CHAPTER 1

INTRODUCTION

URBANIZATION IN INDIA

Periods of Indian Urbanization

Urbanization in the Indian Subcontinent has not been a continuous process. Ramachandran (2004) has divided the urban history of the Subcontinent in five periods. These periods are described in the following paragraphs:

First Period of Indian Urbanization

First period of urbanization in the Subcontinent has been the prehistoric period of urbanization (2300 BC to 1800 BC). The Indus valley civilization dated at 2350 BC has been the first imprint of urbanization of this period. Harappa (2400 BC to 1900BC) and Mohenjodaro were the two major cities of this period. Besides these the other cities of this period in the Subcontinent were Lothal, Kalibangan, Banwali, Surkotada, Rangpur and Rojdi. There was an abrupt beginning of city life in Harappa and Mohenjodaro and it is stipulated that the idea of the urban life in the Indus valley civilization diffused from Mesopotamia. Although the origin of the Harappan people is still not clear yet it is very clear that their culture was of a fully developed urban society that was supported by rural area. After 1900 BC there occurred a deterioration of these cities. The reasons of their decline are still not clear. Some say the decline took place either due to self-destruction or by some invading army. Others say there must have been some natural causes for the decline. Increasing population and resultant overcrowding and poor sanitary conditions might have led to their decline according to another school of thought. Overcrowding might have produced devastating pestilence that led to reducing population and thus decline of the cities.

Second Period of Indian Urbanization

The second phase of urbanization in the Subcontinent began around 600 BC. It was more or less a continuous phase. From this period onwards urbanization became a
permanent feature of the Subcontinent. The Aryans in the north and the Dravidians in the south steered this phase of urbanization. The oldest cities of this period were Varanasi and Patna in the north and Madurai and Kancheepuram in the south. This period has been further divided into three parts in the north and two parts in the south India. These were: the post-Vedic period, the Mauryan period and the post-Mauryan period in northern India and pre-Sangam and the Sangam period in the southern India. This phase overall is characterized by the Vedic text. The emergence of the cities in the post-Vedic period was due to the economic forces. The Aryans were iron-age people, they used iron ploughs, etc. in agriculture. This generated a surplus of food and led to the emergence of cities. Due to the presence of literature there are available good accounts of the urbanization of the Mauryan period. By this period the number of cities and their size had increased greatly. The internal structure had become well-organized. Now there were many towns of different types. Each had different function, like the commercial city, port city, educational city, military city, etc. The post-Mauryan period was the period of decline of these cities. Foreign invasion, political factors, natural calamities, and conflicts between the feudal chiefs, etc. have been the reasons behind their decline.

Urbanization in southern India has a different story altogether. Two states of Tamil Nadu and Kerela, witnessed a different culture of Dravidians during this period. Unlike the urbanization of the north India, there was no continuity between the urbanization of Harappans and Dravidians in south India. Even though the origins of the Dravidians are still not fully understood, some information has been gathered from the available literary and archeological evidences. A vast literary work of this period has been available in ‘Sangam’ literature. Initially Tamil society was not divided into four varnas, as in the north. Most of the social customs of the Tamil society were different from those of the Aryans. The most distinctive feature of urbanization in southern India was the existence of two capital cities for each kingdom. One was a coastal capital and the other was an inland capital.

**Third Period of Indian Urbanization**

Third period of urbanization in the Subcontinent is the medieval period (AD 600-1800). This period is characterized by turmoil in the northern Subcontinent and rapid growth in the southern Subcontinent. A small amount of literature is supported by the archeological evidences for urbanization of the northern Subcontinent, whereas there is ample literary evidence for the urbanization in south. The major kingdoms of south during
this period (AD 600-1300) were Chalukyas, Ishvakus, Pallavas, Cholas, etc. The southern cities of that time are Tanjore, Kumbakonam, Tiruchirappalli, Cuddalore, Nagapattinam and Tiruchendur. The prominent feature of these cities was dominance of temples in the urban landscape. Urbanization in the period of 1000-1526 AD had almost reached every corner in northern Subcontinent. Initially destruction of some previously formed cities took place but later Khiljis, Tughluqs and Lodis established many new cities. The two new and famous cities of this period were Delhi and Agra. Besides this other cities were Mathura, Thaneshwar, Allahabad, Varanasi, Pataliputra, Gwalior, Ujjain, etc. The Mughal period (AD 1526-1800) was another important period of urbanization after the period of Mauryans. It was characterized by immense political stability and economic prosperity. Many cities were brought up both in north and south of the Subcontinent. Enough foreign literary sources are available for this period. Trade and industry were the main factors behind urban growth of this period.

Fourth Period of Indian Urbanization

Prior to the Independence was the fourth period of urbanization in the Subcontinent. This period is from 1800 to 1947 AD and Europeans played a major role in this. The Portuguese were the first to establish on the Indian Subcontinent at Panaji in Goa (1510) and Bombay (1532). This was followed by the Dutch, the French and the British. Urbanization in the 19th century is attributed mainly to the British. Their economic policies and social attitudes guided the process of urbanization. There are a vast amount of literary sources available on the urbanization of this period. Initially there occurred a period of decline of the cities. The reasons of decline were lack of interest of the British in the economy and the prosperity of the country, and the industrial revolution in England. Industrial revolution led to the development of the rail network which besides contributing to the growth of few centers, resulted in the diversion of the old trade routes and thus neglecting some towns. After this period of decline of urban centers till 1870s there occurred a slow growth in urbanization. Major contribution of the British in this period were the creation of metropolitan cities, creation of the hill stations, modification of the landscapes of existing urban centers, introduction of railways and provision of urban amenities in the cities. Hill station was an important contribution by the British to the urbanization of the Subcontinent. The British established the first hill station in the Subcontinent in 1815. By 1870 about eighty hill stations had been established all over the country (Kenny, 1995).
Fifth Period of Indian Urbanization

The post-Independence period is characterized by rapid urbanization in the Subcontinent. After Independence there occurred many changes—huge influx of refugees due to partition, establishment of new administrative cities, setting up of new industrial cities, coming up of many cities in the category of one-lakh or million cities, decline of many small towns, increase in the slums and squatter settlements in the cities, and the introduction of the concept of city planning are a few of them.

The focus of the present study is on how one of the prominent hill stations established by the British, namely Shimla, deteriorated from being a sanatorium to almost a ‘pestilentarium’*. It is pertinent here to introduce the concept of hill station in little more detail.

Hill Stations

Hill stations are one special kind of settlement established by the British in India. Due to their high altitude the hill stations had a ‘healthy’ climate. Although the British established many hill stations, the credit for the invention of hill stations as summer resorts in India goes back to the Mughal emperors. Akbar, Jahangir and Shah Jahan, who were very much impressed by the beauty of Kashmir, made a summer base there (Wright, 1998). However, most of the present hill stations have been established during the British period and so they are referred to as the inheritance of the British Period (Ramachandran, 2004).

Until the 17th century the mountains were symbols of horror for the Europeans. They were thought of as “…Chaotic vestige of disaster. They were ugly and thought of as aggressive warts that grew on the surface of the new continents” (Bhatt, 1998, p. 26). Due to this fear in the minds of the Europeans, they hardly visited the mountains. It was only during the 18th Century when some Europeans adventured into the mountains that this perception changed. The fear of the mountains now got converted into love, especially among the European poets. This change was followed by the development of hill resorts in India. These hill stations thus are the legacy of the colonial rule in India (Bhatt, 1998 and Ramachandran, 2004).

By the 16th century the Europeans had become aware of the fact that the hot and humid climate of the equatorial and tropical areas did not suit them. They tended to become

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* The term “pestilentarium” was used in context of Shimla by Pamela Kanwar (2007) p. 130.
sick in this climate. By the beginning of the 19th century it was realized that the cold climate was healthful. It was realized that the white man was at respite when a relief from the continuing heat was found out (Spencer and Thomas, 1948). By 1820s, the British realized the recuperative effects of the hill climate. Other than the comforting climate of the hills the relationship between the race and the climate was also now known (Kenny, 1995). Tropical hill locations therefore functionally served as health resorts (Aiken, 1987). A general term came into use to define such stations as ‘Sanatorium’. Later these places were also called as ‘Hill Stations’ as the British officers used to be stationed here.

Indian hill stations acted like the English spa in an alien setting (Mr King, quoted by Barr and Desmond, 1978, p. 42). As “the ports were the bridgeheads of the British Empire, the hill stations were the bunkers for climatic protection” (Kanwar, 1999, p. 12). Hill stations were the sites for refuge and surveillance (Kennedy, 1996). Besides this, the resorts maintained a good civic life for the colonizers. Initially the British had an illusion that when in the hills they could escape from the Indian population (Aiken, 1987; Kenny, 1995; and Kennedy, 1996). The British also made several efforts to distance themselves from the Indian population. The settlement and landscape of a hill station in India depicted the discourse of imperialism of the British (Kenny, 1995). It was a place for the British where the British could express and present their belief of domination.

