8.1 Summary

In recent years, the systematic analysis of settlements has been one of the most significant topics of human geography. As mentioned earlier, such research and detailed analysis of patterns of rural settlement of a state or region is young in India. Really speaking, the growth of the subject in its content of study and research as well as its approaches and methodology is only a post-world war II phenomenon. As a result, there is a growing interest in the field of rural settlements and more and more studies are coming into focus in more and more regions of the country. In Manipur such analytical study of the geography of rural settlements has been comparatively lagging far behind. In the first introductory chapter of this thesis, the problem of research, aims and objectives, methodology, importance and significance are outlined. Then follow the structural organisation in eight chapters (including the present one) dealing with the various aspects of the subject.

Chapter II deals with the environmental setting of the state under study. Manipur with an area of 22,327 sq. km. constitutes 0.68 percent of the total land surface of India and is one of the smallest states of the country. The state shares international boundaries with Myanmar (Burma) in the east and chin hills of Myanmar in the south east. Two National Highways (N.H. No. 53 and 39) serve as the lifelines of the state and connect with other parts of the country.
The central plain or the Imphal valley occupy an area of 1843 sq. km. or 8.25 percent of the total area of the state, while the remaining hilly region occupies an area of 20,484 sq. km. or 91.25 percent of the state's total area.

In Manipur, every share of people's activity of life as well as other physio-cultural activities are controlled by the climate in one way or the other. The microclimatic factors like local relief, distance from the sea, local wind direction, social types, water bodies, forest and natural resources have been responsible for the minor changes in the settlement patterns of the state during the last few decades. In fact, the light flowing dresses of the people of the state in summer and the light close-fitting dresses in winter are keenly related with the condition of climate. However, a detailed micro-level analysis up to the desire level could not be made due to the lack of micro-level data and hence only the broader climatic factors and characteristics of the state have been taken into consideration.

It is apparent that the state has subsistence agricultural economy and the overwhelming majority of population is rural. Natural calamities such as floods, considerable run-off and landslides usually occur during the monsoon season. The agricultural potentiality of the state is directly linked with the heavy rains of this season. Hence, the season is the backbone of the state economy and has closely related with the settlement system of the region.

The state is known for its rich natural vegetation which consists mainly of forest. The forest area in Manipur is 15,154.95 sq. km. and this covers 67.76% of the total area of the state. These forest areas are mainly confined to the hills of Manipur. Thus, the major portion of the valley are diverted for settlement and agriculture. About 70 percent of the total population of the state are directly engaged on agriculture. This shows that the region continues to be predominantly rural in character.
The remotesness of the state from the centre and her geographical location are among the reasons why its economic development including transport has failed to keep pace with the tempo of progress in the rest of India. Difficulty of terrain, a large number of small rivers, shortage of skilled labour and imbalance between export and import are some of the major hindrance to the rapid growth of her industries. As result, the state has very few industries of great significance.

It has been noticed that in 1901, there were 2,84,465 persons in the state. The subsequent decades were marked by a small change from 3,46,222 in 1911 to 3,84,016 in 1921. In 1971 a higher increase in population has been registered with a total population of 10,72,753. The decade 1991-2001 further witness a remarkable increase in population from 18,37,149 in 1991 to 23,88,634 in 2001 (Table 2.9).

The most spectacular increase of population during the period 1991 to 2001 has directly affected the patterns of the human settlements of the state under study.

To sum up, the transportational isolation, socio cultural diversities, lack of encouragement for any outside capital investment on industrial output are the basic causes for the hindrance in the rapid economic growth of the state. However, the state's irrigation, schemes, power generation and forest resources forecast a bright future. In fact, there is scope and need for the further improvement of the transport and communication systems, as the state is experiencing all round development specially in the fields of agriculture and forest resources.

