CHAPTER -1

INTRODUCTION:

Geography is defined as the study of ‘special organization expressed as patterns and process’.¹ Thus, it is essentially concerned with man-environmental relationship and emerging cultural landscape. The geographers have long been concerned with interpreting the form and function of landscape and deciphering the geneses of his components.² Geography's integrating concepts and process concern the worldwide eco-system of which man is the dominant part.³

Man appeared as the best species on the earth and adopted the environment. During his adaptation with the environment, man came in to close contact to various environmental features and his adaptation brought charges in his physical landscape. These changes are identified as cultural landscape and present man's relation to man upon earth.⁴ These inter-relationships are best expressed through the settlements, which are concrete expressions of human occupance of the earth's surface.

Broadly speaking, in human geography, which depicts the inter-relationships between human activities and natural environment, may be defined as the study of ‘who gets what where, and how’,⁵ the settlement geography is concerned with ‘Who build/inhabit settlements, where and how’. Thus, the discipline covers the entire hierarchy of settlements from rural to urban and 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.” ⁶
The study of settlement has been one of the most significant themes of human geography. Its consideration runs like a thread through almost the whole fabric of geographic thought. Settlemenst are also concern of economists, historians and sociologists, but their line of approach differs. Geographers mainly treat the problem as man made 'habitat on the earth's surface in relation to environment. The geographical study of rural settlements/habitats in modern time began with Ritter's work in the early nineteen century. His theme of interdependence among the elements of landscape gave broad base to early settlement geography, which included studies of various phenomena and processes resulting from complex man-land relationship.

It is only since the turn of the 20th century that settlement geographer's have been preoccupied with the study of rural settlements belonging to two groups namely:

(1) Concerned with siedlung geographie and De, L' habitat rural and
(2) That describes the process of settling and its geographical manifestations.

The term 'settlement geography' is derived from a German word 'siedlung geographie', which involves the study of visual imprints made by man upon the physical landscape in the process of human occupancy.

During the sixties, Stone (1965) 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 the purpose of primary production". But the neglected some significant constituents like building materials, architectural styles, land use and fence types. A year after, his ideas were challenged by Jordan, who wrote on the 'Nature of Settlement Geography' and defined it as the "Study of the form of the cultural landscape involving its 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) Houses and farmstead types including the building materials and folk architecture.  

The view of Prof. R.L. Singh is that the central theme of rural settlement geography is to study, “The settlement ensembles and their spatial patterns for analysing the sequence of change in landscape”. 

More explicitly the size, form and functions of settlements and their origin are the essentials of the subject matter, their regional variations also are no less significant. Chatterjee explained that, “The rural settlement geography deals with the size, form and function of settlements built up by man and traces their historic growth”.

Various significant aspects of the study have also been emphasized by viz; rural houses and architectural styles; relationship between rural, settlements on the one hand and roads, forms and field pattern on the other; type of rural settlements and their origins; and morphological and regional character of rural settlements. After analysing these definitions a new vista can be added to rural settlement geography while it is clear, that the core concern of rural settlement geography is space and sequent occupance. Both the themes are incorporated in best possible way in a synthesized definition given by Prof. R.L. Singh,

“Rural settlement geography is concerned with the orderly description and interpretation of processes, patterning, functions and the spatial organisation of human occupance with in rural environment over the earth surface”.
It has been emphasized further that the rural area including man, land and settlement is a holistic and integrated environment.

Rural habitat contains four key dimensions in its form, that is;

1. the dimension of environment,
2. the dimension of time,
3. the dimension of space and,
4. the dimension of ecology.

The core of rural landscape is a composition of four elementary aspects i.e.;

1. People
2. Occupance units
3. Resources and
4. Structure.

These aspects simultaneously give rise to the dimension of environment, time, space and ecology.

As the rural settlement system epitomises the essential morphological forms of the cultural processes, the analysis of their different aspects, viz; evolution, spatial distribution, spatial pattern, morphology and dwelling forms and functions, helps to unravel them. Thus, spatio-structural analysis forms the base for comprehending the basic principles underlying the existing pattern of the rural habitat, spatial organisation and processes responsible for their evolution. The rural habitat/settlement system forms the most significant constituent core of geographical studies while geography plays the role of integrating science.16

A vast amount of literature on rural settlement geography has grown during the 20th century. But our knowledge of current processes, configurations and implications of development of rural settlement in developing countries is very limited. In our own country, the credit goes to Prof. E. Ahmed, Prof. R.L. Singh, Prof. Pithawala, Prof. K.N. Singh and Rana P.B. Singh etc. for introducing this
branch of geography. Several works of Prof. R.L. Singh on this discipline have provided guidelines to investigations for conducting studies in this field. Singh (1994)\textsuperscript{17} has highlighted the growth of settlement studies in his book \textit{"Geography of Settlements"}. Further he has also described the significance of human settlements studies.

