Chapter I

Introduction

1.1 Introduction
1.2 Signification of Study of Settlement Geography
1.3 The Origin and Growth of Settlement
1.4 Definition, Scope and Approaches
1.5 Review of Literature
1.6 Aims and Objectives
1.7 Hypothesis
1.8 Database and Methodology
1.9 Chapter Scheme
Chapter I
INTRODUCTION

1.1 Introduction:

The planet is formed of so many Organisms. In them, Man is the most-wise animal on the basis of his brain. Man has three most important basic needs that are Food, Cloth and Shelter. These needs are fulfilled by nature or environment. An animal only produces what it immediately needs for itself or it’s young. It produces one side whilst man produces universally.¹ In the early stage; Man used branches of trees, caves or rock-cut for shelter.

After that man changes his work according to his space and time that affects on his space and Settlement. Hence, his shelter was converted into villages, towns and finally into cities and this hierarchy was mostly influenced by Social, Physical, Economical and Cultural factors. Thus any settlement can be studied in either a world or a regional context, but any settlement if it is to be adequately appreciated must be correlated with other facts of geography e.g. relief, climate geology and social and economic conditions.² These factors affects on the distribution, spacing and morphology of settlements.

The term settlement refers to manmade habitats on the earth surface. Geography is integrating concepts and processes concern the worldwide ecosystem of which man is the dominant part.³ Human is powerful animal on the basis of brain. In other words, settlement is organized colony of human beings consisting of buildings in which they
live or store various things and street on which their movements take place.

Settlement geography is one of the branches of human geography. The study of settlement has most important themes. The term “settlement geography” is derived from German “siedlunge Geographic” which involves the study of visual imprints made by man upon cultural landscape in the process of occupation. Geography has made valuable contribution towards understanding of spatial-temporal pattern of settlement. The study of settlement distribution has been the focus of human geographers. The study of settlement is a recent most sprout from vulnerable trunk of human geography habitats along with the street patterns are relatively permanents and become elements of landscape which man his superimposed on the natural landscape of a certain region. Geographic thoughts have spread and spanned around the different settlement over the globe. The systematic development of the scientific discipline started after the First World War. Some important work have been published particularly to urban settlement which have facilitated the present attempt at defining the field classifying the fact and elucidating the concept of settlement.

In the First World War, this branch of discipline of geography has undergone a remarkable transformation both in its content of study and research as well as approach methodology. There has been almost a revolution in the field of general information, ideas, and concepts as well as intellectual awareness and applied aspects of the result. As a result, there has been a great branching in the discipline of geography as a much
more conceptual and empirical revaluation. However in this particular file urban geography have reality come of age and both infield of theoretical contents and approaches. The geography of rural settlement has been a comparative legging for behind. Rural settlement is like a pioneer habitat of human being for living with functional space. However there is a growing interest in the field of rural settlements and more regional on our globe.

Broadly speaking settlements deals with the facilities developed in process of human occupancies of the land and there grouping. The nature and distribution facilities are related to the art and mode of living. “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. On the other hand to the physical factor as water supply, forests and swamps? There are different designed and grouped to serve specific purpose and such as to carry functional expression of their grouping of arrangements. It concerns not only with the building grouped from dwelling but also with the temporary comps of the hunters of harbors or with the settlements clusters of agglomeration.

Demangeon was the first geographer who raised the issue of the establishment of a separate commission for rural settlements geography in I.G.U. general meeting in 1932. Rural settlements constituting essential parts of the cultural, landscape basically concern with study of occupancy features distributed over space.
1.2 Signification of Study of Settlement Geography:

Settlement geography is an important branch of geography which studies the human settlement. Human settlements are the representation of human culture. We can understand the human culture with the help of it, which give immense significance to the study of settlement geography? Human settlement does not only mean the stability but the mark of human culture of settlement also have history just has human culture. Settlements also through the process of origin, development and definition the time of which is not certain it depends upon the location. According to Babcock as a specific area to enquiry, Settlement geography is the product of nineteenth century German house types and urban centers by 1840. Settlement geography had evolved into an investigation of the relation between cities and the natural environment. During the next decade the early emphasis on urban morphology declined and the historical approach developed to near suffocating proportion. As admitted by Stone the developments of urban geography over whelmed settlement geography. Though the geographical study of rural settlements began with Ritter’s work in the early nineteenth century, it is only since the turn of the twentieth century that settlement geographers have been pre-occupied with the study of rural settlement belonging to two groups namely a) Concerned with siedlungen geographies and De L habitat rural and b) That describes the process of settling and its geographical manifestations better to give thematic interpretation.

