

Chapter - V

TYPES AND PATTERNS OF RURAL SETTLEMENTS

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Chapter - V

Types and Patterns of Rural settlements

5.1 INTRODUCTION -

The geography of rural settlements is a sub-field of settlement geography, which deals with urban as well as rural settlements. The study of rural settlement is basic to the human geography because the form settlement in any particular region reflects man's relationship with the environment. settlements have gradually grown up and evolved over along the period time and by studying the site, pattern and arrangement of settlement

(Leong and Morgan, 1982).

Rural settlements indicate the complex relationship between the human occupancy of land and the environment. The type of settlement is a system of functionally interrelated settlements. Each village is a part of total system of each centre and it performs certain functions. Throughout the human history settlements have evolved a close relationship between topography and resources. (Kumbhar, 1997)

In fact almost the endless variety of settlements can be classified in several different ways. The settlements can be grouped into two categories as town and village. The basic characteristics of settlements are, more of the people engaged in agricultural work, some other occupations are in villages such as fishing, mining, and lumbering etc. and less availability of shopping centres and lack of industries (Leong and Morgan, 1982).

5.2 FACTORS AFFECTING THE TYPES OF RURAL SETTLEMENTS -

There are so many factors, which affects on the types of rural settlements These factors affect outer and inner structures of the settlements. The outer shapes and inner structures of a villages are governed by several factors such

physical, social, historical and economic. In case of indigenous growth of villages the farms have been governed by various forces, whereas in case of planned settlements it may be the outcome of conscious efforts of the planner.

The physical factors affecting the form of rural settlements are the configuration of site, water bodies like rivers and ponds, slope and elevation of land such as plains, uplands or valleys, water table, water-logged areas etc. All these are of paramount importance in the growth of village patterns under effects of natural environment.

Among cultural factors historical events, planned geometrical patterns of Roads and lanes. Field pattern, religious institutions like mosques and temples etc. are intimately related to the structure of the village. The state of insecurity in the past and the present social make up of the village are other significant factors in the development of village patterns. (Mandal-1979)

Socio-economic factors such as land tenure, transport network, and density of population also control the settlement types. Along the road and railway route the linear types of rural settlements are formed. The density of population concerned mostly with the organization of agglomerated types of settlements.

When above factors control the types of rural settlements, the development of technology accelerates the development in agriculture which influences on the rural settlements types in the study region. Similarly political, religious and socio-cultural considerations are also important in the study of rural settlement types.

5.3 TYPES OF RURAL SETTLEMENTS:-

primarily rural settlements may be classified into two broad groups. Compact settlements have narrow lanes and tortuous streets separating the houses. Dispersal settlements exhibit privacy marked by scattered dwellings made by peasants in their respective farms and fields. In between these two extremes,

semi-compact and semi- sprinkled types are more numerous and these result from physical, social and economic history of the community.

The settlements having lower spacing and the greater population size have been declared to be compact settlements. The hamlets, having a higher spacing and lower population size have been classified as dispersed settlements.

In other words, a settlement of one hamlet only is called dispersed settlement, while a settlement having one large hamlet and one or two smaller sub-hamlets falls in the category of semi-compact settlement.

Similarly a settlement having a number of hamlets and therefore, no recognisable central site is classified as semi-sprinkled settlements. A settlement built in a secluded place where the hamlet is small and the houses are also comparatively far apart, is called sprinkled or dispersed. (Mandal-1979)

5.4 METHODOLOGY-

For the identification of the rural settlement types in the study region, the following methods are used. The first, topographical maps (1:50,000) show the clear picture of rural settlements and other method is statistical method, which is used to study the rural settlement types. the dispersion index has been calculated by the formula used by Mandal (1979).

To find the settlement types, the entire area has been divided into sizable grids of 4 Km x 4 Kms and index of dispersion has been calculated each grid by the following formula:-

$$DI = \frac{R_{Pi} \times V_i}{A_i^2}$$

Where, DI= Dispersal Index

R_{Pi} = Total Rural Population Of 1st Grid

A_i = Area of the Grid

After, calculating the index of dispersion the region has been classified into four types of rural settlements, they are-

- 1) Compact type
- 2) Composite type
- 3) Disperse type
- 4) Fragmented type.

Table V-I
Koregaon Taluka
Settlement types, Area Covered,

No. of settlements and the percentage to total- 1991

Sr. No.	Dispersal Index Value	Types Of Settlement	Area in sq.km	% of Area	No. of settlement	% to total
1	Below 5	Fragmented	384	41.7	56	50.9
2	5 - 10	Disperse	224	24.3	24	21.8
3	10 -15	Composite	104	11.3	14	12.7
4	Above 15	Compact	208	22.7	16	14.6
			920.00	100	110	100

Source- Author

5.5 REGIONAL ANALYSIS-

The dispersal index have been plotted in figure No.5.1 which clearly show that the whole area classified into four major types of rural settlements. The table No. V-I give the details of area and number of settlement in different classes of settlement types.