The histogenesis of settlements for the state has been discussed in chapter III. In the absence of detailed archeological and anthropological investigations, it is difficult to assert the early history of the settlement of the valley of Manipur and its surrounding hills. So most of our study of the early forms of settlements has to depend upon traditional beliefs, custom and
usage, folk-lore and other legendary history of the state. For that reason, it is not easy to find out the systematic records for tracing the actual dating of the first human settlements in the state. Based on available literature, archeological findings and anthropological background, an attempt has been made to trace the historical development of settlement system and rural landscape of the region.

The study had been divided into three stages viz, (i) ancient, (ii) mediaeval and (iii) modern period.

Historical evidences reveal that during ancient period, the valley was unsuitable for human habitation. In those days, the valley was covered with grass and reed jungles with poisonous snakes, animals etc. Such as condition is visible even today in and around the Loktak and Pumlel lakes in the southern part of the valley. Thus, human settlements during the ancient period were confined on the hills, particularly on the hills near the valley.

The hilly region which was previously densely forested was gradually cleared up for human habitations during the mediaeval period. Protection of human life from dangerous wild animals also become a little better. In fact, during this period the valley become a little better place for human settlement. Thus, in the late mediaeval period there was great expansion of settlements both in the valley and the hill areas of Manipur. As settlements in the valley increased on account of the increase of population, more and more forests were cleared up for human habitation.

The modern period commenced with the arrival of the British in 1891 and the next work of settlements and associated cultural landscape of the state was also substantially improved. During the British regime remarkable changes occurred in the pattern of rural settlements with the development of modern transport and communication system of the state.
The post-independence period witnessed maximum growth of settlement in Manipur. Extension of the network of modern means of communications and the development of social facilities like education, medical and other facilities encouraged further development of rural settlements in the state since independence. It may be pertinent to point out that improvement in agriculture as a result of land settlement, rapid extension and metaling of inter-village roads and construction of major bridges etc. led to the rapid development of settlements. Most of the rural market centres were the outcome of the proximity of the road network. The growth of towns like Imphal, Kakching, Churachandpur, Nambol Moirang, Bishnupur, Wangjing, Yairipok and Lilong may be cited as examples. Thus the post independence period witnessed a fresh spurt in the growth of rural and urban settlements. The transformation of many villages into towns and towns into major urban centres led to a remarkable change in the settlement system of the state under study.

Chapter - IV deals with the distributional pattern and types of rural settlement of the state. Settlement, like any other geographical feature, is unevenly distributed over the earth's surface; the same is true in case of Manipur too. The analysis of distributional patterns and types of rural settlements is of great significance in settlement studies and it refers to the spatial dimension of the process of regional development. Hence, the distribution of rural features like the distribution of rural settlements, size wise distribution, site of rural settlements, relief features, means of communication, types of rural settlements, spacing of rural settlements etc. are examined.

It is observed that no clear-cut pattern in the spatial distribution of rural settlement is discernible. It has also been noticed that most of the villages in the valley are located along the side of the rivers or roads.

The morphology of rural settlements of the state has been analysed in chapter - V. It has been noticed that most of the rural settlements of the state differ in shape, size, nature and
the degree of compactness. Here an attempt has been made to analyse some of the morphological structure of rural settlements of the state. Considering the limited scope, space and time factor 14 (fourteen) villages have been selected from different size and class groups for a detailed study.

Different aspects of morphological studies such as village pattern, factors influencing pattern, viz. physical, cultural factors, distribution, shape and sizes of the rural settlement areas, household structures etc. have been spelt out in detail.

The theme of the chapter-VI is to bring out a clear picture of morphology of rural dwellings of the region under study. In fact the present form and structure of rural dwellings of the region is the result of successive stage of evolution, social systems and cultural cults which evolved in the ancient past. It is observed that the layout of dwellings and designs are to a great extent influenced by social and economic status of dwellers within their environment.

With the increase of population in the rural areas, there have been changes in the original pattern of dwelling houses. In recent years, they have partially stopped constructing the traditional types of the dwelling houses and have started modern houses having L-shape, U-shape, I-shape and E-shape and alike. Thus, the shape and size of rural dwellings reflect economic and social status of people. However, based on the materials collected from different sources during the course of extensive fieldwork, it is revealed that most of the rural people is still residing in congestion which further emphasises their level of poverty.

