages have a church, a single room building. Some of the villages have Lower Primary school.

Granaries are found in every Padam village. They are a little away from the residential buildings for protection against village fire. Apart from those there is no other construction in the village.

The dwellings of Padams have a bamboo and wooden beam structure tied with cane cables. The houses are on raised platforms. The floor is of rectangular shape. The houses are single room dwellings. On the main rectangular platform a room is raised. A long rectangular platform is extended in the front from the main building. The floor of the house is made of split bamboo matting or of wooden plank. This depends on the resourcefulness of the householder. Similarly, side walls are constructed with spilt bamboo matting or wooden plank. There is no window in the house. There are two doors, one at the front and another at the rear where a small platform is extended for the younger generation to sit. The fireplace is constructed in the centre of the room. A conical structure is raised from the ground up to the level of the floor filled with earth. An iron tripod stand is used for the hearth. Over the hearth hangs a square bamboo shelf which is used for drying fish, meat and fuel. There is no latrine in the house. People are used to going in the jungle to answer nature's call. The roof is of dochala type with thatches of leaves placed on a framework of bamboo and beams. Inside, the room is rather dark and smoky which preserves the wood and bamboo work from insect pests and keeps away mosquitoes and flies. One half of the front verandah is covered. The open portion of the verandah is used for drying grain and also sitting out while weaving. The covered verandah is also used for the same purpose to avoid the sun and rain.

Granaries are constructed on poles higher from the ground than ordinary dwelling houses and poles are provided with wooden discs below the floor to keep away rats. The granary is sealed on all sides with only one opening in the front. Wooden planks are used to make floors and walls. The roof is the same as on other dwelling houses.

Materials for construction of houses are available in the forest. When the question of a new house comes the village leaders select the house site. Materials are collected by the householder. All villagers lend a hand in constructing the house. The owner of the house does not have to pay any remuneration for the labour of the villagers but he has of course to spend on 'apong' (local beer) and pigs for entertaining the villager.

IV. Tibetan House Pattern

Tibetan houses are situated on flat land between hills. Houses are so situated that there are places in between two houses where vegetables can be grown.

Houses in a village are made of wooden posts, roughly-hewn wooden planks with a wooden floor. As plenty of soft pinewood is available in the area, people construct their houses entirely of wood. They sometimes use nails for joining the planks and posts. The house is built on a platform made of planks with posts fixed in the ground. The platform structure is at a height of 4/5 feet above the ground. The entrance is generally from the side of the house where a staircase made of wood is fixed to the platform. Wooden posts are first made and fixed in the ground. The house is protected on one side by a projection of the roof which serves as a sitting out-place. The walls of the houses are also made of thick roughly-hewn planks joined by nails. Each house has only one entrance door and as such the house is very dark. There are some apertures in the walls, which serve the purpose of windows. They have sliding shutters for these. The space between the ground and the floor of the house is used as a cowshed. The house is generally divided into compartments depending upon the number of the people in the house. The fireplace is located on one side of the main room. The roof of the house is also made of planks overlapping one another in such a manner that there is hardly any chance for rain water to leak into the house. The door of the house is also made of planks, is attached on one side by a hinge and can be closed at night. There is no separate fireplace in the house but the cooking place is used for warming oneself. There is a horizontal bar fixed near the fire which is used for drying meat on it. In the innermost room the owner and his family live while the remaining rooms are shared by others. Houses generally face the road.

Houses have no bathroom or lavatory of their own. When entering the house by the side with the projecting roof serving as an awning one enters the guest room where visitors stay. This is a very small room which cannot accommodate more than two or three persons. Each house has a wooden bunk or fixed bedstead and shelves inside. Pictures and newspaper cuttings are hung up. Each house has a fine array of utensils and bins for storing foodstuff. The housewife is proud of her kitchen utensils and brassware or aluminium pots and pans. One may find empty grenade containers, ammunition boxes etc. There are wooden benches and raised wooden platforms to sit on. There is a wooden balcony at the entrance where one can sit or sleep. It is covered partly by the projecting roof.

V. Khampti Village Layout and Location Pattern

Khampti villages are mostly situated on the plains. Villages have vegetable gardens, where the people grow their daily needs. There is no fixed direction the village should face. Houses are not constructed in a uniform order but according to convenience. Each village has a demarcated boundary and each house has its own boundary.

Drinking water is from wells or from the nearby river. In almost all the villages there is a Buddhist monastery (Bapuchang) where the people congregate daily or on special occasions. Houses have no private lavatory or bathroom and people resort to the jungle or riverside.

Generally there is no custom or convention that the people of the same clan should live in one place but they do so whenever possible.

There are fairly good roads in the village and the road from each house is connected with the main village road.

There is a drainage system in most of the villages to carry off rain water.

The people practise wet-rice cultivation and each village has a stretch of paddy fields where an enlightened form of cultivation is practised. The paddy fields are fenced into protect them from trespassing cattle. Every house has a granary where they keep the harvested paddy and other grain.

Khampti house pattern

Their houses are made of bamboo/wood bound by creeper vines, wire or cane. No metal is normally used in a typical Khampti house. The floor of the house is made of bamboo raised at a height of 4/5 feet from the ground. The houses are square in shape.

The posts are sometimes of bamboo and sometimes of wood depending on the availability of material. But in most cases they are of wood. The posts are fixed in the ground, with a rectangular plinth at a height of 4/5 feet on which the whole structure stands. There is a portico attached to every house which is climbed by a staircase made of bamboo or wood. The people hang their clothes to dry in the portico. They also use it for sitting out and for drying paddy and for husking. The main house has four walls made of palmyra leaves or plaited bamboo. The Khampti house normally has four pagoda-type roofs one above the other generally made of wood and sometimes bamboo.

The house is partitioned into 3/4 rooms according to necessity and the number of members in the family. Generally the area of the house is 50′ × 25′. Houses have doors made of plain planks, sometimes of bamboo and with provision for securing them from inside. Normally there are no windows in the house. Insides is usually dark.

After the portico there is a room open on the side of the portico. This room is generally for receiving and entertaining guests, who are also put up in it. At times household members also use this room as a kitchen.

The villages are not laid out on a systematic plan but houses are made to a specific pattern. There is no fixed direction towards which houses should face.

VI. The Meyor and Zekhring Lama

Village layout and location pattern

These people live on the extreme border of the Division between Walong and Kibithoo. Villages are situated on the flat land of Hills, which is connected by a track with the main road or track. All the villages practise wet rice cultivation and terrace cultivation and the people consequently select village sites where suitable cultivable land is available. Houses are not in rows or lines but constructed according to actual convenience. In some houses there are pictures of Lord Buddha, but there is a place called 'Sothap' in the central place of the village where the people light candles or burn pine leaves, and pray on religious festivals.

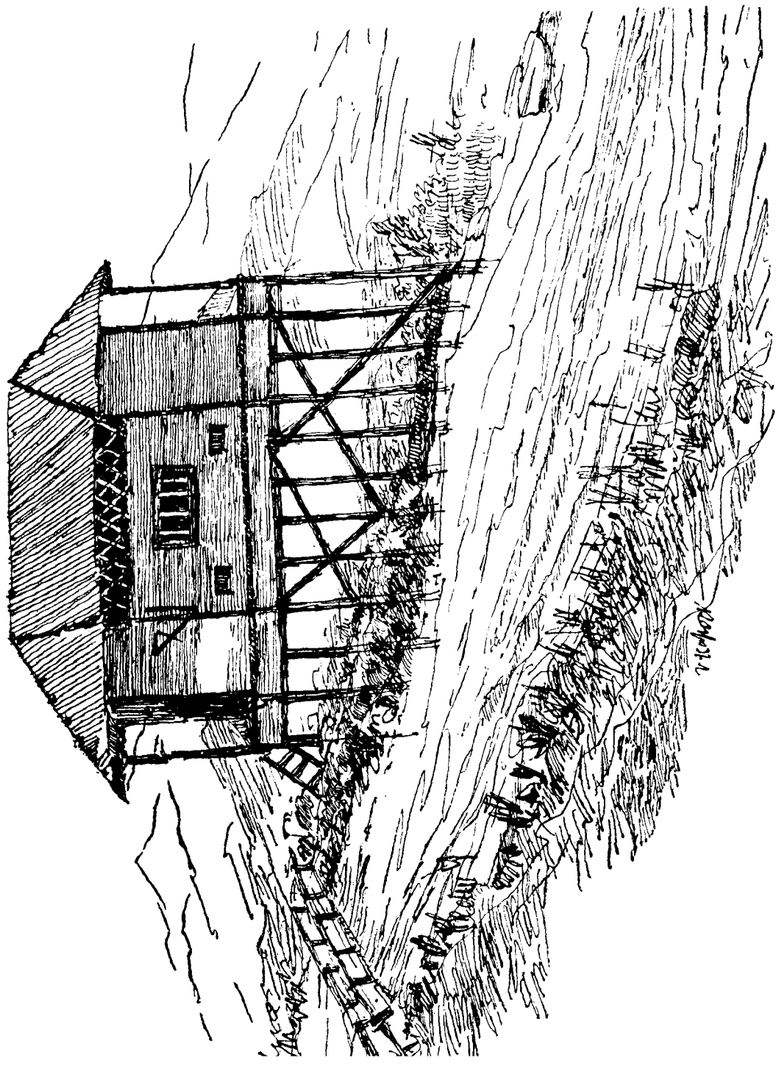
The people obtain their drinking water from snow-fed streams or springs.

The fields are all around the village. There is no village boundary worth the name, but high hills and paddy fields enclose the village.

There is no separate granary in a Tibetan village but a portion of the main house is used as a granary.

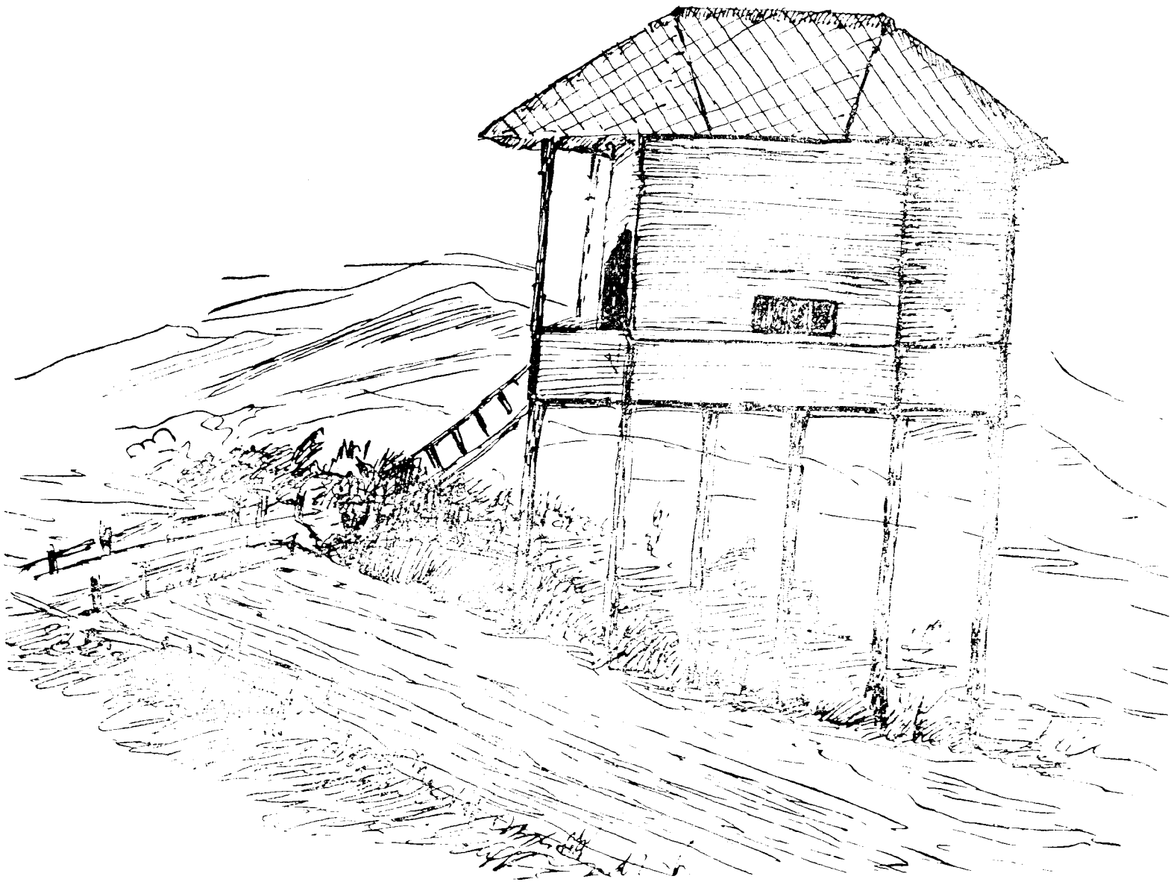
There is no separate lavatory or bathroom in the village. The jungle and river are used for this purpose.

There is no fixed direction towards which the village should face and this is done according to the prevailing wind and depending upon other conditions pertaining to the village.

