

SPATIO-TEMPORAL TRENDS IN THE DEVELOPMENT OF TOURISM INDUSTRY IN SIKKIM

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MASTER OF PHILOSOPHY

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1997

Dedicated to.....

Ma and Baba



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CERTIFICATE

This is to certify that the dissertation entitled: "**SPATIO-TEMPORAL TRENDS IN THE DEVELOPMENT OF TOURISM INDUSTRY IN SIKKIM**", submitted by **Ms. Sanjukta Sattar**, in fulfillment of the six credits out of the total twenty-four credits for the award of the Degree of **Master of Philosophy (M.Phil)** of the University, is a bonafide work to the best of our knowledge and may be placed before the examiners for evaluation.

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SECTION - I

INTRODUCTION AND SCOPE OF THE STUDY

Introduction :

Tourism is understood as the relationship and phenomena arising out of the journeys and temporary stays of people travelling primarily for leisure or recreational purposes.¹ Spatial interaction is thus an inherent feature of tourism and therefore the subject lends itself to geographical analysis. In a geographical sense a basic distinction between tourism and other forms of leisure is the travel component. According to Mathieson and Wall (1982), 'tourism is the temporary movement of people to destination outside their normal place of residence and work, the activities undertaken during their stay in the destinations, and the facilities created to cater to their needs.'²

These travel and stay attribute of tourism in turn give rise to demands of various services and other physical and cultural infrastructure which may be provided by different sectors of the tourist industry.

Until recently, only about a quarter of century ago, tourism was the privilege of a few rich, affluent and adventurous class. The people had very diverse motivations and expectations. In earlier times traveling was mainly done for trade, pilgrimage or for exploring the world. The credit of travelling for pleasure for the first time goes to the Romans. The set back to tourism in the

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1. Pearce, D (1989), "Tourist Development," Longman, London.
 2. Mathieson, A. and G. Wall (1993), "Tourism : Economic Physical and Social Impacts," Longman, N.York.

5th century can be attributed to the fall of the Roman Empire. The tourist stream came into being in the 17th and 18th century, but it was, by and large an "elitist tourism". The concept of "mass tourism" emerged with the establishment of the system of annual paid holidays during the inter-war years in the 19th century. Increased leisure, higher incomes and greatly enhanced mobility have combined to encourage tourism activity among more people. Improvements in transportation, the availability of accommodation and other forms of relatively cheap vacation travel, have further extended the opportunity to travel for pleasure. Today the majority of people in the developed world and an increasing numbers in the developing countries are tourists at some time or the other in their lives.

In present time, it is no double that , tourism is of major economic and social significance. More than 270 million tourists spend US \$ 92 billion annually in places outside their own Country³. With a world growth in visitor arrival rate of approximately 6 percent per annum, tourism is one of the fastest growing economic activities and has gained the status of industry. It is the World's largest export industry, which according to the World-Tourism Organisation generated about US\$ 372.6 billion during 1995 by some 567 million tourists worldwide. In the same year, travel and tourism is expected to have provided direct and indirect employment for 212 million people accounting for 10.7 percent of the global work force. Tourism, thus is a major contributor to foreign exchange earnings of several developing and developed countries.

3. Mathieson A and G.Wall (1993), op.cit.

There is a widespread optimism that tourism might be a powerful and beneficial agent of both economic and social change. Indeed tourism stimulated employment and investment, modified the economic structure and made a positive contribution to the balance of payments in many countries throughout the world. At the same time alarm had been raised regarding the negative feedbacks and the burdens on the host region that accompany the rapid growth of tourist industry beyond a saturation point after which any further growth of tourist activity would create more problems than benefits. Therefore, the need for planned development of this industry, arises specially in case of the developing areas which cannot afford to waste scarce resources. The major aim of the tourist plan is to maintain a balance between the demand and supply elements, while avoiding the creation of serious economic territorial or social imbalances. "An understanding of tourist development processes will lead to a greater awareness and fuller comprehension of how tourism is established and expands. Given the recent growth of the industry in many parts of the world, such an appreciation is becoming increasingly important not only to geographers but also to planners, local authorities and government agencies as well as to the populations of the host communities." Here lies the relevance of this study which will attempt to evaluate the development of tourist industry and identify the spatial elements in the organization and planning of tourism.

Conceptual Framework :

The study of tourism is the study of people away from their usual habitats, of the establishments of travellers and of the impacts that they have on

the economic, physical and social well-being of their hosts. Pearce (1989)⁴ had identified six broad areas which constitute the major components of the geography of tourism :

1. Spatial patterns of supply
2. Spatial pattern of demand.
3. The geography of resorts
4. Tourist movements and flows.
5. The impact of tourism.
- 6 Models of tourist space.

Considering the fast rate of tourism expansion, which infact, is the result of increasing leisure, higher standards of living, advanced technology in the field of transport and communication, measurement of tourism phenomenon has become very vital. It is the 'tourist' who is the principal character in tourism. Therefore, tourists become unit of measurement. Thus, a conceptual clarity about, 'who are tourists', is needed. As per United Nations definition which was reviewed by the United Nations Conference on International Travel and Tourism held in Rome in 1963 which is, generally, followed by all countries in compiling their tourist statistics, "a tourist is any person visiting a country other than in which he has his usual place of residence for any reasons other than following an occupation remunerated from within the country visited"⁵.

This definition covered:

4. Pearce, D. (1989) Ibid.(1). P.6.
5. United Nations Conference on International Travel and Tourism, Rome (1963) quoted in Bhatia A.K. (1994) "Tourism Development: Principles and Practise". New Delhi, Sterling Publication, P.98.

1) 'Tourists' i.e. temporary visitors staying at least 24 hours in the country visited and the purpose of whose journey can be classified under one of the following headings :

- a) leisure (recreation, holiday, health, study, religion and sport)
- b) business, family mission, meeting.
- c) 'Excursionists' i.e. temporary visitors staying less than 24 hours in the country visited (including travellers on cruises)

The above definition exclude travellers who in the legal sense, do not enter the country (i.e., air travellers, who do not leave an airport's transit area). The statistical group concerned by United Nations Statistical Commission in 1976 recommended the use of definition proposed in Rome conference and to distinguish within the definition of visitors, a separate class of visitors, who might be described as 'day visitors' or 'excursionists defined as consisting of visitors on day excursions and other border-crossers for purposes other than employment, and visitors in transit who do not stay overnight in accommodation provided within the country.

In case of 'domestic tourism' people travel outside their normal domicile to certain other areas within the country as compared to travelling outside the boundaries of a country in international tourism. Presently there exists no generally accepted definition of the term 'domestic tourist'. The following definition was put forward by International Union of Official Travel Organisation (IUOTO) in 1974-75, which however was not adopted as an official definition but merely as a basis for discussion. For statistical purposes, the term 'domestic tourist' designates any person who travel within the country where he

resides in a place of residence for at least twenty -four hours or one night, for a purpose other than exercising a gainful activity and which may be classified under one of the following headings :

- 1) Leisure (recreation, holiday, health, study, religion and sports);
- 2) Business, family mission, meeting.

But the study of tourism activity is not merely the measurement of tourist volume. In fact "tourism is a multifaceted phenomenon which involves movement to and stay in destinations outside the normal place of residence."⁶ Tourism has two basic aspects i.e. the supply of facilities and the demand for participation. Supply and demand interact to produce the pattern of tourism, which may be defined as spatial and temporal incidence of tourism development. More specifically, tourism development might be defined as the provisions or enhancement of facilities and services to meet the needs of the tourist.

Tourist development takes many forms, as the interactions between supply and demand occur at a variety of scales reflecting the vacation length, the distances that can be traversed and the types of activities involved and tourist motivations. Based on these different tourism developments, e.g. mountain tourism, coastal tourism, cultural tourism, tourism of wild-life sanctuaries and national parks, adventure tourism etc., can occur in different ways at different scales and at different rates. "From a series of motivational studies, Plog Suggests that travellers are distributed normally along a continuum from 'psycho- centrics' to 'allocentrics'. At the one extreme are the psycho centrics, who tend to be anxious, self-inhibited, non-adventurous. In contrast, the

6. Mathieson, A.and G.Wall. (1982), Ibid. (2) P.14.

allocentrics are self-confident, curious, adventurous and outgoing, travel for them is a way to express their inquisitiveness and curiosity."⁷ These two different types of travellers with different motivations and attitude will generally visit different-destinations, demanding different types of facilities, therefore encouraging different-type of tourism activities. Therefore making facilities and services available to meet the varied tourist demands, at the same time making an effort to minimise the negative impacts on the environmental, and socio-economic conditions of the host-region, is necessary. This needs a prior analysis of the existing state of tourist development which is the stepping stone for tourism planning and organization. An useful starting point for a systematic analysis of tourist development is found in Miossec's Model of the spatial dynamics of tourist space. (Fig I.1) Miossec (1976,1977) considered four basic elements (1) resorts (2) transport network (3) the behavior of tourists (4) the attitudes of local decision-makers and population, in determining the structural evolution of tourist regions through time and space. With the expansion of tourist industry, an increasingly complex hierarchical system of resorts and transport networks evolves, and the tourists become more aware of the regions possibilities with consequent changes in their behaviour.

Overall it may be conceptualized that tourism development envisages augmented availability and improved organisation of different components of the tourism infrastructure to meet the requirement of the tourists. The basic essence of this activity includes the interactions between supply and demand components

7. Plog (1973) quoted in Pearce, D.(1987), "Tourism Today", Longman, New York. Pp.15.

RESORTS phases	TRANSPORT phases	TOURIST BEHAVIOR phases	ATTITUDES OF DECISION MAKERS AND POPULATION OF RECEIVING REGION phases
0 territory traversed distant	0 transit isolation	0 lack of interest and knowledge	0 mirage refusal
1 pioneer resort	1 opening up	1 global perception	1 observation
2 multiplication of resorts	2 increase of transport links between resort	2 progress in perception of places and itineraries	2 infrastructure policy servicing of resorts
 Organisation of the holiday space of each resort Beginning of a hierarchy and specialisation.	 Excursion circuits	 spatial competition and segregation	 segregation demonstration effects dualism
 hierarchy specialisation saturation	 connectivity → maximum	 Disintegration of perceived space Complete humanization departure of certain types of tourists forms of substitution saturation and crisis	 A total tourism B development plan ecological safeguards

FIG 1.1 A synthesis of the dynamics of tourist space.
(Miocsec 1976)

and their variation over space. It is the spatial element in the organization and planning of tourism, which forms the main area of interest for the geographers. More generally it is felt that, an understanding of tourist development processes will lead to a greater awareness and fuller comprehension of how places change or might be changed as tourism is established or expanded. The industry has witnessed tremendous growth in many parts of the world, therefore such an appreciation is becoming increasingly important to geographers planners, local authorities and government agencies as well as to the population of the host communities.

Based on the above mentioned conceptual frameworks of tourist activity, the proposed study attempts to examine the tourist industry in Sikkim.

Literature Review:

A number of attempts have been initiated for understanding tourism by the academicians representing different fields of knowledge. The complex nature of tourism phenomena implies that various academic disciplines are involved in its study. From some basic disciplines such as geography, economics, ecology, anthropology and sociology, researchers have made attempts to understand the phenomena of tourism activity. Their approaches can broadly be identified into two major streams :

(i) political economy approach and (ii) functional approach.⁸ Political economy approach emphasizes the structural relationship between origin and destination.

8. Lee. J. (1989), "Tourism Development in the Third World," Routledge Publication, New York.

According to this approach the structure of the industry is governed by the political and economic determinants. Functional approach mainly deals with classifying tourism in terms of their functional aspects, without any political considerations. It lays emphasis on the material importance of the industry to all participants and upon the ways to improve its efficiency and minimize its adverse effects. The theoretical premises are highly optimistic in view of the fact that most of the problems may be resolved through management and appropriate policy measures. The best way of theorising the dynamic aspects of tourism according to this approach is to examine the spatial interaction of tourism within a broader functional framework.

In the context of the present study the contribution of geography in the field of tourism literature will be examined.

Geography and Tourism

Unique geographic contributions to the social sciences in general and to the study of tourism in particular are based on responses to questions pertaining to locations. Physical and cultural environments are examined from systematic and regional perspectives to comprehend evolutionary changes in the tourist scope and to understand the movement of tourists from the originating markets to leisure destinations of their choice.

Geographers first took up the study of tourism about half a century ago. Contribution of geographers to the analysis of environmental, regional, spatial and evolutionary considerations of tourism are quite noteworthy. "To geographers, the environment is the totality of tourism activity incorporating

natural elements and society's modifications of the landscape and resources".⁹ The early American geographers saw tourism as a distinct and significant form of land-use (Mc Murphy 1930, Brown 1935). Other writers observed that tourism modified the existing landscape and gave rise to new different urban forms (Jones 1933, Eislen 1945). An early example of this comprehensive approach to research is interest in the morphological structure of sea side resorts (Stansfield 1969). Geographers have constructed a general land-use model for such resorts (Pearce 1978). Apart from these, impact-oriented research has been equally specialized, emphasizing specific types of impacts. For instance, Doxey (1976) and Smith (1977) examined the resentments which may result from tourist - host interactions, the World Bank (1972) and Peters (1969) treated tourism as an economic phenomena. Hall (1970) and Cohen (1978) documented some of the effects of tourism on the physical environment.¹⁰

Environmental Approach

Within the wide range of tourism environment relationships which cover natural, socio-economic and cultural milieu, lie two inter - related concepts. First the carrying capacity concept which has been extended to the total tourism environment. Second the seasonal nature of tourism which has also been studied as a component of carrying capacity issue.

According to Barkham, "carrying capacity is a phrase delightful in its simplicity, complex in its meaning and difficult to define, as in different

9. Mitchell & Murphy (1991), "Geography and Tourism", Annals of Tourism Research, Vol. 18, 1991, Pp 57-70

10. Wall, G, A. Mathieson (1982), ibid.(2) p.2.

situations and to different people it is understood in different ways" (Barkham 1973 : 218).

This is certainly the case with the tourism studies. Studies have confirmed the existence of a physical and perceptual character to the carrying capacity concept and the difficulty of its operationalisation. The concept has received great deal of criticism, but much of it is due to unrealistic expectations rather than any basic flaws, in the model.¹¹ In various literature it has been pointed out the need for managers to catch up with the techniques of carrying capacity measurement and specify their management objectives more clearly in terms of the limits to change, they are willing to accept. Such an approach could benefit future conservation linkages and calls for more balanced tourism development (Coppock 1982, Krippendorf 1987). Assessment of social carrying capacities involves detection of the objectives of host community. Some geographers have examined the resident perceptions of tourism impact and potential (Lui, Sheldon and Var 1987). A number of works have been published on the social impacts of tourism. In the last few years a growing number of empirical studies have been conducted such as those by Pizam, Belisle, Hoy, Sethna, Richmond, Rethman, Fuji and others. Some have mentioned about the acculturation theory and used it as mode of analysis in examining the interaction between residents and tourists (Getz 1983, 1985).¹²

11. Barkham, J.P. (1973), "Recreational Carrying Capacity: A Problem of Perception," as quoted in Mitchell, L.S. and P.E. Murphy (1991), ibid (9) p.60.

12. Getz, D. (1986), "Models in Tourism Planning : Towards Integration of Theory and Practice," Tourism Management 7(1). P.21-32.

Some geographers have studied the phenomena of tourist seasonality. It has been shown that seasonality can affect social patterns in tourism and the residents need to make continued adjustments. Interest in the temporal aspects of tourism has been extended to the behaviour of tourists, examining how they use their time (Pearce 1988; Genson - Verbeka 1987). The problems of seasonality and its impact on the natural and cultural environments of mountain areas has been studied by a number of researchers. Gupta, et.al.¹³ studied the seasonal aspect of tourism and its impact on the hilly environment in Udaipur. It has been noted that the length of the tourist season has become a crucial factor in investment decisions and their physical impact in Alpine Communities (Barker 1982).¹⁴ An assessment of the UNESCO, Man and the Biosphere (MAB) program, at Obergugle, Austria, concluded that community involvement and decisions are required as much as technical expertise and advice, if sustainable levels of development are to be created in small mountain communities (Moser and Moser 1986).

Tourism research in India also focuses on the impact of tourism on mountain environment as indicated by the special issue of "Tourism Recreation Research (Singh 1982) on "Tourism in the Mountains" and the book "Integrated

-
13. Gupta, N.L. Kothari and Kothari. (1989), "Tourism and Mountain Environment in Udaipur Region, pp 158-169 in S.C. Singh (ed), "Impact of Tourism on Mountain Environment", Research India Publications, Meerut.
 14. Barker, M.L. (1982), "Traditional Landscape and Mass Tourism in the Alps," Geographical Review 72(4), p.395-415.

Mountain Development (Singh and Kaur 1985).¹⁵ Much of this literature reflects similar concerns about the development capacity of fragile environments but these also include discussion on the cultural and ethnic implications of bringing tourists to these previously isolated areas. Some other examples include the book, "Impact of Tourism on Mountain Environment," (Singh, 1989),¹⁶ in which an attempt has been made to analyze both negative and positive impacts of mountain tourism as documented by various scholars for presenting an integrated model of mountain development. Currently the studies highlighting sustainable approach and development of eco-friendly tourism are becoming the area of interest of many tourism researchers (Deardan 1991; Karan and Mather 1995; Lahiry 1996; Lakshminarasaiah 1997).

The studies regarding the economic impact of tourism development encompasses the studies on the change induced by tourism activity on the employment scenario and the state income. A number of studies have considered the various costs, like developmental, operational, social and cultural, which accompany tourism development. Works of Gray (1970), Peters (1969) point out tourism as a force in international trade. There are many studies in which tourism has been treated as an industry having multi-dimensional impacts. There are innumerable studies on the multiplier effect of tourism. Each time a tourist makes an expenditure, a ripple of additional spending is sent through the

15. Singh, T.V. and J.Kaur, (eds.) (1985), "Integrated Mountain Development," Himalayan Books, New Delhi.
16. Singh, S.C. (Ed), (1989), "Impact of Tourism on Mountain Environment", Research India Publication, Meerut.

economy. This ripple is called as tourist multiplier. A few examples of studies in this field include those by John Brydon (1973), Archer (1976), James S. Dalos Santos et. al. (1979), Elwood Pye (1979) etc.

There are many studies in India dealing with economic aspects of tourism. One of the earliest attempts in this regard is the cost-benefit study of tourism undertaken by NCAER (1975).¹⁷ The emphasis of this study was on four aspects: (a) Cost-benefit analysis of investment in different classes of accommodation for the tourist. (b) Cost-benefit analysis of Kovalam Beach Resort (c) Importance of tourism on the economy of Jammu and Kashmir (d) the estimation of the contribution of tourism to the national economy of the country. It has been the work of the National Committee on Tourism which made a breakthrough in the field of the study of Indian tourism. Their study entitled, "Economic Benefits of Tourism", consists of various segments of tourist industry which can produce a wide range of products and service for the tourist. The major emphasis of this study is on the role of domestic and international tourism in the socio-economic development process of the country.

Regional Approach

The regional character and peculiarities of tourism destinations has been dealt with, by some geographers (Boniface and Cooper 1987), while some went further and tried to capture the essence of local tourism opportunities through an examination of the regional character and heritage of the host community.

17. National Council of Applied Economic Research (1975), "Cost Benefit Study of Tourism," NCAER, New Delhi.

In this context it may be mentioned that in 1972, the International Geographical Union created a commission to study the geography of tourism and leisure. This commission has been extremely active, particularly in Europe. There have been a series of regional meetings addressing specific themes such as urban tourism (Berlin, Germany, 1985), coastal tourism (Majorca Spain in 1986), mountain tourism (Grenoble, France 1987), development of peripheral regions (Sousse, Tunisia, in 1987), and international tourism (Christchurch, New Zealand 1988). As can be seen from these examples," there was a distinct local interest in each theme, which helped to demonstrate the applicability of the research, as well as raise the general profile of this subfield of geography".¹⁸

Most of the literature in India on this approach is mainly based on mountain tourism with the Himalayan region as their study area (T.v. Singh 1990, 1991; S.C. Singh 1989; Singh and Kaur 1984; Jina 1994; Subba 1990; Dutta and Zutshi 1990; Chakravarty 1989 etc.). The other upcoming areas of study include assessment of the development of coastal tourism (Lahiry 1996), tourism at the pilgrimage centers (Kaur 1982; Bharadwaj 1973;), tourism at the archeological sites (K.Singh & S.C. Singh), tourism of national parks and sanctuaries (Singh and Kaur 1982) unpublished papers presented in the National Conference on "Management of Tourism In National Parks and Sanctuaries: The Human Experience (1997)."

18. Mitchell & Murphy (1991), ibid(a).

Spatial Considerations

Tourism involves travel, therefore, its spatial implications are very important to geography. In the early fifties and late sixties a few geographers such as Wolfe (1951) and Defert (1966) have outlined the fundamental aspects of the pattern and processes of the spatial interactions inherent in all forms of tourism. In 1956, it was proposed that the degree of trade or interaction between any two regions would depend on their degree of complementarity, the existence of any intervening opportunities and the cost of making the transfer. These principles of interaction have been examined in the literature on tourism in geography. (Ullman 1956).¹⁹

Many attempts have been made to express there relationships more explicitly, through more complex models of tourist space. The basis of most of these models remains an origin - linkage - destination system with various writers giving different emphasis to these three elements and expressing them in different terms. One of the earliest papers to discuss tourist flow was published in the early 1960s. In general the 'gravity model of spatial interaction has been applied with varying level of success.²⁰ But it was found that intervening variables, such as cultural and climatic characteristics accounted for certain travel patterns, but did not conform to the distance deccay function of the gravity model. To overcome such difficulties, several variations of the gravity model

19. Ullman, E.L. (1956), "The Role of Transportation And The Bases For The Interaction," quoted in Mitchell & Murphy (1991). ibid(9), p.63.

20. Williams, A.V. and W.Zelinsky (1970), "On Some Patterns of International Tourist Flows," Economic Geographer 45(4). p.14.

have been developed which reflect recreational travel conditions relevant to tourism research. However, "..... the most important reason for developing a gravity model is not to replicate observed travel patterns but rather to provide a forecasting methodology "(Smith 1989 : 112).²¹ Hence a useful derivative for geographers was the probabilistic trip model. This provided regions and individual destinations an estimate of how many visitors to expect and locate their points of origin. There had been a growing interest in analyzing the travel patterns of circuit tourism. Circuit tourism is a form of time-geography where the tourists seek to maximize the benefits of travel subject to the constraints of time and money (Forer and Pearce 1984). In a couple of studies the gateway centers had been identified and a hierarchy of attractions based on their differing lengths of stay were worked out. In addition a 'trip index' was developed which provides a gauge of the relative time spent at a particular destination during a circuit tour (Pearce and Elliot 1983).²² Indian tourism literature lacks any kind of work in this field, except a few, like "International Tourism in India: A Geographical Analysis" (Babu 1991).²³ Taking the origin-linkage -destination system as the basic framework, this study had been aimed to provide an effective integrative approach, for understanding the geographical aspects of tourism.

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21. Smith, S.L.J. (1989), as quoted in Mitchell & Murphy (1991), "Geography and Tourism", in Annals of Tourism Research, Vol. 18, pp 57-70.
22. Perce, D.G., and J.M.C. Elliott (1983), "The Trip Index," Journal of Travel Research 22(1). p. 6-9
23. Babu, S, (1991), "International Tourism In India: A Geographical Analysis." unpublished M.Phil dissertation, J.N.U., New Delhi.

Evolutionary Considerations

The synthesizing perspective of geography has encouraged some geographers to take a broader temporal view of tourism development. To understand tourism transformations and trends, they have examined its evolution in terms of social and destination developments. The product life-cycle concept, resort life-cycle, "Ellis Curve",²⁴ and various tourist typologies were the basis for the formulation of the cycle of evolution model for tourist resort areas (Butler 1980). A sequential series of stages were hypothesized which describe the evolution of tourist resorts through time. In the subsequent studies it has been pointed out that changing transport technology and consumer preferences have modified the evolutionary patterns for individual destinations (Lundgren 1983).²⁵ The concept has been applied to a core-periphery analysis of Canada's North-West territories and suggests that area's approaching development stage must weight the advantages of outside investment against the loss of local control (Keller 1987).

These and some other studies have demonstrated the general validity of viewing tourism development within an evolutionary framework, because early decisions undoubtedly influence later growth options. All of these time-space studies have had difficulty operationalizing the concept, searching for -----

24. Tourism can pass from a beneficial stage of positive, psychological, monetary, cultural, and environmental change to a net loss position for the destination area in terms of economic, social and ecological costs. This evolutionary trend is known as "Ellis Curve".
25. Lundgren, J.O.J. (1984), "Geographic Concepts and the Development of Tourism Research in Canada," Geo Journal 9(11), p.17-25.

appropriate development indicators and concrete historical data, with which to define various stages. But if it becomes possible to coordinate the diverse subsidiary cycles that have been observed, it could form a tentative step in the development of a indigenous tourism theory. It had been noted that current operational problems, conflicting findings and planning difficulties could be corrected with a broadening of the evolutionary approach to incorporate some of the economic, political and social forces that shape it (Haywood 1985). There are a few contributions of Indian tourism literature solely examining evolutionary aspects of tourism results. Some of the authors make reference to the evolutionary aspects of the tourism development, as an accessory to some other topic in this field. Prem Singh Jina to some extent has dealt with the evolutionary aspect of tourism development which covers a part of his work, "Tourism in Ladakh Himalayas".²⁶ He had identified four stages in the process of tourism development and had correlated it with the economic development of the host region. Apart from this, many of the work dealing with the impact study, have examined the evolutionary aspects in order to gain a better understanding (Sreshtha 1989; Gupta, Kothari & Kothari 1989; Kumewat 1989; Chopra 1991; Singh 1990).

In each of the approaches mentioned above, the geographer's approach has been to synthesize a myriad of causal factors into concepts or models of behaviour that assist in an understanding of a complex worldwide activity. The major focus has been on those elements which have an impact on the

26. Jina, P. Singh (1994), "Tourism in Ladakh Himalayas," Indus Publications, New Delhi.

environment in general and distinct areas in particular. This emphasis reflects the geographer's concern over how humankind uses the resources and space found on planet earth. The next logical step is to integrate these individual concepts and models into some general framework or paradigm that will guide future practice and theories. Currently, the tourism literature is extending their coverage beyond direct geographic issues. A conceptual framework of tourism and its environmental impacts was developed by examining the individual components of tourism activity, with specific interest in their external costs (Mathieson and Wall 1982). This approach was taken one step further by offering the prescriptive option of a community planning approach based on ecological principles (Murphy 1985). An examination of tourism travel patterns (Pearce 1987)²⁷ and an updating of tourist resort developments by the application of comprehensive assessment of destination planning has returned geography to its spatial roots (Pearce 1989).

Some have taken the first tentative step towards developing more applied planning models that incorporate diverse components. Creation of an integrative systems model encompassing the combination of traditional models as well as tourism planning model was suggested. This challenge was accepted and methods by which the constraints and difficulties of bringing the various parties and interest together could be achieved (Haywood 1988).²⁸ The use of several

27. Pearce, D (1987), "Tourism Today : A Geographical Analysis," Wiley, New York.

28. Haywood, K.M. (1988), "Responsible and Responsive Tourism Planning In The Community," quoted in Mitchell & Murphy, ibid(9). p.66.

interactive learning techniques were recommended along with the design of a community planning paradigm.

While the above models are a logical transition from earlier concepts and research models, they are still in their infancy. Much of the emphasis has been on travel patterns, impacts and resource management considerations, but this reflects only the supply side of tourism. More research needs to be done on the tourists, needs and these demand characteristics integrated into existing models. One area that geographers could address themselves is the motivation for travel and the influence of perception on actual travel choice.

Some geographers in United States and Netherlands have coalesced the studies on tourist demand with tourist marketing studies. For example a marketing text includes topics on "how tourists choose their holidays," "planning of tourist routes," and "the image of destination regions," (Goodell and Ashworth 1988). The geographic significance of similar topics is strongly stated in a more recent anthology including papers on "can places be sold for tourism," "people places and priorities" and "the dynamics of tourism place marketing" (Ashworth and Goodell 1990). It can be seen throughout these collections that the environmental, and cultural issues continue to be brought together in a regional context, and are examined from the perspective of the individual tourist as well as the industry and host destination. This is an exciting development that will hopefully incorporate the management-objectives of modern marketing, framing of policies and strategies into more complete geographical models of tourism development.

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Another area where geography offers great possibilities is in the realm of data storage, retrieval and analysis (Burroughs 1986). Computer assisted cartography and geographic information system (GIS) can assist in refining the above models by portraying data in map formats, and can manipulate the information according to various practical and theoretical needs. It has been indicated that GIS can be applied to corridor analysis, events planning, information and for displaying of data for operational planning. Role of remote sensing in assessing, monitoring and protecting the environment related to tourism development, specially in the sensitive areas, has been highlighted by many Indian authors too. (Jha, Lakhera, Jugran 1989;²⁹ Verma 1989;³⁰ Garg and Singh 1991).³¹

From these reviews of literature on the various perspectives of tourism geography, it may be concluded that geographers mainly analyze the static and dynamic aspects of the findings and synthesize this information into descriptive, productive and normative models. Geographic enquiry has focussed on the human-environmental relationships within tourism, important progress has been

29. Jha, V.K. et.al. (1989), "Role of Remote Sensing in Assessing, Monitoring and Protecting the Environment Related to Tourism Development in Mountain Areas," in S.C. Singh (Ed.), Impact of Tourism on Mountain Environment, Research India Publication, Meerut. P.354-357.
30. Verma, S.S. (1989) "Tourism Environment and Remote Sensing," in S.C. Singh (ed.) op.cit. P.33-40.
31. Garg, S.P. and Inderjit Singh (1991) "Applicaition of Remote Sensing Techniques In The Development of Tourism: A Case Study of Ranikhet Tashil, U.P., Geographical Review of India, Sept. Vol. 53(3). P.21-29.

made and more may be expected as geographers join forces with other social scientists in this exciting and important area of research.

The contributions of academicians belonging to different disciplines are also noticeable, specially in the field of tourism marketing, management, planning and policy perspectives. Likewise works of A.K.Bhaita, Somnath Chib, P.N. Seth, R.N.Kaul, J.M.S. Negi, Adele Hodgson, Richard W.Butler, U.Bala provide valuable informations on such aspects of tourism, as tourist information, marketing strategies, planning and development perspective.

To conclude it may be said that tourism is a subject of extensive study and research. This is still an upcoming discipline and every aspect of tourism transcends the boundaries of many disciplines, thereby making it a complex subject of study. Though in recent times, a considerable amount of literature on different aspects of tourism is available, still there is a great paucity of information. The literature available is of lop-sided nature as there is no exhaustive information about any single aspect of tourism industry. This is because the study of tourism is still in its infancy. In this context except for conceptual aspect, the scarcity of relevant literature was felt, in the present study also.

Objectives:

This study mainly focusses on the interaction of the demand and supply components of tourism activity and its impact on the spatial variations and development of tourist industry in Sikkim. Keeping this in mind, the following objectives have been set forth :

1. To identify the existing tourist attractions.
2. To analyse the tourist flow pattern, the socio-economic background of the tourists and some aspects of tourist decisions.
3. To evaluate the availability of tourist facilities and related infrastructural development and their capacity to meet the tourist demands.
4. To examine the spatial element in the overall development of tourism activity.
5. To analyse the development of the tourist industry through plan effort.

Data Base:

This study has been conducted taking the state of Sikkim as the unit of study and is entirely based on secondary data sources.

For the statistical information needed for studying the background of the study area, Sikkim, Census of India publications and Gazetteer of Sikkim have been used. The data related to volume of tourists, both international and domestic, seasonality aspects, have been compiled from Tourist Annual Reports, provided by statistical cell of the Department of Tourism, Sikkim. Various brochures and pamphlets published by Department of Tourism, Sikkim have been the source for information on distribution of places of attractions, schedule for package tours, trekking, programmes and adventure tourism.

Other important source of informations used in this study are the various reports published by Bureau of Economics and Statistics (Planning and Development Department), Government of Sikkim, Gangtok. The 'Report on Tourists in Sikkim (1992) which is a survey report, undertaken by the above

mentioned department, on the tourists visiting Sikkim in 1992, provided informations on the tourist flow pattern by places of origin, purpose of visit, mode of transport used, socio-economic characteristics of the tourists, tourist motivations and tourist decisions. The survey covered both domestic and international tourists visiting Sikkim during 1992. The informations regarding the accommodation facilities has been obtained from, A Report on Hotels, Guest Houses and Restaurants in Sikkim (1991-92). Other sources of information regarding tourism infrastructure and facilities include reports and leaflets like 'Sikkim - A Statical Profile (1979-80 & 1991-92) and 'Sikkim At a Glance (1995)', respectively, published by Bureau of Economics and Statistics, Sikkim.

