CHAPTER I
DEVELOPMENT OF SETTLEMENT

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CHAPTER I
DEVELOPMENT OF SETTLEMENT

1.1 Introduction:

Shelter is one of the most important basic helissities of human being. Even the naked saints or pygmies need sound sleep the physiological necessity of living being at some place. Man also needs some sort of shelter for safe rest for shelter he selects tree branches, caves or Pits or rock-cut hiding places. These Shelter Places become the most concrete expression of human cultural activity and assume various forms as well as names. Houses dwelling group of Houses, abodes, habit action all from human habitat more specifically settlements with the establishment of any sort of dwelling the foundation of a civilization is laid which grows flourishes and spreads like petals of blossoming flowers in all directions in varied tint and colour and temporal variation in the form of habitations these become the concrete expressions of anthropogenic and later on technogenic adaption of human being. Although all living or ganisms build for themselves nests dwelling like bees, beavers ants etc. An animal only Produces what it immediately needs for itself or it’s young. It produces one Sidely whilst man Produces universally\(^1\). This universality of houses and their grouping in the form of Settlements exhibit Variations in Size Shape Pattern and types as well as multi-distributional aspects. All being the subject matter of Systematic study.

The study of a Single most settlements with its own niche in the habitat and as a subsystem of a system. Both become essential. The unit of settlement however may range from a slum dwelling in
shanty town a herders hut a farm or a tribal’s home stead up to ecumenopolis. Thus any settlement can be studied in either a world or a regional context, but any settlement if it is to be adequately apriciated must be correlated with other facts of geography e.g. relief, climate geology and social and economic conditions. Brunnes put houses in the first group among the essential facts of human geography houses roads and fields are also the essential facts of human occupation. The distinctive features of the landscape. Transformation of original habitat by settlements is so much so that in towns the very air itself is changed and vitiated and everything is of an artificial character.

We start here with the assumption that man is a product of the earths surface.

But mans relation to nature has emerged not as one of self interrogation nor even of simple dialogue but of a conference with others present and in which social man increasingly has the right of veto.

Geography is integrating concepts and processes concern the worldwide ecosystem of which man is the dominant part. Man in the context of geographical man machine analogy is composed of a complex of interlocking socio- economic systems which operate on the above machine by means of decision making mechanisms of great complexity and bias not without their own important stochastic elemements.

During man’s adaption with the environments, man came in close contact with various environmental features and his reaction of adaption brought forth change in his physical landscape. These changes are identified as cultural Landscape and present man’s
relation to man and the earth. The author agrees with the American Philosopher who Philosophizes Over geography that more than an inventory, of man and things, geography at heart is a concern to depict man’s relation to man upon the earth, although earth were his home. “In a geographers words It is a way of understanding man in a matrix of human and physical relationship and interrelationship”. These interrelations are best expressed through the settlements, which are concrete expression of human occupancy of the earth surface.

Settlement geography, being an offshoot of social geography or a recent sprout from the venerable trunk of human geography was mainly concerned with urban settlements before the turn of the twentieth century. But since two third of the world population and about 98 percent of the total settlements occupy rural areas many historians, sociologists and geographers have studied rural settlements as well as problems attached with environmental aspects in rural areas. So a comprehensive study of settlements requires explanation of site and situation building materials forms, functions, types and patterns and characteristics. Of these site and situation and material need full interpretation of physical environmental aspects and cultural linkages while morphology requires in depth study of sequent occupance involving historical background of the unit of occupance as well as the man the occupant. Regional variations and spatial patterns present significant subject matter for analyzing the sequence of change.