KOREGAON TALUKA
TYPES OF RURAL SETTLEMENT

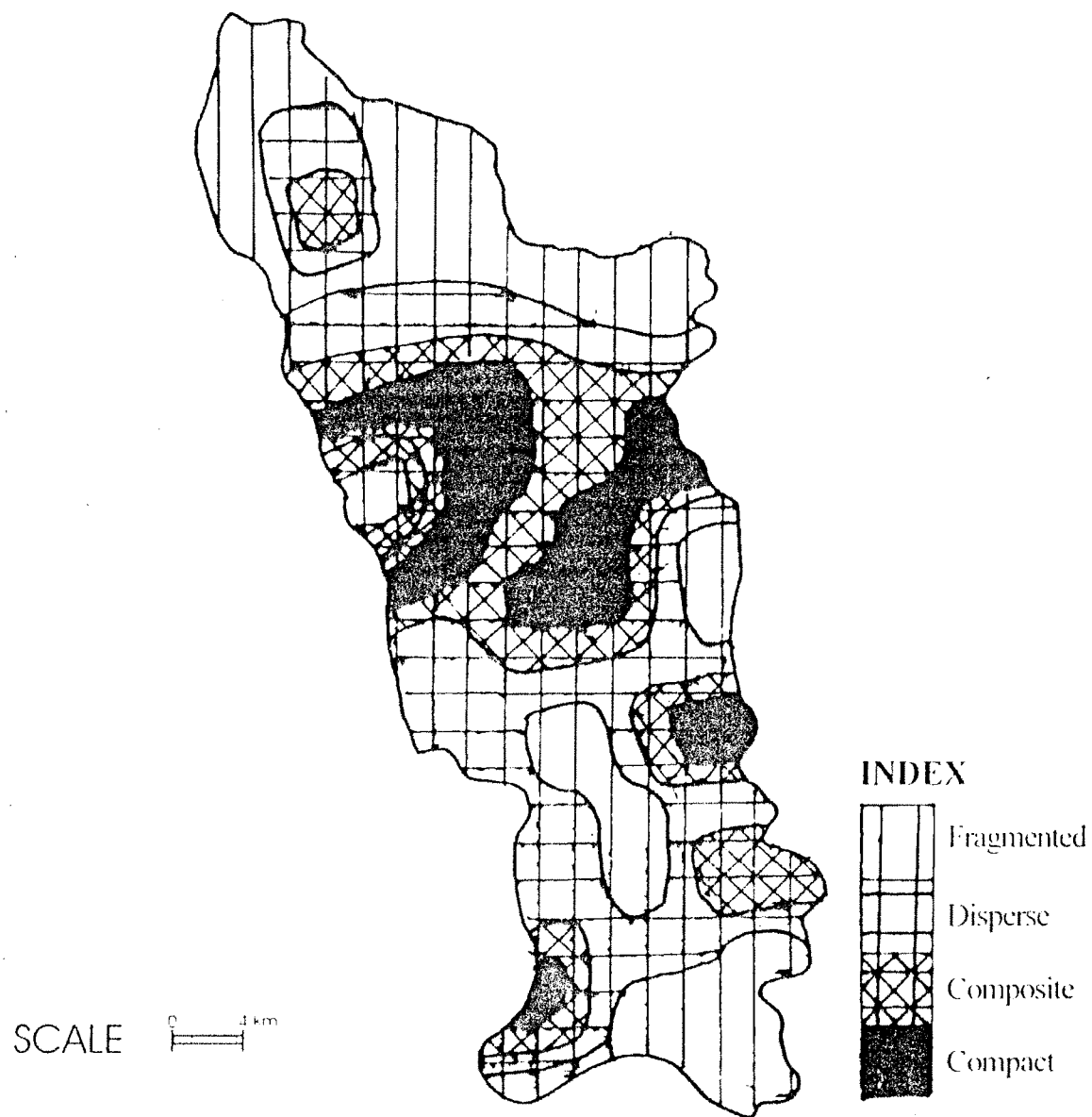


FIGURE No. 5.1

1) The Fragmented types of Rural Settlements-

The maximum area of the study region is covered by the fragmented types of rural settlements. It occupies nearly 41.7 percent of the total area and 50.9 percent of the total rural settlements. Most of the Northern and eastern part and southern toe of the study region, fragmented type of settlement are found. Where physical factors are mostly influenced the organization of fragmented type of settlements.

2) The Disperse Type of Rural Settlements-

The disperse type of rural settlements are found at western and middle part of the study region, which is covered 24.3 percent land and 21.8 percent of rural settlements. This portion of the study region along the vasna river where availability of water, development of canal irrigation and fertile soil are some of the contributory factors responsible for the development of disperse type of rural settlements.

3) Composite Type of Rural settlements-

In the study region, composite type of rural settlement zones are located at four places, one is northern side, another at middle, third patch of composite rural settlements is located at western part of the region and the forth is located at eastern boundary of the taluka, which is covered 11.3 percent of the total land and 12.7 percent of the settlements

4) The compact type of rural settlement-

Such type of settlements are observed at middle, western and eastern boundary of the study region. It covers 22.7 percent land of koregaon Taluka where the total settlements are 14.5 percent.

