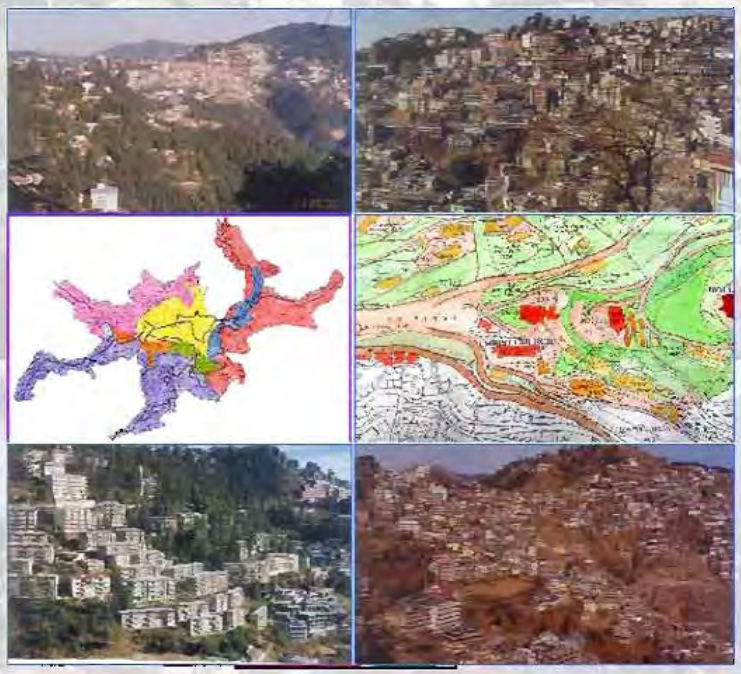
# DRAFT DEVELOPMENT PLAN

## FOR

## SHIMLA PLANNING AREA




**TOWN & COUNTRY PLANNING DEPARTMENT**
**SHIMLA-171009**
**HIMACHAL PRADESH**

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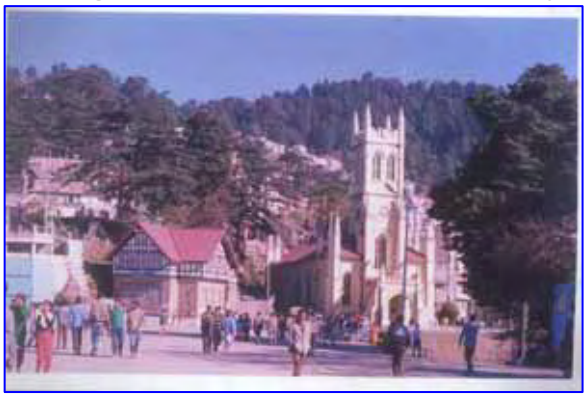
# CHAPTER-1

# THE CONTEXT

**1.1** Perceived and established by the British during colonial period in the first half of 19th century as their Summer Capital, Shimla acquired global fame by the time British left in 1947. Located at a commanding site in the interior Himalayas, connected by road, rail and air, it has emerged a preferred destination for the tourists from all over the world. Known as premier city of the orient and 'Queen of Hill Stations', it has become a multifunctional city along with dominance of tourism, administration and institutional activities. The Central Shimla has become over-congested and crowded and requires meticulous approach to harness its potential, on one hand and to rehabilitate the spill-over functions suitably with public participation, on the other.



**The Ridge-Nucleus of Shimla**

**1.2** Developed with a lot of taste by the British, Shimla's lost glory has to be restored. By the time the British left back in 1947, it was a living model of meticulous planning, heritage, environment and development in consonance with ecological imperatives. During the post- independence era, however, it witnessed unprecedented degradation. In-spite of mammoth mandatory provisions in force, consumerism forces are dictating its destiny. Environmentally sensitive areas, particularly the green cover, has therefore, been worst hit. The proud heritage is dwindling. The residential areas are in a critical state. Intrusion and collision of commercial activities is a bitter reality. There is confusion and illusion of tourism industry. The institutional areas are overcrowding. Basic services infrastructure is victim of adhocism and degrading system. Traffic and transportation chaos is persisting. Shimla city has thus become a sad story of its old glory.

**Expanding Shimla- Threatening Green Cover**

**1.3** First formal and statutory Interim Development Plan (IDP) in Himachal Pradesh, in accordance with provisions of the Himachal Pradesh Town and Country Planning Act, 1977 and Rules, 1978 there under was notified for Shimla Planning Area in 1979. The proposals of IDP were envisaged for year 2001. Subsequently, in order to implement the Development Plan, Shimla Development Authority (SDA) was constituted, which during latter half of 1980s and first half of 1990s developed and built New Shimla Township, implemented a housing complex under IDSMT near Vikasnagar, constructed an office complex at Kasumpti and Ashwani lift water supply scheme. A National Highway bye pass was also constructed by the National Highway Authority. Instead of going in for creation of serviced land for potential buyers of plots, the SDA concentrated on building construction activities, leaving the vast planning area at the prey of urbanization forces which resulted in haphazard and unauthorized development. Though SDA was upgraded in 1995 as Himachal Nagar Vikas Pradhikaran (HNVP), which too confined to building construction activities only in Shimla and a few other towns. Ultimately during year 2000, finding no difference in the Development Authority and Housing Board, the same was amalgamated into Housing Board. In the absence of concrete action for creation of serviced land, on one hand and vital community provisions including arterial road network, on the other, the implementation of Development Plan could not be carried to the logical conclusions.

**1.4** The individuals generally purchased raw land with zig-zag 'Khasra' Numbers here and there from the landlords, without requisite basic services infrastructure. The Section 16-C provides for approval of sub-divisions of land by the Director TCP and yet development of roads and other requisite amenities including parks, open spaces, sewerage, drainage, water supply, electricity etc. were grossly violated. Though the Registrars were restrained to register the sale deeds without proper sub-divisions of land and development yet they continued to register the same according to the whims of landlords, leading to menace of unplanned development in the entire Planning Area.

**1.5** During the course of last two decades, the IDP Shimla witnessed several hiccups and thereby 37 amendments were carried out pertaining to additional regulations, floor Area Ratio, number of storeys and heritage imperatives. The ban on construction activities was imposed thrice. Most of the planning and development activities of Central area of Shimla were brought under the control of State Government being in heritage and sensitive zone. Through a rugged course of planning, development and management, Shimla grew horizontally as well as vertically, even on steep slopes. Norms and standards for construction activities, however, continued changing. In view of changing aspirations of people and requirements, the cases of change of Landuse have increased manifold.

Retentions have largely affected the course of planned and sustainable development.

**1.6** "Shimla takes pride in the past, it broods over the hanging present and is worried for its dreadful future". Popularly known as ' Jewel of the orient' and 'Queen of Hill Stations' Shimla has to be restored to its past glory in terms of its unique heritage and environmental quality. In the event of its degradation by emergence of slums and encroachments even on forest lands and precious green cover, up-coming structures on nallahs, spreading dirt and filth, traffic chaos, haphazard and inefficient services infrastructure, overcrowding and congesting prime locations and emergence of concrete jungle, a perspective strategy has been chalked out to uphold the original character of Shimla, on one hand and to make it technologically a viable and competitive modern city. This Development Plan, therefore, paves a way for a healthy, wealthy and vibrant Shimla, attracting tourists from all over the world, a city that takes care of its citizens and accommodates those who intend to settle in it as well as in its environs. The fact that most of the physical thresholds of Shimla have already been exhausted and there is no option than to go in for at least a counter- magnet by the year 2021 at a strategic location and three satellite towns, namely Vaknaghat on Shimla – Chandigarh Highway, Fagu on Shimla-Rampur Highway and Ghandal in between Ghanahatti & Shalaghat on Shimla-Bilaspur Highway . Besides a Counter magnet and three Satellite towns, all the urban and rural growth centres in Shimla region, particularly along the Highways are required to be strengthened, well planned and developed in terms of services infrastructure. In order to safeguard Shimla- a city of dreams, a city which owes a great deal to the colonial history and a city which has a lot to teach the coming generations, planners, architects, engineers, heritage lovers and environmentalists, a visionary authority with adequate spatial planning know how which can revolve its resources and implement vital provisions by harnessing appreciation of land values is inevitably required to be in place for implementation of this development plan.

**1.7** Though the provisions of Interim Development Plan envisaged for 2001 are still continuing fully, revised Development Plan, has however, been devised for year 2021, in order to orient it in accordance with changing requirements and aspirations of people of Shimla. On the physical survey and broad existing land use map of 2002 and on the basis of findings of socio-economic, traffic and transportation and infrastructural surveys and studies, on one hand and Public Awareness Campaign conducted under a Norwegian Agency for Development (NORAD) Project and by the TCP Department subsequently, on the other, the department has worked out a model for future development of Shimla. Thus, in order to prepare a technically viable document, acceptable to the masses, about 32 deliberations and seminars

including a national seminar with the public, grass-root functionaries, stakeholders, public representatives and Non-Governmental Organizations (NGOs) have been organized. A brain storming deliberation was also held with the Municipal Corporation , Shimla on the proposed Development Plan. The recommendations, as emanated from the deliberations, form the basis for working out proposals of this Development Plan. The plans and proposals of various departments and local authorities have been incorporated and future land requirements worked out accordingly which form an integral part of this Development Plan. This Plan envisages for restricted land acquisition and massive implementation through "Land Pooling and Reconstitution" mechanism. It emphasizes upon massive public-private participation by involvement of Development Authorities, Municipal Corporation, Panchayats, Revenue Department and services infrastructural departments.

# CHAPTER-2

# SHIMLA OVER TIME

## 2.1 NOMENCLATURE:

2.1.1 Shimla, prior to its development as a hill station was described as an "obscure village. The village was named 'Shimla' after the temple of Goddess Shyamala located in the village. In 1817, it was "a middling village", where a fakir used to give water to the travelers. Another legend is that 'Shimla' or 'Simla' is named as is pronounced by the hill people. According to Mr. W.H. Carrey the original village of Shimla was situated on the ground lying to the east of present secretariat buildings, above the road leading to the Ripon hospital, and immediately below the Roman Catholic chapel, S. Michael's school, and the Court house.

**2.1.2** Shimla, the Summer Capital of British India, is popularly known as 'Jewel of the Orient'. Amidst the Central Himalayas, it is a charming hill resort for tourists from all over the globe. Ever established by the British on hill top, with unique urban design, it is known as 'Queen of Hill Stations'. Shimla possesses distinct British heritage. During recent decades, after acquiring the status of state capital of Himachal Pradesh, it emerged as a major cultural, educational and institutional centre. Still considered as the star of India's hill resorts, Shimla is dominated by 19th Century colonial buildings. Located on junction of Chandigarh- Kourick National Highway-22 and Shimla and Shimla- Dharamshala National Highway-88, it is expanding beyond its leaps and bounds.

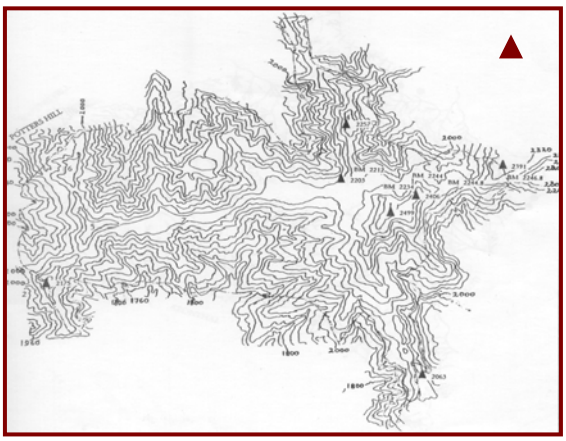
**Expanding Shimla over the Time**

2.1.3 Shimla with its salubrious climate, mountainous topography and enchanting landscape is a major centre of attraction for national and international tourists. Acting as a primate city of the State, it possesses about ¼th of total urban population of Himachal Pradesh. It is the

largest hill top city of its own type in the Himalayan region. This fast expanding city is performing varied functions.

## 2.2 GEOGRAPHICAL SETTING

Shimla is situated on the last Traverse spur of the Central Himalayas, south of the river Satluj. At $31^0$4' North to $31^0$10' North latitude and $77^0$5' East to $77^0$15' longitude, at an altitude of 2130 metres above mean sea level. in shape, it has been described as an irregular crescent. It is 88 kilometres from Kalka having“ exquisite” scenery. It is spread over an area of 9950 Hectares along with its commanding position. It has a panoramic view and scenic beauty all around. The city is an unique combination of hills, spurs and valleys. to the north and east, a network of mountain ranges which are crossed at a distance by a magnificent crescent of new peaks, the mountains of Kullu & Spiti in the North, the central range of the eastern Himalayas stretching East and South-east. The East-West axis have emerged major axis of development for the city.



**Contours, Elevation & Spurs of Shimla city**

## 2.3 HISTORICAL EVOLUTION

### 2.3.1 Pre-Independence Era

2.3.1.1 Shimla town has a very interesting history of its origin, gradual growth and development. At the beginning of last century, Shimla was taken from the Jhind Rana in 1815 and given to the Patiala Raja for assistance rendered by him to the British in the Nepal War. Subsequently, it was used by the Raja for a sanatorium. It is said that the first person who brought Shimla to notice was a British officer, who, when moving Gurkha troops from Sabathu to Kotegarh in about 1816, passed through Shimla was impressed by its cool climate. It was a dense jungle infested with wild beasts. It is however, claimed by Mr. A. Wilson in his ‘Abode of Snow’ that the hill on which Shimla is situated was first made known by Gerard brothers. These two Scotch officers were

engaged in the survey of the Sutlej valley. Their diary, dated August 30th, 1817, Shimla, a middling sized village where a fakir is situated and gives water to travelers. They encamped on the side of Jakhu, and had a very extensive and beautiful view.

2.3.1.2 In 1819, Lt. Ross Assistant Political Agent in the Hill States built a cottage of wood and thatch. This was probably the first British House in Shimla. By 1824, invalids from the plains had been given permission to establish themselves in the locality on rent free sites provided by the Maharaja of Patiala and Rana of Keionthal. In 1825, a political agent, Major Kennedy constructed a permanent house on a rent free site. It was named as Kennedy House. In 1827, Lord Amherst, the then Governor General of India, after completing progress through North-West proceeded for the summer months to Shimla. This was the foundation of Shimla's Greatness. In 1828, Lord Combermere with his staff and the whole establishment of Army Head Quarters came upto Shimla. During his stay, he superintended the construction of a bridge known as 'Combermere Bridge' and also a fine broad level road about three miles in length around Mt. Jakhu. In 1829, a house named 'Bentick Castle' was built for the Governor General, Lord William Bentick. Later on, it was known as 'Pleti's Grand Hotel."

2.3.1.3 The movement of British Officers to Shimla in the summers became a regular phenomenon. This was perhaps the basic contributing factor to the evolution of "Shimla Village" into a proper town and its fame as a hill station and convalescent depot. Another factor that enhanced the popularity of Shimla was its health giving attribute- 'climate', which combined with every imaginable beauty of nature-terrain, natural vegetation, springs and streams presented a very homely atmosphere to the British. By 1831, Shimla had about sixty permanent houses and a bazaar. Communication between these was secured by well-formed narrow but quite safe communication routes. Following the example of British Officers, native chief also started visiting Shimla in the summers. An announcement regarding summer movement to Shimla reads-"should the Governor General and Commander-in-Chief come up next season, it will consist of British subjects-200, and native 8000 and when the tributary chieftons and followers come in, it will be nearly 20,000. Again in winter, when but few remain, it will probably not exceed-British subject 20, natives-2000". Despite the two distinctly different faces, one in summers and the other in winters, Shimla had

achieved fame as a reputed hill station within a short span of time. Shimla during this period was accessible from Kalka by bridle path, passing through Kasauli, Kakkarhatti, Hurreepore and Syree covering 43 miles and entering the town at Boileauganj, one of the suburbs of Shimla. A distance of 43 miles up the hills from Kalka had to be accomplished in a two wheel cart drawn by a couple of ponies under the auspices of the 'Mountain Car Company'. Jhampan and dandy were the other means of travel.

2.3.1.4 Despite of the difficulties of traveling over this track, the British used to visit Shimla every summer season like a flock of the faithful, to escape the scorching heat of the plains and to smoothen their home sick feelings and were considered "wise to surround themselves as far as they can with an English atmosphere". By 1844, the number of houses in Shimla had risen to 100 as compared to 60 residences reported in 1831. Rapid growth led to necessity of providing amenities and services. Some of the social institutions through a central authority promoted the Municipal Committee at Shimla in 1851. The Committee was responsible for establishment of the Town Hall with a library, Gaiety Theatre, and Police Station. Municipal Market and Fire Brigade Services were also provided in subsequent years. Shimla was declared the Summer Capital of Indian Govt. in 1864. In the following years, the older, narrower track from Kalka to Shimla was improved. A new road named Grand Hindustan-Tibet road, 58 miles in length, passing through Dharampur, Solan and Kiaree Ghat was built.

2.3.1.5 The emergence of Shimla as the Summer Capital also resulted in the acquisition of several old buildings by the Govt. for its offices. In addition, construction of new buildings was also started. A new Secretariat building, very close to the Mall was constructed on the site of Gorton Castle. In 1840, Peter Hoff became the official residence of the Viceroy and remained so till 1888 when a new residence, Vice Regal Lodge was constructed.

2.3.1.6 In 1871, the Punjab Govt. also decided to use Shimla as its summer capital. In order to meet the water requirements of the much-increased population of the town, the Municipal Committee installed powerful water pumps in 1901 at Churat Nallah near Sanjauli, to lift up 200,000 gallons of water. In 1902, Walker Hospital was opened. Prior to it there was only one medical institution, Ripon Hospital, built in 1885. In

1903, the electrical lighting system was introduced in the town and the first place to benefit was the railway station. In 1904, the Kalka-Shimla railway line was commissioned to make the town easily and comfortably accessible. Shimla by now had grown considerably, mainly extending along the entire length of ridge, the extreme ends of town were separated by a distance of six miles. Limits of the town were bounded by the states of Patiala, Keionthal and Koti on the Northwest, Southwest and northeast respectively. In 1913, to meet the increased demands of water supply, two steam pumping engines were installed at Churat Nallah, supplying 150,000 gallons of water daily. Chaba electricity generating station was also installed on the Sutlej, to supply electricity to the town.

### 2.3.2 Post –Independence Period

Nursed and popularized by the Govt., the elite, the traders and the tourists, the town continued to grow in importance and size and when India became independent in 1947, Shimla was one of the most important hill stations of the world. After the partition of India in 1947, many of the Punjab Govt. Offices from Lahore in Pakistan were shifted to Shimla. In 1966, with the re-organisation of territory into Punjab, Haryana and Himachal Pradesh, Shimla became the capital of Himachal Pradesh. Since then Shimla has flourished as capital of the State and has continued to be an important tourist resort of India and the world.

## 2.4 SHIMLA MUNICIPAL CORPORATION

2.4.1 Shimla Municipal Corporation, one of the oldest institution in the country passed through many slings and arrows during the last one hundred and fifty three years of its existence. It was first constituted as Municipal Committee, in December, 1851, under the provision of Act XXVI of 1850. Initially appointed Municipal Commissioners were Government officials and they failed to receive the favour of House proprietor. The first election was held on August 26,1855, following the first meeting of the committee after its inception in 1854. The elected committee comprised of Deputy Commissioner, Medical officer, Senior Assistant Commissioner, an Executive Engineer and house proprietors. On July 31, 1871, the Shimla Municipal Committee was declared as Class I Municipality.

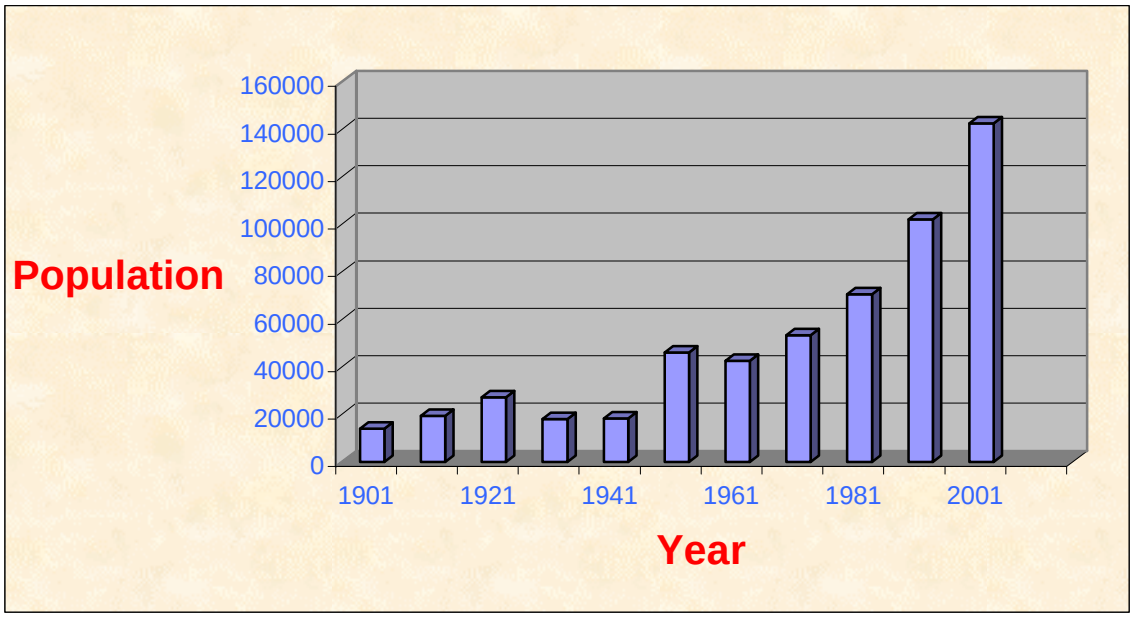
2.4.2 In 1874, it was brought Under the Punjab Municipal Act (IV of 1873) but there were grave objections to this constitution of the Committee. In 1884, with the introduction of the Punjab Municipal Act (XII of 1884), the town was divided into two wards- the Station and the Bazaar. The committee passed through different reconstitutional procedures till the Independence. After Independence there was demand from the public for extending franchise to the whole population.

2.4.3 Shimla was divided into fourteen single member wards and one double member ward. All the members were to be elected and the president was in turn to be elected by the members from amongst themselves. Elections in 1953 and 1960 were held on the basis of this system. In view of the substantial increase in population of the town, advisors to the Committee were appointed and subsequently membership was raised. As a result of reorganization of Punjab, Shimla became a part of Himachal Pradesh. Even the case between committee and Punjab Government was set aside by Court and reinstated the Committee in June, 1967.

2.4.4 In 1968 arrangements for holding elections were made and as a prelude the Government ordered the delimitation of wards of Municipal Committee into ten wards. in the meanwhile, the passing of the Himachal Pradesh (Development & Regulation) Act 1968,( Act No. 22 of 1969) converted the committee into Corporation w.e.f June 29, 1969. The committee thus witnessed its liquidation after a long history. With the passing of the Himachal Pradesh Municipal Corporation Act, 1994 (H.P. Municipal Corporation Act,1994) Government revised the delimitation of wards into 21 and conducted election. The ward delimitation was done in accordance with rules prescribed as under the 6(2) provision of Act.

2.4.5 At present, Municipal Corporation, Shimla consists of 25 wards. The total number of households and population of M.C. Shimla is 37756 and 142555 respectively. Out of total population, 81186 are males and 61369 are females. The Sex ratio is 756 females per 1000 males. Besides, there are three SADA's also functioning under Special Area Development Authorities.

**Figure 2.1: Population Trend of M.C. Shimla**




Source: Census of India

## 2.5 IMPERATIVES:

2.5.1 Shimla has a proud past. It has a unique history of fast development, on virgin landscape, which had physically different terrain. The way, the British had given shape to the townscape along east-west and north-south axis namely, The Ridge to Vice Regal Lodge and the Ridge to Ellerglie along the Mall on either side is a saga of its own kind. Each heritage masterpiece located along the Mall - the pedestrian artery has its own history and lesson to learn. Shimla calls for utmost discipline in construction activities in accordance with its historical imperatives, on one hand and shaping the future city in consonance with its environmental and ecological, considerations on the other.

2.5.2 The British strived to build Shimla an unique town at a commanding location and gave it a distinct status of Summer Capital. It has many lessons to learn from its historical development in terms of meticulous planning and development in accordance with environmental and ecological imperatives, harmony of natural and built heritage and accordingly a feast to tourists and people from various walks of life. As the Shimla has reduced to a concrete jungle, particularly during last few decades and is presently witnessing unprecedented threats to its heritage and interesting history, it has to be restored to its past glory by

public participation and by building culture to preserve whatever is in consonance with natural and built heritage, on one hand and to strive to make it attractive to tourists, on the other.

2.5.3 During the deliberation held in the Municipal Corporation House on11.8.2004, it emanated that conservative Surgery be effected in the central area in view of availability of adequate Government land. The house decided to shift non-conforming activities including wholesale, warehousing, grain, vegetable and timber markets to the periphery preferably in the vicinity of Shimla-Chandigarh road on the Shoghi-Ghanahatti proposed bye pass. In the process of conservation of heritage, rehabilitation of uses in structures which have either outlived their life or look eyesores and removal of non-conforming uses, the entire area is required to be remodeled. Whereas, those occupants who are in possession of Government land shall be provided with suitable workplaces for their sustenance, those who are owners in possession are proposed to be provided suitable work place and living accommodation. However, as reconstructions on old lines are not proper from safety and security point of view, on one hand and aesthetics, tourism and hill architecture imperatives on the other, up to 60 percent of land of which they are owners in possession shall be allowed to them and rest of the land shall be utilized for the community infrastructure including water supply, sewerage, drainage, roads, Parks, open spaces, recreation and landscaping

# CHAPTER-3
# PLANNING AREA

3.1 In order to ensure planned and regulated growth of Shimla Planning Area, Government of Himachal Pradesh extended the Himachal Pradesh Town and Country Planning Act, 1977 vide Notification No. 9-12/72-PW (B) dated 24.3.1977. Subsequently, the Planning Area was constituted vide Notification No. 9-12/72/PW (B) dated 30.11.1977. Existing landuse of Planning Area was frozen vide notice dated 14.3.1978, whereby change of landuse became mandatory requirement. Subsequently, the Interim Development Plan of Planning Area was devised and notified vide Notification No. TCP-FS(6)-54/94 dated 2.8.1979. Thereafter, 127 revenue villages and 421 part revenue villages were excluded from Shimla Planning Area, in view of demand of people thereof vide Notification No. TCP-F (6)-54/94 dated 2.8.1995. However, subsequently, vide Notification No. TCP-F(5)-4/2000, dated 11th August, 2000 Kufri Special Area and Shoghi Special Area have been constituted by designating some parts of Shimla Planning Area as special areas. Thus, 33 revenue villages were included in Kufri Special Area and 49 revenue villages in Shoghi Special Area. Thereafter, vide Notification No. TCP-F(5)-13/2001 dated 2.3.2002, 14 more revenue villages were included in Kufri Special Area. Further Additional Shimla Planning Area notified vide Notification No. TCP-F (5)-1/2006 dated 12.1.2007.

3.2 The 9950 Hectares of total area as taken into account for revision and formulation of Development Plan, includes, Municipal Corporation, Shimla, Special Area Development Authorities of Kufri , Shoghi and Ghanahatti Special Area which is as under:-

**Table 3.1: Settlements Falling Within Planning Area**

| Settlement | Area in Hectare | % age |
|---|---|---|
| M.C. Shimla | 2207 | 22.18 |
| S.A Ghanahatti | 1647 | 16.55 |
| S.A Kufri | 3173 | 31.89 |
| SA Shoghi | 2923 | 29.38 |
| **Total** | **9950** | **100.00** |

**Shimla Planning Area comprises of the following areas**

## Table 3.2

| Sr. No | Name of Area | Remarks |
|---|---|---|
| 01 | Municipal Corporation | ------- |
| 02 | Kufri Special Area | As notified vide Notification No. TCP-F(5)4/2000 dated 30.11.2000 and further extended vide Notification No. TCP-F ( 5) 13/ 2001 dated 2.3.2002. |
| 03 | Shoghi Special Area | As notified vide Notification No. TCP-F(5)4/2000 dated 30.11.2000 . |
| 04 | Ghanahatti Special Area | As notified vide Notification No. TCP-F(5)-5/2004 dated 4.11.2004. |

**Kufri special area has following revenue villages:**

| Sr. No. | Name of the Village | Hadbast No. |
|---|---|---|
| 1. | Lambi Dhar | 349 (Whole) |
| 2. | Jungle Mashobra | 247 Min.<br>(Partly, as already bifurcated in M.C.Shimla). |
| 3. | Kolu Ka Jubbar | 309 Min.<br>(Partly, as bifurcated by Khasra No. 2,21, 85, 79, 80, 95, 96, 106 inclusive towards Shimla-Suni Road). |
| 4. | Jhalti | 307 (Whole) |
| 5. | Chanavat | 308 Min.<br>(Partly, as bifurcated by Khasra No. 64, 65, 66, 67, 68 inclusive towards Shimla-Sunni Road). |
| 6. | Bontlu | 306 (Whole) |
| 7. | Dhagog | 305 Min.<br>(Partly, as bifurcated by Khasra No. 1, 3, 4, 22, 151, 158, 162, 215, 219,220, 221, 119, 117, 116, 112 inclusive towards Shimla-Sunni Road). |
| 8. | Jungle Dhagog | 304 (Whole) |

| | | |
|---|---|---|
| 9. | Jotlu | 303<br>(Partly, as bifurcated by Khasra No. 1, 8, 128, 129, 137, 138, 155, 156, 186, 187, 188, 195, 196 inclusive towards Shimla-Sunni Road). |
| 10. | Bhatla | 302 Min.<br>(Partly, as bifurcated by Khasra No. 1,2, 3,4, 5, 6, 79, 80, 81, 72, 73, 66, 152 inclusive towards village Sandhora). |
| 11. | Sandhora | 269 (Whole) |
| 12. | Kailidhar | 297 (Whole) |
| 13. | Jungle Barog Sheel | 298 (Whole) |
| 14. | Balldehan | 283 (Whole) |
| 15. | Shaiser | 291 Min.<br>(Partly, as bifurcated by Khasra No. 582, 486, 329, 333, 334, 345, 346, 347, 348, 354, 355, 366, 367, 364 inclusive towards Shimla-Sunni Road). |
| 16. | Mashobra | 246<br>(Partly, as bifurcated in M.C.Shimla). |
| 17. | Retreat | 243 (Whole) |
| 18. | Chharabra | 241 (Whole) |
| 19. | Jungle Chharabra | 241 (Whole) |
| 20. | Kufri Junga | 228 (Whole) |
| 21. | Kufri Koti | 229 (Whole) |
| 22. | Catchment Area | 242 (Whole) |
| 23. | Badah | 350<br>(Partly, as bifurcated in M.C.Shimla) |
| 24. | Chhakryal | 352 Min. (Partly, as bifurcated in M.C.Shimla) |
| 25. | Chamyana | 372 Min. (Partly, as bifurcated in M.C.Shimla) |
| 26. | Shanan | 375 Min. (Partly, as bifurcated in M.C.Shimla) |
| 27. | Malyana | 376 Min. (Partly, as bifurcated in M.C.Shimla) |
| 28. | Mewag | 353 (Whole) |
| 29. | Ganoti | 377<br>(Partly, as already bifurcated in M.C.Shimla) |

| | | |
|---|---|---|
| 30. | Jungle Ganoti | 380<br>(Partly, as already bifurcated in M.C.Shimla |
| 31. | Kamali | 379<br>(Partly, as already bifurcated in M.C.Shimla) |
| 32 | Shakral | 381 (Whole)<br>(Partly, as bifurcated in M.C.Shimla). |
| 33 | Mehli | 113<br>(Partly, as bifurcated in M.C.Shimla). |
| 34 | D.P.F. Kanger | 45 (Whole) |
| 35 | Gallu Khurd | 199 (Whole) |
| 36 | D.P.F. Teer Mahasu | 02 (Whole) |
| 37 | Gallu Kalan | 320<br>(Partly including area bifurcated by Khasra No. 6, 7, 8, 34, 28, 29, 30, 31, 79, 80, 81, 84, 75, 133, 132, 147, 150, 206, 206/1, 207, 219, 217, 216, 194, 193, 364, 358, 356, 514, 517, 607, 639/1, 645, 643, 642, 653, 677, 676, 679, 683, 767, 772, 775 included towards N.H.–22, Hindustan Tibet Road). |
| 38 | Fagu | 241<br>(Partly, including areas bifurcated by Khasra No. 183,181, 176, 201, 154, 152, 151, 150, 149, 263, 264,266, 354, 372, 373, 392, 393, 394, 395, 410, 411, 412, 413, 414, 415, 416, 417, 418, 423, 424, 425, (included towards N.H.-22 Hindustan Tibet Road) Fagu Bazar and Dehna Mohal. |
| 39 | Dehna | 370<br>(Partly, including areas bifurcated by Khasra No. 1, 2, 79, 1135/ 3/2 , 3, 5, 6, 8, 9, 247, 248, 298, 299, 394, 395, 294, 263/1, 266, 1185/260, 258, whole, 202, 161, 178, 175, 174,173 included towards Fagu Bazzar). |
| 40 | Bani | 371 (Whole) |
| 41 | Kadrav | 384<br>(Partly, including areas bifurcated by Khasra No.2, 1180/1, 46, 1182/53, 1236/68, 65, |

| | | |
|---|---|---|
| | | 1232/62, 1191/1173/91, 503,504 (included towards Dehna Mohal). |
| 42 | Kasufar | 292 (Whole) |
| 43 | Shainal | 290<br>(Partly, including areas bifurcated by Khasra No. 809, 810, 803, 802, 798, 796, 795, 794, 783, 781, 779, 181, 180, 178, included towards Shimla-Mandi Road and Jungle Naldehra). |
| 44 | Naldehra | 279 (Whole) |
| 45 | Jungle Naldehra | 278<br>(Partly including area; bifurcated by Khasra No.13 (Min) included towards Shimla-Mandi Road, bifurcated by Khasra No. 37, 38, (included) towards Shaiser, bifurcated by Khasra No. 48, 49, (included) towards Kasufar and bifurcated by Khasra No. 59, 55, 56, 57, 72,73,74 towards Baldayan). |
| 46 | Neri | 281<br>(Partly including area bifurcated by Kh. No. 1, 2 , 3, 4, 5, 6, 10, 11, 12 (included) towards Shimla-Mandi road. |
| 47 | Durgapur | 134<br>(Partly, including areas, bounded by Khasra No. 108, 07, 06, 114, 104, 103, 101, 90,89,86, 85, 84, 65, 30, 29, 27, 26, 20, (included) towards Shimla-Mandi Road bifurcated by Khasra No. 24, 23, 136,142, 216/ 145, 217/145 ,146, (included) toward Durgapur bifurcated by Khasra No.154, 155, 221 / 157, 164, 174, 175,176, 177, (included) towards Shimla-Mandi Road and bounded by Khasra No. 209, 211, 213, 214, 215, 196, 136 (included)to wards Shimla-Mandi Road). |