The data related to the government expenditure and plan allocations for tourism development have been obtained from the Five Year Plan reports and the records maintained by the Office of the Sr. Dy. Accountant General (A & E), Sikkim.

The source of maps utilised in this study include those published by Department of Tourism, Sikkim and Census of India publications.

At this juncture it should be mentioned that the quality of secondary data is not dependable, and quantity is inadequate, therefore, limiting the study in various respects. However, all the informations available to the best of our knowledge, have been utilised to fulfill the objectives.

Methodology:

In this study, the system of tourism development will be sub-divided into two of its basic components (i) demand component which includes the tourist volume and their respective demands (ii) supply components or the supply of

tourist facilities and infrastructure. Each of these two components have been dealt individually and finally the interaction of these two have been portrayed to measure the level of tourist development and their variation over space.

The study pertains to spatio-temporal analysis of tourism phenomena. The data collected from the various secondary sources have been compiled and analysed according to the need of the study. The data computation ranges from computation of simple percentage values of the absolute figures, to construction of various indices. Moving averages and correlation analysis have also been done wherever it was necessary. The use of statistical diagrams and cartographic techniques have also been made. The following indices have been constructed for a better portrayal of the significant features of tourism development.

1. **Seasonality Index (SI) :**

This index has been constructed to measure the seasonal fluctuations of tourist arrival. For this purpose, the year is divided into four seasons : Winter (December, January, February) Summer (March, April, May), Monsoon (June, July, August) and Autumn (September, October, November), based on the homogeneity in distribution of temperature and rainfall. Seasonality index for each season is obtained by computing the percentage share of tourists coming during each season out of annual tourist flow. The index is as follows :

$$SI = \frac{\text{tourists arriving in the } x^{\text{th}} \text{ season}}{\text{total tourist arrival in } y^{\text{th}} \text{ year}} \times 100$$

$$SI = \frac{t(x)}{t(y)} \times 100$$

Higher is the value of index, higher is the share of tourist in that season.

Example (1)

To find the SI for the winter season 1992 :-

Step 1:

tourists in winter = tourist in Dec + tourists in Jan
of 1992 + tourists in Feb.

$$t(x^{\text{th}} \text{ season of } y^{\text{th}} \text{ year}) = 3416 + 2270 + 3300 \\ = 8986.$$

Step 2:

total tourists arriving in 1992 = $t(y) = 68137$

Step 3:

$$SI = \frac{t(x)}{t(y)} \times 100 = \frac{8986}{68137} \times 100 = 13.19$$

2. De Martonne's Aridity Index :

De Martonne defined his aridity index as follows :

$$I = \frac{\text{Mean Annual Precipitation in mm}}{\text{Mean Annual Temperature in } ^\circ\text{C} + 10}$$

Based on this, the above mentioned index is used in this study to represent the composite impact of precipitation in mm and temperature in $^\circ\text{C}$, on the monthly tourist flow. It is found that higher is the value of the index, lower is the aridity and vice versa. It is noted that in the original use, the index values are computed for different stations in a macro-region for the purpose of further regionalisation. But in this study, due to limitation of data the index is computed for a single station - Gangtok, but for all the months in the year. Station Gangtok is chosen, as it is found from the observation of the date on tourist

flow, that it receives the maximum number of tourists. Thus, in this case the original purpose of the index is modified to meet the purpose of the study.

Example (2)

To find the De Martonne's aridity index for the month of July and December.

$$\text{De Martonne's index for July : } I_j = \frac{P_j}{t_j + 10}$$

$$\text{Mean Monthly Precipitation (} P_j \text{)} = 65.3 \text{ cm}$$

$$\text{Mean Monthly Temperature (} t_j \text{)} = 19.95^\circ \text{C}$$

$$I_j = \frac{65.3 \text{ cm}}{19.95^\circ \text{C} + 10} = 2.18$$

$$\text{De Martonnes index for December : } I_d = \frac{P_d}{t_d + 10}$$

$$\text{Mean Monthly Precipitation (} P_d \text{)} = 2.09 \text{ cm}$$

$$\text{Mean Monthly Temperature (} t_d \text{)} = 10.75^\circ \text{C}$$

$$I_d = \frac{2.09}{10.75 + 10} = 0.10$$

It may be concluded that month of July has low aridity whereas December has higher aridity.

3. Occupancy Rate (OR) :

Development of tourism accommodation and occupancy rates are relative to each other. This index had been derived as by Jina (1994)³² to examine -----

32. Jina, P. Singh (1994), "Tourism in Ladakh Himalayas," Indus Publication, New Delhi.

whether the available accommodation capacity, which is measured in terms of bed capacity for the entire year i.e 365 days, is enough to meet the annual tourist demand, which is measured in terms of annual total overnights. Annual total overnights is the product of average tourist days and number of tourists. The index has been worked out as under :-

$$\text{occupancy rate} = \frac{\text{Annual total tourist overnights}}{\text{Total bed capacity} \times 365} \times 100$$

Where Annual tourist overnights = Average tourist days x total tourists.

$$\text{Average tourist days} = \frac{\sum [x_1 t_1 + x_2 t_2 + \dots x_n t_n]}{T}$$

Where - x = length of stay in days with a range of 1 to 'n' days

t = number of tourists corresponding to each range of length of stay

T = Total number of tourists

Higher the value of the index, greater is the pressure on accommodation facility indicating that supply of accommodation facility is unable to meet the tourist demand.

Example (3)

To find the occupancy rate of East district for the year 1992 :-

(i) Total number of tourists in East district = 52,429

(ii) Average tourist days in Sikkim³³ = 4 days.

(iii) Total Annual Overnight = 52,429x4 = 209716

33. Average tourist days in Sikkim have been computed, based on the data obtained from sample survey (see Appendix :4.4), conducted by Bureau of Economics and Statistics, Govt. of Sikkim. As district-wise data for length of stay is not available, the value for average tourist days for all the districts is taken same as that for the entire state.

(iv) Number of hotel beds = 1702

$$(v) \text{ Occupancy Rate} = \frac{209716}{1702 \times 365} \times 100 = 33.8$$

4. Road Density (RD) :

This index had been constructed to measure the accessibility. This is a ratio between length of road in kilometers in the n^{th} district and the area (in square kilometers) of the n^{th} district. Higher value of index indicates greater accessibility. The index has been calculated as under:

$$\text{Road Density (RD)} = \frac{\text{Road length in km in } n^{\text{th}} \text{ district}}{\text{Area in sq km of } n^{\text{th}} \text{ district}}$$

Example (4)

To find road density of East district.

- (i) Length of road in kilometers in East district = 1018 km
- (ii) Area in Square kilometer of East district 945 Sq. km
- (iii) Road density = 1.067

5. Tourism Development Index (TI) :

This index, had been constructed to measure district-wise variation of tourism development. This is a composite index which collectively represents the impact of various components on the development of tourism activity. The following variables were thought to best represent the various factors, including both the demand and supply components, influencing tourism development. The index has been calculated as under:

$$\sum_{i=1}^{n=8} \frac{x_1 + x_2 + \dots + x_8}{8}$$

Where $\sum_{i=1}^{n=8} x_i$ represent the standardised value of the 8 selected

variables. The following variables have been selected for the study:

1. x_1 = Percentage of tourists in n^{th} district
2. x_2 = Percentage of hotel/guest house beds in n^{th} district
3. x_3 = Occupancy Rate in n^{th} district.
4. x_4 = Percentage distribution of places of tourist attractions in n^{th} district.
5. x_5 = Road density in n^{th} district
6. x_6 = Hospital beds per thousand population in n^{th} district
7. x_7 = Post offices per thousand population in n^{th} district
8. x_8 = Banks per thousand population in n^{th} district

The variable x_1 represent the demand component of tourism activity. The variables x_2 x_8 represent the supply component of tourism development, out of which x_4 represents the attraction factor, x_2 , x_3 represent accommodation factor, x_5 portrays accessibility and x_6 x_8 represent the availability of other infrastructural facilities.

The computation of this index involves the following steps:

STEP 1

Standardisation of the variables, $(x_1/x_1 \dots x_8/x_8)$ by dividing each observations for each variable by the mean. This way one can get rid of the bias of scale without affecting the relative position of the districts in the series. This transformation does not disturb the 'dispersion' of the variables since the coefficient of the variation of the original series is retained as the standard

deviation or the coefficient of variation of the transformed series (Kundu 1980)

Step 2

The final composite index

$$\frac{\sum_{i=1}^n \frac{x_1}{x_1} + \frac{x_2}{x_2} + \dots + \frac{x_8}{x_8}}{8}$$

is obtained by dividing the summation of the standardised observations of all the variables by the number of variables. This is computed for all four districts.³⁴

Choice of The Study Area :

The proposed study will be based on the tourist industry in the state of Sikkim. Sikkim which is a hill state, is protected on all its three sides by huge mountain barriers. Agriculture is the mainstay of the people. Apart from this, tourism activity along with local handicrafts industry occupies large share in the economy of the region. Scarcity of flat land for fullfledged agricultural development and absence of enough mineral wealth, has discouraged the setting up of basic industries. But fortunately Sikkim is gifted with splendid scenic beauty and rich cultural heritage which has been attracting tourists, both international and domestic in increasing numbers. Therefore tourism industry can be considered as one of the important sectors promoting the economic advancement of less-developed areas lacking in other resources.

34. See appendix : 4.1 for the table showing the observations of the variables and the computed value of 'tourist development index'.

Organization of The Material:

The basic framework of this study is the linkage between the supply and demand component of tourism development, in reference to their spatial elements.

The entire study is divided into two sections. The first section includes introduction, conceptual framework, literature review, objectives, data base, methodology and choice of the study area.

The second section which is divided into five chapters, contains the actual study. The first chapter includes a brief commentary on the profile of the study area and a descriptive analysis of the various tourist attractions available there.

The second chapter includes analysis of demand component of tourism industry which includes a study on the tourist flow pattern both spatial and temporal, socio-economic characteristics of the tourists, tourist motivation and decision.

Similarly the third chapter deals with the evolution of the demand component of tourism development which includes analysis of the availability of the tourism facilities and infrastructure.

The fourth chapter is exclusively meant for the examination of spatial variation of tourism development from the viewpoint of balance between demand and supply. An attempt is also made to evaluate the growth of tourism industry through plan efforts.

The fifth chapter presents the summary and the inferences drawn from the study along with some suggestions.

SECTION - II

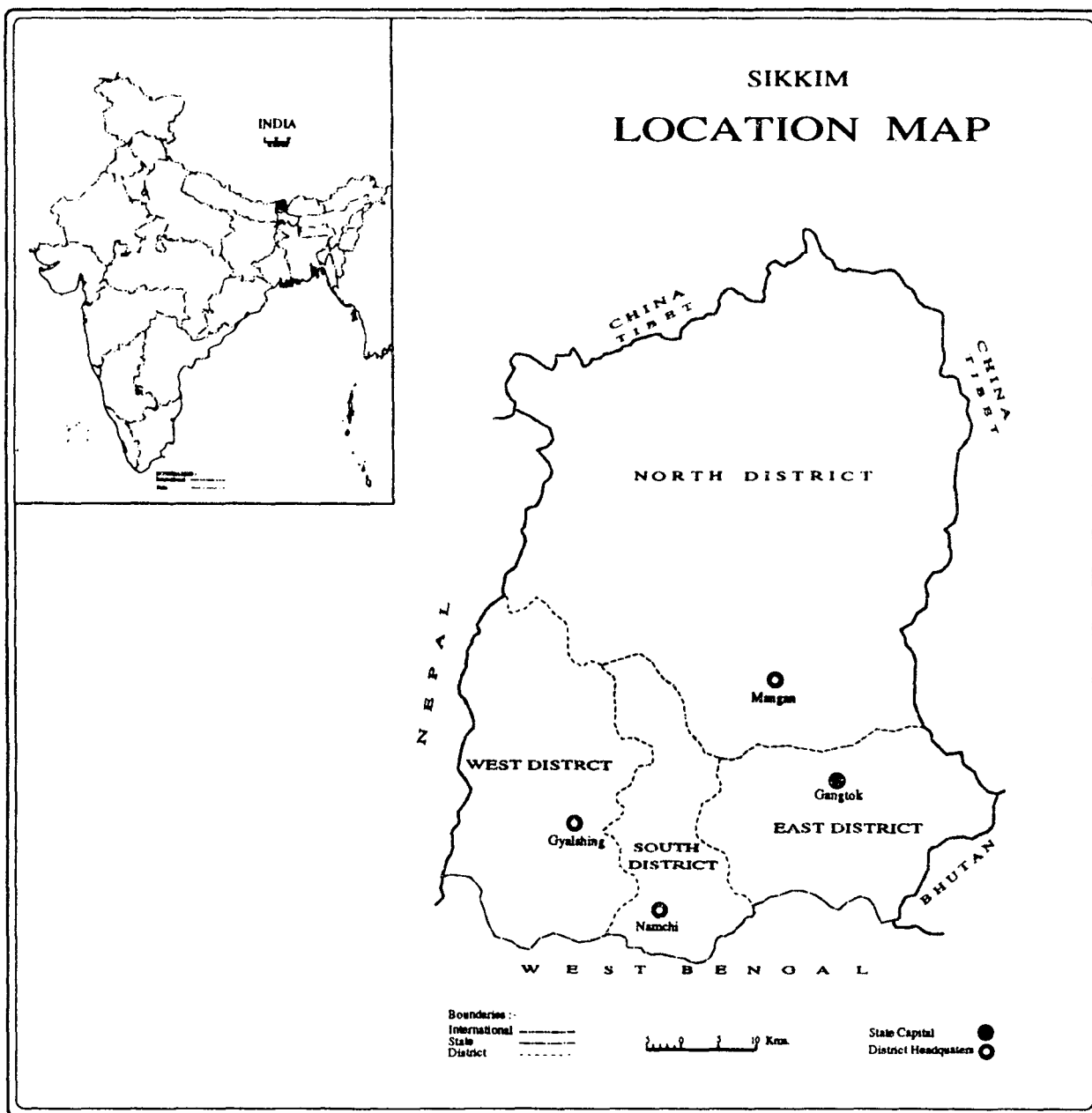
Chapter : 1

A. PROFILE OF THE STUDY AREA

Introduction:

Small but picturesque, Sikkim is situated in the eastern part of the Inner Greater Himalaya. The state is spread below the Mount Khanchendzonga (8,534 mts), the third highest peak in the world, and revered by the Sikkimese as their protecting deity. Administratively, Sikkim shares her borders with Xizang (Tibet) in the north, Bhutan in the east, Nepal in the west and West Bengal in the South. (Fig. 1.1) This state lies between 88°00'58" E and 88°55'25" E longitudes and 27°04'46" N and 28°07'48"N latitudes. In its areal extent the state roughly stretches for about 112.70 kilometers in north south direction and for about 64.0 kilometers in the east-west direction. The total geographical area of the state as per Census of India 1991 is 7,906 square kilometers which accommodates a population of 4,06,457 persons.

The modern history of Sikkim goes back to 1642, when Phuntsog Namgyal was consecrated as the chogyal or the temporal and religious head of Sikkim. For three centuries before this, the Namgyals had ruled the Chumbi valley and the Teesta Valley. Phuntsog Namgyal moved his capital to Yuksom and instituted a centralised administration. He divided the kingdom into 12 dzongs (districts) and placed each of them under a Lepcha Dzongpon (governor). During his time Buddhism established itself as the religion. Till 1700 A.D. Sikkim was ruled by the Namgyals, after which followed a eight-year-long occupation by the Bhutanese forces. This ended with the acceptance by Deb



Raja of Bhutan to mediation by Tibet. Chador Namgyal returned and consolidated his kingdom. But this was soon followed by a phase of Gorkha invasions. This continued till the advent of the British and the signing of the 'Treaty of Titaliya in 1817 between Britain and Nepal. This treaty marked the beginning of the British influence in Sikkim. Though initially the British helped drive out Gorkhas from parts of Sikkim, soon they themselves turned out to be exploiters and Sikkim's relation with the British deteriorated which resulted in a punitive expedition by the British. In 1890, China recognised Sikkim's status as a British protectorate. The period following the departure of the British from India saw major changes in the political environment. In 1948, independent India signed an agreement with Sikkim in order to preserve the existing rights and obligations. Within the kingdom, the influence of India's freedom struggle was apparent: a number of political parties emerged, which merged to form the Sikkim state Congress in 1947. The party made three demands : the abolition of landlord system, the establishment of a responsible government and Sikkim's accession to India. There was a political impasse and the government of India took over the administration. The landmark Indo-Sikkim Treaty of 1950 sought to concretise Indo-Sikkim relations. It revoked all previous treaties and affirmed Sikkim's protectorate status under India. The period between 1950 and 1973 saw the emergence of political parties, voting rights for citizens and the formation of a State Assembly. Tensions between the palace and the political parties resulted in violent agitations in 1973. These led to the signing of the May Agreement of 1973 and the formation of a popular Ministry in 1974 and the kingdom's merger with India. Sikkim became the twenty-second state of India on April 26, 1975.

At present Sikkim is the second smallest state and covers only 0.21% of the total geographical area of the country. Administratively the state is divided into four districts viz, North, East, South and West districts with their headquarters at Mangan, Gangtok, Namchi and Gyalshing respectively. Gangtok is the state capital. The state has eight towns, 453 revenue blocks and 148 panchayat units. (Table : 1.1).

TABLE: 1.1. ADMINISTRATIVE SET-UP. (1991)

PARTICULARS	UNIT	NORTH	EAST	SOUTH	WEST	STATE
DISTRICTS	NO	1	1	1	1	4
SUB-DIVISIONS	NO	2	2	2	2	8
PANCHYAT UNITS	NO	20	43	39	46	148
REVENUE BLOCK (Including Forest and special area)	NO	53	134	145	121	453
TOWNS	NO	1	3	2	2	8
POLICE STATION	NO	4	10	5	5	24

SOURCE : Bureau of Economics and Statistics, Planning and Development Dept., Govt. of Sikkim.

Physiography :

The state has rugged and mountainous terrain, with no open valleys and plains. The elevations range from 244 meters to over 8540 meters above the mean sea level, consisting of lower hills, midhills, higher hills, alpine zones and snow-bound land. The high serrated, snow-capped spurs and peaks, form an attractive feature in the scenery of Sikkim. The important peaks visible from

Sikkim are Khanchendzonga (8534 mt), Kumbha Karna (7711 mts), Narsing (582 mts), Pandim (6706 mts) Simvo (2828 mts), Nepal (7163 mts.), Tent Peak (7315 mts), the Pyramid (7132 mts.), Fluted Peak, (6888 mts) and the Siniolchu (4858 mts)

The alignment of the mountain systems viewed from a distance, in general, follows an East-West direction. The direction of main drainage is southwards. The Rangit and Tista rivers, which form the main channels of drainage, run nearly North-South. The drainage pattern of Sikkim is dendritic, consequent and post-Himalayan. None of the streams are fit for navigational purposes, although many of them, at many places, are fit for harnessing of hydroelectricity.

Climate :

Sikkim experiences great variation in climate and vegetation which range from sub-tropical to alpine, owing to the altitudinal differences. The ranges are Tropical (below 610 mts), Sub-tropical (610 mts-1524 mts), Temperate (1524 mts-2743 mts), Sub-alpine (2743 mts-3962 mts) and Alpine (3962 mts to 5182 mts).

The region receives heavy rainfall. The mean annual rainfall varies from 2000 mm to 5,000 mm with intensity ranging from drizzle to torrential rain. The larger proportion of rainfall is received between May and September.

The temperature varies with altitude and slope aspects. The trend of decrease in temperature with increase in altitude holds good everywhere. The

maximum temperature is usually recorded during July-August which varies between 22°C to 23°C. The minimum temperature is recorded during December- January which ranges between 3°C and 5°C. In this small state a traveller can experience different climatic conditions, particularly in the context of temperature. All those valley lying at elevations less than 600 meters above the mean sea level experience moist tropical climate, whereas areas which have elevations more than 5000 meters having perpetually snowclad peaks and ranges have arctic type of climate. Cool temperate climatic conditions prevail in the middle altitudes.

Flora and Fauna :

Sikkim is endowed with rich natural flora and fauna and is a paradise for nature lovers, conservationists, botanists, zoologists and environmentalists. The state may be roughly divided into three vegetation zones. These are : (i) Tropical zone (stretching from lowest level to 1700 metres). (ii) Temperate zone (1700 to below 4300 meters) (iii) Alpine zone (above 4300 meters to the perpetual snowline of 5000 meters).

In the tropical zone Sal forests are in abundance. Different species of oaks, cherry, laurels, chestnuts and different varieties of ferns are found in the upper tropical zone.

Subtropical vegetation e.g. trueferns, plantains, screwpines and other tropical plants are found in the valley region. The temperate zone coincides generally with the oak forest region. Sub-alpine zone is practically the region of

the rhododendron and pine forests. In the temperate zone epiphytical orchids, rhododendrons and mass of shrubby vegetations are also found. Bamboo and tall grasses form the underwood in this zone. Rhododendrons are in their glory in April and May. Sikkim has the largest varieties of orchids in the world which may be as many as 600 speceis. There are hundreds of varieties of flowers other than orchids. Among them are Primulas, Blue Poppy, Iris, to mention only a few which adorn the mountain slopes during summer months.

Sikkim is also the home of some of the worlds rarest and maginificent species of wild life like musk deer, blue sheep, red panda, mountain goat, black deer, snow leopard, various species of snakes and many others. The state animal of Sikkim is the red panda, but its population is dwindling and it has become an endangered species. There are a vast variety of flamboyant pheasants and birds like kingfishers, hornbills, robins, mountain thrush, sunbirds etc.

Economy :

(a) Landuse and Agriculture : Sikkim mainly has an agrarian economy, but less than 20 per cent of the land out of the total geographical area is available for cultivation. Partly this is on account of the fact that large part of the area is under forest cover (40%) and permanent pastures and grazing land including culturable wasteland (14.04%). Large parts of the land are not available for cultivation. (Table : 1.2).

TABLE : 1.2 LANDUSE PATTERN OF SIKKIM.**(in hectares)**

Item	1980-81 Area	% to Geog. area	1990-91 Area	% to Geog. area
Net area sown	78,321	9.9	63,254	8.0
Area under current fallow	4428	0.56	3906	0.49
Other uncultivated land (Excluding fallow lands)	4560	0.57	10830	1.37
Fallow land other than current fallow	9474	1.2	9204	1.16
Cultivable waste land	681	0.09	9807	1.24
Land not available for cultivation	11604	1.47	14301	1.81

SOURCE : Computed from the data obtained from
Agriculture Census of Sikkim.

The rugged and mountainous terrain, fragmentation of land, soil erosion, geographical seclusion, transport bottlenecks and dependence on traditional methods of cultivation made large-scale farming difficult and acted as a constraint in the overall agricultural development. The main crops are rice, wheat, maize. Principal cash crops are large cardamom, ginger, oranges, potatoes, citrus fruits, apple and pineapple. The state accounts for the production of 80 percent of India's large cardamoms, which find a high value export market in Pakistan, Singapore, and countries of West Asia. Ginger is of good quality and has export potential. Sikkim produces high-quality tea, although it has only one government owned garden. Emphasis has been laid on the development of horticulture and floriculture. Schemes have been launched to increase the export of exotic flowers and orchids.

(b) Forest Resources : The state is richly endowed with forest wealth. 277,000 hectares are covered with forest which constitute about 40 percent of the total geographical area. But the forest resources do not contribute much to the state's economy. This is mainly due to the fact that total expenditure for conservation and development of forest is much more than the total revenue received out of forest resources. The Forest Department is anxious to ensure that Sikkim's forest cover is conserved and the area under green cover expanded.

(c) Mineral Resources : Sikkim has rich geologic resources but these have not been properly assessed or tapped. Moderate to fair amount of success has been achieved, during the investigations carried out by different agencies in certain sectors like tungsten, talc, magnesite, the numerous thermal springs and mineral water sources, phosphate rich rocks etc.

(d) Industries : Sikkim is one of India's industrially least developed states, and is heavily dependent on Central grants for its developments. Some of the reasons behind poor industrial development are hilly terrain, non-availability of plainlands, geographic seclusion, transport bottlenecks, lack of local entrepreneurship etc. Previously, the state was mostly engaged in cottage industries like carpet weaving and wood carving activities. The larger industrial units included Sikkim Time Corporation Limited (SITCO) Sikkim Distilleries, Government Fruit Preservation Factory, Sikkim Mining Corporation and Sikkim Jewels. SITCO is one of the first industrial units in the state. At present a need has been felt to undertake an all-round development effort regarding speedy industrial development and generation of adequate employment opportunities. A comprehensive five-year industrial policy was launched in 1996. It identified

four thrust areas for development viz; tourism, power, small-scale industry and agriculture including horticulture, floriculture and animal husbandry. In order to encourage a spirit of enterprise and attract investment in industry, the government had announced a package of incentives and facilities in addition to the existing Central incentives. Incentives are offered also to the industries in the thrust areas. The government is also encouraging collaboration arrangements. For example, "a Swiss company had offered to open a tourist resort at Pangthang."¹ Efforts are also being made to revive sick industries either as joint ventures or as private entities.

Currently tourism in Sikkim is rendering significant impact on the state's economy, especially in the trade, hotel and restaurant sector. Therefore tourism has been identified as one of the four sectors as an area having vast potential for development.

(e) Infrastructural Development : All-round development of Sikkim to a great extent has been handicapped till now, due to lack of sufficient infrastructural facilities. This drawback is further felt in transport section, specially with reference to tourism development. It has been realized that the state needs to be connected with major cities in the country by air. Sikkim is perhaps the only border state that has no air link with the rest of the country. Nor does it have any railway link. It is a landlocked state and the only road link it has, with the rest of the country, is National Highway 31A. During monsoon heavy rain

1. As told by the Chief Secretary, Department of Industries, Govt. of Sikkim, to Frontline, May 30, 1997, in "Development Directions : Sikkims Strides On Many Fronts". Pp 125-129.

occurs resulting in landslides and disruptions of traffics and often the state is cut off from the rest of the country. The nearest railway stations are Siliguri (114 km) and New Jalpaiguri (125 km), and both are located in West Bengal. From both these stations bus services, trekkers, and luxury taxis are available for reaching Gangtok. The nearest airport is Bagdogra, located in West Bengal, which is 24 kilometers and approximately four hours drive from Gangtok. Bagdogra has regular Indian Airlines services from Calcutta, Delhi and some cities in the North-east. Private airlines also operate in this sector. A helicopter service had been started between Bagdogra and Gangtok (having a military helipad at Tadong) for a few months in 1982, but the service was discontinued as it was running in loss. This absence of direct air and railway link discourages investors from setting up industries in Sikkim. The present government has emphasized the need to put Sikkim on the airmap of the country. Proposals regarding operation of air-taxi service linking sikkim with major cities and building of an airport at Pakyong, 20 kilometers from Gangtok have been placed for approval. All this will make the state more accessible from all corners of the country which in turn is expected to stimulate further tourism development.

Development of power facilities is another necessity for all-round development of the state. Sikkim has registered striking progress in power generation. The growth since 1979 is of the order of 18.4 MW, but with demands for power growing, several new projects have been commissioned. These include Rongnichu micro hydel project stage II (2.5 MW), the Rimbi micro hydel II (1 MW) and the Miyongchu hydel Scheme (4 MW). The 60 MW Rangit hydroelectric project near Legship is being executed by National

Hydroelectric Power Corporation (NHPC) and is expected to be commissioned during the Ninth Plan. In this context, it should be mentioned that all revenue blocks of Sikkim were electrified by 1991.

(f) Human Resources : Sikkim is a very thinly populated state with a total population of 4,06,457 as per 1991 census with a population growth of 28.47% between 1981-91. The state has a population density of 57 persons per square kilometer. East district is the most populated one having 43.9% of the total population. North district is the least populated with only 7.59% of the population. More than 80% of the population lives in rural areas. The state has a sex ratio of 878 females per 1000 males. 22.36% of the population belongs to scheduled tribes and 5.93% scheduled castes as per the 1991 census. The literacy rate of Sikkim in 1991 was 56.94% and it is expected that the state will become fully literate by the turn of this century. Sikkim, as per 1991 Census, had a working population of 41.51%. Out of the total workers 4% are main workers and 1.06% are marginal workers. 58.49% are non-workers. Out of the main workers, 57.84% are the cultivators, 7.81% are agricultural labourers, 0.77% are engaged in household industry and the rest are other workers. In this context it may be mentioned that approximately 4,505 persons are engaged in tourism industry, with restaurant and hotel sector as the main source of employment. As per 1991 report,² 7.83 persons were employed in each hotel of which male employees accounted for 80% of the total and remaining 14% were female employees. 22% of total employment in hotel industry was shared by household workers, 9% of which were females. The table (table 1.3) provides all the basic information regarding the state demography as per 1991 census data.

2. A Report on Hotels, Guest-houses, Restaurant in Sikkim 1991-92, Bureau of Economics & Statistics, Planning & Development Dept., Govt. of Sikkim, Gangtok.

TABLE : 1.3 AREA AND POPULATION OF SIKKIM. (1991)

(1) PARTICULARS	(2) UNIT	(3) NORTH	(4) EAST	(5) SOUTH	(6) WEST	(7) STATE
Total Geographical Area	Sq. Km	4226	954	750	1166	7096
Percentage Area of the District	%	(59.56)	(13.44)	(10.57)	(16.43)	(100)
<u>Total Population</u>						
Male	No	17090	95986	52105	51246	216427
Female	No	14150	82466	46499	46915	190030
Total	No	31240	178452	98604	98161	406457
Percentage Population of the District	%	(7.69)	(43.90)	(24.26)	(24.15)	(100)
Decennial population Growth-Rate (1981-91)	%	(18.09)	(28.60)	(29.78)	(30.55)	(28.47)
Density of Population	Sq.km	7	187	131	84	57
Sex Ratio	per 1000 males	828	859	892	915	878
<u>Literacy by Sex</u>						
Male	%	(63.64)	(73.10)	(63.18)	(54.92)	(65.74)
Female	%	(40.69)	(55.66)	(43.70)	(35.26)	(46.69)
Total	%	(53.47)	(65.13)	(54.08)	(45.62)	(56.94)
ST Population	No	17301	37632	16671	19297	90901
Percentage of ST Population	%	(55.38)	(21.09)	(16.91)	(19.66)	(22.26)
SC Population	No	1111	12482	5564	4927	24084
Percentage of SC Population	%	(0.35)	(6.99)	(5.64)	(5.02)	(5.93)
Total Workers	No	13786	68717	42187	44031	168721
% of Workers	%	(44.13)	(38.51)	(42.78)	(44.86)	(41.51)

SOURCE : Compiled by Bureau of Economics & Statistics Planning & Development, Govt. of Sikkim, Gangtok, based on Census of India.

Sikkim today has several ethnic communities such as Lepchas, Bhutids, Limboos, Tamengs, Gurungs, Mangas, and Sunwars with their own language, culture, tradition and ways of life. At present the majority of the people are from Nepalese stock. The Bhutias and Lepchas may be considered to be next in importance. The rest are plainsmen who are immigrants from different states in India and are found in small proportion. The three main languages of the state are Nepali, Bhutia and Lepcha. The state religion of Sikkim was Buddhism during the princely regime but there was full freedom of worship throughout the state. At present the Buddhists, the Hindus, Christians, and a small community of Muslims practice their own faith side by side in complete harmony.

B. SOURCES OF TOURIST ATTRACTION AND THEIR SPATIAL DISTRIBUTION:

Many different attractions may induce tourists to visit particular areas or spend their holidays in specific regions. These have been classified in a variety of ways (Suzuki, 1967; Peters, 1969; Defert 1972). "A first distinction is usually made between natural features such as land forms, flora, and fauna and man-made objects, historic or modern, in the form of cathedrals, casinos, monuments, historic buildings or amusement parks. A third general category embraces man and his culture as expressed through language, music, folklore, dances, cuisine and so forth."³

3. Douglas, Pearce (1981), "Tourist Development", Longman Publishers, Great Britain.

Sikkim has much to offer to tourists and nature lovers. Natural beauty, salubrious climate and ancient monasteries and religious institutions along with its cultural and traditional heritage are some of the various tourist attractions. Sikkim's natural beauty and bio-diversity are still intact, fresh and unspoilt and offers an ideal place for a holiday as well as for those who crave for some adventure. The natural attractions of Sikkim include the view of Kanchendzonga and other snow-capped peaks, cascading waterfalls, green valleys, large variety of orchids, rhododendrons and other exotic flowers, and the great diversity of wildlife. The best time to see orchids in bloom is from the second week of April to the first week of May, when they are to be seen at the lower and middle elevations. The variety of rhododendron is also striking. April-May is the season of flowers which make the hillsides very attractive. The large variety of wildlife also attracts large number of tourists who are nature lovers.