Observed Types of Rural Settlements-

There are various forms of rural settlements showing in the scale 1:50,000 toposheets, therefore one inch toposheet has been used. The deep observation of

topographical map indicates the following types of rural settlements in the Koregaon Taluka.

1) The fragmented type of Rural settlements -

In such settlements houses are away from each other but the entire group of houses makes one village. The fragmented type of rural settlements are most commonly found on the margins of spurs or in the small nallas. In the toposheet No. $47\frac{K}{1}$ the fragmented type of rural settlements like Hivare, Bhadale, kinhai, shendurgane are the best examples. fig No. 5.2

2) The Disperse Type of Rural settlements -

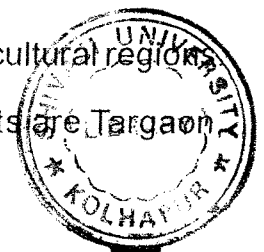
Disperse settlements can also be called as isolated settlements, such settlements include farmstead, homestead and wadi settlements. The disperse type of rural settlements are found at western and middle part of study region, in this area Golewadi, vadachiwadi, Yeksal, Godsewadi, etc. figure No. 5.3. The toposheet No. $47\frac{K}{2}$ show several examples of Disperse type of rural settlements.

3) Composite types of rural settlements

Composite types of settlements have one main single village attached with two to five small hamlets. These hamlets totally depend on the main settlement (Kumbhar, 1997). The toposheet No $47\frac{K}{2}$ show several examples of the composite form of rural settlements in which Rahimatpur, Wathar kiroli wathar station are the best examples. fig No. 5.4 indicates the composite type of rural settlements.

4) The compact type of rural settlements

The compact settlements are also called as agglomerated settlements. Such type of settlements are normally found in the plain, fertile agricultural regions. The toposheet No. $47\frac{K}{6}$ has locating the compact settlements are Targaon



