PART - I

PROBLEM AND BACKGROUND
OF THE STUDY AREA
CHAPTER - I

INTRODUCTION

STATEMENT OF THE PROBLEM

Geographic study of population is assuming increasing importance every year. It is because population is increasing every year and all the issues, may be social, economic, political and environmental are inextricably related to man or human resources. In fact, the quality of human resources is the sole determinant of a region's level of development and creation of better human for the future. To understand the human resources of a place it is necessary to examine thoroughly the character of the people and their socio-economic condition, without which proper development of a region for the welfare of its people cannot be conceived of. A geographic study of population is even more significant in an isolated backward frontier region like Sikkim where the process of socio-economic development may be said to have just started. Also the ground reality is that in a vast country like India with diverse populace, recognition of the regional problems related to population character and its socio-economic condition is possible only through a micro-level analysis. It is in this background a geographic study of population of Sikkim is undertaken in the present work.

It will be in order to state here that the population character of a region may be known through an analysis of the demographic variables as population growth, age, sex, marital status, economic variables as working force, participation rate, occupational categories, and the social traits as literacy and educational level, ethnic and religious composition, language and dialects, etc. The nature of population structure plays a crucial role in the development of a region and its geographic personality. Birth, death and migration are the important components of demographic structure which are responsible for the population dynamics and spatial variation of population in a region. Besides, these components also bring remarkable change in the age-sex composition, dependency ratio, marital composition and sex disparity in literacy of the region. The age-sex composition
determines the size of the working force pattern, proportion of the dependent population, etc.

To have a better insight regarding the various social and economic attributes of an area, a study of the economic composition of population is also highly necessary. The character of occupational characteristics of an area depends on its physical resource base, background of the different ethnic groups, political situation in the past and the present and a number of its historical and socio-economic factors. The type of economy present in the different parts, scope for employment in different sectors and the pace of socio-economic transformation could be understood from the occupational structure of an area. The social attributes provide the total picture of the social pattern and the degree of socio-economic change. Among the social attributes literacy and educational level reveal the proportion of skilled, literate and educated persons, both male and female, in a society. In brief, an analysis of these attributes provides a clear understanding of the various socio-economic problems present in a region without which proper development planning cannot be made. Thus, a geographic study of population in respect of the above has immense importance, particularly in a backward region like Sikkim where special emphasis has to be given for upliftment of the prevailing socio-economic condition of the people.

Thus, above are the major points in view behind selection of the present research problem; Population of Sikkim: A Geographical Analysis. A synoptic view of the study region to follow justifies this contention.

The study region, i.e., Sikkim, is a rectangular shaped mountainous area with no flat land. It has a complex physiographic condition with a young folded mountains characterised by varied altitudinal zones. The State is dissected by innumerable number of perennial and non-perennial streams. Within an area of 7096 km² it exhibits varied terrains and a wide range of climatic conditions, soils and vegetations. Out of the total area only 25 per cent (approximately) is found habitable.
The total population of the State is 4,06,457. The present population structure of the State, on the whole, is the result of the process of intermixing of a number of tribal and non-tribal groups. Till the beginning of 19th century the predominant inhabitants of the State were the tribals. Towards the end of the same century the demographic profile changed and at present the State is predominantly inhabited by the non-tribal people. Among the major ethnic groups, Lepchas are considered as the autochthons of the State. According to many scholars Limboo and Mangars (Nepali) are also considered as the original inhabitants, contemporary to the Lepchas of the State. The next important tribe is the Bhutia. Among the non-tribals, the Nepalese (Gorkhali, Kirati, Newar) constitute the majority. Generally speaking, Lepchas are concentrated in the central, the Bhutias in the northern highland areas and the Nepalese, in the southern part of the State. At present, more than 60 per cent of the total population of the State are Nepalese, next to them come the Bhutias and the Lepchas. Besides, there are other groups of people coming from the neighbouring countries and different states of India. Thus, the State exhibits a distinct physiographic, demographic and cultural characteristics of its own and it provides a potential field for population geographic study.