Sikkim offers ideal spots for trekking, which was a popular sport in the former kingdom, even in the earlier years of this century when the British in India escaped the summer heat by visiting the hills. At present five trekking routes are open to tourists in the west and the north-The Dzungri trek, the rhododendron trek, the orchid trek, the coronation trek, and the youth (or country) trek. The rhododendron trek through the south west corner of Sikkim is ideal for first time trekkers. The Dzungri trek is the most popular trek. The trek usually begins at Yoksom and continues till Dzungri, which is the take off point to the Kanchendzonga base camp. At Dzungri the trail splits. One route leads towards north to Goechela and another towards north west to the Kanchendzonga base camp. Apart from trekking rafting along the roaring

Teesta and kayaking attracts those tourists who like adventure sports. Mountain biking, hang gliding and yak safari are the other sources of attraction which have been recently organised by Department of Tourism to attract tourists.

Sikkim's unique culture and tradition also attract large number of tourists. The monasteries, the stupas, the prayer flags, large collection of documents and rare books on Buddhism are the various sources of attraction. In Sikkim there are nearly 200 monasteries, including the famous Rumtek, Enchey, Pemayangtse, Lachen, Phodong, Tashiding and Toloung monasteries. Some of these monasteries conduct 'Chaam', a religious masked dance, for two days every year around January. Arrangements are made by Department of Tourism for the interested tourists to witness them. The Sikkimese culture finds expression in its beautiful arts and crafts. Witnessing the artisans working on their creations is equally unique experience which is made possible for the tourists by opening the Directorate of Handicrafts and Handloom for tourist viewing. It is worth mentioning that the warm friendly and hospitable host population and political stability of the state has encouraged a steady and constant flow of tourists to Sikkim.

Distribution of Places of Tourist Interest and Their Characteristics :

Majority of the places of tourist interest are located in the East district followed by West and North districts. The table 1.4 gives the distribution and types of places of tourist attraction followed by a brief description

East Sikkim : the main places of tourist attraction in this district are the following:-

Table:1.4

Important Places Of Exclusive Tourist Interest In Sikkim.

=====							
Districts	Classification Of Tourist Attractions In Sikkim.						
	Historical Importance	Religious Institutions	Scenic Viewpoints & Scenery	Beauty Gardens	Lakes & Hot springs	Trekking & Adventure Sports	National Parks & Sanctuaries
East		Enchey Monastery	Tashi Viewpoint	Saramsa Garden	Tsongo Lake		Fambong Lho Wild Life Sanctuary
		Do-drul Chorten	Ganesh Tok	Water Garden			Directorate Of Handicraft & Handloom
		Institute Of Tibetology	Hanuman Tok				Kyongnosia Alpine Sanctuary
		Rumtek Monastery	Nathula Pass				
		Sa-gor Chotsog Centre					
North		Phodong Monastery			Yumthang Hot spring	Yumthang Lachen	Singha Sanctuary
		Lachen Monastery				Lachung	
West		Pemayangtse Monastery	Pemayangtse		Khechopalri Lake	Pemayangtse	
		Tashiding				Tashiding	
						Jorethang	Maenam Wild Life Sanctuary
	Yuksom				Yuksom	Dzongri	
=====							

Source: Dept. Of Tourism, Govt. Of Sikkim.

1. Directorate of Handicrafts and Handloom

The aim of this institution is promoting and keeping alive the state traditional motifs, blankets, shawls in Lepcha weaves and carved "choktse" tables and many other gift items. The best part is that the tourists can witness the artisans working on these articles as well as buy them.

2. Enchey Monastery

This is Gangtok's one of the various spots of tourist attraction. This monastery was built almost 200 years ago by Lama Druptoo Kerpo on the top of a ridge about 3 kms from Gangtok. It is an important seat of Nyingma order. The walls of the monastery are decorated with paintings of tantrik gods, goddesses and other religious objects. The monastery conducts '*Chaam*', a religious masked dance, for two days every year in January.

3. Do-drul Chorten (Stupa)

The Do-drul Chorten or Stupa was built by Tulsi Rinpopche, head of the Nyingma order of Tibetan Buddhism in 1945. Inside this Stupa are a complete mandala set of Dorjee Phurpa, a set of Kan-gyur relics (Holy Books), complete '*Zung*' (mantras). Around this chorten, which is one of the most important stupas in Sikkim are 108 Mani-Lhakor (Prayer Wheels).

4. Research Institute of Tibetology

This is one the most prestigious Buddhist Institute and houses a vast collection of rare Lepcha, Tibetan, and Sanskrit manuscripts, statues and rare Thankas (tapestries) used in Buddhist liturgy. Today it is a worldwide renowned centre for study of Buddhist philosophy and religion.

5. Saramsa Garden

About 14 kms from Gangtok is the Saramsa garden, the home of Sikkim's many exotic orchids and other rare tropical and temperate plants. This garden has been formed and maintained by the Department of Forests and is an excellent recreation and picnic spot.

6 Water Garden

Water garden at Martam Khola is located on No. 31 A National Highway, approximately 16 Km South of Gangtok. It has a wading pool and is ideal for picnic.

7 Rumtek Dharma Chakra Center

The Rumtek monastery, which is located approximately 24 km from Gangtok, is impressive in its size and grandeur. It houses some unique religious art objects. Traditional in design, it is almost a replica of the original Kagyu headquarters in Tibet. This is the largest monastery of its kind outside Tibet. It is an important center of Kagyu teachings and has over 200 centres world over.

8 Tsongmo Lake-Yak and Ponyride

Tsongmo lake at an altitude of 3663 mts. is 40 kms from Gangtok. This lake is regarded to be extremely sacred. Between May and August one can see a variety of flowers like rhododendrons, various species of primulas, blue and yellow poppies, irises etc in bloom. It is also an ideal habitat for the red panda, and various species of birds. Yak and pony ride has proved to be an added attraction to the tourists.

9 Tashi View Point

It is situated along the North Sikkim highway and is only 8 kms from Gangtok. From this point one can get a clear view of Mt. Kanchendzonga, Siniolchu and series of other snowcapped peaks on a clear day.

10 Ganesh Tok

It is situated on a ridge and is only 7 Kms from Gangtok. This is also a beautiful spot located on the eastern part of Gangtok. Mt. Kanchendzonga and Siniolchu can be viewed on a clear day from this spot. A cafeteria is there to serve hot beverages and snacks to the visitors.

11 Hanuman Tok

It is 11 Kms away from Gangtok town. There is a temple where one can offer prayers. Tourists can also enjoy good view of Gangtok and its surrounding areas and can also enjoy a short distance trek from here.

12 Sa-ngor-Chotshog Centre

This is a Tibetan Refugee Monastic Institution established in 1961 by His Eminence Luding Khen Rimpoche, head of Ngorpa sub-sect of Sakya order, with the blessing of 'His Holiness Sakya Trizin' and 'His Holiness Dalai Lama'. This is the only monastery of Sakya order of Tibetan Buddhism in Sikkim. It is located on a beautiful hill top just 5 Kms away from Gangtok town.

13. Fambong Lho Wildlife Sanctuary

Fambong Lho wildlife sanctuary is located at a distance of 25 kms from Gangtok and has an area of 51.76 sq. km. The main vegetation is Oak, Katus, Kimbu, Champ with thick bamboo forest and ferns. The sanctuary is also home to a large number of wild orchids, rhododendrons etc. One can see a

large number of mammals like Serow, Goral, Barking Deer, Himalayan Black Bear. Red Panda, and pheasants like Tregopan, Kaliji, Hill Partridges etc. The best season for visiting this sanctuary is October and April. A loghouse with two rooms is available at Golitar and Tumin. Apart from these sanctuaries there are others like Kyongsola Alpine sanctuary, Singbha Rhododendron sanctuary, Maenen Wildlife sanctuaries, Kanchendzonga National Park.

North Sikkim : Following are the places of tourist attractions in the North district.

1. Phodong Monastery

This is one of the six major monasteries in Sikkim. Phodeng is located in the North district approximately 38 kms from Gangtok. 4 kms beyond Phodong is the recently renovated Lebrang Monastery, and is known for its unique architectural design.

2. Yumthang

Yumthang in North Sikkim is situated at an altitude of 3540 mts. and is 140 kms from Gangtok town. This place is a paradise for nature lovers and has a fascinating blend of scenic view with hot spring and alpine environment. Enroute is the Singbha rhododendron sanctuary. May-June is the best time for visiting this place. During this season 'Alpine Package Tour' to Yumthang is organised by Department of Tourism, Government of Sikkim. From here one can also make a trip to Lachung and Singhik from where one can have a magnificent view of Kanchendzonga.

West Sikkim

1. Pemayangtse Monastery

Pemayangtse monastery which is situated at a height of 2052 mts. is the second oldest monastery in Sikkim. This monastery belongs to the Nyingma-pa sect and is the head of all other monasteries of this sect in Sikkim. The view of the mountain ranges from Pemayangtse is one of the finest. A tourist lodge is there to accommodate the tourists who plan to stay. This place is an ideal base for those who would like to explore the unspoilt charm of neighbouring tourist spots and for the trekkers who would like to visit Yaksom and Dzongri.

2. Tashiding Monastery

This beautiful monastery is only a day's trek from Pemayangtse. This is an important Buddhist pilgrimage centre and according to ancient belief pilgrims are cleansed of all their sins, if they only contemplate on the great sacred chorten of Taashiding-Thongwa-Rang-Dot. For tourist accommodation, trekkers huts, forest bungalows, moderately priced hotels are available.

3. Dzongri

Dzongri is located in West Sikkim at an altitude of 3900 mts. An exhilarating experience awaits for those tourists who have trekked from Pemayangtse to Dzongri. Dzongri offers the most fascinating close-up view of the Kanchendzonga massif. Immediately opposite rises Mt. Pandim 6587.4 mts cloaked in thick ice and to the left appears the deep gorge of Goechela. To the west over the gentle slopes of Dzongri rises the long outline of the Khangla ridge.

4. Yuksom

Yuksom is a historical spot, located amidst beautiful Himalayan scenes and clear mini lakes. It was here that the first ruler of Sikkim was consecrated as the Chogyal of Sikkim in 1641 A.D.

5. Khechopalri Lake

Khechopalri lake is located in the midst of a dense vegetal cover and is thought to be a sacred one. In spite of the fact that the lake is surrounded by forest one cannot see a single leaf floating on the lake. It is believed that as soon as leaves fall the birds come immediately and pick them up. Pilgrims' huts and Trekkers' huts are there for the tourists to stay after obtaining permission at Yuksom.

Apart from these there are many other places which are equally attractive but lack tourist facilities. Nonetheless, the state Department of Tourism and state Government is at the job of building the tourist infrastructure. It is expected that very soon many other parts of the state shall be thrown open to tourists and visitors.

Chapter - 2

ANALYSIS OF THE DEMAND COMPONENT OF TOURISM INDUSTRY IN SIKKIM

Sikkim is the 'Land of Paradise' for tourists, trekkers and expeditioners. The state has a lot to offer in the way of tourism potential, which needs to be tapped from the point of view of economic development of the state. But tourism is a recently introduced industry in this state. The erstwhile feudal authorities made, little efforts to develop some of the scenic spots and open the region to tourists from other parts of the world. The promotion of tourism was initiated in right earnest only in the early 1980s after obtaining some concessions from Government of India. Since then, there has been a gradual increase in the number of tourists visiting this state.

An attempt has been made in this chapter to evaluate the demand aspect of tourism in Sikkim. The level of rise in tourist flow at a particular destination is one of the important indicators of development of tourism. Therefore, for this purpose, number of visitors, their distribution in space and time, the socio-economic characteristics of the visitors, length of their stay, types of tourist activity and levels of tourist satisfaction will be analysed to evaluate the demand for tourism in Sikkim.

(i) Pattern and Trend of Tourist Traffic to Sikkim:

Tourism industry in Sikkim is passing through a transitional stage which is characterised by a growth rate of the tourist flow that is picking up very fast since 1987. As already mentioned, tourism promotion venture was initiated

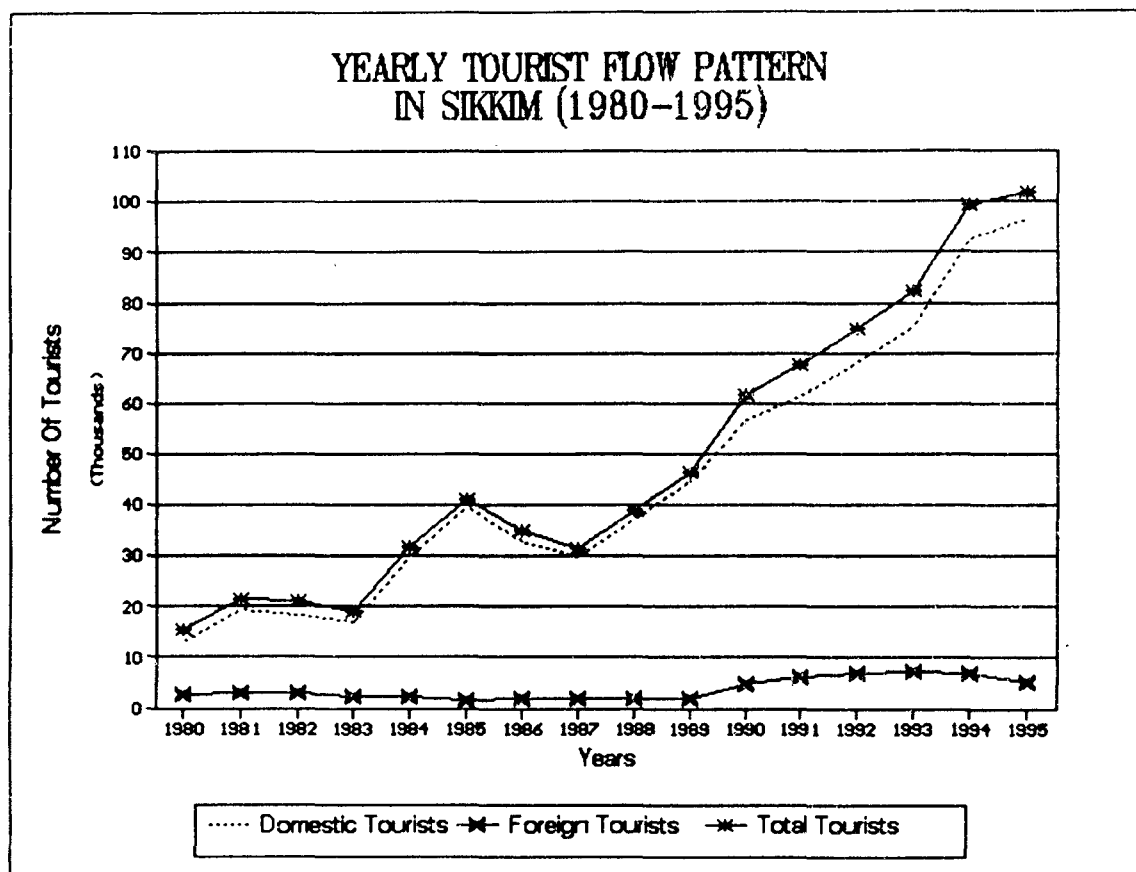


Fig 2.1

Table:2.1**Pattern Of Tourist Flow In Sikkim (1980-1995).**

=====						
Year	Domestic		Foreign		Total	
	Tourists	% Share	Tourists	% Share	Tourists	% Share

1980	12862	83.33	2572	16.66	15434	100
1981	19115	87.47	2737	12.53	21582	100
1982	18347	86.43	2880	13.57	21227	100
1983	16906	89.02	2084	10.97	18990	100
1984	29468	93.19	2153	6.81	31621	100
1985	39342	95.92	1670	4.07	41012	100
1986	32918	31.44	1986	5.68	34904	100
1987	29589	94.16	1833	5.83	31422	100
1988	37080	95.09	1911	4.9	38991	100
1989	44478	95.82	1938	4.17	46416	100
1990	56706	92.32	4719	7.68	61425	100
1991	61360	90.84	6187	9.15	67547	100
1992	68137	90.97	6761	9.03	74898	100
1993	75091	91.32	7132	8.67	82223	100
1994	92435	93.06	6887	6.93	99322	100
1995	96555	95.02	5050	4.97	101605	100

Tot(16yrs)	730389	92.58	58500	7.42	788889	100

Mean	45649.3		3656.25		49305.6	
S.D	25822.7		2016.3		27485.2	
C.V	56.56		55.14		55.74	

Source: Computed From The Data Obtained From Department Of Tourism, Govt. Of Sikkim .

with adequate effort only in the early 1980s. The fact that growth of tourism has immense possibilities and potentials, was identified in the seventh five year plan. Since then improvements have been brought about in the creation of facilities, establishing transportation links and promoting Sikkim as a tourist destination. This resulted in overall increase in the tourist flow from late '80s. (Fig. 2.1)

Statistics reveals that only 15,434 tourists had visited the state in 1980, whereas the number increased to 1,01,605 in 1995, thus registering an increase of 558.3%. The major share (92.6%) has been from the domestic sector while international tourists contributed only 7.4% of the total tourist flow to Sikkim. There has been an appreciable increase in the tourist traffic from late '80s till mid '90s. (Table 2.1). But during the period 1980-87 tourist arrivals in Sikkim witnessed large fluctuations. The table (2.2 a & b) shows that 1980-81 registered a moderately high growth rate of 41.58%. This was followed by two years of negative growth. But the following two years i.e 1983-84 and 1984-85 witnessed a very high positive growth (66.51%) and (29.61%) of tourist traffic respectively, only to be followed by two years of negative growth. The subsequent years till 1995 registered a positive growth rate, indicating some sort of consistency in the tourist flow to this state. The fluctuations in the annual tourist flow till mid and late '80s were probably also due to political instabilities and rising disturbances in various parts of the country and the problems enroute which might have discouraged people from going for trips, even though the state of Sikkim is free from any political hostilities or internal disturbances. Moreover, occurrence of epidemics also discouraged the arrival of international tourists. The annual growth rate of international tourist flow is more vulnerable to all these above mentioned causes compared to the domestic tourists.

Table : 2.2(a)**Annual Growth Rate Of Tourists Coming To Sikkim (1980-95)**

Growth Rate			
Year	Domestic	Foreign	Total
1980-81	48.61	6.41	41.58
1981-82	-4.01	5.22	-2.86
1982-83	-7.85	-27.64	-10.54
1983-84	74.30	3.31	66.51
1984-85	33.50	-22.43	29.69
1985-86	-16.32	18.92	-14.89
1986-87	-10.11	-7.70	-9.97
1987-88	20.20	4.25	24.08
1988-89	19.95	1.41	19.04
1989-90	27.49	143.49	32.34
1990-91	8.21	31.11	9.96
1991-92	11.04	9.27	10.88
1992-93	10.20	5.48	9.77
1993-94	23.09	-3.43	20.79
1994-95	4.48	-26.67	2.29

Source: Computed From The Data Obtained From Department Of Tourism,
Govt. Of Sikkim.

Table:2.2(b)**Growth Rate Of Foreign Tourist Flow To India & Sikkim .**

Growth Rate Of Foreign Tourists		
Year	India	Sikkim
1981-82	0.7	5.22
1982-83	1.27	-27.64
1983-84	-8.49	3.31
1984-85	5.49	-22.43
1985-86	15.22	18.92
1986-87	2.29	-7.7
1987-88	4.8	4.25
1988-89	11.6	1.41
1989-90	-1.67	143.49
1990-91	-1.74	31.11
1991-92	11.33	9.27
1992-93	-5.51	5.48
1993-94	6.89	-3.43
1994-95	-0.83	-26.67

Source: Computed From The Data Obtained From Department Of Tourism ,
Govt. Of India & Govt. Of Sikkim.

It is evident from the overall picture that from 1988 till 1995 there has been a remarkable increase in the number of tourists visiting Sikkim. The highest number of tourists of 1.01 lakh was recorded in 1995. The mean annual arrival of tourists to this state over a period of 16 years has been 49,305 with a coefficient of variation of 55.74% indicating lack of homogeneity and consistency in the tourist flow pattern to Sikkim over the years. In spite of the initial years of fluctuation the tourist flow over a period of sixteen years registered a rising trend. (Fig. 2.2). Data shows that there is much resemblance between the pattern of domestic tourist flow and total tourist flow (Appendix 2.1). After the initial years of fluctuations the tourist flow acquired stability from '80s till 1995, which was infact the year with highest number of domestic tourists as well as total number of tourists visiting Sikkim. (Fig. 2.3). The picture is slightly different in case of the international tourist flow which registered consistant declining trend till 1987 followed by years of constant rise, (Fig. 2.4). Thus international tourist flow to Sikkim did not experience much irregularity. The '90's are marked as the period witnessing rise in the number of international tourists. In fact in 1990, the number of foreign tourists visiting Sikkim almost doubled as compared to the previous years. The average number of international tourists visiting Sikkim during the '80s was 2,176 persons, whereas it had increased to 3,674 persons in '90s. The largest number of foreign tourists (7,132) visited the state in 1993. Every year Sikkim receives only 0.25% of the total number of foreign tourists visiting India. Therefore, this number can be very substantially increased and valuable foreign exchange can be earned. Advantage can also be taken of the fact that there are a number of

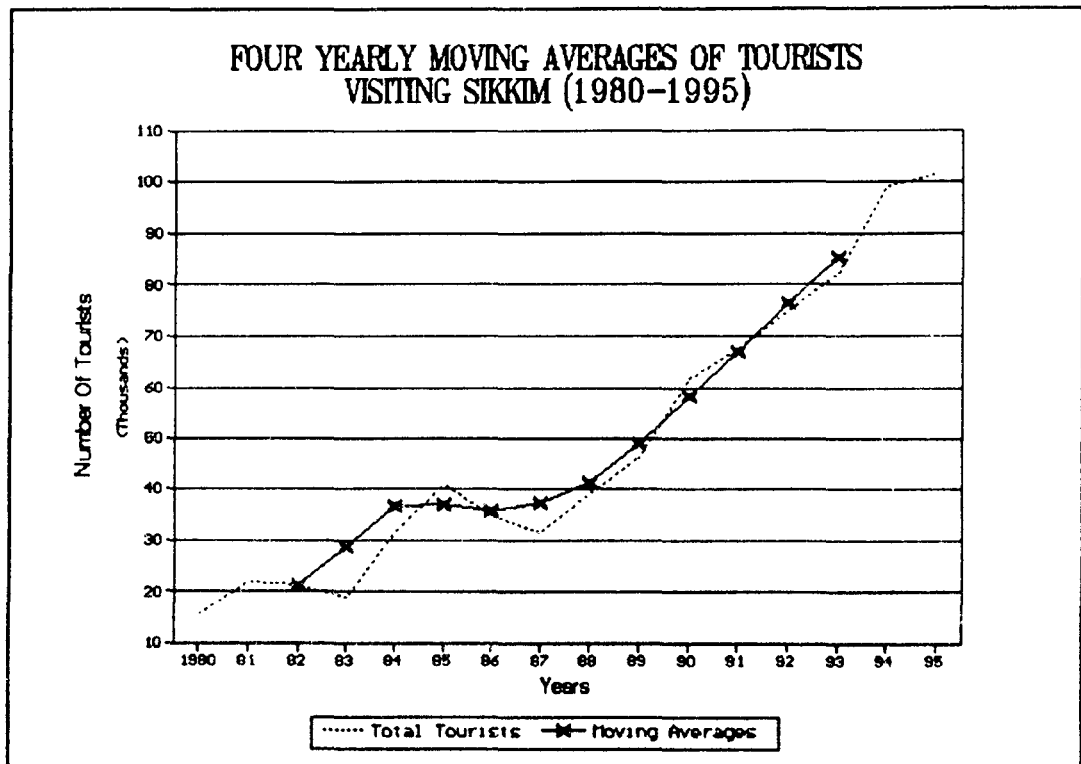


Fig 2.2

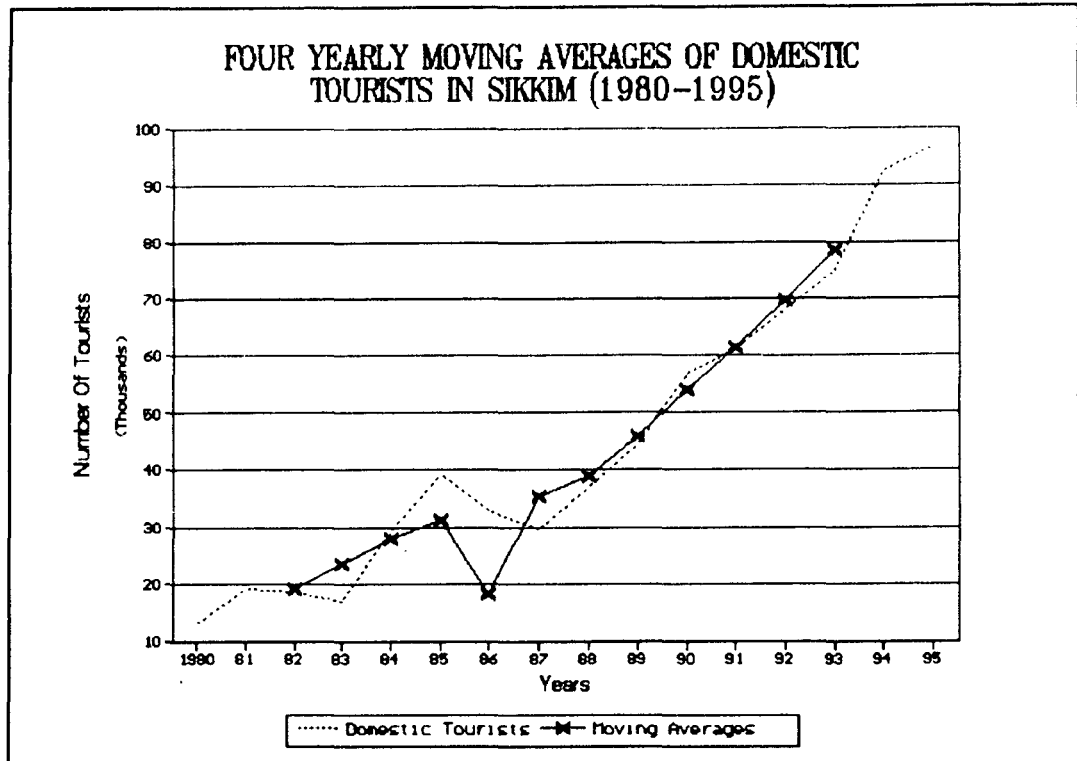


Fig 2.3

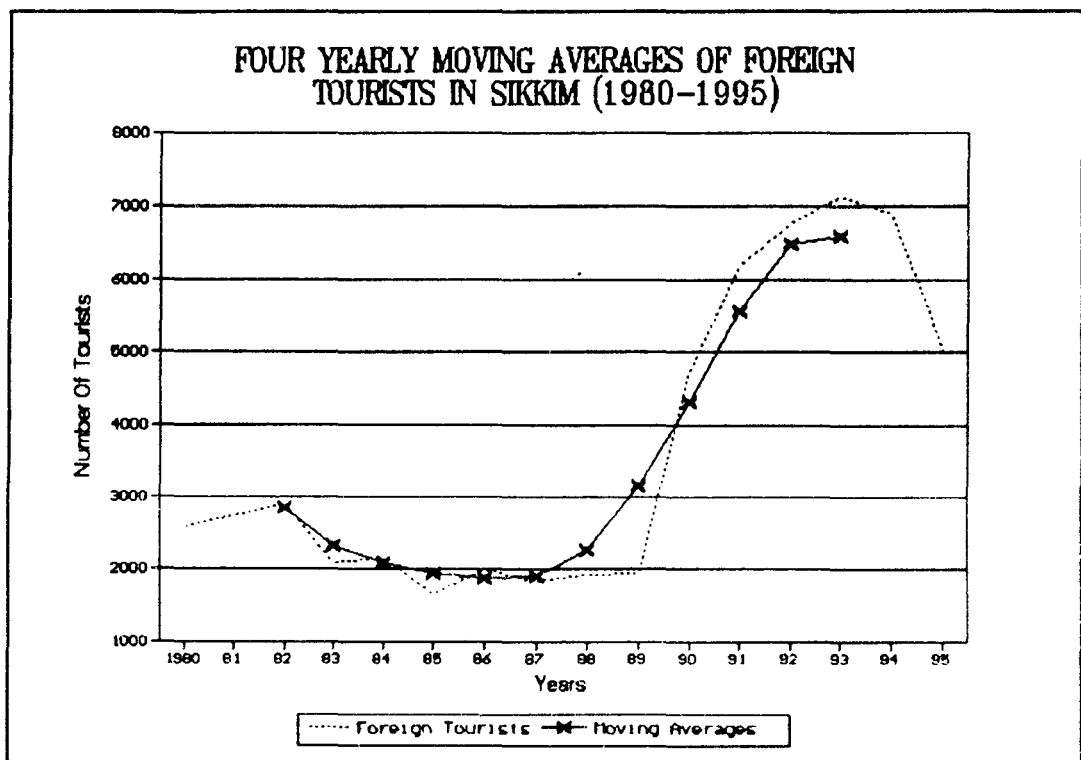


Fig 2.4

monasteries and unique Tibetan, Buddhist educational and religious institutions present in Sikkim, and Buddhist tourists from Japan, and South-east Asian countries can be encouraged to come. A very small share of foreign tourists coming to this state may be to some extent due to elaborate and rigid entry, formalities for coming to this state and inability to visit certain areas of scenic beauty due to their strategic importance. All foreigners intending to visit Sikkim can avail of 15 days permit. Permits for groups for restricted areas i.e. Phodong, Gangtok, Rumtek, Pemayangtse can be obtained, 24 hours in advance from all Indian Missions abroad, Sikkim Tourism offices at Delhi, Siliguri, Calcutta and Gangtok with requisite documents. Due to these elaborate formalities many of the international tourists might have avoided this state as one of their tour destinations. To overcome this obstruction, the issue of relaxation of the present restrictions to some extent, has been taken up with the Ministry of Home Affairs by Sikkim Govt.

(ii) Seasonality of Tourists Arrival In India:

The tourist flow to Sikkim follows a seasonal pattern which may be the reflection of varying weather conditions and vacation pattern. It is observed that tourist arrivals in this state are generally highest during the months of September, October, November or between March and late May. These two peak tourist seasons coincide with the period judged as best season for visiting this state by the Department of Tourism, Sikkim. Seasonality index has been worked out to examine the seasonal fluctuations in tourist arrivals, for both domestic and international tourists to Sikkim, (Appendix 2.3).

Among the international tourists, the two favourite seasons for visiting Sikkim have been between September and November and the period between March and May which is due to the presence of comfortable weather conditions with moderate temperature and almost no precipitation, (Fig. 2.5). Moreover, this is the season with right weather conditions for trekking. Since 1994, the period between March-May or the spring cum early summer has become the most popular season among the foreign tourists with 38% to 39% of the international tourists visiting during this time. The autumn season between September and November slipped back to second position with 26% to 28% of the tourists visiting during this time of the year. It is during March-May, when most of the state's 600 species of orchids, 240 kinds of trees and fruit trees, 150 kinds of gladioli and 46 varieties of the world famous rhododendrons, varied species of magnolias and many other foliage plants are at their best. During this season, many attractive events like 'International Flower Festival', alpine Package Tour to Yumthang' are arranged by Department of Tourism of Sikkim since past few years. The special efforts has succeeded in attracting larger number of international tourists to this state. The lean period of international tourist flow coincides with the monsoon season i.e. during June-July and August when there is heavy rainfall, often resulting in landslides, and road closures. This obstructs the regular traffic flow and the state is deprived of the supplies of daily necessities by road. This acts as a great hindrance to the smoothe flow of tourists, as the only way of reaching this state is by road.