**Shoghi Special Area Has Following Revenue Villages:**

| Sr. No. | Name of Village | Hadbast No. |
|---|---|---|
| 1. | Pawad | 393 Min.<br>(Partly, as bifurcated by Khasra No. 617, 618, 621, 623, 583, 600, 599, 595, 593, 591, 571, 572, 574, 447, 648, 298, 297, 282, 283, inclusive towards Shimla-Kalka Road). |
| 2. | Chelli Chola | 382 (Whole) |
| 3. | Gusan | 117 Min.<br>(Partly, as bifurcated by Khasra No. 562/8, 2, 12, 15, 68, 69,103, 104, 105, 106, 107, 108, 113, 114, 192, 357, 358, 143, 136, 539/132, 542/135, 539/132, 515/23, 512/20, 513/20, 514/20, 19, 559/511/18, 556/510/18, 555/510/18, 557/510/18, 547/1, 549/4, 551/5, 564/8 inclusive towards villages Sargheen and Kwara). |
| 4. | Pujarli | 116 Min.<br>(Partly, as bifurcated by Khasra No. 83, 82, 85, 89, 1402/ 321, 327, 328, 329, 338, 344, 360, 359, 357, 356, 355, 342, 341, 337 inclusive towards villages Kwara and Gusan). |
| 5. | Kwara | 115 Min.<br>(Partly, as bifurcated by Khasra No. 250, 118, 189, 220, 217, 219, 200, 209, 210, 366, 365, 401, 402, 399, 480, 481, 505, 483, 511, 513, 948/791, 789, 788 inclusive towards village Sargheen). |
| 6. | Sargheen | 114 Min. (As bifurcated by M.C.Shimla) |
| 7. | Patti Rehana | 110 Min. (As bifurcated by M.C.Shimla) |
| 8. | Rajhana | 109 (Whole) |
| 9. | Nehra | 108 (Whole) |
| 10. | Bihar | 104<br>(Partly, as bifurcated by M.C.Shimla). |
| 11. | Barhai | 102 Min.<br>(Partly, as bifurcated by M.C.Shimla). |
| 12. | Malog | 100 (Whole) |
| 13. | Sheel Gaon | 99 (Whole) |
| 14. | Pattiud | 98 (Whole) |
| 15. | Bhog | 125 Min. |

| | | |
|---|---|---|
| | | (Partly, as bifurcated by Khasra No. 118, 117, 108, 105, 101, 106, 30, 37, 38, 39, 1111/43, 562, 1112/177, 150, 561, 558, 626, 630, 777, 775, 644, 646, 603 inclusive towards Dhalli-Shoghi Road). |
| 16. | Mahauri | 96 Min.<br>(Partly, as bifurcated by Khasra No. 34, 30, 26, 741, 46, 739/24, 748/204, 203, 154, 153, 149, 148, 137, 138, 188, 116,112, 111, 385, 813/367, 811/645 inclusive towards Dhalli-Shoghi Road). |
| 17. | Shoghi | 95 (Whole) |
| 18. | Gawahi | 397 Min.<br>(Partly, as bifurcated by Khasra No. 338, 303, 302, 425 inclusive towards Shimla-Kalka Road). |
| 19. | Panog | 396 Min.<br>(Partly, as bifurcated by Khasra No. 151, 203/139, 126, 183, 110, 107, 106, 184 inclusive towards Shimla-Kalka Road). |
| 20. | Ganaidi | 382 Min.<br>(Partly, as bifurcated by Khasra No. 179, 157, 176, 177, 178 inclusive towards village Batlana). |
| 21. | Batlana | 381 Min.<br>(Partly, as bifurcated by Khasra No. 207, 380/268, 266/220 inclusive towards Shimla-Kalka Road). |
| 22. | Jungle Tarab | 97 (Whole) |
| 23. | Matholi | 370 (Whole) |
| 24. | Bharyal | 6/87 Min.<br>(Partly, as bifurcated by M.C.Shimla) |
| 25. | Majthai | 6/86 Min<br>(Partly, as bifurcated by M.C.Shimla). |
| 26. | Dawat | 6/82 (Partly, as already bifurcated in M.C. Shimla) |
| 27. | Manglooj | 6/84 (Whole) |
| 28. | Badoh | 338 (Whole) |
| 29. | Kayargi | 30/42 Min.<br>(Partly, as bifurcated by Khasra No. 28, 29, 33, 27 inclusive towards Village Bagna). |
| 30. | Bagana | 343 (Whole) |
| 31. | Panti | 344 (Whole) |
| 32. | Dhanokri | 345(Whole) |
| 33. | Shilru | 331(Whole) |

| | | |
|---|---|---|
| 34. | Patina | 330(Whole) |
| 35. | Khalog | 95(Whole) |
| 36. | Thalu Chamaru | 329 |
| 37. | Kot | 326 (Whole)-Solan District) |
| 38. | Chandoli | 325 (Whole)-(Solan District) |
| 39. | Pawabo | 324 (Whole)-(Solan District) |
| 40. | Sayari | 322 Whole-(Solan District) |
| 41. | Balain | 16/195(Whole) |
| 42. | Banwi | 16/196 (Whole) |
| 43. | Mawari | 16/198(Whole) |
| 44. | Barog | 16/188(Whole) |
| 45. | Kaphlerh | 16/169(Whole) |
| 46. | Jakari | 9/108(Whole) |
| 47. | Khayari | 9/101(Whole) |
| 48. | Baghli | 86/337(Whole) |
| 49. | Gudshali | 6/83(Whole) |

**Ghanahatti Special Area has Following Revenue Villages:**

| Sr. No. | Name of Revenue Village | Hadbast Number | Partly / whole | Remarks |
|---|---|---|---|---|
| 1. | Rehal Bachadi | 7/88 | Whole | - |
| 2. | Fatnechi | 7/89 | -do- | - |
| 3. | Kanda | 11/109 Min. | Partly | As already included in Shimla Planning Area |
| 4. | Dhayla | 11/108 | Whole | - |
| 5. | Padech | 63 Min. | Partly | As already included in Shimla Planning Area |
| 6. | Ichhaser | 60 | Whole | - |
| 7. | Bharoi | 61 Min. | Partly | As already included in Shimla Planning Area |
| 8. | Jablog | 62 | Whole | - |
| 9. | Fataichi | 4/63 | -do- | - |

| | | | | |
|---|---|---|---|---|
| 10. | Neri | 64 | -do- | - |
| 11. | Rihai | 67 | -do- | - |
| 12. | Girb Khurd | 65 | -do- | - |
| 13. | Girb Kalan | 66 | -do- | - |
| 14. | Dhainda | 80 Min. | Partly | As already bifurcated in M.C. Shimla |
| 15. | Kyar | 79 | Whole | - |
| 16. | Chandi | 77 | -do- | - |
| 17. | Gdawag | 78 | -do- | - |
| 18. | Chayali Kalan | 76 | -do- | - |
| 19. | Chayali Khurd | 75 | -do- | - |
| 20. | Sangti | 3/13 | -do- | - |
| 21. | Sanog Uprala | 3/14 | -do- | - |
| 22. | Kyar Giri | 5/71 | -do- | - |
| 23. | Bhoong | 3/30 | -do- | - |
| 24. | Manla | 3/29 | -do- | - |
| 25. | Neri | 3/35 | -do- | - |
| 26. | Krand | 28 | -do- | - |
| 27. | Hiun | 5/72 | -do- | - |
| 28. | Chamu | 3/17 | -do- | - |
| 29. | Karog | 3/15 | -do- | - |
| 30. | Kyalu | 3/16 | -do- | - |
| 31. | Nawag | 18 | -do- | - |
| 32. | Golchha | 19 | -do- | - |
| 33. | Kawai | 20 | -do- | - |
| 34. | Mathav | 320 | -do- | - |
| 35. | Jangle Pagog | 322 | -do- | - |
| 36. | Pagog | 323 Min. | Partly | As already bifurcated in M.C. Shimla |

As the settlement of the Planning Area has taken place, the hadbast numbers as well as Khasra numbers are yet to be allotted. The new coinciding numbers will therefore be referred against above numbers.

The outer boundaries of foregoing area taken for integrated perspective Development Plan are as under:-

**North:** Starting from Padech (63), Ichaser (60), Bharoi (4/61), Jablog(62), Rehai(67), Girbkhurd(65), Chayali Khurd(75), Kairgiri(5/71), Bhoong (3/30), Manla (3/29), Neri (3/35), Krand (28), Nawag (18), Kavi (20), Mathav (320), following M.C. boundary upto Lambidhar (349), Dhalli(348), Jungal Mashobra (247), Kolu –ka-jubbal(309), Chanabat(308), Dhagog(305), Jungal Dhagog(304),Jotlu(303), Batla(302), Jungal Bharog Sheel(298), Shai-sher(291), Shainal(290), Neri(281), Durgapur(134), Naldehra(279), Jungle Naldehra(278), Jungal Mashobra (315), Mashobra Bazar (246 A), Mashobra(246), Retreat(243), Charabra (240), Jungal Charabra(241), Kufri Koti (229), Kufri Junga (228), Galu Kalan (320), and Fagu (241).

**East:** Then following Fagu (241), Bani (371), Dehna (370), Kadarav (384), Jungal Teer Mahasu (2 ), Galu Kalan (320), Jungal Kanger (45), Kufri Koti (229), Jungle Charabra (241),Catchment Area (242), Badah (350), Chadadyal (352), Mewag (353), Chamayana (372), Malyana (376), Ganoti (377), Jungle Ganoti (380), Shakral (381), Mehli(113), Gosan (117) , Cheli-Cholla(382).

**South:** Then following Cheli-Chola(382), Pujarli 116, Kawara 115, Patiud (98), Bhog(125), Mahori (96), Shoghi (95), Gawahi (397), Pawad (393).

**West:** Then following Pawad(393), Gawahi(397), Pnog(396), Ganedi(382), Bathlani(381), Jungal Karv(97), Matholi(370), Bharyal(6/87), Manglooj(6/84), Badoh(338), Kayargi(30/342), Bagna(343), Dhanokhri(345), Shildu(331), Patina(330), Khalag (95), Thaul-Chamara(329), Kot(326), Chandoli(325), Pawabo(324), Shyari(322), Balain(16/195), Banwi(16/196), Mawari(6/189), Barog(16/188), Kaphlair(16/165), Jakhri(9/108), Khayri(9/101), Patina(330), Shilru(331), Baghli(86/337), Rahal Baichadi(7/88), Fatnechi(7/89), Kanda(11/109), Padech(63).

## 3.3 IMPERATIVES:

Shimla and its environs have to be viewed as an entity. Alike human body, its heart, the Central Shimla which has become very congested and over-crowded has to be eased by building important nodes on the periphery of city on the commanding sites on Chandigarh, Rampur and Bilaspur Highways. Similarly, New Shimla- Kasumpti area has emerged a major node during the last two decades and should not at all be assigned important functions any more. In order to divert the trend of further development in already congested localities along the central arteries including the Mall and Circular road, up-gradation of status of Dhalli-Mehali-Shoghi road, development of a bye pass down below the existing bye-pass and throughout a bye pass on the northern face is the foremost necessity. To ensure channelisation of the growth on the periphery, further areas have been brought within the ambit of Planning Area.

In order to ensure integrated planning and sustainable development, entire above area including Municipal Corporation, 3 Special Areas of Kufri, Shoghi, Ghanahatti and Additional Shimla Planning Area have been considered as an entity for proposals of Revised Development Plan. As the area is highly eco-fragile, having immense pressure of urbanization and consumerism forces, finalization and accordingly implementation of the Development Plan has been viewed as a participatory venture.

Entire Municipal Corporation Area including Toto, New Shimla (Kasumpti) and Dhalli Areas may form the core. Areas towards east of Ghanahatti-Kamna Devi-Tara Devi range are pressure areas. The areas towards the west of the said range to which Act has recently been extended, may form the activities zone. Catchment Areas and physical barriers in terms of hills and spurs are automatically dictating the formation of planning zones each likely to comprise of 3 to 5 sectors. These 8 zones are namely Central, Eastern, Northern Zone-I-II, Western, Southern-I & II and South Eastern Zone.

# CHAPTER- 4

# REGIONAL SCENARIO

## 4.1 SHIMLA REGION:

Shimla was established primarily as a tourist-cum-administrative town. It is now vibrating with multifarious activities like trade, commerce, tourism, education, health, institutions, Govt. offices, infrastructure, traffic and transportation. Besides the Capital of Himachal Pradesh it has apex order of functions to cater for requirements of the entire State. Shimla is known for its scenic beauty, simple and benevolent behaviour of people and pollution free pleasant climate. Shimla is district headquarter of Shimla District. It forms its immediate region. According to 2001 census, population of District Shimla is 7,21,745 persons, which is 11.88% of total population of the state. Population of region is expected to grow at the rate of 25% per decade, primarily due to increase in horticulture activities and development of new areas for harnessing the resources. Part of population, is therefore, likely to migrate to nearest urban centres to seek employment and basic amenities. Shimla being most important regional centre and preferred destination in this resource region, is likely to witness an unforeseen pressure of population and thereby multifarious activities. As Shimla city and its immediate environs are witnessing exodus of development, any more pressure in it will lead to chaos. In order to tackle the problem of over-development, planning and development of a countermagnet and preparation and implementation of Capital Regional plan are essential.

## 4.2 REGIONAL LINKAGES

Shimla is well connected by road, rail and air services. Luxury and ordinary buses ply to Delhi, Chandigarh and Manali, located at a distance of 360, 115 and 260 kilometres respectively. There is long route regular bus service to all parts of the state as well as to the neighboring states. The city is connected by the century old narrow gauge "toy train" railway line further connecting it with Delhi, Amritsar and Jammu. It was connected by air services in 1987. It has a comparatively small air strip at Jubbarhatti, at a distance of about 12 kilometres. There is a daily flight to Shimla from Delhi via Chandigarh. The same flights further connect Shimla with the Kullu Valley.

## 4.2 REGIONAL RESOURCES:

Agriculture and Horticulture are the mainstays of economy of this region. However, as compared to its geographical area of 4,80,058 hectares, only 1,81,139 hectares which works out to 37.7 percent is the total cropped area. It has 68,784 hectares forested area. The geo-climatic features of this region are very much congenial for the development of horticultural pursuits specially the temperate fruits. During recent years, the horticulture has become a prime concern of economy of this region. A shift from the agriculture to horticulture in the economic pattern of this region has revolutionized the economic conditions of people. This has led to commercialization, industrialization, marketing and urbanization. The production of apple has become major source of income which was 376.73 thousand tones during the year 2000-2001. During the year 2000, 14,56,577 apple boxes were exported to foreign countries. Production of potato in Shimla District during the year 1999-2000 was 60,803 metric tones. It is anticipated that Shimla will continue to act as a major collection and distribution centre with fast increasing production of fruits and cash crops in its hinterland. Proper planning and development of wholesale, fruit, vegetable and timber markets as well as transport nagar and truck stand in the vicinity of Shoghi where bye-passes connect is the foremost necessity.

## 4.3 TOURIST ATTRACTIONS:

Shimla is on the national and international tourist map. It is well known as a summer resort and tourist city. It is preferred by the tourists more for its scenic beauty and British heritage. Shimla is famous for its snowfall when the entire city is covered with a thick blanket of snow and it looks like a ‘city of dreams’.The scenery around Shimla is major attraction. The valleys on either side are deep and thickly clothed with forest. There is a large number of tourist places around Shimla like Kufri, Fagu, Mashobra, Naldehra, Craigneno, Chail, Kasauli, Narkanda, Hatoo Peak, Sarahan and Tatta Pani. Kiar, the capital of erstwhile Koti State is at a distance of 15 Kilometres from the city. Shimla is famous for its Summer Festival for which tourists come from all over the Country. It is also known for Sippy fair of Mashobra, Christ Church at the Ridge, Jakhoo Temple, Dhingu Temple, Kali Bari Temple, Kamna Devi, Tara Devi, Ice Skating Rink, The Mall, Roller Skating Rink, pedestrian pathways, Glan and Chadwikfall falls. Shimla is famous for built heritage, such as Vice Regal Lodge now named as Indian Institute of Advanced Studies, Rothney Castle, Railway Board Building, Gaiety Theatre and Gorton Castle. The rich cultural heritage is a feast for tourists.

## 4.4 REGIONAL IMPERATIVES:

Shimla is growing beyond its leaps and bounds. Ribbon development along the Highways and even minor roads emanating from the city is a common feature. A vast city scape is in the formation. Whereas, the already existing areas have got congested, the fringes are acquiring serious proportions. Being a regional city, problems of Shimla cannot be tackled at local level. Formulation of a Regional Plan for capital city of Shimla and accordingly to tackle its problems at regional scale is foremost necessity of the day. Such immediate Capital Regional Plan alongwith a radius of about 30 kilometres crow fly distance from which people commute daily will go a long way to tackle multifarious problems of Shimla including over crowding alongwith stringent regulatory control. However, perspective solution to Shimla's problems lie in developing a counter magnet at an appreciable distance amidst the populous belt at a nodal location.

# CHAPTER-5

# PHYSICAL AND ENVIRONMENTAL CONSIDERATIONS

## 5.1 PHYSICAL DETERIORATION-A PRIME CONCERN

5.1.1 Shimla lives on its proud past. It broods over its passive present. It aspires for a promising future. The glory of its past attracts visitors and the reality of magnitude of its degradation makes them sad. Unfortunately, Shimla has reduced to a concrete jungle. It is now just a city on a hill with din, dirt and curses that go with any city. Narrow lanes where people feared to tread are today the racing promenades for cars and jeeps. Greenery in Shimla is fast disappearing. With rising population, un-checked construction and depleting forests, water crisis has mounted. Cost of Rs. 28 per kilolitre water supply is quite high. The drains are all dry, choked with waste and the roads overflow with water and dirt. The present generation of Shimla dwellers has also lost what their forefathers took pride in their civic sense. Now people spit everywhere. They have turned the slopes close to their homes ugly to look at and unhygienic. The public conveniences like urinals and latrines are dirty and stinking. Encroachments have reached serious proportions. Much of the activity pertains to the business establishments. Even on the famous Mall, a number of shopkeepers have added a floor or two. Some hotels have opened shops in their basements and many others have extended their premises much beyond the permissible limits. The congested Lower Bazaar and the Ram Bazaar areas abound with such encroachments. Hundreds of two room hutments have come up in the Krishna Nagar area, near the General Bus Stand on steep slopes. Most of these dwellings have been constructed on Municipal land are unauthorized and look ugly. In the Sabzi Mandi and the Anaj Mandi, scores of shopkeepers, who were allotted booths by the Municipal Corporation, have added extension, on the first floor.

**Mass of Construction in Central Area**

5.1.2 Numerous buildings are in dilapidated condition. In many cases joint structures and properties under litigation are about to crumble. There have been at least three major building collapses in Shimla during the last few years. Shimla is a hill town where recently a number of multi-storeyed RCC framed structures have come up for residential or commercial purposes in private sector. In a number of such constructions, structural designs have not been followed.

## 5.2 MOUNTING PRESSURE ON LAND RESOURCES:

5.2.1 The original structure of city was designed for 25000 persons at pedestrian scale. Population of the city and migration to it have increased manifolds. The housing stock, water supply, transportation, sewerage, electricity supply and tourist infrastructure are under stress and strain. Every conceivable space has been utilized for constructions and to cater for infrastructural requirements. Thus Shimla has exhausted all physical threshold and any more development shall be at the cost of health of the city at exorbitant costs. The immense pressure on land resources has led to environmental degradation.

5.2.2 Shimla has reduced to a hazardous city. It has congested built-up areas. Common problems of the city are the disturbance to natural profile of land by cutting of terrain for constructions, haphazard development, traffic hazards, over concentration in the Central area, unauthorized constructions, encroachments on roads and public land, mixed land use, lack of integration between place of work and place of living discrimination between population growth and urban infrastructure development, garbage nuisance and scanty care of natural and built heritage. Land, Water, Air and noise pollution and vegetation loss have grossly affected its eco-system. High rate of construction activity is damaging the natural setting as well as its scenic beauty. Increasing depth of water table has also become a prime

**Massive Constructions in Jiwanu Colony**

concern. The greed and selfishness and thereby materialistic and consumerism attitude have taken over almost all spheres of life.

## 5.3 CLIMATIC VARIATIONS:

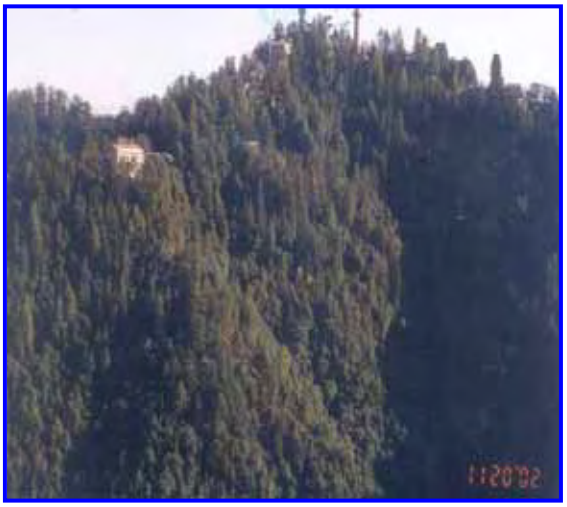
Increasing heat in summers, declining quantum of show in winters, unusual behaviour of monsoon and frequent dry spells are the prime climatic concerns. The highest temperature during summer months of May-June goes even more than $30^0$ C. Temperature, however goes down even - $4^0$ C during winters.

## 5.4 STRESS ON GREEN COVER:

5.4.1 Spread over seven hills/ spurs, covered with various tree species of deodar, pine, Oak, Kail, Rai and rhododendron, Shimla has lush green environs. Shimla is known for its City Forests. Some common fruit trees are Apple, Almond, Cherry and Plum. Depleting green cover due to massive constructions is the prime concern. Wild life is vanishing or migrating to greener pastures. Uncollected garbage finds its way to the ravines, spoiling the entire serene ambience provided by the landscape.

5.4.2 Vide Notification No. HIM/TP-RW-AZR/2000-III dated 11.8.2000, besides delineation of Core and Restricted Areas, all areas possessing substantial green cover, but not classified as forest, whether in public or private ownership were designated as Green Belts and only reconstruction on old lines was allowed therein.

5.4.3 The 17 green belts identified and notified vide notification No. HIM/TP-RW-AZR/2000-III dated 7.12.2000 included Tutikandi Forest bounded by Bye-pass and Cart road,- Nabha Forest, Phagli-Lalpani Forest, Bemloe Forest, Himland Forest, Khalini, Chhota Shimla Forest, Chhota Shimla Forest above Cart road, Kasumpti Forest, Charlie Villa Forest, Forest between Himfed Petrol Pump and Secretariat, Jakhu Forest (3 portions), Bharari-Shankli-Ruldu Bhatta Area in between Boileauganj -Chaura Maidan known as Ellesium Hill. Boundaries of these green belts, are shown at para 19.6.4. Presently as per revenue records, the identified green belts in Shimla Planning Area are spread over 414 hectares, out of which 76% area is either under Govt. Land/ forests and 24% is Private land/properties.



**Green Belt in Chaura Maidan Area**

**Expanding Shimla**

5.4.4 Locations, on either side of cart road/ National Highway-22, Circular Road and Mall Road or in vicinity thereof, there is already inadequate width of the roads, a heavy traffic load, inadequate parking lots to cater even for present requirements and mixed traffic. The Core wherein many green pockets are situated, comprising of most of the Shimla, possess a precious natural and built heritage, requiring preservation for posterity at any cost. Indiscriminate tapping of natural resources in terms of wood and stone, construction of roads, has led to loss of scenic beauty of green cover in the city and its surroundings, which has been acting as a major tourist attraction, throughout the year. As majority of tourists visit Shimla for pleasure and site seeing, it is imperative that areas with predominant green cover are to be preserved.

**R.C.C. Construction Threatening Green Belt in Jakhoo Area**

Furthermore green cover is required to be increased for the vital cause of environment and betterment of eco-system of future Shimla. Shimla also falls in seismic Zone-IV and is also susceptible for earthquakes. Vertical buildings have led to manifold increase in pressure on land resources and added to traffic problems, besides they look ugly over hill slopes and are hated by the tourists, against the serene natural landscape and green cover.

5.4.5 The eco-tourism development approach based on natural preservation imperatives, recognized to be most suited for Shimla also call for utmost care in preservation of traditional green cover, on one hand and plantation of evergreen long lasting trees, on the other. Recognition and implementation of interface between tourism, heritage and environment is foremost requirement. Congested built up areas, traffic hazards, over-concentration of the central part, unauthorized constructions, land degradation, mixed landuse, lack of integration between place of work and place of living and mismatch between population and urban infrastructure development are the common problems of Shimla, which are required to be tackled by restricting construction activities in central Shimla, including green areas, comprising of even the private ownerships.

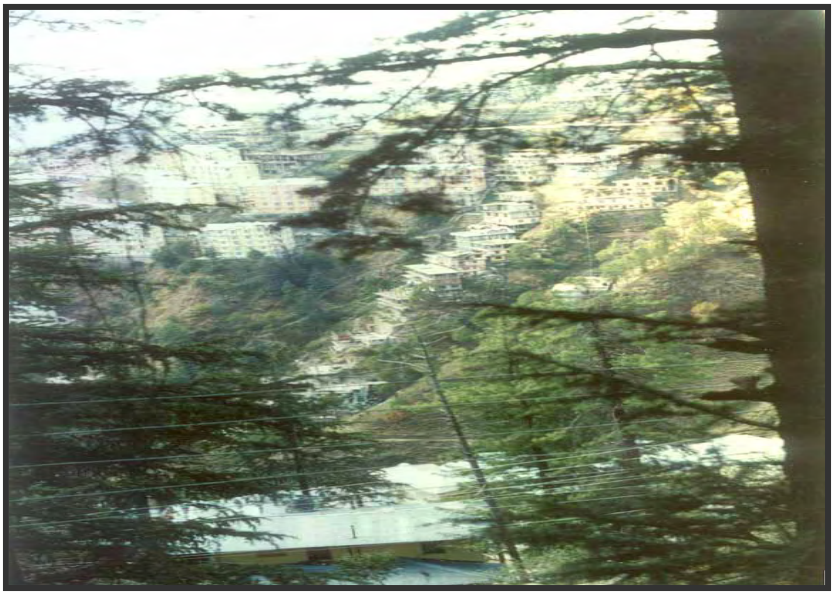
5.4.6 Conservation of the environmental quality of Shimla is possible through careful planning taking into consideration the ecological paradigms. Respect for the environmental paradigms in development planning can make the state capital not only to perform its political function, but also continue to act as an attractive location for national and international tourism.

## 5.5 SINKING/ SLIDING AREAS

**5.5.1** Geologically week areas identified as highly sinking prone areas which includes the Northern slopes of the Ridge extending upto the Grand Hotel in the West covering Lakkar Bazar including Central School extending to Auckland Nursery School then down to Dhobi Ghat below the Idgah electric Sub-Station and sliding areas which includes Laddakhi Muhalla (Krishna Nagar) and the spur below the Directorate of Education Department and surrounding areas of Hotel Clark's are prone for hazardous.

## 5.6 GEO-HAZARDS:

5.6.1 There is a constant environmental and aesthetic degradation. Once quaint and tranquil, now melancholy shadows of its glorious past. Increased



**Construction on steep slopes below Bye pass near B.C.S.**

commercial activity, unplanned physical growth and influx of rural population, along tourists have ruptured the fragile relationship

between the built form and nature. All this has resulted in denuding the mountain slopes of majestic tree-cover-making way for more asphalt roads and concrete buildings. Metamorphosed Himalayan system has Shali series, permo- carboniferous, Pre- Cambrian archcan group of rocks and hard sedimentary rocks. It has mountainous and sandy soil. Shimla city and its surrounding areas have a complicated physiography due to tectonic events, foldings, faulting and thrusting processes, resulting inversion of topography and formation of irregular landforms. On account of predominance of dolomite and lime stone rocks, landslides are common. As rocks are unstable, dislocation of buildings can occur. Being located in seismic zone, it is susceptible to earthquakes.

5.6.2 The recent two decades of organic growth, on account of overwhelming urbanization forces, resulted into eyesores on the townscape of Shimla, which may emerge death traps in the event of natural calamities like earthquakes, cloudbursts and landslides, for which the area is highly susceptible. As the city is now growing beyond its leaps and bounds, it has posed colossal environmental threats. Constructions carried on slopes are more dangerous. Even $45^0$ slope is more than tolerable limits in order to cope up with the gravity of geo-hazards like earthquakes, landslides and dislocation of buildings. The following table shows requirement of natural state with the increase of slope:-

**SLOPE DENSITY PROVISIONS (ADOPTED FROM NELSEN, 1979)**

| **Average Slope (%age)** | **%age of site to remain in Natural State** |
|---|---|
| 10 | 32 |
| 17 | 36 |
| 20 | 45 |
| 25 | 57 |
| 30 | 72 |
| 35 | 90 |
| 40 | 100 |

5.6.3 Localities like Cemetery, Sanjauli, Jiunu Colony, Chakkar, Katchi Ghati and Lower Bharari are susceptible to major mishaps during earthquakes whereby chain effect of collapse of building may affect many buildings

on slopes down below. In such a situation, the strength of any individual building amidst the maze of weak and multi-storeyed buildings is likely to make a tangible difference. Utmost discipline in construction activities in accordance with ecological imperatives and to allow construction on limited slope, is the present day concern. In view of empirical observations of various important localities, havoc potential thereof has been assessed for densely populated localities and the same is given as under:-

**Table: HAVOC POTENTIAL OF CONSTRUCTIONS IN MAJOR LOCALITIES.**

| **Locality** | **Average Slope** | **Coverage** | **No. of Storeys** | **F.A.R of locality** | **Peak Density of Population (Per hectare)** |
|---|---|---|---|---|---|
| **1.** | **2.** | **3.** | **4.** | **5.** | **6.** |
| Dhalli | $70^0$ | 60% | 4 | 3.0 | 2500 |
| Cemetery | $70^0$ | 85% | 4-5 | 3.5 | 3000 |
| **Locality** | **Average Slope** | **Coverage** | **No. of Storeys** | **F.A.R of locality** | **Peak Density of Population (Per hectare)** |
| **1.** | **2.** | **3.** | **4.** | **5.** | **6.** |
| Sanjauli | $70^0$ | 70% | 4-5 | 3.0 | 2500 |
| Jiwanoo Colony | $60^0$ | 85% | 4-5 | 3.5 | 3000 |
| New Shimla | $35^0$-$45^0$ | 70% | 4 | 2.5 | 2000 |
| Vikas Nagar | $30^0$-$40^0$ | 60% | 4 | 2.5 | 2000 |
| Khalini | $45^0$ | 65% | 4-5 | 2.5 | 2000 |
| Chhota Shimla | $45^0$ | 65% | 4-5 | 2.5 | 2500 |
| Central Shimla | $60^0$ | 90% | 4-5 | 4.0 | 3500 |
| Krishna Nagar | $70^0$ | 70% | 2-3 | 1.5 | 2000 |
| Bharari | $50^0$ | 70% | 4 | 2.5 | 2000 |
| Kaithu | $45^0$ | 60% | 4 | 2.5 | 2000 |
| Phagli | $60^0$ | 50% | 4 | 2.0 | 2000 |
| Chakkar | $65^0$ | 60% | 4-5 | 3.0 | 2500 |
| Katchighatti | $75^0$ | 80% | 5-6 | 4.0 | 3000 |
| Totu | $50^0$ | 75% | 4-5 | 3.0 | 2500 |

Source:- Survey by TCP Deptt.