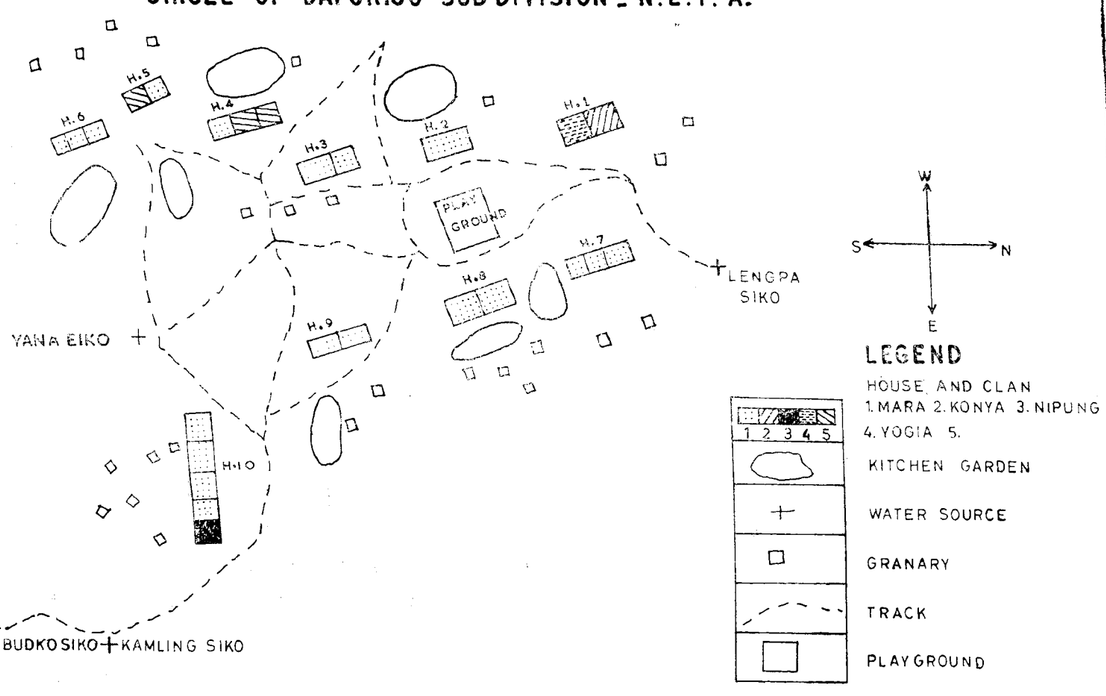


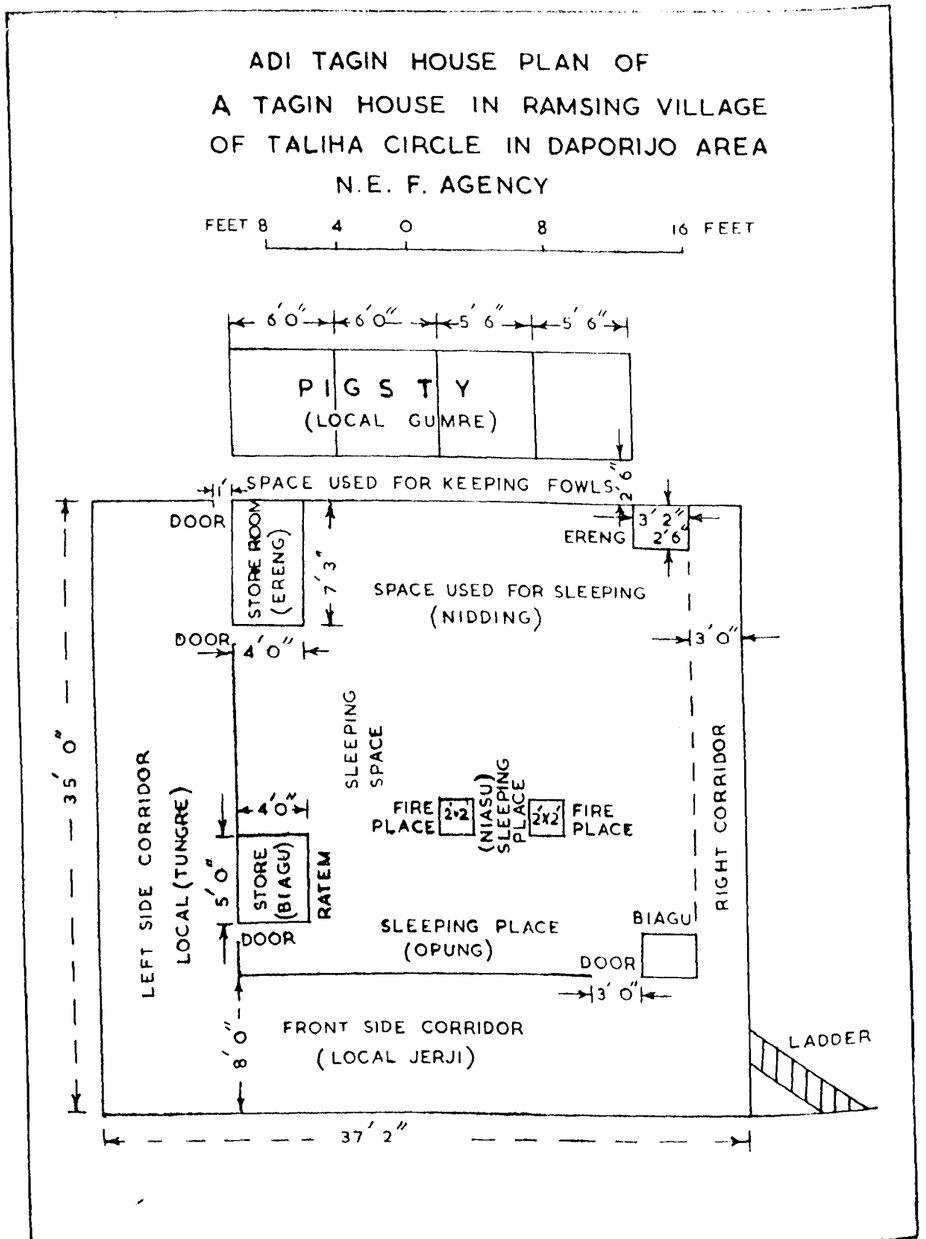
BANGRU HOUSE TYPE

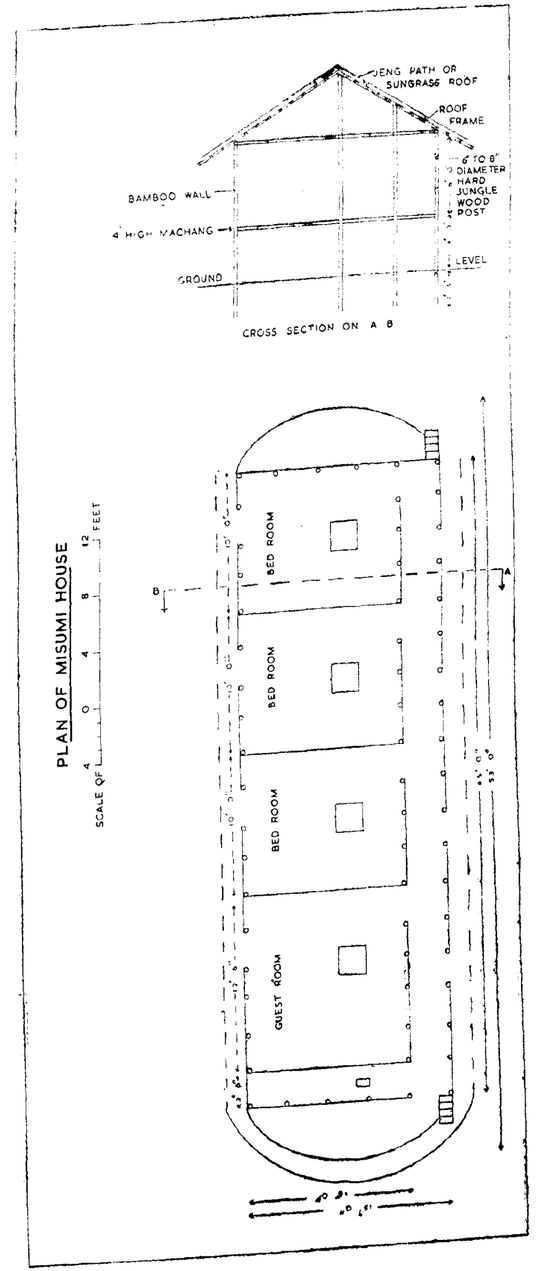
SOLUNG HOUSE TYPE



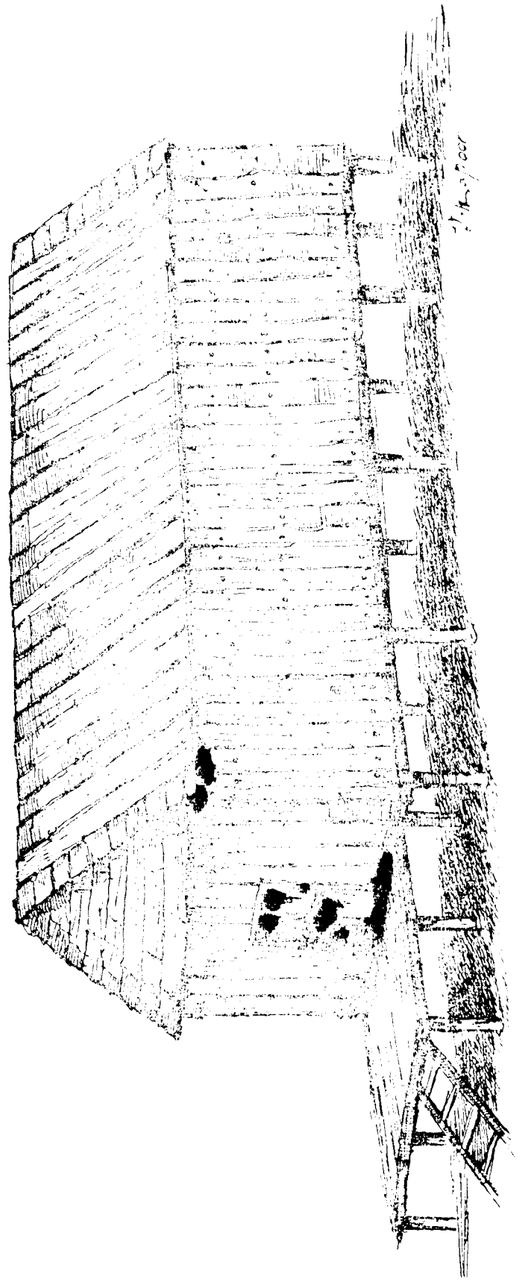
SKETCH MAP OF HABITATION AREA OF RAMSINGH VILLAGE IN TALIHA CIRCLE OF DAPORIJO SUB DIVISION _ N.E.F.A.