An attempt has been made for a comprehensive planning of rural settlement systems of the state in chapter-VII. In this chapter, various suitable plans and schemes which reasonably can be taken up in the state have been proposed for the betterment of settlement systems in future. Among the proposed plans improvement of infrastructure is the main achievement which to make possible measures.
With the above, it is concluded that since several aspects of the patterns of rural settlement of the state had been analysed it can be rightly observed that the state has a bright potentiality for a sound economic base for all round developments of its settlement in the near future.

8.2 Findings of the Study

After evaluating and examining various aspects of the morphology of rural settlement it is renowned the following findings in two ways.

8.2.1 Problem Findings

(i) Difficulties of transport and communication have been a major hindrance to rapid economic development of Manipur. This has however been, realised by both the state and central governments and considerable efforts have been made in the five-years plans to improve the situation. The remoteness of the state from the centre and her geographical location are among the reasons why the economic development including transport has failed to keep pace with the tempo of progress in the rest of India.

(ii) The physical factors are not alone sufficient to explain the pattern of rural settlements. A number of factors like time, space, form, function, and social groups have direct impact on the patterns of rural settlements in various levels of the state.

(iii) It is also further observed that although a large number of settlements of the state had their origin in the ancient period, their growth and expansion have mostly occurred during the late mediaeval and modern period.

(iv) The state is known for its rich natural resources which consists mainly of forest, power and agriculture. About 67.76 per cent of the total geographical area of the state is occupied by the forest and mainly confined to the hills of Manipur. It is also apparent
that major portion of the valley areas are confined for human settlement and agriculture. About 70 per cent of the total population of the state are directly engaged on agriculture and its allied services. This shows that the state still continues to be predominantly rural in character.

(v) It is also observed that there is no clear-cut pattern in the spatial distribution of rural settlement in the region under study. It has been noticed that most of the villages in the valley are located along the sides of the rivers or inter-village or district roads or highways.

(vi) It is quite clear that the region awaits some concrete plan and suggestions for its future development. It also urgently needs some major and minor improvements and corrections in its existing system of rural settlement of the state which is full of congestion and other problems.

(vii) There are significant regional variations in the road density patterns. For example the Imphal-West district and Imphal-East district have a lighter density than the Bishnupur and Thoubal districts. This is mostly because of the lethargic growth of the overall economic developments in their parts. Such variation in the district and inter-village roads in the state have a direct effect on the patterns of rural development of the state.

8.2.2 Prospect Findings

(i) As pointed out earlier, there is a scope and need for the further improvement of the transport and communication systems as the state is experiencing an all sided development, especially in the field of agriculture, forest and industry.

(ii) As our survey reveals, the housing conditions of the rural areas has undergone considerable changes during the last two decades due to the better socio-economic conditions of the villages. In recent years, most of the rural people have partially stopped construction
of their traditional type of dwelling houses and have started better type of houses which reflects economic and social status of the people.

(iii) The most interesting aspect of rural settlement of the state is the recent growth of a large number of rural marketing centres in the several districts of Manipur. These centres, though not yet qualified to attain the status of towns by the census definition, are receiving considerable urban impulse, especially over the last few years. This development owes primarily to increasing commercial activities consequent upon the increasing pressure of rural population on agricultural land on the one hand, and the improved road communication connecting these service centres on the other. In fact, these centres are potential market centres forming lower orders in the hierarchy of urban development of the state under study.

(iv) The recent growth of literacy and educational institutions is another indication of the better system and development of rural people of the state. From our previous discussions and analysis it is being realised that the rural dwellers of the state has undergone considerable changes during the last 50 years particularly after the independence of the country. These transformations have contributed in every field of the rural life particularly on demographic aspects, literacy, public health, means of transportation and communication etc. Thus the contact of the rural dwellers with the urban people becomes a regular phenomena, and as a result, urban influence has infiltrated into the rural areas bringing a gradual change in the modes of dress and habits of the rural characters.