The significance of settlement geography can be explained in following lines.
I) Settlement geography answers question like who are the settlements on Earth. Why are they?

II) How the development and function of settlement is depended upon the location of settlement.

III) Every human settlement has its own personality which is exhibited through the existence and cultural activities of the settlement. All these things are studied in settlement geography.

IV) Study of Settlement geography helps in designing the plan of development of settlement.

V) Settlement geography tells how the settlement developed and degenerated from the times ancient.

VI) Settlement geography studies the circulation process between Rural and Urban Settlement.

VII) Settlement geography helps us know economical, social and cultural study of people.

1.3 The Origin and Growth of Settlements:

No one knows which exactly the first settlement was or when they began to grow. Archaeological evidence in the Indus valley, Egypt and other sites of early civilization bear testimony to existence of cities. But even man built walls of stone and mortar; he must have used simpler objects such as leaves and thatch. It is presumed that these materials could not withstand the assault of time and therefore not left much trace had behind. Historically the first settlement began to form in the Neolithic period. Agricultural activity also began then. Buried sites of this age such as stone hanged at Salisbury plain in England. Seem to indicate that there
might have been settlements nearby. Earlier the largely agriculture based population depended totally on the land. New and improved technologies brought with them a surplus production of food. A part of population was therefore, able to pursue other activities. Administration, trade and craft soon became subsequently changed the social structure, settlement morphology and their linkages. Every breakthrough in technology brought change with it. Not all settlements, however adapted to technological changes in the same manner. Some hardly changed at all, retaining their original character.

There are examples of change from urban to rural though such change is rare. The best examples are perhaps the reversal of the urbanized Indus valley Civilization to a pastoral agrarian rural Aryan cultural. The arrangement of rural settlement as a geographical entities express the grouping of dwelling types of rural settlements.\(^7\)

The evolutionary process brings about change in several aspects. These are morphology, population, society, occupation pattern, services. The change in morphology results in a real expansion, reorganization of land use and architectural changes with increasing population a once homogeneous group transform itself into a multi-cultural one whose primary identification is with the city alone. This changes the original social structure. The increase in population is a result of the possibilities for occupation found there.

Another theory of evolution which is open to question is validity of the model of the rural to urban change. If urbanization is interpreted as a cultural breakthrough, than the origin of cities cannot be explained by the
process of sequential evaluation only. Cities do not always evolve from existing villages ‘only in limited areas did towns emerge from settled village agricultural.’ Elsewhere they were products either of the direct physical impact of already urbanized areas predisposed conditions.’

The evolution of settlement cannot be studied in isolation. A settlement grows or decays through interaction with its environment and settlement around it. 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. The concentration of services in this metropolis resulted in stagnation or retardation of economic activities in other centers over the last two centuries. The settlement landscape here changed from being a more balanced, hierarchical structure to primate city model. The factors that brought about this change are many.

The evolution of settlements and settlements systems therefore are the results are different force acting together. A proper study requires the collection of detailed, accurate information and the analysis of the region as a whole.

1.4 **Definition, Scope and Approaches:**

A rural settlement is mainly agricultural work-shop which cannot be separated from the land whose use it insure. Its shape and arrangement are often in strict accord with the kind of work, the agricultural technique and the way the soil is used. On the other hand it is also related to the socio-economic condition such as land use, land tenure, crop association,
means of transport and density of population. During his adoption with
the environment man came in close contact in various environmental
features and his reaction brought forth changes in his physical landscape.
These changes are identified as a cultural landscape and present man
relation to man upon Earth. In a geographer word it is a way of
understanding man in a matrix of human and physical relation-ship and
interrelationship. These in the inter relationship are best expressed
through the settlement which are concrete expression of human
occupancies of the earth’s surface. If human geographer which depicts
the interrelationship may be defined as the study of “who gets what where
and how.”