From above table, the threats emanate as under:-

(i) Likely devastation during earthquake on slopes of more than $35^0$ to $40^0$ will multiply due to chain effect.

(ii) High percentage of coverage with no tree/ greenery amidst congested localities and utmost disregard to natural drainage and cleanliness may cause pollution menace and casualties in fire.

(iii) More number of storeys coupled with high FAR and coverage and thereby no light, air and ventilation may lead to environmental chaos and thereby affect human health.

(iv) High peak density of population may lead to more casualties during earthquake. As localities are thickly built with utmost disregard to roads, setbacks etc., no relief and rescue operations can be carried.

5.6.4 Dilapidating buildings, constructed many decades ago in the heart of city, give a shabby look. The localities of Sanjauli, Summerhill, Dhalli, Kasumpti, Shoghi, Totu and Ghanahatti have become veritable concrete jungle, leading to deterioration of environs. The Municipal Area has been dotted with slums and hutments of construction workers, even amidst the forest areas.

**Massive Construction at Cemetery without Proper Accesses**

5.6.5 The localities which are susceptible for geo-hazards including likely devastation during earthquakes, landslides, collapse of buildings due to local disturbances, cloud thrusts etc. be identified and all remedial measures be taken by the concerned organizations including Development Authority, Municipal Corporation, Town and Country Planning Department and Revenue Department, so that there is no threat to human lives in these areas.

## 5.7 DISASTER MANAGEMENT

5.7.1 The North-Western fringe of the Himalayas is bounded by two major thrusts namely Main Central Thrust and Main Boundary Fault running parallel to the axis. Himachal State therefore, falls in most active seismic zones-IV and V. Shimla being capital and most important city of the State has multifaceted functions. There is a mounting pressure of urbanization forces, whereby the city is susceptible to various hazards like earthquakes, landslides, cloudbursts and fire. In order to ensure safety and preparedness for these hazards, it is imperative to devise a pre-disaster mitigation plan for the Shimla city.

5.7.2 Majority of localities in Shimla Planning Area with massive construction of buildings on slopes without adhering to provisions of seismic building code and earthquakes resistance measures, are vulnerable to hazards. Localities like Sanjauli, Lower Bazaar, Fingask and Ram Bazaar are prone to disasters. Majority of houses are old and have less load bearing capacity and structurally poor resistance. So far as land slides are concerned, areas like Katchighati, New Shimla Phase III, Chakker, Totu and Cemetery localities are vulnerable to hazards. The city is also susceptible to fire hazards in view of wooden Dhajji walls of houses in areas of Grain market, Lower Bazaar and Lakkar Bazaar of city. Provision of sufficient fire hydrants at every ward level is inadequate. Only core area of city is equipped with this facility. It is imperative to develop fire hydrants net-works in other areas to ensure preparedness for the fire hazards.

## 5.8 ENVIRONMENTAL POLLUTION

5.8.1 Quantum of pollutants is increasing in the city due to massive toxics emerging from the various unmanaged sources. The air is contaminated

with different pollutants such as $SO_2$, Nox and SPM. As per information supplied by the State Environment Protection and Pollution Control Board existing quantum of pollutants is given below.

**Table 5.1 Pollutants in Residential Areas Figure 5.1: Pollutants in Residential Areas**

| Year | Pollutants (Ug/$m^3$) | | Standard (ug/$m^3$) |
|---|---|---|---|
| | SO2 | Nox | |
| 1999 | 1.61 | 4.35 | 15 |
| 2000 | 1.92 | 4.53 | 15 |
| 2001 | 2.56 | 9.32 | 15 |
| 2002 | 4.04 | 14.08 | 15 |
| 2003 | 0.35 | 11.87 | 15 |

Source: H.P SEP& PCB

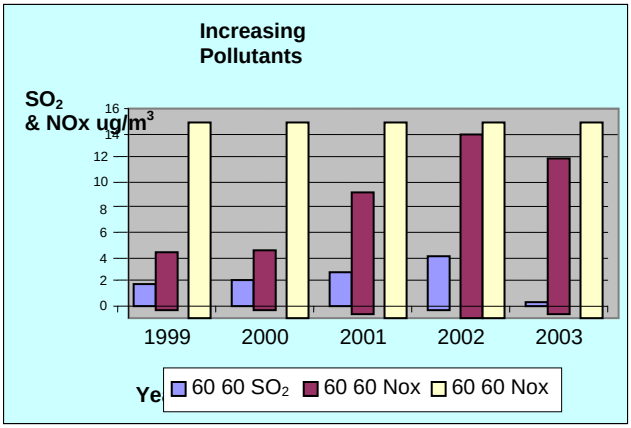
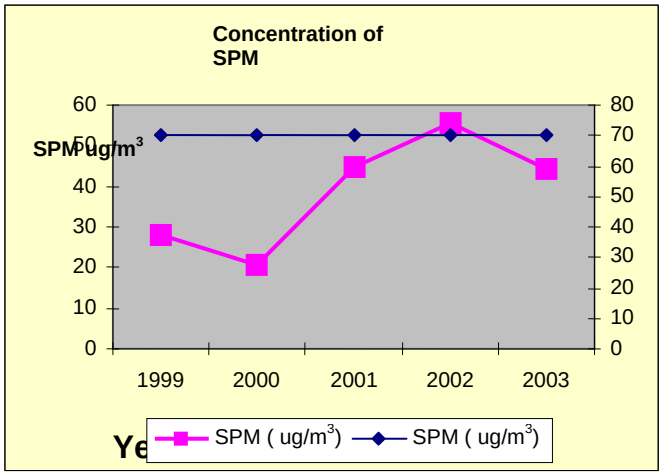



**Table: 5.2: Concentration of SPM** **Fig 5.2: Concentration of SPM**

| Year | SPM ( ug/$m^3$) | Standard ( ug/$m^3$) |
|---|---|---|
| 1999 | 27.82 | 70 |
| 2000 | 20.67 | 70 |
| 2001 | 44.77 | 70 |
| 2002 | 55.66 | 70 |
| 2003 | 44.41 | 70 |

**Source: H.P SEP&PCB**




The National Ambient Air Quality Standard (NAAQS) has setup a norm of 15 and 70 ug/$m^3$ respectively at residential area, but table reveals that quantum of such toxic trends are being mushrooming over city as a whole over the period of time. As a resultant, there is ill effect on various

systems of human settlement and ecology. Similarly, concentration of Suspended Particular Matter in residential area is increasing at faster rate.

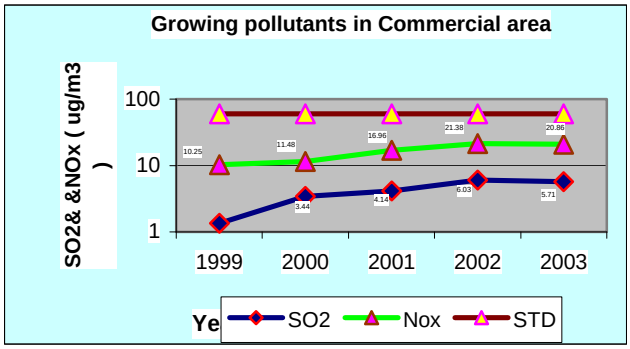
5.8.2 The level of pollution in commercial areas is increasing and the same is shown as under:-

**Table 5.3: Pollutants in Commercial Areas**

| Year | SO2 | Nox | STD ($ug/m^3$) |
|---|---|---|---|
| 1999 | 1.349 | 10.25 | 60 |
| 2000 | 3.44 | 11.48 | 60 |
| 2001 | 4.14 | 16.96 | 60 |
| 2002 | 6.03 | 21.38 | 60 |
| 2003 | 5.71 | 20.86 | 60 |

**Source: H.P SEP&PCB**

**Fig. 5.3: Pollutants in Commercial Areas**



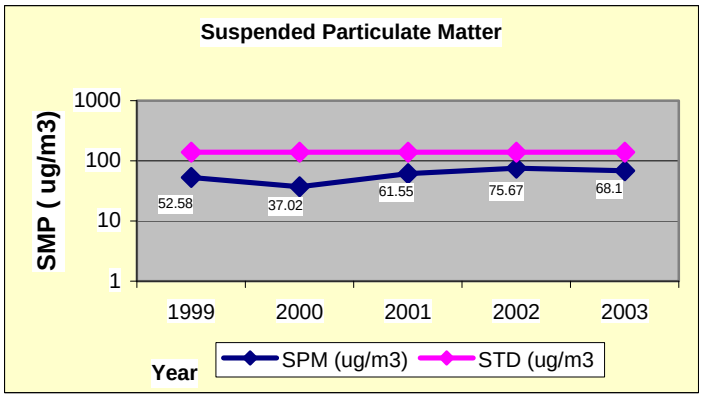

The table reveals that existing quantum of $SO_2$ and Nox pollutants are increasing over the period of time in commercial areas, due to multifold increase of commercial activities in and around the city. Permissible limit of $SO_2$ & Nox is 60 $ug/m^3$ in commercial areas as per the NAAQS norm. In addition, Suspended Particular Matter is increasing at faster rate as against norms of 140 $ug/m^3$ as given below.

**Table 5.4: Suspended Particular Matter**

| Year | SPM ($ug/m^3$) | Standard ($ug/m^3$) |
|---|---|---|
| 1999 | 52.58 | 140 |
| 2000 | 37.02 | 140 |
| 2001 | 61.55 | 140 |
| 2002 | 75.67 | 140 |
| 2003 | 68.1 | 140 |

**Source: H.P SEP&PCB**

**Figure 5.4: Suspended Particular Matter**



### 5.8.3 Noise Pollution

Noise pollution is also increasing as against the given norms of 55 dB for day and 45 dB for night at residential locality. In commercial area same level is 65dB for day and 55 dB night as given below:-

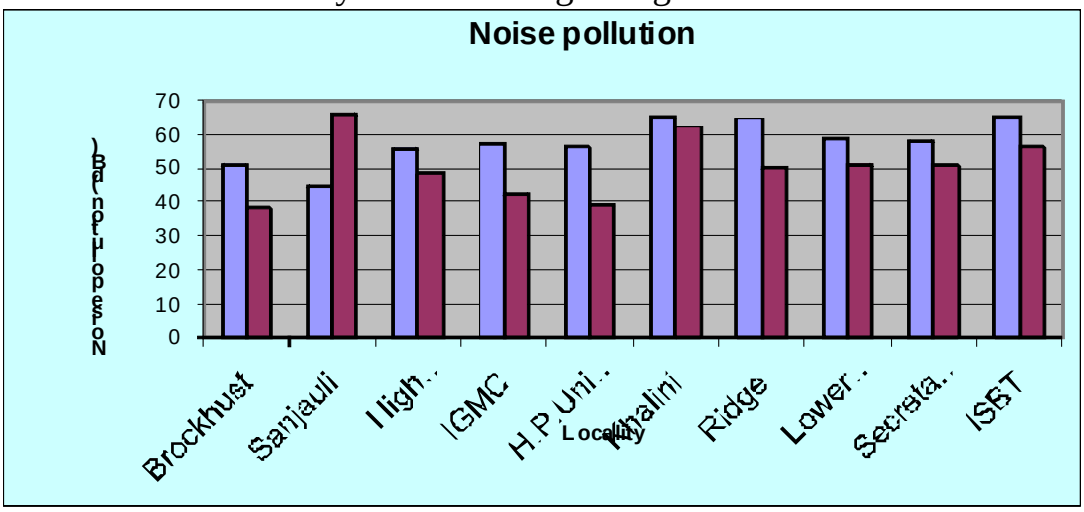



**Table 5.5 Noise pollution level**

| | Day | Night | STD (dB) | |
|---|---|---|---|---|
| Brockhust | 51.1 | 38.05 | Residential | |
| Sanjauli | 44.6 | 65.9 | Day | 55 |
| High Court | 55.8 | 48.5 | Night | 45 |
| IGMC | 57.3 | 42.4 | | |
| H.P University | 56.0 | 38.9 | Silence Zone | |
| Khalini | 64.8 | 62.2 | Day | 50 |
| Ridge | 64.6 | 50.2 | Night | 40 |
| Lower Bazaar | 58.5 | 51.0 | | |
| Secretariat | 58.2 | 50.7 | Commercial area | |
| ISBT | 65.1 | 56.0 | Day | 65 |
| Source : SEP& PCB | | | Night | 55 |

**Figure 5.5: Noise pollution level**

Noise pollution is exceeding as against the given norms at night and day time as given in table for localities, due to massive concentration of residential and commercial activities. The highest noise level is recorded in ISBT area followed by H.P Secretariat area. In addition, noise level is

also high in city commercial areas like Lower Bazaar, Lakkar Bazaar, Sanjauli and Khalini localities. Besides, water is also contaminated by sewerage and drain wastewater. Water is also not of good quality as per norm due to waste and toxic suspended material over ground.

## 5.9 INFRASTRUCTURAL, TRAFFIC AND TRANSPORTATION CHAOS:

The aging drainage and sewerage system has become a nightmare for residents of central Shimla. The faulty pipe lines are posing threats. The entire municipal area and potential locations along highways are witnessing haphazard growth in absence of proper services infrastructure including accesses, water supply, sanitation, electrification and open spaces. On account of limited road width and as a resultant of manifold increase in number of automobiles and regional heavy traffic, entire peace and tranquility of the city has been disturbed. Traffic jams, bottlenecks, delays and accidents have become common. The problems in peak hours of morning and evening are severe. Besides wastage of man-hours, lot of fuel is wasted and air is polluted. As there is no scope for expansion of roads in central areas due to prevalence of structures on both sides, traffic problems have multiplied. There is an acute problem of water supply in Summer season. Due to old water supply system, leakages are common. Sometimes water supplied is turbid and lacks proper treatment. The choking of sewers, disposed of untreated sewage and open defecation are common problems. The city lacks proper drainage. Generally there are open drains. Haphazard transactions of land, encroachments on drains and inadequate width of streets have led to a chaotic situation. On account of damage of drains by builders of houses and unauthorised cutting of land, the drainage system is frequently disrupted. Vehicles are parked on the roads, which leads to their choking. On account of mushrooming of ‘khokas’ along roads, expansion of roads and provision of parking is a stupendous task. The picturesque city of Shimla nestling amidst the mountains is therefore fast turning into a slum.

## 5.10 IMPERATIVES:

5.10.1 Shimla, the premier British town, popularly known for its cleanliness, natural environs, heritage masterpieces, scenic beauty and commanding view of the mighty Himalayas has to be saved at any cost from increasing pollution, environmental degradation and ruin. As the city is bleeding and pleading, no more degradation be allowed to take place. Overall green cover be enhanced by mobilizing the masses. The plantation be made mandatory. There must be blanket ban on cutting of trees. Its physical deterioration has to be dealt by paving way for detailed local level and problematic area plans and their implementation by community participation. Regular surveillance of well being of trees is required to be ensured by the requisite authorities. In order to tackle the pressure on Shimla at least 3 satellite towns along major highways and a counter-magnet at an appreciable distance are required to be planned and developed. Green Shimla will be the panacea for most of the evils that have come to Shimla. An utmost discipline in carrying out construction activities in accordance with physical, environmental and ecological imperatives is the foremost necessity. Energy efficient solar passive housing be encouraged in the city. Discipline is also required in the disposal of debris at earmarked sites, so that the same neither harms tree cover nor goes down to the streams. Besides, statutory duty, it is the moral responsibility of Development Authority, Municipal Corporation, Shimla, Environmentalists, Heritage lovers, Spatial Planners and all those who have respect to their premier hill station to protect it for tourists, safeguard its beauty and take remedial measures to pave way through regulatory control along with conservative surgery to restore its basic character and make it efficient, viable, healthy, wealthy and vibrant city, which may continue to attract tourists from world over and cater for basic requirements of common man.

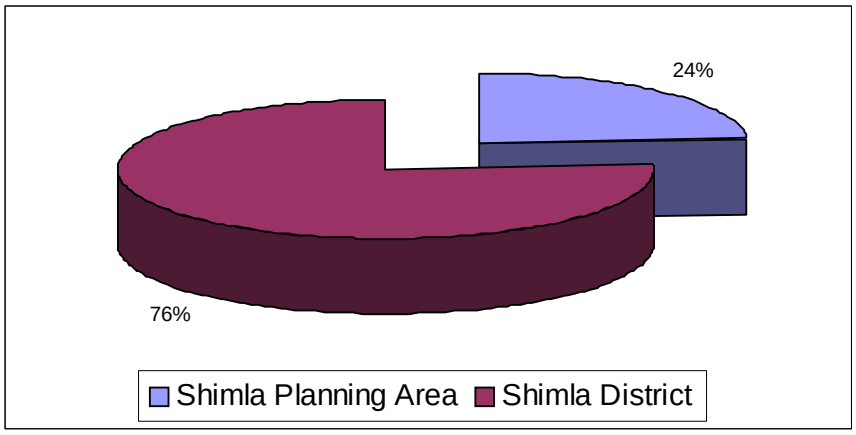
# CHAPTER- 6

# DEMOGRAPHIC CHARACTER

## 6.1 SIGNIFICANCE

The development of a particular city, town or a region depends upon natural, physical and socio-economic factors. Among these factors the population assumes significance in determining the future pattern of progress and development. As per 2001 census, population of Shimla Planning Area is 174,789 persons, which accounts for 24% population of the Shimla District. The socio-economic analysis has been made on the basis of primary survey conducted by the Town and Country Planning Department, H.P. for entire Planning Area in 1997. 10% sample has been conducted for demographic, socio-economic, housing and commercial aspects.

**Figure 6.1: Proportion of Population of Shimla Planning Area**




Source: Census of India ,2001.

## 6.2 POPULATION GROWTH:

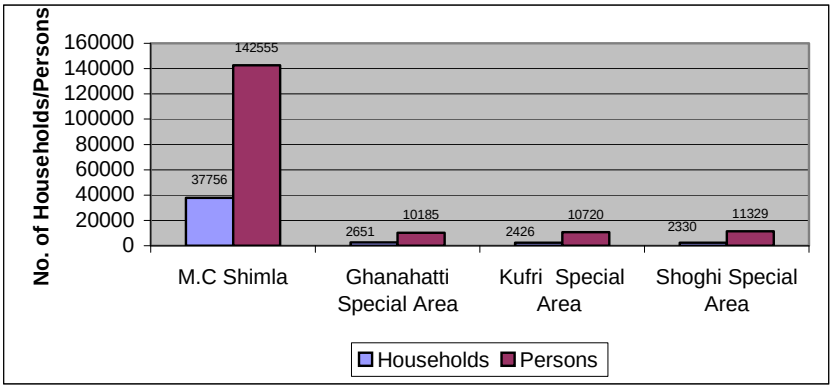
6.2.1 The population of Shimla Planning Area has increased from 1,29,827 persons in 1991 to 1,74,789 in 2001, recording a decadal growth rate of 34.63 percent. Shimla Planning Area comprises of Municipal Corporation Area, Special Areas of Kufri, Shoghi and Ghanahatti. The settlement-wise description of population as per 2001 Census is as under:-

**Table: 6.1 Population of Shimla Planning Area 2001**

| Settlement | No. of Households | Total Persons | Male | Female |
|---|---|---|---|---|
| M.C. Shimla | 37756 | 142555 | 81,186 | 61369 |
| Ghanahatti Special Area | 2651 | 10185 | 5839 | 4346 |
| Kufri Special Area | 2426 | 10720 | 5925 | 4795 |
| Shoghi Special Area | 2330 | 11329 | 5954 | 5375 |
| **Total** | **45163** | **174789** | **98,904** | **75885** |

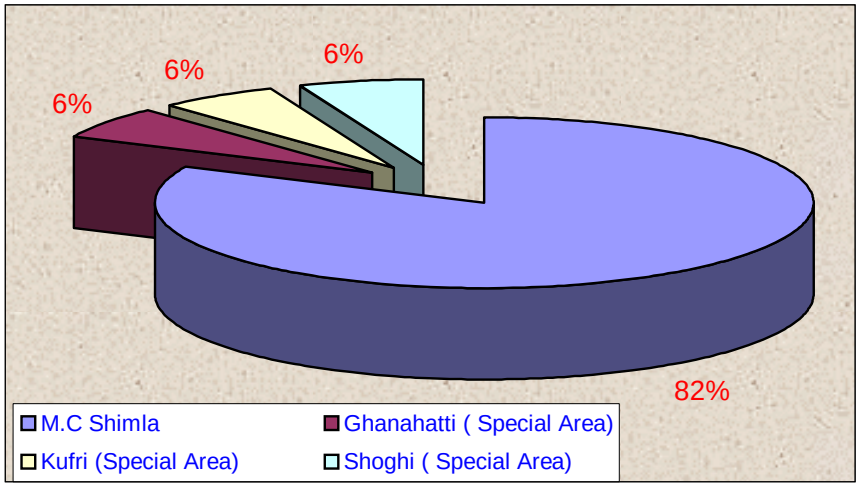
Source: *Census of India ,2001.*

**Figure: 6.2 Population of Shimla Planning Area, 2001**




Source: *Census of India ,2001.*

**Figure 6.3: Settlement-wise Population Distribution**



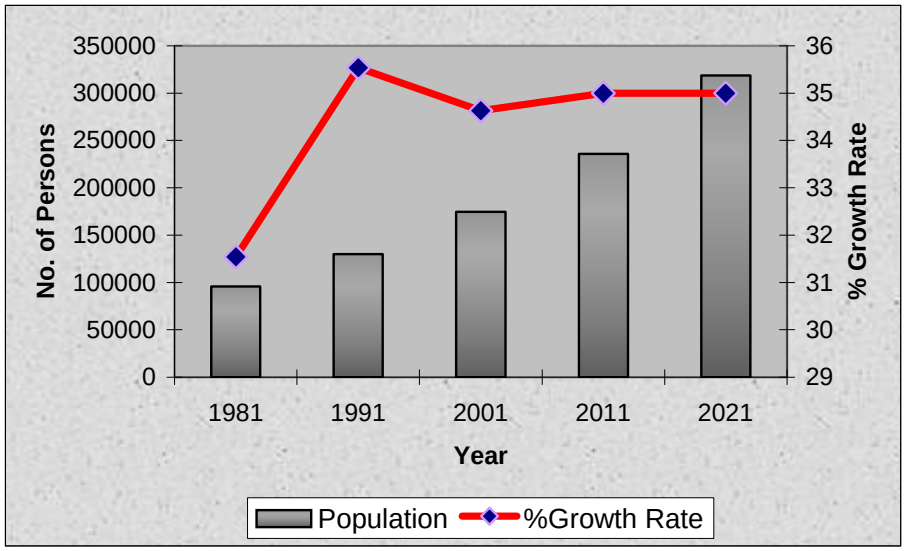
About 82% of whole population of Planning Area lives in Municipal Corporation, Shimla including three Special Areas namely, Dhalli, Tutu and New Shimla Special Areas. As per the Census 2001, these urban agglomerations were part of Municipal Corporation and presently under Special Areas having a total population of 13.83 % of the total population of Municipal Corporation. Besides, 12% population of total Planning Area lives in Kufri and Shoghi Special Areas and 6 % population lives in newly constituted Ghanahatti Special Area. It is assumed that population of Shimla Planning Area is anticipated to increase at the rate of 35 % during the decades of 2011 and 2021, which is likely to be 2,35,970 and 3,18,560 respectively.

**Table 6.2: Decadal Population Growth**

| Year | Persons | Decadal Variation | % Age Decadal Growth Rate |
|---|---|---|---|
| 1971 | 72870 | ----- | ----- |
| 1981 | 95851 | 22981 | 31.54 |
| 1991 | 129827 | 33976 | 35.45 |
| 2001 | 174789 | 44962 | 34.63 |
| 2011 | 235970 | 61181 | 35 |
| 2021 | 318560 | 82590 | 35 |

Source: Census of India, 2001

**Figure 6.4: Decadal Population Growth**



### 6.2.2 Floating Population:

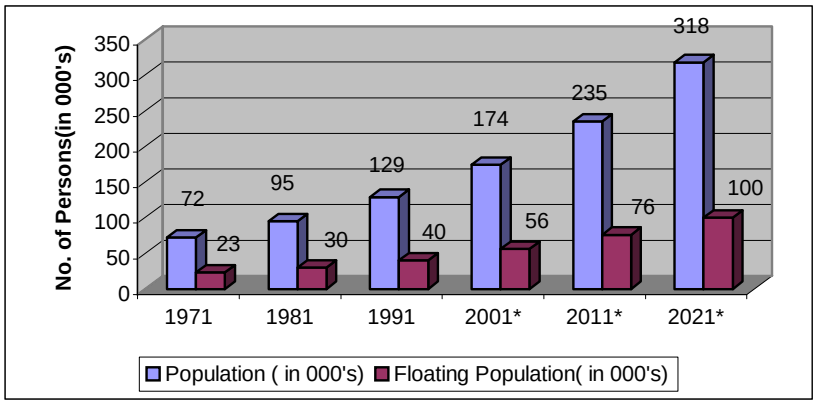
It has been observed as per Census analysis that the floating population growth rate has observed a little downward trend, while the total number of floating population has increased due to Shimla being a service city as well as tourists' destination.

**Table 6.3: Floating Population**

| Year | Floating Population | % Age Decadal Growth Rate |
|---|---|---|
| 1971 | 23459 | 36.00 |
| 1981 | 30000 | 31.74 |
| 1991 | 40000 | 31.70 |
| 2001* | 56000 | 40.00 |
| 2011* | 76000 | 35.00 |
| 2021* | 100000 | 31.00 |

Source: Census of India *** projected**

**Figure 6.5: Floating Population**



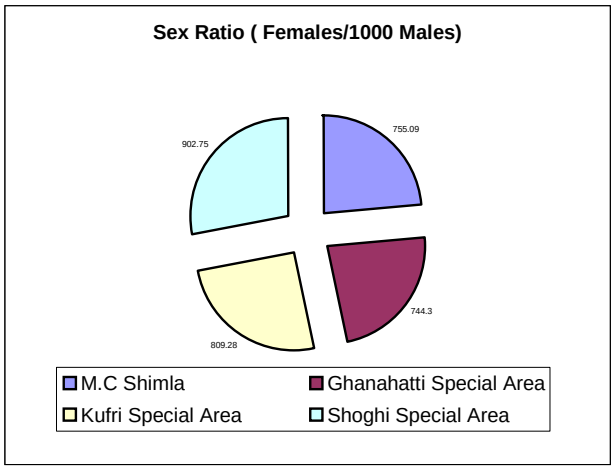

## 6.3 SEX RATIO AND AGE-COMPOSITION

6.3.1 In Shimla Planning Area for every 1000 males, there are 767.25 females. The District has, however, 896.35 females per 1000 males. Out of 1,74789 total population, 98904 are males and 75885 females. Being a service city males are involved in service sector and majority of them keep their families at their native places. Number of females per 1000 males vary within Shimla Planning area. As per analysis the settlement-wise description of sex ratio is as under:

**Table 6.4: Sex Ratio**

| Settlement | Females/1000 Males |
|---|---|
| M.C. Shimla ( including Dhalli, New Shimla & Totu Special Areas) | 755.09 |
| Ghanahatti Special Area | 744.3 |
| Kufri Special Area | 809.28 |
| Shoghi Special Area | 902.75 |
| Planning Area | 767.25 |

**Figure 6.6: Sex Ratio**




**Source: Census of India, 2001**

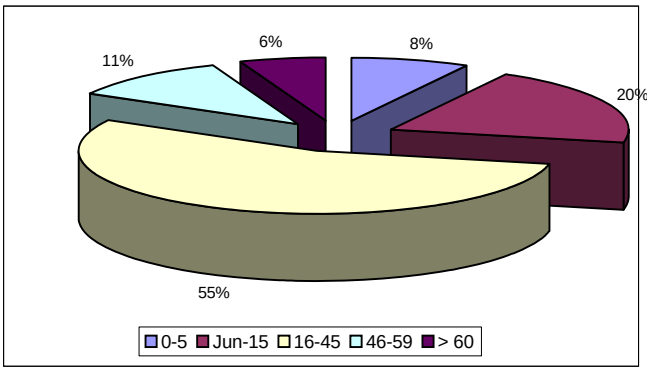
## 6.3.2 AGE-COMPOSITION

As per Sample survey conducted by Town and Country Planning Department, 8% population is below 5 year age, requiring mother care nurseries and tot lots. The 20 % population is in the age group of 6-15 years requiring provision for schooling and recreation. The 55 % population is in the age group of 16-45 years, which require facilities for higher learning like Senior Secondary Schools, Colleges, Industrial Training Institutions, Professional Colleges including Information Technology, Computer Applications, Management, Engineering and Medical. This reproductive age group has to be provided with family planning and post /pre-natal health care services. The 5.81 % population is 60 years and above age group, implying that most of these people may be leading a retired life in old age. For this age group, provisions are to be made for old age homes and passive recreational facilities.

**Table 6.5: Age Composition**

| Age Group | Percentage |
|---|---|
| 0-5 | 8.16 |
| 6-15 | 20.30 |
| 16-45 | 54.52 |
| 46-59 | 11.28 |
| > 60 | 5.81 |
| **Total** | **100.00** |

**Figure 6.9: Age Composition**




## 6.4 MARITAL STATUS

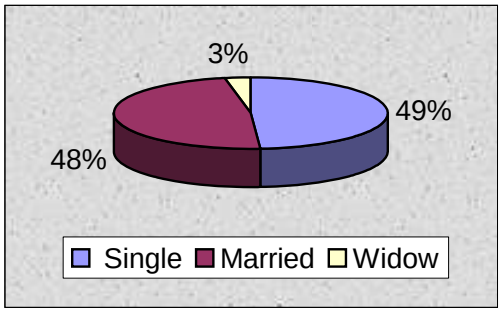
Sample survey reveals that out of total population of Shimla Planning Area, 48% persons are married, 49.00 % persons are unmarried and 3.00 % are widows.