**SIGNIFICANCE OF SETTLEMENT STUDIES:**

The significance of human settlement studies refers to the following:

1. It provides clear understanding of where, how and why of the people in temporal frame.
2. It 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 nucleus family, gadgets and day-to-day changing behaviour of the inhabitants.
4. It provides better picture for the location and deployment of new facilities, i.e., supply of drinking water, electricity, irrigation, education etc.
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-system and intra-system relationship and arrangements 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. It provides comprehensiveness to evaluate and search out better conditions for optimum quality of life regarding housing, sanitation and environment as a whole.
(10) It provides knowledge regarding varied architectural styles and their cultural backgrounds.

(11) It provides clear view of the changes in size, structure and linkages of settlements due to sectorally and administratively oriented planning intervention.

(12) It provides better approach for the development of industry, the tenets of appropriateness (i.e. different types of industries in different size of settlement in different regional settings).

(13) It provides human settlement approach at global level.18

NATURE OF PROBLEM:

Rural section of Indian society is a very important component in the total sociological, economic and cultural fabric of India. The study of rural landscape, therefore, is a pre-sequiste of any nation or regional developmental plan. Jind plain falls in the northeastern part of Haryana and it is generally known as a backward region or less developed region. The surrounding areas of Jind Plain like Hissar, Kaithal, Bhiwani, Panipat etc. have developed more rapidly as socio-economic and administrative factors have played an important role in the development of these surrounding areas. Considering prevalent socio-economic under development, the region has been selected for the empirical study.

OBJECTIVES OF THE STUDY:

Jind plain has an ancient seat of settlement with diverse cultural surroundings. It presents a mosaic of diversified factors effecting the process of human settlement.

The objectives of study have been confined to the distribution aspects of settlements, especially with regards to the population parameters.

The present study has been conducted to deal with the following selected objectives of rural settlement geography.
(1) To understand changing patterns of demographic set up.
(2) To attempt a classification of functional hierarchy of rural settlements in the region.
(3) To attempt the recognition of certain areas where little or no public amenities exist, and to demarcate the areas of satisfactory or desirable amenities of service facilities.
(4) To identify the patterns of specialised and deficient functions.
(5) To study the change in morphological characteristics of selected villages.
(6) To identify critical issues and strategies for balanced rural development.

**SOURCE OF DATA AND METHODOLOGY:**

The data have been collected from various sources which include both published and unpublished maps, District census Handbooks, District Gazetteers, Statistical Abstracts, Encyclopaedia, Village Surveys, Census Reports, Government publications and field investigations.

The study is mainly based on the statistics for the reference years of 1961 and 1991. The data has been mainly obtained from the secondary sources. A brief account of these sources has been given below;

**A. Haryana and Punjab Government Publications:**


(ii) Census of India (1961), "District Census Handbook of Karnal District," No.4, Punjab, Chandigarh.


B. Central Government Publications:
(i) Census of India (1961), Regional Divisions of Punjab, Chandigarh.

C. Gazetteers:

Besides the listed Census publication extensive references were made by the study of published Survey of India (SOI) topographical sheets of the following particular;

1. 44 O/ 14, 15
   53 C /1, 2, 3, 4, 6, 7, 8, 10, 11, 12.
   All these topographical sheets were on the scale 1:50,000.

2. To study the morphological analysis of selected villages, the information and data obtained from concerned village Patwari.

The published Census data have been used to highlight the population dynamics operating in the region over the period of 30 years i.e. 1961 and 1991. Sample study of selected villages has been conducted for micro-land study. The main focus of the study has been on different aspects viz; spatial distribution, functional hierarchy, patterns and morphology of villages etc. An attempt has also been made to analyse and interpret the data by applying some important quantitative techniques like percentage, weighted score and 'z' score etc. Maps and graphs have been prepared with the help of suitable cartographic techniques.
ORGANISATIONAL STRUCTURE OF THE STUDY:

The present research work has been divided into six chapters including summary and conclusion.

**Chapter-I** mainly deals with the nature and scope of rural settlement geography. Brief description of nature of problem, objectives, source of data and methodology, organisational structure of the study, general background of the study region, economy, transport network, brief history and some places of interest of the region.

**The Chapter -II** deals with the population dynamics which includes the distribution of rural population, density, growth of rural population, density and growth behaviour, trend of rural population, literacy, male literacy, female literacy, sex ratio and working force etc.