The hill stations have been found to be the most extensive network of settlements, after the cantonments, built by the British (Bhatt, 1998 and Kanwar, 2007). They built about eighty such hill resorts in a span of roughly thirty years. A great political influence was exercised by them in the colonized area (Spencer and Thomas, 1948).

As the hill stations in India were resort towns, they were mostly located in the lower mountain ranges of the Himalaya and high hill ranges in the rest of the Subcontinent. Some of them also functioned as summer capitals of the British Empire and its component territories. Hill stations carried the imprint of the British communities. In the hill stations hotels and houses were built for visiting Europeans. The main thoroughfare in them was The Mall Road. It was a meeting place for the Europeans. After the Independence the role of the hill stations did not change much even though they were mostly no longer used as summer capitals. The Europeans were now replaced by the well-to-do natives (Dutt, 1983).

For the Europeans the only barrier for the growth of the hill stations used to be the water supply and infectious diseases (Hagget, 1972). The latter was overcome in most of the hill stations by locating them on the hill tops, but in spite of great efforts water crisis in
them has been a perpetual problem, as on the hill tops supply of water used to be difficult. Considering only the good and healthy climate, towns were established at this height by the British. Although the hill stations and their surrounding areas were endowed with abundant natural resources, still they suffered from some short falls. Some of the common problems these days faced by a hill station are indiscriminate felling of trees, overexploitation of the resources, soil erosion, landslides, faulty agricultural practices, water scarcity, and lack of proper irrigation facilities, etc.

Many other problems in hill stations occur due to their morphology. The morphology of an urban settlement is affected the most by the physical factors (Sharma, 1987). The location, site, climate, geology, and water availability are amongst the physical factors. Settlements in mountainous areas have some special characteristics. They differ from the settlements of plains in both the physical and cultural aspects. They are on hill tops, valleys or spread on the hill slopes. Land utilization depends a lot on the topography of the area and gives a special character to the settlement in mountains (Berry and Horton as quoted by Herbert, 1972, p. 62). The fertile soil, as a result of the geomorphic processes prevalent in hill areas, is available mostly in the valley bottoms. The valley bottom provides the best area for agriculture and for the settlement as well. Due to this most hill towns tend to be located in valley bottoms or on gently sloping valley sides. Hill top settlements, including the British-induced hill stations are rather a digression from the norms. On the hill stations there is a scarcity of agricultural land as well as that of water. In the Himalaya the northern slopes are covered with dense forest and the southern ones are generally sunny and are best for pastures (Kanwar, 1999). When a hill town is located in this kind of set up the town’s morphology adjusts to physical factors of the locality. A hill top settlement in mountainous areas requires a great deal of adjustment to its complex physical environment.

In mountainous areas due to the physical characters of land, development and growth of the city becomes difficult. Problems get aggravated in due course of time (Sharma, 1987). Development takes place at a much higher cost in the city located in the hills, as compared to the cities of plains. Urban expansion remains restricted in the hill area due to its complex geology and geomorphology. The hills are geologically unstable. This instability is aggravated by the urban activities on it. Along with the urban expansion the corollary activity of deforestation also takes place and this makes the steep slopes more fragile and prone to landslides and erosion. Problems associated with the designing of the railroads and streets, construction of tunnels, and traffic hazards are unique to the hill towns. All these give a special character to a city established in the mountainous areas
Thus urbanization in hilly areas has to deal with larger and more intense problems than urbanization elsewhere. The present study deals with the inherent problems and their aggravation in one of the prominent hill stations of the Indian Subcontinent, namely, Shimla.

Evolution of the Hill Stations

Shimla has been referred to as a multifunctional hill station (Kennedy, 1996). Ramachandaran (2004, pp. 63-64) makes the following observations about the way the Indian hill stations were established and their present functions:

Hill station is an inheritance from the British period. The British, coming from a cool temperate climate, found the Indian summer season inhospitable and even considered it a threat to good health and longevity. They found an escape in the hills, where they spent the greater part of summer. Even the national capital was shifted from Delhi to Simla for six months of the year. The hill stations, located at elevations of 1,500 to 3,000 metres above sea level, attempted to replicate the ambience of the English countryside, for which the English in India longed, nostalgically.

The first hill stations were established as early as 1815, and by 1870 there were over 80 hill stations in four different areas of India, serving the four major metropolitan cities of Calcutta, Delhi, Bombay and Madras. These areas were: (a) Simla-Mussoorie-Nainital near Delhi, (b) Darjeeling-Shillong near Calcutta, (c) Mahabaleshwar in the Western Ghats near Bombay, and (d) the Nilgiri-Kodaikanal area in Tamil Nadu.

The hill stations originally catered to the needs of the British population in India, which consisted mainly of civilian and military personnel and their dependents. In the course of time, a substantial native population migrated to these towns, seeking employment in providing the various services which the British needed. The British built schools, hospitals, hotels, and clubs for the exclusive use of the Europeans. Women and children of European origin outnumbered the men, who were compelled to spend longer times in the plains. In due course, the Indian princely families followed the British to the Hill stations, where they established their summer palaces. The hill stations also eventually served the needs of European business executives working in private industrial and business houses, and Christian missionaries.

The hill station, for the British, was a temporary home away from home. For a people accustomed to a different climate, the hill station was also a definite need. Today hill stations exist primarily as recreational and tourist centres catering mainly to the needs of the new urban elite.

Many have tried to study the evolution of the hill stations in the Indian Subcontinent. Monika Buhrlein (quoted by Kennedy, 1996, p. 11) studied the evolution of the Indian hill stations and identified three stages in their evolution. First stage is sanitarium to high refuge (1819-72), the second stage is of high refuge to hill station (1872-96) and the third stage is from the hill station to the town (1892-1948). Kennedy (1996) has studied the growth of the Indian hill stations. He has suggested that the first half of the 19th century was the period of their foundation. The second half has been called as the period of the consolidation of these hill stations. During this period, the established hill stations were growing more and more. The turning point in the evolution of hill stations was
reached during the time of the Great Indian Mutiny (the First War of Independence of 1857). At this time the strategic importance of the hill stations was realized by the British. After this, in the late 19th century, the hill stations reached their zenith. New structures and grand buildings started coming up. Population started growing beyond the capacity of the place. Shandil (1992) divided the evolution of the city of Shimla in four stages, the first one being the conceptual stage. In this stage Shimla emerged as a great urban settlement. It became famous for salubrious climate, for trade, etc. Second stage was when Shimla became important administratively. It came up as the summer capital of the government of India. Lots of construction took place, there occurred an increase in the population, etc. Third stage is the railway stage. As the name suggests Shimla-Kalka rail link was set up. Immense population growth occurred along with decentralization. Many problems in the city were now being recognized in the fourth stage called as modern stage in which Shimla faced a political set back. Now population was putting undue pressure on the resources. This aggravated the problems of shortage of accommodation, sewage disposal system, water supply, congestion, etc.

**URBANIZATION IN HIMACHAL PRADESH**

The city of Shimla currently occupies a place of considerable importance in the administrative set up of the state of Himachal Pradesh. It is the capital of the state and the largest (the only class-I town as per the Census of India) urban agglomeration in the state. Roughly one-fourth of the urban population of the state of Himachal Pradesh resides in Shimla. The journey of the town, from being a small un-conspicuous hamlet around a hill-top temple (Shyamla) through sanitorium for the British (Simla) and summer capital of the Raj, to the present capital of Himachal Pradesh (Shimla) has not been eventless. Rather, the evolution of Shimla town has been quite intimately related with the evolution of urbanism and urbanization within the bounds of Himachal Pradesh. It has always dominated the urban scene of the area. In the following paragraphs an account is given of the manner in which urbanization in Himachal Pradesh has progressed and the role that Shimla has played in this process. Especially the account of the development of Shimla has been drawn from Kennedy (1996) and Kanwar (1999) and that of progress of urbanization in Himachal Pradesh is from Marh (2006).
Pre-British Period

Even before the 19th century, the area that now is the state of Himachal Pradesh did have some so-called urban centers in the form of the headquarters of princely states. These, however, were small and only few. These small towns were mostly located in the valleys occupying valley flats, river terraces, and relatively gentle sloping hillsides. The towns like Chamba, Kangra, Mandi, etc. can be cited as examples of the traditional hill towns. They were located at sites which were blessed with the availability of water, fertile arable land, and might be a scenic landscape. The general population in these towns would reside in the houses built on slightly sloping land, keeping the fertile flat land for agriculture. The mahal (palace) of the Raja (the king or the chief) would be located on a strategic site generally on the highest ground available (cliff top, ridge top, etc.). Some of the traditional hill towns also had a fort which housed the local army especially during war situations. These towns were rather outgrown villages, with their extensive agricultural fields, cattle pens, gardens, etc. They mostly preserved their rural character. Kanwar (1999, pp. 119-20) describes the pre-nineteenth century urban scene in this area very succinctly as below:

The thrust of development prior to the nineteenth century had been confined to the valleys and wherever agriculture was possible with the forests and pasturelands on the ridges serving as watersheds. Strategic summits in the pre colonial period were often sites for defensive forts that guarded the cultivated valleys and towns below. The pattern also implied a cycle of adaptation that tied the multifarious uses of land, the interlocking of agriculture, forest and pasture into mutually interdependent activities.