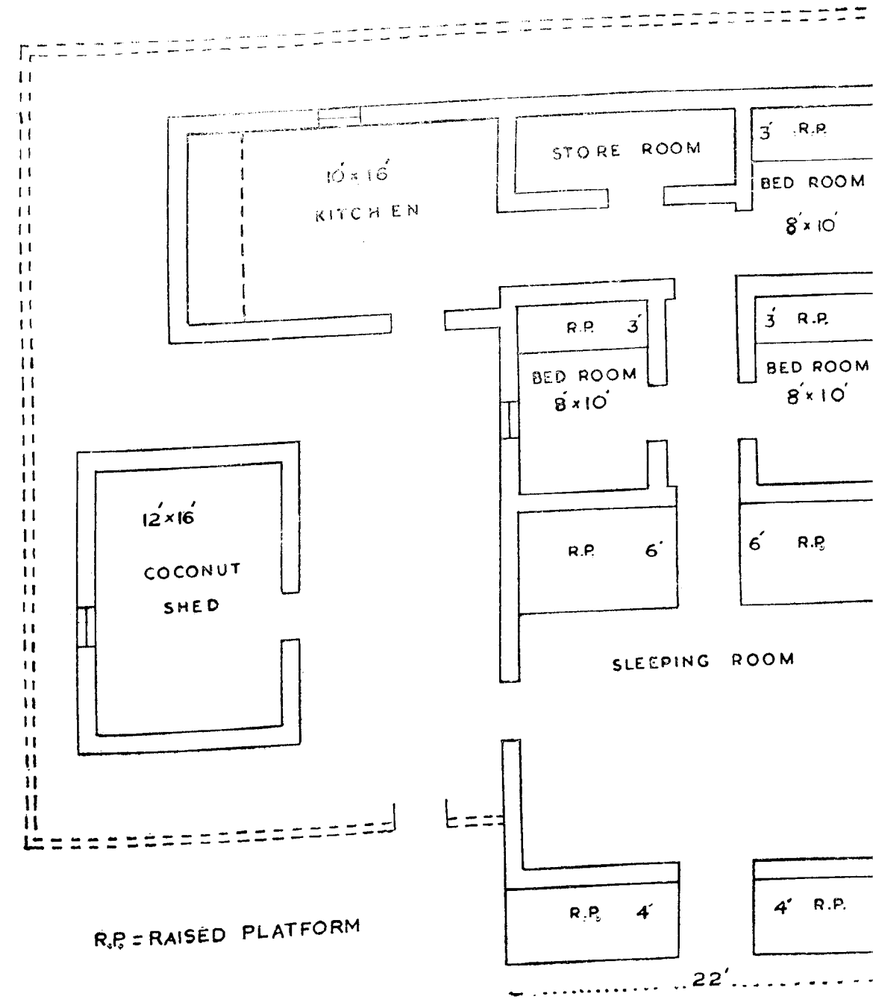


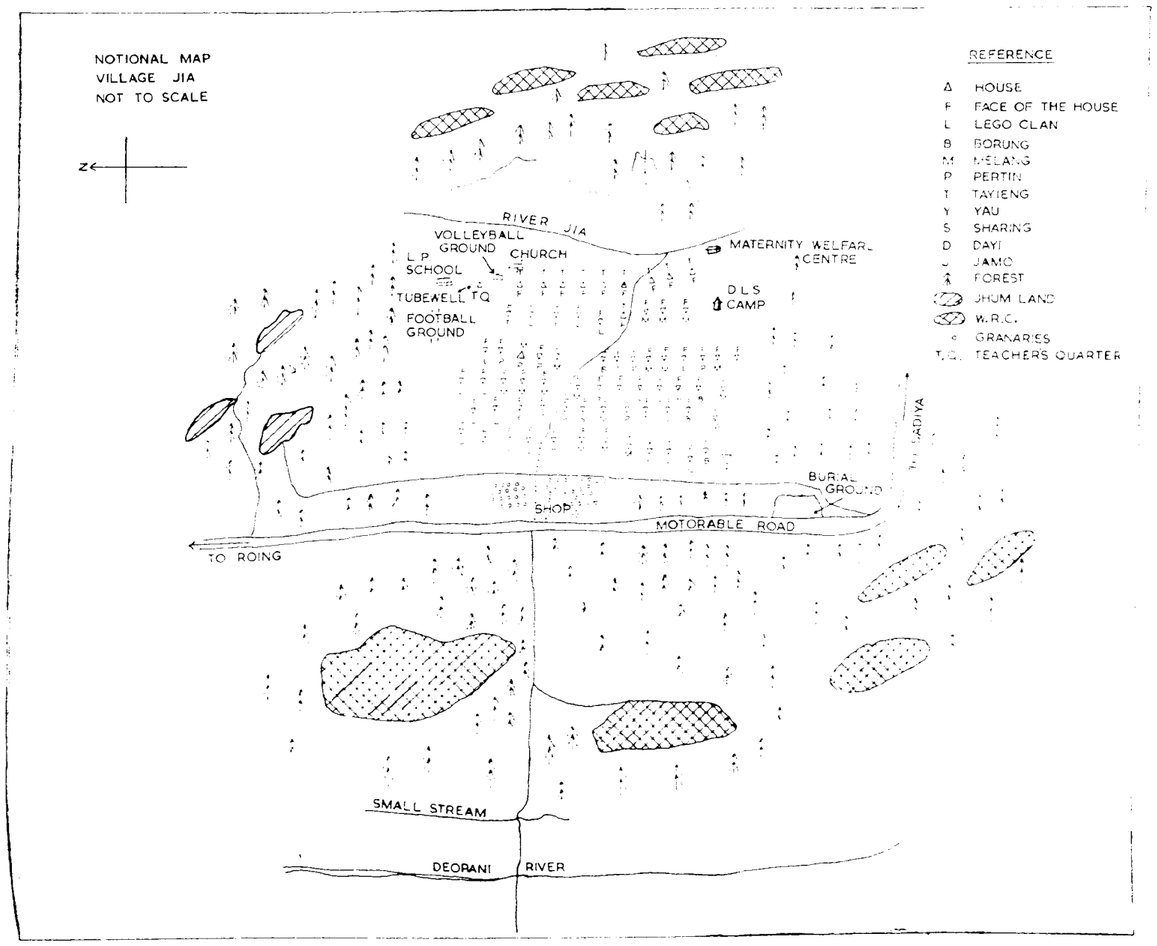

ADI TAGIN HOUSE PLAN OF
A TAGIN HOUSE IN RAMSING VILLAGE
OF TALIHA CIRCLE IN DAPORIJO AREA
N.E. F. AGENCY
FEET 8 4 0 8 16 FEET
6'0" 6'0" 5'6" 5'6"
PIGSTY
(LOCAL GUMRE)
SPACE USED FOR KEEPING FOWLS
DOOR
STORE ROOM (ERENG)
7'3"
EERENG
3'2"
2'6"
SPACE USED FOR SLEEPING
(NIDDING)
DOOR
4'0"
3'0"
35'0"
SLEEPING SPACE
LEFT SIDE CORRIDOR
LOCAL (TUNGRE)
4'0"
5'0"
STORE (BIAGU)
RATEM
FIRE PLACE
2'x2'
(NIASU) SLEEPING PLACE
2'x2'
FIRE PLACE
RIGHT CORRIDOR
DOOR
SLEEPING PLACE
(OPUNG)
BIAGU
DOOR
3'0"
8'0"
FRONT SIDE CORRIDOR
(LOCAL JERJI)
LADDER
37'2"


JENG PATH OR SUNGRASS ROOF
ROOF FRAME
6" TO 8" DIAMETER HARD JUNGLE WOOD POST
BAMBOO WALL
4' HIGH MACHANG
LEVEL
GROUND
CROSS SECTION ON A B
PLAN OF MISUMI HOUSE
SCALE OF 4 0 4 8 12 FEET
BED ROOM
BED ROOM
BED ROOM
GUEST ROOM
B

TIBETAN HOUSE TYPE






NOTIONAL MAP
VILLAGE JIA
NOT TO SCALE
REFERENCE
A HOUSE
F FACE OF THE HOUSE
L LEGO CLAN
B BORUNG
M MELANG
P PERTIN
T TAYIENG
Y YAU
S SHARING
D DAYI
J JAMO
FOREST
JHUM LAND
W.R.C.
GRANARIES
T.Q. TEACHERS QUARTER
RIVER JIA
VOLLEYBALL GROUND
CHURCH
L.P. SCHOOL
TUBEWELL TQ
FOOTBALL GROUND
MATERNITY WELFARE CENTRE
D.L.S. CAMP
BURIAL GROUND
SHOP
MOTORABLE ROAD
TO ROING
SMALL STREAM
DEORANI RIVER

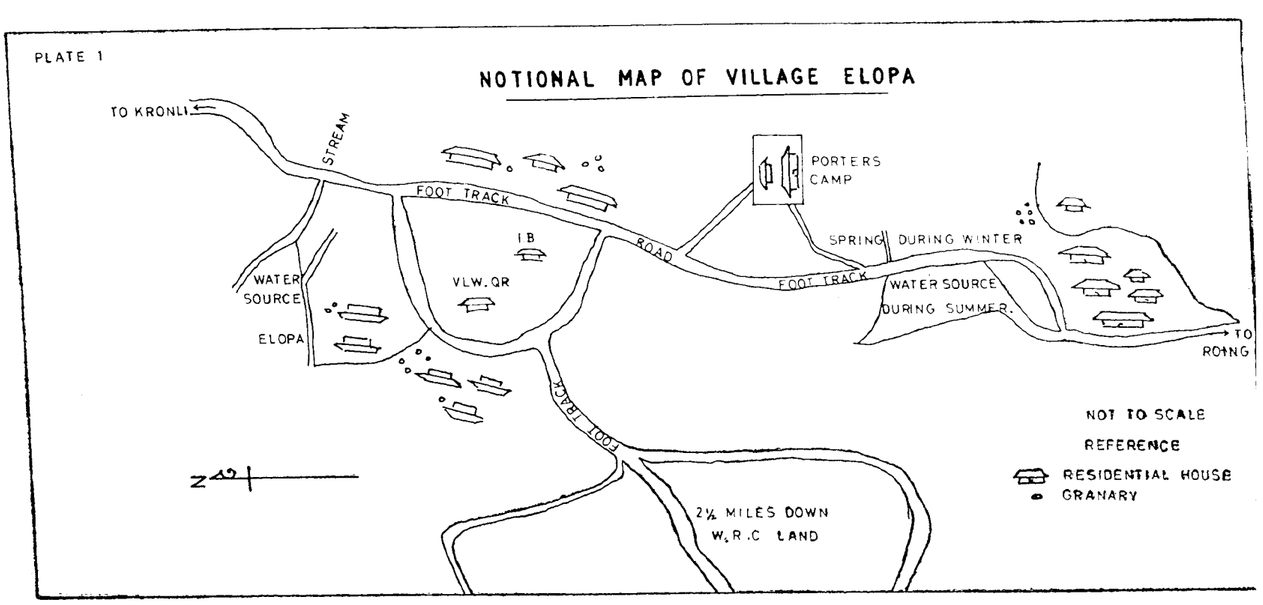
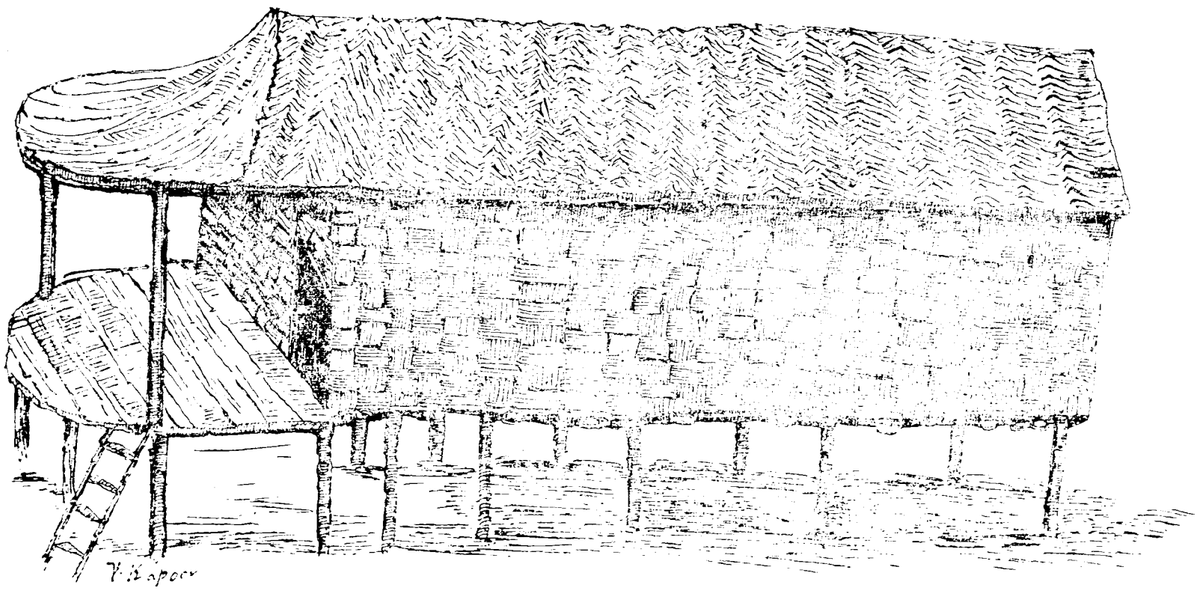
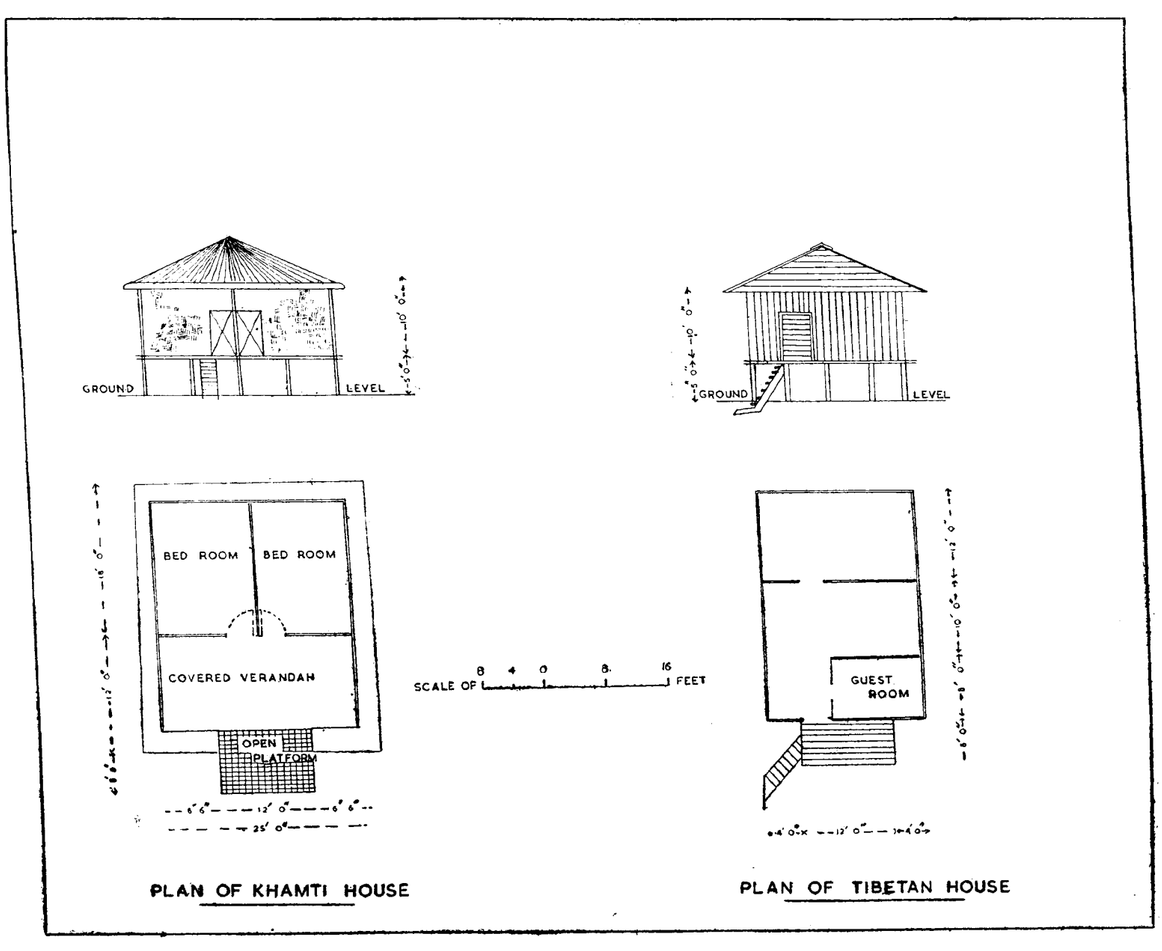


PLATE 1
NOTIONAL MAP OF VILLAGE ELOPA
TO KRONLI
STREAM
FOOT TRACK
PORTERS CAMP
ROAD
SPRING DURING WINTER
I.B
WATER SOURCE
VLW. QR
FOOT TRACK
WATER SOURCE DURING SUMMER.
ELOPA
TO ROING
FOOT TRACK
NOT TO SCALE
REFERENCE
RESIDENTIAL HOUSE
GRANARY
2½ MILES DOWN W.R.C LAND