**The main objectives of Chapter-III** is to study the population potential, function pattern (on the basis of amenities) and functional classification on the basis of specialised and deficient functions with the help of 'Z' score.

In **Chapter-IV** the morphological expressions of rural settlements have been described by spatio-functional base, house occupancy etc. Only two villages have been selected on basis of dominant castes for testing the religio-ritual model.

**Chapter-V** is devoted to identification of problems and strategies for balanced development. It attempts to bring out regions of deficient and surplus areas in terms of functions. Some suggestions are put forth for an integrated and balanced development of rural scene in the region.

**Finally, in Chapter-VI** the work has been summarized and concluded.
STUDY AREA:

Jind plain has been one of the ancient nuclei of human settlement. The study area lies between 29° 03' and 29° 55' North latitude and 75° 57' and 76° 47' East longitude. On its east and northeast lie the district of Karnal and Kurukshetra. On the northwest it borders on the Patiala and Sangrur districts of present Punjab state. In the northwest, west and southwest it has a common boundary with District Hisar and its southeast lie the Rohtak and Sonepat districts. [Fig.1.1].

Jind plain has been selected as case study based on Regional Divisions of Punjab, 1961. Before the creation of Haryana, Jind Plain was a part of Sangrur and Karnal districts of Punjab. According to data as provided in the Regional Divisions, Jind Plain had two parts: Narwana Plain (145 villages) and Jind Plain (209 villages). After the creation of Haryana as a separate state the political administrative boundaries of the region have changed a great deal and some new district have emerged over the period of 30 years i.e. 1961-91.

| TABLE NO. 1.1
| JIND PLAIN
| IMPORTANT STATISTICS: 1991 |
| Rural Population | Haryana State (Rural) | 12,408,904 Persons | Jind Plan (Rural) | 966,355 Persons |
| Rural Male Population | 665,733 Persons | 526,895 Persons |
| Rural Female Population | 575,157 Persons | 439,460 Persons |
| Total Rural Area | 43245.27 Sq. km. | 3266.2 Sq. km |
| Rural Density/Sq. km. | 372 Persons/sq. km. | 298 Persons/Sq. km. |
| Literacy (%) | 55.85 % | 33.3 % |
| Male Literacy (%) | 69.10 % | 45.3 % |
| Female Literacy (%) | 40.47 % | 18.9 % |
| Sex Ratio | 865 (Female/1000 Males) | 834 (Female/1000 Males) |
| Working Force (%) | 30.87 % | 29.7 % |
| No. of Villages | 6988 | 354 |
| Un-inhabited | 229 | 4 |

Source: Compiled by Author
According to 1991 Census, the study area has 354 villages of which (350 inhabited villages) 305 villages of Jind district, 44 villages of Kaithal district and 5 villages of Panipat district. The important statistics of population of Jind Plain is shown in the table 1.1.

**PHYSICAL ASPECTS:**

**Relief**

In its physical features, it presents a level plain without any hill or stream.

**Climate**

Jind Plain has a sub-tropical continental Monsoon climate. The climate of Jind Plain is on the whole dry, hot in summer and cold in winter. The Monsoon (rainy season) withdraws by 15th September and is followed by the post Monsoon or the transition period or autumn season. The rainfall generally increases from Southwest to Northeast. Winds are generally light, with some strengthening in force during late summer and early Monsoon season.

**Soils**

Medium soils particularly loam (Bhangar and Nardak) are found in Jind Plain. The soil as classified by the National Bureau of Soil Survey and Land Use Planning (ICAR), Nagpur, the plain has mainly Aquepts-Ochrepts and Ochrepts type of soil.

**Geology**

The geological structure of Jind Plain consisted Alluvium. The Plain, by and large, is underlain the quartenary alluvium comprising Chiefly clay sand of various grades ‘Kankar’ and occasionally gravel and pebbles. Salt peter (Shora) occurs as soil encrustation in several areas. Gypsum has been reported from Julana area. It occurs as dissemination in the clay bands interbedded with sandy layers.
JIND PLAIN
LOCATION CODE NUMBER AND
VILLAGE BOUNDARIES

Figure - 1.2
Natural vegetation

Jind plain is not very rich in natural vegetation. All existing forests are man made and they are concentrated along the rail and road and canal strips. The principal tree species in the Jind Plain are Shisham, Kikkar, Siris, Neem, Jamun, Badh, Aam, Simbal, Lasura etc. Safeda is being planted in agricultural field and along the road to increase the forest wealth of the Jind Plain.