According to Finch and Trewartha (1946) isolated or dispersed and
the nucleated are two primate types of rural settlement. But Chandel
(2013) says that nucleated and dispersed are two major pattern in rural
areas. The settlement geography is concerned which who builds
settlements where and how? In the present context ‘Who’ means the man
a part of the terrestrial space, along with the ways he has historically
emerged and the process through which he has observed the divers waves
of races cultural and technologies. Simply means the act of construction
by putting parts of materials together as well as the style of construction
related to the house and other facilities attach to it.

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 of the land for purpose of
primary production. But he existed some significant constituent like
building material, is hectare styles land use and fence types. A year after his ideas were challenges by Jordan who wrote on the nature of rural settlement geography as the study of the form of the cultural landscape involving its orderly description and attempted explanation later on he emphasized three aspects of the cultural landscape I) Settlement pattern or distribution of form stead II) The field pattern of the forms resulting from division of land for productive used and III) House and form stead types including the building material and folk architecture. As refer to above the German word siedlunge does indicate the process of human occupancy as well as its arrangement and groupings.

A definition incorporating both the themes in best possible way is that rural settlement geography is concerned with the orderly description and interpretation of processes pattering functions and spatial organization of human occupancy with in rural environment over the earth surface.

1.5 Review of Literature:

Settlement geography is concerned with the spatial and temporal variation in the processes of settling and their manifestations on the earth’s surface. Abundant literature of settlement geography is available, particularly on the towns of the developed countries. However, our knowledge of current process, growth, configurations, problems and implication of development of rural settlement in developing country like India is still limited.

Review of the relevant literature is divided into three parts i.e. Foreign, Indian, and Maharashtrian works.
1.5.1 Foreign Works:

Aurosseau (1920) an Australian Geographer used the term arrangement for the grouping of dwellings in their typical form and close relationship with the physical factors like soil, topography, climate, and water in the region. Their external forms reflect architectural styles of the time, cultural and reason from which they spring. Their distributional pattern is distinguishable in their landscape when once created they outline both the function for which originally designed and the architectural style of their time and thus they reflect changes in human occupancies of an area often being the only relict expressions of the past cultural landscape.7

Trewartha (1946) are of the view that the compact rural villages in the U.S.A. reflect colonization by homogeneous ethnic or religious groups.11

Bruhnes (1953) in his study he explained that houses and highways are the two fundamental facilities and settlements are topographic expression of their groupings or arrangements.13

Demangeon (1920) emphasized the study of field ownership, cultivation, building material, house types and the distribution of towns, rural settlements and human habitations.14

F. S. Hudson (1976) in his “Geography of Settlement” the major part of the subject is concerned with urban geography, towns and cities are the most striking man-made features on the earth’s surface. He described and tried to interpret the site and situation, building material,
form and functions of small settlements and the pattern they make on the map as well as the characteristics of urban settlements.\textsuperscript{15}

**Hudson (1969)** has emphasized the location of rural settlements through colonization, spread and competition of people and he concludes that these processes are cycle in nature.\textsuperscript{16}

**Barnes (1936)** examined the relative merits of the rectangular and liner patterns of rural settlements. He found that the standard rectangular pattern characteristic of large parts of the U.S.A. was actually very costly of public services.

**Grosaman (1971)** has emphasized the theory of location of rural settlements with the process of the migration of people from one settlement to other. People development and settlement are correlations.

**Hugh D. Clout (1977)** has presented his book “rural geography, an introductory survey.” The first of them involves out-migration from the countryside, leading to depopulation which has affected many parts of the developed world during and after their periods of industrialization.

The second theme involves the recent repopulation of some rural areas in the post-war age increased personal mobility as car-owning urbanities that chose to move in to the countryside for residence on a permanent or a part time basis and for recreation.

The third group of chapter discusses selected systematic aspects of planned and unplanned change in the countryside.