Settlements, both urban and rural tended to be confined to the valleys. To the indigenous villages the forested heights were normally the sacred groves dedicated to the local devta [deity]. For the local people who lived in the hills it was Dev Bhumi [land of gods]: almost every forested peak was the sacred grove of a local godling. Associated with water sources, these sacred groves were ecologically tied to worship and had a socio-religious orientation.

The British Period

Urbanization in Himachal Pradesh virtually has been the phenomenon of the 19th and 20th centuries. Initiation was made by the British, in the beginning of the 19th century, when some hill stations were established in the lower and lesser Himalaya. The ability to command strategically, acquire territory, for the transportation network, and exploit the resources of the British areas were some phenomena that made such hill stations possible (Aiken, 1987). European hill stations of the lower Himalaya were established for social, cultural and strategic reasons in the Subcontinent (King, 1976). “Hill stations were unique urban entities” (Kennedy, 1996, p. 3). Functionally these hill stations began as health centers -‘the Sanitaria’- for the British (King, 1976). For the British the Himalaya provided a refuge (Aiken, 1987) from the unbearable hot and muggy weather of the Indian
Subcontinent (especially that of the North Indian Plain) and provided an environment that was similar to that back home. Besides this another function of such hill stations was that they provided good socio-cultural characteristics of the colonial society (Aiken, 1987). Landscape was made in a way that represented their culture (Kenny, 1995).

Development of Shimla-The Hill Station-Antecedents of Pestilentarium

Shimla located in the northwestern India, is one of the hill stations of Himachal Pradesh. The history of Shimla has been profoundly shaped by its political role of being the summer capital of India (Kennedy, 1996). Initially it gained fame for its pleasant climate.

Like many other hill stations in India established by the British, the area around Shimla was hosted initially by a tribal society that was neither seen nor heard. The only sign of civilization were a few scattered houses. But then with the continuous invasion of some people, extremely different in culture, it got changed into a feudal society. This invasion of people in the hill station of Shimla led to the commencement of the process of urbanization. But the main impetus for the move of the British to the hill stations came after 1857. Now the strategic value of the hill stations was realized (Kennedy, 1996). A formal policy of shifting the government to the hills was brought out.

The story of Shimla is about changes or rather transformations. The natural landscape of the pre-nineteenth century period was completely transformed (Kennedy, 1996). Ever since the first colonial establishment, the natural environment of Shimla was under constant assault. These transformations started early in the 19th century. Within a short span of time many developments took place and Simla became Shimla, as a gesture of Indianization. Since then the inhabitants have been constantly, energetically and ceaselessly unrolling the carpet of urbanization in the region. It was an ‘overgrown village’ by 1860s consisting of few European cottages. It soon got converted into a small ‘metropolis’ (Kennedy, 1996). The present habitation has been only possible in the region after certain manipulations in the nature (Dear and Flusty, 1998) one of which is deforestation (Kennedy, 1996).

From the beginning as a feudal society, Shimla has come a long way and has reached the present climax of urbanization. Shimla began its journey as Shumlah, which was a small hamlet in the beginning of the 19th century. It was first referred to as ‘Semla, a middle sized village’ in 1817, in the diary of two Scottish officers, Lieutenant Patrick
Gerard and Lieutenant Alexander Gerard, as they surveyed and mapped the newly conquered (from Nepal) hill state.

At that time the hill state was described “as a land capable of infinite care and acceptance, a land seemingly content within itself, a land yet unaware of its place in the episode of Empire” (Bhasin, 1992). It was for certain ‘the resort of the idle, the invalids and the rich’, as one writer puts it. It was a place to escape the heat of the plain (Kennedy, 1996). There was no other town in the whole of the northern India, which could be placed next to it. Shimla was clean and beautiful. It was a fascinating hill station, pure and simple which hypnotized all its viewers with its beauty. It was placed in a charming sylvan setting, with snowy hills surrounding it, gushing cascades, and meadows. Shimla had a bracing climate, well adapted to the Europeans, a fact which immensely contributed towards its popularity as a ‘Sanatorium’ (Sud, 1992), a name given to Shimla (Bhasin, 1992 and Kanwar, 2007). Hill stations had ethnomedical benefits for the colonial society (King, 1976). The station acted as a sanatorium for the wounded and the convalescents too. Places such as Shimla, had the potential to substitute their native place (Aiken, 1987) and thus obviated the need of sending convalescents out of the country.

Shimla offered the British, a location that reminded them of the way the things were back home including the famous ‘London fog’. It was a ‘landscape of memory’ (Kennedy, 1996) for the British. So they established this town as a replica of the way the towns were back in England. The buildings, whether residential, official, religious, or commercial, were made the way they would have been made in England. Bungalows were the prominent residential units of a colonial urban settlement (King, 1976). Efforts were made to make the town a real transplant of England. Botanical gardens were developed to make the area similar to their land (Kennedy, 1996). The administrators of the town went to a great length to ensure the racial purity of the population of the town. They segregated themselves away from the Indian population. This was another motive behind the establishment of the hill stations (Kenny, 1995). ‘Indians and dogs’ were not allowed on The Mall, the famous thoroughfare straddling The Ridge. As Kennedy (1996) writes “...the more the natural world of the hill stations were deliberately altered by the British, the more “natural” it seemed to them”.

By 1824, European gentlemen, and the invalids, had started pouring in and taken asylum in the state for recuperation. The first Governor-General who gave into the exotic
charm of this ‘dreamland’ was Lord Amherst, in 1827, after which a continuous influx of people began to this place.

The journey to Shimla used to be the epic march by the British. Initially it used to take many days to reach. But with the development of the transportation network, the journey was shortened. Gradually the number of visitors also increased (Kennedy, 1996). People from all corners started coming to this place and gradually houses sprang up. In 1830 the Government directed that the negotiations should be done with the chief of Patiala and Rana of Keonthal to whom the land of Shimla originally belonged. As directed, the then political agent, Major Kennedy, negotiated an exchange with the Rana of Keonthal for his portion of the Shimla hill comprising thirteen villages.

British Empire had always been apprehensive of Russian’s ambitions. Punjab provided the key to the security of the newly established empire against the bugbear of a Russian advance, either from the Mediterranean or from Central Asia. Throughout their stay in India, British feared an attack from Russia through Afghanistan and northwest India. Shimla had the potential to safeguard the northern frontiers as well as develop Indo-Tibetan trade, and exploit the rich mineral resources of Tibet.

There were many other political and military reasons, which added to the development of this hill Station. One was its strategic position. Shimla overlooked the plains. It was easy to send the troops to the plains in case of emergency (Bhasin, 1992 and Kanwar, 2007). Thus it was made the base for the troops. In this regard Sir John Lawrence, the then Viceroy (1863) wrote to the Secretary of state that:

... of all the hill stations Simla seems to me the best for the supreme Government. Here you are with one foot, I may say, in the Punjab, and another in the North West provinces... (Barr and Ray Desmond, 1978)

John Lawrence, thus, decided Shimla to be the most appropriate hill station to be the summer headquarters of the Government of India. His choice of Shimla, as the summer capital stemmed from its domination over the northwest frontiers and that the climate and the land reminded the British of their native land. Shimla was fortunate [or might be unfortunate] to get selected as the site for the summer capital of the British Indian Empire. In 1864, Shimla was formally made the summer capital of the Government of India. From here, the troops could be rushed to Delhi and deployed in the plains even during the rainy seasons, as the events of 1857 had demonstrated. Thus Shimla appeared to be a logical choice of being a summer capital. This was a turning point in the history of Shimla. Within
a short span of time many developments took place. In 1864 the decision to maintain Army Headquarters permanently in Shimla was taken. In view of its strategic location, the officers attached to the army headquarters were also permanently located in Shimla.

An army of British officers and administrators, along with an even larger army of Indian clerks, peons, and orderlies started coming to Shimla every summer initially from Calcutta and later from Delhi (Kenny, 1995). Along with these came Indian as well as continental businessmen to make hey while the ‘sun’ (of the British Empire) shines. This was the case almost in every hill station (Aiken, 1987). In case of Shimla cue of the British Indian Government was also followed by the then Government of the Punjab Province. The latter made Shimla their summer capital as well.

Raja Bhasin, a celebrated historian of Shimla, described the Shimla of those days thus – “Interestingly, apart from the rulers of the ‘Simla Hill States’ who were free to come and go as they pleased, practically all others were discouraged as an ‘undesirable influence’” (Bhasin, 1992).