**Table 6.6: Martial Status**

| Married Status | Percentage |
|---|---|
| Single | 49 |
| Married | 48 |
| Widow | 3 |
| Total | 100 |

Source : Town & Country Planning Deptt. Survey

**Figure 6.10: Marital Status**




## 6.5 EDUCATIONAL STATUS

Shimla being a Capital city and traditional educational centre since British days, there are number of educational institutions namely University, Colleges, Senior Secondary, High, Middle and Primary schools. Therefore, Literacy Rate is high in Shimla Planning Area. As per 2001 Census, out of total population of 1,74,789 persons, 143917 persons are literate and 30872 persons are illiterate. It reveals that 82%

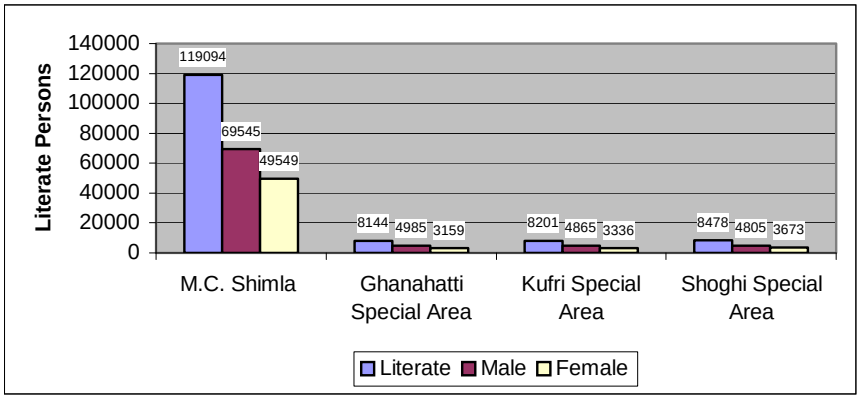
of total population of Planning Area is literate. The number of literate persons in Municipal Corporation, Shimla and Ghanahatti Special Area is 119094 and 8144 persons respectively. It has been observed that literacy rate of females is lower than that of males. Out of total literate persons, 84200 are males and 59717 are females. The following figures illustrate settlement-wise educational status, proportion of literate males and females.

**Table 6.7 : Proportion of Literate Persons ( 2001)**

| Settlement | Literate | Male | Female |
|---|---|---|---|
| M.C. Shimla | 119094 | 69545 | 49549 |
| Ghanahatti Special Area | 8144 | 4985 | 3159 |
| Kufri Special Area | 8201 | 4865 | 3336 |
| Shoghi Special Area | 8478 | 4805 | 3673 |
| Whole Planning Area | 143917 | 84200 | 59717 |

Source: Census of India 2001

**Figure 6.12: Settlementwise Proportion of Literate Persons**




Source: Census of India, 2001

**Table 6.8: Comparative Educational Status**

| Settlement | Population | Literate Persons | Male Literate | Female Literate |
|---|---|---|---|---|
| Shimla District | 7,22,502 | 504330 | 293745 | 210585 |
| Shimla Planning Area | 174789 | 143917 | 84200 | 59717 |

Source: Census of India 2001

**Figure 6.13: Educational Status of Shimla District`**

**Figure 6.14: Female Literacy Rate**

**Shimla Planning Area**

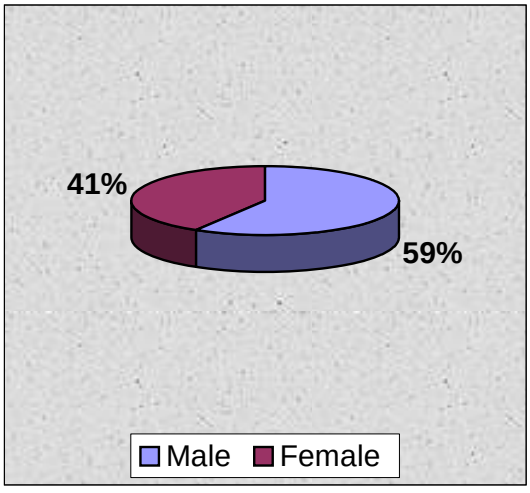



**Figure 6.15: Female Literacy Rate**

**Shimla District**

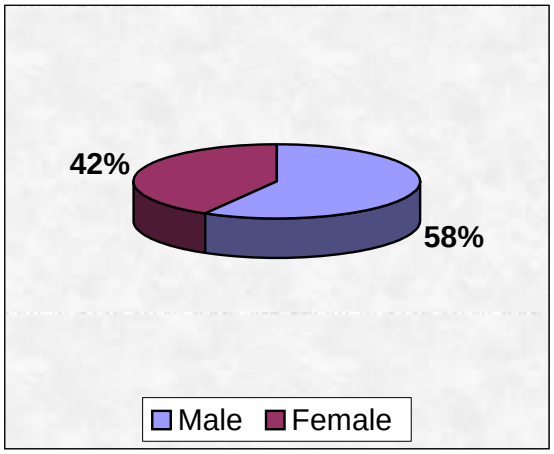
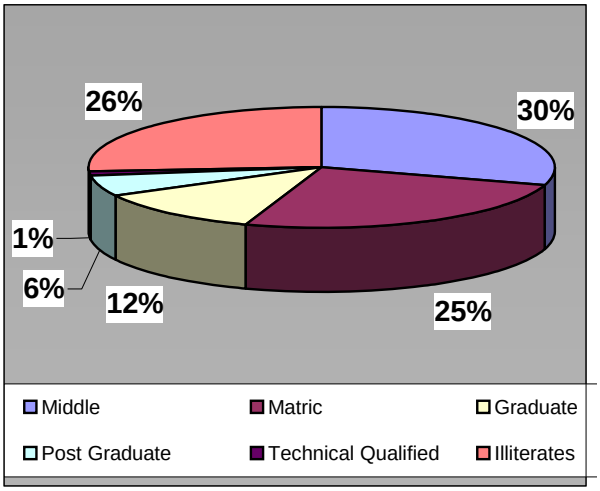


**Table 6.9 Educational Status**

| Classes | Percentage |
|---|---|
| Middle | 29.84 |
| Matric | 25.47 |
| Graduate | 11.77 |
| Post Graduate | 5.58 |
| Technical Qualified | 1.17 |
| Illiterates | 26.17 |
| **Total** | **100.00** |

**Figure 6.16: Educational Status**




**Source : Town & Country Planning Deptt. Survey**

Sample survery reveals that 30% population has recieved the education upto under matric standard, 25 % of population is having education up to matric, 18 % population up to graduate and post-graduate level and 1% of population is teachically qualified.

**Table 6.10 : Distance of Educational Facility**

| Distance (In Km) | Percentage |
|---|---|
| < 1 | 10.00 |
| 1-2 | 15.00 |
| 2> | 75.00 |
| **Total** | **100.00** |

**Figure 6.17: Distance of Educational Facility**

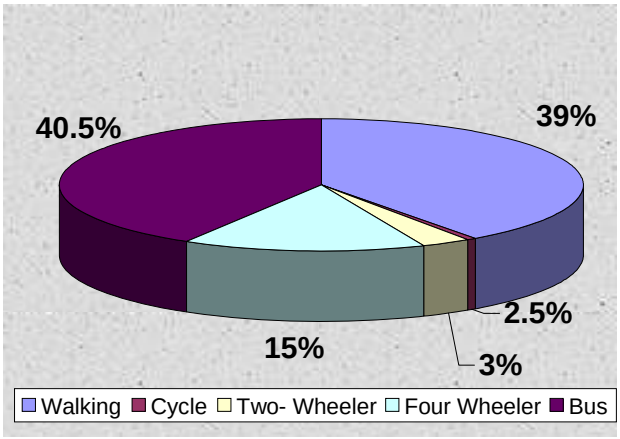
**Source : Town & Country Planning Deptt. Survey**

In Planning Area, public transport is the common mode for educational purposes, as it caters for about 41 % of students population. The 40% students go to school on foot and 15 % students use the private transport. Only 4% students are using motor- cycle, scooters and cycles.

**TABLE : 6.11 MODE OF TRAVEL**

| Mode | Percentage |
|---|---|
| Walking | 39.00 |
| Cycle | 2.50 |
| Two-Wheeler | 3.00 |
| Four Wheeler | 15.00 |
| Bus | 40.50 |
| Total | 100.00 |

**FIGURE 6.18: MODE OF TRAVEL**




Source : Town & Country Planning Deptt. Survey

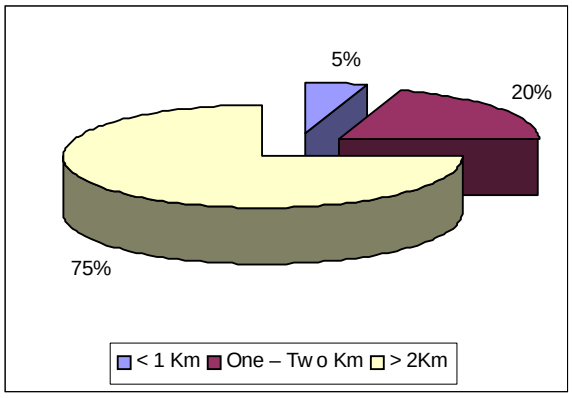
## 6.6. DISTANCE AND TRAVEL MODE FOR WORK

6.6.1 The 5 % workers have to walk less than 1km for their place of work, whereas 20 % have to travel 1 to 2 kms. and 75 % workers have to travel to their places of work more than 2 km. and above. Longer distances between places of residence and places of work are due to lack of planned and perspective development. The working efficiency is being adversely effected on account of improper relationship between work areas and residential areas. A lot of energy is wasted in trips in between residences and workplaces. It also leads to unnecessarily loading of arterial and sub-arterial roads. In order to cope up with this problem proper integration of work areas with residential areas is required to be addressed.

**Table 6.12: Distance of place of work**

| Distance (In Km.) | Percentage |
|---|---|
| < 1 Km | 5.00 |
| One – Two Km | 20.00 |
| > 2Km | 75.00 |
| **Total** | **100.00** |

**Figure 6.19: Distance of place of work**



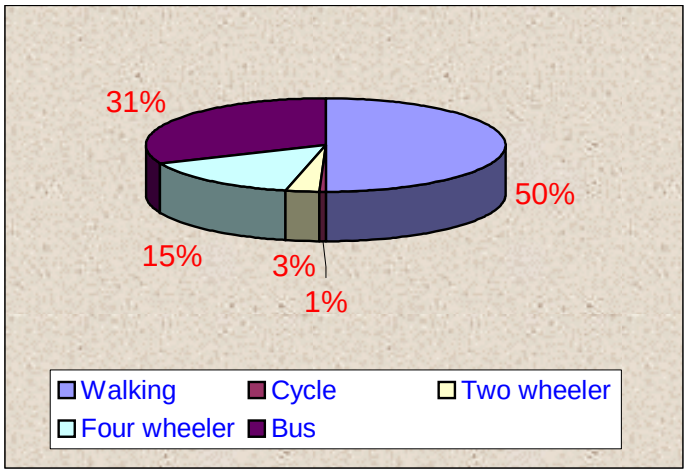

**Source: Town & Country Planning Deptt. Survey**

It has been observed that out of total workers in Shimla Planning Area, 50 % workers are going for work areas on foot, whereas 31 % workers use bus. 15 % workers use Private vehicles. Only 4% are using two wheelers including cycle.

**Table 6.13: Mode of Travel**

| Category Mode | Percentage |
|---|---|
| Walking | 50.00 |
| Cycle | 1.00 |
| Two wheeler | 03.00 |
| Four wheeler | 15.00 |
| Bus | 31.00 |
| **Total** | **100.00** |

**Figure 6.20: Mode of Travel**




**Source: Town & Country Planning Deptt. Survey**

## 6.7 OCCUPATIONAL STRUCTURE

The capacity of a city to provide employment opportunities and absorb the work force in various sectors of economy is an index of prosperity. The participation ratio gives an idea of the share of gainfully employed population against the dependent and non-working population. As per 2001 Census, there are 69197 workers (40%) and 105592 (60%) non-workers. Out of total workforce, there are 65402 main workers and 3795 marginal workers. The detailed description of workforce of Shimla Planning Area is as under:

**Table 6.14: Workforce**

| | |
|---|---|
| Workers | 69197 |
| Non-workers | 105592 |
| Total persons | 174789 |

**Figure 6.21: Workforce**

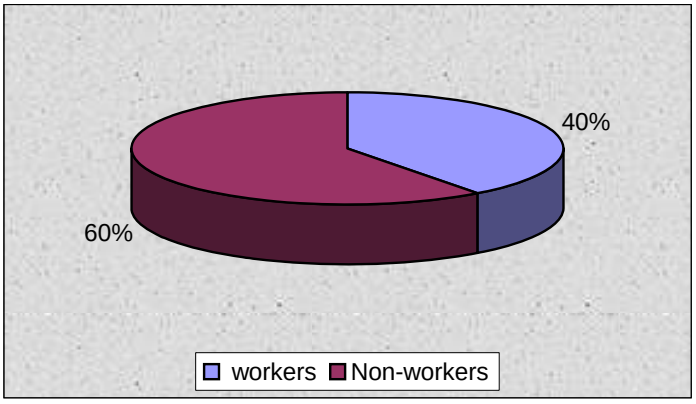
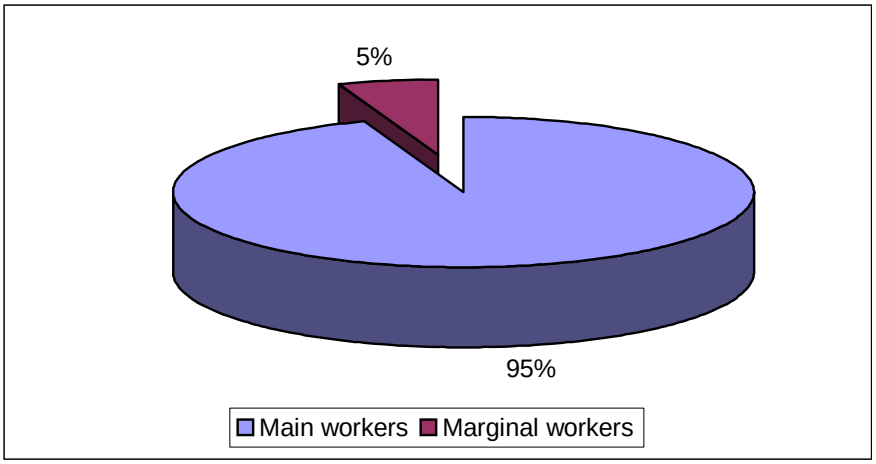



**Figure 6.22: Main & Marginal Workers**

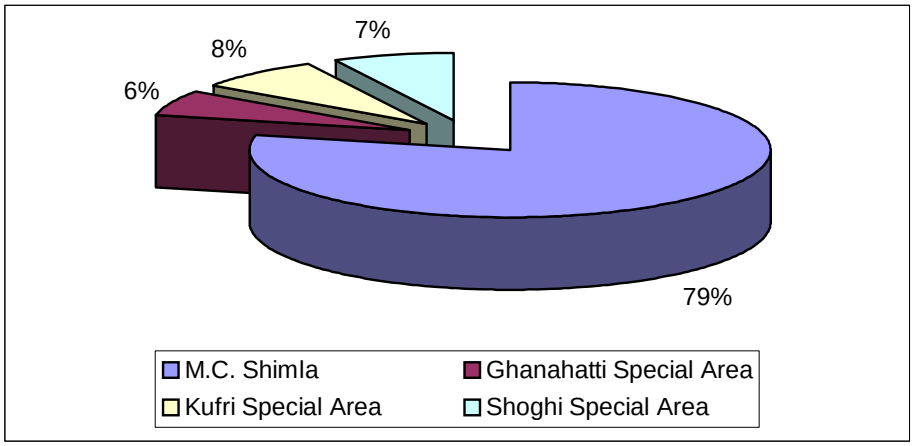


## Table 6.15: Settlement-wise Number of Workers

| Settlement | Workers | Male | Female |
|---|---|---|---|
| M.C. Shimla ( including New Shimla, Dhalli & Totu SA's) | 54404 | 44611 | 9793 |
| Ghanahatti Special Area | 4205 | 3055 | 1150 |
| Kufri Special Area | 5447 | 3499 | 1948 |
| Shoghi Special Area | 5141 | 3341 | 1800 |
| **Planning Area** | **69197** | **54506** | **14691** |

Source: Census of India, 2001

**Figure 6.23: Settlement-wise Workforce Participation**




## Table 6.16: Settlement wise Main Workers

| Settlement | Main Workers | Male | Female |
|---|---|---|---|
| M.C. Shimla ( including Totu, New Shimla & Dhalli Special Area | 52809 | 43514 | 9295 |
| Ghanahatti Special Area | 3480 | 2807 | 673 |
| Kufri Special Area | 4558 | 3184 | 1374 |
| Shoghi Special Area | 4555 | 3129 | 1426 |
| **Planning Area** | **65402** | **52634** | **12768** |

**Source: Census of India, 2001**

**Figure 6.24: Settlement-wise Main Workers**

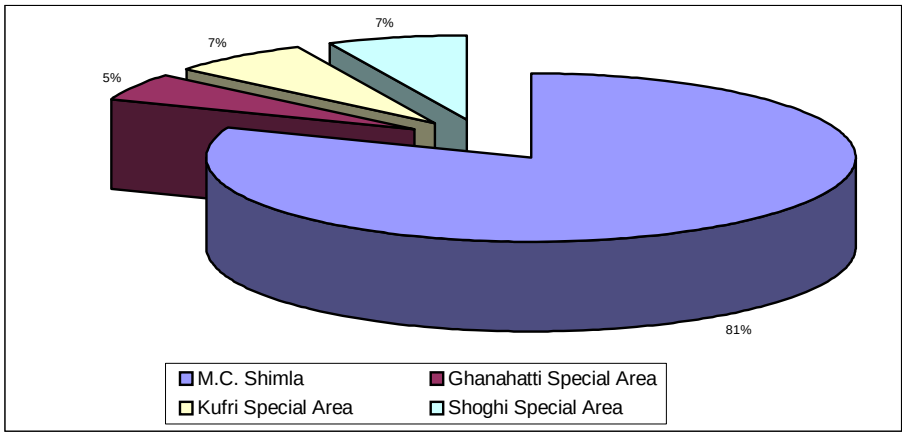



**Table 6.17: Settlement wise Marginal Workers**

| Settlement | Marginal | male | female |
|---|---|---|---|
| M.C. Shimla ( including Tuto, New Shimla & Dhalli Special Area) | 1595 | 1097 | 498 |
| Ghanahatti Special Area | 725 | 248 | 477 |
| Kufri Special Area | 889 | 315 | 574 |
| Shoghi Special Area | 586 | 202 | 384 |
| Planning Area | 3795 | 1862 | 1933 |

Source: Census of India, 2001

**Figure 6.25: Settlement Wise Marginal Workers**

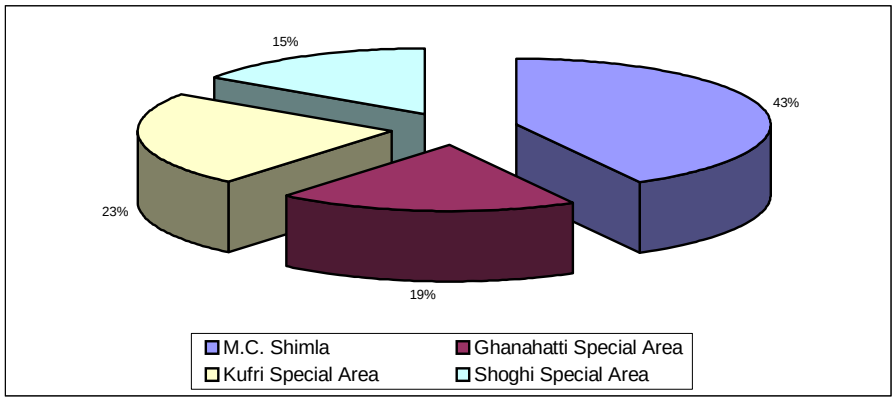


**Table: 6.18 Settlement Wise Workforce Participation**

| Category | M.C area. | Ghanahatti SA | Kufri SA | Shoghi SA | Total |
|---|---|---|---|---|---|
| Cultivators | 439 | 1199 | 2384 | 2474 | 6496 |
| Agriculturist | 149 | 115 | 107 | 172 | 543 |
| Household Industry | 504 | 52 | 42 | 106 | 704 |
| Others | 53312 | 2839 | 2914 | 2389 | 61454 |
| Total | 54404 | 4205 | 5447 | 5141 | 69197 |

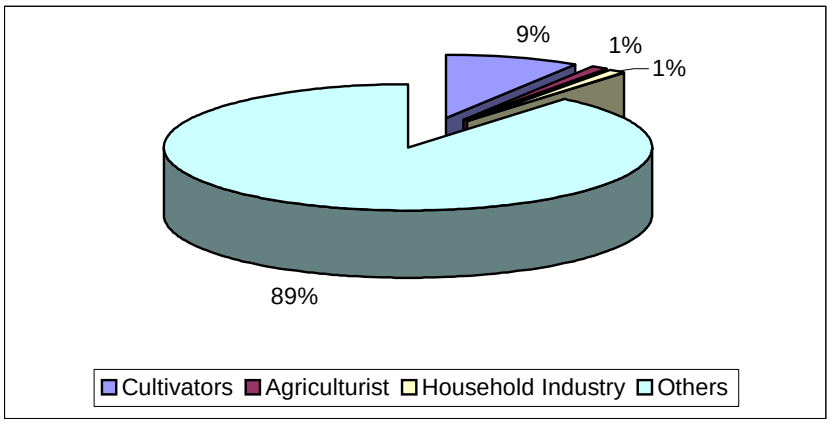
**Source: Census of India, 2001**

**Table 6.19: Workforce Structure**

| Category | Total | %age |
|---|---|---|
| Cultivators | 6496 | 9.00 |
| Agriculturist | 543 | 1.00 |
| Household Industry | 704 | 1.00 |
| Others | 61454 | 89.00 |
| Total | 69197 | 100.00 |

**Source: Census of India, 2001**

**Figure 6.26: Occupation Structure (2001)**




**Source: Census of India, 2001**

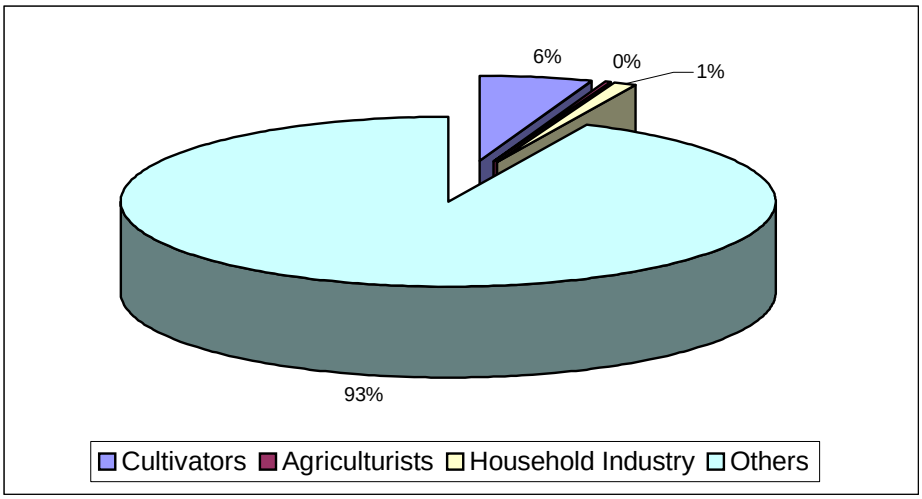
## 6.8 ANTICIPATION OF WORK FORCE

**6.8.1** There are 69197 workers in Shimla Planning Area as per 2001 Census, which account for 40% of Planning Area population. On the basis of previous Growth Rate, number of workers has been projected for the year 2011 and 2021. It is anticipated that there will be a workforce of 94,455 and 127724 by the year 2011 & 2021 respectively. Whereas, the percentage of primary workers is likely to reduce, the percentage of secondary workers will increase in view of immigration of people from different parts of the State. Being an administrative city and tourists' destination, tertiary sector shall continue to function as a dominant sector of economy by the year 2021.

**Table 6.20: Projected Workforce**

| Category | 2011 | 2021 |
|---|---|---|
| Cultivators | 6820 | 7025 |
| Agriculturists | 543 | 543 |
| Household Industry | 1056 | 1426 |
| Others | 86036 | 118730 |
| **Total** | **94455** | **127724** |

**Figure 6.27: Projected Occupation Structure for the year 2021**



### 6.8.2. FACTORS AFFECTING GROWTH RATE

The population projections have been made for the year 2011 and 2021. It is anticipated that there will be a population of 2,35,970 and 3,18, 560 respectively. The increasing trends of migration and decreasing death rate will affect the projected population. Shimla's changing socio-economic conditions and better amenities are now the major pull factors for rural population migrating to the city. If the migration is unchecked, no doubt, it will have its adverse effect on the growth of population and overall development of Shimla City. Ironically, the city is crying for respite and denying any more population.

## 6.9 IMPERATIVES

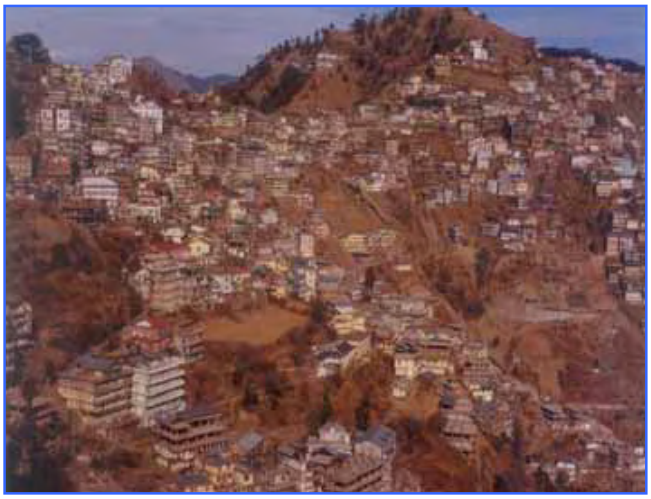
Shimla is growing and overflowing.Shimla being the hub of outstanding state,interstate and national level activities, it is likely to attract more population. The existing natural growth coupled with floating population is exerting heavy pressure on the existing infrastructure. Unpalnned and unauthorised construction are taking place. At present the construction activities are not coping up with the traditional culture and heritage of the city. It is however overweight and cannot combat with increasing load of population and activities. In order to combat the further deterioration and ruin, it is imperative that problem of increasing migration to Shimla is minimised. Regional development in terms of boosting growth centres and urban areas outside its immediate umland and alternate routes for diverting the traffic flow need no emphasis. The interest of already settled population can only be safeguarded, if new comers and migrants are not allowed to settle in ambience of main Shimla anymore. Further population is therefore, required to be accommodated at Ghandal spur near Ghanahatti and Waknaghat. Population from upper region may be settled on back of Fagu around Theog at strategic sites. The ambience of Shimla proper across the Ghandal-Ghanahatti –Jatog-TaraDevi ridge towards east upto Fagu-Kufri,Naldehra-Mashobra ridge is highly eco-fragile and already over-weight. As such only need based constructions be allowed to the occupants and owners of land and plots to cater for their own requirements. No more transaction of land be allowed in the interest of already settled population. However, an Activities Zone for spill over and incompatible activities existing in the city namely, Truck stands (roadside), wholesale, grain, timber, vegetable markets and workshops may be established in Ghanahatti-

Jubbarhatti-Shoghi belt across the ridge along a proposed bye pass road connecting National Highway-88 with National Highway-22 on the western periphery. Besides planning and development of Activities Zone in the West and 3 satellite towns, Shimla Capital City Regional Plans is required to be prepared to develop the growth centres in its region and thereby diverting the trend of migration towards them. Moreover, a countermagnet is required to be planned and developed in the populous belt, at a strategic location to divert the attention of potential migrants.

# CHAPTER - 7
# HOUSING

## 7.1 CHARACTERISTICS

7.1.1 Residential areas constitute a larger share in the landuse plan than any other single land use type in Shimla Planning Area. Shimla and its environs are being preferred as prestigious location for living, whereby trend for residential development has picked up manifold during the recent decades. The main housing areas in Shimla are the core city, part of Kaithu, Shankli, Longwood, Chhota Shimla, Jakhu, Kasumpti, Sanjauli, Summer Hill, Boileauganj and Tutikandi. Most of the housing areas in the form of developed colonies are on the slopes. The Southern Sunny slopes and spurs are thickly built up as compared to northern windward and cold slopes.



Haphazard Housing Colonies in Sanjauli area

7.1.2 The residential use comprises of 903.13 hectares of total area. Presently, dwelling units in city are coming up in form of private houses, bungalows and R.C.C. multistorey buildings providing residential flats. The pace of development of residential and commercial buildings has accelerated on fringes in different directions in the Planning Area. Presently 1,74,789 persons are residing in Shimla Planning Area.

7.1.3 The gross density of population recorded as per 2001 census is 18 persons per hectare, whereas net residential density is 191.43 persons per hectare. During the year 1991 net residential density in Shimla planning area was 143.75 persons per hectare. According to 2001 Census, there are 45,163 houses in the Planning Area. 10% sample has been taken by the Town and Country Planning Department for survey conducted in 1997 to assess the housing status and characteristics in the Planning Area. However, the housing scenario in terms of construction carried much more than the requirement of individual families, trend for multi-

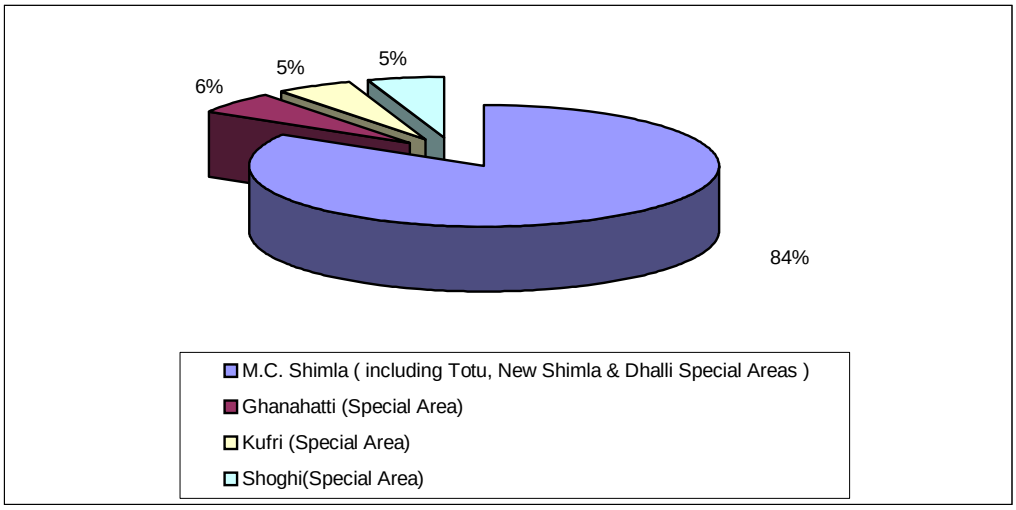
storey constructions, increased rental values and roof types have undergone considerable changes during the last 8 years.

**Table: 7.1 Existing Number of Dwelling Units 2001**

| Settlement | No. of Houses |
|---|---|
| M.C. Shimla | 37756 |
| Ghanahatti (Special Area) | 2651 |
| Kufri (Special Area) | 2426 |
| Shoghi(Special Area) | 2330 |
| **Total** | **45163** |

Source: Census of India, 2001

**Figure:7.1 Existing Number of Houses**




## 7.2 NUMBER OF HOUSES AND FAMILY SIZE:

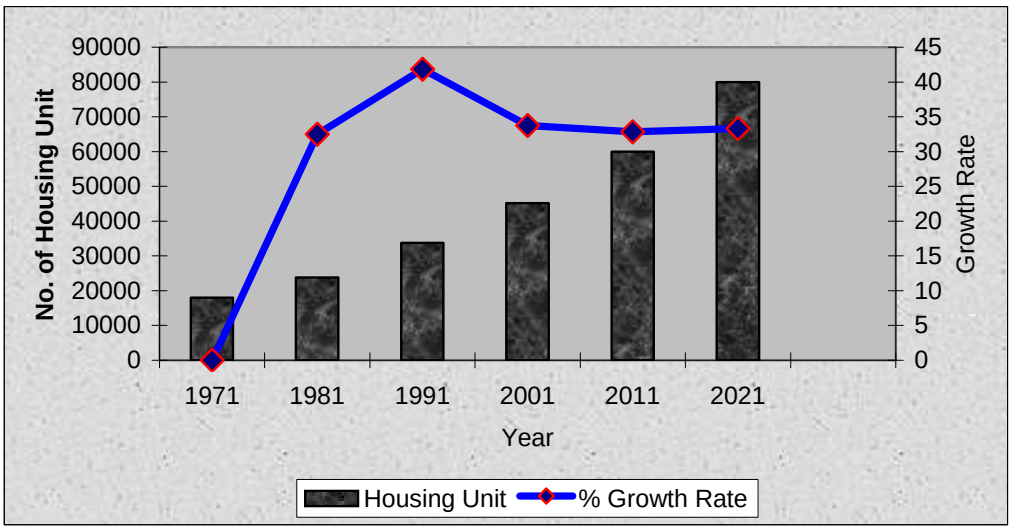
In Shimla Planning Area, the housing stock has increased at the decadal growth rate of 33.75 percent. As per 2001 Census, total number of housing units are 45163. Average family size is 4.0 persons in the Planning Area. It shows that city being a Class I, majority of persons are residing as single and they are engaged in services. Joint family system is however rare. It is anticipated that during the year 2011 and 2021 housing stock is likely to be 60000 and 80,000 respectively.