FRAGMENTED TYPE OF RURAL SETTLEMENT

47 K/1

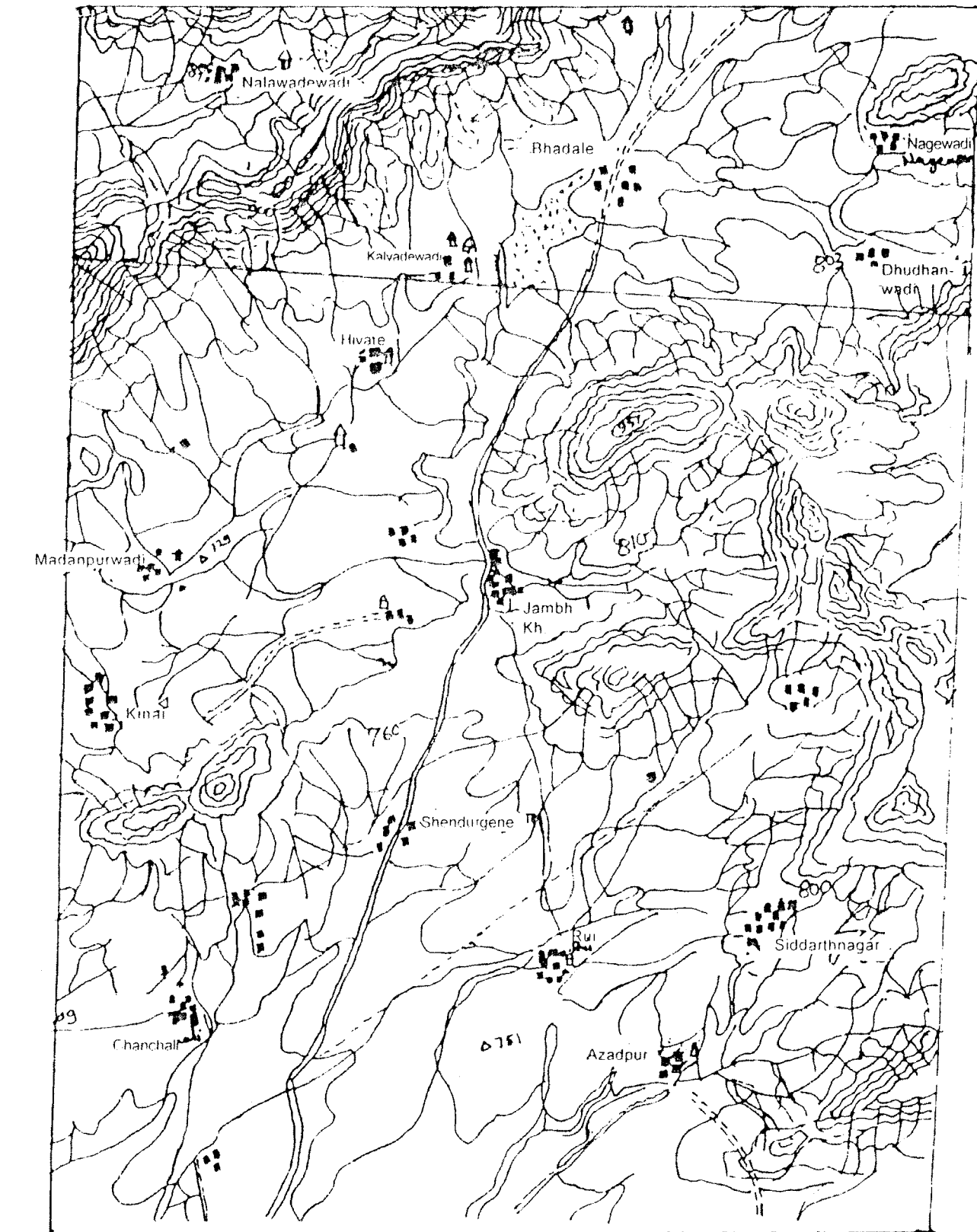


FIGURE No. 5.2

DISPERSE TYPE OF RURAL SETTLEMENT

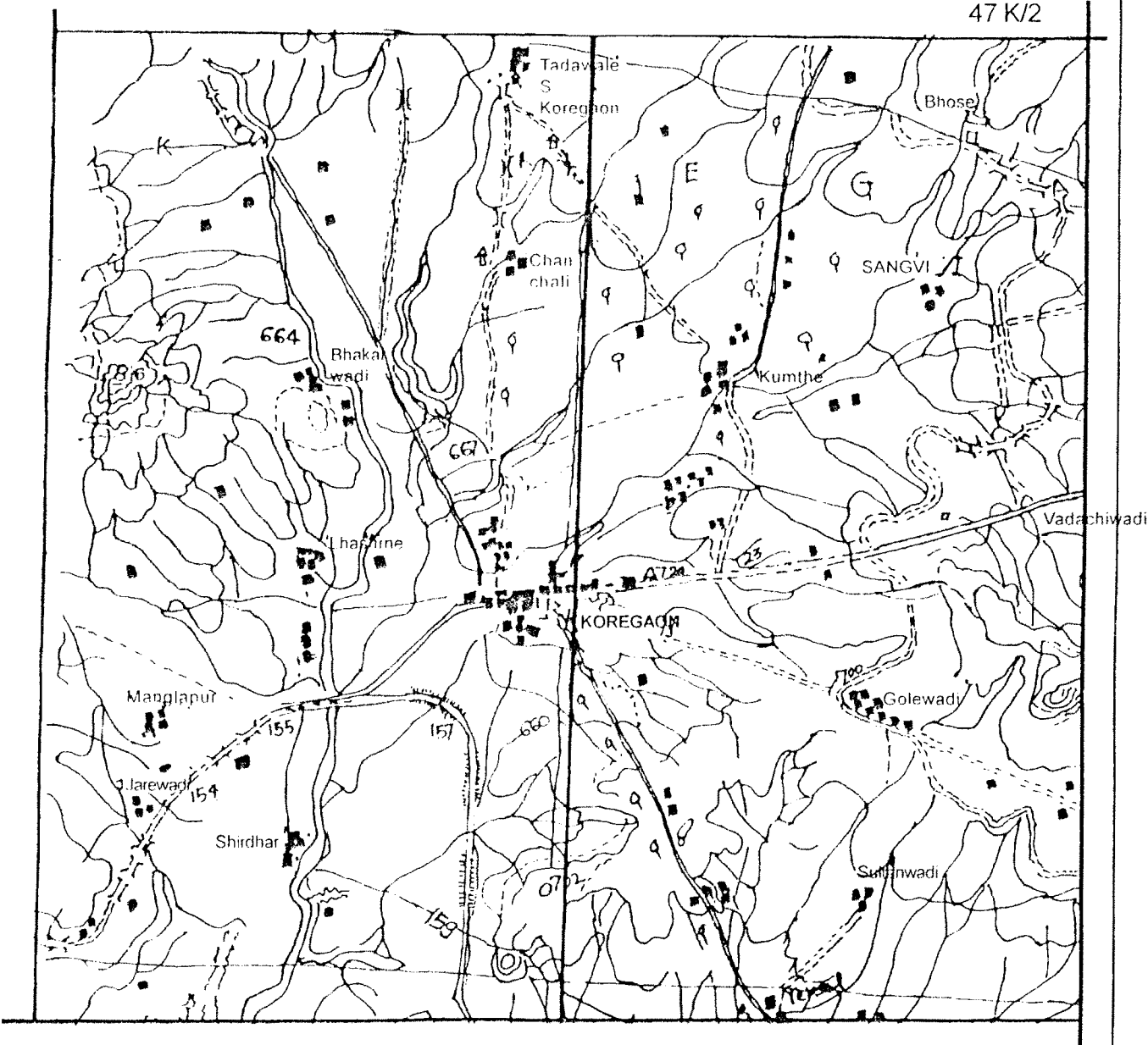
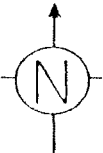