In case of the morphology of the town, the British had made a marked distinction in the landscape of the town. As observed by Sorkin (quoted by Dear and Flusty, 1998) social order of a place has always been visible in its urban form. The British divided the town into two wards, the Station Ward and the Bazaar Ward. The Station Ward had a European character and the Bazaar Ward had Indian character and was crowded. This kind of distinction can be seen on the face of the hill station even today. The northern slope comprised of the Station Ward with scattered bungalows of the British and the Bazaar ward consisted of the Indians, the most crowded of all, also called as the ‘rabbit burrow’.

The Shimla Municipality came up with a bye-law in 1891 prohibiting the porters on The Mall Road between 4 and 8 pm from April to October. A tunnel was constructed in 1905 under The Mall Road. This was done in order to divert the coolie traffic from the notice of the Europeans. The use of topography in Shimla and most of the hill stations was done in such a way that the habitations of the Indian population were almost invisible to the British most of the time. The British occupied the higher grounds while the Indians occupied the lower areas (Kennedy, 1996).

The natives were always placed at a distance from the Europeans (King, 1976). They were to remain constrained to the Lower Bazaar and other designated areas. So much so that at one time the Municipal Corporation of Shimla had almost decided to move all the Indian population away from the town. It was only due to the enigmatic situation that the
British required the services of the lowly Indians for their daily chores and could just not survive without them that this could not be implemented. One of the paradoxes of the hill station was that the success of these places, where the British imagined to be without the Indians, could not be without their contribution (Kenny, 1995 and Kennedy, 1996)

In 1874, a bullock-cart service for goods and a tonga service for mails and passengers commenced from Kalka to Shimla. In 1903, first passenger train service ran between the two stations of Kalka and Shimla. Shimla did not remain an untouched state anymore. The improvement in the transportation system led to increase in the number of the visitors in Shimla.

According to the Imperial Census of 1881 the population of Shimla grew about 53% becoming 13,258 from 8,672 in 1875. The number of houses also increased from 290 in 1866, to 350 in 1871 and to 550 in 1898 by the completion of Ambala-Kalka railway line. Viceregal Lodge came up as a statement in stone by the British for their permanent presence in India (Kennedy, 1996). No housing plan was followed although the Municipal bye-laws broadly regulated structures. Individual owners built houses to their own specifications. All this was gradually changing the morphology of the town. The reason of this rising population in the town was that the hill station had gained a lot of popularity as a sanatorium.

The major force behind the steady increase in the population was the migrants. People from all corners were pouring into the hill station. There was always a huge floating population in the station, which was burdening the place more and more. Shimla offered many good things which encouraged people to migrate from long distances too. It offered a number of advantages besides its vantage position. It was a town in an European setting, with good climate, less mortality rate, good health (Bhasin, 1992), good education facilities and, a perfect social atmosphere for the European population.

Women and children were an important element of the European population in the hill stations. In India hill stations were the only places with more women than men (King, 1976). Some women came here without their husbands, some became widows, some along with their husband, and still some came as young unmarried women looking for husbands. With the increase in the total population the women population also kept increasing. Women made about 44.6% of the total population in 1869, this increased to 53.7% in 1904 and then 57% in 1922.
Besides women children were an integral part of the British society in the hill stations. Hill stations were famous for their schools. This was another important function of the hill stations, i.e. to provide the colonial community with the educational needs (King, 1976). Many British parents were unwilling or could not afford to send their kids back home for studies. So hill stations were a good option for them. The hill schools promised the kind of education the British children required. Other than women and children the number of British was also increasing in the Subcontinent. Many wanted to enter the non official enterprises and get employment opportunities in commerce like plantation, etc. (Kennedy, 1996).

Along with the British a huge number of hill people from the surrounding areas were also coming to Shimla. The young from different areas made the majority of the workers in Shimla (Kennedy, 1996). The Indian population in the town had risen from 20,779 in 1889 to 29,048 in 1898, an increase of forty per cent (Kanwar, 2007).

Raja Bhasin described the Shimla of those days thus:

As an overview, there was precious little of that a demographer could term a ‘stable’ population. Almost all followed the pied-piper who called them up every summer and bade them return before the onset of winter. This included the migrant labourers. People from Ladakh, Garhwal and Kashmir acted as job-porters and coolies; while rikshaw pullers were mostly local hill-men (Bhasin, 2005, p. 8).

With the rising population many British living here thought that Shimla would soon become a pestilentarium instead of a sanatorium (Kanwar, 1999). Though initially many British were reluctant to acknowledge both the increasing population and thus the unsanitary conditions of the town, yet by the mid 19th century a paranoiac fear of overcrowding had started bothering the officials. An apprehension had developed that the hill station, which was then cool, clean, and disease free, would soon become unhealthy, unsanitary and unfit to stay. This fear soon got materialized in 1875 when cholera claimed 184 lives. In 1905 it was found out that Shimla’s most crowded bazaar averaged 17.5 residents per house. There was a high density condition in the bazaar area of Shimla (Kennedy, 1996).

Overpopulation has remained a perennial problem in Shimla. With the increase in the population of the station, arose many other problems. Biggest of all was the problem of overcrowding especially in the Indian quarters. This had many repercussions. Increasing population made the other problems more severe. Due to the increase in the population there was a necessity of expansion of the settlements also. The first time the town gave a feel of a
metropolis was in the later part of the Second World War, when the refugee government of Burma was temporarily stationed in the town (Sud, 1976). The whole landscape of the town was transforming further. A mixed type of architecture, Hetero-architecture (the kind suggested by Dear and Flusty, 1998) had started developing in the town. It was a result of many people coming from many diverse cultures together.

Lower Bazaar was the densest part of the settlement. It emerged on the sunny southern slopes in the heart of Shimla - the Lower Bazaar. It has always been the most congested area, erupting in untidy irregular construction down the hill, which irked all. It appeared as if the buildings have been slapped on to the hillside. Also the sanitary conditions of this portion of the town have always been a matter of concern for the British. This ugly overcrowded bazaar occupied the main portion of the town, which instead should have been the noblest and handsomest. It was an eyesore for the British. Shimla Improvement Committee of 1877 and 1904 proposed the demolition of the Lower Bazaar area. It was the area full of filth and pollution (Kennedy, 1996).

Overpopulation led to crowding and congestion and thus more construction. Besides this, water scarcity was another problem related to this increasing population of Shimla. Since the very beginning Shimla had been experiencing water crisis. It has been one of the major drawbacks of the place since the beginning (Wilson, 1979). The town had a few mountain springs, one of which still exists and is known as ‘Ram Mandir ki Bowlee’ (Sud, 1992, p. 5). Water supply to the British households on The Mall was provided by another perennial torrent originating from Jakhoo Hill located near the Combermere Bridge. But these sources of water did not suffice the demands of the growing population. There occurred a perennial problem of water shortage and thus a few reservoirs were built in 1828 and 1830. The daily water supply was increased from the 9,00,000 gallons per day to 42,00,000 gallons per day in 1948 (Kanwar, 2007). Shimla Municipal Committee had warned way back in the end of 19th century that if Shimla expanded beyond its capacity of water supply, the probable result would be ‘Shrinkage’. This would lead to a loss of capital to those who have invested in house property.

Measures were taken at that time to solve the water crisis. Subsequently reservoirs and the pumping engines were installed around Shimla. A reservoir was built in Sanjauli in 1884 and another was brought up in Seog, 9 miles east of Shimla. A large catchment area east of Dhalli was utilized for this. Pumping engines were located at Cheroot Nallah, with the storage in Seog (Sud, 1976).
Linked to water crisis was the problem of the sewage disposal. Due to the insufficient water supply every house couldn't be provided with flush system. There was no uniform sewage disposal system until 1870s. A large portion of population used the edges of the ravines and open land behind houses as latrines. Then another system was brought into practice. Sewage was collected by the sweepers from the houses all over the station in large buckets. This was then put in the four tanks, made on the southern hill of the station. From there it was flushed to the main tank in Lalpani Nallah. Several methods of night soil disposal were tried and abandoned. Nothing worked until the shooting of sewage through iron pipes down the ravines was considered the most appropriate and the most suitable. But with the fourfold increase in the number of houses and a population that had doubled, the problem also became more intense.

Every aspect the society, economy, and ecology was being affected by the increase in population. One such aspect which was related to the sanitation system of the town was drainage and garbage disposal problems of Shimla town. It was another permanent problem of the town. Ecological imbalance was also occurring because of massive deforestation. The assault on the forest began with the beginning of the construction work in Shimla. By 19th century timber had started being used for the commercial market. About 85,000 cubic feet of timber per year was being used in Shimla. As the population increased, more and more wood was required as fuel for cooking and heating purpose. Forests were removed as more flat area was required for the establishment of the settlements or for cultivation. Buck (1925) noticed that many full grown trees were cut down just for potato cultivation. Deforestation further resulted in erosion and landslides. These were the environmental repercussion of deforestation.