**Kollmorgen and Jenks (1951)** have found a line pattern of rural settlement developing in an area originally laid out on a rectangular pattern in the wheat lands of western Kansas.
Losh (1954) has shown the deviation of the market areas of the central place for different sizes of region and he gave mathematical solutions through equations.

Matui (1932) was Japani geographer who analyzed rural settlements geography quantitatively. He suggested that his technique is more useful in shape, size and growth of settlement.

Miss Lefevre (1921 & 1964) Belgium geographer has made some major contribution. Her study concentrates on rural settlement pattern and density. She has also suggested that rural habitat be reserved for the residence of person who worked on the soil. This idea of Lefevre was seconded by Demangeon in 1931.

Mills (1972) has classified the village as closed and the open villages on the basis of single ownership and multiplies ownership respectively. He was classified compact, semi-compact and dispersed.

Chisholm (1973) studied rural settlement and land use. Distance is the central theme of this book, an attempt to provide a systematic account of certain features of rural settlement and land use.

Paul J.Cloke (1983) has studied the changes in rural settlements in England and Wales. He explained the constant dynamism taking place in the countryside and the resultant fluctuations both in the nature of settlements and communities in their demands as well as requirements.

Vidal de la Blache (1926) was a French settlement geographer who studied human geography in detail. Human activity can change settlement pattern and also his affects on growth of settlement. He was also discuss physical factors affects on settlement growth.
1.5.2 Indian Works:

**Kaushic (1959)** has studied the settlements of Dehradun valley and jaunsar Bawar which are drained by Yamuna and tons respectively. In Dun valley linear settlement lie along roads and canals. Most of the remaining settlements are confined between 380 m. to 900 m. in this region.\(^{17}\)

**R. C. Sharma (1972)** he has studied detailed about settlement of the Indian desert. He has deduced that general distribution pattern of rural settlement is clearly the effect of physical relief, rain fall distribution extent of cultivated area, means of irrigation and impact of the network of transport lines. He has found that the settlement types and house types in the area are the result of adaptation of local physical conditions.\(^{18}\)

**R. B. Mandal (1979)** has studied the form of settlements which are determined by social requirements and the physical environment. The origin of settlements took place near cross roads, houses of land lords and hermits. He also told the types of rural settlements in India, selected area Jammu and Kashmir and desert areas of Rajasthan and also told where settlement sitting is selective either on slope or on oasis pattern of rural settlements which determine the shape, size and structure of rural settlements. They correlate the rainfall, income with housing and conditions in terms of material and studied the rural service centers. He has made a modest attempt to highlight to problems of rural settlements and need for their planning in North Bihar in 1981.\(^{19}\)

**A. B. Mukerjee (1953)** studied Jat settlement and habitations and made valuable contribution in this field. He has also work on Moradabad
and Bijnor District, He has described growth and distribution of rural settlement and explained the various types and pattern and gave suggestion for the development of rural landscape of region.

A. Prasad (1969) has studied “rural settlements of Chotanagpur” and has explained their evaluation, types and spatial distribution. He also co-related physical landscape with various aspects of settlements.

Bhattacheraya (1956) has studied the settlement pattern in the upper Ganga plain of U.P. He has mainly concentrated on the study of settlement of Jat, Rajput and Ahirs and has found that they preferred to live close together in large agglomerated habitation and not necessarily close to the farm.

Bhattacheraya and Varma (1957) have studied types of rural settlement in upper Son valley. Their study revealed that culture provided with security has helped the growth of hamlets near marshes and fields, whereas the dissected relief and dense forests have caused dissemination and farmsteads in the midst of forest clearing and cultivable patches.

E. Ahmad (1948) has given details about study of settlement of both rural and urban in the long settled fertile state of Uttar Pradesh. He also described the Indian village pattern based largely on the study of one-inch topographical maps.

Haushila Prasad (1986) has studied physical environment and settlements in Missouri region. He has use co-relation technique to show that how settlements are distributed in association of altitudinal zones, relative relief, dissection index, slope and drainage density of the region.
J.P. Sharma (1975) has done the study of rural dwellings and house types in the Himalayan Ravi-Chenave in interfluves. He also proved that the physic-economic and socio-cultural conditions in the region have determined the site, plain, shape, size building material, roof type and style of construction of rural houses to great extent.