1.2 Definition scope and approaches:

During his adaption with the environment man came in close contact to various environmental features and this reaction brought
forth changes in his physical landscape. These changes are identified as cultural landscape and present man’s relation to man upon earth. The author agrees with the American philosopher who philosophizes over geography that more than an inventory of man and things geography at heart is a concern to depict man’s relation to man upon earth as though earth were his home. In a geography words. It is a way of understanding man in matrix of human and physical relationship and interrelationships. These interrelationship are best expressed through the settlement which are concrete expressions of human occupancy of the earth’s surface. If human geography which depicts the interrelationship may be defined as the study of “who gets what, where and how”. The settlement geography is concerned with who build settlements where and how”. In the present context. ‘Who’ means the man a part of the terrestrial space, along with the way he has historically emerged and the processes through which he has observed the diverse waves of races, cultures and technologies.

Build simply means the act of construction by putting parts or materials together as well as the style of construction related to the house and other facilities attached to it, ‘inhabit’ points towards the occupancy of such houses. “settlement” means the settlement units representing an organized colony of human beings together with the buildings in which they live or that they otherwise use and the paths and streets over which they travel.

Where focus immediate attention on the most sensible subdivision of territory for the purpose of investigation. ‘How’ require the identification and understanding of the structure process and causal mechanisms at work leading to a particular pattern of
who build settlements where. Thus the discipline covers the entire hierarchy from rural to urban settlement from nomadic to sedentary. It is concerned not only with the buildings grouped around the permanent farm dwelling but also with the temporary camp of the hunter or herder or with settlement clusters or agglomerations, running the scale from hamlet to village to town to city and to metropolis. During the sixties stone suggested that geography of rural settlements be defined as the description and analysis of the distribution of buildings by which people attach themselves to the land for purpose of primary production. But he excluded some significant constituents like buildings materials architectural styles. Landuse and fence type. A year after his ideas were challenged by Jordan who wrote on the nature of “settlement Geography” and defined settlement geography as the “study of the form of the cultural landscape involving it’s orderly description and attempted explanation” later on the emphasized three aspects of the cultural landscape. 1. The settlement patterns or distribution of farmsteads. 2. The field patterns or the forms resulting from division of land for productive use and. 3.house and farmstead types including the building materials and folk architecture. As referred to above the German word siedlung does indicate the process of human occupance as well as arrangement and groupings. Obviously the main theme is to study the settlement ensembles and their spatial patterns for analyzing the sequence of change in the landscape. More explicitly the size form and functions of settlements and their origin the essentials of the subject matter their regional variations also are no less significant. Chatterjis view is that the settlement geography deals with the size, from and function of settlements built up by man and traces their historic
Rural settlement geography is concerned with the orderly description and interpretations of processes patterning, functions and the spatial organization of human occupancy within rural environment over the earth surface.”

**Scope:**

Settlement geography being an offshoot of social geography or a recent most sprout from the venerable trunk of human geography. Was mainly concerned with urban settlements before the turn of the twentieth century. The latter may be described as the hallmarks of contemporary civilization. But since about two-thirds of the world population and about 98 percent of the total settlements occupy rural areas many historians, sociologists, and geographers have studied rural settlements as well as the problems attached with environmental aspects in rural areas. Even urbanized world still processes varied forms of rural settlements. Thus a comprehensive study of settlements requires explanation of site and situation building materials forms function, types and patterns and characteristics. Of these site and situation and materials need full interpretation of physical environmental aspects and cultural ink ages while morphology requires. Depth study of sequent occupancies involving historical background of the unit of occupancies as well as the man the occupant. As the post is the key to the present and we walk to a certain degree in every village among the ruins of antiquity.

The themes proposed for international symposium had at Varanasi in 1971 outlined below form comprehensive subject matter of and approaches to the study of settlement geography in general and rural settlements geography in particular.
(A) Approaches to rural settlement geography:
   i. Relation to rural settlement geography.
   ii. Field survey and first hand observation and data collection.
   iii. Census records and maps and other historical record’s
   iv. Data analysis and mapping development of models paradigms, hypothesis etc. and
   v. Other sources materials such as place names.

(B) Histogenesis of Rural settlement and settlements pattern
   (i) Historic culture areas
   (ii) Systems of land division, proprietary grant systems and water rights etc. and their relation to settlement growth patterns.
   (iii) Pioneer settlement areas and their problems and
   (iv) Sequence of occupancies Neolithic, bronze, iron, ages, ancient, medieval and modern periods.