MISHMI HOUSE TYPE

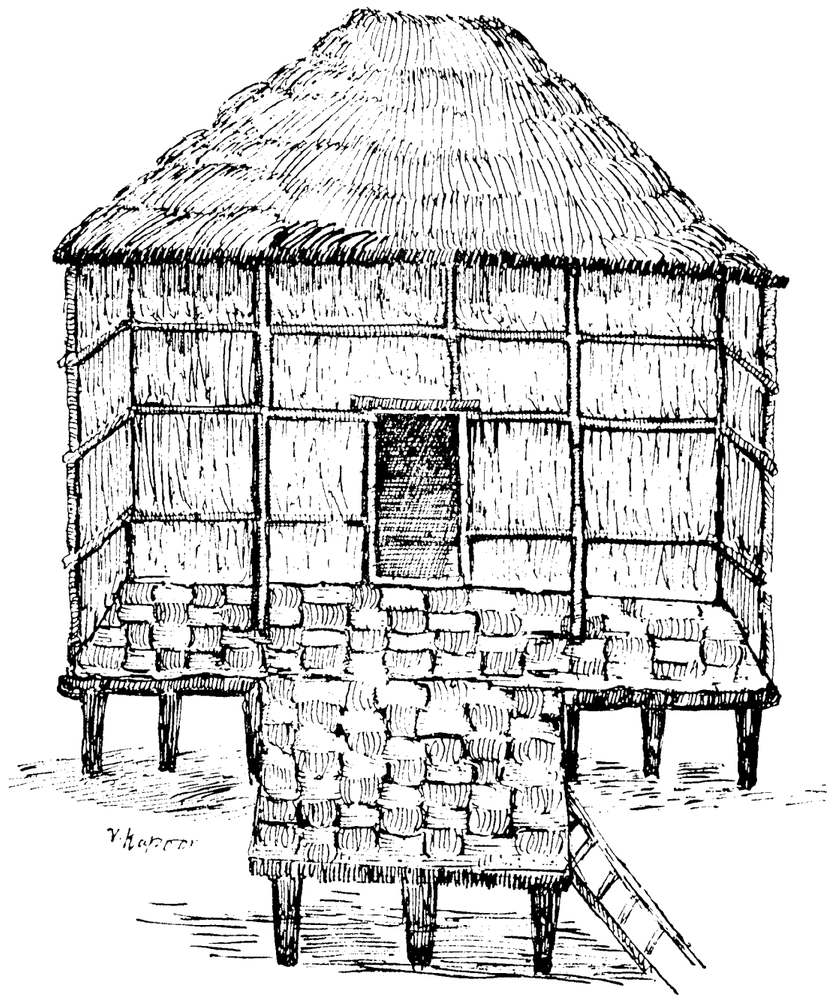




PLAN OF KHAMTI HOUSE

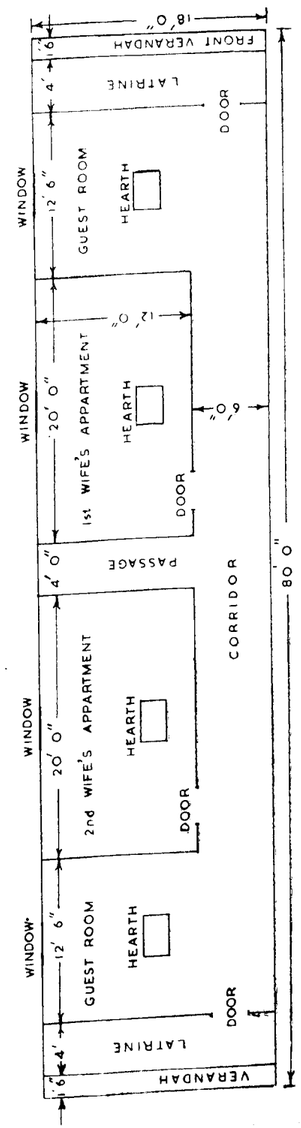
PLAN OF TIBETAN HOUSE

KHAMPTI HOUSE TYPE

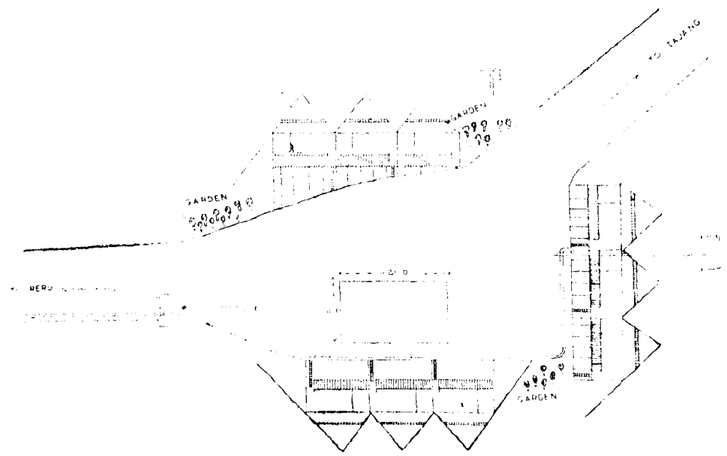


HOUSE PLAN OF IDU MISHMI

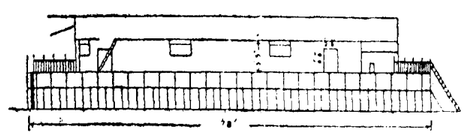
1" = 8'



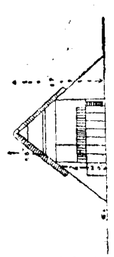
TYPICAL DIAGRAM OF ONE APATANI CLAN OF RERU VILLAGE



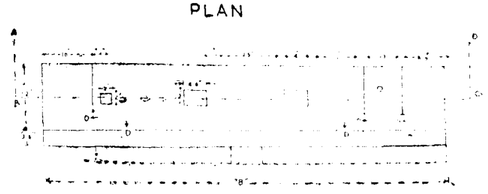
SECTION ON A.B.C.D.



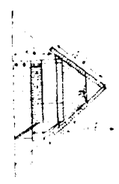
FRONT ELEVATION



PLAN

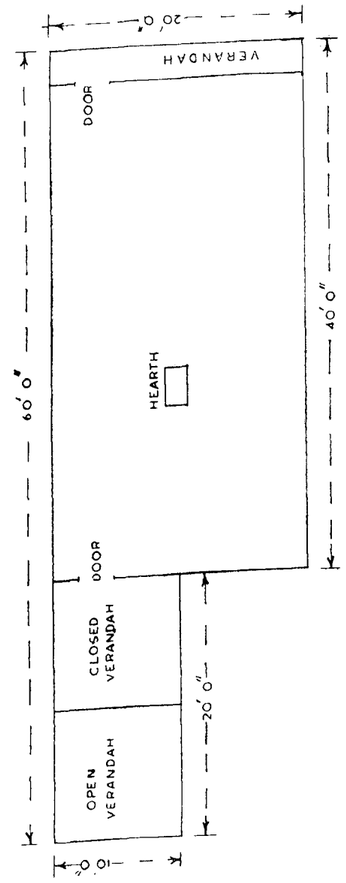


REAR ELEVATION



HOUSE PLAN OF PADAM

SCALE OF 8 4 0 8 16 FEET



HOUSE TYPES AND VILLAGE SETTLEMENT PATTERNS

Layouts of Angami Villages and Locational Pattern

(i) **Layouts**—Angami villages are generally located on the top of low hills or ridges. The village is divided into several *khels* but there is no clear cut demarcation line to differentiate one *khel* from that of other. The village streets and the lanes leading to individual households are narrow and *kutcha*. The houses are huddled together without any symmetry. Before their annexation by the Britishers, the Angami villages must have been elaborately and effectively fortified against enemy attack. The approaches of the villages are often up through tortuous and narrow paths with banks on either side, lined with an overhanging tangled mass of creepers. These paths lead up to gates, which are closed by strong thick and heavy wooden doors, hewn out of solid piece of wood. In the olden days starting from the gates the whole village was fenced round by bamboo and wooden fencing or thorny creepers but now such fences are no longer maintained, though, the gates with the wooden doors are replaced or repaired whenever fallen or worn out.

(ii) **House type**—A typical Angami house varies in length from 30 to 50 feet and in width from 20 to 35 ft. The house is built in one storey on the ground, the bare earth being roughly levelled to form the floor. The front gable, which is furnished in the case of men of wealth with heavy beams carved with the heads of men and mithan rises even up to 25 ft. high, while the back gable is usually lower. The front wall of the house is made of great boards of wood, while the partition is made of smaller planks. The sides and back walls are of bamboo matting from the ground. The roofs used to be of plain thatching grass though in recent years tin sheets are fast replacing the thatching grass.

The house is constructed by setting up eight posts, four on each side, with four higher corresponding posts in the centre to bear the horizontal roofridge pole. All the posts are notched at the top and a hole is bored below the notch to take the cane lashing which secure the ridging post and the side beams from falling.

The interior of the house is divided into three compartments. The front room comprising half the length of the house is mainly for storage of paddy in huge baskets, ranged along one or both of the side walls. The second compartment contains the hearth, beds, foodstuffs and cooking utensils. This is used as a kitchen, a sleeping room and a sitting room. The third room is a narrow one at the back where is kept the liquor vat. In front of the house, the broad projecting eaves of the gable form a porch where wood is stored and where in cold seasons a fire is made round which men sit and talk. Each house has a space in the front of it surrounded with a low stone wall marking of its compound.

Layouts of Ao Villages and Locational Patterns

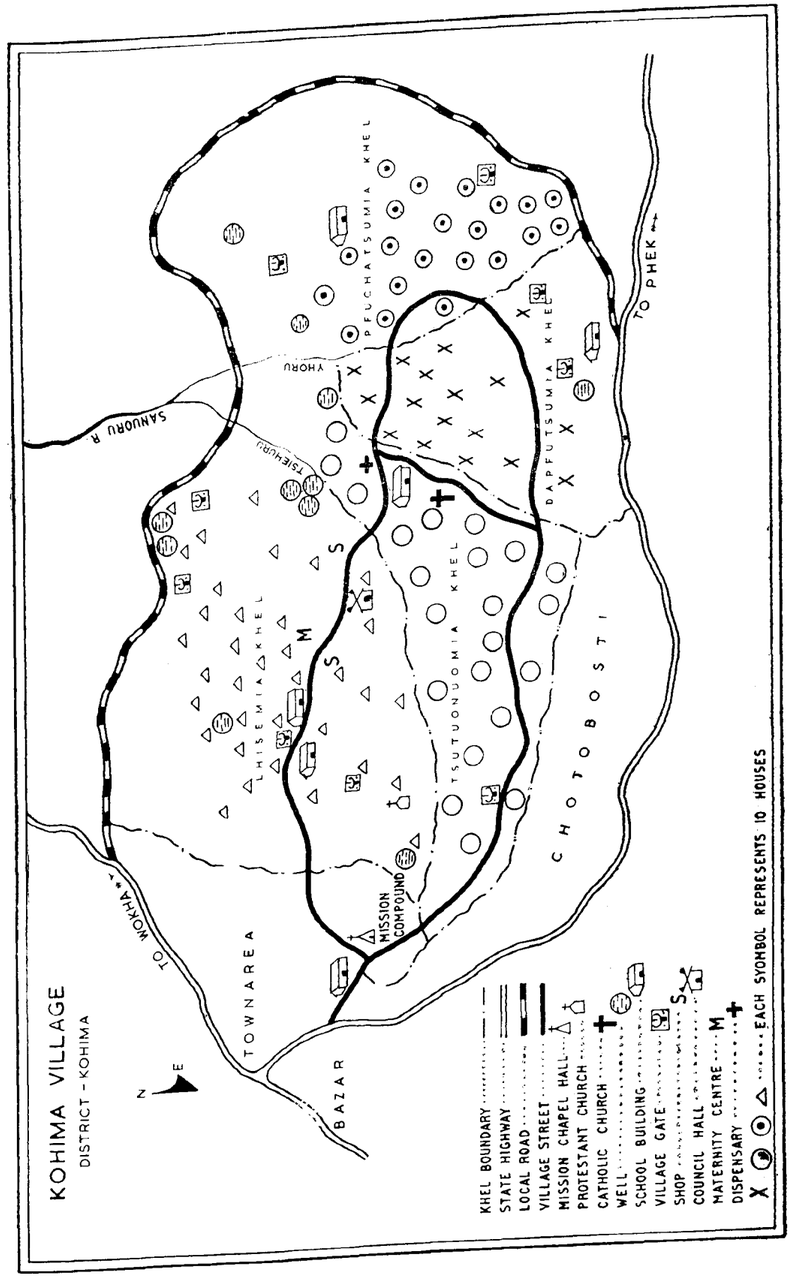
(i) **Layouts**—Ao villages are located on the tops of hills for security reasons. The village is usually divided into two *khels* mainly on the basis of locational pattern upper *khel* (Impang) and lower *khel* (Imlang). In some villages there is an additional *khel* in between those two *khels* known as middle *khel* (Tiyong mepu). The main street which runs up the centre of the village has several transverse lanes leading to the houses situated away from the main street. The houses are huddled together on both sides of the main street facing the street or the lanes.

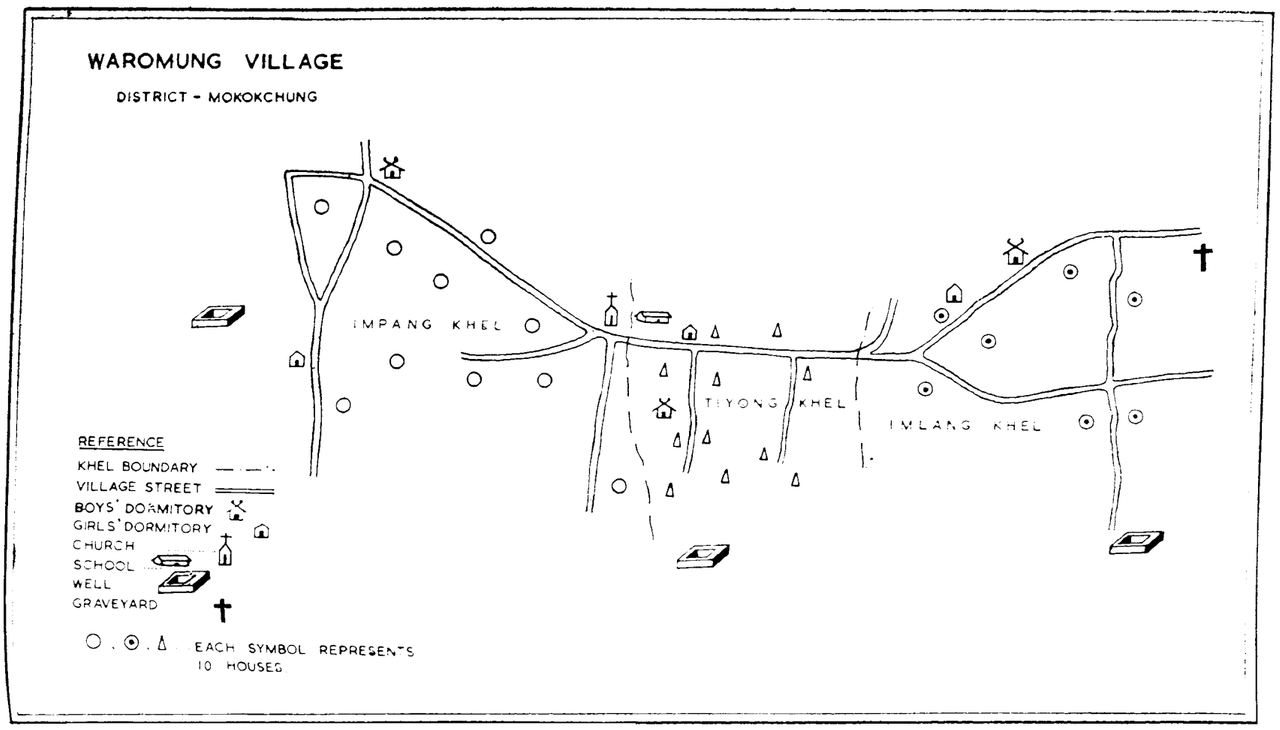
In the olden days, when head hunting was prevalent in the area, the gate at each *khel* was kept closed with a great wooden door hewn out of a single piece of wood. On either side of the village; strong stockade like fences, which used to be of wooden stakes, lashed together and bristling with polisades structure right round the village were built except where the precipitous nature of the ground made it unnecessary. They relied on the fence for their safety, with a second and advance line of defence in the form of bamboo polisades, which were strongly planted in the ditches. To strengthen the defence, lookout platforms were constructed in convenient trees close at hand. But now those defence arrange-

ments no longer exist. The gateways and fences that fell into disuse and were no longer replaced.