**Table 7.2 Number of Houses and Family size**

| Years | No. of Houses | % Growth Rate of Housing | Total Population |
|---|---|---|---|
| 1971 | 17965 | - | 72870 |
| 1981 | 23801 | 32.48 | 95851 |
| 1991 | 33766 | 41.86 | 129827 |
| 2001 | 45163 | 33.75 | 174789 |
| 2011* | 60000 | 32.85 | 235970 |
| 2021* | 80000 | 33.33 | 318560 |

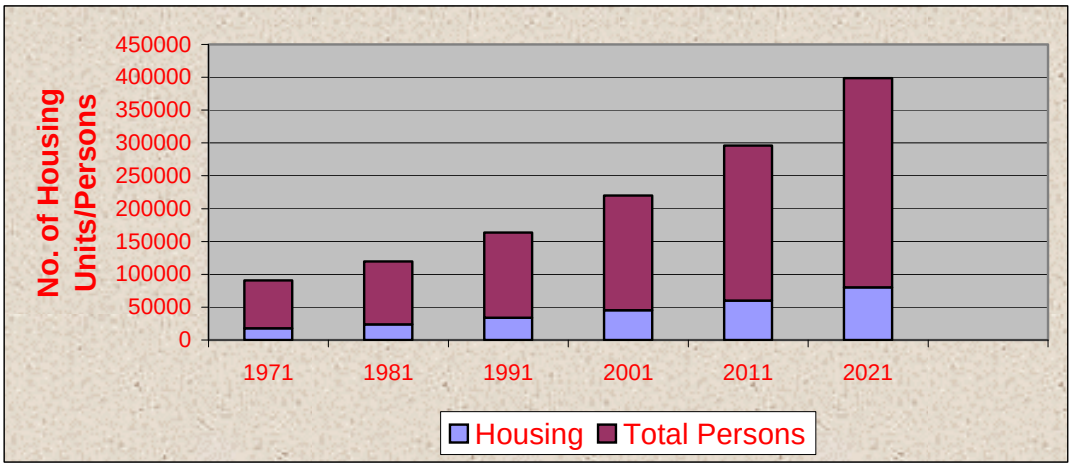
Source: Census of India * Projected Figures

**Figure:7.2 Housing Growth Rate**




Source: Census of India, 2001

**Figure: 7.3 Projected Housing Units/Total Persons**



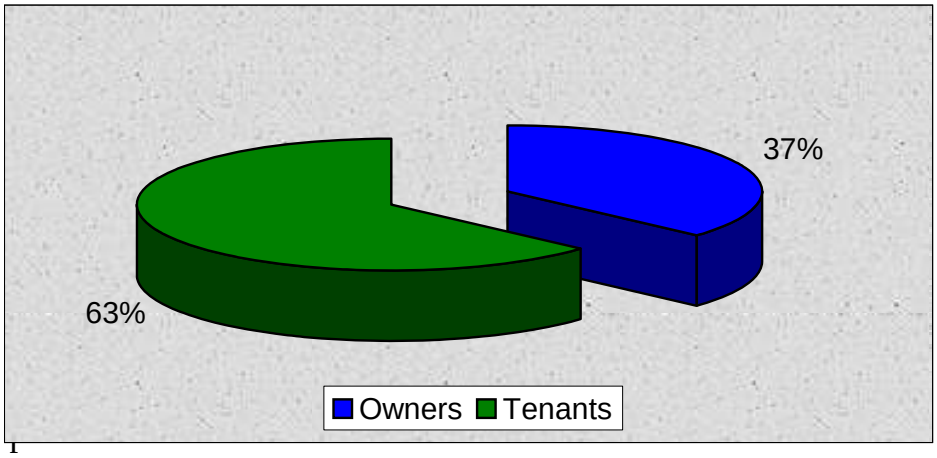

**Source: Census of India, 2001**

## 7.3 STATUS OF HOUSING

### 7.3.1 Ownership:

The survey analysis reveals that out of total households, 37 % are house owners and 63 % are tenants. It apparently shows that being a Capital, Tourist destination and service city, most of the persons are engaged in Government & semi - Govt. services, Tourism sector and accommodated as on rental basis in private houses.

**Figure 7.4 Proportion of Owners & Tenants**

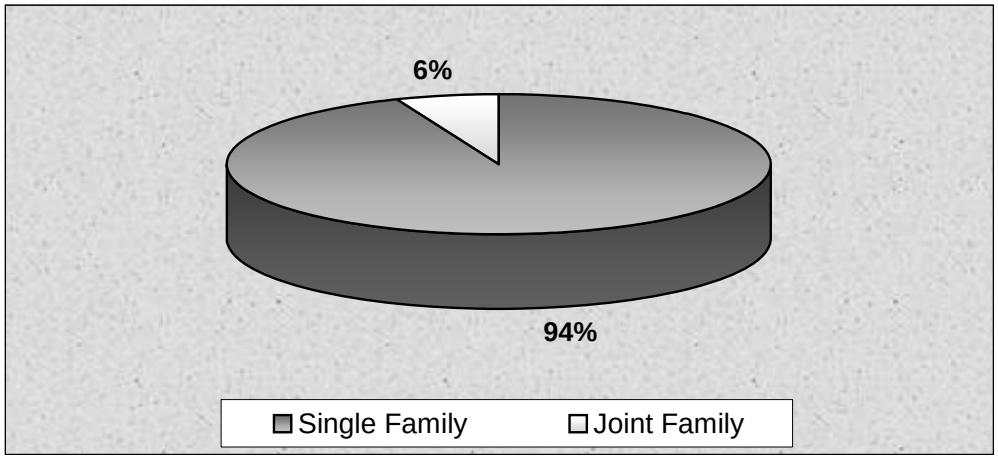



**Source: TCP Housing Survey**

### 7.3.2 Family Accommodation:

As per TCP Housing survey, 94 percent households don't share habitable rooms with joint families, whereas 6 % households share rooms with joint families in city as well as the Planning Area.

**Figure: 7.5 Type of Families**

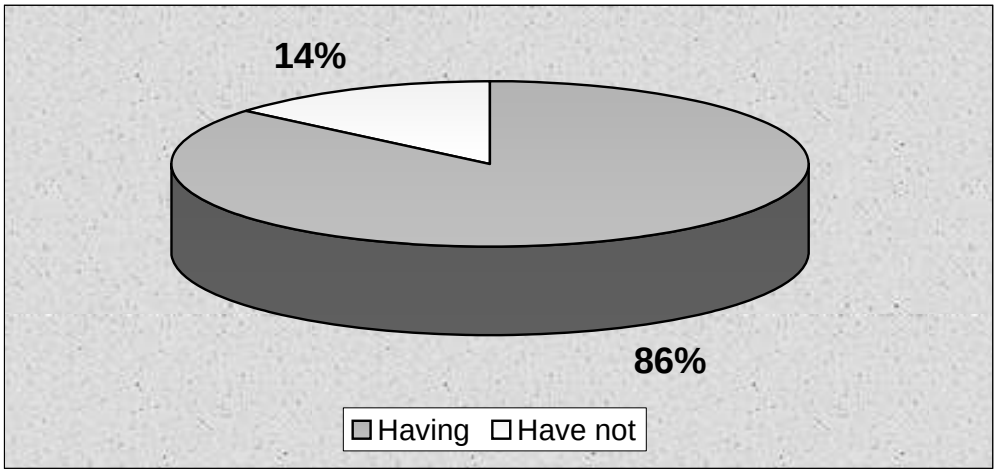



**Source: TCP Housing Survey**

### 7.3.3 Kitchen:

The 86 % households have been equipped with separate kitchen facility, whereas 14 % of households do not have separate kitchen facility due to scarcity of suitable plot sizes and lack of affordability for costly kitchen materials.

**Figure 7.6: Availability of Kitchen**

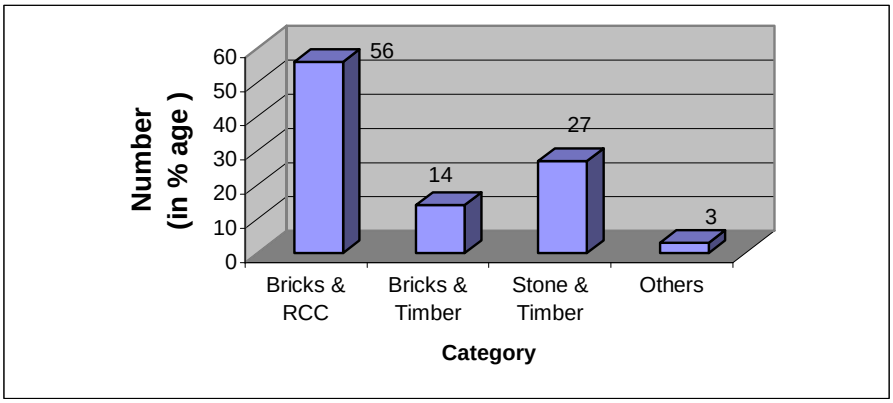



**Source: TCP Housing Survey**

### 7.3.4 Types of Structure:

As per visual observation and 10 % survey, it has been observed that most of structures in Planning Area are built in bricks and RCC materials, which account for 56 % of total, followed by 27 % houses in stone and timber. Besides this, 14 % structures are built using material like bricks and timber and 3% houses built using other traditional materials. Thus housing activities are not in consonance with the traditional, cultural and heritage characteristics of the city. Hence serious steps have to be taken for controlling such construction activities.

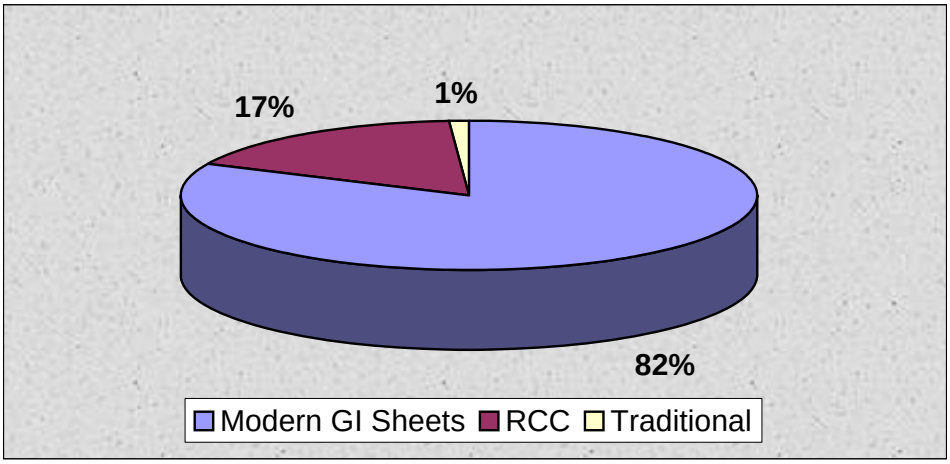
**Figure 7.7 Built Structure**



### 7.3.5 Types of Roof:

As per Survey analysis, it has been observed that 82 % houses are having G.I sheets roofing and 17 % roofs are of RCC. Besides, traditional and other materials accounted for just 1 % roofs.

**Figure 7.9: Type of Roof**




**Source: TCP Housing Survey**

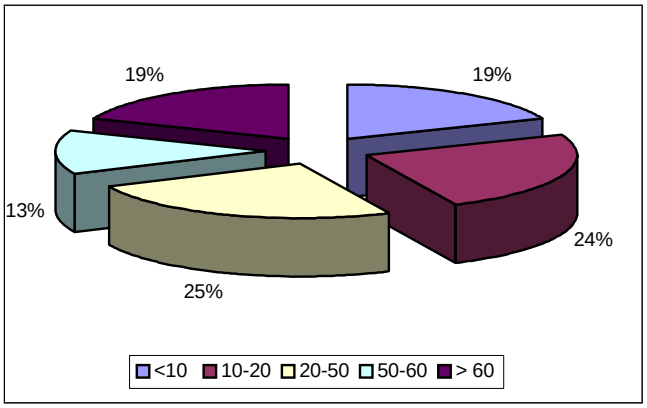
### 7.3.6 Age of Houses:

In Shimla Planning area, 19 % houses are above 60 years of age and 13% houses are in age group of 50-60 years. Besides this, 25 % houses are in age group of 20-50 years and 24 %houses are in the age group of 10-20 years old, whereas 19 % houses are of age below10 years.

**Table 7.3: Age of Houses**

| Age of Houses | % to total |
|---|---|
| <10 years | 19 |
| 10-20 | 24 |
| 20-50 | 25 |
| 50-60 | 13 |
| > 60 | 19 |
| **Total** | **100** |

**Figure: 7.10 Age of Houses**

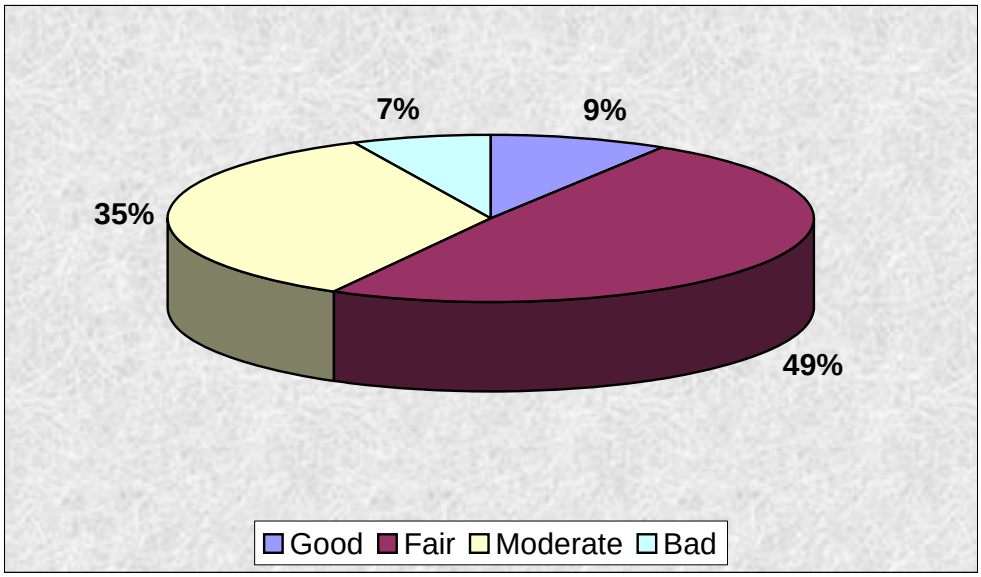



**Source: TCP Housing Survey**

### 7.3.7 Condition of Houses:

As per analysis of sample survey, 7 % of houses are in bad condition and 9% are in good condition. 35 % houses are in moderate condition and 49 % are in fair condition.

**Figure: 7.11 Condition of Houses**

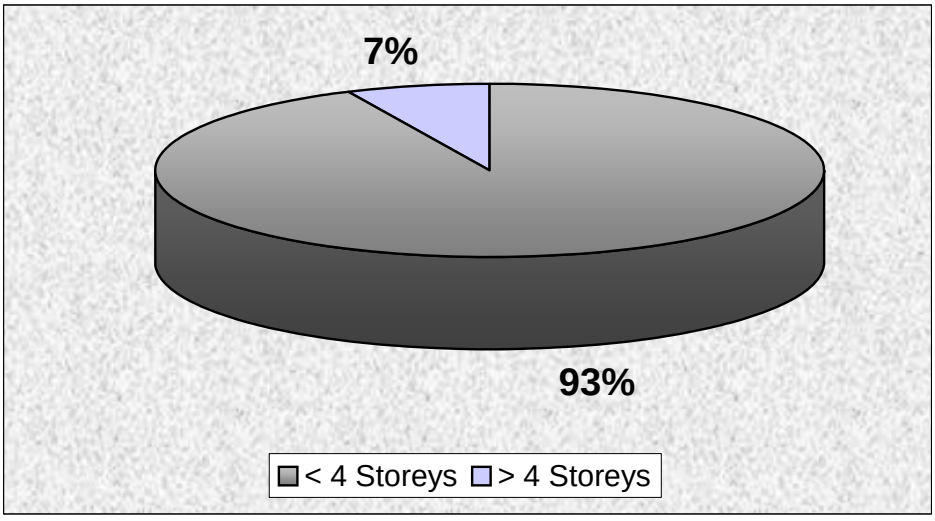



**Source: TCP Housing Survey**

### 7.3.8 Number of Storeys:

About 93 % of houses are having less than four storeys and 7 % houses have above four storeys in Shimla Planning area.

**Figure 7.12: Number of Storeys**

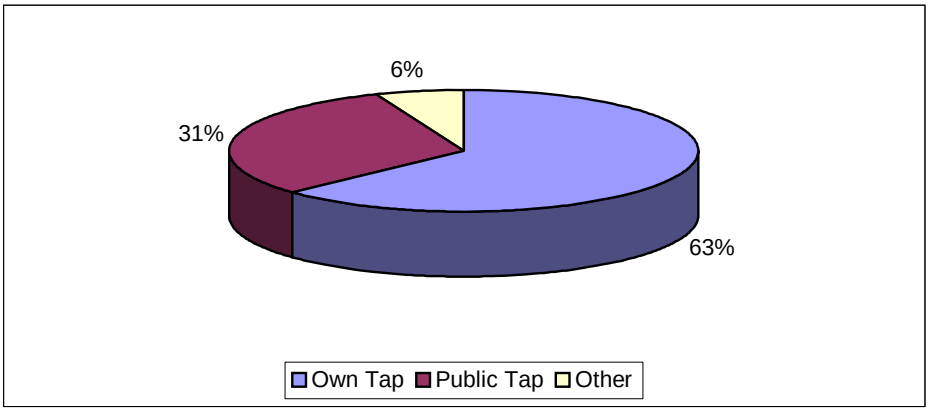



**Source: TCP Housing Survey**

### 7.3.9 Water Supply

So far as water supply is concerned, 63 % households have their own taps, followed by 31 % households who have public tap facility. 6 % households are getting water supply from tanks, Baulies and wells.

**Figure 7.13: Status of Water Supply**

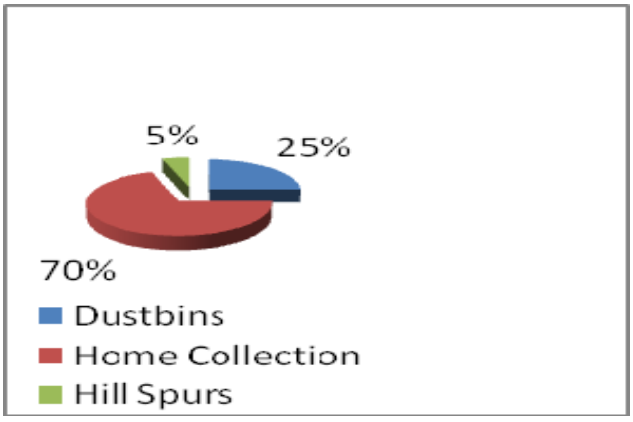



**Source: TCP Housing Survey**

### 7.3.10 Solid Waste:

The Municipal Corporation manages solid waste in city as well as in the Planning Area. It has provided dustbins and door to door collection system in each locality. Sample Survey reveals that 25 % households have dustbins, 70 % have home collection provision and 5% households are using hill spurs for waste disposal

**Figure 7.14: Solid Waste Disposal**

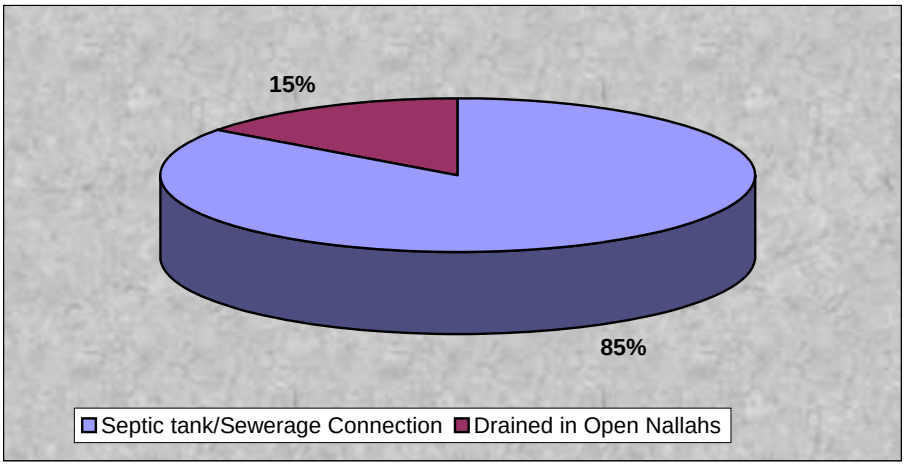



**Source: TCP Housing Survey**

### 7.3.11 Sewerage:

85 % households are having either own septic tanks or sewerage connections, whereas 15 % households don't have any connection and they drain sewage in open nullahs passing nearby houses.

**Figure 7.15: Sewerage System**

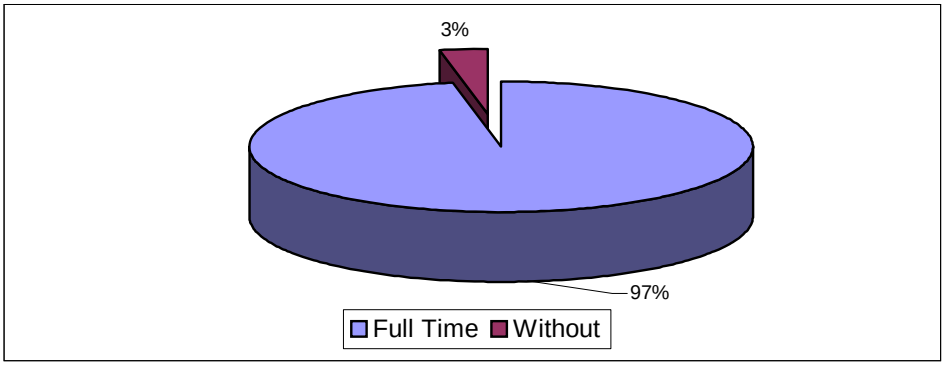



**Source: TCP Housing Survey**

### 7.3.12 Electricity:

As per Town & Country Planning Housing Survey 97 % of households have full time electricity facility. Only 3 % households are without this facility.

**Figure 7.16: Status of Electricity**




**Source: TCP Housing Survey**

## 7.4 CRITICAL HOUSING SCENARIO

7.4.1 There is a blind race for housing. Most of the High Income Group families have either more than one house or a big house in the city or on its periphery. Most of the Middle Income Group families have also constructed their houses. For L.I.G. and E.W.S., construction of house is a difficult task. They are not in a position to afford construction of home. The rents are also quite high. A two room set is for Rs. 1500 to 2000. Haphazard Sub-Divisions of land on zig-zag 'khasras' have played havoc with precious and scarce urban land resources. Construction of houses on steep slopes, even more than $70^0$, enormous violations of regulations, encroachments on green areas and absence of services infrastructure are common problems. Hutments of construction workers and slums in the forest lands is the worst part of Shimla's plight. Similarly, congested localities like Cemetery, Sanjauli, Totu and Jiwanoo Colony are not giving way out even to take out the dead bodies and thus is worst part of the tragic development.

7.4.2 Shimla is witnessing exodus of haphazard and unplanned residential development. With the growing materialism and thereby consumerism, on one hand and hike in land prices and construction cost on the other, housing scene is critical, grossly neglecting environmental imperatives. They are encroaching upon vital virgin lands, green cover and steep slopes, endangering inhabitants.

Expanding Housing Colony in Vikas Nagar

As the house is a significant element of built environment and most of human pursuits of family and society are performed in the house, it has to be viewed as a planned, functional, secure and aesthetic entity.

7.4.3 An unprecedented haphazard and unauthorised housing on irregular and zig-zag plots due to lack of serviced land has become a major concern toady. Illegal sub-divisions of land have added fuel to fire and thereby proliferation of slums. Increasing pace of break up of joint families is adding to demand for housing. Floating population is increasing due to peaceful environs and fast development of tourism, better amenities & services and commercialisation.

Un-planned houses in Cemetery Sanjauli Area

The construction workers are occupying prime Government and municipal lands wherein they have made their hutments and creating environmental problems and destroying the green cover.

7.4.4 The landvalues in Shimla are quite high. These range from 2000 to 4000 Rs. Per Sqm. A minimum size residential plot costs about Rs.3 to 5 lacs. These are very high for plots abutting the roads.

## 7.5 IMPERATIVES:

Housing has to be viewed in accordance with requisite work areas, environmental and ecological imperatives, accessibility and availability of basic services infrastructure and facilities. Redevelopment Schemes are required to be taken up for already congested localities of Central Shimla, Cemetery, Jiunu Colony, Khalini and Totu and these have to be decongested. The limits of such crowded areas be defined wherein no more population be allowed at all and the construction be banned. Endangered houses on the slopes, which are structurally weak and are likely to pose threats during mishaps have to be identified and remedial measures be taken to make them either sustainable or to pull them down to avoid their chain effect. Housing to workers be provided in the vicinity of their work areas, so that they do not travel long distances.As per 2001 Census there are 45163 dwelling units in Planning Area. By the year 2021 it is anticipated that there will be requirement of 80,000 housing units @ the rate of 4 persons per family. Therefore, there will be 34837 additional requirement of housing units. The Planning area has 903 hectares residential area. In view of land scarcity, ecological imperatives taking average density of 100 to 150 persons per hectare, 1221 hectares additional area for housing to be required. In order to divert the pressure from congested areas and to maintain the character of Shimla, its vital heritage and environment, it is proposed to develop 3

satellite towns and a countermagnet at strategic locations. Also a few work areas have to be developed on the periphery of the city and requisite housing thereof alongwith services infrastructure and high/Senior Secondary level education be provided in their close proximity.

# CHAPTER –8

# TRADE AND COMMERCE

## 8.1 STATUS

8.1.1. Shimla being a Capital of State is known for administration and commercial activities, apart from tourism and institutions. Shimla is the only major urban centre in Himachal Pradesh connected with rest of India both by rail and road. It is also well connected with rest of Himachal Pradesh. All these factors have made Shimla a goods collection and distribution centre. Relevance of Shimla as a commercial centre is increasing with increase in population and urbanisation. As more and more people started pouring in, the needs and demands of the larger population of Shimla town attracted number of shopkeepers, big and small from almost all parts of India.

8.1.2. According to a survey conducted by the School of Planning and Architecture, New Delhi in 1971 there were about 1440 commercial establishments in Shimla Planning Area. Presently, there are about 3000 commercial establishments as per survey conducted by the H.P. Town and Country Planning Department during year 1997 and area under commercial activities is about 25 Hectares. It reveals that there is 36% decadal growth of commercial establishments in Shimla Planning Area.

8.1.3. The development of above said sector of economy overtime has made the city hub of apex order multifarious economic activities. The regional level trade and commerce function combined with tourism have further strengthened the economic base of this hill city .

8.1.4. Against the norm of 1 shop per 200 persons, at present there is a shop for about 50 persons in Shimla Planning Area. Many shops are closed, as it has become a fashion to convert built floor space for commercial pursuits as well as construction of new shops to fulfill whims.

## 8.2 WHOLESALE TRADING CENTRES

As physical hindrances pose constraints, the city doesn't possess large size wholesale trading centre as persist in the plains. A few regional level wholesale Trading Market Centres, which cater for needs of a few city districts are located in Dhalli- Bhatakufar areas and Automobile centres at Shoghi and other parts of planning area.

**Vegetable Wholesale Market Straining National Highway-22 at Dhalli**

## 8.3 SHOPPING COMPLEXES AND MARKET CENTRES

The existing main shopping centres and complexes are concentrated in and around the Mall in localities namely, Middle Bazaar, Lower bazaar, Lakkar Bazaar and Chhota Shimla. Other newly developed commercial areas are in Kusumpti, New Shimla, Dhalli and Boileauganj. These centres are fulfilling basic needs of surrounding residential extensions.

## 8.4 NATURE OF SHOPS

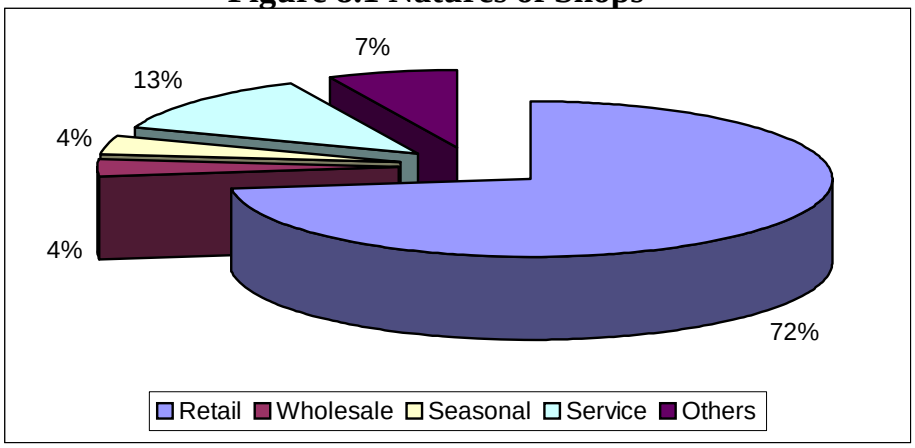
Shimla town is vibrating with trade and commercial activities. Most of the shops are retail, which account for 72%. However, 3% of shops are dealing in wholesale. 5% shops are seasonal. Service shops account for 13 %. Out of total commercial establishments in city, 7 % shops are of other kinds. The nature of shops is as under:-

**Table: 8.1 Nature of Shops**

| Sr.No. | Types | % age of Shops |
|---|---|---|
| 01 | Retail | 72.02 |
| 02 | Wholesale | 3.73 |
| 03 | Seasonal | 4.70 |
| 04 | Services | 12.74 |
| 05 | Others | 6.81 |
| 06 | Total | 100.00 |

**Source: Town & Country Planning Department Survey**

**Figure 8.1 Natures of Shops**




**Source: Town & Country Planning Department Survey**

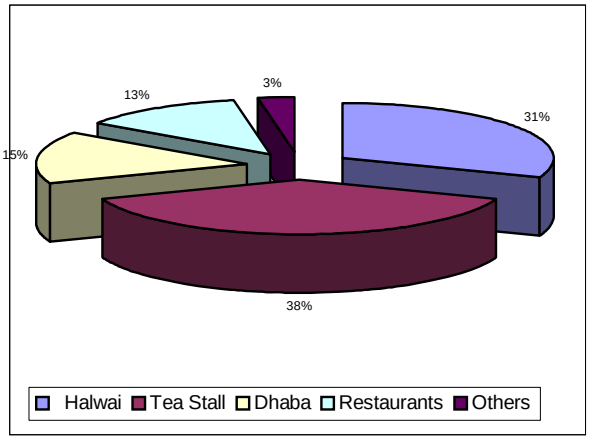
## 8.5 SPECIAL SHOPS

In special category of shops, majority of shops are tea stalls, which account for 38 % followed by Dhabas which account for 15% and other shops are performing the daily needs like food, snacks and drinks.