(C) Basic Regional Types and patterns of rural settlements.
   (i) Relation of settlement types and patterns to various physical ethnic and social factors and
   (ii) Relation to systems of agriculture water and soil management and land tenure theories of landuse intensity, zoning, labour and input output costs etc marketing of products and other locational spatial theories

(D) Morphogenesis of Rural settlements.
   various geomorphological form patterns and their relation to various factors.

(E) Fuctional pattern of rural settlements.
   (i) Analysis of functional types of rural settlements, methodology development etc.
(ii) Functional analysis of service villages and service and trading centres hierarchy of such centres in relation to general central place theory and

(iii) Rural seasonal migration community patterns etc.

(F) Rural building and House types

(i) Analysis of rural house types and other functional buildings their size functions architectural styles building materials etc.

(ii) Regionalization of house and building types and

(iii) Planning of rural houses and buildings.

APPROACHES :-

The two popular methods of approaches in geography as explained by Hartshorne are (i) systematic logical and (ii) regional. Both types of settlement, rural urban have been studied in various proportions through these approaches. Rural settlements have mostly been studied systematically at micro level- village and hamlets. along with their occupancies setting morphology, size shape and functions etc. such systematic empirical studies abound in all countries where geography could reach the graduation level in institutions the second approach to study settlements of regions as a whole comprising their histogenesis, morphogenesis spread distribution pattern and types. Characteristics and comparative distinctiveness and regional variations also do abound in old German studies as well as in newer geographic world in terms of historical period of their investigation and development of geography. Recently theoretical approach has been emphasized through the studies of Bunge, Haggett and so many others including those influenced by the charismatic charm of quantitative
revolution some thought give framework one can apply three basic approaches supplemented by better developed quantitative techniques (1) genetic (ii) spatial and (iii) ecological.

**Genetic Approach :**

Meitzen (1895) on the basis of historical processes attempted to demonstrate the presence of three ethnically based zones of settlements in Europe (i) the grouped settlements along with common field systems almost associated with Germanic conquest (ii) isolated farmsteads associated mostly with the Celts and (iii) round and the street village form associated with the slaves. This idea of ethnic based study was criticized variously. In the 20th International Geographical congress symposium London (1964) It was emphasized that the scientific study of settlements must be founded on an appreciation of the nature and limitation of historical perspective whether archaeological or documentary. As the core concern of settlement geography is the spatial arrangement and sequent occupancies well denoted through the German term “seedlings Geographic.” The histogenetic approach is most appropriate for studying (i) the degree of continuity of territorial organization and (ii) problems of interaction between man and environment at micro level. This also includes three basic methods followed by various geographers.

(i) Retgressive approach advocated by Bloch Focuses upon the past on the basis of the evidences gathered from the recent past.

(ii) Retrospective approach advocated by Roger Dion. Focuses upon the present the past conditions regarding settlements being considered for better understanding of the existing state.
(iii) Prospective approach focuses upon the future past and present cultural landscape being regarded as relief Features projecting towards adjustment with future needs. Analysis of abandoned settlements a new method of approach provides conclusive evidence.

About the past settlements and human activities Developed out of archaeology it consists of three parts (i) Chemical analysis of soil phosphorus indicating human occupancies (ii) Micro separation examining soil and settlement components Primarily through mechanical means and (iii) Poly neology (pollen analysis) Edit presented interesting findings in this studies in the united states.