Thus, the number of tourists falls during the monsoon and majority plan their travels during the dry and comfortable season resulting overcrowding and

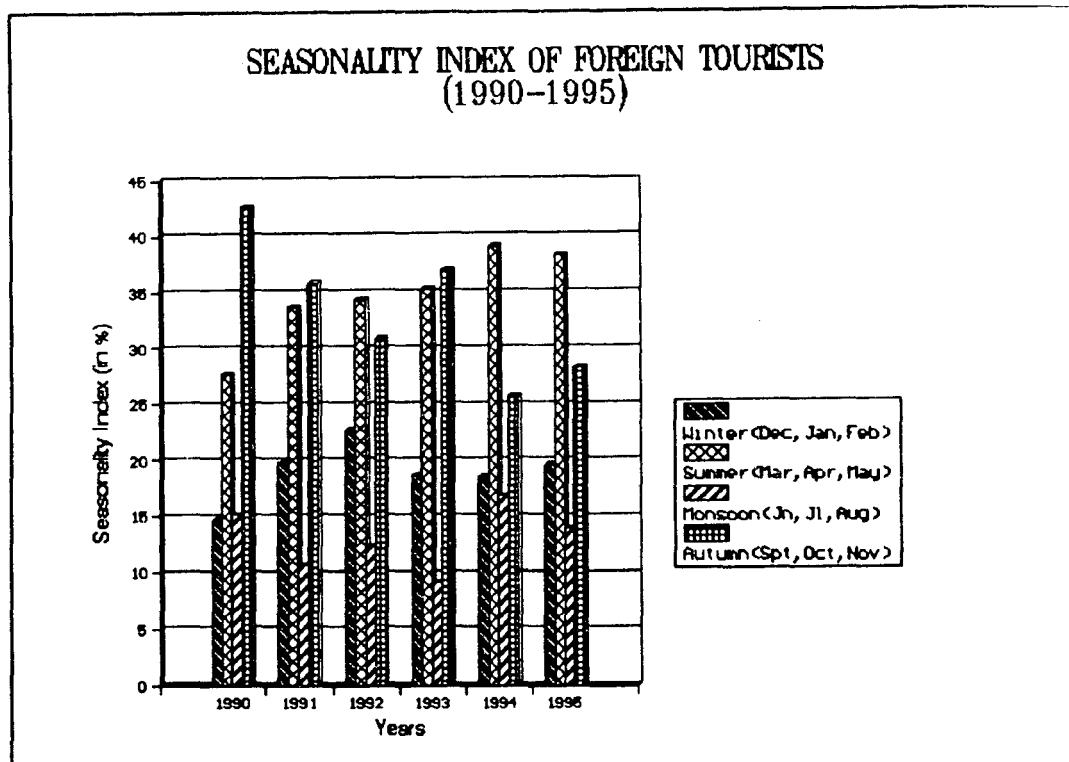


Fig 2.5

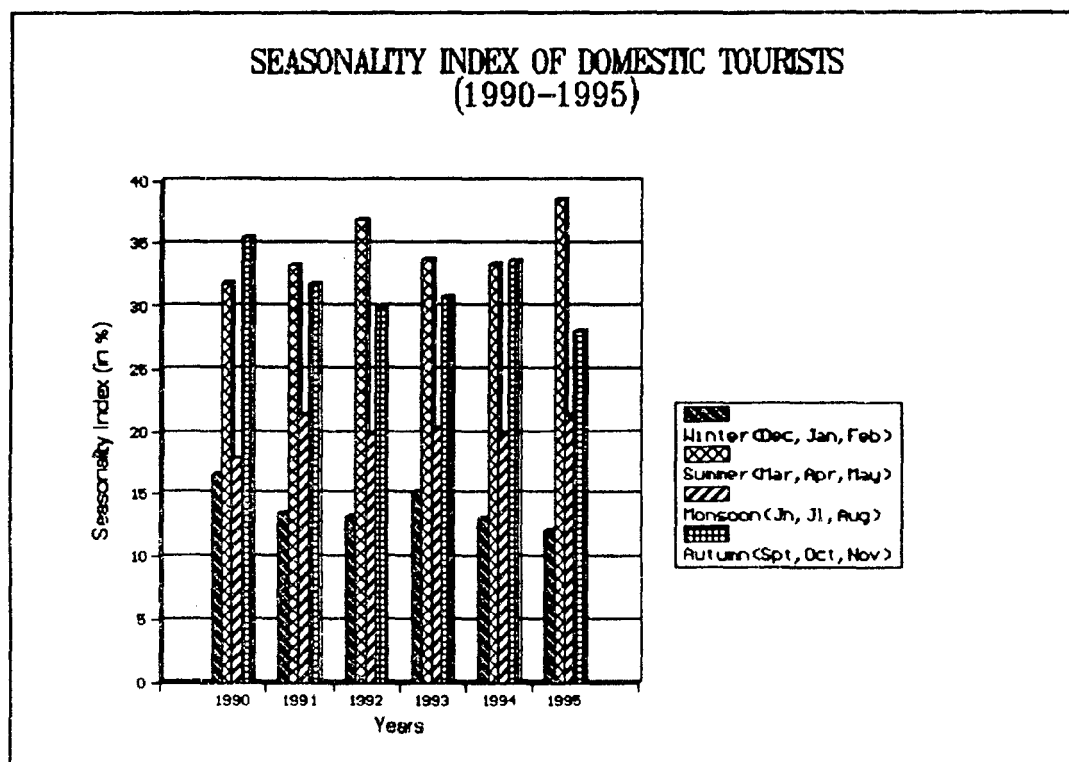


Fig 2.6

scarcity of tourist facilities. But it is worth mentioning that GREF which is one of the departments of military services and responsible for road maintenance provides prompt relief during the dislocation.

Among the domestic tourists too, the most popular seasons happen to be between September and November and March-May. (Fig. 2.6) These two peak seasons coincide with period of favourable climatic conditions when the nature is at her best and also with the long and medium vacations in the school and college terms. Moreover, the majority of the domestic tourists to Sikkim hail from West Bengal, where schools and colleges are closed for one month for Durga Puja vacation, which gives an opportunity to the people to take a break. This holiday season and vacation mood often extends till late October or early November. This is why the heavy rush of domestic tourists during these months takes place. Another period of heavy rush coincides with the months of March, April, May and June. This season commences with the end of school sessions all over India and beginning of summer vacations. The parents also try to coincide their holidays with that of their wards. Apart from this, to escape the intense and unbearable heat of summer, specially the people of the plain regions tend to spend their vacation in some hill stations. Sikkim as an ideal tourist destination provides all the comfort that the summer tourists seek. The lean season for the domestic tourist extends from December to February during which due to extreme cold they find it difficult to adjust.

To understand the seasonal pattern of the domestic tourist arrival to Sikkim, the data on monthly fluctuation of domestic tourist arrival by states of

origin for the year 1992 as collected by Department of Tourism of Sikkim, needs to be studied. (Table 2.3).

It is quite evident that, in general, among all the states of origin the months of May and June seems to be most favoured followed by March and October for travelling to Sikkim as their destination. Among the tourists coming from West Bengal, May, June and October are the three most favoured months for spending their holidays in Sikkim. The tourists from other eastern states like Bihar and Assam come during the months of June (19.4%), May (17.95%), July (10.98%) October (10.68%) and June (17%), August (14%), July (13%) respectively. Among the tourists coming from the north eastern states, February is the most popular time as majority (17.4%) of them travel to Sikkim during this month. The North Indians prefer to come to Sikkim in the month of June (31.85%) and May (17.51%). Among the tourists coming from the western states the month May (31.41%) followed by February (17.97%) and November (8.93%) are the best time for visiting Sikkim. Most the tourists coming from the southern states visited this state during the months of May (19.59%), June (17.25%) and February (11.99%). For the people from the other remaining states the best season started from February (11.64%) extended till March (11.78%) and peaked in May with 33.15% of the visitors coming during this month. Thus, May and June can be considered to be the peak tourist season as majority of the domestic tourists from the various states of India visited Sikkim during this period, as per the 1992 data.

The temporal analysis of the monthly arrival of domestic and foreign tourists has been done to understand the monthly cycle of peak and lean seasons

Table: 2.3

Monthwise Distribution Of Domestic Tourists By States Of Origin (1992).

=====													
Tourists(in %)													
State	January	February	'March	'April	May	'June	'July	August	September	October	November	December	Total
=====													
W.Bengal	0.52	6.77	10.31	8.85	18.39	14.38	5.89	4.8	6.43	12.02	5.51	6.13	100
Bihar	0.15	9.34	11.28	9.5	17.95	19.44	10.98	1.93	4.45	10.68	1.93	2.37	100
Assam	0.24	3.82	11.94	7.42	5.49	16.95	12.56	14.09	5.81	9.76	9.87	3.58	100
Other N.E. States	1.05	17.14	10.94	5.59	8.04	12.59	5.24	8.74	5.59	4.2	13.29	8.04	100
Sn States	0.44	11.99	10.97	10.23	19.59	17.25	3.65	6	2.05	7.6	4.53	5.7	100
Mn States	0.16	5.08	8.84	5.4	17.51	31.85	7.35	5.29	7.3	3.02	4.5	3.7	100
Wn States	0.23	17.92	7.34	7.01	31.41	5.76	0.09	1.24	2.49	3.11	8.93	3.61	100
Othr States	0	11.64	11.78	1.1	33.15	1.37	3.7	6.3	11.78	0.96	6.17	2.05	100
Total	0.44	7.68	10.8	8.12	19.86	15.91	5.96	4.94	6.27	10.38	5.62	5.44	100

Source: Bureau Of Economics & Statics, Development & Planning, Govt. Of Sikkim.

of tourist flow (Appendix : 2.3 a & 2.3 b). In case of the foreign tourist traffic, the graph based on the three monthly moving average shows that each year since 1990 till 1995 is marked by two peak periods during the months of March-April and September-November which coincides with the most comfortable seasons. The lean season is during July-August which is characterised by periods of bad weather, and frequent occurrences of landslides, (Fig. 2.7). These facts strengthen the argument that the seasonality of international tourist flow is very much controlled by climatic conditions. This is also evident from the strong negative co-relation ($r=-0.56$) between 'De Martonnes Index'¹ and the monthly International tourist flow. This shows that tourists flock during the dry months or with less rainfall (Appendix 2.4a). The coefficient of co-relation is found to be significant at 10% level of significance. In case of the domestic tourists the three monthly moving averages show that each year is characterised by having two peak seasons, one extending over the months of April, May and June and the other during September, October and November, (Fig. 2.8). But for domestic tourists, there are two lean periods, one during July-August and other extending from December till February. To examine the influence of climate on the monthly fluctuations of domestic tourist flow, co-efficient of correlation has been worked out between 'De Martonne's Index' and monthly domestic tourist flow (Appendix 2.4b) and the result accounts to be a very weak positive co-relation ($r=0.23$) but this is found to be insignificant at 10% level, meaning

1. De. Martonnes Index' is an aridity index which is $P/t+10$, where P is average monthly precipitation in centimeter and t is monthly average temperature in °C. Higher is the index, lower is the aridity.

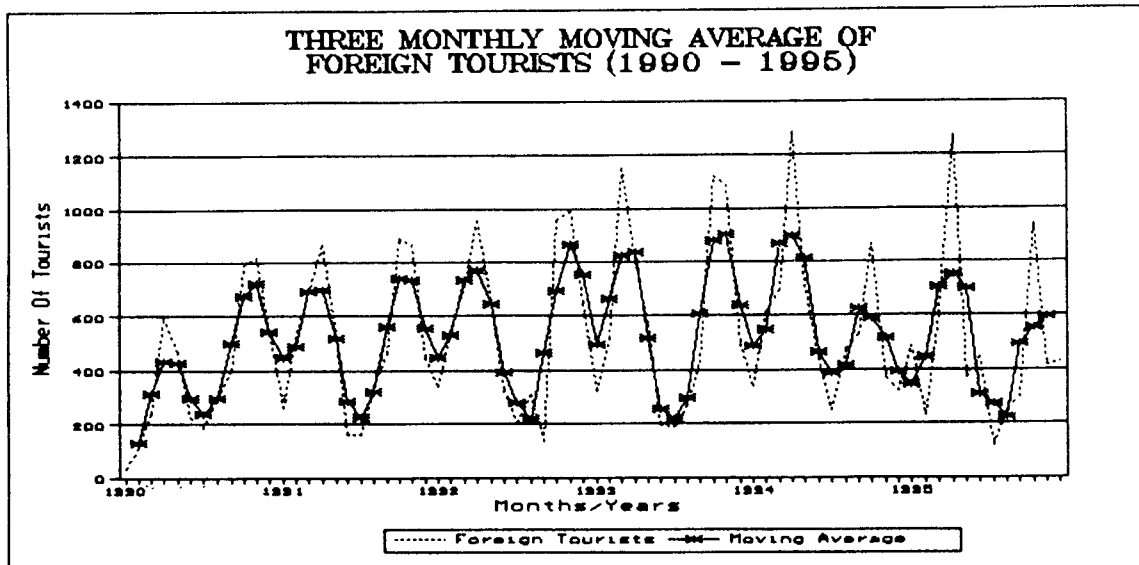


Fig 2.7

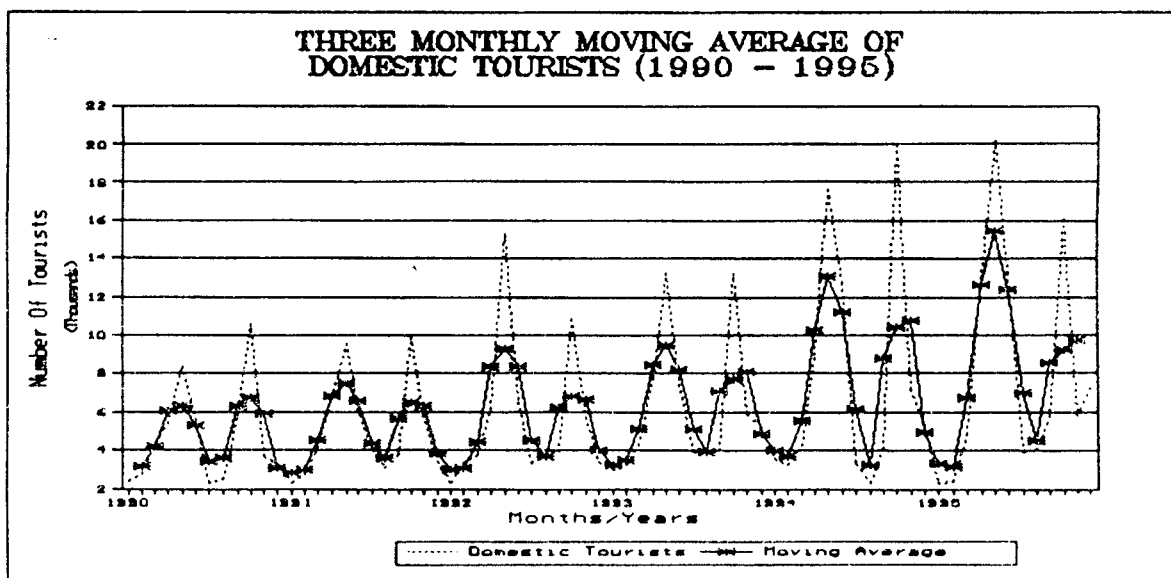


Fig 2.8

thereby that over a large number of similar observations the two variables will be independent. But when coefficient of correlation is computed between number of holidays per month and monthwise domestic tourist flow (Appendix 2.5), a high positive correlation exists between the two ($r=0.87$) and the test of significance was also found to be significant at 1% level. From this, it can be inferred that the seasonality in case of domestic tourist flow is more influenced by holiday patterns than favourable climatic conditions.

Thus, it can be concluded that seasonality is a characteristic feature of tourism in Sikkim which results in heavy demand on the tourist infrastructure and accommodation facilities during the peak season which in turn has various other side effects like shortage of power and water supply and price rise of various commodities. |As a result not only the tourists but the local people also suffer, which often antagonise the local people against the tourists. Therefore a better understanding of the seasonal pattern of tourist flow is necessary for chalking out proper management programmes for the smooth functioning of tourism industry.

(iii) Characteristics of The Tourists

(a) Tourist arrival in Sikkim by places of their origin :

About 92.58% of the tourists visiting Sikkim are domestic tourists. The source of the remaining 7.42% which constitute international tourists visiting this state, follows a distinct regional pattern, (Fig. 2.9). As per the data on the source of international visitors for 1991 and 1992 (Table 2.4). European countries dominate the scene, contributing 54.5% and 58.54% of the total

Foreign Tourist Flow To Sikkim By Regions Of Origin, (1992)

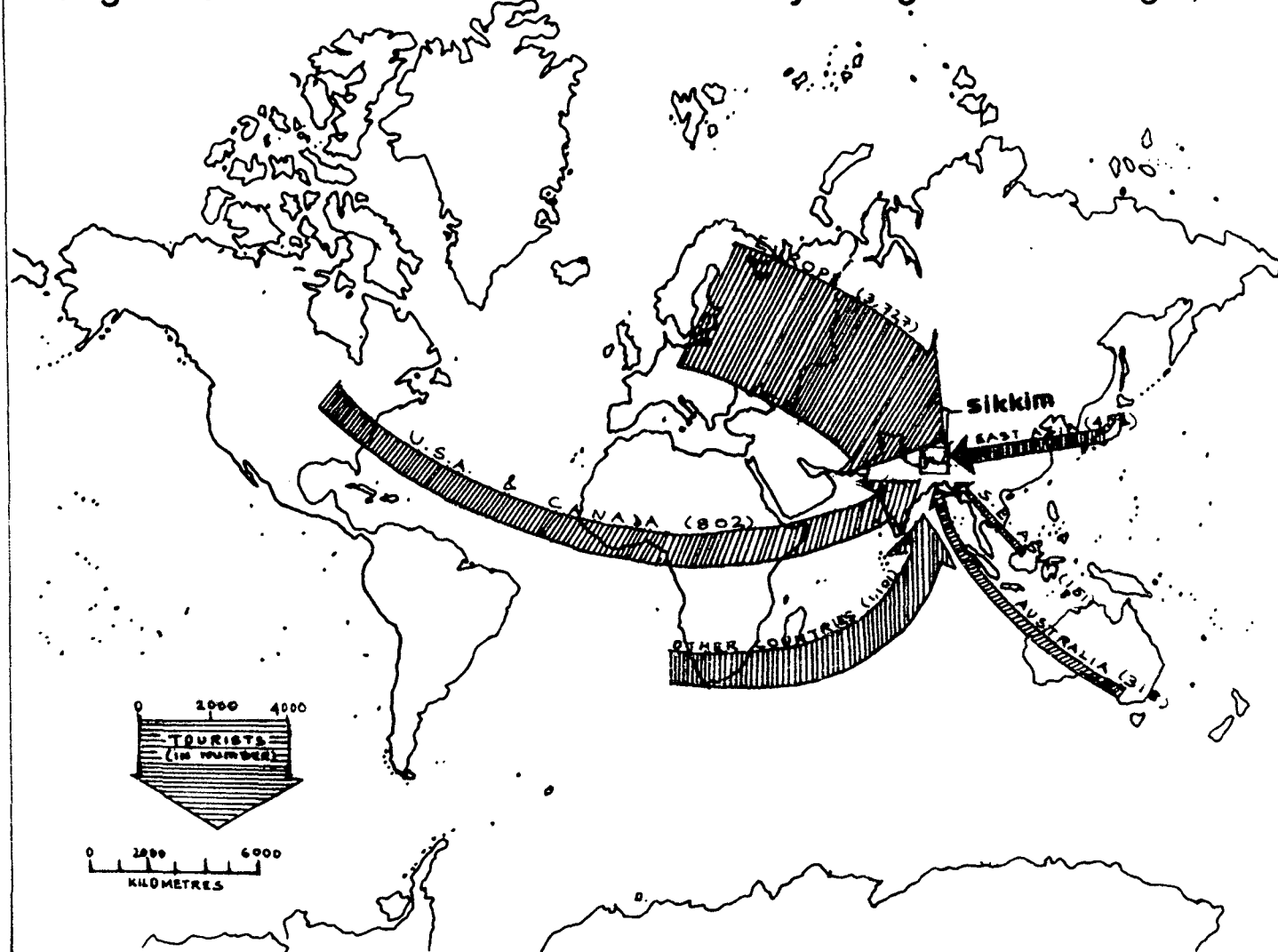


Fig 2.9

Table:2.4

**Distribution Of Foreign Tourists Coming To Sikkim
By Country Of Their Origin (1991 & 1992).**

Country	1991		1992	
	Number	Percent	Number	Percent
Australia	303	4.9	318	4.67
Belgium	125	2.18	101	1.48
Canada	225	3.64	188	2.76
China	13	0.21	58	0.85
Denmark	84	1.36	88	1.29
France	587	9.49	700	10.27
Germany	878	9.49	700	13.28
Holland	297	4.8	394	5.78
Hongkong	13	0.21	25	0.37
Israel	136	2.2	147	2.16
Italy	320	5.17	253	3.71
Japan	366	5.92	393	5.77
Malaysia	30	0.21	63	0.92
Russia	13	0.21	2	0.03
Singapore	69	1.11	63	0.92
Spain	127	2.05	160	2.35
Switzerland	264	4.27	314	5.49
Sweden	92	1.49	68	1
U.K	877	14.18	947	13.81
U.S.A	666	10.77	614	9.01
Nepal	2	0.03	171	2.51
Other Country	689	11.14	783	11.49
Total	6186	100	6815	100

Source: Dept. Of Tourism, Govt. Of Sikkim.

volume of foreign tourists travelling to Sikkim in these two years respectively. Among the European countries, U.K. proves to be the dominant customer for Sikkim's international tourist market contributing 14.18% of the total foreign tourists in 1991, which ofcourse slightly declined to 13.88% in 1992. But the percentage share of German and French tourists coming to Sikkim rose substantially from 9.49% to 13.3% and from 9.5% to 10.3% respectively during 1992. The second most important customer for Sikkim tourism comprises of those coming from U.S.A. and Canada but their share registered a decline from 14.4% in 1991 to 11.80% in 1992. But quite surprisingly the percentage share of tourists coming from East and South-East Asian countries, housing most of the world's Buddhist population, to Sikkim, which is known as the seat of Buddhist culture and some world famous monasteries was found to be quite low, as compared to other countries. But the trend of travel to Sikkim from the East and South-East Asian countries, has been picking up as the share has increased from 7.69% (1991) to 11.34% (1992). The increase may be the reflection of improved diplomatic relations with some of the East Asian countries and relaxation of permit rules. This may also be the result of the special incentives provided by Department of Tourism to encourage higher tourist flow from these countries, by scheduling package tours during the months of Buddhist festivals. Special arrangements were also made for the tourists for witnessing the various rituals and cultural activities. Some such package tour circuits touching spots of religious significance are

(a) Religious/heritage circuit: - Gangtok-Kabi-Phodong monastery-Tumlong palace ruins-Labrang monastery-Gangtok

(b) Religious/heritage circuit :- Pemayangtse monastery/ Rabdentse ruins - Sangacholing - Khecheopalri lake - Norbugang Chorten - Dubdi monastery - Tashiding.

As already mentioned, Sikkim attracts a large number of domestic tourists which account for about 95% of the total number of tourists visiting this state. As per the 1992 data (Table 2.5) majority of the domestic tourists came from the eastern states. West Bengal alone accounted for almost three-fourth of the total domestic tourist coming to Sikkim. The remaining eastern and north-eastern states accounted for 7.23%, of the domestic tourists. The second largest share (9.9%) was from the northern states. Lowest proportion of tourists come from the southern states (3.58%). A small percentage of tourists (4.69%) arrived from the western states. A distinct regional pattern can be evolved on the basis of the source regions of the domestic tourists flow, (Fig. 2.10). It is quite obvious that the volume of the tourist by place of origin is inversely related to the distance between the place of origin and destination. Therefore this distance decay factor' i.e. $p \propto 1/d$, where 'p' is the volume of tourists, and 'd' is the distance between the place of origin and destination plays an important role in influencing the tourists decision about their likely destinations. Sikkim's nearest railway station, New Jalpaiguri, and nearest air port Bagdogra are all located in West Bengal. This very well explains why largest number tourists come from West Bengal and other eastern and north- eastern states for which Sikkim is accessible. Whereas those from western and southern states have to travel via Calcutta. For them distance factor becomes a constraint. The second reason may be due to lack of adequate publicity, the information about the existence of

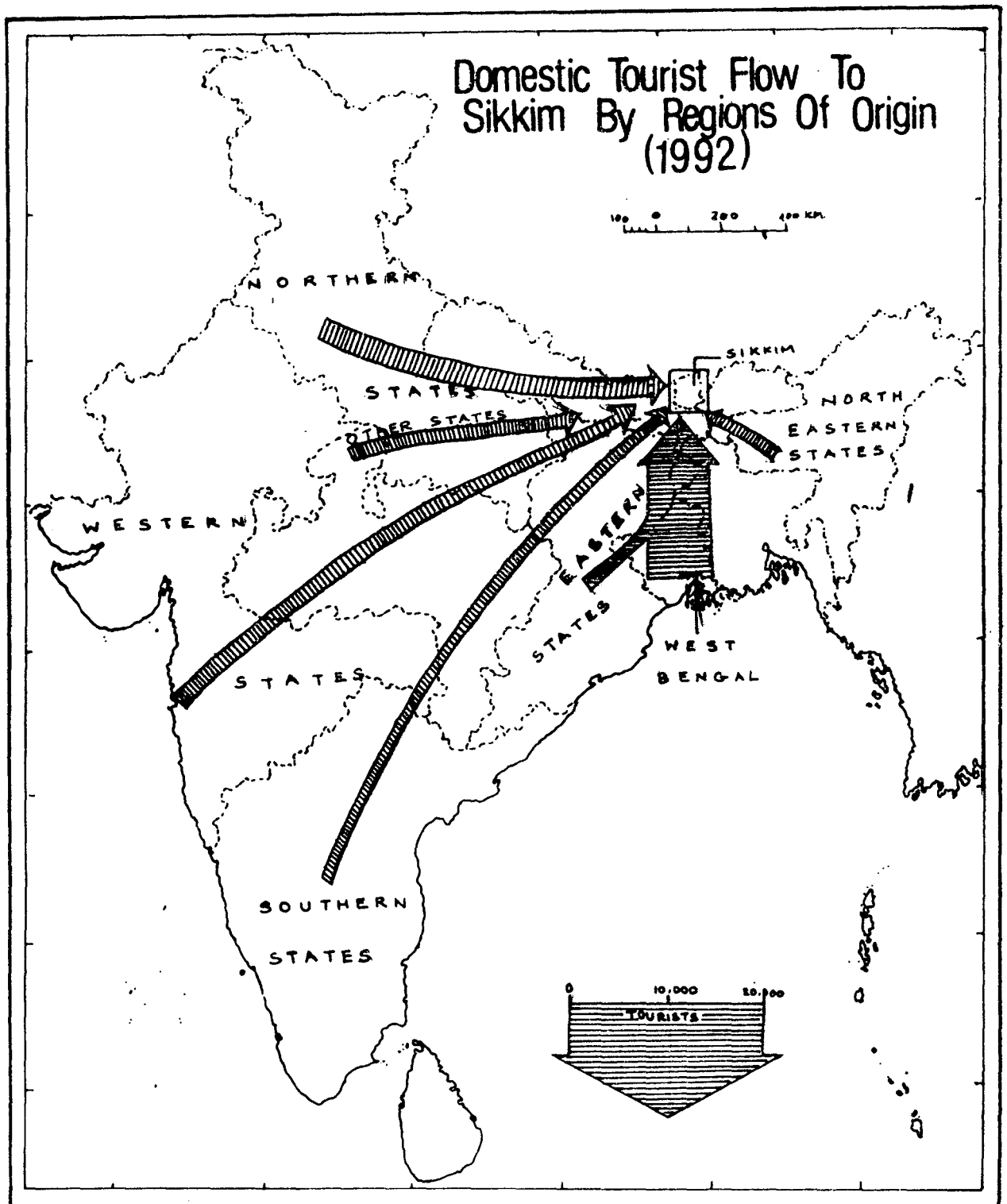


Fig 2.10

Table:2.5

**Distribution Of Domestic Tourists Coming To Sikkim
By Places Of Their Origin '(1992).**

State	Tourists	% Share
W.Bengal	13507	70.81
Bihar	674	3.53
Assam	419	2.2
Othr N.E.States	286	1.5
Sn States	684	3.58
Nn States	1890	9.91
Wn States	885	4.64
Othr States	730	3.83
Total	19075	100

Source:Bureau Of Economics & Statistics, Devt. & Planning,
Govt. Of Sikkim.

the various tourist facilities and attractions are limited within the regions, neighbouring to Sikkim. Therefore, much has to be done to capture a wider market.

(b) Tourist arrival by purpose of their visit:

People travel from place to place with some intention or purpose. From the information collected by the Bureau of Economics and Statistics on the purposes of visit for the domestic tourists coming to Sikkim during 1992 it is found that majority (73.26%) came for pleasure and sightseeing, 23.41% came with business purpose, (Fig : 2.11). Tourists visiting Sikkim for religious purpose were negligible in number and they mainly came from W.Bengal and the north-eastern states, (Appendix : 2.6).

Most of the international tourists also visit Sikkim for pleasure and sight seeing. (Fig : 2.12). Out of the total foreign tourists visiting Sikkim in 1992, 97.67% mainly visited for sight-seeing and only 1.44% came on official duty. International tourists who visited Sikkim for religious purpose constituted a negligible share of 0.89%. Among those coming for sight seeing, came during the month of April, March and October, but those coming with religious purpose, mainly came during the month of March, (Appendix : 2.7).

(c) Socio-economic characteristics of the tourists :

A study on the visitor characteristic is important because they all influence the magnitude, frequency and kind of interaction with the physical attributes of the destination and its people. For this purpose the Bureau of Economics and Statistics had undertaken a sample survey in 1992 to collect information about the socio-economic characteristics of the tourists visiting

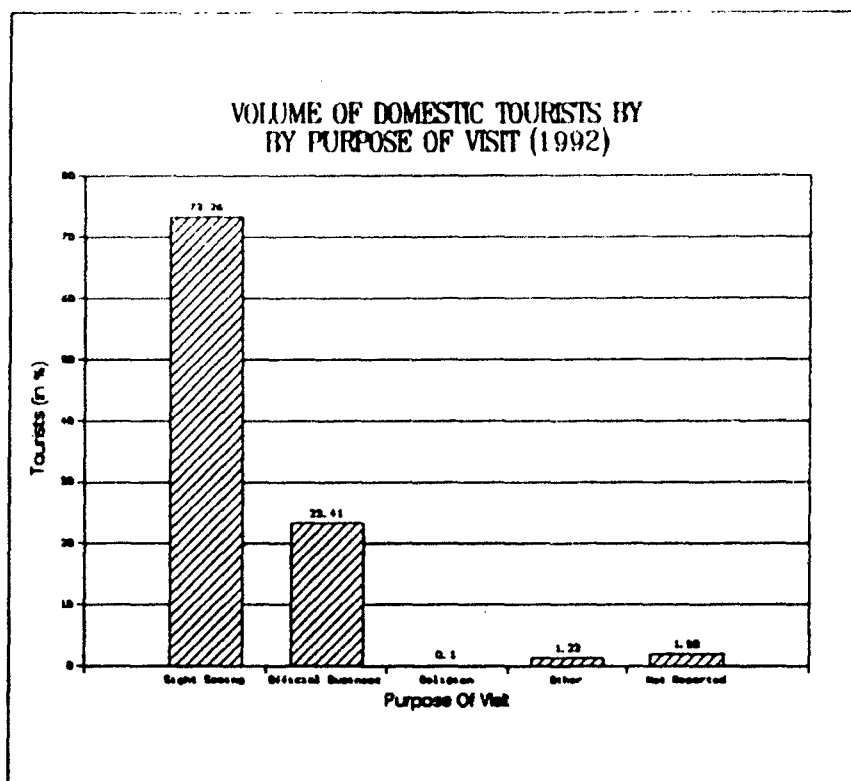


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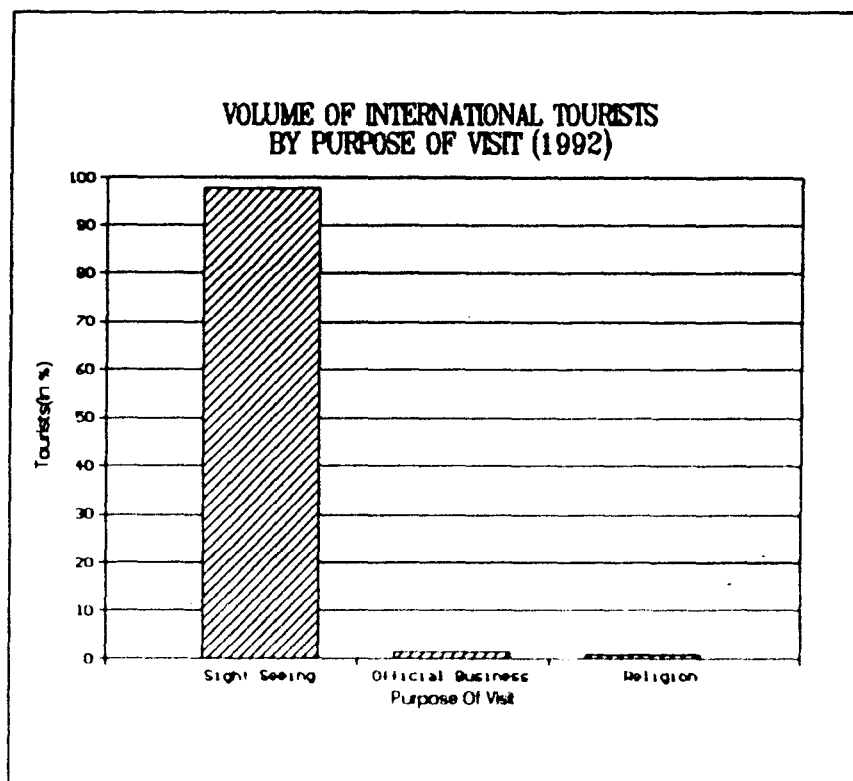


Fig 2.12

Sikkim. The information covered demographic, social and economic aspects of the tourist characteristics.