FIGURE No. 5.3



COMPOSITE TYPE OF RURAL SETTLEMENT

47 K / 2

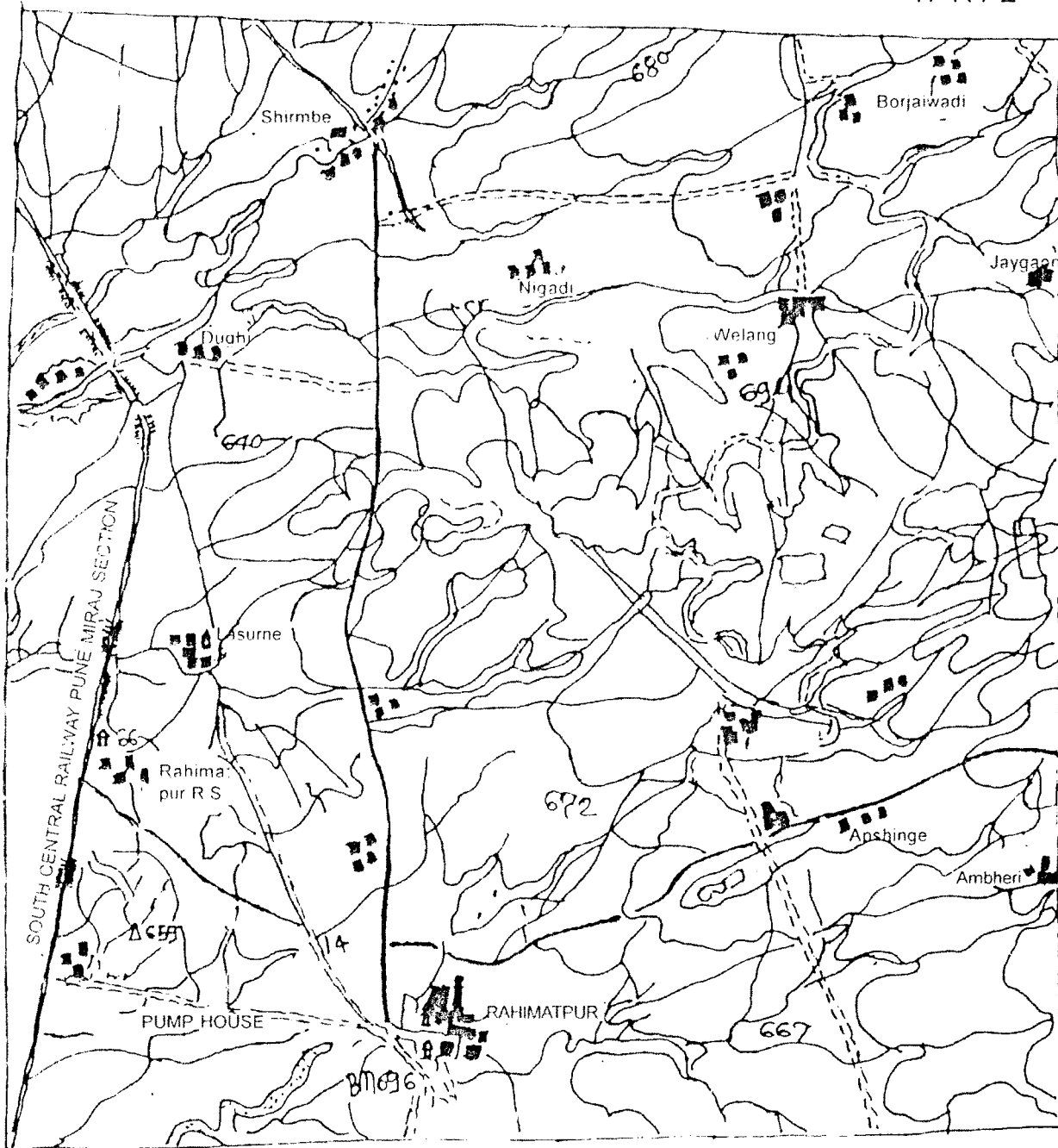


FIGURE No. 5.4

COMPACT TYPE OF RURAL SETTLEMENT 47 K/6

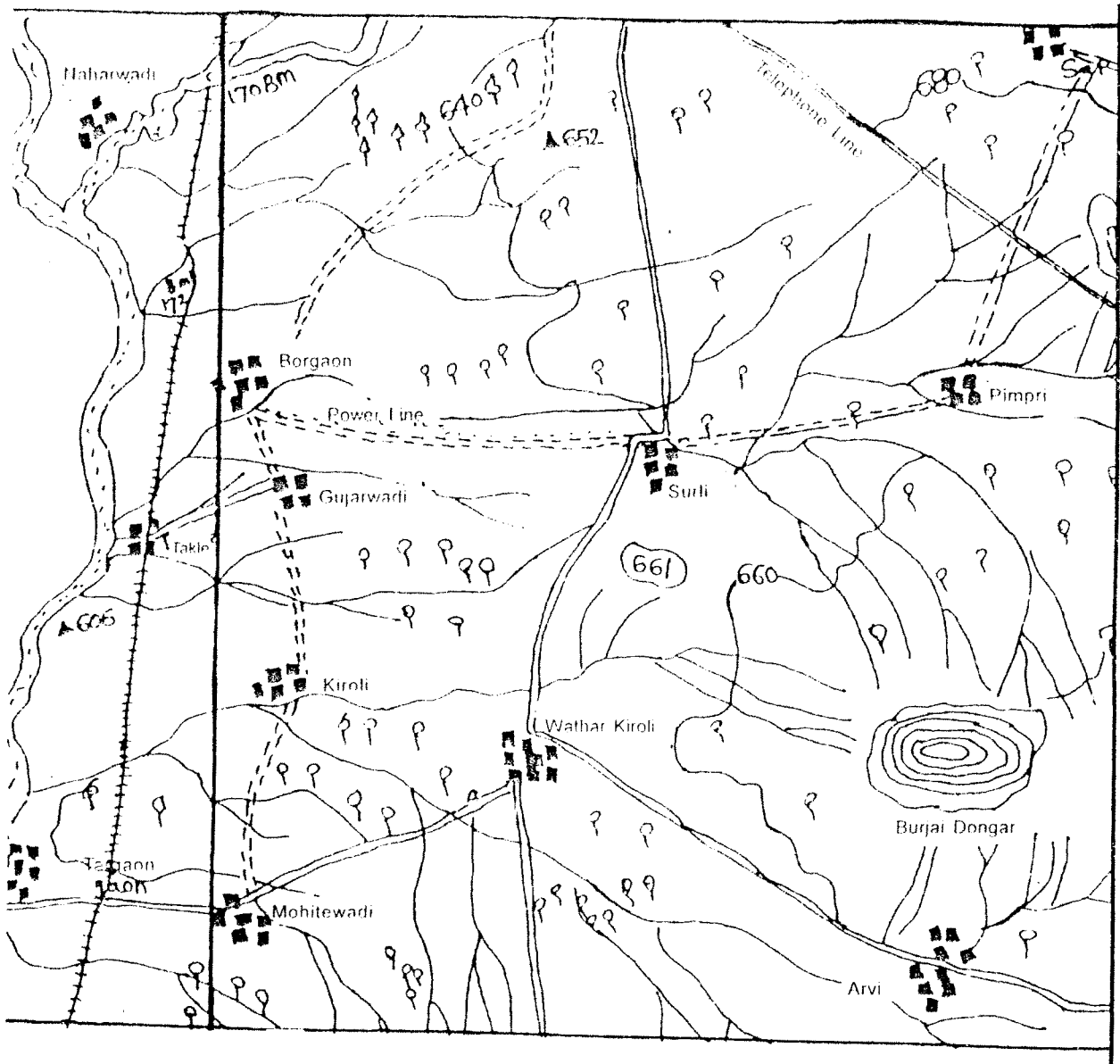
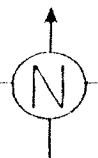


FIGURE No. 5.5



Kiroli, Guarwadi, Borgaon, surli are the best examples. Figure No. 5.5 shows the clear picture of compact type of rural settlements in Koregaon Taluka.

5.6 PATTERNS OF RURAL SETTLEMENTS -

The morphology of rural settlement is its anatomy governed by physical and cultural factors and manifests in the physical form and structure including the layout of streets and spacing of buildings. The layout means external and internal form of settlements which in turn depend upon the physical and cultural conditions of the landscape and the society (E. Ahmad-1952).

The rural settlements nucleus develops at the most accessible place from where the surrounding agricultural land can be easily observed (Duggal, 1961). Almost all villages are related to the types of soils, field pattern and other cultural elements like temples, mosques etc. (Singh, 1955). The present work has concerned to the form of houses, structure of roads and expansion of villages.

Village Patterns-

In Koregaon Taluka the Physical factors, like topography, Drainage and vegetation and cultural activities such as transport and communication, marketing, streets, formed the various rural settlement patterns. The following rural settlement patterns observed in the study region.

1) The square Village Pattern -

The square pattern and rectangular pattern are always complementary to each other. This pattern is generally associated with villages lying at the crossing of cart tracks or roads. It is also related to some features restricting the extension of the village outside a square space such as an old boundary wall. In the study region Nandwal, Khed, Arvi, Borgaon, Naharwadi, Rui and Azadpur have the similar pattern of settlement (fig-5.6)

2) The Elongated Village Pattern -

Elongated village pattern is easily recognised by its simple arrangement of houses along a line or a series of lines. The settlement prolonged in one direction and restricted in another due to certain physical features. The best examples of elongated patterns are the shirambe & Dughi in the study region. (fig-5.6)

3) Circular Pattern -

A circular village may have several variations, which are caused by an attempt to build a maximum number of houses at one site. The houses may be concentrated for the purpose of defence or build around the mansion of the local 'zamindars or around a well. It may also be necessitated by a desire to have a higher site for building purpose. The best example of circular pattern are karanjkhop and knherkhed. (figure-5.6)

