CHAPTER - III

ORIGIN AND EVOLUTION
OF RURAL SETTLEMENTS
A careful enquiry into the origin and evolution of rural settlements is necessary because the present structure and character of rural settlements can hardly be comprehended without knowing the complex cultural background which began with its origin. The process of settling down led to the union of families in the villages. The habitation of man on the earth took place in various bases. Man initially started to reside in caves and bushes and slowly established the organizational setup in the ancient times. In the process of occupancy territory formation, man undertook economic and social activities which involved the existence of people on the available physical landscape. The growth of settlement is not the matter of chance, it started from the nucleus of the original site Metai (2001). Settlements are under the influence of physical and cultural conditions, and functional characteristics with the impact of historical events. The events shown by the various rulers during ancient era for administration or defence of territories influenced greatly in the evolution of the settlements of the region.

The evolutionary history of human settlements can be interpreted in terms of migration of people into less populated areas. The people of Indian and European origin migrated towards continents of North and South America exploiting minerals and making agricultural settlements. Likewise, every society has undergone through a series of evolutionary stages. The earliest man was a hunter, then the trader, the pastoral stage of rancher's life,
the exploitation of land for crops then finally the more intensive culture of rural settlements. In ancient times, the danger and fear of wild animals and necessity of mutual help and co-operation favored the rise of compact settlements in many parts of the world where India is not an exception. The reciprocal effects of different historical periods on the rural settlements have brought changes in their own way. As rural settlement is primarily an agricultural workshop any change in the agricultural landscape is bound to radiate modifications in the character and distribution of settlements. The evolution of the rural settlements are closely associated with the evolution of man and can be traced back to the earliest organized settlements of man in the region but, unfortunately the ancient settlers have hardly left any actual record of their habitation. However, the archeological evidences have been traced out in the various civilizations proved beyond doubt about the existence of settlements. The remains of the implements used by them are helpful in reaching to some conclusions pertaining to their settlements at some places.