As per the data on distribution of domestic tourists by sex and child by states of origin (Fig 2.13), 48% of the domestic tourists are adult male, 30% are adult female and 22% are Children. From this distributional pattern it is evident that most of the tourists come with thier family. Unlike most of the states of origin in whose case share of male tourists dominate, the tourists coming from Haryana, Himachal Pradesh comprise only of adult females and children. In case of Punjab 50% of the tourists are children. In case of all these three states, the groups surveyed must have come for excursion or study purpose. Such information on international tourists were not available, therefore demographic characteristics of international tourists were not analysed.

Eventhough Sikkim is a land of 'Gumpas' and some of the world famous Buddhist monerteries, only 0.52% of the domestic tourists visiting Sikkim were Buddhists. Majority of the tourists (85%) were Hindus, while those following other religion accounted for 12% of the total domestic tourist arrival, (Fig : 2.14). This is because Sikkim, inspite of being a seat of Buddhist culture, is yet to mould itself as a centre for pilgrimage. Out of the total international tourists who were surveyed, 37.84% were Christians, 2.7% were Buddhists, 1.35% were Muslims and 0.68% were Hindus. The rest did not mention their religion (Fig. : 2.15).

Occupational pattern of the domestic tourists reveals that majority were salaried persons, (Fig : 2.16). 44.46% of the domestic tourists who were surveyed were engaged in salaried jobs. 16.14% were self employed, while

DISTRIBUTION OF DOMESTIC TOURISTS
BY SEX AND CHILD MEMBERS (1992)

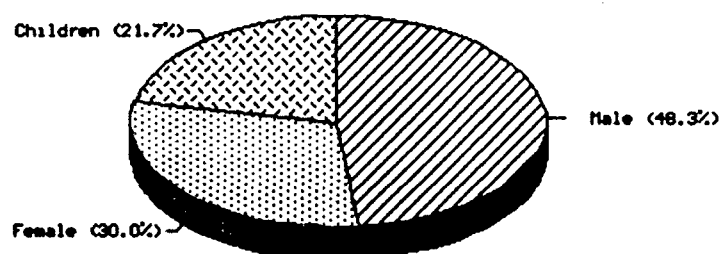


Fig 2.13

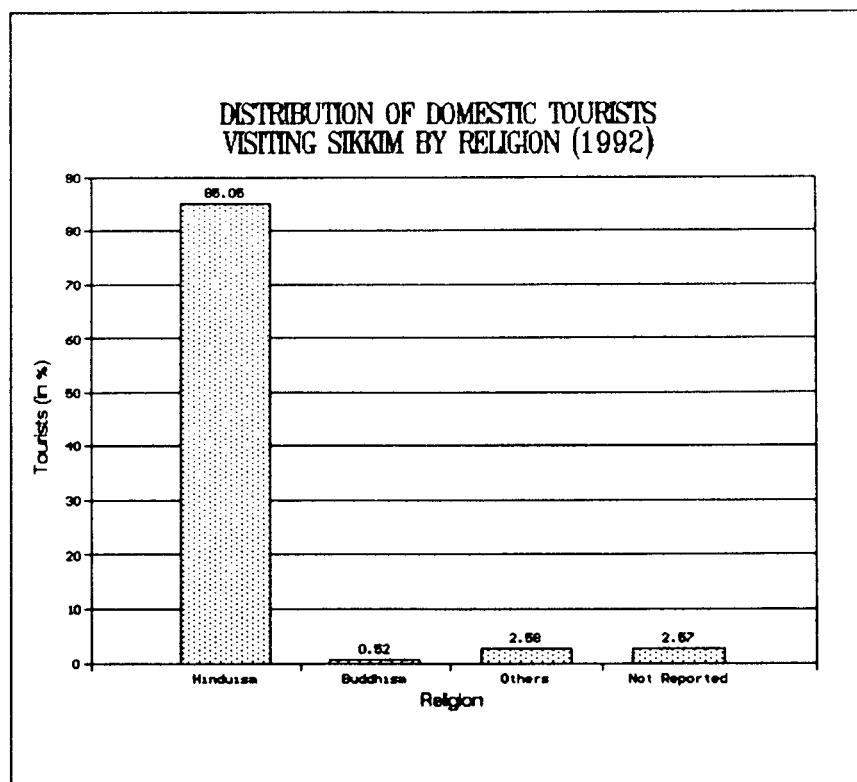


Fig 2.14

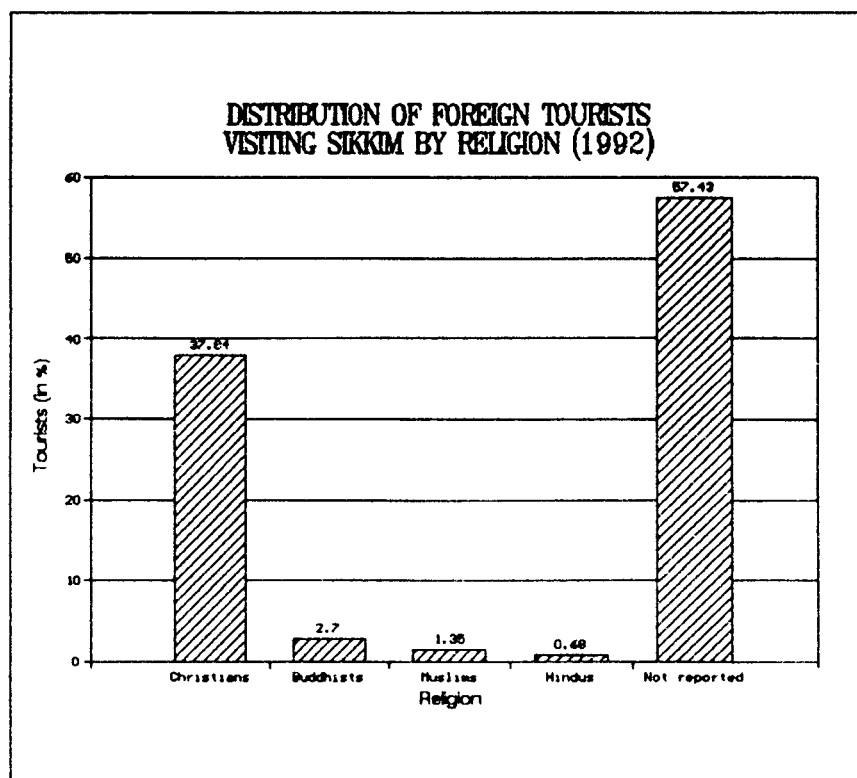


Fig 2.15

OCCUPATIONWISE DISTRIBUTION OF DOMESTIC TOURISTS IN SIKKIM (1992)

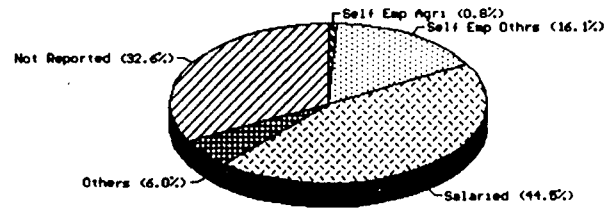


Fig 2.16

OCCUPATIONWISE DISTRIBUTION OF FOREIGN TOURISTS IN SIKKIM (1992)

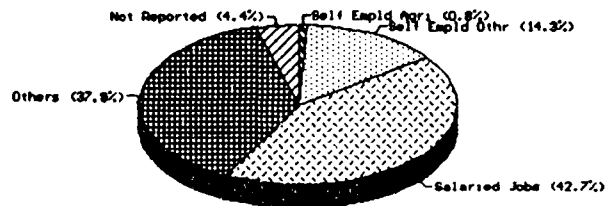


Fig 2.17

6.04% pursued other occupations and 0.77% were self employed in agricultural and allied activities. From the average monthly income analysis of the domestic tourists (Appendix : 2.10b) it is found that majority comes from the middle income group whose monthly income ranges between Rs. 2000 to Rs. 4000. Thus, most of the domestic tourists traveling to Sikkim must have been 'budget tourists' who will prefer moderate and economy class accommodation facilities and cheap transport services. In case of international tourists most of them were salaried persons followed by those engaged in other occupations and those who were self-employed (Fig : 2.17). Data on monthly income of the foreign tourists were not available, therefore income classification of the foreign tourist have been left out.

(d) Length of their stay:

Nearly 57% of the domestic tourists who were surveyed had planned to stay for 1-3 days, whereas 39.43% planned to stay for 4-7 days. Only 4% wanted to stay for more than a week. From the state-wise analysis by length of stay (table : 2.6a) more than 50% of the tourists coming from Andhra Pradesh, Assam, Bihar, Calcutta, Delhi, Haryana, Himachal Pradesh, Maharashtra, Orissa, Uttar Pradesh proposed to stay for 1-3 days. Rest of the visitors from these states mainly planned a stay of 4-7 days. Only in case of the tourists who came from Calcutta, Delhi and Maharashtra, a small percentage of them had a plan to spend more then a week. The majority of the tourists coming from Kerala, Karnataka, Tamil Nadu and Punjab preferred to stay either for 4-7 days or more than a week, sepcially as in case of tourists coming from Kerala. From this one thing can be concluded that though majority of the domestic tourists

Table:2.6(a)

**Distribution Of Domestic Tourists In Percentage Coming To Sikkim By
Average Length Of Stay (1992).**

Place Of Origin	By Duration of stay			Total
	(1-3)days	(4-7)days	>7days	
Andhra Pradesh	57.14	42.86	0.00	100
Assam	50.00	50.00	0.00	100
Bihar	61.90	38.10	0.00	100
Calcutta	59.08	37.89	4.64	100
Delhi	55.00	40.00	5.00	100
Haryana	100.00	0.00	0.00	100
Himachal Pradesh	100.00	0.00	0.00	100
Karnataka	20.00	80.00	0.00	100
Kerala	0.00	66.67	33.30	100
Maharashtra	53.66	43.90	2.44	100
Orissa	71.43	28.57	0.00	100
Punjab	0.00	100.00	0.00	100
Uttar Pradesh	66.67	33.33	0.00	100
Tamil Nadu	0.00	100.00	0.00	100
Total	56.70	39.43	3.87	100

Source: Bureau Of Economics & Statistics, Devt. & Planning, Govt. Of Sikkim.

Table:2.6(b)

**Monthwise Distribution Of Foreign Tourists Coming
To Sikkim By Average Length Their Of Stay.
(in percentage)**

Months	Duration Of Stay				Total
	(1-3) days	(4-7)days	(8-14)days	>15 days	
January	62.00	28.00	10.00	0.00	100
February	42.90	37.60	14.40	2.10	100
March	55.40	29.76	14.58	2.08	100
April	63.50	24.50	10.55	1.50	100
May	36.50	50.00	11.40	2.06	100
June	36.92	38.97	22.56	1.53	100
July	69.28	20.26	10.45	0.00	100
August	70.97	25.17	3.84	0.00	100
September	100.00	0.00	0.00	0.00	100
October	69.20	26.94	3.88	0.00	100
November	69.14	25.71	5.14	0.00	100
December	48.33	35.05	14.70	0.00	100
Total	58.44	30.46	10.22	0.88	100

Bureau Of Economics & Statistics, Devt. & Planning, Govt. Of Sikkim.

planned to stay for 1-3 days, but those coming from distant states like Kerala, Karnataka, Tamil Nadu, Punjab planned a longer stay extending between 4-7 days or more than a week. This may be because most of them came with the purpose of trekking or study purpose in which case a longer stay is expected. Majority did not opt for an extension of their stay because of some have planned like that, some due to lack of accommodation and some due to financial crunch. The remaining had some other reasons.

Out of a total of 6815 international tourists who visited Sikkim in 1992, 3526 (51.7%) of them did not report their exact duration of stay. Out of the remaining 3289, most of them stayed for the period of 1-3 days. Those who stayed for more than seven days were little over 12%. About 30% stayed between 4-7 days. Most of the international tourists who planned for a longer stay for two weeks or more than that came during February and June and again in December, (Table 2.6b). This coincides with some of the best season for visiting as well as for trekking in Sikkim.

(iv) Spatial Analysis of Tourist Arrival.

Sikkim has a number of spots of tourist attraction but there are only some which are visited by almost all the tourists visiting this state. From the district-wise analysis it is found that out of the total volume of tourists both domestic and international coming to Sikkim, 70-75% are received by the east district, 15-20% by west district, 10-15% by north district and the remaining negligible share by the south district. Thus, the east district proves to be the core area of tourist demand. From the data on the volume of tourist by places of

visit, the most visited spots were found to be located in and around Gangtok, which is located in the east district, (Table : 2.7). This may be due to the availability of better transport services, and accommodation facilities in the east district. This will be examined in the following chapter where supply aspect of tourism industry will be discussed. According to the sample survey of 388 groups of domestic tourists in 1992 the most popular place of visit was found to be the Deer Park which attracted 78.6% of the tourists. Institute of Tibetology, Epica garden, Rumtek and Enchey monasteries. Tsangu lake and Tashi view point also are the most visited places. The remaining places of interests like Mimentso lake, Gyalshing Pemeyangtse, Yuksom, Dzongri, Khechopalri, Namchi, Tashiding, Mengan, Yumthang, Lachen and Lachung are visited only by 0,5% to 1% of the tourists. For visiting all these places the mode of conveyance availed of were private taxis, Sikkim Nationalised Transport Buses, tourist buses and other types. To reach the tourist spots located in comparatively remote and distant areas, private taxis are mainly availed of by the tourists.

Out of the 148 international tourists surveyed by Bureau of Economics and Statistics, 124 had visited Rumtek which constitutes 83.78% of the tourists, (Table : 2.7). 82.43% of the foreign tourists visited Deer Park, 71.62% visited Institute of Tibetology, 57.43% visited Epica garden, 43.92% visited Enchey monastery. Only 3.38% visited Tsangu lake. Unlike the majority of the domestic tourists whose movements were restricted within the east district, large number of international tourists visited the places of interests located in the west district also. Gyalshing Pemeyangtse received 39.9%, Khechopalri 3.38% and Dzongri 2.75% of the international tourists. This shows that international

Table:2.7

Percentage Share Of Tourists By Places Visited In Sikkim (1992).

District	Places Of Visit	Tourists(in %)	
		Domestic	Foreign
East	Deer Park	78.60	82.43
"	Institute Of Tibetology	69.58	71.62
"	Epica Garden	55.41	57.43
"	Rumtek Monastery	44.58	83.78
"	Enchey Monastery	26.80	43.92
"	Tsongo Lake	26.54	3.38
"	Tashi View Point	13.66	18.92
"	Mimantso Lake	1.03	0.00
"	Nathula	0.00	0.00
West	Gyalshing Pemayangtse	0.77	39.86
"	Yuksom	0.52	3.38
"	Dzongri	0.25	2.70
"	Kechopalri Lake	0.25	3.38
"	Tashiding	0.25	4.73
South	Namchi	0.25	0.00
North	Mangan	0.00	0.00
"	Yumthang	0.00	0.00
"	Lachen	0.00	0.00
"	Lachung	0.00	0.00

Source: Bureau Of Economics & Statistics, Devt. & Planning ,
Govt. Of Sikkim.

tourists apart from visiting the most frequently visited places of interest, tend to explore and trek to those places which are not commonly visited by all the tourists due to comparative inaccessibility and lack of basic infrastructure. About 83% of the international tourists were interested in trekking, thus, these above mentioned places attracted a large share of foreign tourists visiting Sikkim.

(v) Goods and Services Demanded

(a) Place of their stay

The survey reveals that hotels play a predominant role in accommodating the domestic tourists. 96.30% of the domestic tourists stayed in hotels. Only 1.1% availed of the guest house accommodation, whereas 2.6% managed themselves in some other types of accommodation, (Table : 2.8a), Regarding occupancy of different kinds of rooms preferred by the domestic tourists, 31% occupied single beded rooms, 65% double beded rooms and 3% stayed in dormitories. From the data it is found that majority of the tourists residing in hotels and other types of accommodation opt for double rooms, whereas for those staying in guest houses majority stay in single rooms. From this it may be concluded that generally those residing in guest houses are single persons who might have visited the state on business purpose or on some official duty and cannot be classed as proper tourists who visit this place solely for sight-seeing or pilgrimage. A detailed survey on the charges per day per person paid by the domestic tourists for their accommodation (Table : 2.8b) showed that about 42% of the tourists paid between Rs. 51-100, 36% paid within Rs. 50, 19.08%

Table:2.8(a)

**Domestic Tourists In Percentage By Type Of Accomodations
For Each Type Place Of Stay In Sikkim (1992).**

=====						
Type Of Accomodation						
Place Of Stay	Tourists(%)	Single Room	Double Room	Dormitory	Not Reported	Total
Hotels	96.30	31.02	66.84	1.87	0.27	100.00
Guest Houses	1.10	50.00	25.00	25.00	0.00	100.00
Others	2.60	100.00	30.00	20.00	40.00	100.00
Total	100.00	30.67	65.46	2.58	1.29	100.00

Source:Bureau Of Economics & Statistics, Devt. & Planning, Govt. Of Sikkim.

Table:2.8(b)

**Distribution Domestic Tourists In Percentage By Charges
Paid For Accomodations In Sikkim (1992).**

=====						
Tourists(%) By Charges Paid Per Person Per Day(in Rs)						
Place Of Stay	(1-50)	(51-100)	(101-200)	(201-300)	(>300)	Total
Hotel	34.49	42.24	19.52	3.47	0.28	100
Guest House	50.00	25.00	25.00	0.00	0.00	100
Others	70.00	30.00	0.00	0.00	0.00	100
Total	35.60	41.74	19.10	3.40	0.30	100

Source:Bureau Of Economics & Statistics, Devt. & Planning, Govt. Of Sikkim.

Table:2.9

**Distribution Of Foreign Tourists In Percentage By
Charges Paid For Each Type Of Accomodation (1992).**

=====							
Charges Paid For Accomodation Per Person Per Day(in Rs)							
Place Of Stay	(10-50)	(50-75)	(75-100)	(100-300)	(300-500)	(>500)	Total
Hotel	15.49	32.40	33.10	16.20	0.70	2.11	100
Guest House	40.00	40.00	20.00	0.00	0.00	0.00	100
Others	100.00	0.00	0.00	0.00	0.00	0.00	100
Total	16.9	32.4	32.4	15.5	0.7	2.03	100

Source:Bureau Of Economics & Statistics, Devt. & Planning, Govt. Of Sikkim.

between Rs. 101-200. A small section of the domestic tourists availed of accommodation with charges ranging between Rs. 201-300 and above Rs. 300. This shows that majority of the tourists staying in hotels paid between Rs. 51-100 whereas majority of those staying in guest houses paid charges within Rs. 50. The reason may be because almost all the guest houses are run by various government departments which were mainly built to house the government officials on duty at a subsidized rate. Only a limited section of tourists not coming on official duty can avail of this facility whereas most of the hotels are privately owned and try to extract maximum profit.

In case of international tourists 96% stayed in hotels and only 4% stayed in guest houses and other places. In hotels 65.45% stayed in single bedded rooms, 31.08% in dormitory type of accommodation. Given the choice of accommodation charges, majority preferred to stay in accommodations costing between Rs. 50 to Rs. 100, (Table 2.9). Thus, among the international tourists visiting Sikkim, majority are budget tourists.

(b) Mode of travel:

Road transport is the only mode of traveling in this state. As per the survey report private buses were found to be the ones which were mostly used by the domestic tourists for traveling. About 54% tourists travelled to Sikkim by private buses and 31% by the buses run by Sikkim Nationalised Transport. Approximately 12% of the domestic tourists entered Sikkim by shared taxis and jeeps. For visiting various places of interest, majority of the domestic tourists hired private taxis. The remaining travelled within the state by SNT buses private tourist buses and other modes of transport, (Table : 2.10a).

Table2.10(a)

**Distribution Of Domestic Tourists In Percentage By
Mode Of Transport Availed By Them (1992).**

=====		
For Travelling		
Mode Of Transport	To Sikkim	'Within Sikkim

Private Taxi	11.6	52.63
SNT Bus	31	7.92
Tourism Bus	54.4	2.59
Others	3	30.07
Not Reported	0	6.79

Source:Bureau Of Economics & Statistics, Devt. &
Planning, Govt. Of Sikkim.

Table:2.10(b)

**Distribution Of International Tourists In Percentage
By Mode Of Transport Availed By Them (1992).**

=====	
Mode Of Transport	Tourists(%)

SNT Bus	85.18
Private Tourist Bus	8.11
Private Taxi	5.41
Others	0.67

Total	100

Source:Bureau Of Economics & Statistics, Devt. &
Planning, Govt. Of Sikkim.

Among the international tourists 85.8% used buses run by Sikkim Nationalised Transport, 8.1% used private tourist buses and only 5.4% used private taxis. The remaining 0.7% used other means of transport, (Table 2.10b).

(c) Demand of services related to trekking and adventure tourism:

Sikkim attracts a large number of tourists who mainly come for trekking experience for which special permits have to be obtained from the tourism offices. Of late, the increasing popularity of trekking has widened the scope of tourism industry in Sikkim. As a part of the sample survey conducted by Bureau of Economics and Statistics an effort was made to evaluate the interest and viewpoint of both domestic and international tourists regarding trekking facilities in Sikkim.

Out of 388 groups of domestic tourists, 199 (51.29%) were enthusiastic about trekking while 48.71% were not keen for it. From the state-wise analysis (Table: 2.11a) it is found that most of the tourists interested in trekking came from West Bengal, Maharashtra and Andhra Pradesh. It is also found that tourists from Haryana, Himachal Pradesh and Andhra Pradesh mainly come to this state to take part in trekking activity. About 48.7% of the domestic tourists were not interested in trekking. 18% of them were unaware about the details of this activity while 27% of them found the trekking facilities to be expensive, and according to 16% of tourists arrangements were inadequate. The remaining 39% gave some other reason. From these, two things become clear. Firstly, the charges of trekking facilities have to be further subsidized as there are many tourists who inspite of being interested in trekking cannot afford it. Secondly,

Table:2.11(a)

Distribution of Domestic Tourists In Percentage By Their Interest In Trekking Activities In Sikkim (1992).

State Of Origin	Percentage Of Domestic Tourists					Total
	Interested In Trekking	Not Interested In Trekking With Reasons				
		Details Not Known	Expensive	Inadequate Arrangement	Other Reasons	
Andhra Pradesh	10.00	10.00	20.00	10.00	50.00	100
Assam	85.70	0.00	0.00	7.14	7.14	100
Bihar	43.00	14.30	14.30	9.50	19.00	100
West Bengal	50.60	9.70	12.20	7.17	20.30	100
Delhi	47.50	17.50	15.00	10.00	10.00	100
Haryana	100.00	0.00	0.00	0.00	0.00	100
Himachal Pradesh	100.00	0.00	0.00	0.00	0.00	100
Karnataka	60.00	0.00	0.00	0.00	40.00	100
Kerala	33.30	0.00	66.70	0.00	0.00	100
Maharashtra	65.90	0.00	12.20	9.80	12.20	100
Orissa	28.60	0.00	28.60	0.00	42.80	100
Punjab	0.00	0.00	50.00	0.00	50.00	100
Tamil Nadu	66.60	0.00	0.00	33.30	0.00	100
Uttar Pradesh	33.30	0.00	33.30	0.00	33.30	100
Total	51.29	8.80	13.10	7.70	19.10	100

Source: Bureau Of Economics & Statistics, Devt. & Planning, Govt. Of Sikkim.

Table:2.11(b)

**Distribution Of International Tourists (in %)
By Their Interest (1992) In Trekking
Activities In Sikkim (1992).**

Country Of Origin	Percentage Of International Tourists					
	Interested		Participated		Reasons For Not Participating	
					Facilities	Details
	Yes	No	Yes	No	Inadequate	Not Known
Australia	71.43	28.57	0.00	100.00	50.00	0.00
Austria	0.00	100.00	0.00	0.00	0.00	0.00
Belgium	100.00	0.00	0.00	100.00	0.00	0.00
Canada	100.00	0.00	62.50	37.50	66.60	33.30
Denmark	100.00	0.00	0.00	100.00	33.30	66.60
England	82.35	17.65	0.00	100.00	85.71	14.30
France	94.12	5.88	0.00	100.00	62.50	37.50
Greenland	50.00	50.00	0.00	100.00	0.00	100.00
Holland	80.00	20.00	25.00	75.00	100.00	0.00
Ireland	40.00	60.00	0.00	100.00	100.00	0.00
Israel	100.00	0.00	40.00	60.00	0.00	100.00
Italy	100.00	0.00	0.00	100.00	0.00	100.00
Japan	100.00	0.00	0.00	100.00	50.00	50.00
Malaysia	100.00	0.00	0.00	100.00	100.00	0.00
Mexico	100.00	0.00	0.00	100.00	100.00	0.00
Netherland	66.67	33.30	0.00	50.00	100.00	0.00
New Zealand	100.00	0.00	0.00	100.00	0.00	100.00
Norway	100.00	0.00	0.00	100.00	100.00	0.00
Portugal	0.00	100.00	0.00	0.00	0.00	0.00
Scotland	100.00	0.00	100.00	0.00	0.00	0.00
S.Korea	100.00	0.00	0.00	0.00	0.00	0.00
Spain	100.00	0.00	0.00	100.00	100.00	0.00
Sweden	100.00	0.00	0.00	100.00	100.00	0.00
Switzerland	100.00	0.00	0.00	100.00	20.00	80.00
U.S.A	85.19	14.81	0.00	100.00	65.22	34.78
Germany	80.00	20.00	0.00	100.00	0.00	100.00
Total	83.11	16.89	8.94	91.06	59.82	40.18

Source: Bureau Of Economics & Statistics, Devt. & Planning, Govt. Of Sikkim.

further publicity campaigns regarding the trekking facilities and attractions have to be made to attract more tourists interested in exploring the nature.

Regarding the international tourists scenario and their interest in trekking, this can be said that about 83% of the foreign tourists, were interested in trekking. From the origin wise analysis (Table: 2.11b) it is evident that foreign tourists irrespective of any country, visit Sikkim mainly with the intention of taking part in the trekking activity. But out of those who were interested, only 8.94% actually participated. The rest did not participate because according to 59.8% of them facilities were inadequate, and the remaining 40.2% were not aware of the details of the trekking arrangements.

(d) Tourist motivation attitude and levels of tourist satisfaction:

The survey revealed that majority of the tourists, both domestic and international, were encouraged to come to this place by their friends and relatives. Only few were influenced by the publicity made by Department of Tourism Sikkim, (Fig : 2.18).

An effort was also made to measure the level of tourist satisfaction regarding the various tourist facilities. Regarding the transport services the opinion of both domestic and international tourists was almost positive. 78% of the domestic tourists, and 79.7% of the international tourists did not face any difficulty while coming to Sikkim. Among those who faced difficulty, 65% complained about inconvenient bus timings, 21% about non-availability of buses and 8% about high taxi fares. Regarding the transport service for visiting the various tourist spots, 56% of the tourists felt satisfied. Scarcity of accommodation during the peak season is often faced by the tourists and many of

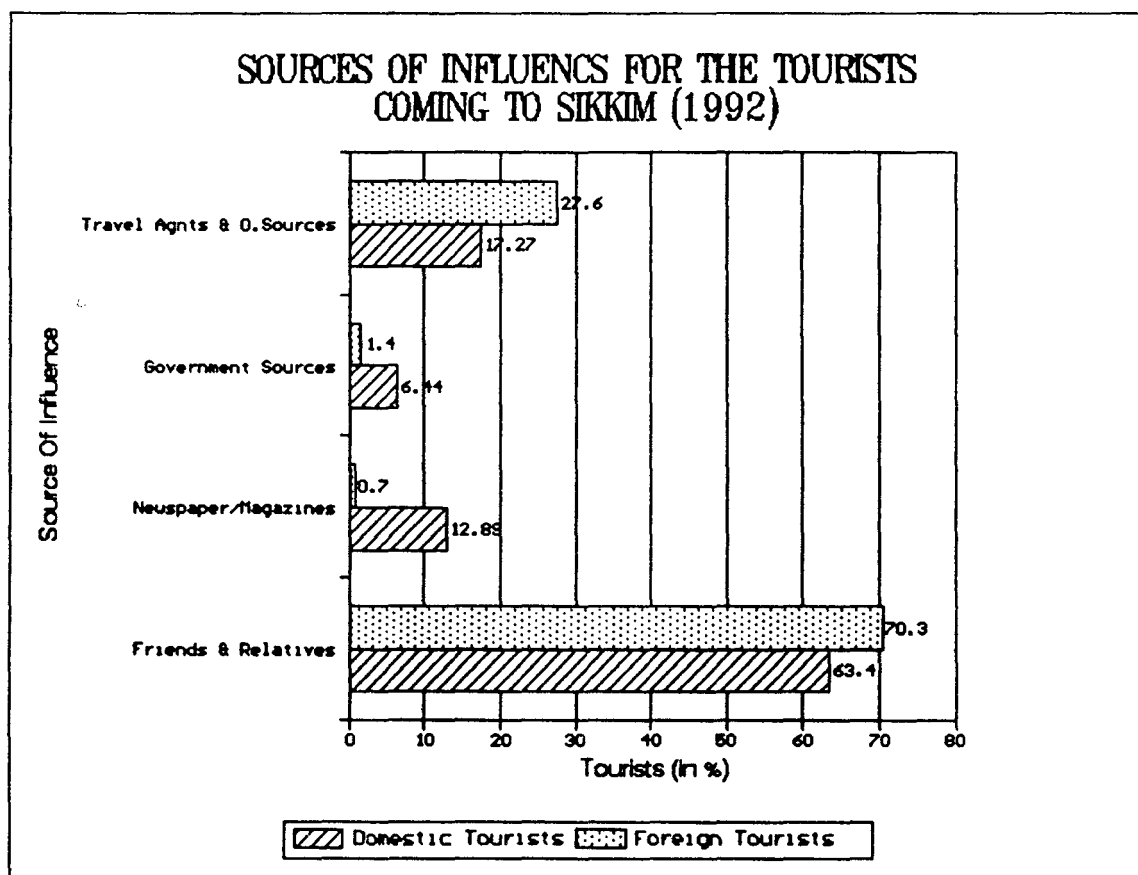


Fig 2.18

them inspite of their desire to stay longer fail to extend the duration of stay. The opinion of the tourists regarding the services rendered by the tourism department is not very encouraging. This is evident from the fact that only 30% of the domestic tourists contacted the tourism office. The better side of this fact is that out of those who contacted 70% were satisfied with their services. From this it may be concluded that Department of Tourism Sikkim lacks adequate publicity regarding the services offered by them. As a result the tourists market is being captured by the private tour operators. This, infact, is happening due to a deliberate step taken by the tourism department which is heading for privatization of the various sectors of tourist industry to introduce professionalism.

Chapter : 3

ELEMENTS OF SUPPLY IN TOURISM DEVELOPMENT

Tourism development embraces the provision of a wide range of facilities and services. The numerous types of facilities and services sought by the tourists can be grouped into the following broad sectors:

1. Attractions
2. Accommodation
3. Transport
4. Other infrastructural and supporting facilities

A study of all the sectors is vital, as an amalgam of attractions, accommodation, transport sector, and other infrastructural and supporting facilities makes up the tourist product which influences the marketing aspect of tourism industry. All these sectors have their respective functions. "The attractions induce the tourists to visit the area, transport services enable him to do so, the accommodation and supporting facilities (e.g. shops, restaurants) cater to his well-being while there and the infrastructure assures the essential functioning of all these."¹ All these things are to be designed and presented according to the requirements of the tourists. From the point of view of development, these facilities and services can be classified into three further

1. Pearce, D. (1981), "Tourist Development", Longman, London.

categories, depending on whether they are build for the purpose of tourism, transformed, or shared with other activities. Facilities built especially for tourism, range from attractions such as sancturies, orchid gardens to accommodations like resort hotels, trekker's huts etc. Others have been transformed from their original functions to some tourist use, for example farm corteges have become second homes and old canals and waterways have been restored for recreational boating. In other instances tourism may supplement the original activity - arrangements made for the tourists to visit the workshop of the local handicraft industry. Apart from these as in Sikkim, many monasteries and religious institutes like Institute of Tibetology attract the curious as much as the faithful. Tourist also may share their accommodation and transport with other travellers and also take advantage of services and infrastructures provided essentially for the residential population. Keeping all these in mind, in this chapter an attempt has been made to examine the spectrum of supply components, their functions and role in the development of tourist industry in Sikkim. In this section the study has been restricted mainly to those sectors like accommodation transport, and certain other infrastructural and recreational facilities. The elements of "attraction" which form one of the prior and deciding factors, which induce tourists to visit a particular area or spend their holidays in specific regions, has been dealt with in the previous chapter (Chapter 1).