Spatial approach :- spatial organization approach is a form of system approach which helps in comprehending the settlements as a whole. A good detail has already been presented in the first section. Considering this method of approach spatial organization may be analyzed through different concepts among which very pertinent in rural settlement geography are (i) type pattern and classification (ii) functional integration and hierarchy (iii) local identity and (iv) planning and rationalization. In wide terms spatial organization studies include the varied literature produced on the basis of the central place theory denoting hierarchy and rank size in relation to any environment space. We shall come with details on this in chapter 9 Demangeon. Actually developed the concept of spatial organization in context to morphological structure. He presented the classification of French grouped settlements in to different types according to shape. Also he dealt with the principal distribution patterns of rural houses. His works
pared the way for geographers to produce regional classification of rural settlement types. Schaefer\textsuperscript{26}. Initiated the modern orientation following the works of German geographers. Modern geographers are now among him in the study of settlements through the analysis of patterns and process as they express the spatial organization in environmental space.

Ecological approach: A fundamental work was produced by Radha Kamal Mukharjee regarding adaption of human society and ecology in his man and Habitation: A study in social Ecology. The setting processes as described by Hudson\textsuperscript{27}. Includes three phases colonization, spread and competition- similar to plant communities in space. He concluded that these processes follow a cycle way temporally- since much of the human behavior is of sub-optimal nature\textsuperscript{28}.

Peoples in various habitats are often satisfied with less than the ideal. Such habitats have been studied by many geographers including kayastha\textsuperscript{29}. And singh\textsuperscript{30}. How people adapt their available ecological habitat finds explanation in the settlements and life patterns of Gaddis and Bhils. New studies are coming up regarding impact of dam site, port site. Resorts and change in ecology in newly settled areas such studies as micro-level would help in many way and in proper geographization of ecological forecasts\textsuperscript{31}.

1.3 Significance of settlements studies:

The ultimate Goal of human activity is his own welfare while setting somewhere on the earth to seek the multi dimensional factors involved in attaining, sustaining and improving human well being various dynamic aspects of settlements need to be studied
thoroughly scanning all along the spectrum\textsuperscript{32}. Hence significance of human settlements study refers to the following.

(1) It provides clear understanding of where, how and why of the people in temporal frame.

(2) To provides clear understanding of division of labour engaged into type of production.

(3) It provides better understanding of the modernized need in settlements themselves due to increasing number of Nuclesis family gadgets and day to day changing behaviors of the in habitats.

4) It provides better picture for the location and developments of new facilities i.e. supply of drinking water, electricity, irrigation education.

(5) It provides better understanding of agriculture and pioneer settlements interrelationship.

(6) It provides better understanding of impact of planned development.

(7) It provides better understanding of inter regional inter system and intra-system relationship and arrangement to integrate the spatial structure of the economy with the settlement structure.

(8) It provides better understanding of socio-cultural values and ethos of people.

(9) Provides knowledge regarding varied architectural styles and their cultural backgrounds.

(10) It provides that better approach for the development of industry the tents of appropriateness.

(11) It provides human settlement approach at global level.
1.4 Study Area: Jalna district is separated from Aurangabad district in 1981.

Economy of the Jalna district is depending upon agriculture. The nature of agriculture is changing as per spatial and temporal in Jalna district. The choice of the area and topic under investigation has been influenced by several consideration firstly Jalna district comprising 8 Tahsil of Maharashtra state has a significant location of Maharashtra plateau except Ajanta and satmale range and river basins majority part of the district comes under plateau region.

The region has major portion under flat topography has it supports high concentration of agriculture as a result these characteristics make this region a district physical entity and homogenous unit for geographical investigation.

Secondly there are 959 villages in Jalna district out of the total villages 13 villages are uninhabited. Entire district regions come under drought prone area

About 80% of the annual rainfall as received in the southwest monsoon period. The variation in the rainfall from year to year is fairly large. There are seven medium irrigation projects and advantage of one major project to the region. The work of 290 percolation tanks was completed. IT means that there is a wide scope for agricultural development in the region. Thirdly this has black loamy alluvial and murmad soil. Agriculture is developed in this region. Of deep and medium black soils because they are having wage irrigation facilities Godavari, Purna, Duhdna and kundlika jivreka are the important rivers to the region. Fourthly the pressure of population of agricultural land was more in 2001.
During 2001 the per capita cultivated land was only 0.52 hectare. Its varies from tahsils to thahsils. It is essential to divert the population to other business.