It is quite obvious that every settlement in any region was characterized by various stages of evolutionary changes exhibited with certain functional and morphological development of settlement. The evolutionary process of rural settlements where analyzed in England and noted that the settlements were the outcome of combination of small hamlets and their enlargement in due course of time, Jones (1961). Barker (1973) concluded that the settling
process in France in the 19th century considered the distance between the farmstead and fields of rural areas. The scholar observed the changing features of farm structures and system among the grouped and dispersed farmsteads. The settling of man in the clearings of dense forest may be regarded as the initiations in origination of settlements. The people were constantly exposed to the hazards of life and often from wild animals. The requirement to combat the danger from surroundings and the need of collectivity and co-operation lead to the construction of buildings, wells, tanks for irrigation, etc. which brought people together and closer. Such a type of settlements were noticed by Rawland (1971) in England to the fact that defense was a responsible factor to grow up the settlement, with development of economic conditions, socio-political system, technology and the environmental setting. Hudson (1969) observed the settlements of U.S.A. between 1870 to 1960 and concluded that the diffusion of rural settlements took place like the spread of plants and animals from the niche space to biotope space. It was believed that first phase of colonization was associated with the dispersal of settlement into new territory and new environment, whereas second phase indicated by regeneration of habitation with the creation of settlements clusters filling up of space by sons and relatives of origin colonizers and the third phase was noted with distribution of habitation due to limited environment in which density of population increased and stronger groups of settlers forced out weaker section.
David Grossman (1971) argued Hudson’s idea on the ground that evolution of human settlement may not be like the diffusion of plants species rather his study in Northern Africa proved that symmetrical arrangement of settlements on the physically uniform landscape was possible. There might be planned settlement growth if human efforts combined with local relief features and each clan and culture might have its own method of special organization by controlling the land texture and land allocation system. Wherever the land is suitable having adequate water supply, relatively at higher altitude and land free from floods and a fertile agricultural land surrounding these areas, the settlements have attracted towards it. There are several villages in Bihar plain due to this reason determining the morphometric development of the rural settlements in the region. (Singh, 1988). The settlements originated on relatively higher elevations and fertile lands with efficient water supply, those settlers enjoyed a secured life though they are unplanned villages with poor transportation facilities. Such settlements are often close to river courses thus rural settlements emerged with the emergence of permanent agriculture. Such types of habitations are very common in the state of Sikkim and Himachal Pradesh. Bylunds (1960). Models of settlement evolution revealed the colonization process of lappland in Sweden with histogenetic frame and emphasized the reality of physical conditions which influenced in the development of settlements. Depending upon physical characteristics, colonization started from the original settlement area and continued one after another along the sea shores where settlements developed parallel to one another, on a plain concentrically and radially like seepage and some times
settlement established in relation to the mother settlement and new land was found. The number settlements came into existence and developed in recent years only due to population pressure in the main settlements leading to partition of joint families and over crowding of houses. The settlements like Baghauni, Kothi, Gairba, Bhadulia in Bihar are the origin of such factors. The large number of settlements originate and grow up along network of communication system. The opening of railway stations and creation of crossroads give rise to new hamlet which developed with the advancement of time and the need of the people where commercial activities attract to centers and gradually developed into rural trading centers. Harry (1983) observed similar settlements evolving and developed in Nigeria. Such types of settlements have an ability to grow at a faster rate an emerged as a service center for surrounding hinterland. Rivers and their tributaries are the effective barriers in the land routes and tracts, to overcome such barriers ferry services came to be established on such points. Very often villages or hamlets frequently came into existence at such points. North Bihar plain is land of rivers and waterways and there are number of ferry points and ghats like Akhara Ghat, Haya Ghat, Kolhua Ghat, Karaari Ghat, etc. which are distinctly emerged as rural settlements. Similar type of settlements are noticeable all along the foothills of Himalayas and Sahyadry ranges. Karim (1989) had concluded that there are 28 rural villages in the entire state of U.P. which has the origin to the fact of river crossings. Singh (1965) examined the impact of socio-economic landscape in the settlement process of Ganga valley, Uttar Pradesh and observed that from 13th century settlements came up with the facilities of
ditches, fences, community services, and a system of land ownership, irrigation and wells. The rural landscape is the outcome of the interplay of physical environment and social background of the people and historical accidents. Another cause leading to the origin and evolution of new villages is the royal decree where by the king ordered the establishment of new village settlements on new sites or on old ruins either in irregular fashion or on a planned bases. Such type of ordered evolution of settlement was common among Muslim rulers. The Archeological glimpses collected from various sources in Maharashtra show this evidence that the emergences of some settlements are due to the order of royal decree. Hagarstand (1952) made an attempt to analyze the evolution and distribution of settlement and innovative waves of settlements at different point of time in America and observed that there are four stages of settlement evolution. Initial agglomeration of settlements, diffusion process with a strong centrifugal effect and formation of new centers at distant areas, condensing of settlement with equal relative increase in all directions with increasing number of settlements and saturation stage of settlements. The process of division of labor between different classes of people according to their skill and capabilities which led to the division of village on the basis of “Varnas”, which in the beginning were merely professional followed by different people thus, came into existence the professional settlements. The inhabitants involved in the fishing occupation especially in the coastal belt of Kerala and Tamilnadu have developed such type of professional settlements. Similar types of settlements are also noticeable in the agricultural community in the lands of West Bengal and
Orissa. Singh (1975) presented a systematized process of spatial diffusion covering 15 generations about 350 – 400 years on the evolution clan settlement in the Middle East Ganga valley. The observations state that, the clan settlement had sparsely inhabited area with dominant of political body, through social relations, marriages and economic activities linkage develop with the surrounding areas. The core part remained as Bhumibais and the reminder of the inhabitant area as Tappa centers. Because of territorial command over resources and economic interactions with other settlements the clan centers and Tappa centers developed into urban centers.

Villages have also emerged due to the devastation by floods and the resultant damage of the habitations along river banks, and also by newly constructed dams. As a result the rehabilitation settlements have been emerged which later on became the important settlement among the settlements in the region.

The evolution of rural settlements is the outcome of various factors. The original growth settlements are on the basis of favorable environmental implications. Precipitation is the most important factor in the evolution and distribution of settlement. The number and the concentration of the houses is more and dense where there is relatively sufficient amount of precipitation. Ali (1942) in his study of Ghaggar plain remarked that the concentration of population in their settlement pattern is in confluence with the hydrographic pattern of the region. it is observed that, with the high amount of rainfall towards eastern part of the region the water table is high, thus the number and size of rural settlement origined in this region is more. Statistically, there is a
co-relation between the distribution of water and the number of villages evolved. The co-relation value “r” is greater in case of rainfall indicating that the water table is more important factor in the origination, evolution and location of settlements.