A. Accommodation Sector :

The accommodation facility is one of those elements in tourist product which do not it self normally provide the motivation for tourist flows. But the

absence of these facilities may deter the tourist from travelling to enjoy the attractions. Accommodation and other related facilities like restaurants, road-side eating joints, are some of the necessities demanded by the several tourists. Absence of boarding and lodging facilities would be an obvious constraint to tourism.

Requirement of a comfortable accommodation, while away from home, has led initially to the development of shelter for travellers. In Sikkim Buddhist monks in various monasteries were perhaps the pioneers who institutionalised the concept of a shelter and food to the travellers who either came for pilgrimage or in search of knowledge and wisdom. It is also observed that these monasteries were mostly located on the earlier trade routes through which inter-regional trade flourished. With the introduction of trade and commerce the concept of a shelter was transformed into hotels. With the passage of time, the accommodation sector has undergone dramatic changes. The changes are also reflected in the facilities and amenities available in these hotels which have managed to cater to the varying needs of the tourists. Even the architectural feature, facades also took distinctive turns to suite the regional and local setting. In the recent years, specially since late '80s, the increase in the tourist flow to Sikkim, have induced mushroom growth of hotels and guest houses. In this section, growth, distribution ownership, and structural pattern and the facilities provided by the accommodation sector will be examined with the help of statistical information obtained from the survey of hotels conducted by Sikkim Bureau of Economics and Statistics during 1991-92.

Table 3.1

**Distribution Of Hotels In Sikkim By Their
Years Of Establishment.**

(in percentage)			
Years	Urban	Rural	Total
Before 1975	2.66	5.55	3.23
1975-80	8.00	0.00	6.45
1981-85	6.66	16.66	8.60
1986-90	45.33	27.77	41.94
1991-92	29.33	16.66	26.88
Not Reported	8.00	33.33	12.90
Total	100	100	100

Source: Bureau Of Economics & Statistics,
Devt. & Planning, Govt. Of Sikkim.

(i) Growth of the hotels and restaurant sector:

The gradual emergence of Sikkim as an area of tourism in the country has created a high-degree of potential for the development of Hotel Industry. The first hotel in Sikkim came up sometimes in 1948-1949 in the form of a small restaurant cum hotel. Prior to this hotel, the rest houses and daktungalows maintained by the government of Sikkim were the only accommodation for the incoming tourist in Sikkim. The close door approach, lack of adequate transport facilities coupled with rigid regulations imposed on the international tourists affected the development of tourism as well as restricted the development of accommodation sector. But recently with the improvement of transport facilities and certain relaxation of restrictions on the movement of the foreign tourists, the tourists inflow has gone up, impact of which is witnessed in the fast development and growth of hotel industry. Prior to merger of Sikkim with Indian union there were only 3 hotels catering to the needs of travellers who used to come mostly on official visit. Sikkim had witnessed development of hotels mostly during Seventh Plan period. More than half of the hotels started operating during 1986 onwards. The table 3.1 shows the distribution of hotels by their year of establishment. About 12.9% of the hotels failed to furnish the exact year of establishment, presumably these have come up in the 80s.

The growth of restaurants also showed significant boost during the Seventh Plan period. It has been observed that 53.37% of restaurants started operating during 1985-90 only. During 1991-92 alone 12.4% of the restaurants have started functioning. Distribution of restaurants by their age of establishments are given in Table :3.2.

Table: 3.2

**Distribution Of Restaurants In Sikkim
By Their Year Of Establishment.**

Year	Urban	(in %) Rural	Total
(1991-92)	12.9	11.11	12.36
(1990-91)	9.67	5.55	8.43
(1985-86 to 1989-90)	54	51.85	53.37
(1980-81 to 1984-85)	10.48	11.11	10.67
(1975-76 to 1979-80)	2.4	1.85	2.24
(Prior to 1975-76)	4.03	1.85	3.37
Not Reported	6.45	16.66	9.55
Total	100	100	100

Source: Bureau Of Economics & Statistics,
Dev't. & Planning, Govt. Of Sikkim.

(ii) Distribution of accommodation facilities :

In Sikkim there are 93 hotels, 44 guest houses and 178 restaurants during 1991-92. As per the definition followed during the survey, "hotel" is a place or an establishment where people can avail of the boarding facilities normally on a payment basis, for any period of time as per their requirements, under certain norms and conditions as laid by the management or owners. It may provide prepared food, readymade snacks, refreshments etc. to its boarders or not. Guest houses are needed to be distinguished from hotels. Private guest houses running on commercial basis providing accommodation with or without food facility were included with the hotels. Only the dak bungalows, rest houses, inspection bungalows, constructed and run by government organisations were included for the purpose of the survey. "Restaurants are generally eating places where prepared meals, refreshments and snacks are sold for immediate consumption without any provision for lodging. Enterprises serving food alongwith the accommodation facilities have been included under hotels.

It has been observed that hotels and restaurants were mostly concentrated in urban areas (Table : 3.3). Out of every five hotels, four are in urban areas and one in rural area. 80.65% of the hotels are located in urban areas. There are seventy-five hotels distributed in eight towns. In case of restaurants, however, number of enterprises in rural areas are proportionally higher than the hotels. Guest houses are mostly located in rural areas as those are primarily intended to provide shelter to officials on their official visit in rural areas. None of the guest houses in urban areas are normally available for the tourists visiting this state, other than those coming on official visits. Only two guest houses

Table:3.3**Rural Urban Distribution Of Hotels, Guesthouses & Restaurants In Sikkim (1992).**

Items	Rural	Urban	Total
Hotels (In %)	18.00 (19.35)	75.00 (80.65)	93.00 (100.00)
Guest Houses (In %)	33.00 (75.00)	11.00 (25.00)	44.00 (100.00)
Restaurants (In %)	54.00 (30.54)	124.00 (69.66)	178.00 (100.00)
Total (In %)	105.00 (33.31)	210.00 (66.67)	315.00 (100.00)

Source: A Report On Hotels, Guest Houses & Restaurants In Sikkim '(1991-92), Bureau Of Economics & Statistics, Devt. & Planning, Govt. Of Sikkim.

Table:3.4**Districtwise Distribution Of Hotels, Restaurants And Guest Houses In Sikkim (1992).**

Disticts	Hotels	Restaurants	Guest Houses
North (in %)	7 (7.53)	13 (7.3)	9 (20.45)
East (in %)	64 (68.2)	130 (73.03)	13 (29.55)
South (in %)	12 (12.9)	19 (10.67)	7 (15.91)
West (in %)	10 (10.8)	16 (8.99)	15 (34.09)
Total (in %)	93 (100)	178 (100)	44 (100)

Source:, Bureau Of Economics & Statistics ,
'Devt. & Planning, Govt. Of Sikkim.

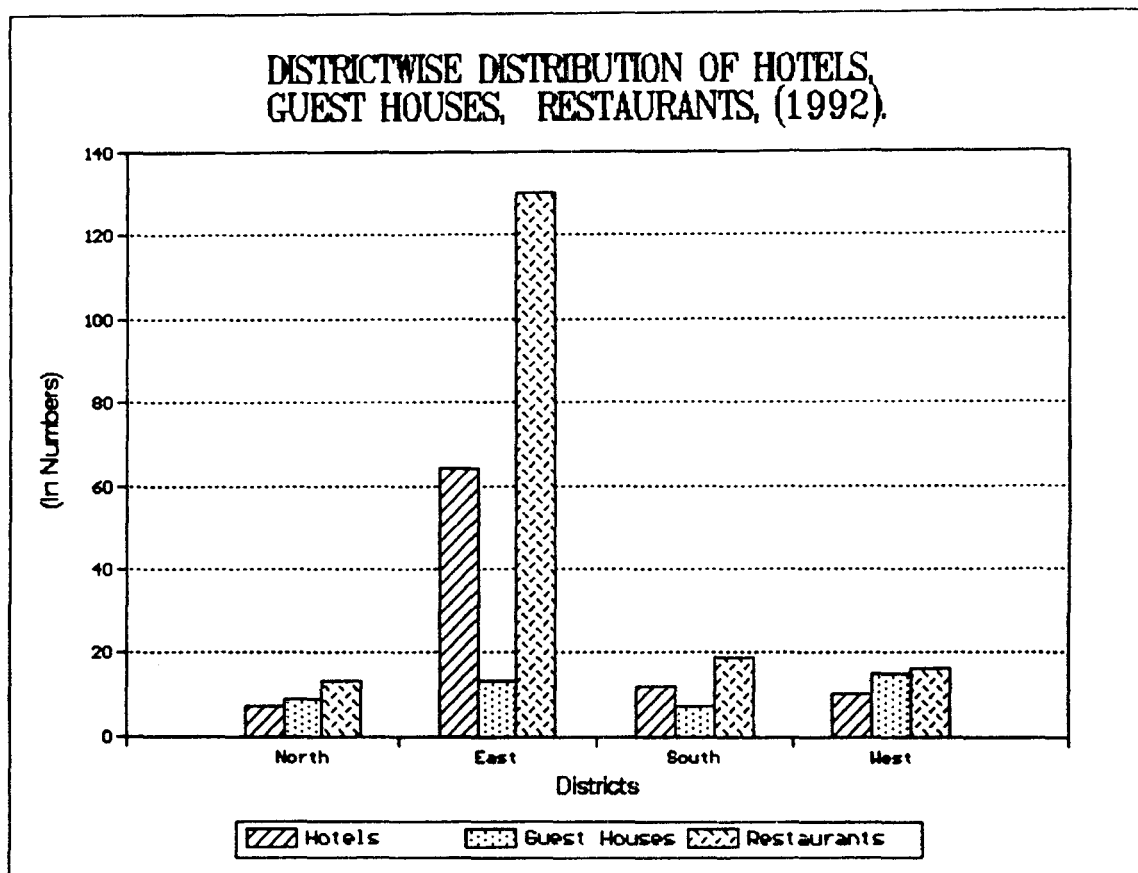


Fig 3.1

maintained by the Fisheries Department are available for tourists on specific request.

It is found that 65.7% of the accommodation facilities which constituted the majority, are located in the East district, (Fig. 3.1). 68.8% of the hotels and 73% of the restaurants are located in this district. Only in case of guest houses, almost 34.09% of them are located in the West district, whereas 29.5% are in the East district, (Table 3.4). It is found that most of the tourist accommodations are located in and around Gangtok, which is the nerve centre, state capital and headquarter of East-district. The South and West districts have only 12.06% and 13.02% of the tourist accommodations respectively. North district has only 9.21% of the facilities. Another striking feature is that, in case of both East and South districts majority of the hotels are located in the urban areas, whereas in case of North and West districts, the majority of the accommodation is located in the rural areas, (Table : 3.5).

Table : 3.5
District-wise Distribution of Hotels
(In Percentage) by Location

District	Urban	Rural	Total
North	42.9	57.1	100
East	89.1	10.9	100
South	91.7	8.3	100
West	40.0	60.0	100
State	80.6	19.4	100

Source : Bureau of Economics & Statistics, Devt. & Planning, Govt. of Sikkim.

(iv) Accommodations by the type of ownership:

The private sector plays predominant role in the ownership of hotels and restaurant in the state, whereas majority of the guest houses are maintained by the state government. Out of every ten guest houses, nine are maintained by state government and only one is maintained by the Central Agency. The State Public Works Department maintains the maximum number of guest houses (39%) followed by Forest Department (34%). The table : 3.6 shows location-wise number of guest houses/dak bungalows maintained by various state and central government departments/organisations.

In the hotel industry the contribution of the government sector accounts for only 4% of the total. In 1991-92 there were only four hotels run on commercial basis under the government sector of which three were located in East district and one in the West district. But as per the current data three more hotels run by the Department of Tourism have been opened, out of which, two are located in the West district and one in the North district, (table : 3.7). Out of 178 restaurants only one, located in Gangtok, has been operating commercially by the state government and the rest are all under private ownerships. But in this context it would be mentioned that currently an issue has been raised regarding the restructuring of the management setup in the hotels and restaurants which are under the control of Tourism Department. A proposal has already been moved by the department for consideration of the government to privatise or form autonomous bodies to manage the hotels and restaurants.

Table: 3.6

**Guest Houses, Dakbungalows Maintained By Various
State & Central Government Departments In Sikkim.**

Departments	Urban	Rural	Total
State Government			
S.P.W.D.	4	13	17
Forest Department	1	14	15
Rural Development	2	2	4
Power Department	1	1	2
Fisheries Department	0	2	2
Central Government			
C.P.W.D	1	0	1
Postal Department	1	1	2
N.H.P.C.	1	0	1
Total	11	33	44

Source: Bureau Of Economics & Statistics,
Devt. & Planning, Govt. Of Sikkim.

Table: 3.7

**Tourist Lodges And Hotels Maintained By
Department Of Tourism, Govt. Of Sikkim.**

Name	Location	District
1.Siniolchu Lodge	Gangtok	East
2.Rangpo Tourist Centre	Rangpo	East
3.Trekkers Hut	Pemayangtse	West
4.Lachung Hut	Lachung	North
5.Hotel Mayur	Gangtok	East
6.Hotel Mt. Pandim	Pemayangtse	West
7.Versey Hut	Versey	West

Source: Bureau Of Economics & Statistics,
Devt. & Planning, Govt. Of Sikkim.

(v) Accommodation by type of structure :

As per the survey three types of structures have been considered. A 'pucca' (permanent) structure is one whose walls and roofs are made of pucca materials such as cement, burnt bricks, tiles, timber, asbestos sheets etc. 'Semi-pucca' (semi-permanent) structures are those which have either the walls or roofs but not both, made of pucca materials, 'Kutchcha (temporary) structure' is the one which has walls and roof made of non-pucca materials such as thatch, stone, mud, bamboo etc.

Majority of the hotels and restaurants have a pucca structure as 86% of the hotels and 71% of the restaurants have pucca structure. None of the hotels have kutchcha structure and only 3.93% of the restaurants have kutchcha structure.

(vi) Nature of activities and facilities provided:

The main activity of the hotels and guest houses is to provide lodging facilities to the tourists, with or without arrangements of food. It has been observed that in one out of every five hotels, only lodging facilities are available. Rest provided both boarding and lodging. From the districtwise distribution (table : 3.8) it is found that there is no hotel in the West district which is only for lodging but in East district almost 23% of the hotels are of this category. This may be to meet the demand of the tourists coming to West District, which receives second largest number of tourists after East district yet have lesser number of restaurants which provide readymade food and refreshments. In the East-district almost 69% of the hotels, provided boarding as well as lodging. Majority of the hotels provide both vegetarian and

Table:3.8**Distribution Of Establishments In Sikkim By
Nature Of Activity (1992).**

District	Lodging Only	Boarding & Lodging	Principal Food Only
North (In %)	1 (14.3)	6 (85.7)	0 (0)
East (In %)	15 (23.4)	44 (68.75)	5 (7.87)
South (In %)	2 (16.6)	10 (83.3)	0 (0)
West (In %)	0 (0)	10 (100)	0 (0)
State (In %)	18 (19.35)	70 (75.27)	5 (5.41)

Source: Bureau Of Economics & Statistics,
Devt. & Planning, Govt. Of Sikkim.

non-vegetarian food depending upon the choice of the customers. Only four hotels, all located in East district provide only vegetarian food.

The guest-houses are mainly meant for accommodation. None of the guest houses are found to provide readymade food to the visitors. However, cooking facilities i.e. kitchen along with cooking appliances are made available in twenty-nine guest houses. Three in urban area and twelve guest houses in rural areas do not have even cooking appliances available for the boarders.

The restaurants provided facilities for both prepared meals as well as snacks and refreshments. It has been observed that 71.3% enterprises provide principal meals. Only 29% of the restaurants serve snacks and refreshments only. Majority of restaurants (66.3%) serve both vegetarian and non-vegetarian food whereas 5.6% and 20.8% of the restaurants serve only vegetarian and non-vegetarian food respectively. From this it may be concluded that majority of the restaurants aim to capture a wide market by keeping both options for food open. East district, receiving the largest number of tourists, is the only one which houses all types of restaurants. Most of the restaurants (37.6%) offer beverages and soft drinks. 32.6% of them offer alcoholic drinks along with beverages and soft drinks whereas only 11.8% offer solely alcoholic drinks. 18% of the restaurant do not serve any drinks.

All the hotels and restaurants even those housed in semi pucca and kutchcha structures have electricity connections. All the guest houses, in urban areas are electrified but 25% of the guest houses in rural areas are without electricity connection. In almost all the four districts most of the hotels and restaurants have the facilities of piped water. Telephone facility is available in a

limited number of hotels, guest-houses and restaurants and almost all having this facility are located in and around Gangtok. Additional facilities such as the conference halls, telex facility, indoor games and transport for sight-seeing are available only in a selected few.

Thus, it is found that the accommodation sector of tourism industry in Sikkim mainly concentrates in providing adequate lodging and boarding facilities to the tourists. They are yet to spread their wings by widening the variety of their facilities which are considered as attractive accessories to simple boarding and lodging. Regarding this the accommodation sector in the East district has been successful to certain extent which may be one of the reasons for pulling greater number of tourists to this district.

(vii) Accommodation capacity and the charges paid for them:

Availability of comfortable accommodation for the in- coming tourists is one of the basic obligatory item to be developed at the outset before tourism can be considered as an industry. Therefore, there rises a need to examine the holding capacity of the existing accommodation sector which will help in forecasting the future requirements.

The survey revealed that there were 927 rooms available in various hotels and guest houses, spread over the four districts. 87.26% of these rooms are available in the hotels while the remaining 12.8% are found in the guest houses. A districtwise spread of these rooms indicates that East district accounts for the major share, having 73.3% of the rooms available in the state followed by West, South and North districts, each having 13.3%, 8.95% and 4.53% of the total share respectively, (Fig 3.2). The North district has equal number of rooms

**DISTRICTWISE DISTRIBUTION OF ROOMS IN
HOTELS & GUESTHOUSES IN SIKKIM (1992)**

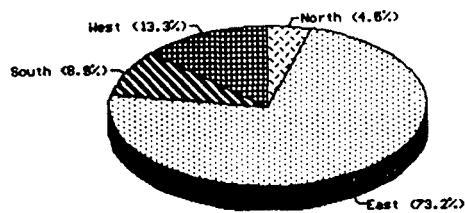


Fig 3.2

**DISTRICTWISE DISTRIBUTION OF BEDS IN
HOTELS & GUESTHOUSES IN SIKKIM (1992)**

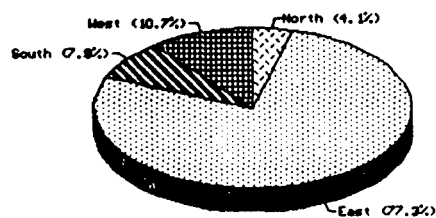


Fig 3.3

available both in hotels and guest houses, where as in the three other districts majority of the rooms are available in the hotels. Moreover, as already mentioned except two guest houses run by the Fisheries Department, rooms in the guest houses are normally not available for the tourists. Thus, the hotels are the main support in the development of tourism. A district-wise spread of the rooms provided by the hotels indicates that in East district alone, there were 79.33% of the rooms followed by West district with 10.52% of the rooms. Remaining 10.15% were distributed in the North and South districts, (Table 3.9).

In terms of facilities available 59% of the rooms have attached bathrooms and the remaining 41% have common bathrooms. There were 506 two-bedded rooms which accounted for 63% of the total rooms available in these hotels. 15% of those rooms were single bedded. Dormitory which had 5 or more beds accounted for 4% of the total rooms while 19% of the rooms had a capacity of 3-4 beds. Capacity wise number of rooms available in these hotels spread over the four districts are given, (Table : 3.10). At any point of time on a single day 2203 beds were available in all the hotels and guest houses to accommodate the visitors. Once again the East district led in the share of tourist beds by having 77.3% of the beds, followed by West, South and North districts, with 10.71%, 7.94% and 4.08% of beds respectively. (Fig. 3.3)

Out of 2203 beds available in Sikkim, 1934 beds were available in hotel to accommodate the visitors which is considered inadequate to meet the growing needs of incoming tourists in the state particularly during the peak seasons. The shortage of beds is more in the East district which receives proportionately

Table:3.9**Districtwise Distribution Of Rooms Available In Hotels And Guest Houses In Sikkim (1992).**

Number & Percentage Share Of Rooms In						
District	Hotels	%	GuestHouses	%	Total	%
North	21	2.59	21	17.6	42	4.53
East	641	79.33	38	31.9	679	73.25
South	61	7.55	22	18.5	83	8.95
West	85	10.52	38	31.93	123	13.3
State	808	100	119	100	927	100

Source:Bureau Of Economics & Statistics, Devt. & Planning,
Govt. Of Sikkim.

Table:3.10**Districtwise Distribution Of Tourists Beds In Hotels And Guest Houses In Sikkim (1992).**

District	Hotels	%	GuestHouses	%	Total	%
North	38	1.96	52	19.33	90	4.08
East	1622	83.86	80	29.73	1702	77.25
South	130	6.72	45	16.7	175	7.94
West	144	7.45	92	34.2	236	10.71
State	1934	100	269	100	2203	100

Source:Bureau Of Economics & Statistics, Devt. & Planning,
Govt. Of Sikkim.

larger number of visitors. Out of every five beds four are found to be in the East district. Although there is recent spurt of the visitors in the West district, its share in the total available beds was 7.45% of the total beds available in the state. Average number of beds available was found to be 20.80 beds per hotel, while average availability of beds per room accounted to 2.39 beds, (Table 3.11).

In case of the guest houses in the state of Sikkim, 269 beds are available in the total 44 guest-houses maintained by various State and Central Governments Organisations/Department. On an average, there are 6.11 beds available per guest-house in the state. However, proportion of beds available per guest house was much higher (7.64%) in urban areas compared to rural areas (5.6%). But as already mentioned guest houses are primarily meant for the official visitors, therefore, they play a minor role in accommodating tourists.

The room rent charged for various types of tourist accommodation approximately ranges between a minimum of Rs. 25 for the dormitories and a maximum of Rs. 3000 for double bed rooms in hotels. Single bed rooms are available within a range of Rs. 40 and Rs. 1150. The average charges in the hotels are slightly more than that of lodges. The Table 3.12 shows the distribution of accommodation charges.

B. Transport

Historically the development of tourism has been closely associated with advances in transport technology. This is because accessibility is a very crucial factor as it is a means by which tourist can reach the area where attractions are

Table: 3.11

**Districtwise Availability Of
Beds Per Hotel, In Sikkim, (1992).**

=====	
District	No: Of Beds Per Hotel

North	5.42
East	25.34
South	10.83
West	14.4

State	20.8

Source: Computed From The Data
Obtained From Bureau Of Economics
& Statistics, Govt. Of Sikkim.

Table:3.12

**Range Of Accomodation Charges By Type Of Accomodations
In Sikkim (1992).**

Types Of Accomodation	Charges(in Rs) By Types Of Rooms			
	Single	Double	Suite	Dormitory
Three Star Hotels				
Maximum Charge	1150	1900	2400	
Minimum Charge	200	250	465	
Other Hotels				
Maximum Charge	770	3000	1500	70
Minimum Charge	40	80	350	25
Lodges				
Maximum Charge	400	500	350	75
Minimum Charge	50	75		30
Guest Houses				
Maximum Charge	850	1300	850	
Minimum Charge	150	150	450	

Source: Department Of Tourism, Govt. Of Sikkim.

located. Tourist attractions of whatever type would be of little importance if their locations are inaccessible by the normal means of transport. Therefore, the distance factor, the availability and cost of transport plays an important role in determining a tourist's choice of destination.

The communication system in Sikkim is entirely dependent upon the availability of road transport. There is no direct air or rail link. The nearest railway station New Jalpaiguri and airport Bagdogra both are located in West Bengal.

A helicopter service had been started between Bagdogra and Gangtok (having a military helipad at Tadong) for a few months in 1982 but the service was discontinued for want of passengers. Therefore, the importance of road development in this state, needs no emphasis.

(i) Nature of roadways:

The state of Sikkim which covers 0.21% of the area of the Indian union has only 0.11% of the total Indian road length. The roads in Sikkim mostly and administratively constructed and maintained by Border Road Project Organisation (Swastik and GREF). But quite a considerable mileage are also maintained by SPWD and CPWD. These roads cut through mountainous terrain, and are difficult in construction. At the end of 1979-80, as per the records of Sikkim Public Work Department, there were 1,288 kms of road in various categories, which included 40 kms of National Highway (31-A), 584 kms of State Highways, 343 kms of Major District roads and 321 kms of other district roads. By 1991-92, the total road length increased to 2,243 kms but the length under National Highway remained the same at 40 km and limited only in

the East district. The other categories of roads registered a considerable increase in the North and East district. There was an overall increase in the road length in the West district also. South district registered a marginal decrease. The table : 3.13 shows the type and length of roads till the end of 1991-92.

As compared to India which has a road density of 0.61 km of road per sq. km, the road density in Sikkim is only 0.31 km per sq.km, as per the 1991-92 data. From the table 3.14 showing the road density in Sikkim, it is evident that there is much inter-district disparity.

East district has a comparatively high road density having 1.06 km of road per sq. km., whereas the South, West and North districts have road density of 0.48 km, 0.33 km and 0.11 km respectively, per sq. km of area. Overall the road density increased between 1979-80 and 1991-92, except in South district. The East district seems to be the most favoured one and the North district seems to be the most neglected one. Accessibility is very poor in the North district, which covers 59.6% of the state area but has only 21.4% of the total road length. East district which covers 13.4% of the state area while has 45.4% of the total road length, therefore, can be considered to be the most accessible district. This is one of the reasons why East district attracts largest number of visitors. The system of transportation of passengers and goods both within and in the adjoining areas in the state has certain peculiarities which are prone to adverse conditions like landslides and road damages due to heavy rainfall. This necessitates imposing strict restrictions on maximum traffic flow, seating and loading capacity of the buses and goods vehicles.

Table:3.13

Districtwise Distribution Of Roads In Sikkim By Type And Length.
(length in kilometers)

Types Of Roads	1979-80					1991-92				
	Districts					Districts				
	North	East	South	West	State	North	East	South	West	State
National Highway	-	40	-	-	40	-	40	-	-	40
State Highways										
Surfaced	135	209	198	42	584	266	387	59	68	780
Unsurfaced						114	43			157
Total	135	209	198	42	584	380	430	59	68	937
Major District Roads										
Surfaced	46	116	84	97	343	24	111	79	52	266
Unsurfaced						32	103	26	19	180
Total	46	116	84	97	343	56	214	105	71	446
Other District Roads										
Surfaced	20	101	95	105	321	4	24	39	47	114
Unsurfaced						41	310	157	198	706
Total	20	101	95	105	321	45	334	196	245	820

Source: Sikkim - A Statistical Profile'(1979-80 & 1991 - 92), Govt. Of Sikkim.

Table:3.14

Districtwise Change In The Road Density In Sikkim.

Types Of Roads	Road Density'(in km/sq.km).									
	1979-80					1991-92				
	North	East	South	West	State	North	East	South	West	State
National Highway		0.042			0.006		0.042			0.006
State Highways	0.032	0.219	0.264	0.036	0.082	0.09	0.451	0.079	0.059	0.132
Major District Roads	0.011	0.122	0.112	0.038	0.049	0.013	0.224	0.14	0.061	0.063
Other District Roads	0.005	0.106	0.127	0.275	0.045	0.011	0.35	0.261	0.21	0.116
Total	0.05	0.488	0.503	0.209	0.176	0.11	1.067	0.48	0.329	0.316

Source: Computed From The Data Obtained From Sikkim - A Statistical Profile '(1979-80 & 1991-92), Govt. Of Sikkim.

(ii) **Nature of traffic flow & modes of transport:**

Passenger and freight are the two main heads of traffic handled by any form of transport. The following table:3.15 shows the number of vehicles registered between 1979-92.

Table : 3.15
Number of Vehicles Registered in
The State Between 1979-92

Item	Number
1. Scooter & M.Cycle (Two Wheelers)	1645
2. Private & Govt. vehicles (Car/Jeep/Gypsy/Van)	2858
3. Goods carrier (Truck/DCM Toyota/Nissan)	0825
4. Contract Carriage (Bus/Taxies/Local Taxies)	1146
5. Tractor/Trailers/Rollers	0013

Source : Department of Motor Vehicles, Govt. of Sikkim.

Out of these contract carriages (Bus/Taxies/Local Taxies) is the main mode of transport for the tourists. The role of the goods carrier is no less important as they transport various necessary goods needed by the local residents as well as the tourists. Apart from these there are passenger bus services run by Sikkim Nationalized Transport whose number increased from 58 to 137 between 1979-80 and 1991-92. But the number of buses which actually operated increased from 35 to 90 by 1991-92. They also run goods vehicles, some of which are owned by them and the rest are hired private trucks. The fleet of

truck actually running on road increased from 51 to 139. According to 1991-92 information the total route length covered by SNT service, is 3,727 kms. Between 1979-80 and 1991-92, there has been an increase of 9346 kms in the average distance covered daily by SNT passenger services. This implies that since last ten years, the transport network has been extended to some of the previously inaccessible regions, which lacked transport service. Altogether there are 16 SNT depots and their transport services operate in 58 routes, covering various regions within the state including a few spots in the neighbouring state. Out of these total 58 SNT routes, 19 routes originate from Gangtok. They are the following :

Table : 3.16
SNT Routes Originating From Gangtok

Routes	Daily Bus Frequency
Gangtok - Bagdogra	1
Gangtok - Siliguri	9
Gangtok - Darjiling	1
Gangtok - Kalimpong	2
Gangtok - Gyalshing	2
Gangtok - Namchi	2
Gantok - Rangli	2
Total	19

Source : Bureau of Economics & Statistics, Devt. & Planning, Govt. of Sikkim.

Thus 32.75% of the routes are from Gangtok. Therefore, Gangtok can be considered to be the most important transport node.

It is also found that between 1979-80 and 1991-92 the number of bus passengers per year has also increased by 5.79 lakh passengers per year. An increase of 1.74 lakh metric tonnes of freight has also been reported, during the same period. The earnings from transport sector has registered an increase of Rs. 4.48 per km whereas the cost of operating has increased only by Rs. 1.84 per km. This showed that by 1991-92 the entire transport system gained efficiency and has been running in profitable conditions. Whether the growth of transport sector and tourism industry had been complementary to each other will be further examined in the following chapter.

C. Infrastructural and Recreational Facilities

In addition to transport there are certain other services under public utility in the form of power and water supply, sewage disposal, banking, health, postal and telecommunication services, which are essential for comfortable and healthy living. Much of these facilities will also serve the resident population, but depending on the type of development, it may also be developed or expanded for the tourists. The critical point regarding infrastructure is that although it is essential, it is basically a charge on development. With few exceptions, such as toll tax, the infrastructure does not by itself generates revenue directly. But the availability of these facilities are necessary for healthy development and whose absence will cause adverse impacts on the host region.

In Sikkim both urban and rural areas are 100% electrified. There are 109 post offices all over the state. The 5 telegraph offices are located at Rangpo, Mangan, Gyalshing, Singtam and Rhenock. All over the state there are 34 public call offices. All the four districts are connected by telephones having 2007 main connections and 169 extensions. The state has 5 hospitals, 24 primary health centres and 144 primary health sub-centres. Distributed all over the state there are 875 beds and 140 doctors. The banking facilities in the state consists of 42 public sector banks and 21 units of State Bank of Sikkim. All these facilities are shared by both the local residents and the tourists. One thing which is quite striking is that in case of all sorts of infrastructural facilities the East district is better off and the North districts lags behind.

Beside the provision of these immediate facilities, quite a range of supporting services and entertainment facilities are demanded by the tourists. A variety of shops will be needed, some oriented specifically for the tourists, such as souvenir shops and those selling local handicrafts. Others supply a general range of goods, for example chemists, foodstores, clothing shops etc. Many of these auxiliary services and facilities serve a larger section of residential clientele and also the tourists. The following (table : 3.17) gives the number of establishments registered under the Sikkim, Shops and Commercial Establishments Act 1983.

Table : 3.17

**Number of Establishments Registered Under the Sikkim shops
& Commercial Establishments Act 1983**

Item	Nos added in 1991-92	Total at end of 1991-92
1. Shops & Commercial Establishments	233	4097
2. Hotels & Restaurants	26	661
3. Cinema Theatre & other Places of Public Amusement or Entertainment	6	78

Source : Labour Department, Govt. of Sikkim.