OBJECTIVES AND HYPOTHESES

Based on the statement of the problem given above, the objectives of the study are:

i] to examine the present pattern of distribution of population and social communities in different parts of the State and to find out the factors behind them;

ii] to assess the man-land relationship by analysing the arithmetic, physiological and agricultural density of population and the available land resources of the different parts of the State;

iii] to study the spatio-temporal pattern of population growth in the State and to evaluate the causes of rapid population growth in it and their effects;
iv] to investigate the pattern of rural-urban migration within the State and mass in-migration from different parts of the country and outside, and to find out the causes of in-migration and its effect on the demographic and socio-economic structure of the area;

v] to portray the spatio-temporal pattern of population characteristics, such as sex-ratio, age-structure, marital-status, fertility and mortality rates, etc., and to examine the causes of their variations in different parts;

vi] to examine the basic socio-cultural characteristics of the State, such as spatio-temporal pattern of literacy and educational level, religion, language and dialects;

vii] to evaluate the pattern of work participation rate and occupational structure in the State and to find out the nature of occupational shifting from one sector to another;

viii] finally, to divide the State into different ethnic zones and population zones on the basis of distribution of different ethnic groups, demographic and socio-cultural attributes so that the socio-economic characteristics of the zones can be thoroughly understood.

In the light of the above objectives, the following hypotheses are proposed to be tested during the course of the work.

i. Isolation due to harsh ecological setting, prevalence of monarchy system over a long period of time and peopling of the region through in-migration during both pre and post merger periods in the country have given the region a population character which is quite distinctive from other parts of the country.

ii. The present distribution pattern of population of the State is the result of both permissive and restrictive factors of physical environment, on the one hand, and socio-cultural, historical and political, on the other.
iii. The growth of population in certain parts, especially in the southern districts is not keeping pace with their physical resource base with resultant effects of population pressure on limited agricultural land.

iv. The pattern of migration into the region bears a complex character owing partly to political reasons and partly to the availability of unexploited resources and increasing economic opportunities since its merger with the country.

v. The development level of the various ethnic groups varies in different parts of the regions depending on their degree of exposure to the outside world and intermixing with each other and also with the rest of the population of the State.

vi. The prevailing land tenure system and certain policies of the Government are acting as important forces of economic differentiation among various ethnic groups in the region.

vii. The socio-economic status of the tribals and also of their woman is somewhat better than that of the non-tribals in the region as opposed to generally prevalent in most parts of the country.

**Significance of the Study**

Sikkim is a socio-economically backward State. Till now, very little research work has been done to analyse the geographical characteristics of its population. Such an analysis is, in fact, a prerequisite for any development planning for human welfare of the region. A comprehensive treatment of demographic and socio-economic characteristics of the region therefore assumes great significance. The region with rugged terrain and a remarkable ethno-cultural diversity, and strategic location near the International Boarder has an unique geographical entity of its own. Hence, a proper examination of the population attributes of the region from a geographic perspective has additional significance.
It is already mentioned that research work on this line is very limited. Although, some works have been done by anthropologists and sociologists on certain socio-cultural aspects of the different groups, but such work hardly focus on the spatial dimension of the problems related to population. It is therefore, expected that the present study, which attempts to focus on the different attributes related to demographic and socio-economic characteristics of the people of the State will be helpful to the planners and policy makers towards formulating development plans for the welfare of its people. In brief, the study is considered to have both academic and practical significance.

Database and Methodology

The study area has a plural society which comprises both tribal and non-tribals belonging to different ethnic groups. But due to non-availability of necessary data at micro level, it has not been possible to cover all the aspects of population in the present study. Also because of harsh physical condition, political restrictions, inaccessibility, remote location, language problem and limited time, the field study has been confined only to a limited number of areas. In any case, every attempt has been made to present a meaningful analysis of the population attributes of the State in this work.