4) Irregular Pattern -

It is the more common form in larger villages than amongst average sized compact settlements. In this pattern houses are huddled in an irregular fashion without following any definite plan. This pattern is not possible in the dispersed settlements, where dwellings are scattered in the whole village without any definite street. velang, kumthe, Lhasurne, Bichukale, Tadavale and Randullabad are the best examples of irregular pattern of village. (figure- 5.6)

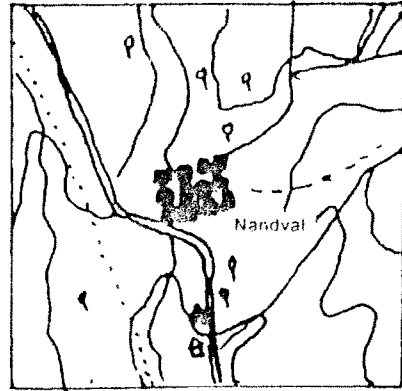
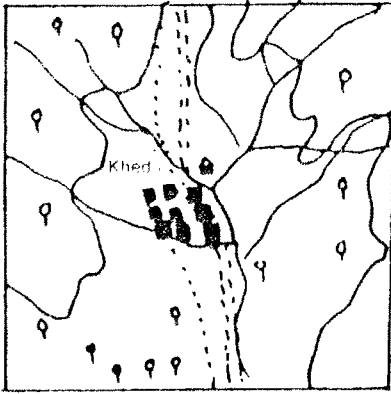
5) linear Pattern -

The linear pattern form of the rural settlements found in varied physical and cultural conditions. Normally such pattern develops along the roads, rivers, nallas and on hill terraces. (kumbhar, 1997). The best example of linear pattern settlements are at sonake, Eksal, sarkalwadi, and sap. (figure 5.6)

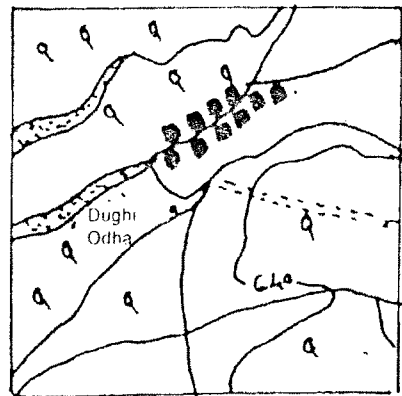
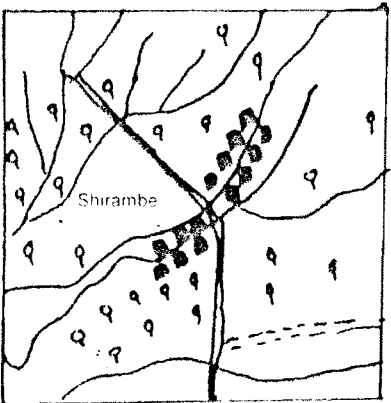
6) Amorphous Pattern -

If the village lands are dotted with many hamlets and individual farmsteads, all

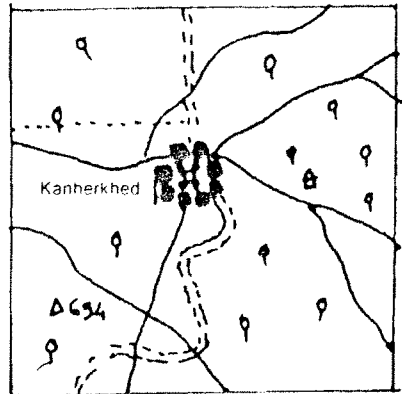
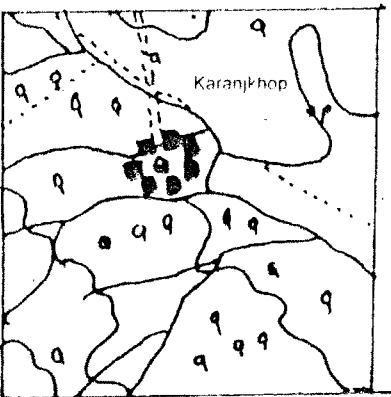
THE SQUARE PATTERN



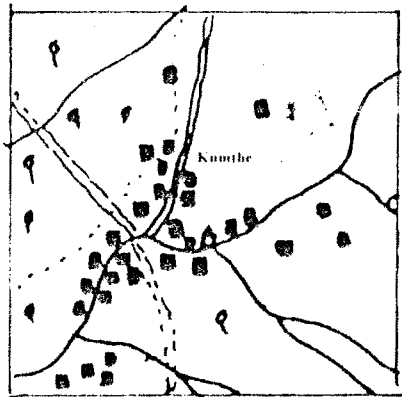
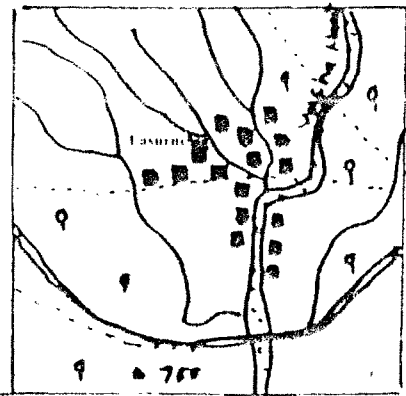
THE ELONGATED PATTERN