Drainage

Jind Plain irrigated by two systems, viz; the Western Yamuna Canal and the Bhakhra Canal. These two systems are inter linked by the Narwana and Barwala link.

TRANSPORT NETWORK:

With regards to means of transportation facilities. The Jind Plain is well developed [Fig. 1.3]. All towns and villages are well connected with each other by major and minor metalled roads. It is also served by rail services. A brief description of important roads is given below:

State Highways

1. Rewari-Jhajjar-Rohtak-Jind-Narwana-Khanuri Road: (SH. NO. 15)

   This road starts from Rajesthan and enters the Jind Plain near Julana and leaves near village Data Singhwala to enter Punjab. The important towns and villages of the region situated on this road are Julana, Jind, Uchana, Narwana and Data Singwala.

2. Karnal-Assandh-jind-Hansi-Tosham-Sodiwas Road: (SH. NO. 12)

   This road enters Jind Plain after Assandh and leaves near village Gunkali. It passes through Alewa, Naguran, Kandela, Jind and Gunkali in Jind Plain.
3. **Panipat-Safidon-Jind-Bhiwani-Loharu Road: (SH. NO. 14)**

   This road enters the Jind Plain near village Karsindhu and leaves the region near Igra. It connects Safidon, Budha Khera, Jamni, Jind and Bibipur. It has common length of 1.59 km. with state Highway No. 15.

4. **Gohana-Jind-Barwala-Adampur-Bhadra Road: (SH. No. 10)**

   This road enters Jind Plain near village Bhambeewa and leaves near village Intal Khurd. The road connects the important towns and villages of Bhambeewa, Lalit Khera, Sindvi Khera, Jind, Ikas and Intal Khurd.

5. **Deoban-Naguran Road: (SH. NO. 11-A)**

   This road enters the region near village Kathana and Joins State Highway No. 12 near village Naguran. It touches Kathana, Chuharpur and Naguran villages.

6. **Ambala-Pehowa-Kaithal-Narwana-Fatehabad Road: (SH. NO. 2)**

   After passing Ambala and Karnal districts, this road enters the Jind Plain near village Dumara, and leaves it near village Surewala. It connects Dumara, Kalayat, Narwana, Badowala and Danoda khurd of the region.

7. **Meerut-Sonepat-Gohana-Assandh-Kaithal-Patiala Road: (SH.NO. 11)**

   It starts from Meerut and after passing through the Sonepat district and cutting a corner of Jind Plain at Anchara Kalan. It joins Panipat-Safidon-Jind-Bhiwani-Loharu state highway and from Safidon it diverts towards Paju Kalan and leaves the Plain.

**Railways**

There are three broad gauge railway lines, which serve the Jind Plain. Jind and Narwana are railway junctions on Delhi-Ferozepur railway main line where Panipat-Jind and Kurukshetra-Narwana branch railway lines terminate respectively.

1. **Delhi-Ferozepur Railway line:**

   This is the oldest railway line in the region and was started in 1897. It is broad gauge line and enters the Jind Plain near village Zafargarh from Rohtak side.
JIND PLAIN
RAIL AND ROAD NETWORK
1991

Figure - 1.3
and leaves it near Kalwan village. The railway stations located on this line from Rohtak side are Zafargarh, Julana, Jaijaiwanti, Kinana, Jind, Barsola, Uchana, Ghaso, Narwana, Dharodi, Dhamitan and Kalwan.

2. **Jind-Panipat Railway Line:**

   This broad gauge branch line of the Northern Railway constructed in 1916, starts from Jind proper and leaves near village Karsindhu. There are 8 Railway Stations namely, Jind, Jind City, Pindara, Pillu Khera, Budha Khera, Silla Khera, Safidon and Karsindhu on this line falling in Jind Plain.

3. **Narwana-Kurukshetra Railway Line:**

   It is broad guage branch of Northern Railway. The line from Narwana to Kaithal was completed in 1899 and was extended to Kurukshetra in 1910. There are 4 railway stations namely; Narwana, Gurtheri, Kalayat and Sajooma.

**BRIEF HISTORY:**

According to an old saying the Pandavas built a temple in honour of jainti Devi (the goddess of victory), offered prayers for success, and then launched the battle with the Kauravas. The town grew up around the temple and was named Jaintapuri, which later on came to be known as Jind.

The antiquity of the Plain is established on the basis of the discovery of the pre-Harappan, Harappan and late-Harappan and the mention of its tirthas in the Puranas corroborates it.

About 1000 BC. with the advent of the Painted Grey ware people, generally associated with the Aryans a new era downed upon the Plain. The people representing this new culture settled on the bank of Holy River Saraswati.