8.3 Conclusion

The patterns of rural settlement in Manipur has shown a continuous progress, especially after the independence of the country. The increase in the number of service centres and the general improvement of the transport and communication systems in the rural areas of the state
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(Manipur) clearly indicate an all-round development especially in the economic conditions of the rural people. The strengthening of the economic base of the state due to the major and minor irrigation projects, development of medium and minor industries and development of inter-villages and inter districts transportation facilities will greatly step up in the development of rural life of the state.

The growth of recent rural marketing and mini-marketing centres at most of the large villages tends to influence the whole socio-economic milieu of the patterns of rural settlement of the state. This has given rise to a continuing process of transformation of a rural society to an urban society.

Davis¹ rightly observes that this process of transformation of rural society is giving rise to a number of problems due to the fast changing pattern of spatial interaction. With the result, there is a change in the attitude of the people. It, thus, refers to a revolutionary change in the pattern of social life of the villages and consequently in its pattern of settlement. Keeping in view of the various aspects of rural settlements, the factor of the degree of development of means of transportation is one of the most vital factors in the pattern and transformation of rural society of the region under study. In fact, much of the interaction envisaged in the process of pattern of rural settlement depends largely upon the degree of regional mobility. Even the process of economic development are accelerated by the regional mobility. Thus, the development of means of transportation and communication will break the rural isolation and may accelerate the commercial activity between country side and urban place. Hence, the nature and the magnitude of patterns of rural settlement is governed largely by the nature of its, economy, social life and demographic character.

Before we conclude this study, it would be prefered to observe that on the whole, the region under study has better prospects. However, the rate of its progress of development will

¹ Davis, Kingsley (1965), "The Origin and Growth of Urbanisation in the World", in H.M. Mayor and C.F. Cohn (eds), Readings in Urban Geography, p. 59.
depend on the proper utilisation of its potentialities on planned lines. If due attention is paid towards its planning and development, it can be confidently observed that the state has a bright future.

8.4 Suggestions

Keeping in view of the above summary and findings of the present study, the following few suggestions are made to highlight the future course of research study.

(i) It is suggested that the future detailed geographical explorations are necessary to provide more facilities for further research work on various problems of rural settlements of this state. In the course of our study and also after completion it was felt that there could be a fresh study of the major towns of Manipur in order to see how they have grown and what impact, if any, they have needed on regional development of the state. Since there is a perpetual communication between the urban areas and the adjoining rural areas of Manipur, the development of the rural areas cannot be planned in isolation from the urban area of the state.

(ii) As already mentioned, the main purpose of the present study is to examine the morphological patterns of rural settlement and planning for future development. In fact, the morphological pattern of the rural settlement of the state is directly influenced by the physical factors. In addition, the socio-economic factors have also contributed much in functional segregation of the settlement areas. Hence a coordinated approach by geographers and town and country planners will bring out the real meaning of the "plans for development". After analysing the various aspects of this pattern of settlement system of the state, it was suggested to prepare a comprehensive scheme for the proper implementation of the programme for its future development. In these circumstances, it would be better if a
comprehensive scheme is prepared for the rural settlements of the state and execution of the scheme is divided into different phases. It will enable to adjust the rural dwellers to their needs.

(iii) There are still a number of rural issues on which further research work is needed before this hypothesis can acquire the status of a theory. The above analysis are based on the preliminary results of a limited empirical research in this field. There are still a fair number of research problems on rural settlements of the state, these problems can be adequately handled by a multidisciplinary group of researches consisting of architects and town planners, civil engineers, sociologists, economists and geographers for developing it into a structurally organised region of the country.

(iv) It is confidently hoped that the present study would stimulate the intent of settlement geographers and demographers for this easternmost state of the country, where the geographical inquiry of such problem is still at its preliminary stage. Thus, the present study needs adequate attention of both the state and central governments towards its improvement so that it may be able to keep up its well-earned reputation for being a most well developed state in the North-East part of this country in the near future.