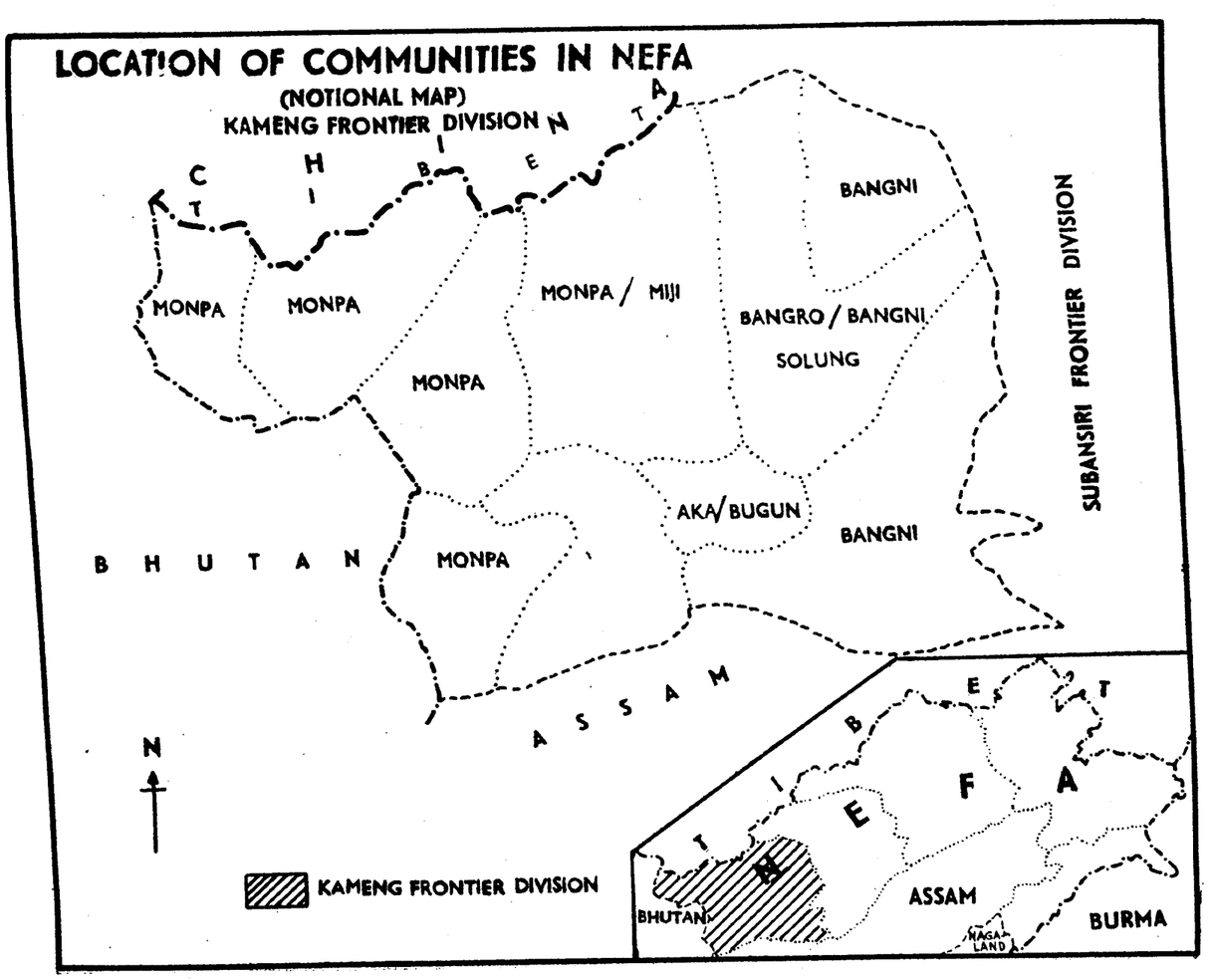
(ii) **House type**—A typical Ao house built in one storey varies in length from 30 to 50 ft. and in width 15 to 25 ft. and consists of only two rooms and an open platform at the back. The front room (tsuin) on ground level is the room where the rice pounding table, cut from one piece of wood and the dried fire wood are placed. Pigs are also kept in this room at night. The main room (Kilong) is on pile or stilts. The floor is of interlaced split bamboos supported on poles. In the centre is the hearth (dep) of beaten earth furnished with three stones embedded on the earth for supporting the cooking pots. The ceiling is of bamboo matting and from the main ceiling beam are suspended three bamboo trays one above the other right over the fireplace. In those trays some of the utensils, and dried vegetables and foodstuffs are kept. This main room is used as sitting room as well as sleeping room. Sometimes a small room is partitioned towards the open platform which is used as store room. A door leads directly from the main room to the platform at the back, which is used as a sitting out place by the family members. All the walls including the doors are of bamboo matting. The roofs which are of usually four slopes are made of leaves of the sago palm. In the front is a porch where a cow-shed is built by those who have cows, otherwise it is used for storing food.

A noticeable feature of the Ao houses is the way in which variations in structure indicate precisely the status of the owner. However, the variations are confined to the roof of the house, the plan of the structure being the same. Rich men who have performed the feast of merit have their roof of the front eaves almost down to the ground making the space in front of the house into an extra room where they set up the carved posts and the mithun skull to commemorate their feast.

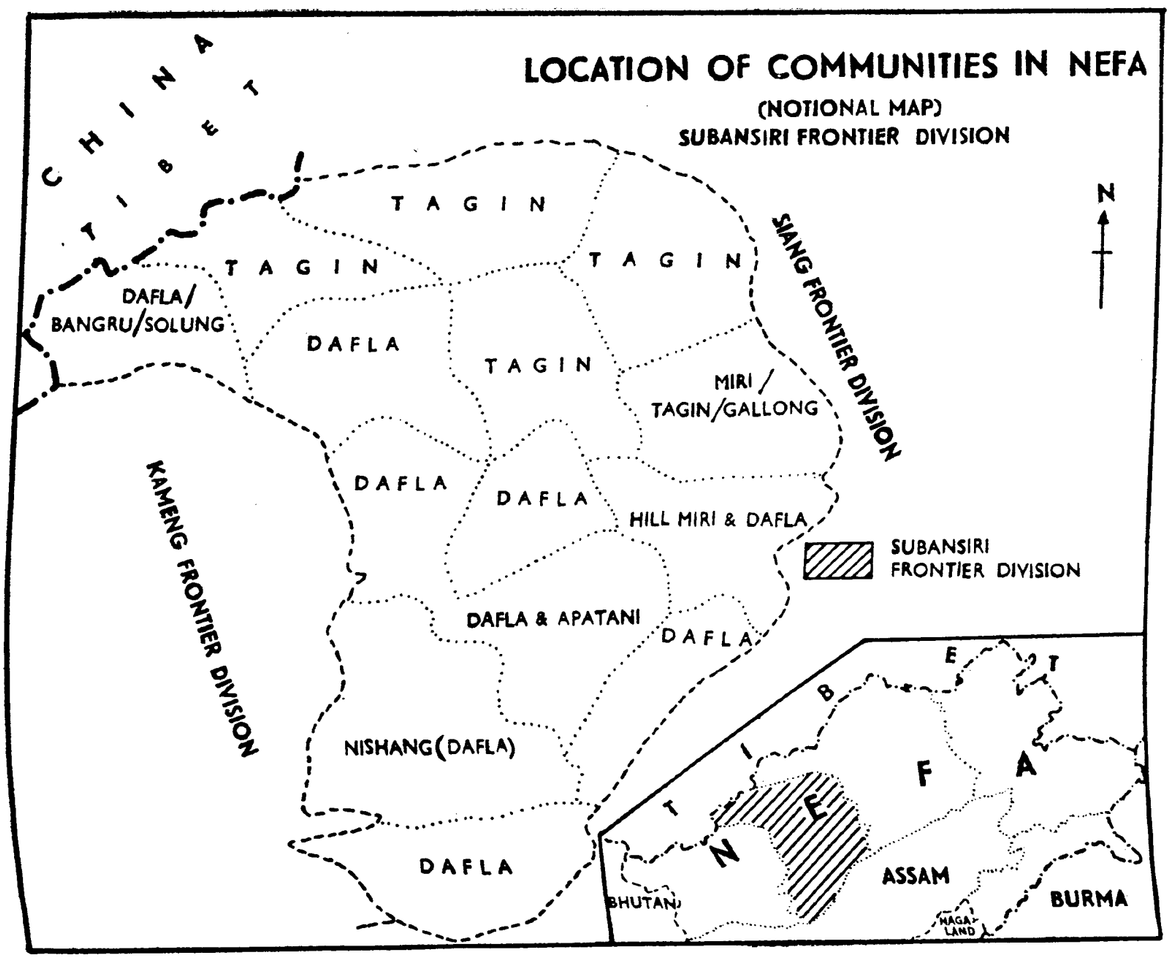



WAROMUNG VILLAGE
DISTRICT - MOKOKCHUNG
IMPANG KHEL
TIYONG KHEL
IMLANG KHEL
REFERENCE
KHEL BOUNDARY
VILLAGE STREET
BOYS' DORMITORY
GIRLS' DORMITORY
CHURCH
SCHOOL
WELL
GRAVEYARD
EACH SYMBOL REPRESENTS 10 HOUSES

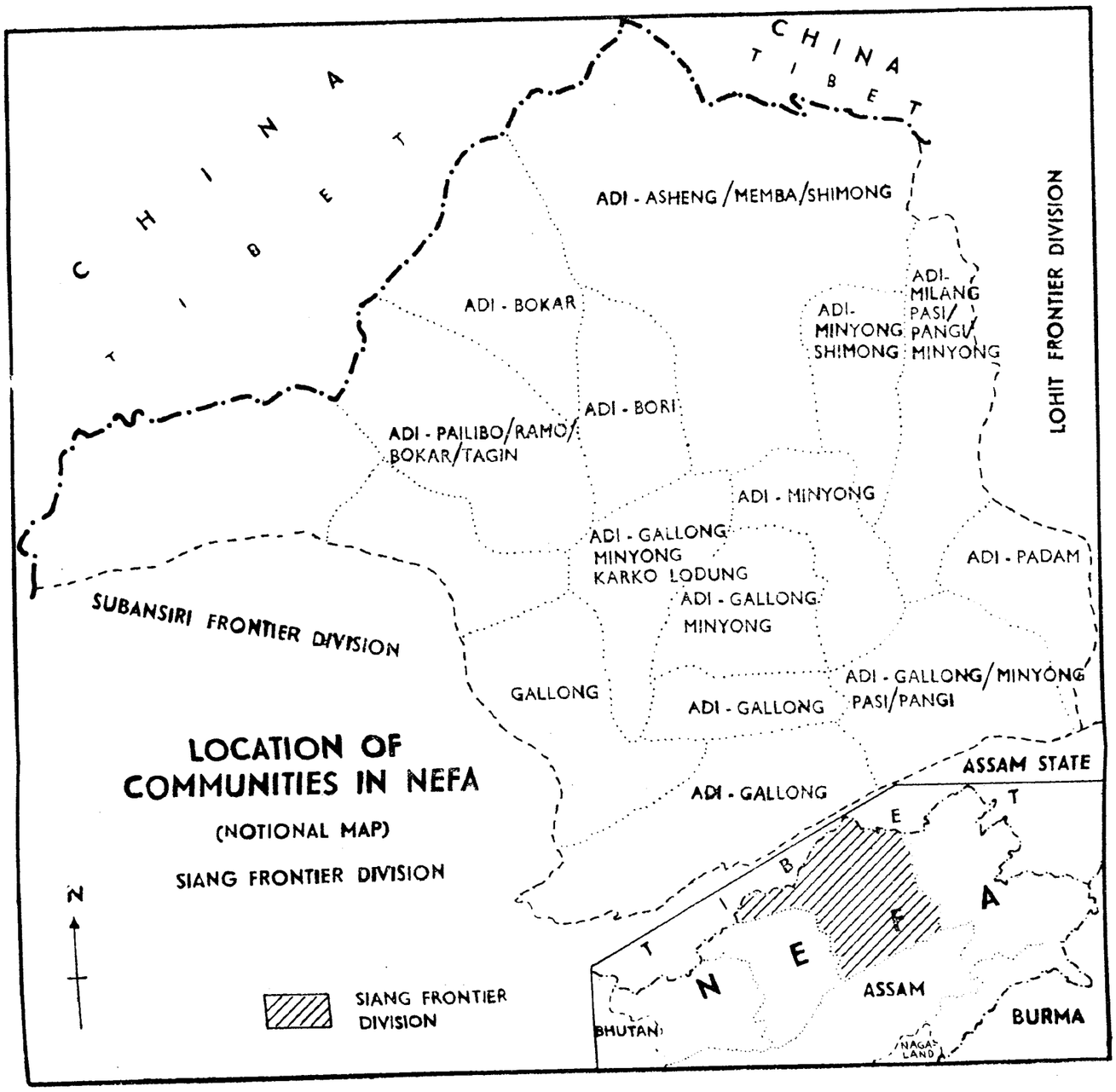
NEFA MAP 1


LOCATION OF COMMUNITIES IN NEFA
(NOTIONAL MAP)
KAMENG FRONTIER DIVISION
TIBET
MONPA
MONPA
MONPA / MIJI
MONPA
BANGNI
BANGRO / BANGNI
SOLUNG
SUBANSIRI FRONTIER DIVISION
AKA/BUGUN
BANGNI
MONPA
BHUTAN
ASSAM
N
KAMENG FRONTIER DIVISION
TIBET
NEFA
BHUTAN
ASSAM
NAGALAND
BURMA