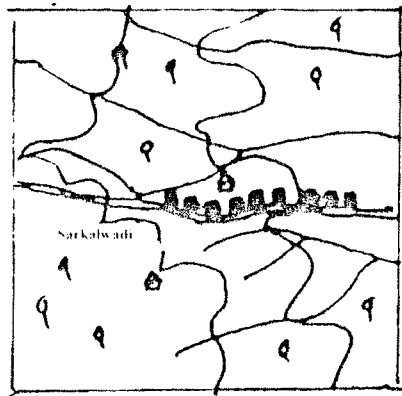
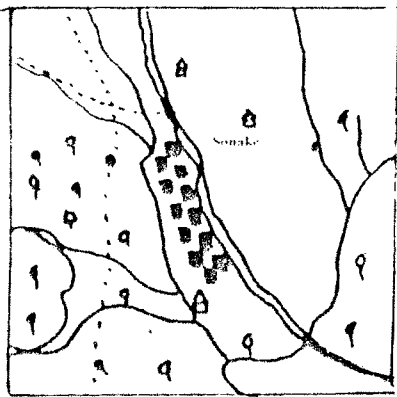
THE CIRCULAR PATTERN



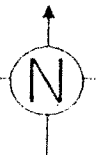
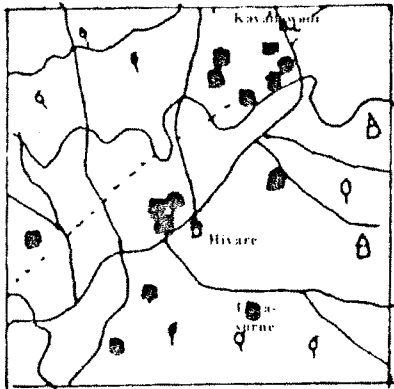
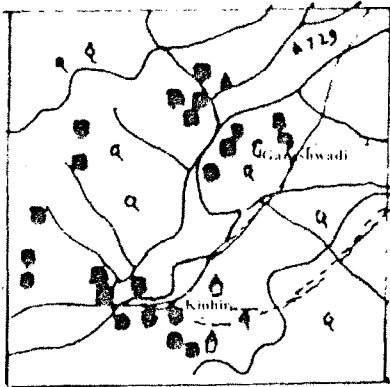
IRREGULAR VILLAGE PATTERN



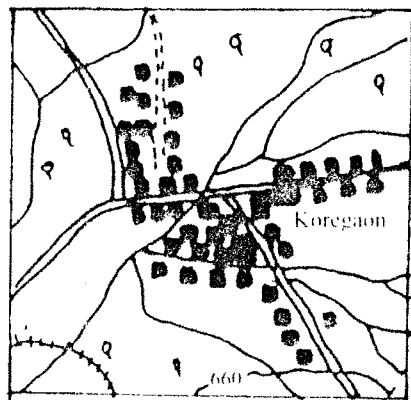
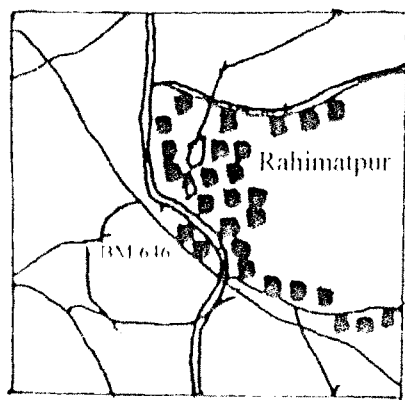
LINEAR VILLAGE PATTERN

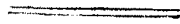





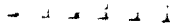

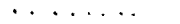

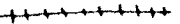



AMORPHOUS VILLAGE PATTERN



SHAPELESS AGGLOMERATION PATTERN



- | | | | |
|---|-----------------|---|---------------|
|  | Road Metalled |  | Settlements |
|  | Road Unmetalled |  | River / Nalas |
|  | Cart Track |  | Temple |
|  | Foot Path |  | Canal |
|  | Power Line |  | Vegetation |
|  | Rail Way |  | Height in M. |

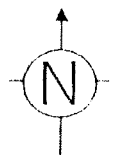


FIGURE No. 5.6

being very small rectangles linked with the central hamlet by crude paths, no definite pattern can be recognised, Such an amorphous pattern. In the study area amorphous pattern is found at Romoshiwadi, Borjaiwadi, vadachiwadi, kathapur and kolavadi (figure No. 5.6)

7) Shapeless Agglomeration Pattern-

Shapeless agglomeration pattern is the most common form of village pattern found in the study region. Koregaon, Rahimatpur, Wathar-station. Wathar-kiroli etc are the best examples of shapeless agglomeration pattern of villages.

It is observed that the compact and composite types of rural settlements show variety of patterns as compare to disperse and fragmented type of rural settlements. In spite of physical and cultural factors play an important role in the shaping village pattern in the koregaon Taluka.

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