Data for the present study, both published and unpublished have been taken from the different Census of India volumes and other relevant sources. Non-availability of data on different demographic and socio-economic aspects prior to 1971 has been a major constraint for the present study. Lack of data on different groups and sub-groups has also been a handicap in the work. Due to the formation of sub-divisions after 1981, data on various population characteristics at this level have been calculated on the basis of census data of 1981.

The entire work has been conducted into four stages. The initial stage comprises mostly the library work. At this stage, different books, journals, periodicals, administrative reports, etc., have been consulted in different libraries, research centres, archives (Government) to collect relevant literature related to the present research work. Besides, most of the data on various demographic and
socio-economic aspects have been collected from census reports and other reports and documents published by different government departments. As most of the data at district level are available only from 1971 onward and at sub-divisional level for 1991, the study has been carried out mostly on the basis of data of these census decades.

In the second stage, village survey through questionnaire schedules is done to examine the validity of the findings obtain from the secondary data. Four villages located in different altitudes and inhabited by different groups and sub-groups, viz., Lepcha, Bhutia, Nepali, Limboo (Nepali) have been selected for collecting primary data on various demographic and socio-economic aspects. Proper care has been taken in selecting the villages for study, opinions from reliable and knowledgeable persons have been taken so that the villages selected reflect a representative character of the different groups of the areas. The size of the selected village varies from small to large ones. Out of the surveyed villages two are located in the restricted areas. They are Lachen (Bhutia) at a height of 2697 metres and Gnon Samdong (Lepcha) at 1200 metres (approximately) near the boarder area. Despite, harsh physical condition, problem and communication facility, restriction in free movement and language problem these villages are chosen for survey because of their typical socio-economic characteristics. To obtain primary information verbal interviews with the members of the Panchayat and government officials were taken during the survey. Besides, observations were made on different aspects of the villages in relation to their respective ecological settings.

In the third stage, data obtained from primary and secondary sources are processed and analysed with the help of suitable, meaningful and simple quantitative techniques such as simple ratio, lorenz curve, location quotient, Sopher's disparity index and Z-score. The results obtained from different statistical analyses are cartographically represented with the help of suitable maps and diagrams for giving a clear exposition of the spatial patterns.
In the final stage, the writing of the thesis is done incorporating analysis of data on various population characteristics of the State. Towards the end of the work, a synthesis of the different variables is done to divide the State into separate ethnic and population zones. Photographs are also appended to illustrate the different aspects of the surveyed villages.

Organisation of the Study

The contents of the work is broadly divided into three parts: (I) Introduction, (II) Analysis of the Problem, and (III) Synthesis and Conclusion. The part I comprises three chapters. In the first chapter the nature of the problem, objectives and hypotheses, significance and methodology of the study have been stated. In the second chapter an attempt is made to critically review some of the works done by the Indian as well as foreign demographers and population geographers to have a theoretical background of the study. In the third chapter, historical, geographical and economic backgrounds, and peopling of the study area have been incorporated.

Part two comprises three chapters covering the analysis of the demographic and socio-economic characteristics of the State's population from both spatial and temporal perspective. In chapter IV of this part an analysis of the pattern of population distribution, density, growth and migration is done. The next chapter, i.e., chapter V, deals with the structural components of population, viz., sex ratio, age structure, dependency ratio, marital composition, etc. In chapter VI, economic characteristics such as work participation rate and occupational pattern in spatial context is discussed. Besides, social characteristics, especially, literacy, religion and language are also discussed in this chapter. The last chapter of this part (Chapter VII) contains a brief picture of both population and economic characteristics of the selected surveyed village (revenue blocks) of the State.

The last part consists of two chapters. In chapter VIII a synthesis of the work is done by outlining the ethnic and the population zones of the State. And finally, summary and conclusion including the major findings of the work have been presented in the last chapter.