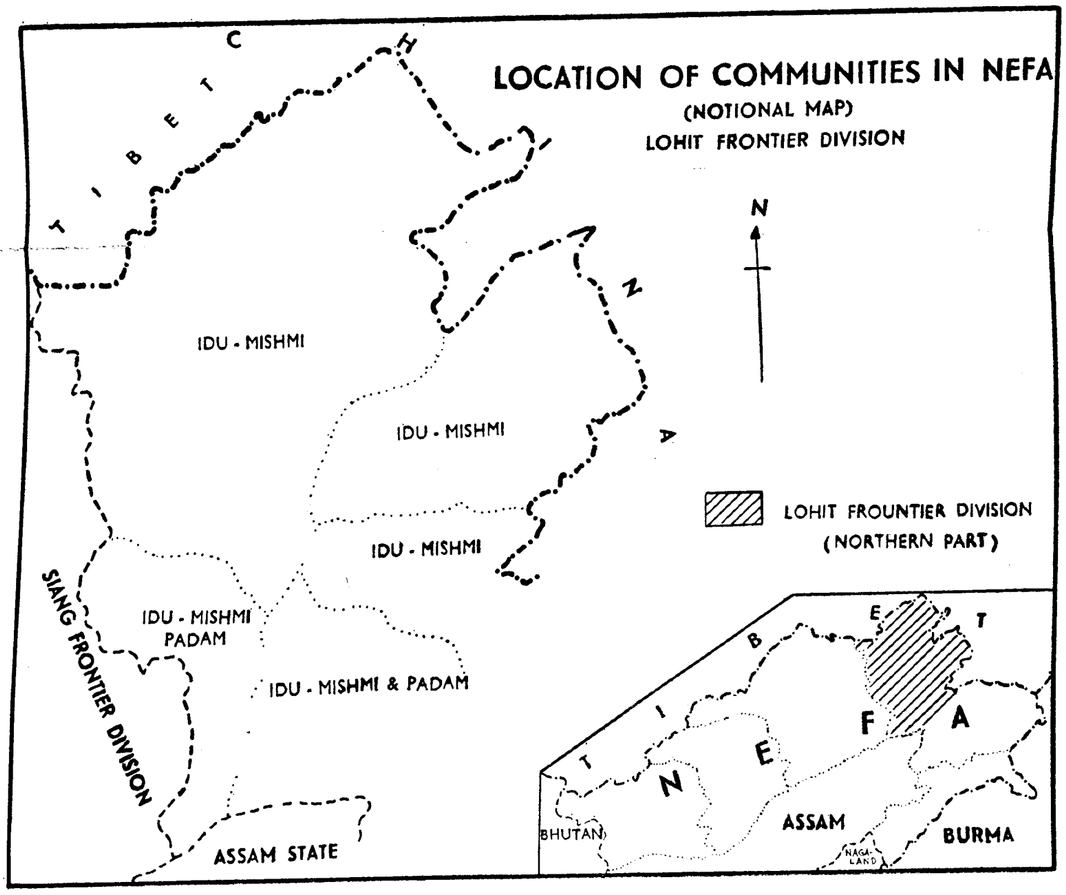
NEFA MAP 2

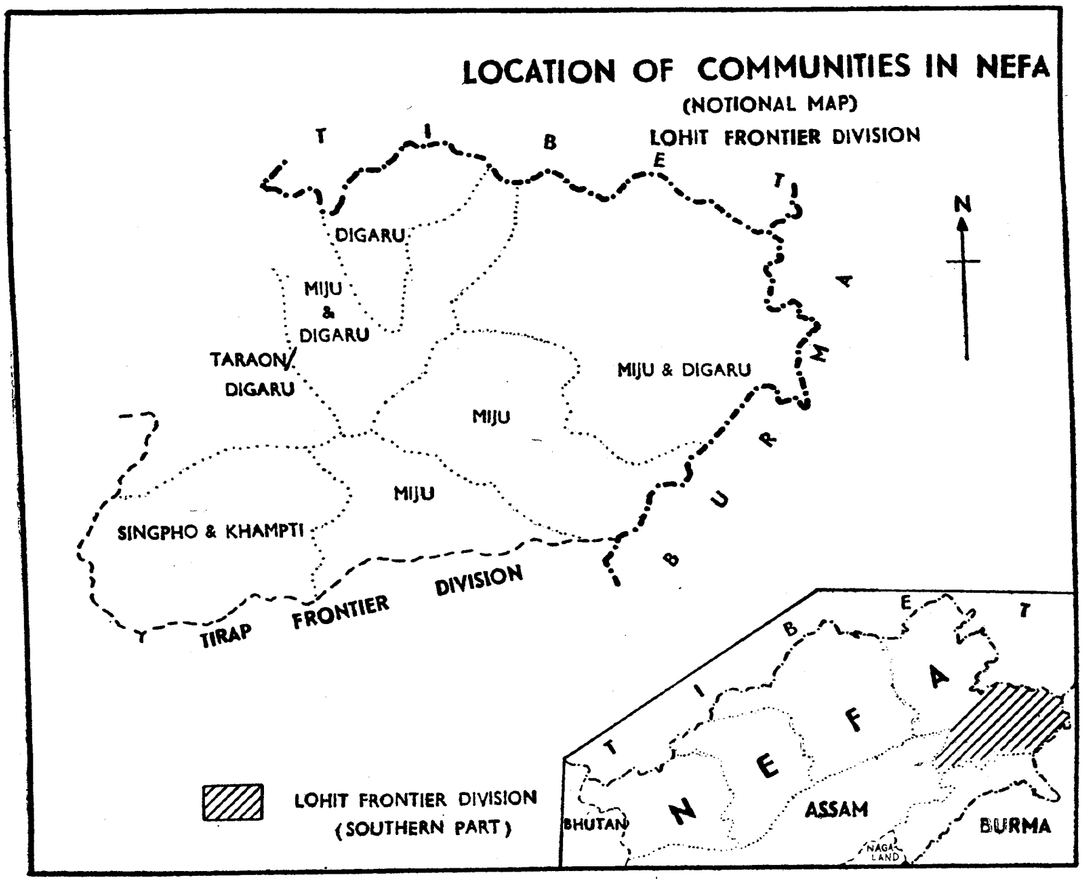

LOCATION OF COMMUNITIES IN NEFA
(NOTIONAL MAP)
SUBANSIRI FRONTIER DIVISION
CHINA
TIBET
N
TAGIN
TAGIN
TAGIN
DAFLA/
BANGRU/SOLUNG
DAFLA
TAGIN
MIRI /
TAGIN/GALLONG
SIANG FRONTIER DIVISION
KAMENG FRONTIER DIVISION
DAFLA
DAFLA
HILL MIRI & DAFLA
SUBANSIRI
FRONTIER DIVISION
DAFLA & APATANI
DAFLA
NISHANG(DAFLA)
DAFLA
BHUTAN
ASSAM
BURMA
NAGA-
LAND

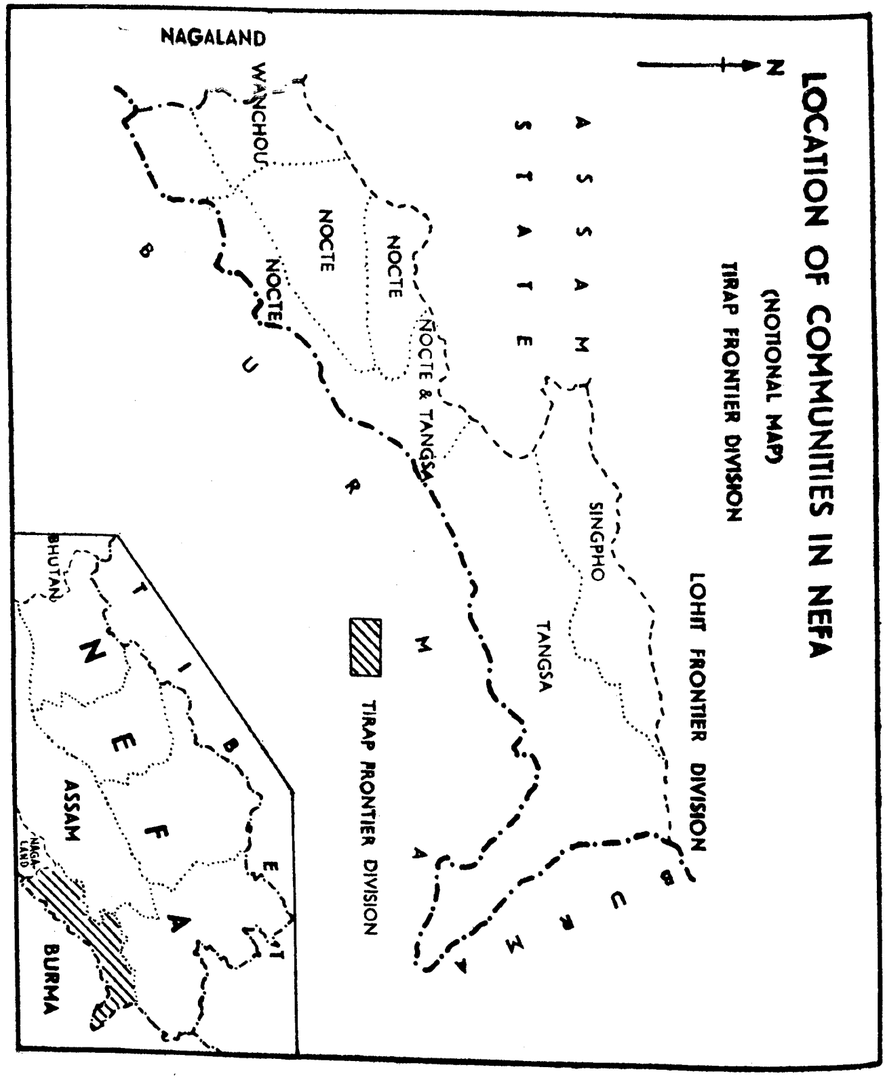
NEFA MAP 3


CHINA
TIBET
CHINA
TIBET
ADI - ASHENG /MEMBA/SHIMONG
ADI - BOKAR
ADI- MILANG PASI/ PANGI/ MINYONG
ADI- MINYONG SHIMONG
LOHIT FRONTIER DIVISION
ADI - BORI
ADI - PAILIBO/RAMO/ BOKAR/TAGIN
ADI - MINYONG
ADI - GALLONG MINYONG KARKO LODUNG
ADI - PADAM
ADI - GALLONG MINYONG
SUBANSIRI FRONTIER DIVISION
GALLONG
ADI - GALLONG
ADI - GALLONG/MINYONG PASI/PANGI
LOCATION OF COMMUNITIES IN NEFA
(NOTIONAL MAP)
SIANG FRONTIER DIVISION
ADI - GALLONG
ASSAM STATE
N
SIANG FRONTIER DIVISION
NEFA
ASSAM
BHUTAN
NAGALAND
BURMA

NEFA MAP 4


LOCATION OF COMMUNITIES IN NEFA
(NOTIONAL MAP)
LOHIT FRONTIER DIVISION
N
TIBET
CHINA
IDU - MISHMI
IDU - MISHMI
IDU - MISHMI
IDU - MISHMI
PADAM
IDU - MISHMI & PADAM
SIANG FRONTIER DIVISION
ASSAM STATE
LOHIT FROUNTIER DIVISION
(NORTHERN PART)
TIBET
NEFA
BHUTAN
ASSAM
NAGA-LAND
BURMA


LOCATION OF COMMUNITIES IN NEFA
(NOTIONAL MAP)
LOHIT FRONTIER DIVISION
TIBET
BURMA
N
DIGARU
MIJU & DIGARU
TARAON/ DIGARU
MIJU & DIGARU
MIJU
MIJU
SINGPHO & KHAMPTI
TIRAP FRONTIER DIVISION
LOHIT FRONTIER DIVISION (SOUTHERN PART)
NEFA
BHUTAN
ASSAM
BURMA
NAGA LAND



NEFA MAP 6

LIST OF AGENTS FOR THE SALE OF GOVERNMENT OF INDIA PUBLICATIONS

(as on 17 February 1964)

AGARTALA—Laxmi Bhandar Books & Scientific Sales . . . (Rest.)

AGRA—
1 National Book House, Jeoni-Mandi . . . (Reg.)
2 Wadhawa & Co., 45, Civil Lines . (Reg.)
3 Banwari Lal Jain, Publishers, Moti Katra . . . (Rest.)
4 English Book Depot, Sadar Bazar Agra Cantt. . . . (Rest.)

AHMADNAGAR—
V.T. Jorakar, Prop. Rama General Stores, Navi Path . . (Rest.)

AHMEDABAD—
1 Balgovind Kuber Dass & Co., Gandhi Road . . . (Reg.)
2 Chandra Kant Chiman Lal Vora, Gandhi Road . . . (Reg.)
3 New Order Book Co., Ellis Bridge (Reg.)
4 Mahajan Bros., Opp. Khadia Police Gate . . . (Rest.)
5 Sastu Kitab Ghar, Near Relief Talkies, Patthar Kuva, Relief Road . . . (Reg.)

AJMER—
1 Book-Land, 663, Madar Gate . (Reg.)
2 Rajputana Book House, Station Road . . . (Reg.)
3 Law Book House, 271, Hathi Bhata . . . (Reg.)
4 Vijay Bros. Kutchery Road . (Rest.)
5 Krishna Bros., Kutchery Road . (Rest.)

ALIGARH—
Friends' Book House, Muslim University Market . . . (Reg.)