Lahiri (1950) has done the study of four typical settlements of AjoyBarakar basin and has stressed the physical growth of settlement through successive stages of young maturity and old.

L. R. Singh (1965) has studied the rural settlement in the Tarai region of U.P. He has given detailed analysis of the evolution, growth and distribution of rural settlement. He further discussed the socio-economic condition of villagers, population composition, spacing of rural settlement and physical–cultural elements which are dominating factors for the development of rural settlement.

Neelam Grover (1985) he has studied the rural settlements: A cultural-Geographical Analysis “A case study of Northern Haryana”, historically an ancient cultural comprise six different cultural group dominantly, they are Rajput, Gujjer, JAt and Kanet each practicing their own genera device.

R. L. Singh (1961) he studied “Evolution of settlement in the middle Gnaga valley” and provided guidelines to investigators in this field. He has explained the meaning, objectives and scope of rural settlement geography. He also described origin, growth distribution and morphology of rural settlement as well as rural house types in the study region.
S. C. Singh and S. B. Singh (1988) have studied settlements distribution and their co-relation with morph metric attributes in Simla hills. Their reveals that there are some stretches which are not suitable for the growth of settlements, which correspondent with areas of steep slope and high relief. In his study it was found that physical environment and their influence on the distribution of settlements is more than other factors. By such studies one should take into account that altitude plays an important role for the growth and development of the rural settlements in the mountainous and hilly region.

Singh (1950) has made the analysis of the landscape of a tribal village named- Bharabharis, in the Chotanagpur pleatu, with habitations on plants and field at lower levels and has established the role of environment on the mode of life fall the communities living in village.

Vishwanath (1956) has studied the settlement pattern of the deltaic district of Thanagavur in Tamil Nadu. Liner settlements predominate in the alluvial tract along the sandy coast, whereas the nucleated settlements are mainly found in the black soil region and scattered settlements predominate in less fertile soil region.

V.N.P. Sinha (1976) has studied “Chotanagpur Pleatu: a study in settlement geography.” This analyses and interprets the growth, pattern, types of rural settlement. A special emphasis has been laid on the geographical conditions that determine evolution, distribution, morphology and functional character of the rural settlement. He also analyzed economic and social conditions, which have influenced typology of rural settlement and rural dwellings.
1.5.3 Maharashtrian Works:

S. P. Kulkarni (2012) he has made valuable contribution in his Doctoral thesis on the rural settlement in the Ahmad Nager District in Maharashtra. He is also examined the influence of some selected physical and Cultural variables on the distribution of settlement co-relation technique is used. He is analysis of settlement size, shape, forms, types and many more on his Ph.D. Thesis.⁵

A. P. Kumbhar (1996) has studied rural habitat as regional study of rural settlements in Niraa valley. In this research monograph an attempt has been made to study the rural settlements in various perspectives. He analyzed the distribution rural settlements, spacing, centrality and functional gap. He also described in detail various factor which have influenced on distribution, types, pattern, site, and spacing of rural settlements in the study region. He has also explained morphogenesis as well as nucleation and dispersion of rural settlements.

A. A. Badgujar (2004) in his dissertation “Geographical aspects of Tribal settlement in the Western Saputara region,” he studies the Tribal settlement with the view of location, types, spacing, size and house types. Tribal settlement is different from other settlements.

B. S. Jadhav (2000) In the M. Phil. Dissertation Spatial organization of rural settlement of Khandala taluka, Satara district presents the organizational structure of rural settlement in Satara district.

Deshpande (1942) has analyzed types of settlement in Bombay-Karnataka in relation to geographical factors and his study revealed that the site of rural settlement in drier was mainly determined by fresh water
supply and although relief and transport system influenced the pattern of settlement, nature of agricultural operation also had the decided influence especially there, where the field and crop there in needed frequent attention as in Kokan.

1.6 Aims and Objectives:

The specific objectives of the present study are as follows

1) To assess the impact of physical determinants like relief, slope, Rainfall, Soil, and Drainage on the distribution of settlements.