The nature and fertility of soil is due important in the evolution of agricultural settlements. Nityanand (1966), in his study of the East Rajasthan remarked on the importance of soil in the evolution and location of rural settlement, that low line areas with a Calcareous substratum were favorable sites for human settlement evolutions, Magra or Tharra soil which were highly sandy and poor in fertility did not support large or many settlements as in the major parts of Western areas. The patches of clayey loams found in depressions surrounded by ridges of sand dunes were favorable for origin of settlements in Rajasthan. The rural settlements have also emerged were rocky outcrops with small rivers making alluvial fans which were good sites for cultivation as well as ease of contact with other settlements. The nature of retentivity of moisture in the soils has favored large evolutions in parts of Ganga Nagar in Uttar Pradesh. The vegetational cover has attracted many people for setting up the houses as these lands provide fodder for livestock which is the wealth for the people.

Among varied reasons and factors leading for origin, evolution and shaping up of settlements are the ethnic and cultural forces which can not be neglected. The long chequered history shows the glimpses that the religious clan ties, the caste system, the tenure system, etc. have played a significant role in the location and origination of rural settlements. The concept of “Dominant
Caste” (Srinivas, 1956) vis-à-vis other subordinates and low castes have played an important part in the evolution of villages and their fragmented nature. The migration of particular caste and their settlements in a particular region has evolved in number of pattern of settlements. There are quite a few examples of the influence of caste on the rural settlement were hamlets were established by a particular person belonging to particular caste and occupation. The caste factor is not only responsible for evolution but also equally responsible for detailed rural morphology. Clan and clan ties were quite significant in the evolution of some rural settlements (Tod, 1877). The influence of land system and land tenure is often noted by geographers as an important issue in setting up of new settlements. To some extent Raiyatwari system is responsible for formation of new settlements because of the ease of getting royal grants by certain favored individuals.

Economic factors are also due important for the evolution of the settlements. The transport linkages like Roads and Railways are significant in the evolution of the rural settlement. Railway connections give birth to many centers for example Chitra and Laky in Maharashtra, Sanju in Kerala. Roads are too important in locating a new settlement and also increasing the importance and size of pre-existing settlements. Among other economic activities like mining, industries, trade and commerce force in the location of settlements. The mineral deposits like gypsum has attracted many inhabitants to locate there settlements in Bikaner district for example Jamsar, Lunkaransar and other adjacent villages. Many rural villages have emerged due to stone quarrying in Aravali region. The salt deposits of Sambar, Didwana,
Panchbhadra and Phalodi are responsible for the emergence of villages. Lignite coal mining to the south of Bikaner city is responsible for the evolution of Palan village.

It is very difficult to conclude that the various aspects like physical, economic, ethnic and cultural factors have been more responsible in the emergence of rural villages but it is obvious that these factors are interrelated and influenced in the location and emergence of rural settlements over a physical landscape.

On the basis of above mentioned literature and review work, an attempt has been made to trace the origin and evolutionary process of rural settlements in the study region. The study region is not an exception under the general rule of emergence of settlements, which holds due importance as cited earlier. However, few of additional factors are also equally responsible for emergence of settlements in the present study area. Such factors have been discussed systematically with relevant evidences in the various historical periods. The study area was ruled by Portuguese for last 450 years till the liberation of the state and had unique characteristics. After becoming independent state in 1962 many of its unique features lost its original identity because of various developmental activities which crept in.

PRE-HISTORIC SETTLEMENTS

It is believed that during pre-historic period, that is the age of early stone-age and age of metals, the study area had dense vegetation cover and was highly concentrated with fruits and animals. The man wondering for food
discovered these resources and made a permanent abode in such places. Earliest man started living in caves. Many such caves have been discovered with floors littered with ashes, charcoal, bones and pieces of crude pottery. The implements like arrow heads awls scrappers of quartz found near the Dabolim, Arli indicate that such settlements existed since pre-historic period and indicated the fact that pre-historic man was essentially a hunter, gatherer and cattle rearer and were not cultivators. It was interesting to note that, most of the pre-historic settlements were confined to the areas of good water resources, ever-green forests, perennial rivers and river valley, which were more suitable for human habitations along with animal wealth. Light stone implements were essentially of more use during this period. Such implements like blades scrappers of silicious material which were the tools of later stone-age were found at Old Goa, Mopa and Kudnem. Some of such light stone implements were also unearthed in the valleys of river Mandovi and Zuari, were settlements like Cortalim, Lotolim and Ribandar are found. The village of Kudnem indicates the clues towards an ancient civilization that flourished, which was shown on the basis of excavations carried out recently. The polished stone axes were reportedly used by the first settlers which can be traced in the village of Old Goa and Ella.