Various suggestions were made to check and ameliorate the population-related problems of Shimla town. With the purpose to restrict urban population expansion of Shimla, regular monitoring was started to curb the increasing population of Shimla and its physical expansion. Decennial census and Municipal summer census were conducted. It was seen that there was a wide divergence between the summer count and the winter enumeration.

The imperial government had recognized and started working on the issues of the hill station. The forests were declared reserved. This had two aims, aesthetic as well as practical (Kennedy, 1996). Among other efforts one was to check overcrowding in Shimla. It was noticed that every official who came to Shimla brought with him directly or
indirectly six to a dozen followers along with him. Some like Curzon even proposed to shift the summer capital from Shimla to Dalhousie. With the shift in the capital it was thought that the increasing population could be controlled.

A plague check post at Tara Devi was set up, where the name and address of each visitor was noted and health was checked. This served a dual purpose, firstly that of excluding the afflicted and secondly to keep a check on the undesirable visitors.

It was realized that the number of laborers was increasing every year in the town. To control their number a ropeway was erected which connected the railway goods terminus with the Lower Bazaar. It was done to reduce the number of laborers required for transporting materials. They had a forlorn hope that diminishing work would also reduce the coolies’ population of the most crowded bazaar. In 1872, imposition of a visitor’s tax was also recommended by the Simla Improvement Committee. The tax was thought to be at the rate of ten rupees per head for the people staying for more than fourteen days in the town. This was another step towards controlling the number of Indian people coming to the town.

All these efforts didn’t help much. The hazardous condition of the town was increasing. Incidences of fire in congested quarters have time and again reminded of the problems of the station. Many fire incidences occurred in the town. The first incidence of fire took place in February 1880, which burnt a considerable portion of the bazaar. Other incidences took place in 1890, 1896, then in 1902, and 1922. This clearly shows the hazardous construction or the growth of the town that was taking place. Even after these fire incidences, no action was taken to decentralize or to improve the situation of the overcrowded bazaar (Buck, 1925).

Around the time of Independence many wealthy natives started pouring into the station. They all came here to have some respite from the hot summers of the plains. Calcutta supplied some Indian clerks to Shimla. Most of them were those who had participated in the migration of the government. Kali Bari in Shimla is one of the manifestations of the “Bengal Connections”. The outbreak of Second World War also boosted the fortune of the hill stations in the Subcontinent. Many of the British who would have otherwise left for their homeland had to stay back in the Subcontinent for some time. Once the War was over the European population of the hill stations started decreasing. By 1925 subsidy was started for the British officials who wished to go to Britain. Now the deterioration of the hill stations had begun. The total population of Shimla came down from 26,149 in 1921 to 18,144 in 1931.
This repatriation of the British was one reason for the increase of the Indian population in Shimla. Their ouster created a vacuum in the hill station. Especially in the post-Independence period the Indians of the elite class filled this vacuum by occupying the British cottages, their property, enrolling their children in the British schools, etc. Independence brought many political as well as physical changes to the hill station (Kennedy, 1996).

At the time of Independence, India (as well as Punjab) was partitioned. Indian Punjab was left without a capital as Lahore went to Pakistan. The summer capital (i.e. Shimla) was to fulfill as the capital. Punjab was further divided and states of Haryana and Himachal Pradesh and of course the present Punjab came out of the territorial bounds of the Indian Punjab. Shimla had to remain (until Chandigarh came into being) the joint capital of three states. Ultimately, in the latest phase of its history, it has become the capital of the hill state of Himachal Pradesh. The town of Shimla by virtue of its history has had more than its fair share of attention.

Besides many changes a few things have remained the same as they were in the British period. The Lower Bazaar has changed very little. The Mall, which was the social center, still maintains its status. Another important thing that remains unchanged is the structure of the city (Sharma, 2002). The city structure is not at all compatible with the present function of the city. This incompatibility has led to many problems. Earlier the town was unfunctional. Its main function was as a sanatorium, but now it has become a multifunctional city. The root cause of the problems lied in overcrowding which led to a chain of problems, which are being faced by the present Shimla. Shimla had been devised for an anticipated peak population of 45,000 or at the most 60,000 (Kanwar, 2007) but the city’s population, has been reported as 1,42,555 in the 2001 Census. This is an eye-opener. Linked to this rise in the population are several other problems like increasing pollution of all kinds, congested and unplanned settlements, traffic congestion, lack of basic amenities, water scarcity, etc.

If looked back overtime each present day problem being faced by Shimla has its historical antecedents. The origin of many problems lies in the previous centuries. The British off course made efforts to overcome and conquer most of them, but many could never be eliminated and many still persist. In the 19th century the British style of tackling most of the urban problems was by appointing commissions, committees, panels, working groups, etc. (Bose, 1973). But, ironically this approach has not worked and problems still
persist (many have become bigger and more serious). The only relief is that Shimla still remains a place for people as a respite from the heat of the plains.

**The Century of Urbanization in Himachal Pradesh**

During the 20th century (1901-2001), the territorial area of the state of Himachal Pradesh has experienced a phenomenal pace of urbanization. In 1901 barely 4.03 per cent of the total population of the state was classified as urban, whereas the corresponding value in 2001 has become almost 10 per cent. The state has experienced phenomenal growth of urban population. Chand and Puri (2000, p. 239) suggest that the rapid growth of urban population results from two factors. Firstly, it occurs due to the natural increase of population which results from the excess of births over deaths. Secondly, urban population grows because of the migration from the rural areas to urban areas and from smaller urban areas to larger urban areas. Although both these factors have played a role in the urban growth in the state of Himachal Pradesh, but the latter factor (i.e. rural-urban and urban-urban migration) has been predominant in case of the growth of urban population of Shimla town.

Another feature of the urbanization of Himachal Pradesh is the fact that throughout these 100 years only one town, that is Shimla, has been dominating the state’s urban scene. The gap between this largest town and the second largest town of the state has been mostly increasing. The ratio between the population of the largest town and that of the second largest town of the state (called the index of primacy by Ramachandaran 2004, pp. 193-199) has been increasing throughout this period. Ramachandaran (2004, pp. 192-199) says that city primacy is a distinct characteristic of Indian urban geography. He discloses that in India “...there has been a distinct tendency for primate city formation at the state level.” This has been the case in Himachal Pradesh as well.

Although there has been a tendency for city primacy throughout Indian history of urban development, the period since Independence has been clearly a period of primate city development and escalation of this phenomenon. Ramachandaran (2004, p. 198) states:

In the post-Independence period, there has been a distinct tendency toward the concentration of investment in industries and provision of urban amenities and social infrastructure in state capitals. Educational and medical institutions, research laboratories, and a multitude of administrative bodies have been set up in capital cities. Much of this concentration is due to the attitude of the ruling elites and the concentration of political activities in the capital cities. Decentralization, an important component of the Gandhian philosophy, has received considerable vocal but insubstantive material support. No decentralization has in fact occurred in the post-Independence period. Thus the state capitals and the national capital have received greater attention.
in relation to other cities and they have grown more rapidly than others. Primate city development at the national and state levels is a product of our political framework and there is every likelihood that this process would continue to operate in the future as well.

Shimla clearly has been a very prominent example of city primacy at state level. Shimla has been the largest town of Himachal Pradesh ever since 1901 and the gap between this town and the second largest town of the state has mostly been increasing. Considering the character of the town it can be very easily imagined that if the floating population is also considered, the index of primacy will become much larger. When we look at the distribution of the population within Shimla town, again we are alarmed by the fact that many parts of the town are supporting very large densities of population.

**Urban Phenomena of Relevance**

In the following section some urban phenomena are described that might be applicable in some ways to the conditions prevalent in Shimla and the state of Himachal Pradesh.

**Rank Size Rule**

G.K. Zipf (1949) is given the credit to have formulated the rank size rule. The rank size rule depicts in a settlement system the relationship between the city size and its rank (Mandal, 2000). According to this rule, in a settlement system the population of $n^{th}$ rank city is $1/n$ times the size of the largest city’s population. In other words the size of the $n^{th}$ city’s population multiplied by its rank will be equal to the size of the largest city’s population (Larkin and Peters, 1983). In this way the size of one settlement is linked to the size of all other settlements in a region. For example, the population of the second largest city is half of the population of the largest city. Similarly the population of the third largest city is one third of the population of the largest city and so on. When the city size is plotted against rank on a semilogarithmic graph paper, the dots representing cities fall along a straight line with a negative slope.

Rank size distribution is based on the concept of allometric growth (Beckmann, 1958, quoted by Larkin and Peters, 1983). This type of growth is similar to the growth of an organism. In this type of growth all the parts of the organism grow together at the same rate. In the same way like the growth of an organism, all the settlements of the region grow proportionally. Rank size rule is also related to the heterogeneity of the region. It works
better in a large, heterogeneous region than a small and less diverse region as found respectively in a developed country and underdeveloped country (Stewart, 1958, quoted by Larkin and Peters, 1983).