It may safely be inferred that this area was also include in the kingdom of the Kuras, which was one of the sixteen Mahajanpads in the 6th century BC mentioned in the Budhist literature. It was a part of Nanda Empire.
In medieval period, after the demise of Shihab-ud-din Ghuri, Qutb-ud-din Aibak, and his favourite general established Turkish rule in North India in 1206. The Haryana territory including the present Jind Plain formed a part of the Sultanate of Aibak. After the third Tuglug-Firuz (AD 1388) death, the Plain felt the full force of these deadly discords, which rent the Delhi Sultanate.

Timur launched a fierce attack on northern India in AD. 1398. He entered Haryana from Punjab side. After Timur's returned from India, the same old situation again arose. Then, Ibrahim Lodhi, Babur, Humayun, Sher Shah Suri, Akbar Shah Jahan and Aurangzeb ruled on this region.22

The history of Jind as a separate state the Raja of Jind is descended from Sukh Chain a grandson of Phul, the ancestor of all the Phulkain families. On Sukchain's death Gajpat Singh made Jind town his capital and built a large brick fort there. He dead in 1789 and was succeeded by his two sons Bhag Singh, who inherited the little of Raja with the territories of Jind and Safidon; and Bhup Singh, who obtained Badrukhan. Raja Bhag Singh shrewdly held aloof from the combination against the British. He dead in 1819, after ruling for thirty-six years and was succeeded by his son Fateh Singh, who dead in 1822. In 1837 succeeded by Sarup Singh of Bazipur, who dead in 1839. He was succeeded by his son, Raghbir Singh who was in every way worthy of his father. He dead in 1887, leaving a grandson Ranbir Singh to succeed him. He stills ruling the state when independence downed in 1947. On the 5th may, 1948, the eight Princely States of Patiala, Jind, Nabha, Faridkot, Kapurthala, Malerkotla, Nalagarh and Kalsia were marged together to form the Patiala and East Punjab states Union considering of eight districts.23

The modern state Haryana came into began on 1 November 1966 as a resulting of their organisation of the old Punjab state into two separate states.
PLACES OF INTEREST:

PINDARA

According to a legend, the Pandavas offered here Pinds to their forefathers and hence the popular name of the village is Pandu Pindara.

RAMRAI

Ramrai or Ramahrada is a traditional southwest yaksha of the Kurukshetra region. It is connected with the mythological story of Parsurama who after the annihilation of Kshatraiyas, filled five pools with their blood and propitiated his forefather there. It is believed that a bath at Ramhrada tirtha and sanet tirtha is very holy.

DHAMITAN

Dhamitan is the corrupted name of Dharamasthan (religious place). It is said to be ashram of Rishi Valmiki and Venue of Asvamedha Yagya of Lord Rama. Guru Teg Bahadur, the ninth gurdwara was built in his memory.

HANSDEHAR

Traditional connects the place with Rishi Kardam who Practiced tapasys (penance) here for many years. His son Kapilamuni took birth and composed Sankhya Shastra here. Its name is said to have been derived from the tradition that Brahma came here to attend the marriage of Kardom rishi on the back of a Hans. The sacred Saraswati is said to have followed by the place and Pandavas come here and offered Pinds to their forefathers.

KALAYAT

The name Kalayat scenes to be derived from Kaplayat. Here he is said to have delivered a discourse of Sankhya Shastra to his mother Devputi. Mahabharta and Vamana Purana referred to a tirtha known as Kapila Harda popularly known as Kapila muni Tirtha.
NARWANA

Narwana is said to be the corrupted name of the word 'Nirwan' which means salvation. There is a tomb of Safi Saint Hazrat Gaibi Sahib who is said to have miraculously disappeared in ground. There is a tank around the tomb.

SAJOOMA

The place is said to be connected with a sage Sukhdev Muni who practiced penance (tapasya) here for 25 years. The smadh of the Saint where an animal fair is held is believed to be the site of a gufa (cave) where the saint used to live. There is a tank known as Surya tirtha, which finds mention in Mahabharta and Vamana Purana.

SAFIDON

The place is possibly the site Surpa Devi or Saridadhi reffered in Mahabharta and Vamana Purana. It is associated with snake sacrifice of Janamejaya son of Parikshit. The latter lost his life in the struggle against the Nagar of Taxila which was later engaged by his son janamejaya symbolized in the epic tradition of snake sacrifice which possibly took place at sarpadevi.

The name of the villages and location code numbers are given in the annexure- 1 and their locations with code numbers are shown in the map.[Fig. 1.2]
REFERENCES:


4. Dolphin, Vernon (1970) The Earth is the Home of man, Education Department, Hardware University.