ALLAHABAD—
1 Superintendent, Printing and Stationery, U. P.
2 Kitabistan, 17-A, Kamla Nehru Road . . . (Reg.)
3 Law Book Co., Sardar Patel Marg. P. Box 4 . . . (Reg.)
4 Ram Narain Lal Beni Modho, 2-A, Katra Road . . . (Reg.)
5 Universal Book Co., 20, M. G. Road . . . (Reg.)
6 The University Book Agency (of Lahore), Elgin Road . . . (Reg.)
7 Wadhwa & Co., 23, M. G. Marg . (Rest.)
8 Bharat Law House, 15, Mahatma Gandhi Marg . . . (Rest.)
9 Ram Narain Lal Beni Prashad, 2-A, Katra Road . . . (Rest.)

AMBALA—
1 English Book Depot, Ambala Cantt. . . . (Reg.)
2 Seth Law House, 8719, Railway Road, Ambala Cantt. . . (Rest.)

AMRITSAR—
1 The Law Book Agency, G. T. Road, Putligarh . . . (Reg.)
2 S. Gupta, Agent, Government Publications, Near P. O. Majith Mandi . . . (Reg.)
3 Amar Nath & Sons, Near P. O. Majith Mandi . . . (Reg.)

ANAND—
1 Vijaya Stores, Station Road . (Rest.)
2 Charto Book Stall, Tulsi Sadan, Station Road . . . . (Rest.)

ASANSOL—
D. N. Roy & R. K. Roy, Booksellers, Atwal Building . . (Rest.)

BANGALORE—
1 The Bangalore Legal Practitioner Co-op. Society Ltd., Bar Association Building . . . (Reg.)
2 S.S. Book Emporium, 118, Mount Joy Road . . . (Reg.)
3 The Bangalore Press, Lake View, Mysore Road, P. O. Box 507 . (Reg.)
4 The Standard Book Depot, Avenue Road . . . (Reg.)
5 Vichara Sahitya Private Ltd., Balepet . . . (Reg.)
6 Makkala Pustaka Press, Balamandira, Gandhinagar . . . (Reg.)
7 Maruthi Book Depot, Avenue Road . . . (Rest.)
8 International Book House P. Ltd., 4-F, Mahatma Gandhi Road . (Reg.)
9 Navakarnataka Pubns. Private Ltd., Majestic Circle . . . . (Rest.)

BAREILLY—
Agarwal Brothers, Bara Bazar . (Reg.)

BARODA—
1 Shri Chandrakant Mohan Lal Shah, Raopura . . . . (Rest.)
2 Good Companions Booksellers, Publishers & Sub-Agent . . (Rest.)
3 New Medical Book House, 540, Madan Zampa Road . . (Rest.)

BEAWAR—
The Secretary, S. D. College, Co-operative Stores Ltd. . . . (Rest.)

BELGHARIA—
Granthlok Antiquarian Booksellers & Publishers (24-Parganas) 5/1, Amlica Mukherjee Road . . (Reg.)

BHAGALPUR—
Paper Stationery Stores, D. N. Singh Road . . . . (Reg.)

BHOPAL—
1 Superintendent, State Government Press
2 Lyall Book Depot, Mohd. Din Bldg., Sultania Road . . . (Reg.)
3 Delite Books, Opp. Bhopal Talkies . . . . . (Rest.)

BHUBANESWAR—
Ekamra Vidyabhaban, Eastern Tower, Room No. 3 . . . (Rest.)

BIJAPUR—
Shri D. V. Deshpande, Recognised Law Booksellers, Prop. Vinod Book Depot. Near Shiralshetti Chowk . . . . . (Rest.)

BIKANER—
Bhandani Bros . . . . (Rest.)

BILASPUR—
Sharma Book Stall, Sadar Bazar . (Rest.)

BOMBAY—
1 Supdt. Printing & Stationery, Netaji Subhas Road
2 Oriental Law Book Co., 161, Mahatma Gandhi Road . . (Reg.)
3 Co-operative Book Depot, 5/32 Ahmed Sailor Bldg., Dadar . . (Reg.)
4 Current Book House, Marui Lane, Raghunath Dadji St. . . (Reg.)
5 Current Technical Literature Co. (P) Ltd., Indi House, 1st Floor . (Reg.)
6 International Book House, Ltd., 9, Ash Lane M.G. Road . . (Reg.)
7 Lakhani Book Depot, Girgaum . (Reg.)
8 Popular Agencies, 23, Bhangwadi, Kalbadevi . . . (Reg.)
9 P. P. H. Book Stall, 190-B, Khetwadi Main Road . . (Reg.)
10 New Book Co., 188-190, Dr. Dadabhai Naoroji Road . (Reg.)
11 Popular Book Depot, Lamington Road . . . . (Reg.)
12 Sundar Das Gian Chand 601, Girgaum Road, near Princess Street. (Reg.)
13 D. B. Taraporewala Sons and Co. (P) Ltd., 210, Dr. Dadabhai Naoroji Road . . . . (Reg.)
14 Thacker and Co., Rampart Row . (Reg.)
15 N. M. Tripathi Private Ltd., Princess Street . . . . (Reg.)
16 The Kothari Book Depot, King Edward Road . . . . (Reg.)
17 P. H. Rama Krishna and Sons, 147 Rajaram Bhuvan, Shivaji Park Road No. 5 . . . . (Rest.)
18 C. Jamnadas and Co., Booksellers, 146-C., Princess Street . (Reg.)
19 Indo Nath and Co., A-6, Daulat Nagar Borivli . . . . (Reg.)
20 Minerva Book Shop, Shop No. 1/80 N. Subhash Road . . (Reg.)
21 Academic Book Co., Association Building, Girgaum Road . . (Rest.)
22 Dominion Publishers, 23 Bell Building, Sir P. M. Road . . (Rest.)
23 Bombay National History Society, 91 Walkeshwar Road . . . (Rest.)
24 Dowamadeo and Co., 16, Naziria Building, Ballard Estate . . (Rest.)
25 Asian Trading Co., 310, The Miraball, P. B. 1505 . . . . (Rest.)

CALCUTTA—
1 Chatterjee & Co., 3/1 Bacharam Chatterjee Lane . . . . (Reg.)
2 Dass Gupta and Co., Ltd., 54/3, College Street . . . . (Reg.)
3 Hindu Library, 69 A, Bolaram De Street . . . . (Reg.)
4 S. K. Lahiri and Co. Private Ltd., College Street . . . . (Reg.)
5 M. C. Sarkar and Sons Private Ltd., 14, Bankim Chatterjee Street . (Reg.)
6 W. Newman and Co. Ltd., 3, Old Court House Street . . . (Reg.)
7 Oxford Book and Stationery Co., 17, Park Street . . . . (Reg.)
8 R. Chambray and Co. Ltd., Kent House, P. 33, Mission Road Extension . . . . . (Reg.)
9 S. C. Sarkar and Sons Private Ltd., 1.C. College Square . . . (Reg.)
10 Thacker Spink and Co. (1933) P. Ltd., 3 Esplanade East . . . (Reg.)
11 Firma K. L. Mukhopadhyay, 6/1A, Banchh Ram Akrur Lane . . (Reg.)
12 K. K. Roy P. Box No. 10210, Calcutta-19 . . . . . (Rest.)
13 Sri P. D. Upadhyay, 77, Mukta Ram Bose Street . . . . (Rest.)
14 Universal Book Dist. 8/2 Hastings Street . . . . . (Rest.)
15 Modern Book Depot, 9, Chowringhee Centre . . . . . (Rest.)
16 Sircar and Co. 125, Canning Street . (Reg.)
17 S. Bhattacharjee, 49 Dharamtala Street . . . . . (Rest.)
18 Mukherjee Library, 10 Sarbi Khan Road . . . . . (Reg.)
19 Current Literature Co., 208, Mahatma Gandhi Road . . . (Reg.)
20 The Book Depository 4/1, Madan Street (1st Floor) . . . (Rest.)
21 Scientific Book Agency, Netaji Subhash Road . . . . (Rest.)
22 Reliance Trading Co., 17/1 Banku Bihari Ghose Lane, District Howrah . . . . . (Rest.)
23 Indian Book Dist. Co., 6512 Mahatma Gandhi Road . . (Rest.)

CALICUT—Touring Book Stall . . (Rest.)

CHANDIGARH—
1 Supdt. Govt. Printing and Stationery, Punjab
2 Jain Law Agency, Flat No., 8 Sector No. 22 . . . . (Reg.)
3 Rama News Agency, Bookseller, Sector, No. 22 . . . . (Reg.)
4 Universal Book Store, Booth 25, Sector 22-D . . . . (Reg.)
5 English Book Shop, 34, Sector 22-D . . . . . (Rest.)
6 Mehta Bros, 15-Z, Sector 22-B . (Rest.)
7 Tandan Book Depot, Shopping Centre Sector 16 . . . (Rest.)
8 Kailash Law Publishers, Sector 22-B . . . . . (Rest.)

CHHINDWARA—
The Verma Book Depot . . (Rest.)

COCHIN—
Saraswat Corporation Ltd., Palliarakav Road . . . . (Reg.)

CUTTACK—
1 Press Officer Orissa Sectt.
2 Cuttack Law Times . . . . (Reg.)
3 Prabhat K. Mahapatra, Mangalabag, P. B. 35 . . . . (Reg.)
4 D.P. Sur & Sons, Mangalabag . (Rest.)
5 Utkal Stores, Balu Bazar . . (Rest.)

DEHRA DUN—
1 Jugal Kishore & Co., Rajpur Road . . . . . (Reg.)
2 National News Agency, Paltan Bazar . . . . . (Reg.)
3 Bishan Singh and Mahendra Pal Singh, 318, Chukhuwala . . (Reg.)
4 Utam Pustak Bhandar, Paltan Bazar . . . . . (Rest.)

DELHI—
1 J. M. Jaina & Brothers, Mori Gate . . . . . (Reg.)
2 Atma Ram & Sons, Kashmere Gate . . . . . (Reg.)
3 Federal Law Book Depot, Kashmere Gate . . . . . (Reg.)
4 Bahri Bros., 188, Lajpat Rai Market . . . . . (Reg.)
5 Bawa Harkishan Dass Bedi (Vijaya General Agencies) P.B. 2027, Ahata Kedara, Chamalian Road . . (Reg.)
6 Book-Well, 4, Sant Narankari Colony, P. B. 1565 . . . (Reg.)
7 Imperial Publishing Co., 3, Faiz Bazar Daryaganj . . . . (Reg.)
8 Metropolitan Book Co., 1, Faiz Bazar . . . . . (Reg.)
9 Publication Centre, Subzimandi . (Reg.)
10 Youngman & Co., Nai Sarak . (Reg.)
11 Indian Army Book Depot, 3, Daryaganj . . . . . (Reg.)
12 All India Educational Supply Co., Shri Ram Buildings, Jawahar Nagar . . . . . (Rest.)
13 Dhanwant Medical & Law Book House, 1522, Lajpat Rai Market . . . . . (Rest.)
14 University Book House, 15, U.B. Bangalore Road, Jawahar Nagar . (Rest.)
15 Law Literature House, 2646 Balimaran . . . . . (Rest.)
16 Summer Brothers, P. O. Birla Lines . . . . . (Rest.)
17 Universal Book & Stationery Co., 16, Netaji Subhash Marg . . (Reg.)
18 B. Nath & Bros., 3808, Charkhawalan (Chowri Bazar) . . . (Rest).
19 Rajkamal Prakashan P. Ltd., 8, Faiz Bazar . . . . . (Reg.)
20 Premier Book Co., Printers, Publishers & Booksellers, Nai Sarak . (Rest.)
21 Universal Book Traders, 80 Gokhale Market . . . . (Reg.)
22 Tech. & Commercial Book Coy., 75 Gokhle Market . . . (Rest.)
23 Saini Law Publishing Co., 1416, Chabiganj, Kashmere Gate . (Rest.)
24 G. M. Ahuja, Booksellers & Stationers, 309, Nehru Bazar . . (Rest.)
25 Sat Narain & Sons, 3141 Mohd. Ali Bazar, Mori Gate . . . (Reg.)
26 Kitab Mahal (Wholesale Div.) P. Ltd., 28, Faiz Bazar . . . (Reg.)
27 Hindu Sahitya Sansar, Nai Sarak (Rest.)
28 Munshi Ram Manohar Lal, Oriental Booksellers & Publishers, P. B. 1165, Nai Sarak . . . (Rest.)
29 K. L. Seth, Suppliers of Law, Commercial Tech. Books, Shanti Nagar, Ganeshpura . . . (Rest.)
30 Adarsh Publishing Service, 5-A/10 Ansari Road . . . . . (Rest.)

DHANBAD—
1 Ismag Co-operative Stores, P. O. Indian School of Mines . . (Reg.)
2 New Sketch Press, Post Box 26 . (Rest.)

DHARWAR—
1 The Agricultural College Consumers Co-op. Society . . . (Rest.)
2 Rameshraya Book Depot, Subhas Road . . . . . (Rest.)
3 Karnatakaya Sahitya Mandira of Publishers and Booksellers.

ERNAKULAM—
1 Pai & Co., Cloth Bazar Road . (Rest.)
2 South India Traders C/o Constitutional Journal . . . (Reg.)

FEROZEPUR—English Book Depot, 78, Jhoke Road . . . . (Reg.)

GAUHATI—Mokshada Pustakalaya . (Reg.)

GAYA—Sahitya Sadan, Gautam Budh Marg . . . . . (Reg.)

GHAZIABAD—Jayana Book Agency . (Rest.)

GORAKHPUR—Vishwa Vidyalaya Prakashan Nakhes Road . . (Reg.)

GUDUR—The General Manager, The N.D.C. Publishing & Ptg. Society Ltd. (Rest.)

GUNTUR—Book Lovers Private Ltd., Kadriguda Chowrasta . . (Reg.)

GWALIOR—
1 Supdt., Printing & Stationery M.B.
2 Loyal Book Depot, Patankar Bazar, Lashkar . . . . (Reg.)
3 M. C. Daftri Prop, M.B. Jain & Bros. Booksellers Sarafa, Lashkar (Rest.)

HUBLI—Pervaje's Book House, Koppikar Road . . . . . (Reg.)

HYDERABAD—
1 Director, Govt. Press
2 The Swaraj, Book Depot, Lakdikapul . . . . . (Reg.)
3 Book Lovers Private Ltd. . . (Rest.)
4 Labour Law Publications, 873, Sultan Bazar . . . . (Rest.)