Fifthly there is very different settlement in the study region. In Godavari basin settlements are compact and many villages resides the bank side and northern part of the district is hilly. And there settlement pattern is scattered, Agriculture is main occupation of the region near about 75% population are depend upon agriculture and its related industries. All these consideration motivated the author to turn his attention toward the region and its settlement patterns.

1.5 Aims and objectives: Systematic approach and methodology has taken significant position in any scientific enquire. In fact it has become the basic and fundamental need of any attempt of research in any discipline. As such there has been revolution in the search methods and approaches to great extent tools and approaches. These methods and approaches to a great extent serve the purpose.

The main objective of the present research is to study the forms and characteristics of rural settlements. As attempt has been made to identify and measure three definable forms of rural settlement dispersion. (a) Clustering (b) randomness and (c) uniformity. The major objectives of the study is as follows.

(1) To example the determines of settlements and factors affecting on types distribution of settlement in study region.

(2) To describe the classification of rural settlement based on different indices of local and regional scale described earther.
(3) To study the settlement pattern of the study region and find out geographical factors associated with this aspect.

(4) To study the rural settlement’s are usually classified in to distinctive types compact and dispersed with several intermediate stage.

(5) Shape and patterns are both important aspects of settlement dispersion.

(6) To make in depth study of three sample villages of the study region to identify the level of settlement development.

(7) To prepare a suitable plan and strategy for worthwhile development of settlement of the study region.

1.6 Hypothesis : The main Hypothesis of the study is as under.

(1) Geographical factors affect the distribution of rural settlements.

(2) Agricultural development and growth of settlement are correlated.

(3) Economic activities can change the settlement pattern.

1.7 Database and methodology :

This study is based on primary as well as secondary data collected from different sources primary data has been collected from field survey involved to methods i-e the sample survey method and observation method. The data for the village study were collected partly from the village records and partly through personal observation and questionnaires.

Would be administrated to collect information which is not available by secondary sources. The suitable cartographic
techniques has been applied to present the pattern and distribution of settlement since single variable cannot explain the level of development and therefore this has been considered numerous factors which have influence on the pattern and general characteristics of settlement in the study region. To find out influence of certain factors. Simple statistical methods Mean median mode, correlation method has been applied and level of settlement has been measured by applying statistics techniques. The secondary data has been collected from different sources mainly from the government published records like district census hand book Jalna, report of socio-economic abstract of Jalna district the present research work of Jalna is a picture sque representative of multi rural settlement in Maharashtra agglomeration, cultural, social ecological racial and many other human factors have caused diffusion and complexities in Jalna district for the purpose of analytical investigation of dispersion characteristic of settlement in the research area. Two villages of each thahsils have been selected and gramps as clustered, random and regular settlement types has been mapped and first order nearest neighbor measurement techniques researcher have treated the dispersion values as depends variables viz water level irrigated land, agricultural labors literacy and scheduled castes as independent variables. Only a few methodological studies are available in the field of rural settlement geography. Suitable research method have been applied to analyze dispersion of settlements and others characteristics like functional attributes and relationship with physical and cultural conditions prevailing in this study area.
1.8 **Chapter Scheme**: The present study is organized into seven chapters. The first chapter deals with the introduction of the study. In this chapter, emphasis is given to the objectives, approaches, scope, significance of settlement geography. Choice of the topic and region, aims and objectives, database & methodology, hypothesis, chapter scheme, and review of literature.

The second chapter deals with a geographical personality of the region. Location and boundaries, physiographic, administrative setup, historical background, geology, drainage, climate, soil, natural vegetation, agriculture, irrigation, literacy population, and rural settlements.

The third chapter deals with an analytical framework of rural settlement dispersion, growth and development of rural settlements.

Chapter fourth highlighted on the evolution of rural settlements, origin of rural settlements, early accounts of settlement evidence of ancient settlements.