For Zipf (1949), the straight line relationship as per the rank-size rule reflects the national unity in the political and the economic terms both. This kind of relationship is expected in a homogeneous socio-economic system which has reached the harmonious equilibrium.

**Primacy**

The concept of a primate city is a deviation of rank-size rule. It is an indicator of an improper balance in the process of urbanization (Exline, et al., 1982). It is a concept developed by Mark Jefferson (1939). A primate city is a type of city defined by size and function (William, et al., 1983). According to the primate city size distribution a large proportion of the urban population resides in the largest city of the region. The population of the second largest city is much less than half of the population of the largest city. In other words the largest city is much larger than double of the second largest city.

In contrast to rank size rule, a primate pattern indicates the dominant role of the largest city (first rank city) or the 'Primate city' (Hagget, 1972). It dominates the whole urban system (Mandal, 2000). In the primate city distribution, one city is excessively big and has its effects on the cities of other ranks. Such a city provides almost all the urban functions to the region. This largest city with a large population dominates all the settlements.

Primacy is often one of the most important symbols of an independent country. It is also a reminder of victory over colonizers. The capital cities of the developing countries often show primacy. There occurs a disproportionate concentration of the development and population growth in the primate city (Fellmann, et al., 1992). It serves as a center for all the activities and functions of the whole region.

The reason behind the development of primacy is that, instead of the development filtering down the hierarchy of the urban centers it gets concentrated in the major cities. This happens because with each increment in the urban economy of a city, more and more migrants come to the primate city (Berry, 1973 and Kidwai, 1993).
Colin Clark (1967, quoted by Berry, 1973) and Kidwai (1993) have used another term called ‘Oligarchy’ to describe a situation in which a town with over 1,00,000 population has a bigger share of the total urban population than is expected in a straight line rank size relationship (Berry, 1973).

Primacy is a simple type of city size distribution, caused by a few dominant forces. The rank size distribution on the other hand is complex and is caused by economic, social and political factors (Berry, 1961 quoted by Larkin and Peters, 1983).

A study done by Brian J.L. Berry (1961, quoted by Larkin and Peters, 1983) on thirty seven countries found out that only thirteen countries out of them adhered to the rank size pattern of settlements. He concluded that only those countries which have a long history of urbanization have rank size pattern (Fellmann, et al., 1992). Those countries which have a short history of urbanization or are new in urbanization show a primate pattern (Ginsberg, 1961 quoted by Kidwai, 1993). Thus the rank size pattern is associated with developed countries and primacy with underdeveloped countries (Stoddard, et al., 1986; Fellmann, et al., 1992 and Mandal, 2000).

Hyperurbanization, which is defined as a greater concentration of people residing in a city than what is required to define an area as urban, also leads to primacy. Shift from colonialism to independence of a country leads to the condition of hyperurbanization (Bardo and Hartman, 1982). Colonial primate cities are mostly developed by the combined force of administration and commerce (Kidwai, 1993). It has been suggested that the cases deviating away from the straight line are caused by overurbanization. This happens due to excessive immigration and the limited economic development as in case of the colonial cities.

Primacy tends to result in the neglect of the rural and lesser urban areas and focuses totally on the largest (or few largest) urban areas. Gradually with more and more expansion and increasing concentration of people in the city, the primate city acts like a parasite on the country (Berry, 1973; Lampard, 1955; Stolper, 1955; and Hauser, 1957 (quoted by Kidwai, 1993)). Primate city parasitism is defined as a blockage of the national development as it retards the development of the other cities.

There are two types of primacy (Kidwai, 1993). One is in which only the largest city deviates from the regular rank-size distribution of cities by being extra large. Another is in which the largest city is much larger than the other cities which do not conform to the regular rank size pattern. The other cities are too small in relation to the rank size distribution. The second type of primacy is called an immature distribution. Evidences
suggest that this kind of distribution is found in places of poor urban trade. In both the cases the reasons leading to primacy are different and both have different policy implications (Smith, 1972 quoted by Kidwai, 1993).

Many researchers have attempted to formulate an index for primacy. The Index of primacy is a measure to know the extent or the degree of primacy of a place with reference to the population size. The higher the value of the index, higher is the primacy (dominance) of a place. Primacy has been measured by the following methods (Sheppard, 1982; Sokona, 1985; Moomaw and Alwosabi, 2004 and Ramachandran, 2004):

1. The most common measure of primacy is the ratio of the population of the largest city to that of the second largest city. Thus

\[ I_p = \frac{P_1}{P_2} \]

Where, \( I_p \) is the Index of Primacy

\( P_1 \) is the population of the first largest city

\( P_2 \) is the population of the second largest city

This index takes into consideration only the two largest cities. No consideration is done of the pattern of distribution of the smaller cities.

2. Moomaw and Alwosabi (2004) have used indices of primacy for a situation where two or more largest cities of a country are of almost the same size, other smaller cities being much smaller; meaning thereby that there are two or more primate cities. Two indices are calculated as follows:

a). Index of primacy is the ratio of the population of the largest city to that of the sum of populations of second through fourth largest cities. Thus

\[ I_p = \frac{P_1}{P_2 + P_3 + P_4} \]

Where, \( P_3 \) is the population of the third largest city

\( P_4 \) is the population of the fourth largest city

This is called the 4-city primacy index (Sokona, 1985)

b). The index of primacy is the ratio of the sum of the populations of two largest cities to that of the sum of population of third and fourth largest cities. Thus

\[ I_p = \frac{(P_1 + P_2)}{(P_3 + P_4)} \]
3. Sokona (1985) has reported of the use of still another index of primacy, the 11-city primacy index, in which ratio is taken of the population of the largest city and the total population of next ten largest cities. Thus

\[ I_p = \frac{P_1}{P_2 + P_3 + \ldots + P_{10}} \]

Where, \( P_{10} \) is the population of the tenth largest city

As noted above, although primacy is mostly defined in terms of population, yet other relations are also important. For example, primacy can also be defined in terms of functional dominance of the center (Ginsberg, 1953 quoted by Kidwai, 1993). There occurs a monopoly in the urban services in one city and other cities are unable to grow due to lack of services (Kidwai, 1993). But these relations are not easily quantifiable.

There are many factors which determine primacy. Ginsberg (1961) and Berry (1973) (quoted by Kidwai, 1993) said that primacy is the state common in poor countries with short history of urbanization than in more prosperous and long established ones. It has been said that primacy is associated with the type of regional economy (Stewart, 1960 quoted by Kidwai, 1993), size of population, spatial extent of the country and also its dependency on export (Mehta, 1964; Vapnarsky, 1969; and Mc Greevey, 1971 (quoted by Kidwai, 1993)). Mehta suggests that there is no relation between the population density and the degree of primacy. According to Vapnarsky (1969) and Mc Greevey (1971, quoted by Kidwai, 1993) the primacy of a place depends on its relation with the world. El Shakhs (1965, quoted by Kidwai, 1993) related the stage of economic growth to the occurrence of the urban primacy and said that in the underdeveloped regions primacy is rare. Primacy explained either by the theory of export or by colonialism, always leads to concentration of infrastructure in the city center. In case of the colonialism theory there is a concentration of administrative, military and religious institutes in the primate city (Kidwai, 1993).

Linsky (1965, quoted by Kidwai, 1993) said there are six conditions necessary for the development of a primate city - primacy occurs in small countries, which are thickly populated, have a history of colonialism, have low per capita income, a high population growth and an economy based on export.
Suburbanization

Suburbanization means the shift of people from the central urban area to the suburbs or the rural-urban fringe (Wikipedia, encyclopedia, Suburbanization, webpage*). Suburbs or the satellite communities (Wikipedia, encyclopedia, Suburbanization§) refer to the residential area outside the boundary of the city (Larkin and Peters, 1983), or in the outer city (Miller, 1976, quoted by Exline, et al., 1982). It is now an essential part of any city. Almost all cities have suburbs (Jackson, 1973, quoted by Larkin and Peters, 1983). Suburban growth began with the movement of the wealthy people moving out of the congested city center. It started in the western cities especially in North America. But now it has become a universal phenomenon seen in all cities (Herbert, 1972).

Suburbanization takes place when the pull of the suburbs is more than the pull of the inner city. Push factors of the city center include congestion and high population density, pollution and high levels of traffic, a perception of a lower quality of life in inner city areas, etc. Pull factors of suburbs include more open spaces and a perception of being closer to "nature", lower house prices and property taxes in comparison to the city, and the increasing number of job opportunities in the suburbs (Wikipedia, encyclopedia, Suburbanization§).