**Table: 8.2 Special Shops**

| Types of Shops | % age of Shops |
|---|---|
| Halwai | 30.71 |
| Tea Stall | 38.49 |
| Dhaba | 15.40 |
| Restaurants | 12.69 |
| Others | 2.71 |
| Total | 100.00 |

**Figure: 8.2 Special Shops**




**Source: Town & Country Planning Department Survey**

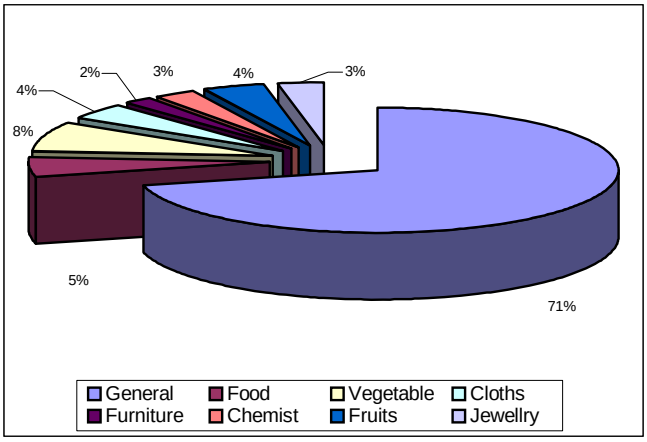
## 8.6 CLASSIFICATION OF SHOPS

There are vegetable, cloth, furniture, fruit jam and Jewellery shops. General merchandise shops are 71% and 29% are others shops as given below:

**Table: 8.3 Shops Classification**

| Items Sold | % of Shops |
|---|---|
| General | 71.20 |
| Food | 4.82 |
| Vegetable | 7.83 |
| Cloths | 4.21 |
| Furniture | 2.05 |
| Chemist | 2.77 |
| Fruits | 4.10 |
| Jewellry | 3.02 |
| Total | 100.00 |

**Figure: 8.3 Shops Classification**




**Source: Town & Country Planning Department Survey**

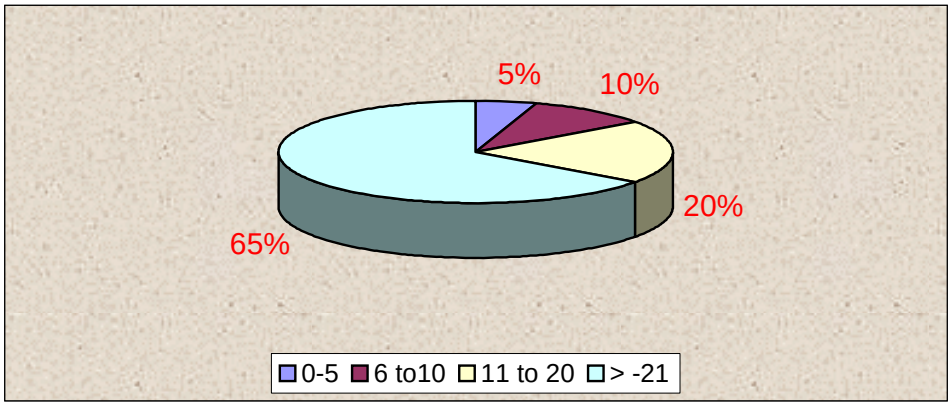
## 8.7 AGE OF SHOPS

**Table: 8.4 Age of Shops**

| Sr. No. | Age of Shops | % of Total Shops |
|---|---|---|
| 01 | 0-5 | 5 % |
| 02 | 6-10 | 10 % |
| 03 | 11-20 | 20 % |
| 04 | > -21 | 65 % |
| Total | | 100 |

**Source: Town & Country Planning Department Survey**

**Figure 8.4 Age of Shops.**



The year of establishment of shops depends upon the inception of city as a Capital of the State and socio-economic development of city residents. Survey reveals that 65 % of present shops are more than 20 years old and 20 % shops have been established during the last 20 years in Shimla.

## 8.8 CUSTOMERS IN SHOPS

**Table: 8.5 Number of Customers**

| Sr.No. | Range of Customers | % age of Total Shops |
|---|---|---|
| 01 | 0-25 | 3 |
| 02 | 26-50 | 7 |
| 03 | 51-100 | 28 |
| 04 | 101-500 | 24 |
| 05 | 501& above | 38 |
| | Total | 100 |

**Source: Town & Country Planning Department Survey**

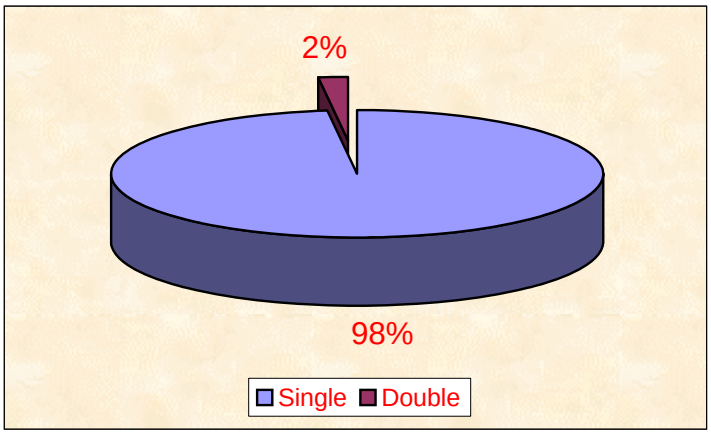
The centres of maximum concentration of customers during tourist season are the Mall, Middle Baazar and Lower Baazar.

## 8.9. STOREYS OF SHOPS

**Table: 8.6 Number of Storeys**

| No. of Storeys | Percentage |
|---|---|
| Single | 98 |
| Double | 2 |
| Total | 100 |

**Figure 8.5 Number of Storeys**



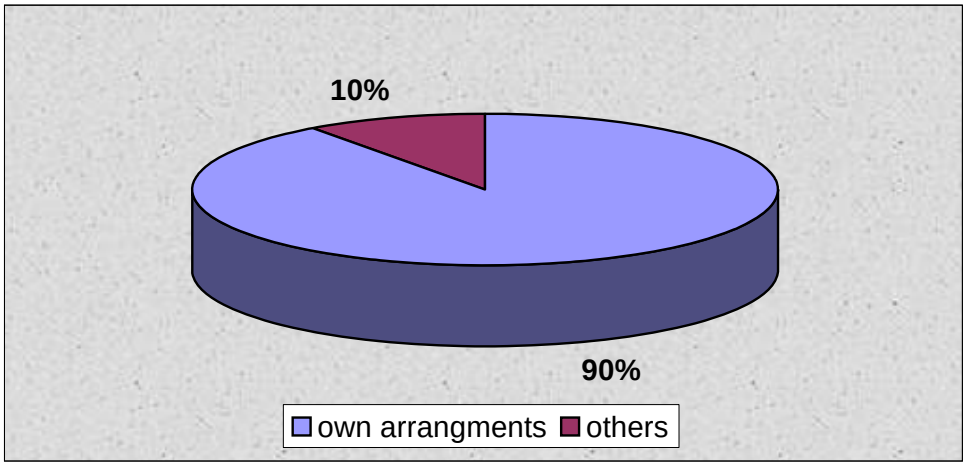

**Source: Town & Country Planning Department Survey**

Survey analysis reveals that 98 % commercial units have business accommodation in single story and the remaining 2 % have their own business in double storey accommodation.

## 8.10 WASTE DISPOSAL

It has been observed that about 90% commercial establishments have their own arrangement of Waste Disposal. Remaining 10% use other methods to dispose of solid waste. Municipal Corporation waste collection system is required to be modernized.

**Figure 8.6: Solid Waste Disposal**




**Source: Town & Country Planning Department Survey**

## 8.11 IMPERATIVES

8.11.1 It has been observed that Shimla city is efficiently serving its local population, tourists as well as surrounding population. It is anticipated that number of commercial establishments is likely to be 3900 and 5300 by the year 2011 and 2021 respectively. There will be additional requirement of 26.54 Hectares area for commercial activities by the year 2021.

8.11.2 The commercial activities have come up here and there in every nook and corner of the city. Haphazard commercial pursuits, encroachments on the roads and intrusion and collision thereof with other activities is playing havoc. It has been observed that more than 65% commercial establishments are located in Central Shimla. All out-efforts be made to decongest Shimla by shifting of wholesale, grain market, vegetable market, uncalled for non-conforming activities from the Central Shimla.

Efforts may also be made to uphold the original character of central Shimla that was primarily developed by the British. Other few pockets including New Shimla, Kasumpti, Sanjauli, Chakker, Summer Hill, Totu, Longwood and Bharari have become crowded and are getting further congested. Therefore non-conforming activities including workshops, wholesale have to be shifted to the periphery of the city in the west to Activities Zone. The menace of ribbon development of shopping pursuits has to be tackled on priority.

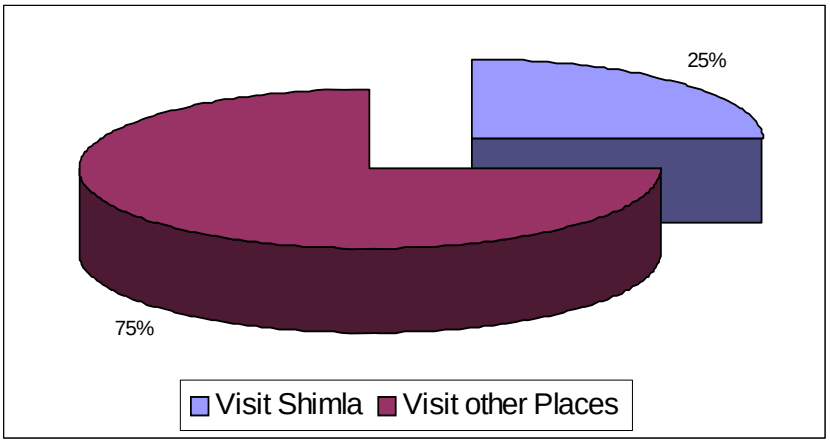
8.11.3 Planned and regulated development of commercial pursuits along with their proper location and spatial manifestation including requisite provision of parking and walkways need no emphasis. Planned commercial centres, each covering four to five sectors have to be developed at Ghanahatti, Activities Zone and Jathia Devi, besides local shopping to cater for sectoral requirements. Satellite towns have to be developed to cope up with any more population and commercial activities inevitably required to be accommodated in the adjoining areas of Shimla.

# CHAPTER - 9
# TOURISM AND INDUSTRY

## 9.1 STATUS

9.1.1 Shimla is the 'Queen of Hill Stations' and destination for tourists from all over the world. The splendid views of the snow-clad ranges of the Himalayas, fine walks through oak and flowering rhodendron, enchanting resorts within easy reach, Golf at Naldehra and Skiing at Kufri and Narkanda make Shimla an attractive destination throughout the year. Shimla has youthful topography, characterized by interlocking spurs, narrow and steep valleys with high peaks and thick forests. Its salubrious climate and strikingly lovely scenery attract a number of Indian and Foreign tourists. As compared to other districts, arrivals of tourists is higher in Shimla. The city is known for its British heritage and has numerous masterpieces in it. It is easily accessible by Chandigarh-Shimla National Highway-22, Kalka-Shimla narrow gauge railway line and by Air from Delhi, Chandigarh and Kullu. The World Heritage railway of Kalka-Shimla narrow gauge line is itself a tourist attraction and a feat in railway engineering. Besides this, Shimla is the most important entry point to the upper region of the State. The tourists who intend to visit other tourist centres of the State such as Kullu, Manali, Kinnaur, Sangla valley and Sarahan usually touch Shimla, making it not only an important destination point but also an important transit point. It has been observed that 10000 tourists per day visit Shimla in peak time. As per Himachal Pradesh Tourists Statistics, 25 % of the total State tourists visit Shimla Planning Area. Besides, Planning Area is equipped with numerous hotels, restaurants and Tour and Travel operators.

**Figure 9.1: Proportion of Tourists**



## 9.2 TOURIST ATTRACTIONS

### 9.2.1 Local Tourist Nodes

#### i) The Ridge

This large open space in the heart of town presents excellent views of the mountain ranges. Shimla's landmarks-the neo-gothic structure of Christ Church and the neo-Tudor library building - are worth seeing. Altitude is 2130 metres. The Ridge is not only a portion of land in Shimla; it acts as lifeline of the city. The water reservoir beneath it has storage of ten lac gallons of water. The church on the ridge has witnessed numerous historical events. The Ridge used to be a sacred place and may be the reason that the then Municipal Engineer Mr. Fletcher had the temerity to lay before the vehicle of the Viceroy, so as to stop him from crossing the Ridge

The majesty of Ridge

#### (ii) The Mall

From Boileauganj to the Ridge and onwards to Chhota Shimla along with heritage masterpieces, here and there along it, the mall road is highly fascinating. Whosoever, tourist visits Shimla, he enjoys the beauty of this unique pedestrian artery.

### (iii) Kufri

Kufri is perched at an altitude of 2,510 metres above sea level amongst the foothills of the Himalayas. It is 13 km from Shimla. The region around Shimla including Kufri was once a part of the Kingdom of Nepal. This region remained obscure from the rest of the world until the British 'discovered' it in 1819. The British made Shimla their Summer Capital in 1864 and it remained so until 1939.As Shimla gained importance, Kufri also began to be recognized as an important place to be visited near Shimla. Kufri is famous for its beautiful environs and cool refreshing atmosphere that pervades it. In summers, travelers enjoy the panoramic view of the surrounding verdant valleys and snow-capped peaks. There are a number of picnic spots, hiking and trekking trails in and around Kufri. The other places to visit in Kufri are the Himalayan Nature Park, which has a collection of animals and birds found only in Himachal Pradesh and the Indira Tourist Park, which is near the Himalayan Nature Park and provides panoramic view of the locations around Kufri. In winters, the snow-clad slopes of Kufri come alive with skiers and other visitors.A winter sports festival is organized every year in the month of February at Kufri. Skiing enthusiasts and adventure seekers participate in this festival.

Ice Skating- Kufri

### (iv) Wildflower Hall

This magnificent beautiful place has green grass. It is 13 Km. from Shimla and situated at a height of 2600 mtrs. Shali peak is visible from this site. Amidst the Coniferous Deodar forests it is highly fascinating place.

Wildflower Hall Hotel at Chharabra

**(v) Mashobara and Craignano**

Apple Trees in Craignano Area

There is a Summer Retreat of former ruler of Faridakot. The President of India usually visits and stays over there. It consists of St. Crispin's Church, Kali Temple, Fruit Research Station having exotic trees and plants. Craignano is 3 km away from Mashobra. Annual Sipi hill fair, in honour of Sipu Devta is held over here. Admist Oak and pine trees, it is interesting to walk.

**(vi ) Jakhu Temple**

Jakhhu Temple

Jakhu hill at the altitude of 2500 M looms over Shimla city and is the geographical nucleus. The Hanuman temple at the top of Jakhu hill is the highest point in the city. Jakhu is derived from Yaku after Yaksha. It is legendary abode of Yakshayas, Kinnur, Nagas and Asuras. Legend says that sudden landing of Hanuman was the cause to flatten the hill. It is a spot for excellent view of sunrise, mountains and of sunrise, mountains and the city. An ancient temple of Hanuman, the monkey God is situated over here and legend says Hanuman's sandal also fell here.

**(vii) Naldehra:**

Naldehra is situated at a height of 2044 metres above sea level, about 22 kms. from Shimla. This place does not confine its activities to Golf alone, but the day hikes and excursion through the woods and villages are other attractions for the tourists and nature lovers. Naldehra has one of the world's oldest Golf Club. Close to the 19th century Lord Curzon (1899-1904) the then Viceroy discovered Naldehra, set under a thick mane of Himalayan cedar- deodar trees. The Naldehra spur is an off shoot of the Kufri which is the highest spot in the Shimla area. The Golf Course took shape on totally natural topography, which remained untouched to the present day.Soon after Lord Curzon's

departure from India, the Naldehra Golf Club came into being and has been in existence since 1905. The 'Naldehra' name is regarded to have come from the temple of 'Nag Devta', serpent deity, whose temple is situated inside the beautiful and serene Golf Course.

**(viii) Tibet Monastery**

A head Lama of Gompha, built it in unique Tibetan architectural style at Sanjauli and Kasumpti. The monastery is famous for Buddhist Lamas and nuns for their spiritual rituals, who worship over here. It is also known for other pilgrims. Old Thanka paintings are displayed on walls.

**(ix ) Tutikandi**

Himalayan Geological Park is located over here. There is an old temple dedicated to Lord Krishana.

**(x ) Sri Sankat Mochan**

Sri Sankat Mochan Hanuman temple is built by Baba Neem Karori Maharaj.It is made of stone in natural surroundings. It is an unique feature of Shodasa Dravidian Temple style. There is unique view of twinkling lights of Shimla at nights.

**(xi) Prospect Hill**

Kamna Devi temple, also known as Krera Devi Mandir is situated on the summit of Prospect hill. Moonrise and sunset can be seen here together. Excellent view of Jutog, Subathu, Tara Devi. Solan district, old Shimla-Kalka bridal path and Choor Chandi Dhar can be seen from this spot.

**(xii ) Indian Institute of Advance Studies.**

Viceregal Lodge is located on the Observatory Hill. Also known as Rashtrapati Niwas, it was formerly the residence of the British Viceroy Lord Dufferin. It was the venue for many important decisions, which changed the fate of the sub-continent. It is quite befittingly the only building in Shimla that occupies a hill by itself. This

rambling Scottish baronial edifice was Viceregal Lodge designed by Henry Irvine, architect to the Public Works Department of the colonial government in India.

After independence, the Lodge remained the Summer Retreat of the President of India. In the early 60s the President of India, Dr. S. Radhakrishnan, a leading philosopher and writer and the Prime Minister Jawaharlal Nehru decided to make it a scholars' den where the best minds would find an ideal retreat. That's when the Indian Institute of Advanced Studies moved into the Vice-Regal Lodge in 1965.Obviously enough, some of the interiors had to be changed to accommodate the needs of the Institute. The state drawing room, ball room, and dining room, for example, have been converted into a library. The Viceroy's office is now the IIAS Director's office. The conference hall is now a seminar Hall for research scholars.

**( xiii) Birds' Sanctuary**

Himalayan Birds' sanctuary is situated near Petter Hoff Hotel. It consists of rare colourful birds.

**( xiv ) Tara Devi**

Alight at Tara Devi railway station Trek, 4km. via Homestead, a halting point and picnic point on climbs through forests of oak to ancient temple of Tara Devi. It was built 2000 years ago by Rana of Junga, Bhupendra Sen. Named after Taradinath, a holy man who made the statue of Devi, it has a fascinating location from where the view of Shimla Tara Devi Temple is highly majestic and alluring.

**(xv) Dhingu Temple**

Located on the top of Dhingu peak, near Sanjauli, there is a temple of deity. View from the hill top of all around including the mighty Himalayas is highly fascinating.

**(xvi)** Other important places worth visit around Shimla are Chadwick fall, Annadale Golf Course, State Museum, Jubbarhatti and Jatogh.

### 9.2.2 Regional Tourist Nodes

#### ( i ) Narkanda

Narkanda is 64 km. from Shimla on Hindustan Tibet Road. This place offers view of the snow-clad Greater Himalayas and especially Hatu Peak. It is more than 3300 mtrs high. Skiing courses of different duration are held here every year.

Trekking in Narkanda Area

#### ( ii) Kotgarh

Apple valley of Kotgarh and Thanedhar is 80 Km. from Shimla. Samuel Evans Stokes had planted apple for the first time in this valley. Apple has now become the mainstay of entire economy of valley. The beautiful area, lacks hotels and is an impediment in the tourists inflow to this area.

#### (iii) Khara Pathar:

As name indicates, ‘Kahra Pather' has huge free- standing egg-shaped boulder. This is a remarkable natural wonder of the area. This point is also marked as edge of ridge. After it there is a steady descent to the Pabbar Valley.

#### (iv) Sarahan

Situated on the border of Shimla and Kinnaur Districts, Saharan is 180 Km. from Shimla. The place with immense natural beauty and architectural splendour is the seat of Bhima kali- the diety, which is visited by devotees with high reverence.

Bhima Kali Temple

#### (v) Hatkoti

Amidst the green fields in the valley, there is a temple of deity with distinct architectural style.

### (vi) Shali Peak

Visible from Shimla and facing Mashobra is the 'Shali Peak'. It has a height of 3200 metres. The summit presents an unimpaired view of the area and herbs encircle the peak.

### (vii) Rampur

At 135 Kms. distance from Shimla, Rampur was the Capital of old Rampur Bushahar State. This valley town has spectacular heritage.

## 9.3. TOURISTS TREND

9.3.1 In view of easy accessiblility by road, Air and Railway line, Shimla is well connected with other parts of the Country. It attracts tourists from various walks of life. Number of tourists has increased from 912508 to 1418035. Annual tourist arrivals are as under:

**Table: 9.1 Tourist arrivals and growth**

| Year | No. of Tourists | Variation in Growth | % Variation |
|---|---|---|---|
| 1998 | 912508 | ------ | ------ |
| 1999 | 962691 | 50183 | 5.50 |
| 2000 | 1063200 | 100509 | 10.44 |
| 2001 | 1167085 | 103885 | 9.77 |
| 2002 | 1265186 | 88775 | 7.61 |
| 2003 | 1418035 | 52000 | 4.11 |

**Source: Deptt. of Tourism, Himachal Pradesh. Tourists Statistics, 2003.**

**Figure 9.2 Annual Tourists Inflow**

### 9.3.2 Seasonal Tourists' Variation

Annual tourist traffic has been analysed on the temporal basis, which reveals that the arrival of tourists begins from the month of March onward and goes up to the end of the July. Arrival of tourists in subsequent months declines due to change in weather conditions. December onwards tourists inflow accelerates due to snow-fall and other winter adventure sports. As per Tourist Statistics, in summer season tourists arrival is about 48 %, whereas 52 % tourists visit is in the subsequent seasons.

**Table 9.2: Monthly Tourists Variation (2003)**

| Months | Indian | Foreigner | Total |
|---|---|---|---|
| January | 71114 | 794 | 71908 |
| February | 77929 | 1492 | 79421 |
| March | 76753 | 1648 | 78401 |
| April | 88492 | 1774 | 90266 |
| May | 186396 | 4909 | 191305 |
| June | 298405 | 4565 | 302970 |
| July | 124598 | 3647 | 128245 |
| August | 69047 | 5791 | 74838 |
| September | 100956 | 6117 | 107073 |
| October | 82510 | 6512 | 89022 |
| November | 73229 | 4258 | 77487 |

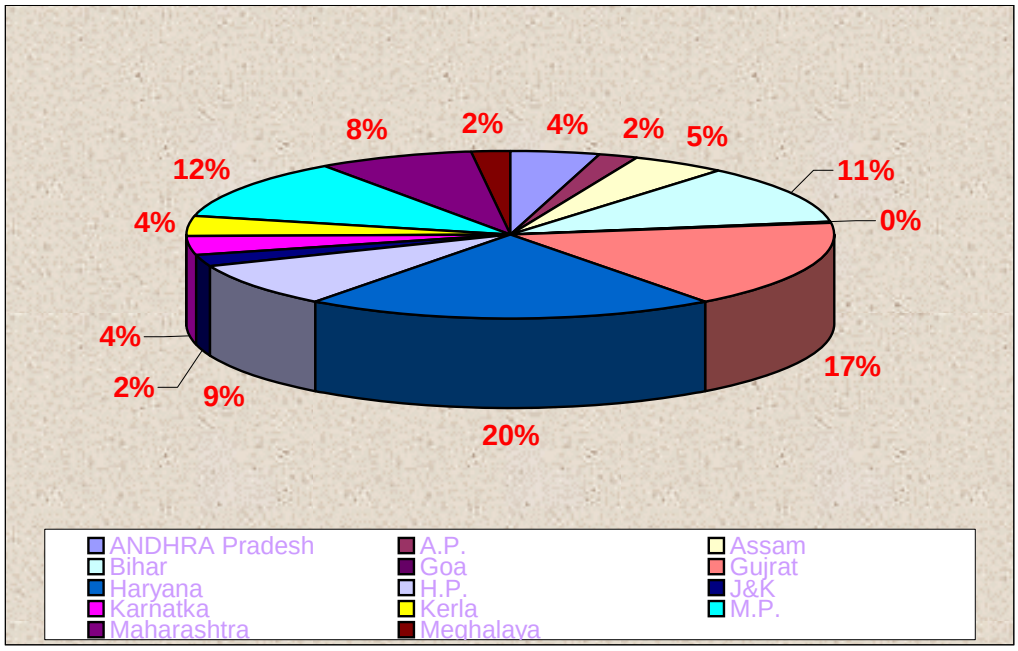
| | | | |
|---|---|---|---|
| December | 124206 | 2893 | 127099 |
| **Total** | **1373635** | **44400** | **1418035** |

**Source: Tourists Statistics, Tourism Department, 2003.**

**Figure 9.3: Monthly Tourists' Variation (2003)**

## 9.3.3 TOURISTS' CHARACTERISTICS

**Figure: 9.4 State-wise Arrival of Tourists**




**Source: Tourists Economic Survey Report - 2002**

**Figure 9.5: Purpose-wise Distribution of Tourists**

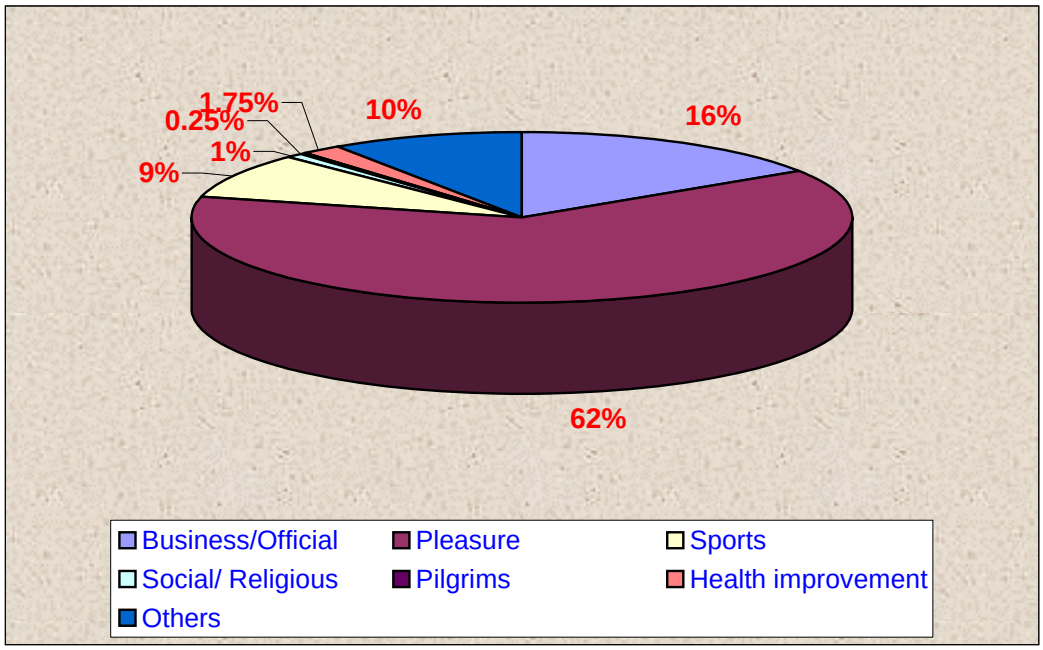



**Figure 9.6: Tourist Likeness**

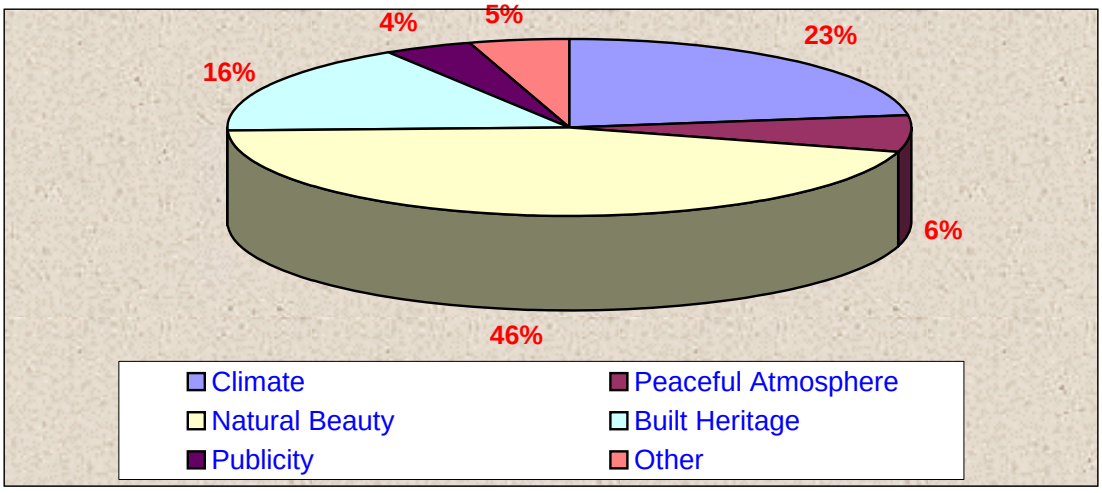
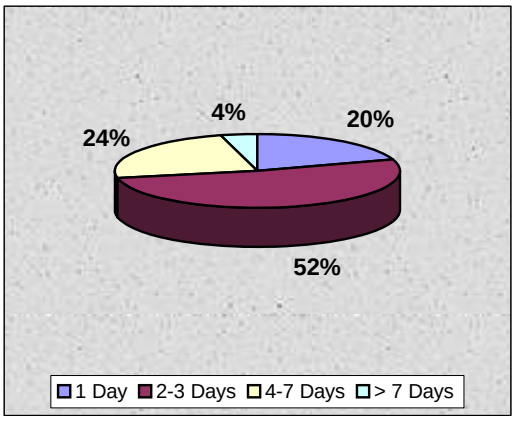
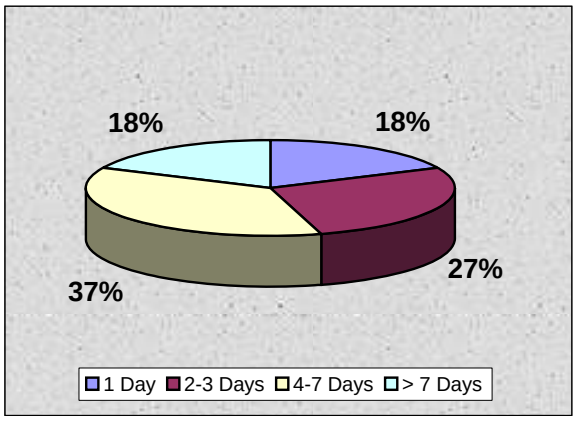


**Fig. 9.7: Duration of Stay** **Fig. 9.8:Duration of Stay**




(Indian Tourists)

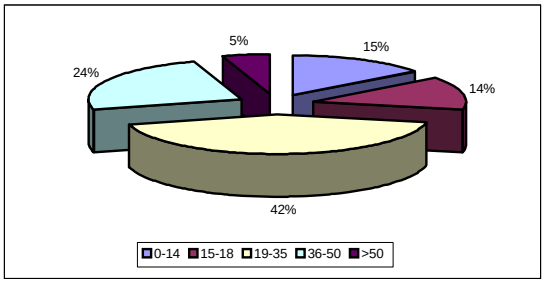



(Foreign Tourists)

**Source: Tourist Economic Survey Report - 2002**

### 9.3.3.1 Age Structure of Tourists

**Figure 9.9 Age Structure**

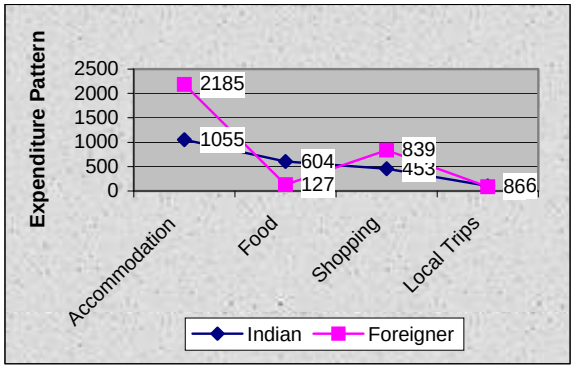



The highest number of tourists is in the age group of 19-35 years, which account to 42.43% of the total tourists. This age group consists of newly married couples and individuals, who visit Shimla for entertainment. The 24.13 % tourists are in age group of 36-50 years, who visit Shimla for trekking, adventure and vacations. 5.05 % tourists are in the age group of above 50 years, who visit Shimla for health improvement and 14.61 % are children in the age group of 0-14 years. 15% tourist in the age between 15-18 also visit Shimla mostly from various institutions.

**Table 9.3: Expenditure Pattern**

| Category | Indian | Foreigner |
|---|---|---|
| Accommodation | 1055 | 2185 |
| Food | 604 | 127 |
| Shopping | 453 | 839 |
| Local Trips | 106 | 86 |

**Figure 9.10: Expenditure Pattern**




**Source: Tourist Economic Survey Report – 2002**

## 9.4 IMPACT OF TOURISM

Tourism plays an important role in the economy of Shimla. As per Tourist Statistics, 4049 persons are employed in Tourism Industry, out of whom 3870 are Himachalis and 179 are Non-Himachalis. Tourism is one of the important sources of Revenue to the State Government. As per Excise and Taxation Department, Revenue generated from Hotels/ Guesthouses in the form of luxury tax was 2.10 crores in 2003.