Trekking in the hills has become a popular activity and quite a number of adventure loving tourists visit Sikkim to take part in the mountain treks. The Adventure Division of Sikkim Tourism Department and 84 government recognized travel agents are there to help the tourists by providing them with all sorts of facilities needed. Trekkers' huts are available along the trek routes at Pemayangtse, Khechopalri, Yuksom, Tsokha, Dzongri, Thengshing, Zemethang, Chaurigang, Tashikding, Varsey, Yangang, Rebongla, Sang and Sikip. Most of

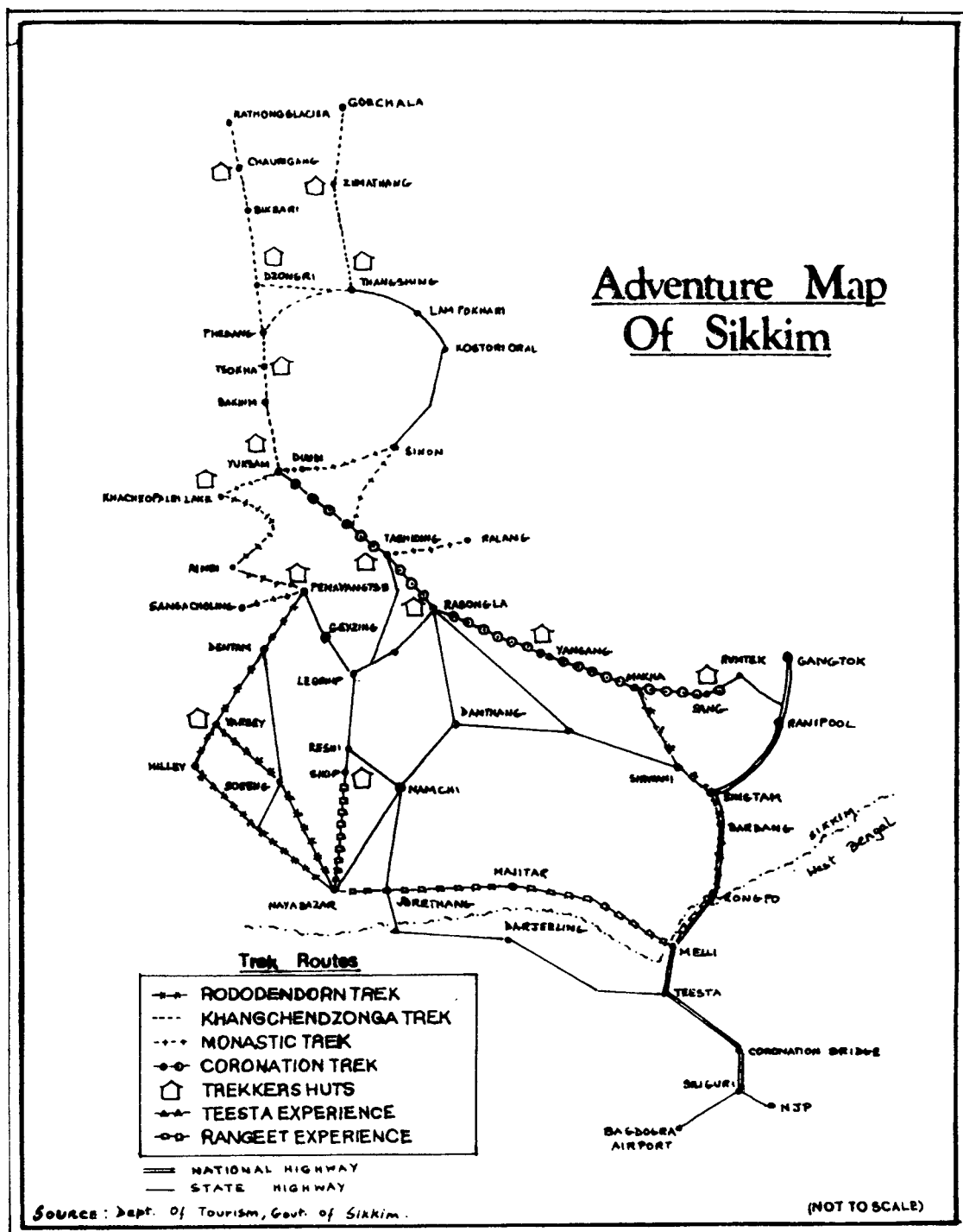


Fig: 3.4

the camping points have primary health centres. Trekking equipments like ruck sacks, sleeping bags, tents, jackets can be hired from the Tourist Department at a nominal rate. The tourism department and some of the private travel agencies arrange for white water rafting trips, kayaking, and yak safari as a part of adventure tourism. Other provisions for entertainment and recreation include flower shows, food and traditional dance festival arranged by Department of Sikkim Tourism. All these additional facilities are arranged to extend the tourist season and also to attract a larger number of tourist even to the not so famous but equally attractive spots, having high potential for tourism development.

Chapter - 4

SPATIAL PATTERN OF TOURIST ACTIVITY AND POLICY FRAMEWORK

Tourism is a very complex industry because of its multifaceted activities which together produce the tourist 'product' and various sub-sectors that are themselves complete industries, if considered independently (lodging industry, transport industry etc). Its complexity furthermore, lies mostly in the fact that tourist promotion, in its various forms, has to be directed at a larger number of people having various socio-economic backgrounds, different needs, tastes, attitudes, expectations, and behaviour pattern, Efficient marketing is the one which succeeds in penetrating the people's tastes and preferences. The understanding that people are different in the same market helps in planning an efficient marketing strategy. Krippendorf has defined marketing in tourism as follows:

"Marketing in tourism is to be understood as the systematic and coordinated execution of business policy by tourist undertakings whether private or state owned at local, regional, national, or international level to achieve the optimal satisfaction of the needs of identifiable consumer groups and in doing so to achieve an appropriate return."¹

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1. Bhatia, A.K. (1994), "Tourism Development : Principles and Practices," Sterling Publications, N.Delhi.

Prior to the framing of any tourism marketing strategy, a study on the demand and supply relation is necessary. This is because it should aim at that position when the infrastructure and other facilities offered are geared to the demand. Keeping this in mind the state of tourism industry in Sikkim will be evaluated from the viewpoint of balance between demand and supply. Excess or lack of either of the components might jeopardise the balance which would adversely affect not only the industry but will be a burden on the society, economy and the environment of the host region. Moreover, it will also be examined as how have spatial distribution of various demand and supply factors influenced the travel pattern of the tourists visiting Sikkim? The development of tourism sector through plan effort will also be examined.

As already mentioned in the previous chapters, the demand factors include the volume, origin and types of visitors while the supply variables include the nature and distribution of the attractions, the development of transportation network accommodation, entertainment and other infrastructural facilities.

Out of these basic components of a tourist product, availability of tourist attractions is of vital importance. Unless these are there, the tourists will not be motivated to visit a particular place. Attractions are those elements in the tourist product which determine the choice of a particular tourist to visit one particular destination rather than the other. The most well known and the 'so called' popular tourist attraction spots are the ones which attract larger number of tourists compared to the one not so famous and untapped spots of attractions having future potentials which are yet to be discovered by the majority. The later are visited by more curiosity minded tourists who are generally, fewer in

number, and are always in search of new resources. Thus, there is a close relation between the presence of recognized and well known sources of tourist attractions and the volume of tourist visiting them. This becomes quite clear from table : 4.1.

Table : 4.1 DISTRICTWISE DISTRIBUTION OF TOURIST SPOTS AND TOURIST FLOW

DISTRICT	NO: of tourist spots	% of tourists
North	4 (21.05%)	10
East	9 (47.36%)	70
South	1 (5.26%)	5
West	5 (26.32%)	15
STATE	19 (100%)	100

Source : Comupted from the data obtained from Department of Toursim Govt. of Sikkim.

But this presents only a rough idea, as it may happen that quite a few of the tourists who have visited the tourist spots located in the districts other than their destination of stay, as only a part of their day trip. But still, the attraction factor definitely influences volume of tourist flow. Their seasonal appeal often results in variations in tourist demand.

Accommodation facility constitutes a vital part of tourist supply. An adequate supply of accommodation suitably tailored to the requirements of the tourism market is one of the basic conditions of tourism development. Infact the

type and pattern of tourism, is to a great extent, dependent on the type and quantity of accommodation available. In the state of Sikkim the "average tourist days" are found to be 4 days. The "occupancy rate" in hotels and guest houses, for the entire state has been 37.38, which can be graded as a moderate one. It might be inferred from this that, on an average the accommodation capacity is able to meet the tourist demand, at least to some extent, if not fully. The districtwise variation in the occupancy rate presents an interesting picture table : 4.2.

Table : 4.2 DISTRICTWISE VARIATION IN OCCUPANCY RATE

DISTRICT	TOURISTS	NO:OF BEDS	OVERNIGHTS	OCCUPANCY RATE (Index)
NORTH	7,489	90	29956	91.2
EAST	52,429	1702	209716	33.8
SOUTH	3745	175	14980	23.5
WEST	11235	236	44940	52.2
STATE	74898	2203	299592	37.8

Source : Computed from the Data Obtained from Bureau of Economics & Statistics, Devt. & Planning, Govt. of Sikkim.

Note : See Methodology (Pp.29)

North district has the highest occupancy rate (91.2) followed by West district (52.2). In these two districts the accommodation capacity is not enough to meet the tourist demand. This means that the tourists coming to these two districts have to accommodate themselves somehow within their limited accommodation facility, often at the cost of their comfort and on payment of high rent. It can be very well expected that shortage of supply will result in a hike in the charges of the existing facilities, as for them the demand will be very high. Whereas, in

case of East district, which, inspite of having the highest tourist demand among all the four districts has a lower occupancy rate of 33.8. This may be because the accommodation capacity in the East district is adequate and is able to meet the tourist demand. In case of South district also the occupancy rate is low (23.5), which may be due to lean flow of tourists to this district, compared to the available accommodation capacity. The inequitable distribution of accommodation facility may be because, of the fact that the investors and the entrepreneurs tend to invest and set up new accommodation projects in those places which are recognized as famous tourist spots with already established profit earning tourist market and with adequate infrestructural facilities. They are mainly located in the East district. Very few entrepreneurs take the risk of setting up accommodation projects in the not so famous or upcoming spots as in the North and West, districts, though these have high untapped potential for tourist development. Many of the investors hesitate to take the pioneering step of investing in these potentially important but untapped areas due to the lack of adequate infrestructural facilities. But, quite surprisingly this remote areas with abundant natural beauty have gradually started attracting more and more tourists.

Table : 4.3 DISTRICTWISE DISTRIBUTION OF NUMBER OF OCCUPANTS PER BED.

DIST	NO:of Beds	No: of Occupants	Occupants per bed
North	38	174	4.6
East	1622	4217	2.6
South	130	333	2.8
West	144	2350	16.3

Source : Based on the survey conducted during the month of May-June 1992 by Bureau of Economics and Statistics, Devt. & Planning, Govt. of Sikkim.

As a result the, existing limited accommodation facilities having limited accommodating capacity are unable to cope with the increasing demand specially during the peak season. This often leads to overcrowding and the tourists have to stay in a cramped condition. The table:4.3 gives the number of occupants per hed during the peak season (month of May-June). North and West districts have much less accommodation facilities as compared to the East and South districts. Shortage of accommodation facilities often discourages many tourists from visiting these areas, who otherwise were interested. This section of tourists represents "suppressed" or "potential" demand.² Thus, it can be concluded that availability of accommodations and volume of tourist flow are strongly related to each other. This is evident from the high value of correlation ($r=0.992$) between accommodation availability represented by percentage of hotel beds and tourist volume, and the relation is found to be significant at 0.01 percent level of significance.

Table: 4.4 ACCOMMODATION CHARGES AND THE SHARE OF TOURISTS (IN %) WHO PAID THEM

ACCOMMODATION CHARGES, PER BED, PER DAY (IN RS.)	% OF TOURISTS WHO PAID THEM			% OF HOTELS & GUESTHOUSE
	DOMESTIC	INTERNA- TIONAL	TOTAL	
01- 50	35.6	16.9	26.2	10.7
51- 100	41.7	64.9	53.3	28.6
101- 200	19.1	15.5	17.3	36.9
201- 300	3.4	0.7	2.0	15.5
300-1500	0.26	2.0	1.14	8.3

Source : Computed from the data obtained from Department of
Toursim Govt. of Sikkim.

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2. Mathieson, A and G.Wall (1993), "Tourism-Economic, Physical and Social Impacts," Longman Publishers, New York.

The price structure of the accommodations available in Sikkim ranges from Rs. 01-15 per bed per day to above Rs. 300 upto Rs. 1500 per bed per day. The table : 4.4 provides detailed information regarding the distribution of rental charges. The accommodations with very high rent of per bed per day ranging between Rs. 300 and Rs. 1500 are available only in very selected and luxurious hotels accounting for about 8.3% of the total accommodations available. The demand for such type of accommodation is quite low as only 1.14% of the tourists could afford it. The customers for this type of accommodation are mainly international tourist whereas the share of hotel and guest houses providing beds at a very subsidised rate of Rs. 01-50 per had per day is very low (10.7%), compared to the demand for it. As per the survey, 26.2% of tourists could afford staying in this class of accommodations. Majority of the tourists accounting to 53.3% of the total visitors, paid Rs. 51-100 per bed per day. Only 17.3% of the tourists paid Rs. 101-200 per bed/day for accommodation. The majority (36.9%) of the hotels and guest houses offer beds within this range of rentalcharges. This indicates that most of the tourists visiting this state are 'budget tourists' and, therefore, more of economy class accommodation facilities should come up. The 'luxury class' tourists seeking luxury during their stay away from home can opt for the starred and luxury hotels. Hotels and lodges with a wide range of charges will be able to cater to all types of demand. As already discussed, seasonality is a characteristic feature of tourism in Sikkim which has its reflection in the variation of demand during the lean and peak seasons. But the supply of accommodation facilities, which is fixed and inelastic cannot be adjusted to the declining demand in the lean season. Therefore, the

hotel owners and tourism department offer heavy discount ranging between 20% to 50% on the accommodation charges to lure the tourists during the lean seasons, thus, trying to extend the tourists season and keep the industry active all the year round.

Accessibility is another important component in the tourist product. It is a means by which a tourist can reach the area where the attractions are located. Thus, supply of transport facilities and communication network is one of the vital factors which effects the volume of tourist flow. If the tourist attractions are located at places which are not well connected by roads or where there are inadequate transport facilities, they fail to attract large number of visitors. Many of the tourists who are interested in visiting these places can not reach there due to the lack of transport facilities. This makes these places inaccessible. The tourist attractions which are located near to the tourist generating markets or tourist gateways and are linked by a network of efficient transport, receive the maximum number of tourists.

In Sikkim, which has a hilly terrain, roadways is the only and the most efficient mode of communication. Therefore, there is a strong influence of road density on tourist flow. The coefficient of correlation, ($r=0.8998$) which has been worked out between the districtwise distribution of road density and tourist, shows a high positive correlation and the coefficient of correlation is significant at 0.05 level of significance. This indicates that districts with high road density receives larger number of tourists (table 4.5).

**TABLE: 4.5 DISTRICTWISE DISTRIBUTION OF ROAD DENSITY
AND TOURIST VOLUME (1992)**

DISTRICT	ROAD DENSITY (in Km.per Sq.Km)	TOURISTS (in percentage)
NORTH	0.11	10
EAST	1.07	70
SOUTH	0.48	5
WEST	0.33	15
STATE	1.99	100

Source : Computed from the data obtained from Bureau of Economics & Statistics, Devt. & Planning, Govt. of Sikkim.

North district having the lowest road density receives only 10% of the tourist share, whereas East district having highest road density receives 70% of the tourists coming to this state. Gangtok, the state capital and the main tourist gateway to this state is located in this district. The city is the most important transport node having road network that connects all the important towns and tourist spots within the state, as well as with that of the neighboring states. Majority of the tourists, both domestic and international, first arrive here as they prefer such a destination which is accessible both from outside and within the state. West district, which is comparatively less accessible by road transport attracts only 15% of the tourists. As through West and North districts runs the major part of the trek route, these two districts are mainly visited by the adventure spirited trekkers for whom lack of proper roadways and transport facility are not at all a hurdle. But they comprise of a small percentage out of the total number of tourists visiting this state. One exception is the case of South district, whose road density is definitely higher than North and West districts, but receives the lowest share of tourists (5%). This may be due to a stronger

influence of some other variables like availability of tourist attractions which may be less in comparison to other districts.

Thus, we find that the availability of these three basic components of tourist product strongly influences the volume of tourist flow. Though presence of attractions is the basic element, supply of accommodation and communication facility also have great impact on tourist demand. All these three components are complementary to each other. Apart from these three, certain other facilities necessary for comfortable stay for the tourists like, water supply, electricity, medical services, bank and postal services, may influence tourists choice of destination. Special arrangements for winter sports, fairs and festivals may influence tourist demand. Such programmes help in extension of tourist season and dispersal of tourist activity over a wider space. The distribution of these supply components over space influences the spatial distribution of tourist flow. Regions where all these three basic components of tourist product alongwith the subsidiary ones, are available attract majority of the tourists. Such is the case of East district in Sikkim with Gangtok as the nerve centre of all tourists activity,

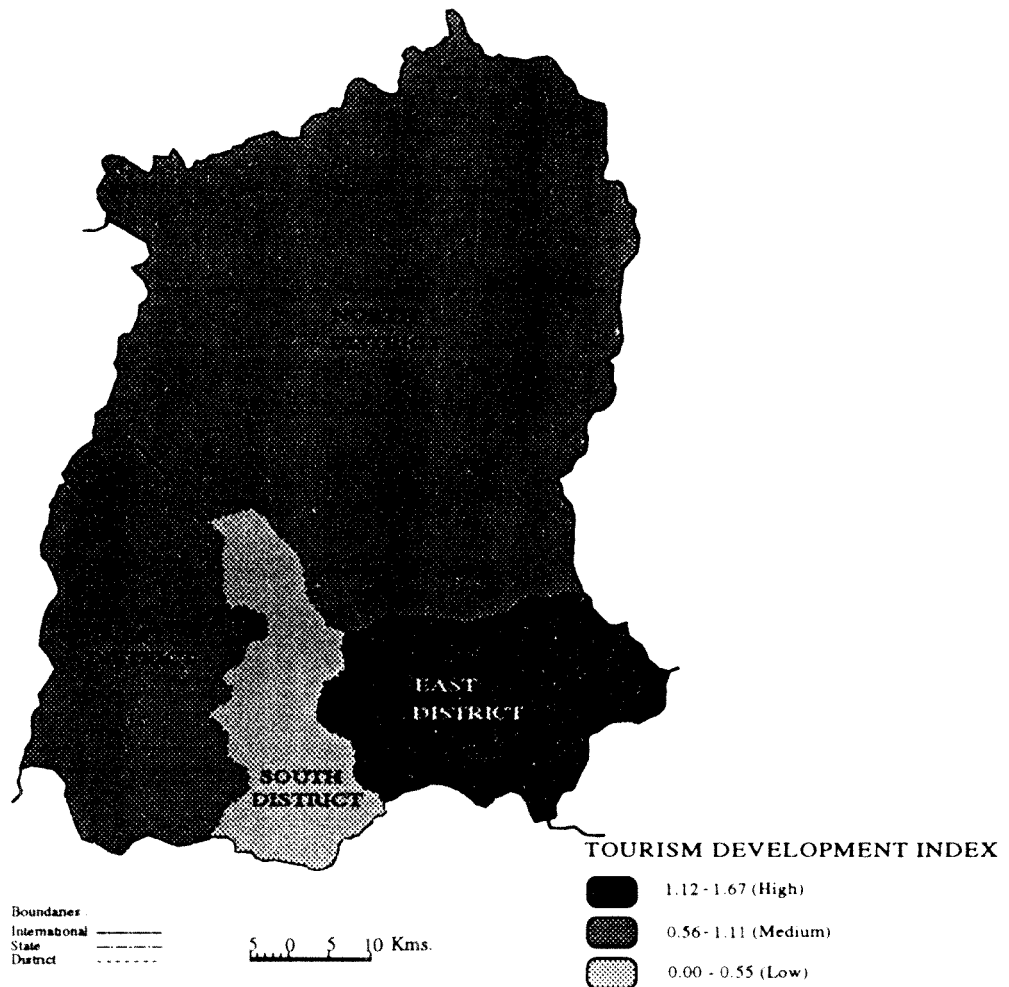
Table: 4.6DISTRICTWISE TOURISM DEVELOPMENT INDEX.

DISTRICT		TOURISM DEVELOPMENT INDEX
1.	NORTH	0.76
2.	EAST	1.61
3.	SOUTH	0.55
4.	WEST	0.67

Source : Computed from the data obtained
from (i) Dept. of Tourism, Govt. of Sikkim
(ii) Bureau of Economics & Statistics, Devt. & Planning, Govt. of Sikkim.

Note : See 'Methodology' (Section : 1, Pp.30),
Appendix 4.1, for computation.

SIKKIM LEVELS OF TOURISM DEVELOPMENT



This is quite evident from the Tourism Development Index with East district having the highest value (1.61) indicating high tourism development. North and West districts fall in the medium category with tourism development index of 0.76 and 0.67 respectively. South district is the least developed part in terms of tourism development, (table: 4.6). But this concentration of tourist activity mainly in one place result in excessive pressure on the supply component, causing shortage of supply, and create many other attendant problems. To avoid this overcrowding of tourists at one place, dispersal of tourist activity to the other three districts viz North, West, South districts should be initiated, which will involve adequate development of tourist infrastructure as the very first step. "Tourist marketing mix" (1994)³ might help in capturing the untapped market at this stage by introducing price reduction to tourist facilities and service or by increasing available facilities and services for the same price or by strengthening promotional activities in view of facing competition and increasing sales output.

In this context, the various plans and programmes adopted by state government of Sikkim and Tourism Department, for the promotion and development of tourism in Sikkim will be discussed in the following sections.

3. Bhatia, A.K. (1994), "Tourism Development" Principles and Practice", Sterling Publishers, N.Delhi.

"Tourist marketing mix" is largely a complex group of factors intervening to achieve the marketing 'end product' which is increased effectiveness in demand output in relation to supply and marketing investments (input).

Development of Tourism Sector Thorough Plan Efforts:

As per the Eighth Five Year Plan document, it was only during the Seventh Five Year Plan that tourism has been identified as a growth area and considerable improvements have been brought about in the creation of facilities, establishing transport links and promoting Sikkim as tourist destination. It was realized during that plan period that tourism industry holds a high potential for generation of employment and bringing socio-economic benefits through service oriented trade agencies, curio and handicraft shops, floriculture, horticulture and other infrastructure. The achievement during the Seventh Five Year Plan includes:

- a. Construction of tourist facilities at Rangpo at a cost of Rs. 38 lakhs.
- b. Sanction of Yatri Niwas at Gangtok.
- c. Construction of trekking huts at Dzongri, Barsey, Yuksom, Tsokha, Tashiding, Khechopalri, Pemayangtse.
- d. Purchase of Hotel Mayur to be run as major tourist hotel.
- e. Construction of observatory tower at Namchi.
- f. Construction of wayside amenities at Phodong, Chungthang, and Lachung.
- g. Construction of a pilgrim hut at Khechopalri.

Beside these, promotion of adventure tourism including river rafting, was taken up and package tours to Yumthang and Tsongo Lake were introduced. During the Seventh Five Year Plan period(1985-90), the plan outlay was Rs. 200 lakh and the actual expenditure was Rs. 164.56 lakh.

In the Eighth Five Year Plan (1992-97), the emphasis was laid on, augmentation of facilities in and around Gangtok, increasing areas of entertainment and leisure activity and also opening up some of other more interior areas to tourists. For this purpose, proposals have been passed regarding the improvement of transportation facilities from Gangtok to the other districts. Under the scheme for development of the existing tourist centres, it was proposed to develop various centres for recreation in and around Gangtok as, well as in other places, which included provision of restaurant-cum-conference facilities, skating rink and amusement parks. In order to provide for tourists an atmosphere of peace in the wilderness away from the city, development of a tourism village at Rumtek which is 12 km away from Gangtok was taken up. This tourism village is supposed to be self contained complex wherein facilities for boarding, lodging, audio visuals, souvenir shops, tennis court, medical centre and other recreational activities, will be provided. The Department of Tourism will be playing a catalytical role in development of the infrastructure. A private party will be invited to take up investment and management of the village. For this scheme an outlay of Rs. 100 lakhs has been envisaged.

In response to increasing popularity of trekking activity in Sikkim, upgrading of the existing ones and construction of new trekking facilities have been examined. During this plan period camp for trekkers at Yuksom with 20 rooms and a dormitory facility was proposed. Camping huts were also completed at Tsokha, Bakhim, Dzongri.

It was during the Eighth Plan period only, that hitherto unexposed North Sikkim was included in the state tourist map. Therefore, infrastructural development was taken up and gradually developed. As a part of the scheme of providing wayside amenities to tourist, a tourist resort was created at Chungthang which is subdivisional headquarter of the district. It was proposed during the Eighth Five Year Plan period to create a tourist complex at Singhik located near Mangan. This place had been selected because from here the most panoramic view of Mt. Kanchendzonga can be obtained. Necessity for the development of similar facilities was felt at Yumthang, which is known for its hot spring. A total outlay of Rs.50 lakhs had been proposed for these infrastructural development.

Sikkim has several places which are of historical and religious significance. Prominent among these places are Phurchechu (hot spring,) Toshiding, Relong and Pemayangtse. Every year quite a few tourists visit these place therefore, the development of amenities around these monasteries was undertaken.

Apart from these, other areas of emphasis regarding development of tourism in the Eighth Plan included, development of facilities around Tsongo lake, construction of ropeway between Gangtok and Rumtek, increase of and modernization of existing accommodation capacity and further development of existing transport services. During the Eighth Five Year Plan, a total outlay of Rs. 600 lakh was available for expenditure. Against this outlay, the actual expenditure was likely to be Rs. 603 lakhs. (Appendix 4.2).

At the end the Eighth Five Year Plan, it was found that, though some of these programmes have materialized, most of them are yet to take off. The most important achievement of this plan was the preparation of the Master Plan which has been entrusted to Tata Economic Consultancy. The Tourism Policy Development and the Tourism Legislation are currently under preparation and are likely to be completed before the end of the current financial year.

The focus in the 9th Five Year Plan has been laid on the development of tourist circuits, 3 on Nature Trails and 2 on Heritage Religion circuits which are to be well planned and well managed. The objective of developing and promoting these circuits is not only to attract special tourists but also to disperse tourists to other areas besides Gangtok and the Dzongri trail. Consolidation of the existing infrastructure facilities is also a part of the 9th Five Year Plan agenda. Taking into account the fact that many of the facilities that have been created in the past have not been put to full utility, action is being initiated to formulate a strategy to derive maximum benefit from the investments already made in those infrastructure facilities. Leasing out of these assets to the private parties has been proposed. Certain new schemes which are to be promoted as a part of the 9th Five Year Plan include development of winter sports centre at Tsongo Lake and Yumthang Valley, 'mountain biking' and 'white water sports' along the rivers Teesta and Rangeet. The most striking move that is going to be a part of the agenda of this plan is the proposal for restructuring the management of the hotels/lodges and transport service, which are presently under the control of Tourism Department. It has been felt that the Government should not be involved in any business venture, such as in running hotel and transport services.

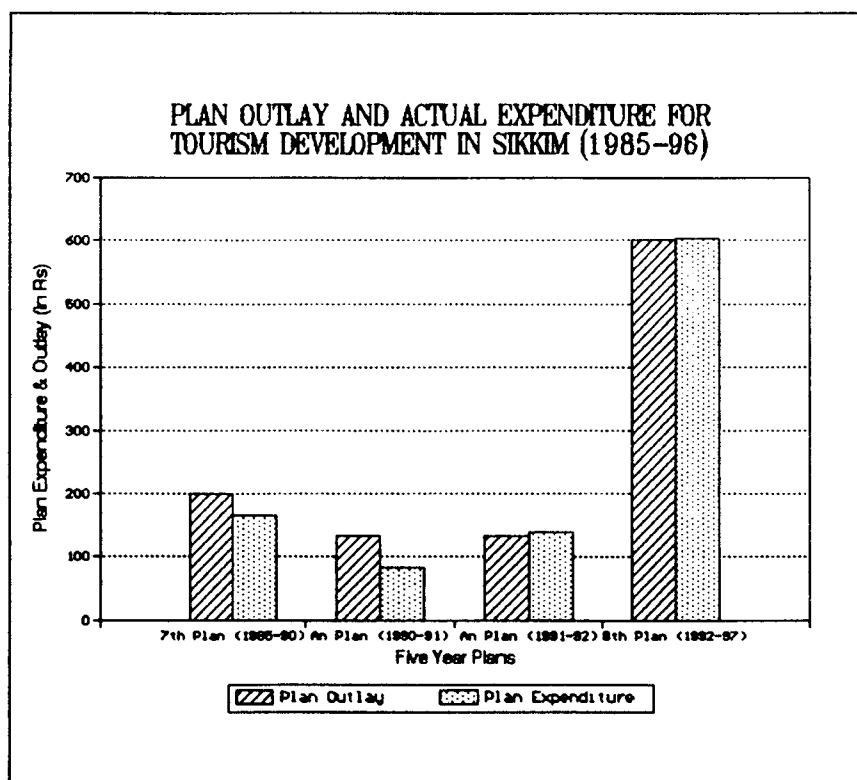


Fig 4.2

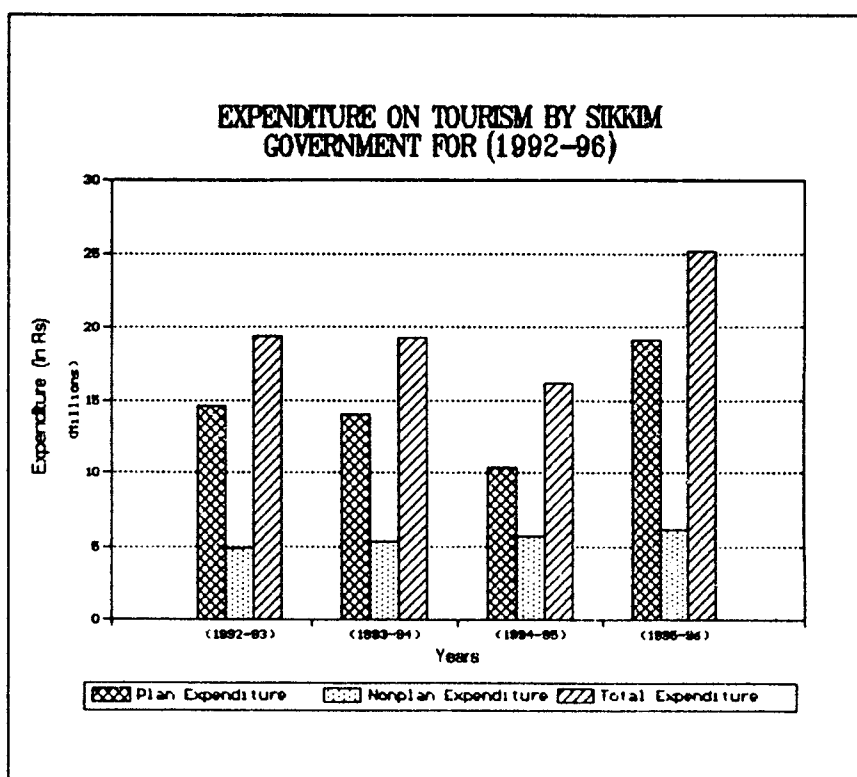


Fig 4.3

It is suggested that the role of the government should be that of a facilitator and it should be left to private sector/autonomous bodies to run and manage business activities. A proposal has already been moved by the Department for consideration of the Government to privatise or form autonomous bodies to manage the hotels and restaurants with the intention to introduce professionalism. The buses which were being operated by the Tourism Department have also been auctioned off and in the course of time, the bus numbers are to be leased out to the private operators to run tourism transport in a more efficient way. The proposal to this effect has also been submitted to the Government for approval. Apart from these, refocusing the role of Information and Publicity Programme, Training and Human Resource Development are also essential aspects in the 9th Five Year Plan.

From the distribution of the plan allocation and actual expenditure for the development of tourism industry over the past few years, the real effort made by the government can be evaluated, (Fig: 4.2).

It is apparent from the plan outlay and actual expenditure since the Seventh Five Year Plan, that government is making some effort to develop tourism activities in Sikkim. Apart from the plan and the non-plan expenditure made by Government of Sikkim for the development of tourism sector, (Appendix : 4.3) certain schemes are being sponsored by the Central Government. These centrally sponsored schemes include development of tourist equipments, tourist fairs and festivals, wayside amenities and publicity. From the table : 4.7 showing the distribution of expenditure on the centrally sponsored schemes for promotion of tourism in Sikkim, it is found that most of the

Table:4.7

Distribution Of Plan Expenditure On Centrally Sponsored Schemes For Promotion Of Tourism In Sikkim (1992-96).