According to Harivanshpurana, there was a fierce battle between Lord Krishna and demon Jarasanda on the mountain of Gomanchal, were the settlement like Tambdi Surla is witnessing the war. In some of the ancient scripts, the coastal village of Benaulim was evolved due to the myth that Parashuram, the sixth incarnation of Lord Vishnu supposed to have shot an
arrow to demarcate a land which fell in the village of Benaulim and is now known as historical settlement. So as the name implies Bann - Arrow, Halli - Village. Later evolved the village called Barnhalli (present Benaulim) in the coastal belt.

HISTORIC PERIOD

During the time of Lord Buddha the study area show the proof that there were number of well organized settlements. On the basis of ancient relics scattered all over the region it is possible to conclude that the region was inhabitant and cultivated by civilized people, whose Stupas and special architectural features still exists and reflect the past. It is quite general to state that Buddhism gave rise to several villages. Vestiges of Buddhism of the Hinayan sect belonging to Pre-Christian era have been found at Rivona (ancient Rishivan) Lamgaon, Haravalem and near Priol. According to Buddhist text Amavatur, the Buddhist monk Purna or Punna, originally a resident of Suna Prantha identified present Goa from the village of Zambaulim in Quepem taluka. It is reported that originally the people in the study region were violent and the spread of the Buddhism transformed the people of the region into peaceful and benevolent community. A stone statue of Lord Buddha in the meditation pose was discovered in the village of Colvali in Bardez taluka, signifying the presence of village during that period. The relics of Buddhism also traced in the village of Chandor owing its presence in the era. Besides, the religious cause of evolution the glimpses of origin of the villages are also found with respect to trading activities. It is believed that, during historical period long distance trade was beyond the limit of the people, however irregular trading was often in practice. Most of the goods
traded were confined to ritual goods associated with god, king and temple (Adam 1966). The rural settlements were developed in order to barter the local produce with that of non-local producers. It is concluded that the settlements have developed all along the stopping or halting places. The inscriptions of Rashtrakootas dynasty speak that long distance trade was carried by roads which were in good conditions in order to facilitate traders (Sathian 1968). It is also believed that all along these trading roads the settlements must have been emerged. During the historical period there are strong evidences to indicate that, the land of Goa was under peace for long time which favored long distance trade and overseas trade mainly under the leadership of dynasties (Fig. 2.1). The study area was the zone of contact between the east & western countries. The region was simply known as center of trade in war equipments and horses with Persian Gulf countries. As a result of these foreign trades, there was large number of settlements developed all along the coastal belt which were origined as the harbour sight settlement. The settlements such as Vasco, Panaji, Mapusa, and Murmagoa were the result of such contact zones. These settlements have gradually emerged as trading centers in all the surrounding areas.

History also reveals that the goods brought from foreign lands which were to be transported to interior lands passing through the forest region had many halting places like Ponda (ancient Phonde), Batagram (present Bicholim), Konkan (present Canacona) and Sangampur (present Sanguem). All these halting places slowly emerged as the settlement and service centers for traders further these settlements also distributed the goods to the surrounding regions. As various goods were readily available at all halting places large number of settlements developed around such halting places(Fig. 2.2).
THE SOUTHERN PENINSULA
16th - 17th Century Trade Routes


Scale: 1.5 cm = 150 kms

Fig. 2.1
GOA
RURAL SETTLEMENT TYPES

Fig. 2.2

INDEX
- Mining
- Fishing
- Contact Zones
- Hauling Places
- Fort Settlements

Fig. 2.2
There are several evidences depicting the cause of security of the historical rulers and the emergence of rural settlements. Several historical rulers made and attempt to build Forts for the security purpose in order to serve the huge army and their subordinates and hence, the settlements have evolved. Such fort settlements are Rishivan (Rivona), Chandrapur (Chandor), Shiroda and Cortalim. Similar settlements are also traced in the Northern part of the study area like Aldona which was built by Adil Shah. These ideas tend to support alternate school of thought headed by Ptolamy. The origin and evolution of rural settlements is also true during the rule of study area under Kadambas. The Kadamba ruler moved to Gopakpattan (present Goa) to the places like Vodlem Goym (present Goa-Velha) which emerged as important settlement, also evidences show some of the settlement emergence in the Tiswadi region.