Suburbanization has been very much linked to the development of transport technology (Herbert, 1972 and Exline, et al., 1982), automobiles and their use. Availability of cheap and a variety of means of conveyance leads to better transportation facilities to the suburbs. As the efficiency of mass transit increases, commuting becomes easy and affordable. The decline in the cost of commuting by car and the increase in public transport encourages people to use automobiles. This encourages people to move to the suburbs (Kopecky and Suen, 2004§).

Besides these, other factors encouraging suburbanization include the availability of cheap land in the suburbs (Herbert, 1972 and Wheeler, 1974). People prefer to stay away from the congestion of the city center and thus choose suburbs as the place of residence. This also helps to alleviate the existing urban congestion and pollution in the center of the city (Exline, et al., 1982; Yeates et al., 1976, quoted by Larkin and Peters, 1983).

Changing economy also encourages suburbanization. After the Second World War the economic growth took place, one of the important indicators of this was the availability
of jobs in the suburbs. The proportion of the available jobs increased in the suburbs as compared to the center (Exline, et al., 1982). This encouraged suburbanization.

Suburbanization transforms the earlier agricultural land into developed urban land (Jackson, 1985; Crawford, 1992 (quoted by Macleod and Ward, 2002)). As urban expansion encroaches the periphery, the agricultural land is lost (Exline, et al., 1982). This agricultural land is used for the residential and commercial purposes.

Suburbanization of America was referred to as a residential and retail phenomenon. It comprised of low density housing and shopping malls. Suburbs are also called as the ‘Edge Cities’ (Wikipedia, encyclopedia, Suburbanization). These edge cities represent a self contained place with employment, shopping and entertainment sources. Individualism and freedom are the characteristic features of the edge city (Beauregard, 1995 quoted by Macleod and Ward, 2002). Such places are thus considered as free from the shackles of the 19th century city. Garrcau (1991, quoted by Macleod and Ward, 2002) calls the edge cities as one of the best attempt by the Americans in search for a utopian centre but they have problems too. For example, they lack sense of community, the houses are expensive, traffic congestion is there, it is difficult to find low wage workers, etc. (Macleod and Ward, 2002).

The suburbs are also characterized by the socio economic diversity. There occurs a complex pattern of the social interaction and an increasing diversity in the social groups in the suburbs (Exline, et al., 1982).

**Urban Sprawl**

Urban sprawl, also called as ‘Population Syndrome’ (Loeffler, 1965) is unplanned expansion of the city beyond the urban fringe into the outer rural area. It manifests on the periphery of the cities. It leads to the development in an unplanned manner (Torrens, 2006 and Wikipedia encyclopedia, Urban Sprawl). Urban sprawl takes place without any proper land utilization plan (Torrens, 2006). It basically shows an extensive growth of the city (Kumar and Singh, 1990). It refers to rapid and expansive urban growth (Wikipedia encyclopedia, Urban Sprawl). In this phenomenon, the scattering of activities (Torrens, 2006) takes place on the isolated tracts. These areas are separated from other areas by vacant land (Ottensmann, 1977, as quoted by Lata, et al.). It is also called as leap frog development (Gordon and Richardson, 1977, as quoted by Lata, et al.). Like suburbanization, cheap and convenient transportation encourages the process of urban sprawl.
Urban sprawl has not been a new phenomenon. It has always been there since urban civilization emerged (Gowda, 1979). Its characteristics varied with time (Kunstler, 1993 quoted by Torrens, 2006).

According to Gottman (1971, quoted by Gowda, 1979) it is defined as “some scattering of residences around centers where business congregates”. It mainly takes place after a place obtains economic and technical achievements.

Urban sprawl has its physical as well as social consequences. It involves changes in land use pattern, transportation, and social and economic activities. It is characterized by low population density (Torrens, 2006), low employment, at times low connectivity also. It is an irresponsible and poorly planned urban development.

Urban sprawl (Sudhira and Ramachandra) is caused by many factors which include overurbanization (Dantzig and Saaty, 1973), population growth, changes in economy, nearness to the resources, etc. As the population growth takes place, congestion increases and the attraction of the town center decreases. Urban sprawl is said to be a phenomenon of mature stage of the evolution of the city. It is a feature of the stage of decentralization in the city. Mainly population pressure is the driving force for urban sprawl. People move to the outer areas of the city due to more access to the nature. There is a belief that, contact with the nature has mental benefits. Besides the mental benefits it also satisfies the residential demand. New houses come up that are affordable (OTA, 1995 quoted by Torrens, 2006). The low density housing also helps in dispersing the pollutants (Bae and Richardson, 1994, quoted by Torrens, 2006). As the economy of the place improves, there occurs a good transport linkage, which acts as a catalyst for urban sprawl. The growth of the highway system and the automobile usage increases. Sometimes imposition of some rules in the developing area leads to the movement of the people to the outskirts of the urban area. A speculation of future developments in a specific area is another factor which initiates urban sprawl. Desire to own an independent house at a distance from the city center or physical features within the city which hinders the continuous development and force people to move out of the city are some of the other factors leading to urban sprawl (Gowda, 1979). Loeffler (1965) says that urban sprawl has connections with highway pattern, places of employment, lower taxes and available water supply.

Some authors have also accused people of being motivated by the racial and social reasons to move outside the city. Public perception is another reason for motivating people to move to the periphery. In a survey (Morriill, 1991 quoted by Torrens, 2006), at least 80%
of the groups preferred urban sprawl. For some, planners and policy makers are also the
agents at work to encourage sprawl. Bahl (1968, quoted by Torrens, 2006) makes the claim
that tax policies have favored urban sprawl. Low density housing favored by the tax rules

Moving to suburbs has negative effects also. Commuting has been found to be a
very stressful exercise (Anonymous c). Urban sprawl leads to more reliance on the
automobiles and this leads to traffic problems, increase in air pollution, more motor vehicle
accidents, more pedestrian fatalities and injuries, low physical activity, destruction of the
green space and agricultural land (Gowda, 1979), congestion, crowding, etc. (Anonymous
b). It affects the mental health of the people and threatens the natural environment. Urban
sprawl leads to increase in the urbanized area of the region. It happens at the cost of natural
habitat including agricultural land (Gowda, 1979). It has been referred to as ‘habitat
encroachment’ (Anonymous a). This loss is the key issue for the environmentalists. Now
urban planners aim to reduce the amount of rural land taken away for the urban activities
(Anonymous d). Sprawl has contributed a lot towards the degradation of the environment
of the city. It has led to fragmentation of the natural habitat and the woodlands near the city.
Urban sprawl is said to be problematic. It requires huge cost in providing new infrastructure
and services in this area. Thus it is a costly phenomenon (Gowda, 1979). The area has low
density of people and thus the cost of dwelling per person is higher than the corresponding
unit in a compact area (Gowda, 1979). The area has generally poor water and air quality,
and increased commuting cost (Torrens, 2006).

**Exurbanization**

Although the phenomenon of exurbanization has been prevalent in the North
America (Larsen, et al., 2007), some similar developments can be seen developing in other
parts of the world as well. Larsen et al. (2007) states that:

The phenomenon [of exurbanization] differs from suburbanization – the steady,
uninterrupted expansion of residences and retail facilities from an urban core – in that it involves
scattered isolated pockets of residential development some distance from an urban center in areas
possessing high aesthetic values and natural amenities (p. 421).

The isolated exurban pockets might be developed by individuals or companies or
societies in areas having relatively low cost of rural land, the lack of regulation and
abundant scenic beauty (Davis Nelson and Dueker, 1994; Crump, 2003; Grubesic and
Murray, 2004; Byun and Esparza, 2005; Carruthers and Vias, 2005 (quoted by Larsen,
Exurban developments are often characterized by social fragmentation (Larsen, et al., 2007) that very clearly manifest on the landscape.

Though until recently exurbanization has been a phenomenon of the west, but of late some developments especially in the hilly tract with similar character are dotting the landscape in developing and less developed countries also.

**Gentrification**

Gentrification is in a way reverse of the processes of urban sprawl and suburbanization. Unlike the latter processes gentrification is the movement of people from the periphery back to the city center (Law, 2000). It is “influx of wealthier individuals into cities or neighborhoods who replace working or lower-classes already living there” (Wikipedia, encyclopedia, Gentrification). It is the movement of mostly the middle and the upper class people to the earlier deteriorated city center. It is a type of urban rebirth.

Gentrification is a process in which certain deteriorated portion of the center of the city, historically and architecturally important, is again taken over by higher income groups (Fellmann, et al., 1992). In the stages of urban sprawl and suburbanization people tend to move away from the city center. They move to the city outskirts from the city center, and away from its congestion. This leads to deterioration of the city center. Improved transportation cost causes the decay of the inner city (Wheeler, 1974). Gentrification instead is a counter current, towards the city center.

Gentrification is purely return to the city. The area undergoes demographic changes, including an increase in the income, a decrease in household size, and often a decline in the proportion of racial minorities. Increase in households with higher incomes results in increase in real estate values with higher rent, home prices, and property taxes (Wikipedia, encyclopedia, Gentrification). The area of the inner city suddenly becomes valuable again. The earlier decline in the population from the city center is replaced by the growth in the population in these areas (Forster, 2006).