Schemes	(1992-93)		(1993-94)		(1994-95)		(1995-96)	
	(in Rs)	(In %)	(in Rs)	(In %)	(in Rs)	(In %)	(in Rs)	(In %)
Equipments	2166739	33.78	4167922	65.55	1456983	52.07	1510000	45.62
Tourist Fairs & Festivals	2199129	34.28	1041315	16.38	0	0	650000	19.64
Wayside Amenities	2048787	31.94	1123329	17.66	690921	24.69	849330	25.66
Publicity	0	0	26000	0.004	8	23.23	300000	9.06
Total	6414655	100	6358566	100	2797904	100	3309330	100

Source: Office Of Accountant General Of Sikkim, Govt. Of Sikkim.

expenditure has been meant for the development of tourist equipment followed by wayside amenities. It was only in 1993-94, that tourist fair and festivals received the major attention. Tourism publicity has been found to be the most neglected one since the last four years. This has to be rectified as due to lack of adequate publicity, a large section of the market remains untapped. Many of the tourist are unaware about the newly developed tourist destinations and the variety of the facilities available.

To conclude, it may be reiterated that the Tourism sector has yet to receive the status it deserves in the context of overall economic development of the state. it may be noted that the budget provision made for the current financial year was not even 1% of the annual plan outlay of the state. It is, therefore, imperative that any question of prioritisation must be supported by a commensurate financial outlays.

Chapter : 5

CONCLUSIONS

An attempt has been made in the preceding chapters to identify and examine the important features of tourism development in Sikkim from geographical perspective. The main emphasis has been laid on the identification and analysis of the various characteristics of the spatio-temporal development of tourism industry. An indepth study of certain aspects of tourism development could not be accomplished due to paucity of relevant secondary data. Certain other aspects like study related to the impact of tourism development on the economic, socio-cultural and environmental aspects could not be examined as the generation of primary data was neither possible nor feasible during the prescribed period for the submission of M.Phil dissertation.

On the very outset, the conceptual frame of the phenomenon of tourism development was discussed to clarify the focus of the study. Tourism is a multifaceted activity which may be defined as the relationships and phenomena arising out of journeys and temporary stays of people primarily for leisure or recreational purposes.¹ Tourism development may be defined specifically as the provision or enhancement of facilities and services to meet the needs of the tourists. Therefore, this phenomenon has two basic aspects i.e. supply and demand. Supply and demand interact to produce the pattern of tourism, which may be defined as spatial and temporal incidence of tourism development. The

1. Pearce, D. (1981) "Tourism Development", Longman; London.

significance of tourism development lies in the fact that it increases foreign exchange earnings, employment and per capita income of the host region. Moreover, it creates demand and value for the natural and cultural resources viz. scenic beauty, historical monuments etc., which otherwise would have remained idle.

Sikkim, which is a hill state with rugged terrain is constrained in the establishment of basic industries and agricultural development. Geographical seclusion, non-availability of flat land, transport bottlenecks, are some of the various constraints which have resulted in the poor performance in terms of agricultural and industrial development of the state. But this mountain state with favourable and enervating climate, scenic beauty, rich biodiversity and unique cultural heritage has much to offer to tourists and nature lovers. In spite of this, Sikkim had a late start in the development of tourism industry. Its immense potential for tourism development was identified only during the Seventh Five Year Plan period.

The first part of the study covers the evaluation of the demand aspect. The level of increase in tourist flow at a particular destination is one of the important indicators of tourism development. Therefore, volume of tourists, the pattern and trend of tourist flow, their spatial distribution, their socio-economic characteristics, length of their stay and various other aspects of tourist demand and tourist satisfaction had been examined. It had been observed from the trend of the tourist flow to Sikkim, that the growth-rate started picking up fast since 1987. An overall increase in the tourist flow was noticed since 1980s, till mid '90s. But during the period of 1980-87 tourist arrival in Sikkim experienced

large fluctuations. The reasons might have been political instability, problems enroute and occurrences of epidemics. Since late '80s till mid '90s the tourist flow regained some stability. The overall tourist flow pattern over the past 16 years (1980-95) lacked homogeneity and consistency. From this, it may be concluded that tourism industry in Sikkim is passing through transitional stage.

Seasonality is another characteristic feature of the tourism activity in Sikkim. There are two peak tourists seasons, of one between March and May which extend till early June and the other one between September and November. The lean season occurs during the monsoon months, when due to heavy rainfall, there are frequent occurrences of landslides which lead to temporary road closure. As a result the state which is only connected by roads gets completely cut off from the rest of the country. Therefore, tourists generally avoid travelling to this state during this time of the year. But it had been found that seasonality of the international tourist flow is strongly controlled by climatic conditions. Whereas, the seasonal pattern of domestic tourist flow is mainly influenced by holiday pattern and very weakly by climatic conditions.

Domestic tourists comprise the major share (92.6%) of the total tourist flow to Sikkim. While international tourists contributed only 7.4% of the total share. Moreover, Sikkim receives only 0.25% of the international tourists visiting India, though, since '90s the international tourist graph followed a rising trend. Therefore, it may be concluded that the main customers of its tourism activity are the domestic tourists. Sikkim as a tourist destination is yet to gain popularity among the foreign tourists coming to India. In this context it may be suggested that, taking the opportunity of the intermittent disturbances in the

popular hill resorts like Kashmir, H.P hills and Darjeeling Sikkim can 'be' introduced as an 'alternative' tourist destination to the international tourists visiting India. In this way, it will be possible to expand Sikkim's international tourist market. Simultaneously it will help in maintaining the steady flow of international tourists to India which, otherwise, would have been affected due to disturbances at certain corners of the country.

Majority of the international tourists visiting Sikkim were of European origin, followed by those coming from United States and Canada. A very small share were from the East and South East Asian countries. Among the domestic tourists, majority came from the neighbouring states. The largest share came from West Bengal. Minimum number of tourists came from the southern states. From this, it may be concluded that 'distance decay, factor played an important role in influencing the tourist decision about their likely destination. Or in other words the volume of the domestic tourists visiting Sikkim was inversely related to the distance between the place of origin and destination.

Majority of the tourists visited Sikkim with the purpose of pleasure and sight seeing. Though, the state is a seat of Buddhist religion, a negligible share came with religious purpose. Currently it had been observed that quite a number of tourists showed interest in participating in trekking activities. Infact, most of the foreign tourists who visited this state were interested in this activity. But only a small share of the tourists actually took part. Inadequate facilities, high charges, and lack of adequate publicity of the existing facilities were some of the reasons which discouraged actual participation.)

Though scenic beauty is ubiquitously distributed, marked districtwise variations had been identified regarding the popularity of the tourist spots. It had been observed that the tourist spots which are mostly visited by both domestic and international tourists are mainly located in the East district. The tourist spots located in North and West district were mainly visited by international tourists as compared to domestic tourists. This may be due to the fact that compared to domestic tourists, large share of international tourists are interested in trekking and most of the trekking trails are located in these two districts. Another reason may be that the majority of the international tourists were found to choose those places as their holiday destinations which were away from the hub of all activities and still possessed unspoilt natural environment.

Sikkim mainly received male tourists, though the gap between the share of male and female tourists were not much. Most of the tourists pursued salaried jobs.

Majority of the tourists used economy class hotels for their staying. The average length of stay of all the tourists visiting Sikkim was found to be 4 days. Another interesting feature that had been observed in case of the domestic tourists was that tourists coming from distant states tended to stay longer than those coming from the neighboring regions. This may be because of those coming from distant destination mainly came for trekking, or for some study purpose, in which case a longer stay is expected. For travelling, private buses, buses run by Sikkim Nationalised Transport and private taxies were used by the tourists.

In case of most of the tourists, friends and relatives acted as the main source of influence for coming to Sikkim as their destination. Only a negligible share of tourists were influenced by the publicity made by Department of Tourism. Overall, almost all those who visited Sikkim felt satisfied about their stay there.

It is true that presence of scenic beauty and unique culture, acted as the basic component to attract tourists to Sikkim. But in addition to this, role of other components of the tourism product, like accommodation, transport and other infrastructural facilities played their respective role in the development of tourism industry in Sikkim.

Sikkim witnessed development of accommodation sector during the Seventh Five Year Plan period (1985-90) which corresponded with the years registering increase in the tourist flow. There were 93 hotels, 44 guest houses and 178 restaurants during 1991-92, to meet the entire tourist demand. Most of the accommodation facilities were located in the East district, with South, West and North districts trailing much behind at the second, third and fourth positions respectively. Most of the hotels were under private ownership. Only four hotels were run by the government. That too, recently, the state government had made proposals for privatizing or forming autonomous bodies to manage the hotels and restaurants with the intention of introducing professionalism and efficient management.

Instead of number of accommodations, measurement of accommodation capacity, in term of hotel rooms and tourist beds, were found to be a better indicator for judging the development of accommodation sector. There were

927 rooms and 2203 tourists beds available in various hotels and guest houses distributed all over the state. But again, East district led in the share of rooms and tourist beds. Average number of beds available were found to be 20.8 beds per hotel whereas average number of beds per room accounted for 2.39 beds. The accommodation charges ranged between Rs 25 Per bed/day in dormitories to Rs. 50 per bed in the cheapest category of hotels. The room rent in starred and luxury hotels range from Rs. 200 to Rs. 3000 per day/room.

Roads are lifeline of Sikkim, and road transport is the only mode of travel. Therefore, availability of road services had strong influence on tourist flow. The road density of Sikkim was 0.31 km per sq. km. Total road length accounted for 0.11% of the total road length in India. But over the past decade the road length had registered an increase from 1288 kms to 2243 kms registering an increase of 74.15 per cent. The number of buses and other vehicles, which are generally used by the tourists for traveling, also increased considerably. But like all other facilities, East district had been found to be the most accessible with Gangtok as the most important terminus of all the major routes connecting places within and outside the state. That is why Gangtok is considered to be the tourist gateway of Sikkim.

Apart from these, the state also had provision of other supporting and recreational facilities, which served as additional attractions to the tourists. Presently much effort is being made to popularise adventure sports and trekking activities. This will certainly result in increase in the flow of international tourists to this state, as majority of them were found to be interested in trekking activity.

From the overall development of tourism in Sikkim it had been observed that the interaction between the various components of demand and supply had played a major role. This is quite evident from the districtwise analysis of tourism development index. This index represents a composite index showing the collective impact of various components of tourism development aspects and their variation over space. East district was found to be the most developed in terms of tourist activities. North and West districts belonged to medium category, whereas, South district was found to be the least developed. East district which had the best combination of all the main components of tourism development viz. places of attraction, accommodation and transport, along with additional infrastructural and recreational facilities attracted the largest number of tourists. South district on the other hand, inspite of having enough accommodation, transport and infrastuctural facilities, almost had no such place recognised as popular tourist spot. It is not that this district lacked scenic and cultural attractions. Infact, no initiative has been taken to identify and develop the places of prospective tourist attractions. Therefore, this district could not find a place in the tourist map of Sikkim. The North and South districts with inadequate supply of accommodation and transport facilities received negligible share of tourists. But currently with the promotion of facilities for adventure sports and trekking activities, these places are being visited by quite a large number of international tourists. But the core area of the tourism activity, in Sikkim, is East District, mainly in and around Gangtok, referred to as 'tourist gateway'. But this over crowding of tourists at one place has led to excessive

pressure on the existing infrastructural facilities. Therefore, to avoid this, dispersion of tourist flow may be encouraged.

The spatial and temporal development of tourism activity in Sikkim can also be related to the policies adopted by the state department and through plan efforts. It was only during the Seventh Five Year Plan that tourism had been acknowledged as the thrust area of development. The plan allocation since Seventh Five Year Plan had also registered an increase. Recently to introduce professionalism and better management, proposals to privatise or form autonomous bodies to manage the hotels, restaurants and tourists transport sectors have been presented. Foreign collaborations are also being invited to set up tourist resorts.

But it is quite ironical that the budget provisions for tourism activities in the current financial year was not even 1% of the annual plan outlay of the state. Therefore, it may be concluded that, the potentiality of tourism is not fully tapped. Infact, the tourism sector in Sikkim is yet to receive the status it deserves in the context of overall economic development of the state.

To sum up, the significant observations made and the respective conclusions drawn from them has been listed below:

1. The fluctuating pattern of tourist flow implies that tourism development in Sikkim is passing through its transitional stage.
2. Domestic tourists comprises the major share of tourists coming to Sikkim.
3. Seasonality is the characteristic feature of tourism activity in Sikkim.

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4. Seasonal distribution of domestic tourists is more strongly controlled by holiday pattern. Whereas, in case of international tourist flow, climatic condition had a stronger influence.
5. The tourists mainly visit this place with the purpose of sight-seeing and pleasure. It had also been observed that most of the international tourists come to Sikkim to take part in trekking activities.
6. The average duration of stay of the tourists in Sikkim had been found to be four days.
7. East district which has the provisions of all the essential components of tourist product is the most popular tourist destination. The other three districts lacked one or the other of the basic components of tourism development and, therefore, ranked lower. The remarks of Pearce's about an ideal tourism development, that "the attraction induce the tourist to visit the area, transport services enable him to do so, the accommodation and supporting facilities cater for his well being while there and the infrastructure assures the essential functioning of all these", hold good in case of Sikkim too.
8. Though tourism industry had been identified as one of the important sources of economic development of Sikkim it is yet to receive its due share of importance in terms of budgetary and plan allocations. To overcome this financial crunch and the various short comings in the management of this industry, the state tourism department is gradually heading towards privatisation of a section of this sector.

These are some of the basic features of tourism development in Sikkim. This study on the spatial and temporal characteristics of tourism development acts as a preliminary ground work for further research in this field. Some of the potential areas of enquiry that had been identified in relation to the present study include, evaluation of the carrying capacity of the region in context of tourism development and its socio-economic and environmental impacts. Therefore, this work can be treated as the initial step for planning tourism activity in association with overall regional development.

Appendix: 2.1

Four Yearly Moving Average Of Tourists Coming To Sikkim '(1980-95).

Year	Domestic Tourists	Four Yearly M.Average Centred	M.Average Centred	Foreign Tourists	Four Yearly M.Average Centred	M.Average Centred	Total Tourists	Four Yearly M.Average Centred	M.Average Centred
1980	12862.00			2572.00			15434.00		
1981	19115.00	16807.50		2737.00	3211.30		21852.00	1937507.00	
1982	18347.00	20959.00	18883.30	2880.00	2463.50	2837.40	21227.00	23422.50	21399.10
1983	16906.00	26015.70	23487.40	2084.00	2196.80	2330.20	18990.00	33675.50	28549.00
1984	29468.00	29658.50	27837.10	2153.00	1973.30	2085.05	31621.00	39487.30	36581.40
1985	39342.00	32829.30	31243.90	1670.00	1910.50	1941.90	41012.00	34739.70	37113.50
1986	32918.00	34732.30	18151.30	1986.00	1850.00	1880.30	34904.00	36582.30	35661.00
1987	29589.00	36016.30	35374.30	1833.00	1917.00	1883.50	31422.00	37933.30	37257.80
1988	37080.00	41963.30	38989.80	1911.00	2600.30	2258.70	38991.00	44563.50	41248.40
1989	44478.00	49906.00	45934.70	1938.00	3688.80	3144.70	46416.00	53594.70	49079.10
1990	56706.00	57670.30	53788.15	4719.00	4901.30	4295.10	61425.00	62571.50	58083.10
1991	61360.00	65323.50	61496.90	6187.00	6199.80	5550.50	67547.00	71523.20	67047.40
1992	68137.00	74255.70	69789.60	6761.00	6741.70	6470.70	74898.00	80997.50	76260.40
1993	75091.00	83054.50	78655.10	7132.00	6457.50	6599.60	82223.00	89512.00	85254.80
1994	92435.00			6887.00			99322.00		
1995	96555.00			5050.00			101605.00		

Source: Computed From The Data From Dept. Of Tourism, Govt. Of Sikkim.

Appendix: 2.2

Seasonality Index Of Foreign Tourists Coming To Sikkim.

Seasons	1989	1990	1991	1992	1993	1994	1995
Winter, Jan, Feb	12.13	14.66	19.8	22.59	18.65	18.49	19.58
Spring, Apr, May	26.11	27.63	33.69	34.25	35.28	39.03	38.29
Summer, Jul, Aug	7.99	15.08	10.65	12.37	9.09	16.81	13.89
Autumn, Oct, Nov	53.76	42.61	35.84	30.77	36.97	25.66	28.23

Seasonality Index Of Domestic Tourists Coming To Sikkim.

Tourists

Seasons	1989	1990	1991	1992	1993	1994	1995
Winter, Jan, Feb	20.88	16.5	13.54	13.19	15.19	13.05	12.07
Spring, Apr, May	27.82	31.8	33.29	36.94	33.73	33.37	38.55
Summer, Jul, Aug	19.69	17.84	21.39	19.89	20.26	19.88	21.39
Autumn, Oct, Nov	31.59	35.52	31.76	29.96	30.81	33.68	27.98

Source: Computed From The Data From Dept. Of Tourism, Govt. Of Sikkim.

Appendix:2.3(a)

Three Monthly Moving Average Of Foreign Tourists
Coming To Sikkim (1990-1995).

Year	Month	Foreign Tourists	Three Monthly Moving Average	Year	Month	Foreign Tourists	Three Monthly Moving Average
1990	January	29		1993	January	317	494.3
	February	112	127.33		February	519	662.7
	March	241	316.66		March	1152	823.3
	April	597	434.66		April	799	838.7
	May	466	429.66		May	565	519.3
	June	226	292.7		June	194	253
	July	186	237.3		July	187	216.3
	August	300	296		August	268	295
	September	402	497.7		September	430	606
	October	791	670.3		October	1120	879
	November	818	720		November	1087	900.3
	December	551	544		December	494	640.7
1991	January	263	443.3	1994	January	341	483.7
	February	516	489		February	616	550
	March	688	689.7		March	693	864.7
	April	865	695		April	1285	896
	May	532	519		May	710	810.7
	June	160	283.3		June	437	464.7
	July	158	219.7		July	247	386
	August	341	320.3		August	474	418
	September	462	563.7		September	533	624
	October	888	739.3		October	865	589
	November	868	734		November	369	517
	December	446	551.3		December	317	392
1992	January	340	442	1995	January	490	346
	February	540	530		February	232	442
	March	710	735.3		March	606	703.3
	April	956	772		April	1272	748.7
	May	650	643.7		May	368	696.7
	June	325	393.7		June	450	311
	July	206	279		July	115	271.7
	August	306	215.3		August	250	221.3
	September	134	466		September	299	495.7
	October	958	693.7		October	938	552
	November	989	864.7		November	419	594.7
	December	647	751		December	427	

Source: Computed From The Data From
Dept. Of Tourism, Govt. Of Sikkim.

Appendix:2.3(b)

Three Monthly Moving Average For Domestic Tourists
Coming To Sikkim '(1990-1995).

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Year	Month	Domestic Three Monthly Tourists Moving Average	Year	Month	Domestic Three Monthly Tourists Moving Average
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1990	January	2333.00	1993	January	2966.00 3192.70
	February	2744.00 3129.30		February	3196.00 3484.00
	March	4311.00 4155.70		March	4290.00 5079.00
	April	5412.00 6011.30		April	7751.00 8443.30
	May	8311.00 6358.30		May	13289.00 9492.00
	June	5433.00 5327.70		June	7436.00 8206.30
	July	2239.00 3372.70		July	3894.00 5073.00
	August	2446.00 3508.00		August	3889.00 3918.00
	September	5839.00 6299.30		September	3971.00 7054.70
	October	10613.00 6714.30		October	13304.00 7712.00
	November	3691.00 5879.30		November	5861.00 8136.30
	December	3334.00 3088.70		December	5244.00 4872.70
1991	January	2241.00 2763.00	1994	January	3513.00 4000.00
	February	2714.00 3010.70		February	3243.00 3684.70
	March	4077.00 4516.70		March	4298.00 5508.70
	April	6759.00 6810.30		April	8985.00 10283.30
	May	9595.00 7494.70		May	17567.00 13090.30
	June	6130.00 6564.30		June	12719.00 11209.00
	July	3968.00 4376.70		July	3341.00 6125.70
	August	3032.00 3588.70		August	2317.00 3229.70
	September	3766.00 5576.70		September	4031.00 8754.30
	October	9932.00 6497.30		October	19915.00 10380.00
	November	5794.00 6359.30		November	7194.00 10807.00
	December	3352.00 3805.30		December	5312.00 4932.30
1992	January	2270.00 2974.00	1995	January	2291.00 3326.30
	February	3300.00 3106.70		February	2376.00 3164.70
	March	3750.00 4397.70		March	4827.00 6728.00
	April	6143.00 8392.00		April	12981.00 12664.30
	May	15283.00 9292.00		May	20185.00 15464.30
	June	6450.00 8350.30		June	13227.00 12426.00
	July	3318.00 4519.00		July	3866.00 7028.00
	August	3789.00 3658.30		August	3991.00 4511.30
	September	3868.00 6178.30		September	5677.00 8577.70
	October	10878.00 6806.00		October	16065.00 9192.70
	November	5672.00 6655.30		November	5836.00 9711.30
	December	3416.00 4018.00		December	7233.00

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Source:Computed From Data Obtained From
Department Of Tourism, Govt. Of Sikkim.

Appendix:2.4(a)

**DeMartonne's Aridity Index And Foreign Tourists
Flow To Sikkim, '(1992).**

Months	DeMartonne's Index	Foreign Tourists
January	0.2	340
February	0.29	540
March	0.55	710
April	0.95	956
May	1.78	650
June	2.14	325
July	2.18	206
August	2	306
September	1.41	134
October	0.57	958
November	0.19	989
December	0.1	647

Source: Compiled From The Data Obtained From
(1) Sikkim- A Statistical Profile(1979-80 &1991-92),
'(2) Dept. Of Tourism.

Table:2.4(b)

**DeMartonne's Aridity Index And Domestic Tourists
Flow To Sikkim, '(1992).**

Months	DeMartonne's Index	Domestic Tourists (in 00)
January	0.20	22.70
February	0.29	33.00
March	0.55	37.50
April	0.95	61.43
May	1.78	153.00
June	2.14	64.50
July	2.18	33.20
August	2.00	38.00
September	1.41	38.70
October	0.57	109.00
November	0.19	56.70
December	0.10	34.20

Source:Computed From The Data Obtained From
'(1) Sikkim- A Statistical Profile'(1979-80 & 1991-92),
(2)Dept. Of Tourism, Govt. Of Sikkim.

Appendix :2.5

Monthwise Distribution Of Holidays And Domestic Tourist Flow To Sikkim '(1992).

Months	Number Of Holidays	Domestic Tourists (in 00)
January	6	22.7
February	5	33
March	7	37.5
April	7	61.43
May	19	153
June	17	64.5
July	5	33.2
August	6	38
September	6	38.7
October	17	109
November	9	56.7
December	10	34.2
Total	114	681.93

Source:Dept. Of Tourism, Govt. Of Sikkim.

Appendix:2.6

Percentage Share Of Domestic Tourists Coming To Sikkim By Purpose Of Visit '(1992).

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Purposes Of Visit						
State Of Origin	Sight- seeing	Official/ Business	Religion	Other	Not Reported	Total
W.Bengal	71.04	24.69	0.08	1.44	2.15	100
Bihar	75.37	20.48	0.00	1.48	2.67	100
Assam	76.85	20.53	0.00	0.95	1.67	100
Other N.E.States	71.33	25.87	1.40	1.05	0.35	100
Sn States	72.66	25.73	0.29	0.59	0.74	100
Nn States	74.71	23.12	0.00	0.58	1.59	100
Wn States	85.99	13.67	0.11	0.00	0.23	100
Other States	81.51	13.56	0.41	1.10	3.42	100
Total	73.26	23.41	0.1	1.23	1.98	100

Source:Bureau Of Economics & Statistics, Devt & Planning
Govt. Of Sikkim.

Appendix :2.7

Monthwise Number Of Foreign Tourists Coming To Sikkim By Purpose Of Visit (1992).

=====				
Purpose Of Visit				
Months	Sight- seeing	Official/ Business	Religion	Total
January	449	0	0	449
February	498	0	1	469
March	865	0	34	899
April	1028	0	5	1033
May	735	60	11	806
June	296	0	1	297
July	211	1	2	214
August	289	17	0	306
September	136	0	0	136
October	923	20	3	946
November	836	0	3	839
December	420	0	1	421
Total	6656	98	61	6815
Total (in %)	97.67	1.44	0.89	100

Source:Bureau Of Economics & Statistics, Devt. & Planning,
Govt. Of Sikkim.

Appendix: 2.8

Distribution Of Domestic Tourists (in %) Coming To Sikkim By Sex And Child Members For Each State Of Origin (1992).

State	Male	Female	Children	Total
Andhra Pradesh	46.91	28.40	24.69	100
Assam	47.17	32.08	20.75	100
Bihar	48.18	27.27	24.55	100
West Bengal	50.53	28.72	20.75	100
Delhi	41.04	32.55	26.41	100
Haryana	0.00	50.00	50.00	100
Himachal Pradesh	0.00	100.00	0.00	100
Karnataka	51.85	22.22	25.93	100
Kerala	66.67	22.22	11.11	100
Maharashtra	46.92	35.07	18.01	100
Orissa	46.15	42.31	11.54	100
Punjab	20.00	30.00	50.00	100
Tamil Nadu	55.56	33.33	11.11	100
Uttar Pradesh	27.78	33.33	38.39	100
Total	48.30	30.04	21.66	100

Source: Bureau Of Economics & Statistics, Devt. & Planning, Govt. Of Sikkim.

Appendix: 2.9(a)

**Distribution Of Domestic Tourists Coming To Sikkim
By Religion (1992).**

(in percentage)

States Of Origin	Religions				Total
	Hinduism	Buddhism	Others	Not Reported	
Andhra Pradesh	71.43	7.14	21.43	0.00	100
Assam	80.00	0.00	20.00	0.00	100
Bihar	95.24	0.00	4.76	0.00	100
West Bengal	91.56	0.42	5.49	2.53	100
Delhi	85.00	0.00	15.00	0.00	100
Haryana	100.00	0.00	0.00	0.00	100
Himachal Pradesh	100.00	0.00	0.00	0.00	100
Karnataka	80.00	0.00	0.00	20.00	100
Kerala	0.00	0.00	100.00	0.00	100
Maharashtra	65.85	0.00	26.83	7.32	100
Orissa	71.43	0.00	28.57	0.00	100
Punjab	50.00	0.00	50.00	0.00	100
Tamil Nadu	0.00	0.00	100.00	0.00	100
Uttar Pradesh	66.67	0.00	33.33	0.00	100
Total	85.05	0.52	2.58	2.57	100

Source: Bureau Of Economics & Statistics,
Devt. & Planning, Govt. Of Sikkim.

Appendix: 2.9(b)

**Distribution Of Foreign Tourists
Coming To Sikkim By Religion (1992)**

Religion	Tourists(%)
Christians	37.84
Buddhists	2.7
Muslims	1.35
Hindus	0.68
Not reported	57.43

Source: Bureau Of Economics & Statistics,
Devt. & Planning, Govt. Of Sikkim.

Appendix: 2.10(a)

Occupationwise Distribution Of Domestic Tourists Coming To Sikkim By State Of Origin (1992)

(in percentage)

Place of Origin	Occupations					Total Statewise
	Self Employed In Agriculture	Self Employed In Others	Salaried Services	Others	Not Reported	
West Bengal	80.95	77.94	73.79	61.54	64.70	70.81
Bihar	1.36	3.70	3.53	6.34	2.99	3.53
Assam	0.00	1.30	2.16	2.17	2.75	2.20
Other N.E.States	2.04	0.65	1.62	2.78	1.50	1.50
Sn States	3.40	1.36	4.07	3.12	4.12	3.58
Mn States	0.68	8.97	8.50	14.93	11.58	9.91
Wn States	10.88	4.16	3.61	7.12	5.68	4.64
Other States	0.68	1.92	2.72	2.00	6.78	3.83
All States	100.00	100.00	100.00	100.00	100.00	100.00

% Of Tourists						
Occupationwise	0.77	16.14	44.46	6.04	32.60	100.00

Source:Bureau Of Economics & Statistics Devt. & Planning, Govt. Of Sikkim.

Appendix: 2.10(b)

Occupationwise Average Monthly Income of Domestic Tourists Coming To Sikkim (1992).

(Tourists In %)

Occupation	Average Monthly Income (in Rs)					Total
	<Rs1000	Rs1000-2000	Rs2000-3000	Rs3000-4000	>Rs4000	
Service	2.63	7.02	21.49	46.05	22.80	100
Self-employed	3.17	14.28	45.24	31.75	5.56	100
Others	38.23	14.71	20.59	5.88	20.59	100
All Occupation	6.00	10.00	27.36	39.00	18.00	100

Source:Bureau Of Economics & Statistics Devt. & Planning, Govt. Of Sikkim.

Appendix: 2.10(c)

**Occupationwise Distribution Of Foreign Tourists
Coming To Sikkim (1992).**

=====	=====
Occupations	Tourists(%)
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Self Employed In Agriculture	0.76
Self Employed In Others	14.25
Salaried Jobs	42.7
Other Occupations	37.87
Not Reported	4.39

Source:Bureau Of Economics & Statistics, Devt. &
Planning, Govt. Of Sikkim.

Appendix:4.1

Districtwise Analysis Of Tourism Development Index Of Sikkim (1992).

Districts	% Of Tourists		% Of Beds		Occupancy Rate		Places Of Attraction		Road Density (km/Sq Km)		Hospital Beds (/000' Pop)		Post Office (/000'Pop)		Bank (/000 Pop)		Tourism Development Index
	X1	X1/m	X2	X2/m	X3	X3/m	X4	X4/m	X5	X5/m	X6	X6/m	X7	X7/m	X8	X8/m	
North	10.00	0.04	4.08	0.16	91.2	0.42	21.05	0.84	0.11	0.12	2.57	1.21	0.58	1.23	0.32	1.72	0.76
East	70.00	2.8	77.26	3.09	33.8	0.67	47.36	1.89	1.067	1.17	2.68	1.26	0.52	1.11	0.16	0.86	1.61
South	5.00	0.2	7.94	0.32	23.5	0.46	5.26	0.21	0.48	0.53	2.01	0.95	0.48	1.02	0.13	0.7	0.55
West	15.00	0.6	10.71	0.43	52.2	1.04	26.32	1.05	0.33	0.36	1.23	0.58	0.31	0.66	0.13	0.7	0.67
Mean (m)	25.00		25.00		50.18		25.00		0.91		2.12		0.47		0.19		

Source: Computed From The Data Obtained From (1) Bureau Of Economics & Statistics, Devt. & Planning Govt. Of Sikkim.

(2) Department Of Tourism, Govt. Of Sikkim.

Appendix: 4.2

Ditribution Of Plan Outlay And Expenditure On Tourism In Sikkim (1985-1996).

Seventh plan (1985-90)		Annual Plan '(1990-91)		Annual Plan '(1991-92)		Eighth Plan '(1992-97)	
Outlay	Expenditure	Outlay	Expenditure	Outlay	Expenditure	Outlay	Expenditure
200	164.56	133	83	133	139.05	600	603

Source : Five Year Plans Of Sikkim, Govt. Of Sikkim.

Appendix: 4.3

Plan & Non Plan Expenditure On Tourism By Sikkim Government (1992-96). (in Rs)

	Years			
	(1992-93)	(1993-94)	(1994-95)	(1995-96)
Plan Expenditure	14533171	13952782	10350238	19072841
(in %)	74.88	72.39	64.42	75.81
Non Plan Expenditure	4874778	5320975	5716959	6086640
(in %)	25.12	29.6	35.58	24.19
Total Expenditure	19407949	19273757	16067197	25159481
(in %)	100	100	100	100

Source:Office Of Accountant General Of Sikkim, Govt. Of Sikkim.

Appendix: 4.4

Average Tourist Days In Sikkim (1992).

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Tourists	Number Of Tourists By Length Of Their Stay			
	(1-3) days	(4-7)days	>7days	Not Reported
International	1922	1002	365	3526
Domestic	10816	7521	738	0
Total	12738	8523	1103	0

Source: Bureau Of Economics & Statistics, Devt. & Planning, Govt. Of Sikkim.

Note: Average for each range of their stay is used for calculating tourists overnights.

Calculations Of Average Tourist Days:

A: International Tourists

Total International Tourists Overnights' = $1922 \times 2 + 1002 \times 5.5 + 365 \times 11 = 13370$

Average Tourist Days = $\frac{13370}{3289} = 4.07$ days

B: Domestic Tourists

Total Domestic Tourist Overnights' = $10816 \times 2 + 7521 \times 5.5 + 738 \times 11 = 71115.5$

Average Tourist Days = $\frac{71115.5}{19075} = 3.73$ days

C: Total Tourists

Total Tourist Days' = $12738 \times 2 + 8523 \times 5.5 + 1103 \times 11 = 84485.5$

Average Tourist Day = $\frac{84485.5}{22364} = 3.77$ days

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