THE ERA OF PORTUGUESE REGIME (OLD CONQUEST)

The Portuguese era began with the fleet led by Afonso-De-Albuquerque which entered the Mandovi River on 1st march, 1510. When Portuguese landed in the study region there were several battles fought between local rulers and Portuguese which disturbed the original settlements. In 1543, the Portuguese ruler conquered two talukas such as Bardez and Salcete. These talukas were called as old conquest of Portuguese. As they conquered the talukas, they started setting up several commercial activities at various places which led to the emergence of some rural settlement. After the old conquest the regular wars were fought between Portuguese and surrounding rulers of Bahamanis, Vijay Nagar and Marathas. For the protection of acquired provinces, the
Portuguese constructed military bases all along the boundaries of surrounding provinces viz., places like Assolna, Cavelossim, Cavorim, Guirdolim, Curtorim of Salcete taluka and Jua, Siolim, Assanora of Pernem taluka later on such places have emerged as settlements. During Maratha rule the powerful ruler, Shivaji ruled some parts of North-East Goa. He fought with Portuguese ruler and conquered some areas and constructed forts at Aldona and Nanus near Sattari, Chapora, Alorna and Curdi. Later with a passage of time the inhabitants attracted to these places and settlements were developed.

PORTUGUESE RULE NEW CONQUEST

On 24th March, 1783 the Portuguese captured Pernem from Maratha rulers and hoisted the flag at the fort of Alorna (Gune, 1979) thus by 1788 new conquest Pernem, Bicholim, Sattari, Ponda, Quepem, Sanguem, Canacona was completed and Portuguese became masters of the study area. Soon after the new conquest a number of changes took place in the internal administration of the study region. Many villages evolved as the administrative and military centers. There are quotations regarding the villages like Colem, Molem and Calem where human habitation was danger and wild and Portuguese rulers used such settlements for prisoners who revolted against them.

The study area is endowed with rich mineral potential and there are large number of mineral deposits like iron ore, manganese and Bauxite which are distributed along the eastern stretch of Western Ghats. The number of settlements like Amone, Codli, Costi, Betul are the out come of the people working in exploration of these minerals. The concentrations of population in such settlements are quite low due to environmental pollution and hazards.
The transportation is also one of the responsible factors for emergence of settlements in the study region. The Portuguese rulers made tremendous development in transportation sector, especially road and rail transportation. This development actually opened a new chapter in the origin and development of rural settlements. With the introduction of railway line from Castlerock to Murmagao which passed from the center of the study region, led to the evolution of number of settlements like Colem, Calem, Sanvordem, Curchorem, Seraulim, Majorda and Casaulim. With the extraction of minerals from the interior lands and the transportation through navigable rivers of Zuari and Madovi has led to the emergence of some settlements all along the river basin like Amone, Tisk-Sanvordem, Xelvona and Cortalim.

In modern days some settlements have emerged due to the availability of some resource like fish, agricultural activities and other services. Fishing is dominant and is confined to the coastal belt. Though fishing is mechanized in recent years, fishing with country crafts is still practiced in many parts. To cater the needs of the people involved in small scale fishing, some settlements emerged in the coastal region namely Betalbatim, Colva, Agonda and Palolim. Small satellite villages have emerged due to modern upcoming hotels in the coastal regions. Many small rural settlements emerged are dominant in providing various hospitality services to the tourist visiting the coast.

Regarding the origin and evolutionary process of rural settlements Dikson (1953) has pointed out that “rural settlements of today are clearly the product of a long process of development and change associated with the changing social, economic, political and legal conditions and their origin and
development vary from one region to another". As a result, the present scenario of the rural settlements in the study region is most significant in nature. At present there are 330 settlements which are functioning in the study region (Fig. 2.3)