The process of gentrification has physical, economic, social as well as political implications. People are either renovating the old structures or they are reconstructing them all together. Due to the sky-rocketing land prices, people again focus on the renovation of the high priced property, owned by them, in the city center. The city center called as the ‘grey area’ where there is concentration of old structures, in dilapidated condition, is reconstructed (Bardo and Hartman, 1982). It is a process by which the poor and the working
class in the inner city are cleaned by an influx of relatively rich people, the home buyers and the renters (Smith, 1996, quoted by Macleod and Ward, 2002). Now gentrifiers are wealthier than those of the old period. The process of gentrification has been called as the cyclical process driven by investments (Lees, 2000). A lot of money is invested in the area for the renovation and a lot of money is generated.

It is a very old phenomenon working since the late 1970s. But the present gentrification is very different from the old gentrification. It is a very important process from the economic aspect of the city. Gentrification first started in America. Now not only the global cities but also the cities down in the hierarchy are witnessing this process. The reason behind this process is that the number of single persons and the childless couples is increasing. This has led to increased attraction for the people towards the nearby jobs and recreational activities. These factors are determining the residential location for most of the people in the city center. Most of the jobs for the professionals are in the central business district. This is acting as a catalyst for the gentrification process (Fellmann, et al., 1992).

The economic characteristic of gentrification is giving rise to a new and a complex pattern of differentiation (Glesson, 2003; Forster, 2004; Randlph, 2004 (quoted by Forster, 2006)). It has led to the increase in the concentration of the professional, managerial and administrative employment in the inner city (Forster, 2006). Besides economic and social factors scholars have also identified the role of gender, race and sex in shaping gentrification (Jacob 1996; Knopp, 1998; Bondi, 1999 (quoted by Macleod and Ward, 2002)).

It has been termed as ‘medicine’ for the removal of the ills of the British and American urban areas (Macleod and Ward, 2002). Some governments are encouraging people for this and are coming up with the policies of urban regeneration. They are promoting a move ‘back to the city’ (Lees, 2000). This is being taken as the remedy for the decaying inner cities. The governments of Britain and United States are such examples, who are encouraging the gentrification process, especially after the success of the process in the cities like New York and London. They see the process as a blueprint of a civilized society.

From the cultural point of view, gentrification is leading to a lot of intercultural interaction. Different people from different cultures are coming together. For some this type of intercultural interaction is enjoyable (Cauifield, 1994, as quoted by Lees, 2000). But on the contrary, for some these interactions are disinteresting and leading to radical cultural differences. Thus gentrification produces social inequalities too (Lees, 2000).
Squatter Settlement

Squatter settlements are the major features of the third world countries (Berry, 1973 and Chatterjee, 2003). They are often termed as ‘Spontaneous Settlements’ (Chatterjee, 2003). They are mainly defined as the makeshift dwellings, erected using locally made material, without the official permission or planning (Bourne and Simmons, 1978 and Chatterjee, 2003). They have different physical, social and economic characterization. They follow no norms or standards. They are the result of the great movements of people with limited means from the surrounding region to the city. The region acts as the settling basin for the new migrants to the city. The construction is largely uncontrolled in these areas. They generally lack the basic amenities (Herbert, 1972; Berry, 1973 and William, et al., 1983). Gradually with time squatters begin to invest money and labor to improve their houses. The squatters are characterized by the rudimentary sanitation and are in a constant danger of the epidemics (Berry, 1973). The prevalence of delinquency and harboring of the criminal activities (Herbert, 1972 and Berry, 1973) are the reasons for the protest against the squatters. The people are mostly illiterate. For the politicians squatters are the fertile grounds for the revolutionary propaganda. The fact that the squatters have voting rights brings the democratic process to their support (Mountjoy, 1978).

These uncontrolled peripheral settlements have been given various names in different countries. For Morris Juppenlatz (1970, quoted by Berry, 1973) squatters are ‘spreading malady’, ‘fungus’ or ‘plague’ with filth and poverty. In India they are mainly referred to as ‘bustees’ or j j colonies (Jhugi-Jhompari).

Under the situation of rapid urbanization these uncontrolled new settlements play an important function. For Mangin (1967, quoted by Berry 1973) squatters provide a solution to the complex problem of shortage of houses and of urbanization and migration. L. Alan Eyre (quoted by Berry, 1973) has referred to the squatters as “the poor suburbanite of the developing world”. They are mobile, industrious, saver and often conservative. Squatters of one of the Indian metropolises, Kolkata, perform about six major functions of urbanization (Berry, 1973). It provides accommodation to lowest income group. It acts as an immediate reception center for the migrants. It provides people employment in marginal and small scale enterprises. It provides accommodation to people near the working place. It provide ample social support incase of difficulties and encourages and rewards the small scale private enterprises (Berry, 1973). Squatters are essential in those countries where the government cannot provide the housing need.
**Substandard Housing**

It is one of the major relics of 19th century. They are found in the cities of non-western countries where there is lack of infrastructure. Shortage of housing here is the major problem. Due to this shortage, migrants accommodate themselves in three ways – as street sleeper, slum dwellers and in squatter and shanty towns (Illegally occupying the towns). Low quality and substandard housing tends to be concentrated in the city, particularly in the older section of the city (Wheeler, 1974). The effect of substandard housing is lowering of efficiency, less production, increase in the social evils in the urban society (Mandal, 2000) like delinquency, crime, etc. (Herbert, 1972).

**Slums**

Slums are the part of substandard housing. The slums are characterized by poverty, ill health, disease, bad water supplies, substandard housing, high population density and congestion, overcrowding, unsanitary conditions, absence of basic amenities, etc. There are various reasons for the development of the slums - poor migrants with no shelter, deterioration of a group of buildings in the old part of the city, expansion of the city leading to the suction of the peripheral colonies, etc. (Rao and Rao, 1984).

**PROBLEMS OF SHIMLA**

The city of Shimla at present has many planning-related problems. The most prominent and visible problems of the city include gross overpopulation, inadequacy of the water supply system, insufficiency of the sewerage system, inadequacy of vehicle parking infrastructure, inadequacy of the solid-waste management system, bad condition of Municipal roads and streets, pollution of water and ambient air, and the unprecedented urban expansion into marginal areas.

Almost all of the problems noted above that the city of Shimla now faces have antecedents either in its history or its geography. The city is overcrowded, has acute shortage of potable (rather all) water, is expanding beyond control, has been overburdened by not only the resident population but also a sizable floating population (both daily commuters and tourists), has very serious traffic problem (both in terms of number of vehicles coming into the city as well as those related to parking of vehicles), has many areas where the slope instability is a problem of very large magnitude, has problems related to air
and water pollution, many of the city’s old areas are deteriorating fast and are turning into
ghetto-like conditions, has acute problems in relation to sewage disposal system and
 provision of basic civic amenities, has mostly been overconstructed, and above all is being
threatened by the unforeseeable natural phenomena of landslides and earthquakes.

The present Shimla city has inherited its character as well as problems from the
British phase of its history. Its present population is all Indian but the physical character of
the city is still British. In the present study, the problems of urbanization being experienced
by Shimla city are preliminarily analyzed keeping in mind the historical antecedents of
Shimla along with the overall urbanization scenario of Himachal Pradesh.

**STATEMENT OF THE PROBLEM**

The present work is mainly based on the study of the process of urbanization in a
mountainous area. It specially brings out the characteristics of the process of urbanization in
the hill stations of India with a special reference to Shimla. To study impacts of
urbanization have been the prime features of the present study.

It is a historical and geographical work. Effort is made to look back through the
history to understand the changes and the transformations that have taken place in Shimla.
The process of urbanization and the changes that have taken place due to this process are
studied. Urbanization in Shimla, the capital of the state of Himachal Pradesh, has been the
prime focus of this study. It tries to study the existing problems in the city and their origin.
The focus is on the antecedents (historical and geographical) of the physical and socio-
economic problems being faced by the present day Shimla. Some suggestions have also
been made to ameliorate these problems.

**OBJECTIVES OF THE STUDY**

With reference to Shimla the objectives of the present study are-

1. To understand the process of urbanization in a hill station.
2. To understand the urban evolution and also the changes due to urbanization
3. To study the impacts of urbanization.
4. To focus on the antecedents of problems of present Shimla.
5. To associate and study the present physical and socio-economic problems of Shimla
   vis-a-vis the process of urbanization.
HYPOTHESES

The following hypotheses will be examined in the present study-

- Shimla has experienced tremendous expansion ever since the establishment of the town.
- With expansion are associated many problems that are being faced by the city.
- Root cause of all the problems being faced by Shimla is overpopulation.
- The problems of present-day Shimla have historical and geographical antecedents.
- Shimla had problems since its establishment as the site was not appropriate for the establishment of the city.