IMPHAL—Tikendra & Sons Booksellers (Rest.)

INDORE—
1 Wadhawa & Co., 56, M.G. Road (Reg.)
2 Swarup Brothers Khajuri Bazar . (Rest.)
3 Madhya Pradesh Book Centre, 41, Ahilya Pura . . . . (Rest.)
4 Modern Book House, Shiv Vilas Palace . . . . . (Rest.)
5 Navyug Sahitya Sadan, Publishers & Booksellers, 10, Khajuri Bazar . (Rest.)

JABALPUR—
1 Modern Book House, 286 Jawaharganj . . . . . (Reg.)
2 National Book House, 135 Jai Prakash Narain Marg . . . (R.)

JAIPUR—
1 Government Printing and Stationery Department, Rajasthan
2 Bharat Law House, Booksellers & Publishers Opp. Prem Prakash Cinema . . . . . (Reg.)
3 Garg Book Co., Tripolia Bazar . (Reg.)
4 Vani Mandir, Sawai Mansingh Highway . . . . . (Reg.)
5 Kalyan Mal & Sons, Tripolia Bazar (Rest.)
6 Popular Book Depot, Chaura Rasta (Reg.)
7 Krishna Book Depot, Chaura Rasta (Rest.)
8 Dominion Law Depot, Shah Building P. B. No. 23 . . . (Rest.)

JAMNAGAR—Swadeshi Vastu Bhandar (Reg.)

JAMSHEDPUR—
1 Amar Kitab Ghar, Diagonal Road, P. B. 78 . . . . . (Reg.)
2 Gupta Stores, Dhatkidih . . (Reg.)

3 Sanyal Bros., Booksellers & News Agents Bistapur Market . . (Rest.)

JAWALAPUR—Sahyog Book Depot . (Rest.)

JHUNJHUNU—
1 Shashi Kumar Sarat Chand . . (Rest.)
2 Kapram Prakashan Prasaran, 1/90, Namdha Niwas Azad Marg . . (R.)

JODHPUR—
1 Dwarka Das Rathi, Wholesale Books and News Agents . . (Reg.)
2 Kitab-Ghar, Sojati Gate . . (Reg.)
3 Choppra Brothers, Tripolia Bazar (Reg.)

JULLUNDUR—
1 Hazooria Bros, Mai Hiran Gate . (Rest.)
2 Jain General House, Bazar Bansanwala . . . . . (Reg.)
3 University Publishers, Railway Road . . . . . (Rest.)

KANPUR—
1 Advani & Co., P. Box. 100, The Mall (Reg.)
2 Sahitya Niketan, Shradhanand Park (Reg.)
3 The Universal Book, Stall, The Mall (Reg.)
4 Raj Corporation Raj House, P.B. 200, Chowk . . . . (Rest.)

KARUR—Shri V. Nagaraja Rao, 26, Srinivisapuram . . . . (Rest.)

KODARMA—The Bhagwati Press, P.O. Jhumri Tilaiya, Distt. Hazaribagh (Reg.)

KOLHAPUR—Maharashtra Granth Bhandar, Mahadwar Road . (Reg.)

KOTA—Kota Book Depot . . . (Rest.)

KUMTA—S. V. Kamat, Booksellers & Stationers (North Kanara) . . (Reg.)

LUCKNOW—
1 Soochna Sahitya Depot (State Book Depot.)
2 Balkrishna Book Co., Ltd., Hazratganj . . . . . (Reg.)
3 British Book Depot-, 84, Hazratganj . . . . . (Reg.)
4 Ram Advani, Hazratganj, P.B. 154 (Reg.)
5 Universal Publishers (P) Ltd. Hazratganj . . . . . (Reg.)
6 Eastern Book Co., Lalbagh Road (Reg.)
7 Civil & Military Educational Stores, 106/B Sadar Bazar . . . (Rest.)
8 Acquarium Supply Co., 213, Faizabad Road . . . . . (Rest.)
9 Law Book Mart, Amin-Ud-Daula Park . . . . . (Rest.)

LUDHIANA—
1 Layall Book Depot, Chaura Bazar (Reg.)
2 Mohindra Brothers, Katcheri Road (Rest.)
3 Nanda Stationery Bhandar, Pustak Bazar . . . . . (Rest.)
4 The Pharmacy News, Pindi Street (Rest.)

MADRAS—
1 Supdt. Govt. Press, Mount Road
2 Account Test Institute, P.O. 760 Egmore . . . . . (Reg.)
3 C. Subbiah Chetty & Co., Triplicane (Reg.)
4 K. Krishnamurthy, Post Box 384 . (Reg.)
5 Presidency Book Supplies, 8, Pycrofts Road, Triplicane . . . (Reg.)
6 P. Vardhachary & Co., 9 Linghi Chetty Street . . . . . (Reg.)
7 Palani Parchuram 3, Pycrofts Road, Triplicane . . . . . (Reg.)
8 NCBH Private Ltd., 199, Mount Road . . . . . (Rest.)
9 V. Sadanand, The Personal Bookshop, 10, Congress Building 111, Mount Road . . . . . (Rest.)

MADURAI—
1 Oriental Book House, 258, West Masi Street . . . . . (Reg.)
2 Vivekananda Press, 48, West Masi Street . . . . . (Reg.)

MANDYA SUGAR TOWN—K. N. Narimhe Gowda & Sons . . (Rest.)

MANGALORE—U. R. Shenoye Sons, Car Street, P. Box. 128 . . (Reg.)

MANJESHWAR—Mukenda Krishna Nayak . . . . . (Rest.)

MATHURA—Rath & Co., Tilohi Building, Bengali Ghat . . . (Rest.)

MEERUT—
1 Prakash Educational Stores, Subhas Bazar . . . . . (Reg.)
2 Hind Chitra Press, West Kutchery Road . . . . . (Reg.)
3 Loyal Book Depot, Chhippi Tank (Reg.)
4 Bharat Educational Stores, Chhippi Tank . . . . . (Rest.)
5 Universal Book Depot, Booksellers & News Agents . . . . (Rest.)

MONGHYR—Anusandhan, Minerva Press Building . . . . . (Rest.)

MUSSOORIE—
1 Cambridge Book Depot., The Mall (Rest.)
2 Hind Traders . . . . . (Rest.)

MUZAFFARNAGAR—
1 Mittal & Co., 85-C, New Mandi (Rest.)
2 B. S. Jain & Co., 71, Abupura . (Rest.)

MUZAFFARPUR—
1 Scientific & Educational Supply Syndicate . . . . . (Reg.)
2 Legal Corner, Tikmanio House, Amgola Road . . . . . (Rest.)
3 Tirhut Book Depot . . . . (Rest.)

MYSORE—
1 H. Venkataramiah & Sons, New Statue Circle . . . . . (Reg.)
2 Peoples Book House, Opp. Jagan Mohan Palace . . . . . (Reg.)
3 Geeta Book House, Booksellers & Publishers, Krishnamurthipuram (Rest.)
4 News Paper House, Lansdowne Building . . . . . (Rest.)
5 Indian Mercantile Corporation, Toy Palace, Ramvilas . . . (Rest.)

NADIAD—R. S. Desay, Station Road . (Rest.)

NAGPUR—
1 Supdt., Govt. Press & Book Depot
2 Western Book Depot, Residency Road . . . . . (Reg.)
3 The Asstt. Secretary, Mineral Industry Association, Mineral House (Rest.)

NAINITAL—Coural Book Depot., Bara Bazar . . . . . (Rest.)

NANDED—
1 Book Centre, College Law General Books, Station Road . . . (Rest.)
2 Hindustan General Stores, Paper & Stationery Merchants P.B. No. 51 (Rest.)
3 Sanjoy Book Agency, Vazirabad . (Rest.)

NEW DELHI—
1 Amrit Book Co., Connaught Circus (Reg.)
2 Bhawani & Sons, 8-F Connaught Place . . . . . (Reg.)

3 Central News Agency, 23/90, Connaught Circus . . . (Reg.)
4 Empire Book Depot, 278, Aliganj (Reg.)
5 English Book Stores, 7-L, Connaught Circus P.O. B. 328 . (Reg.)
6 Faqir Chand and Sons, 15-A Khan Market . . . . . (Reg.)
7 Jain Book Agency, C-9, Prem House, Connaught Place . . . (Reg.)
8 Oxford Book & Stationery Co., Scindia House . . . . . (Reg.)
9 Ram Krishna & Sons (of Lahore) 16/B, Connaught Place . . (Reg.)
10 Sikh Publishing House, 7-C, Connaught Place . . . . (Reg.)
11 Suneja Book Centre, 24/90 Connaught Circus . . . . (Reg.)
12 United Book Agency, 31, Municipal Market, Connaught Circus . (Reg.)
13 Jayana Book Depot, Chhaparwala Kuan, Karol Bagh . . . (Reg.)
14 Navyug Traders, Desh Bandhu Gupta Road, Dev Nagar . . (Reg.)
15 Saraswati Book Depot, 15, Lady Harding Road . . . . . (Reg.)
16 The Secretary, Indian Met, Society, Lodi Road. . . . . (Reg.)
17 New Book Depot., Latest Books, Periodicals, Sty. & Novelles, P.B. No. 96, Connaught Place . (Reg.)
18 Mehra Brothers, 50-G, Kalkaji . (Reg.)
19 Laxmi Book Stores, 42, Janpath . (Rest.)
20 Hindi Book House, 82, Janpath . (Rest.)
21 Peoples Publishing House (P) Ltd., Rani Jhansi Road . . . (Reg.)
22 R.K. Publishers, 23, Beadon Pura, Karol Bagh . . . . . (Rest.)
23 Sharma Bros., 17 New Market, Moti Nagar . . . . . (Reg.)
24 Aapki Dukan, 5/5777, Dev Nagar (Rest.)
25 Sarvodaya Service, 66A-1, Rohtak Road, P. B. 2521 . . . (Rest.)
26 H. Chandson, P.B. No. 3034 . (Rest.)
27 The Secretary, Federation of Association of Small Industry of India, 23-B/2, Rohtak Road . . . (Rest.)
28 Standard Booksellers & Stationers, Palam Enclave . . . . (Rest.)
29 Lakshmi Book Depot, 57, Regarpura . . . . . (Rest.)
30 Sant Ram Booksellers, 16, New Municipal Market Lody Colony . (Rest.)

PANJIM—
1 Singhals Book House, P.O. Box 70 Near the Church . . . (Rest.)
2 Sagoon Gaydev Dhoud, Booksellers, 5-7 Rua, 3 Idc Jameria . (Rest.)

PATHANKOT—The Krishna Book Depot, Main Bazar . . . (Rest.)

PATIALA—
1 Supdt., Bhupindra State Press
2 Jain & Co., 17, Shah Nashin Bazar (Reg.)

PATNA—
1 Supdt. Govt. Printing (Bihar)
2 J. N. P. Agarwal & Co., Padri-Ki-Haveli Raghunath Bhawan . . (Reg.)
3 Luxmi Trading Co., Padri-Ki-Haveli (Reg.)
4 Moti Lal Banarsi Dass, Bankipore (Reg.)
5 Bengal Law House, Chowhatta . (Rest.)

PITHORAGARH—Maniram Punetha & Sons . . . . . (Rest.)

PONDICHERRY—M/s. Honesty Book House, 9, Lue Duplix . . . (R.)

POONA—
1 Deccan Book Stall, Deccan Gymkhana . . . . . (Reg.)
2 Imperial Book Depot, 266, M.G. Road . . . . . (Reg.)
3 International Book Service, Deccan Gymkhana . . . . . (Reg.)
4 Raka Book Agency, Opp. Natu's Chawl, Near Appa Balwant Chowk (Reg.)
5 Utility Book Depot, 1339, Shivaji Nagar . . . . . (Rest.)

PUDUKOTTAI—Shri P. N. Swaminathan Sivam & Co., East Main Road . . . . . (Rest.)

RAJKOT—Mohan Lal Dossabhai Shah, Booksellers and Sub-agents . (Reg.)

RANCHI—
1 Crown Book Depot., Upper Bazar (Reg.)
2 Pustak Mahal, Upper Bazar . (Rest.)

REWA—Supdt. Govt. State Emporium V.P.

ROURKELA—The Rourkela Review . (Rest.)

SAHARANPUR—Chandra Bharta Pustak Bhandar, Court Road . . (Rest.)

SECUNDERABAD—Hindustan Diary Publishers, Market Street . . (Reg.)

SILCHAR—Shri Nishitto Sen Nazirpatti (Rest.)

SIMLA—
1 Supdt. Himachal Pradesh Govt. Press.
2 Minerva Book Shop, The Mall . (Reg.)
3 The New Book Depot, 79, The Mall . . . . . (Reg.)

SINNAR—Shri N. N. Jakhadi, Agent, Times of India Sinnar (Nasik) . (Rest.)

SHILLONG—
1 The Officer-in-charge, Assam Govt. B.D.
2 Chapla Bookstall, P.B. No. 1 . (Rest.)

SONEPAT—United Book Agency . (Rest.)

SRINAGAR—The Kashmir Bookshop, Residency Road . . . (Reg.)

SURAT—Shri Gajanan Pustakalaya Tower Road . . . . . (Reg.)

TIRUCHIRAPALLI—
1 Kalpana Publishers, Wosiur . (Reg.)
2 S. Krishnaswami & Co., 35, Subhash Chander Bose Road . (Reg.)
3 Palamiappa Bros. . . . (Rest.)

TRIVANDRUM—
1 International Book Depot, Main Road . . . . . (Reg.)
2 Reddiar Press & Book Depot, P.B. No. 4 . . . . . (Rest.)

TUTICORIN—Shri K. Thiagarajan, 10-C, French Chapal Road . . (Rest.)

UDAIPUR—
1 Jagdish & Co., Inside Surajapole . (Rest.)
2 Book Centre, Maharana, Bhopal Consumers, Co-op Society Ltd. . (Rest.)

UJJAIN—Manak Chand Book Depot, Sati Gate . . . . . (Rest.)

VARANASI—
1 Students Friends & Co., Lanka . (Rest.)
2 Cowkhamba Sanskrit Series Office, Gopal Mandir Road, P. B. 8 . (Reg.)