Chapter fifth deals with types and patterns of rural settlement. Difference between settlement type and pattern, classification of settlement types and pattern. Factors affecting settlements.

Chapter sixth highlighted on size, spacing, and house types of rural settlements, chi-square test nearest neighbor index, size of rural settlement, house types, rural service centers, and amenities.

Chapter seventh with conclusion, problems and suggestions.
1.9 Review of Literature:

(32) B. Mukharjee (1947) has made a valuable contribution in her doctoral thesis on the changing settlements in the Hooghly region of the lower Ganga plain same work has been done by Ahemad.

(33) Sinha (1950) has analyzed the landscape of tribal village named Bharbharis in the chotanagpur plateau with habitations on uplands and field at lower levels and has established the role of environment on the mode of life of all the communities living in the village. Lahirs has studied four typical settlement of Ajoy Barker, basic and has traced the cyclic growth of settlement through successive stages of youth maturity and old.

(34) Buschaman (1954) has dealt with a number of topics of rural settlements in his exhaustive field study of settlement pattern and human types in different regions of India. A glance at his sketch map illus tracing his paper exhibits that villages surrounded by wall are still to be found in Assam. Rajasthan and Maharashtra and Karnataka. The open type of villages with detached hamlets are the characteristics feature of the Ganga plain.

(35) Anas 1954 has studied the settlement pattern of the foothill of Himalaya in Tarai Region and the transghagara plain of eastern u. p. he has distinguished four types of settlement (i) a some of compact settlements in tarai Region. Which should have developed dispersed type of settlement (ii) the cluster and hamlet types of Bhal region. (iii) The fragmented type in the southern half of the trans ghagara plain (iv) the dispersed type in the khadav portion of the Ghaghara valley.
(36) R. L. Singh (1957) the several works on settlements have provided guide line to research scholars in this branch of geography in one paper he has studied the evolution of settlements in the middle Ganga valley. Lying between Allahabad and Patna from the pre historic stage to the modern time.

(37) Bandyopadhyay (1957) has studied the settlement patteras of Eastern kolhan. A number of research papers on tarai Area and the Ph.D. thesis on the human geography of Tarai region.

(38) Kaushic (1959) has studied the settlements of Dehradun valley and jaunsar Bawar which are drainled by Yamuna and tons respectively. In the Dun valley linear settlement lie along roads and canals. Most of the remaining settlements are confined between 380 m. and 900 mt. in this region.

(39) Sharma (1974) has studied in detail the settlements of the Indian Desert He has deduced that general distributional pattern of rural settlements shows clearly the effect of physical relief. Rainfall distribution extent of cultivated areas and of means of irrigation and the impact of the network of transportation.

(40) Mandal (1972) wrote Ph.D. thesis on Rural settlement Geography in Bihar plain He also published a number of book on settlements. This one book is on introduction to rural settlements where discussions are based on the settlements of north Bihar.

(41) Singh R.L. (1976) studied rural settlement in sun valley plain in Bihar in relation to physical, economic and cultural set up of the area.
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3) Brunhes (1952) human geography (Translated by E. F. Row) George G. Harrap and co. Ltd. Plate 1 fig-1.

4) Ibid fig - 2

5) Semple E. C. (1911) Influences of Geographic Environment pp 1-2 quoted in Geography in the twentieth century by taylor p- 144.


9) Dolphin Vernon (1970) the earth is the home of man Education Department Harward University, 4 quoted w. Bunge in “Ethics and logic in Geography” p-327 in chorley R. J. (ed) Direction in Geography op-cit-Ref no.-8


19) The idea for Organizing and setting a separate commission on rural settlements was initiated by Demengeon in I. G. U. 1932 and relentless efforts continued the Proposal for setting
up a commission on Rural Settlements in monsoon Asia was voted by the general Assembly of the I. G. U. held at New-Delhi India. (1968).


21) Dion Roger (1949) La geographic Humaine retrospective catri’es international rux de sociologie 6- pp- 3-27.