2) To describe the classification of rural settlement based on the different indices of local and regional scale.

3) To analyze place.

4) To study the classification of rural settlements i.e. Compact, Semi-Compact, Dispersed.

5) To analyze the demographic features of settlements.

6) To make intensive study of sample villages of the region to identify the level of settlement.

1.7 Hypothesis:

Following are the hypotheses which are considered to test throughout the study.

1) Agricultural development and growth of settlement are correlated.

2) Geographical factors affect the growth and distribution of rural settlements.

3) Occupation structure can change the settlement pattern.
1.8 Database and Methodology:

For the present study, primary and secondary data has been considered. The census data of 1981, 1991, 2001 and 2011 has been used. The information regarding census has been also used from the Internet, i.e. website Jalgaon.nic.in and Census of India. The general and geographical information of Jalgaon district has collected by Government Gazetteer and Government website of the district. The help of District Statistical Office has been taken in order to collect the data. To include the tahsilwise data regarding Classification of settlements, Structure of settlement, Shape, Housing types, Growth of settlement literacy, occupational structure Annual District Statistic Book has been used.

For case study, two villages from each tahsils have been selected using stratified random sampling method. For micro level study, a questionnaire has been designed to collect the information. On the basis of collected primary and secondary data, tables under various heading have been prepared. The decadal variation regarding settlement pattern, settlement distribution, shape, function of rural settlement and non functional non-functional data has been calculated with the help of collected data. On the tables, decadal change of volume has been noticed and analysis has done on the basis of variation in tahsils.

To examine the influence of some selected physical and cultural variables on the distribution of settlement co-relation technique used. For the indices of agglomeration and dispersion of settlement developed by Bernard, Houston, Demongeon and Deboureive are computed to explain the various types of Settlement in the study area. Nearest Neighbor
analysis, spacing method, use of one dimensional diagrams, use of Choropleth techniques etc. are used. To understand the pattern of settlement, Researcher used Google earth image. Centrality index is computed to determine the centrality score values, which are worked out by taking into account various functions performed and services. Three decades census data is used for this proposed research work. Graphs, maps and diagrams have added wherever necessary in the work to show the variation and for quick understanding.

1.9 Chapter Scheme:

The Present Study is divided into seven Chapters as follows.

Chapter- I: Introduction:

The first chapter deals with Meaning and Definition of settlement geography, Evolution, Significance of the study of settlement geography, Growth of settlement in India and world in last century, Choice of the topic and region, Aims and Objective of the present study, Database and Methodology and also chapter scheme.

Chapter- II: Geographical Personality of the Region:

The second chapter includes Location and Boundaries, Historical background, Physiography, Geology, Drainage system, Rainfall, Temperature, Soil types, Historical and Cultural places.

Chapter – III: Non-physical determinates of settlements:

This chapter includes the details of Irrigation, Net Irrigated Area to Net Sown Area, Population, Livestock, Agricultural Implements, Agricultural Credit and Finance, Marketing, Electricity and Transport in Jalgaon district.
Chapter- IV: Growth and Distribution of Rural Settlement:

This chapter includes the study of growth pattern and Distribution of rural Settlement from the census of 1981 to 2011. The theories of growth and distribution of settlements has been applied here for the comprehensive understanding of the pattern of rural settlements in Jalgaon District.

Chapter- V: Size, Spacing Housing Types and Amenities of Rural Settlement:

This chapter throws light on Size, Spacing, Housing types and amenities of rural settlement. Analysis of these points has been done on the basis of collected Primary and Secondary Data. Bernarad, Demangeon, Debouverue, Houston and Rana R. B. Singh methods has been applied for Size, Spacing and Settlement Types.

Chapter- VI: Case Study

This Chapter covers Micro level Study. For these purpose two villages from each tahsil has been selected. A detailed study of rural settlement with the help of questionnaire has been done for the selected villages.

Chapter- VII: Conclusions, Problems and Suggestions:

This chapter consists of conclusion, problems and suggestion based on all the chapters.
References:


18) Sharma R.C. (1972) Settlement Geography of the Indian Desers kumar Brothers Haus Khas, New Delhi, p.16.


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