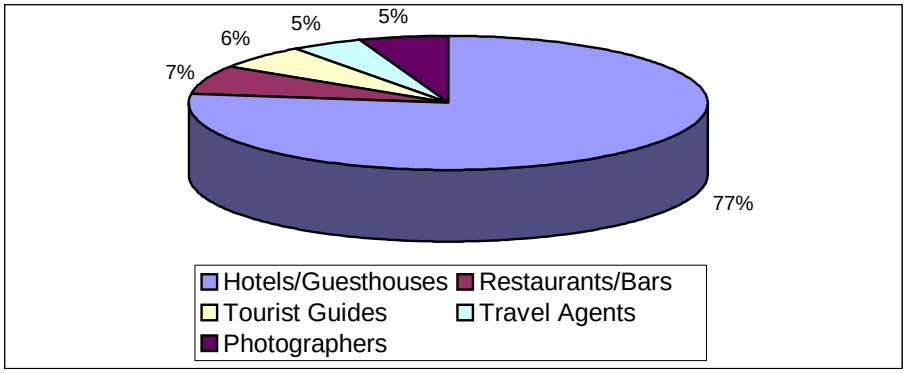
### 9.4.1 Employment in Tourism Industry

**Table 9.4: Employment in Tourism Industry**

| Sector | Number of Workers | % |
|---|---|---|
| Hotels/Guesthouses | 3130 | 77.00 |
| Restaurants/Bars | 276 | 7.00 |
| Tourist Guides | 235 | 6.00 |
| Travel Agents | 188 | 5.00 |
| Photographers | 220 | 5.00 |
| Total | 4049 | 100 |

**Source: H.P. Tourism Department, Tourist Statistics 2003**

**Figure 9.11: Employment in Tourism Industry**

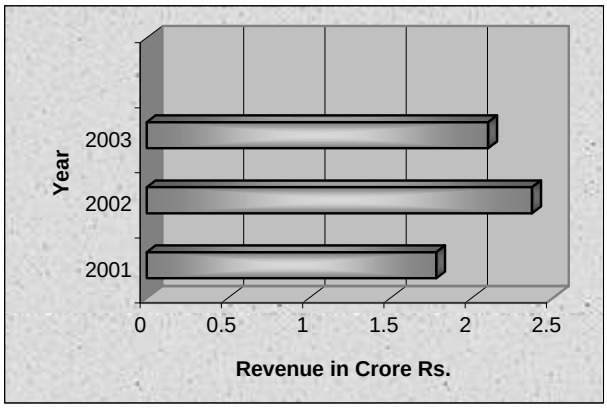


### 9.4.2 Income Generation

**Table 9.5: Revenue Generation**

| Year | Revenue in Rs.(in Crores) |
|---|---|
| 2001 | 1.78 |
| 2002 | 2.37 |
| 2003 | 2.10 |

**Figure 9.12: Revenue Generation**




**Source: Excise & Taxation Deptt. H.P.**

## 9.5 TOURISTS' ACCOMMODATION

In Shimla Planning Area, there are about 31 Government and Semi-Government establishments like tourist hotels, Guesthouses and Rest Houses which cater for tourist accommodation. There are 205 private hotels and Guesthouses. Besides this,9 Dharmshalas also exist in Shimla Planning Area.

Total bedding capacity is 6000 beds. Average number of tourists who visit Shimla per day is 4000. In peak season, particularly in June Month 10000 tourists per day visit Shimla city.

**Table: 9.6 Existing Hotels in Shimla Planning Area**

| Zone | No. of Hotels | Percentage |
|---|---|---|
| Naldehra- Bharari | 2 | 0.97 |
| Shoghi- Panthaghati | 1 | 0.48 |
| Kufri | 5 | 2.43 |
| Central Shimla | 198 | 96.12 |
| **Total** | **206** | **100.00** |

**Source: Hotel Directory 2003, H.P. Tourism Department**

The 96.12 % of the total hotels are located in the Central Area. Diversification of tourists amenities and decongestion of tourist accommodation from the core of city are the major concerns.The cleanliness of the city, enhancement of green cover, efficient

transportation network, planned housing and commercial development, over-all eco-friendly development are other points of attention for tourism.

**Figure 9.13 Spatial Distribution of Hotels/Guesthouses**

**Table: 9.7 Hotels With Tariff**

| Tariff in Rs. per day | No. of Hotels | Percentage |
|---|---|---|
| < 500 | 80 | 38.83 |
| 500-1000 | 70 | 33.98 |
| 1000-1500 | 16 | 7.78 |
| 1500-2000 | 13 | 6.31 |
| 2000-2500 | 9 | 4.37 |
| 2500-3000 | 8 | 3.88 |
| > 3000 | 10 | 4.85 |
| **Total** | **206** | **100.00** |

Source: Tourist Statistics, 2003

**Figure 9.14: Hotels with Tariff (in Rs. per day)**

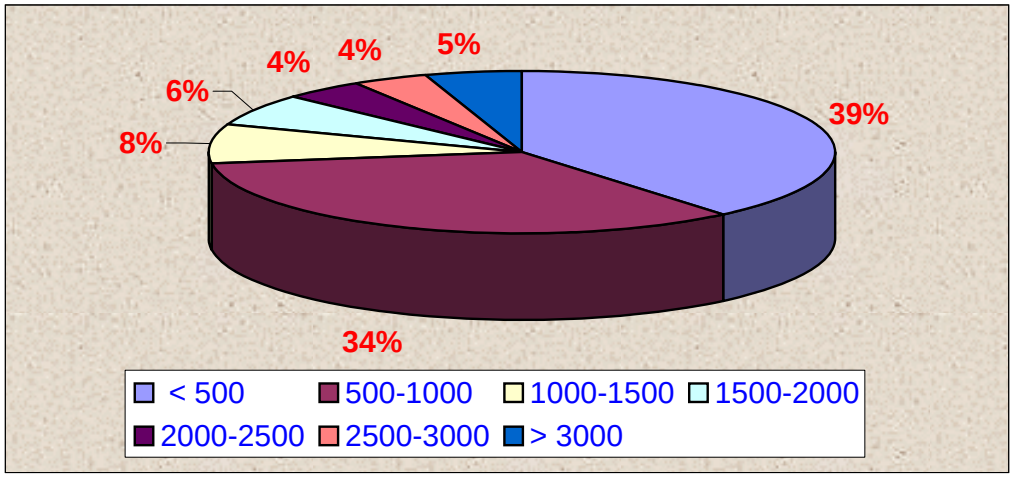
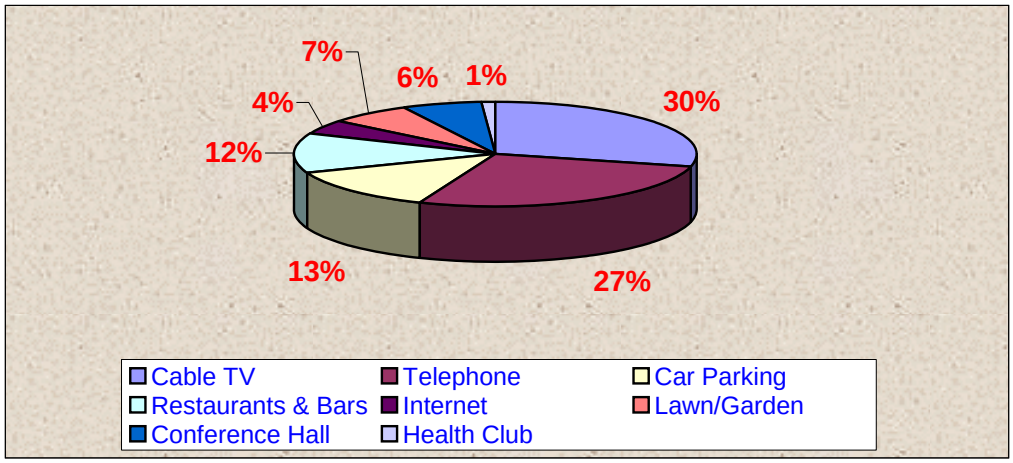



**Figure 9.15: Hotels with Facilities Available**




## 9.6 PROJECTED TOURISTS TRAFFIC

**Table: 9.8 Projected Tourists Population.**

| Year | No. of Tourists |
|---|---|
| 2003 | 1418035 |
| 2011 | 2212135 |
| 2021 | 3204760 |

Based on the previous trend of tourists, the number of tourists likely to visit Shimla for the year 2011 and 2021 has been projected as 22 lac and 32 lac respectively at the annual growth rate of 7%. The peak daily traffic for the year 2011 and 2021 is projected as 16000 and

22000 respectively. Thus, additional number of beds required for the year 2011 and 2021 is 10000 and 16000 in peak season.

To cope up with the influx of tourists in Shimla Planning Area, proper infrastructural development assumes significance. These include additional provision of quality accommodation in view of economic categories, improvement of transportation, provision of adequate parking, luxury buses and organized recreational facilities. As the old town is already congested, therefore it is proposed to develop new tourist accommodation primarily huts and other recreational facilities at proposed satellite tourist township at Fagu.

**Figure 9.16: Projected Tourist Traffic**

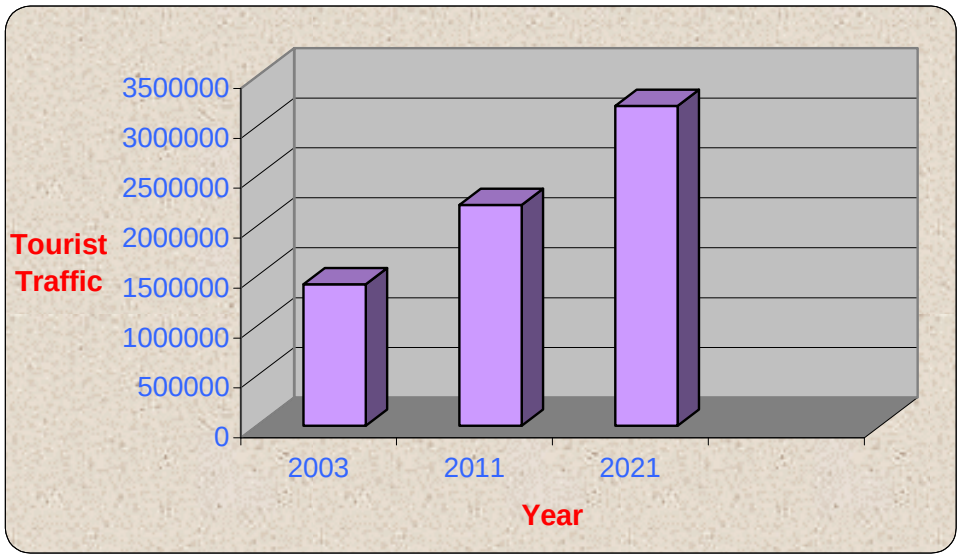



**Figure 9.17 Additional Requirement of Beds**

## 9.7 ECO-TOURISM

The Shimla region has a large variety of terrain, climate and vegetation. Various wild animals and birds persist in it.Tourists are attracted to rich and varied array of natural,cultural,business,entertainment,sports and other attractions. They need to continuously renovate and improve such facilities, in order to sustain in the competitive market. Tourism is required to be well developed and managed in such a way that it benifits the resident population. Environment quality has to be improved. Heritage has to be maintained and preserved for tourism. Presently, however,degradation of environment and heritage are the major causes of worry and require to be immediately addressed. Eco-tourism is required to be propogated in consonance with environmental imperatives. Shimla is witnessing an uprecedented crisis to sustain the tourism due to degradation of its environs.

In order to safeguard the original character of Shimla, on one hand and to ensure its continued attraction for the tourists, eco-tourism is the only panacea. All the toursist activities must come up in accordance with environmental and ecological imperatives. Entire area free of urban uses and forest cover towards east of Jatogh-Kamna-Tara Devi range is proposed to be landscaped and harnessed for recreational purposes for tourists as well as resident population.

## 9.8 IMPERATIVES

As the city is one of the most sought after resort amidst the Himalayan setting and has unique environs, it is a destination of National and International tourists. Degradation of environment and heritage, on one hand and problems of traffic, transportation and infrastructure witnessed by the tourists, on the other are discouraging the flow of tourists to Shimla. It is therefore imperative that its meticulous planning and development in consonance with its heritage and environmental paradigms, is ensured. Haphazard and unauthorized development is required to be dealt with stringently by enforcement of mandatory provisions. An utmost discipline is required for constructions on slopes. Green cover has to be preserved and enhanced at any cost. Basic services infrastructure including water supply, sewerage, drainage, proper accessibility and cleanliness require foremost attention. Circulation network is required to be geared up in terms of provision of alternate Bye Passes, elevators, adequate parking, Tunnels and Ropeways and circular railway on

periphery. An efficient transportation network by improvement of condition of roads will go a long way in attracting the flow of tourists. A parallel Mall may be developed on the spur at Ghandal near Ghanahatti at a commanding location. As the occupancy in existing hotels is far less through out the year, no more hotels be allowed in Shimla Planning Area, in the interest of already existing hotels, on one hand and to safeguard the character of Shimla, on the other. It is also imperative to devise Tourism Mater Plan for Town level as well as Regional level by concerned organizations in consultation with the community.

## 9.9 INDUSTRIAL SCENARIO

Shimla town has only small scale and service industries. The major factors that had been limiting the industrialization are the inhospitable geographical features, inadequate and exorbitant cost of transport facilities and the absence of market in proximity. The region is also environmentally sensitive for industrialization. The city practically had no industrial growth till late 1960's. However, the traditional small scale industries like wool spinning, weaving, basket making and metal work, that use the local resources are still lingering but in vain without attaining progress. Presently there are about 450 small scale and service industries operating in Shimla Planning area. These units are classified under the seven broad categories. About 2300 workers are employed in them. The city has great potential for the establishment of cottage and small-scale environment friendly industries. Locally available Raw material may be utilised and employment opportunities be generated so that economic condition of local people is improved . The description of existing industries is as under: -

**Table 9.9: Types of Industries and Number of Workers**

| Category of Industry | No. of Units | No. of Workers |
|---|---|---|
| Textile | 18 | 60 |
| Manufacturing | 110 | 494 |
| Communication | 44 | 154 |
| Auto Repairs | 52 | 228 |
| Food Products | 63 | 294 |
| Servic Industries | 117 | 384 |
| Others | 45 | 686 |
| **Total** | **449** | **2300** |

Source: District Industries Statistics 2003, Shimla

**Figure 9.18: Types of Industries and Number of Workers**

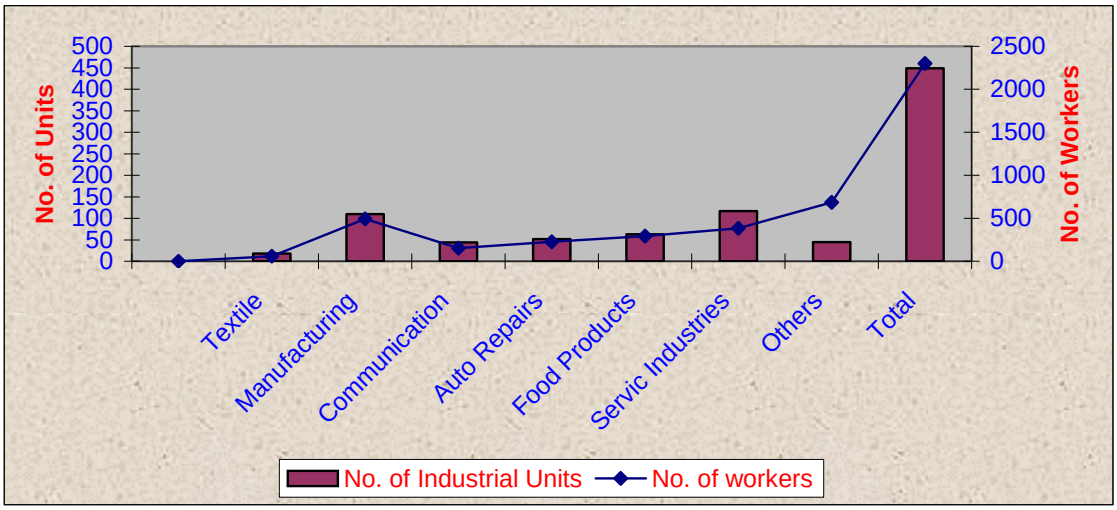
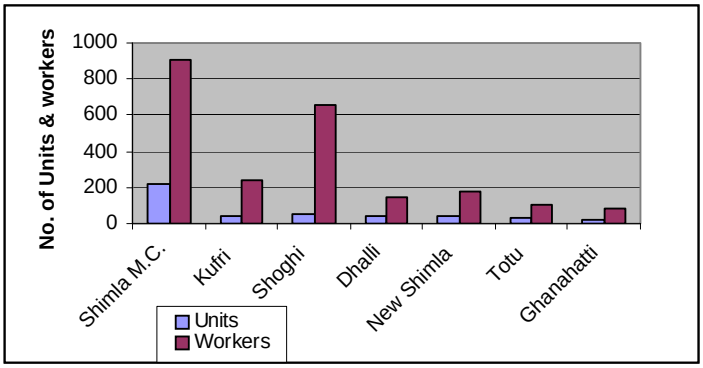



**Table 9.10 Spatial Distribution of Industries** **Fig 9.19 Spatial Distribution of Industries**

| Location | Units | Workers |
|---|---|---|
| Shimla M.C. | 219 | 909 |
| Kufri | 46 | 241 |
| Shoghi | 54 | 652 |
| Dhalli | 39 | 145 |
| New Shimla | 42 | 172 |
| Totu | 27 | 100 |
| Ghanahatti | 22 | 81 |




## 9.10 IMPERATIVES

Shimla has emerged a multifunctional city with dominance of tourism, administration, institutional, trade, commerce and transport activities. Hotel industry is at its peak. However, other industries are the least. It is, however, imperative that environment and eco-friendly industries based on local raw material are established on the western periphery in the vicinity of Shoghi in activities zone. In view of least pollution in the peripheral area technology based electronic industries may be established.

# CHAPTER- 10
# HERITAGE AND ITS CONSERVATION

## 10.1 INTRODUCTORY

Shimla is a premier British town widely known for its picturesque Mall, Scandal Point, the Ridge, Institutional buildings, Bungalows, Hotels, Coffee houses and Theatres. It possesses an unique British heritage, which was transplanted thousand The Ridge and Christ Church of miles away amidst the Himalayan natural setting. During the post-independence era, however, Shimla witnessed an unprecedented growth and has crossed its leaps and bounds. Dwindling natural and built heritage is one of the prime concerns of the day and a cause of worry.

## 10.2 HERITAGE FEATURES

Along the Ridgeline and the Mall, the British established unique heritage features as under: -

### 10.2.1 The Mall:

Starting from Boileauganj along Vice Regal Lodge (Indian Institute of Advanced Studies), Peter Hoff, Cecil Hotel, Gorton Castle Building, Railway Board Building, State Bank of India, Telegraph Building, Town Hall, Gaiety Theatre, Clarkes Hotel, Chalet Day Building, Oak Over and Post Office, it joins the Cart road at Chhota Shimla. The important commanding locations of the Mall from where view of high snow clad Greater Himalayas in the North and Outer Himalayas in the South is visible are namely University-Boileauganj road junction in front of Vice Regal Lodge, Chaura Maidan, Scandal Point and the Ridge. The 6.00 Km. Long Mall road walk, covered in about one and half hour, makes any body/tourist satisfied. The variable

**The Mall**

scenery throughout, comprising of lush green Deodars, Parks and Open Spaces, Heritage Buildings and Shopping Centre makes one spell-bound.

### 10.2.2 The Ridge

With Scandal Point in the West, Lakkar Bazaar, Library and Christ Church in the East, along with Town Hall and Goofa on the Southern side, the Ridge is a commanding site having unique view of distant Greater Himalayas. It is a place of congregation and socio-cultural space for National and State level events. Its width ranges from 10.00 metres to 40.00 metres. Whosoever visits Shimla, enjoys the stroll on the Ridge.

**The Ridge**

### 10.2.3. Heritage Buildings

The Vice Regal Lodge is a masterpiece of British Architecture and Heritage. The Gorton Castle (A.G. Building) at a commanding site is a jewel of Architectural manifestation. The Railway Board Building, alongwith overwhelming use of iron pipes in its façade, is a distinct framed structure in an unique style. The Town Hall has unique façade and a saga of British Heritage. The Telegraph building has simple and elegant style. The Western Command Building on slope in the vicinity of the Mall is an attractive complex. The Bantony (Old Police Headquarter Building) is a rare poetry of roof-scape and façade along with attractive windows, doors and columns. The two storeyed Y.W.C.A. Building has an impressive

façade. The State Bank of India Building is beautiful and well proportioned. The Library Building on the Ridge is a rare architectural feast to heritage lovers.

**Vice Regal Lodge**

**Town Hall Shimla**

**Railway Board Building**

**Gorton Castle**

**Telephone Exchange Building**

**Ellerglie Building**

### 10.2.4 The Churches

There are four Churches in Shimla namely the Christ Church at the Ridge, the Catholic Church near Western Command, Church in St. Bede's Complex and a Church in Bishop Cotton School Complex. The Christ Church, being nucleus dominates townscape of the City. Whereas, the Christ Church is a yellow painted structure in a typical style, the other three Churches are in original stone masonry.

**Christ Church**

**Catholic Church**

### 10.2.5 Bungalows

The British were fond of Bungalows having unique architecture and settings. They preferred commanding sites and harnessed maximum sun and view in their architectural style. They gave distinct names to their Bungalows. Generally constructed in locally available materials namely, Stone, Wood and Tin, they have typical roof-scape, chimneys, windows, doors and façades. Dormers, glazing effect and bay windows formed integral part of Bungalow style. The British liked natural surroundings for their abodes.

**Bantony**

**Woodville**

### 10.2.6. Street Pattern

The Heritage Buildings, Bungalows and various other complexes have generally independent approaches. The streets were initially stone paved. However, many of them have been tarred over passage of time. They are generally vehicular and on steep slopes the same stepped. They are sinuous and circular in their character, due to hill topography.


**Street Pattern in Middle Bazaar**

### 10.2.7 Socio-Cultural Spaces and Buildings

The major socio-cultural spaces are namely the Ridge, Rani Jhansi Park, Skating Rink, Scandal Point and Town Hall Square. The pedestrians and tourists chat and enjoy at these places.

**Socio- Cultural Space in vicinity of Rothney Castle**

Gaiety Theatre has traditionally been used as a place for socio-cultural activities and congregations. Similarly, U.S. Club was being initially used as a club and recreational place.

**Gaiety Theatre**

**U.S Club**

## 10.3. ARCHITECTURE

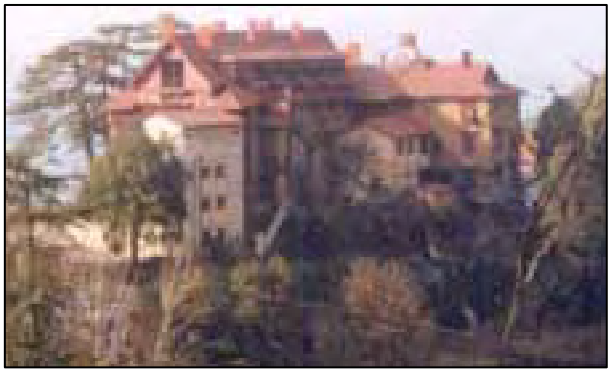
10.3.1 The British in trying to recreate homely atmosphere used English architecture, while constructing their houses. But with time, they also incorporated the indigenous style so that new buildings displayed the attributes of a different style, "the Anglo-Indian Architecture". 'Swiss Chalet' Bungalows were the most common in Shimla. Other main architectural styles were that of 'Boronial chateaux' with corrugated iron roof and Tudor Gothic, a dull but dignified style.

10.3.2 The roofs of most of the houses were either slated or shingled in an angular form to allow the rainwater to run down. A brittle kind of stone was most common, while cement was almost absent except in the outer coatings. Some houses were lined with traputus on their outer surface. Sometimes tar was used in small quantities. Most of the houses had a boundary line, defined by a wall or hedge. The open space between the boundary line and the house structure was developed as a garden. There usually was one main entrance linked to some main road by a footpath.

10.3.3 Unlike these, the houses of the Indian community were of typical vernacular style, covering a small area, made of local material and local techniques of construction, occupying sites on the lower slopes. "Form and structure of the hill residences was based on long established vernacular principles and not on imported European know-how."

### 10.3.4 Types of Facades

The Buildings in Shimla display a variety of facades in Western style.



**Facade of Auckland House School**

**Facade of Rippon Hospital**

**Facade Gurudwara Building**

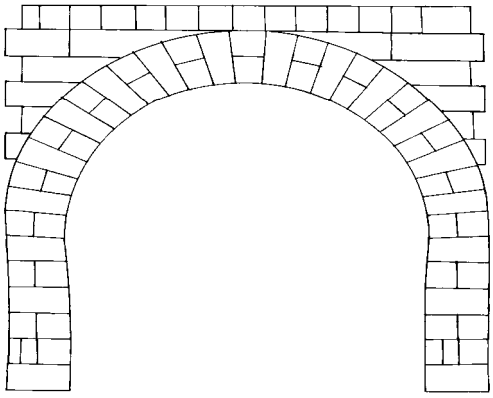
**Facade of Rani Amrit Kaur Building**

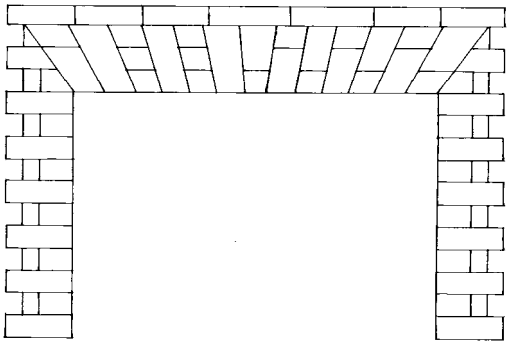
**Facade of Bhargav Estate**

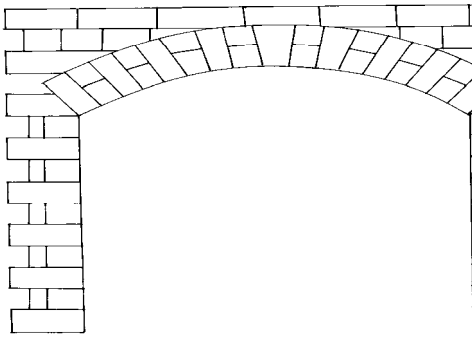
**Facade of Y.W.C A Building**

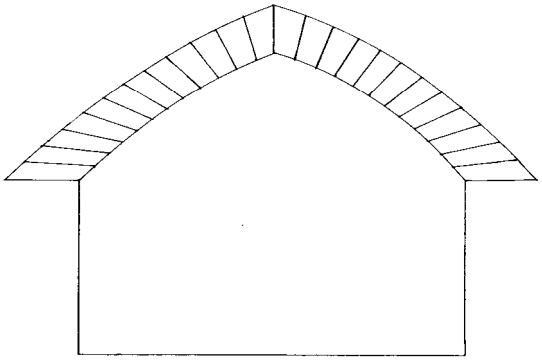
### 10.3.5 Types of Entrances and Doors

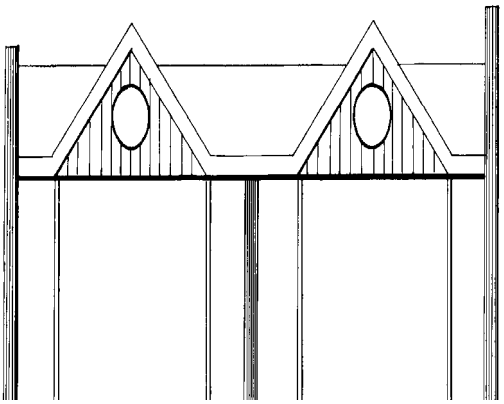
Institutional buildings have their monumental scale. Though there is a variety entrances, porches and doors, a few thereof which possess typical shape, dimensions and scale are as under:-

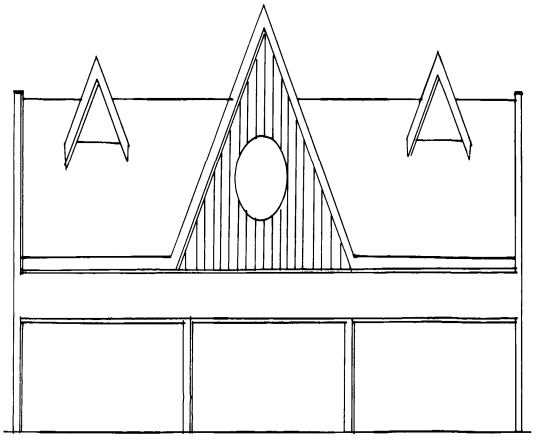


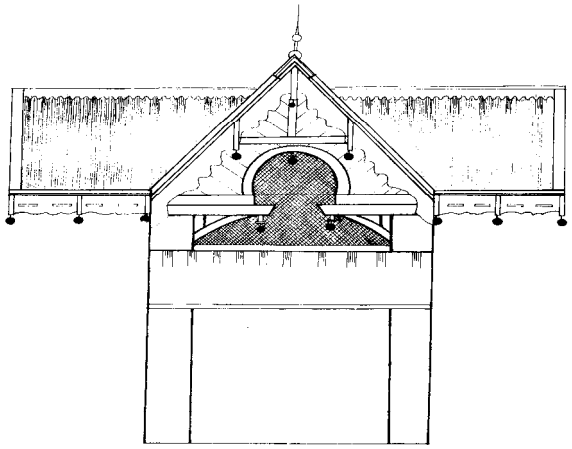








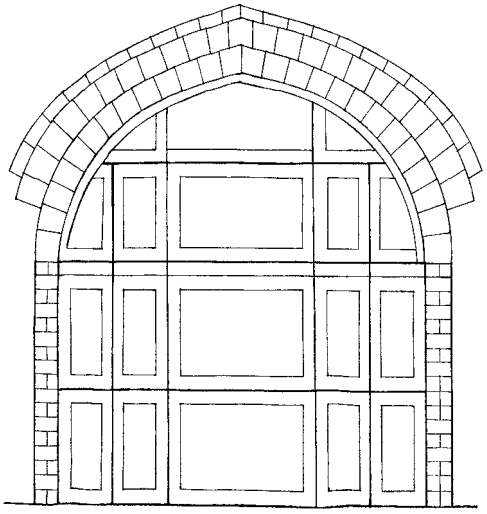




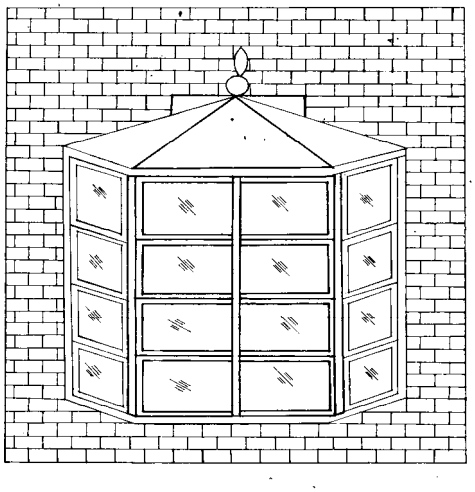
**Porch of Chaipslee**

### 10.3.6 Types of Windows

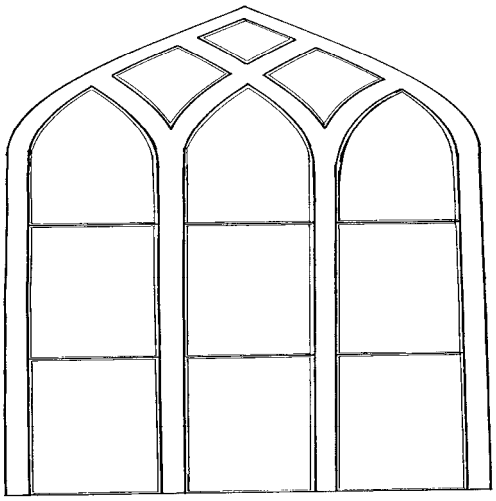
As windows provide multi-faceted impact to the facades, they have been designed with foremost attention by the British architects and designers. Their shape, size, scale and details differ from one set of buildings to another. Institutional, commercial, residential and religious buildings have therefore, different style from each other. Typical types of windows are as under:



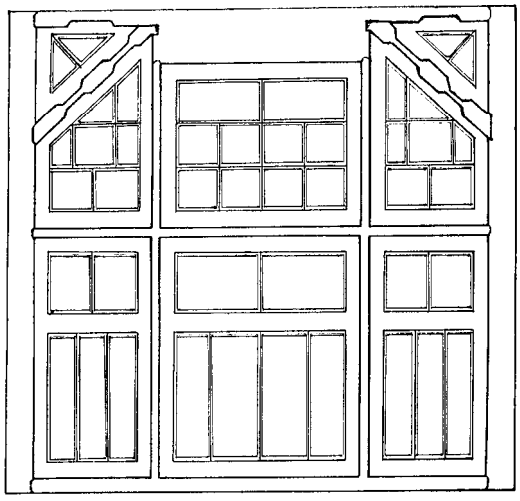
A Window of Ellerglie Building



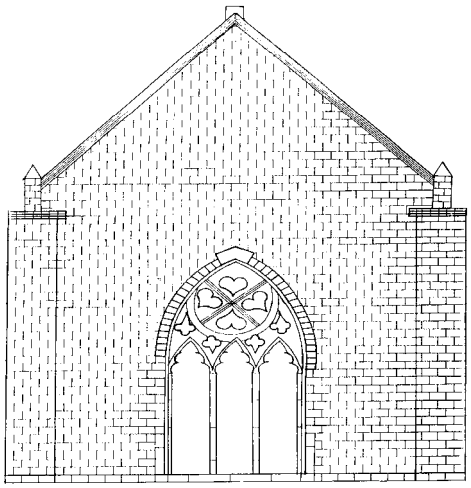
A Window of Rani Amrit Kaur Building



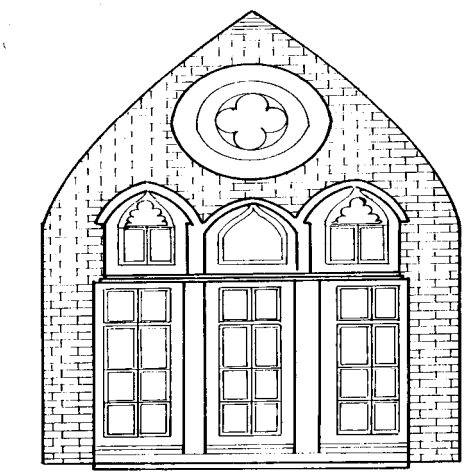
A Window of Catholic Church



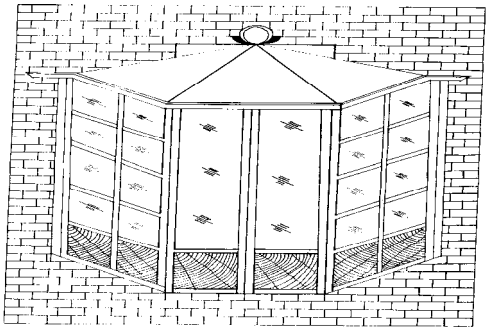
A Window of Town Hall



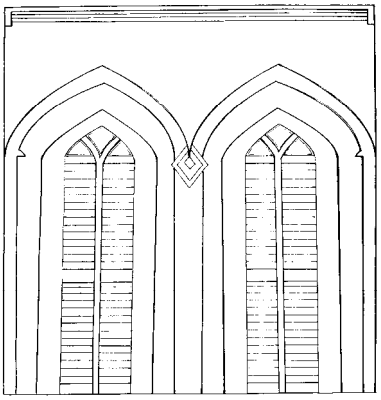
A Window of Catholic Church

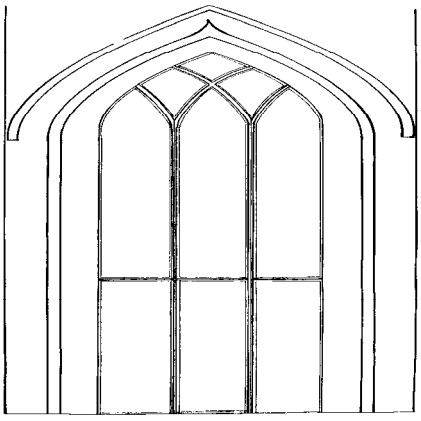


A Window of Gaiety Theater



A Window of Rani Amrit Kaur Building

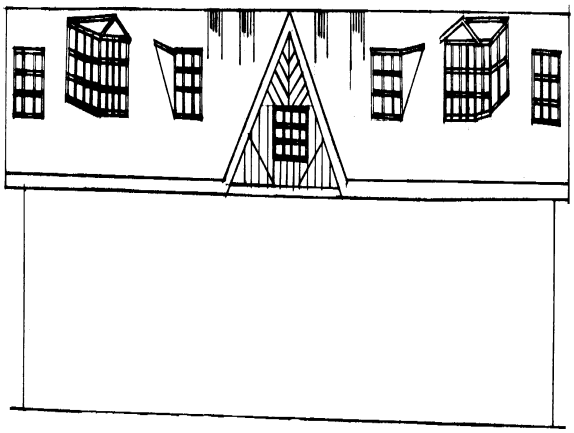




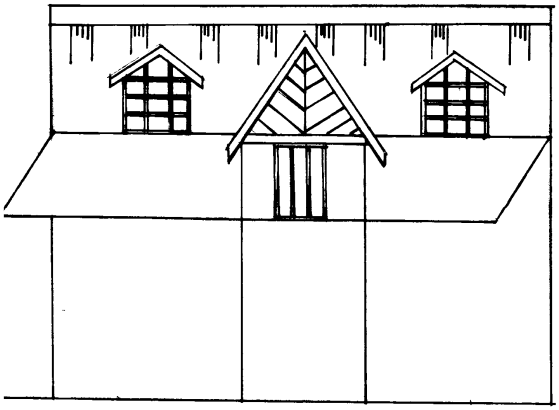
Windows of Christ Church

### 10.3.7 Types of Roofs

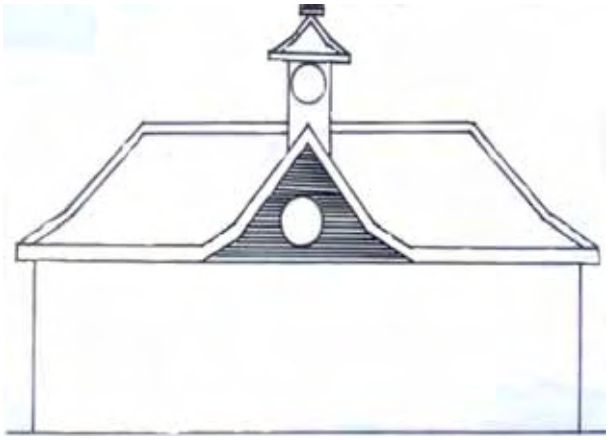
Slanting slate and tin roofed structures, resting on wooden frames thereunder dominated the townscape of Shimla. Major typical roof types of prominent buildings are as under:-

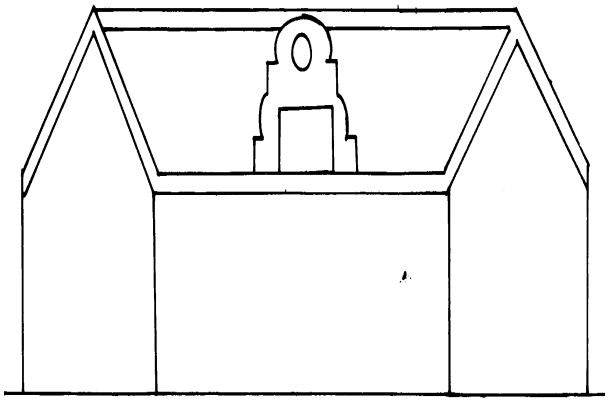


Roof of Town Hall

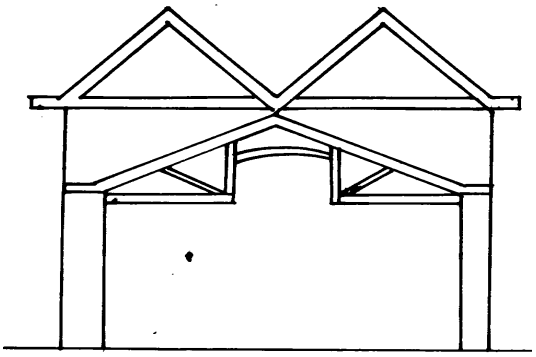


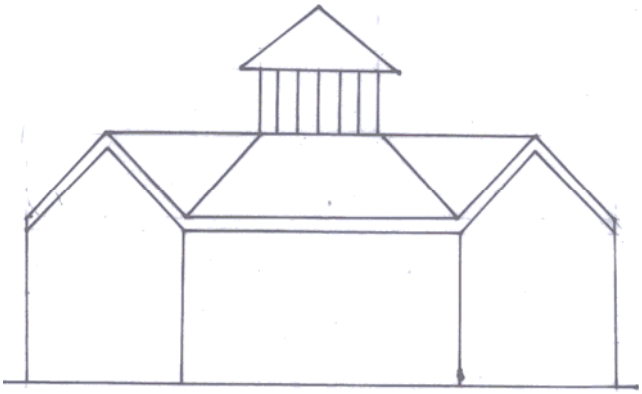
Roof of Deepak Project Building



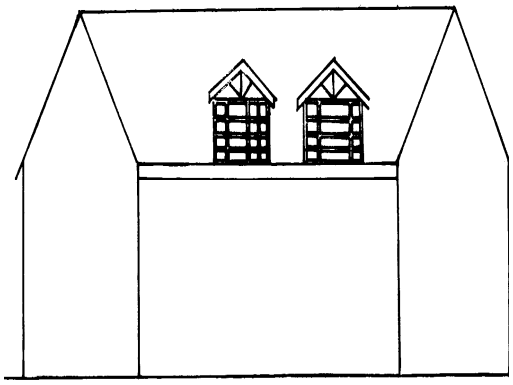


Roof of Bishop Cotton School

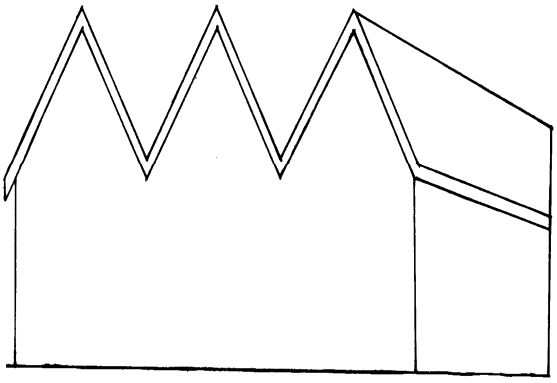




Roof of Grammer School Kaithu



Roof of State Museum



Roof of Winter Field

Roof of B.C.S. School

## 10.4 Natural Heritage:

(a) Socio-Cultural Spaces and Parks.
(b) Area on hillside of the Mall starting from Khadi Ghamodyog to Kali Studio.
(c) Daulat Singh Park
(d) Café Park
(e) Ridge
(f) The open green patches, slopes, woodlands in heritage zone and not covered in above.

## 10.5 CRISIS OF HERITAGE CONSERVATION:

Restoration, preservation and conservation of built heritage of Shimla has become a stupendous task. It is a challenge to the inhabitants and to those concerned with this noble cause. No country or State or region can boast of its prosperity, unless it preserves its heritage, utilizes its scarce land resources properly and takes care of its natural ndowments. The heritage crisis of Shimla is summed up briefly as under:-

**Obsolete Construction in Heritage Zone Near Ridge Near Ridge Crying for Re-Modelling**

(i) The Heritage buildings located in Core Area of the city or at potential sites, are witnessing an enormous pressure from consumerism and urbanization forces.
(ii) The increasing appetite of vested interests led to manifold increase in encroachments in heritage areas during recent decades.
(iii) Intrusion and collision of commercial pursuits with heritage feature is a bitter reality.
(iv) Blind race for modern structures is posing threats.

## 10.6 REMEDIAL MEASURES FOR CONSERVATION:

In view of importance of heritage features it is proposed that construction activities have to be discouraged in and around important heritage features. If any construction is necessarily required to be undertaken in premises of heritage areas, it should inevitably follow the architectural style of such features. Adequate setbacks and open spaces should be left around heritage features. Structures which have been constructed without harmony to their surroundings are required to be remodelled in harmony to adjacent historical features. The Kalka-Shimla Railway line declared as "World Heritage Railway Line" by the UNESCO.

In view of proud past of Shimla, on one hand and need for conservation of Heritage, on the other, the Government of Himachal Pradesh vide notification No. TCP-F (5)-10/2001 dated 22.8.2002, has notified heritage zone as under:-

I. Vice Regal Lodge Complex complete.
II. One building depth on either side of the road surrounding Vice Regal Lodge Complex.
III. One building depth on either side of the Mall Road starting from gate of IIAS upto Chhota Shimla Chowk via S.B.I., Scandal Point, Shimla Club & Oak Over.
IV. One building depth on either side of the path/road starting from Parkash Niwas (Housing Shimla Type Writer) near S.B.I. Via Kali Bari to the Scandal Point.
V. The area bounded by Scandal Point, Ridge, Regal, Takka Bench, Church, Ritz, U.S. Club gate, P.W.D. Office, Chalet Day School and the Mall Road.
VI. One building depth on either side of the road from Oak Over to Barnes Court (Governor's Residence) via Wood Villa and,

VII. Any building/buildings falling outside the Heritage Zone but declared as heritage building/buildings by the State Government.

## 10.7. IMPERATIVES

Shimla possesses a unique and distinct heritage. It possesses numerous master pieces along the Mall. The British Shimla is dotted with heritage buildings of various styles which are required to be notified and regulated in accordance with heritage regulations. All buildings facing Mall and the natural heritage having direct bearing are required to be regulated so that nothing contrary to natural and built heritage comes up in and around heritage areas. Regulations to govern the development activities if any to be carried out in heritage zone have been prescribed under separate chapter of Regulations and the same are required to be adhered strictly.

# CHAPTER -11

# FACILITIES AND SERVICES

## 11.1 EDUCATION

Being an administrative town and tourist attraction, Shimla is one of the major educational centres in Himachal Pradesh. There is a University, medical college, 5 Govt.and Semi-Govt. Colleges, 21 Senior Secondary Schools (15 Govt. & 6 Pvt.) 22 High Schools (14 Govt. & 8 Pvt.) and 24 middle schools (22 Govt. & 2 Pvt.). There are about 15 C.B.S.E. affiliated schools in Shimla Planning Area. Presently, area under educational facilities is about 34.85 Hectares. Thus Shimla is a hub of education institutions. Therefore, literacy rate in Shimla Planning Area is high as compared to other towns and Shimla district as a whole. As per 2001 census, there are 1,43,917 literate persons in Planning Area, who accounts to 82% of whole population of Planning Area. Whereas, number of literate persons in Shimla District is 5,04330, out of total 7,22,502 persons. Thus Literacy rate at district level is low than Planning Area, which is 70%. It has been observed that literacy rate of male and female is almost the same in Planning Area as well as at district level. Literacy rate of males is 59%, whereas females accounts for 41% of total literate persons.

### 11.1.1 University

The Himachal Pradesh University is a premier institution of teaching and research in the country. It was established on 22nd July, 1970 by an Act of the Himachal Pradesh Legislative Assembly. It is entirely financed by the Government of Himachal Pradesh and the University Grants Commission, New Delhi. The University is situated nearly 5 km away from the main city, at Summer Hill, a quiet suburb of Shimla in the vicinity of the Indian Institute of Advanced Studies. Its beautiful surroundings present a panoramic view of snow peaked mountains and are ideally suited to pursue higher learning amidst rhododendron, silver oak, pine and deodar forests. The campus is spread over an area of about 80.94 hect. The various teaching departments, library, offices, residential complexes and hostels of girls and boys are housed in aesthetically designed buildings matching with the hilly terrain and climate. The University is both residential and affiliating in character.

Apart from an International Centre for Distance Education and Open Learning, a University Evening College, a University College of Business Studies, a Regional Centre at Dharamshala and nearly 80 affiliated Under-graduate, Post-graduate, engineering, medical, dental,

education and Sanskrit colleges, the Himachal Pradesh University has 27 Teaching Departments offering various courses. The University has 12 facilities, out of which 8 are campus based. It houses 15 specialized teaching, research and training centres. The campus has 283 teachers, out of whom 67 are professors, 91 Readers and 125 lecturers. Out of 4096 students, 59 % are male students and 41 % female students. It reveals that teacher- student ratio in the campus is about 1:19.

In the campus, there is an Auditorium with a capacity of about 750 students and two main Libraries. The University has 11 hostels for boys and girls. The University has acute shortage of hostel accommodation. So far as basic amenities are concerned in the University, it has own water supply system, sewage and solid waste disposal management system. The M.C Shimla is also providing services. The University however, has problems like lack of hostel accommodation, scarcity of water supply during summers, lack of professional courses and lack of computerized library.

### 11.1.2 Colleges

At present, there are five colleges in the Planning area, which have 7500 students. There are 312 lecturers in these Colleges. Teacher student ratio is 1:23. The premier 100 years old St. Bedes private college for girls has 1400 students.

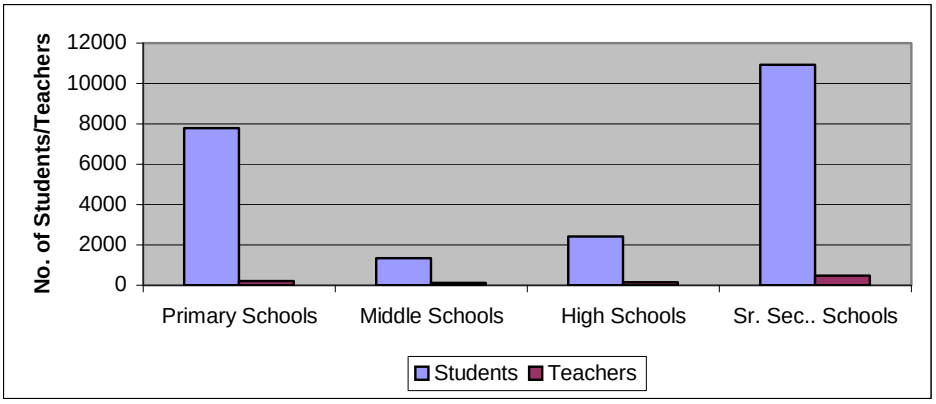
### 11.1.3 Schools

Shimla is known for residential schools. Important schools are Tara Hall, Chapslee, St. Edward, Dayanand Public School and Central School. As per survey conducted by the Town and Country Planning Department, there are 21 Sr. Secondary Schools, 22 High Schools, 24 Middle Schools and 65 Primary Schools.

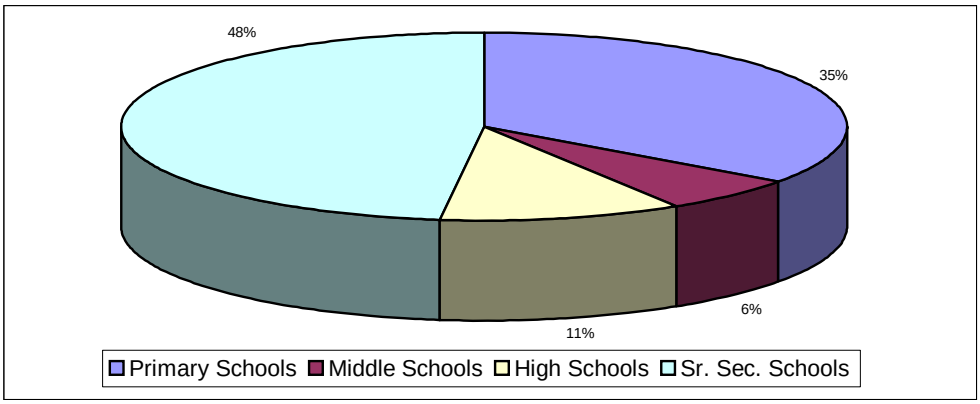
**Table 11.1:Number of Students & Teachers in Govt. Schools**

| Sr. No. | Category of School | No. of Students | Percentage To Total | Teachers | % Age to total |
|---|---|---|---|---|---|
| | Primary Schools | 7800 | 35 | 195 | 21.21 |
| | Middle Schools | 1333 | 6 | 115 | 12.52 |
| | High Schools | 2430 | 11 | 140 | 15.24 |
| | Sr. Sec. Schools | 10934 | 48 | 469 | 51.03 |
| | **Total** | **22497** | **100** | **919** | |

## Figure 11.1: Number of Students & Teachers in Govt. Schools




## Figure 11.2: Proportion of Students in Govt. Schools




## Figure 11.3: Teacher-Student Ratio in Govt. Schools

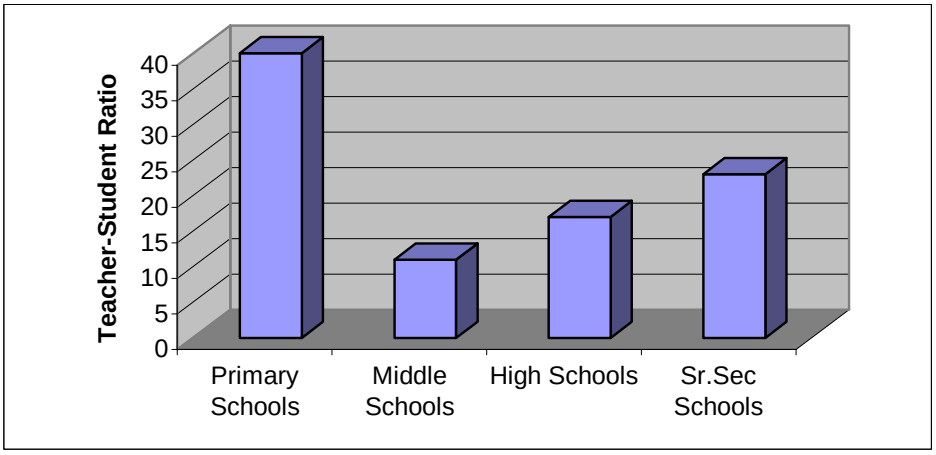


**Table 11.2: Private Schools in Planning Area**

| Schools | Students | % | Teachers | % |
|---|---|---|---|---|
| Middle Schools | 96 | 1 | 14 | 2 |
| High Schools | 2628 | 15 | 122 | 16 |
| Sr. Sec. Schools | 3890 | 22 | 158 | 21 |
| Affiliated With CBSE | 11468 | 62 | 448 | 61 |
| **Total** | **18082** | **100** | **742** | **100** |

**Figure 11.4: Private Schools in Planning Area**

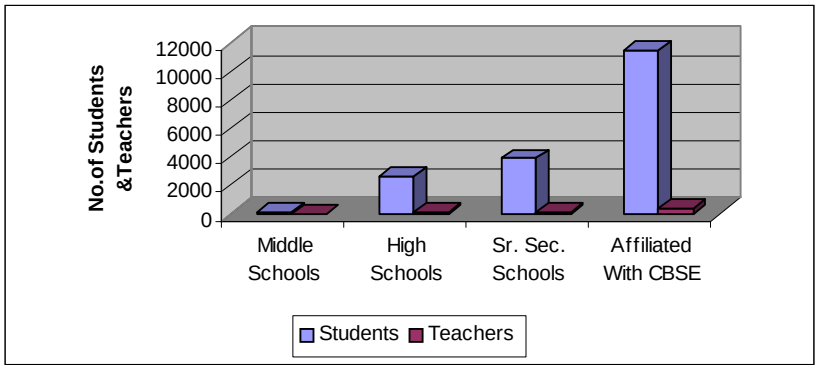



**Figure 11.5: Proportion of Students in Private Schools**

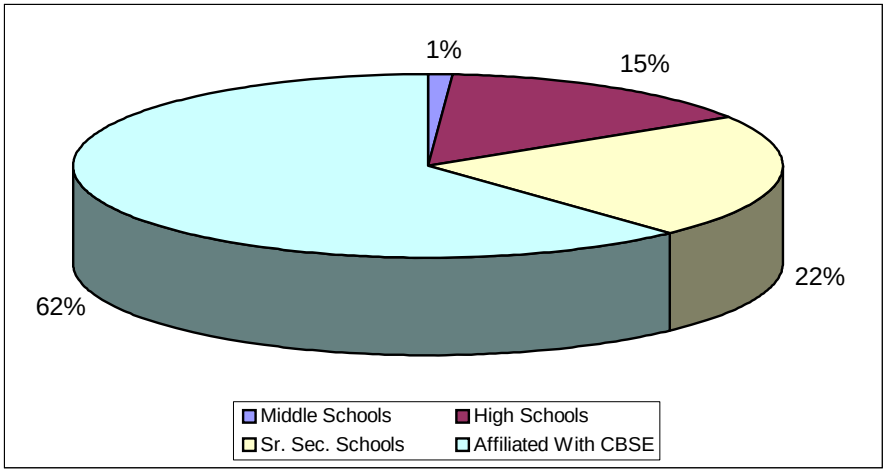
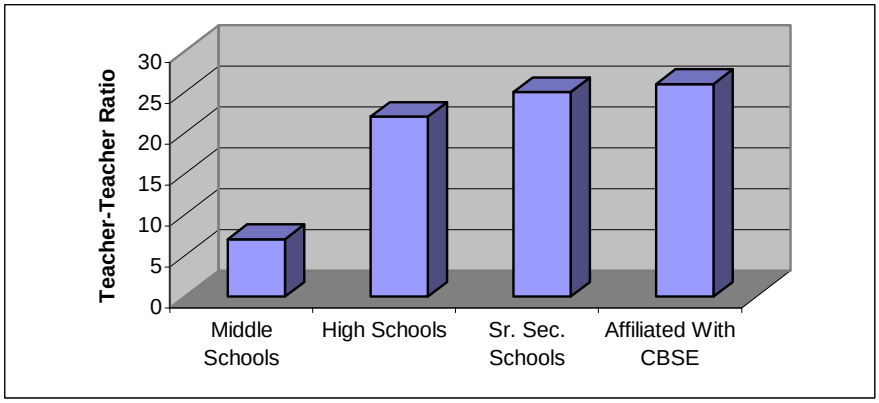


**Figure 11.6: Teacher-Student Ratio in Private Schools**




**Comparative Analysis of Government & Private Schools**

**Figure 11.7: Govt. Schools**

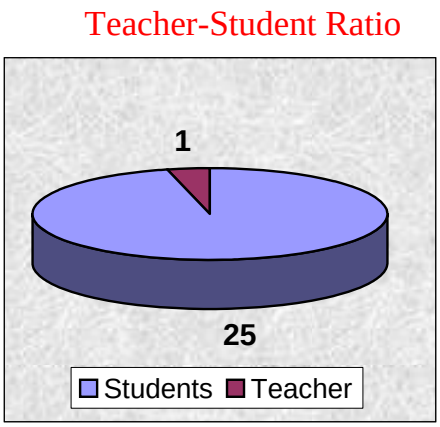
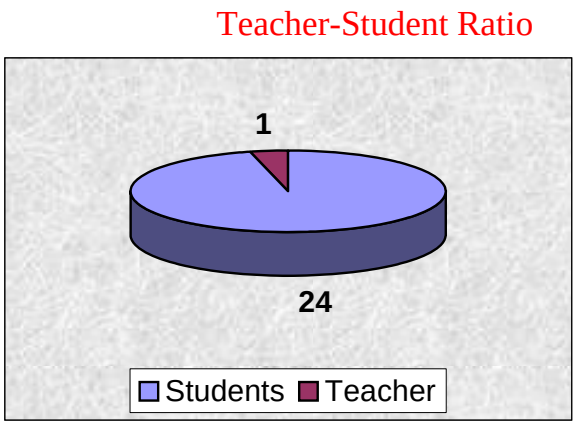



**Figure 11.8: Private Schools**




### 11.1.4 Availability of Modern Facilities

**Table 11.3: Availability of Modern facilities**

| Sr. No | Description | Available Facilities (in percentage) | | |
|---|---|---|---|---|
| | | Library | Computer | Laboratories |
| 01 | Government School | 56 % | 62 % | 62 % |
| 02 | Private Schools | 75 % | 92 % | 77% |

**Source: Town & Country Planning Deptt. Survey**

**Figure 11.9: Availability of Computer (Government Schools)**

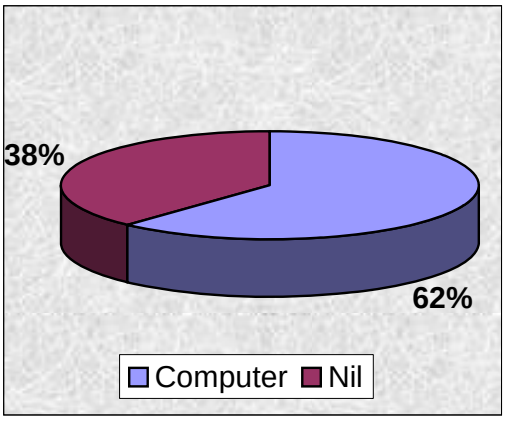



**Figure 11.10: Availability of Computer (Private Schools)**

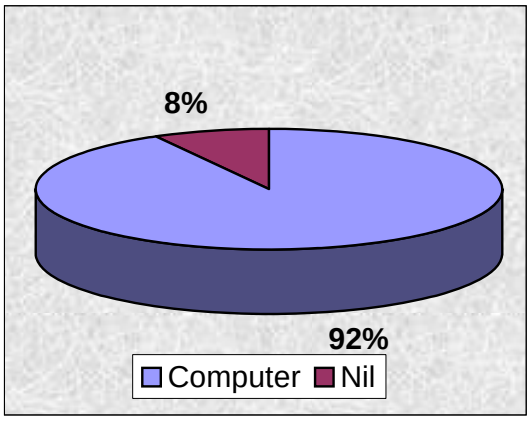



Figure 11.11: Availability of Laboratories **(Government Schools)**

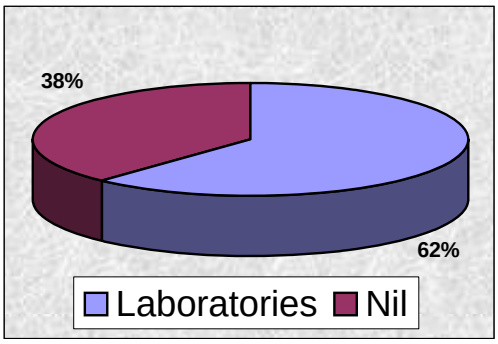
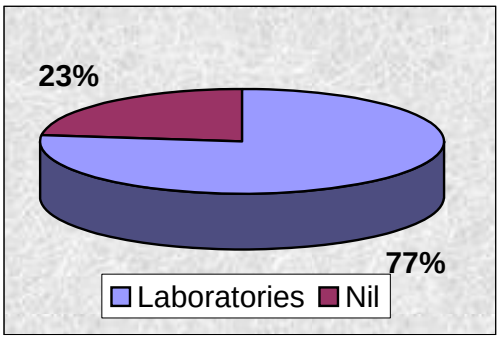



Figure11.12: Availability of Laboratories **(Private Schools)**




All Government as well as private schools are equipped with modern facilities. However, the private schools are better equipped with modern amenities and are being preferred by the community.

### 11.1.5 Availability of Essential Amenities

Most of the Government Schools have no basic amenities of playgrounds, water supply and toilets. Most of Government and private schools have only septic tanks for sewage.

**Table 11.4: Availability of essential amenities**

| Sr. No | Descriptions | Amenities | | |
|---|---|---|---|---|
| | | Play ground | Water supply | Toilets |
| 01 | Govt. Schools | 29 % | 35% | 36% |
| 02 | Private Schools | 99% | 99% | 100% |

Source: Town & Country Planning Survey

**Fig.11.13 Availability of Playground**
Government Schools

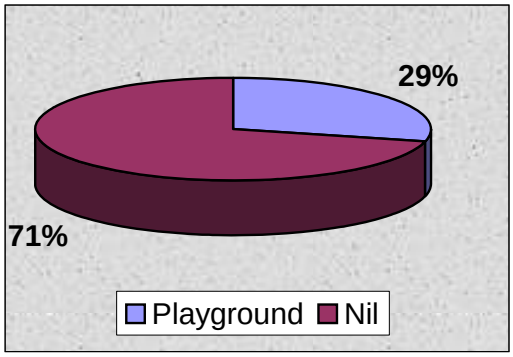
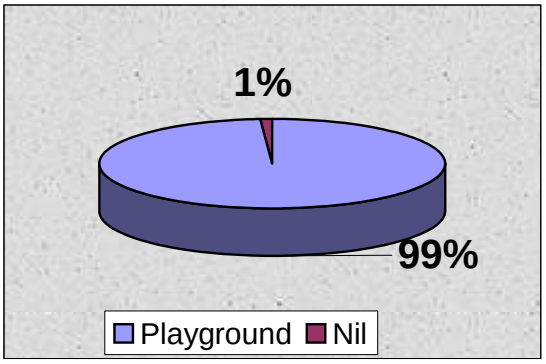



**Fig. 11.14: Availability of Playground**
Private Schools




**Source: Town & Country Planning Survey**

**Fig 11.15: Availability of Water Supply**
**Government Schools**

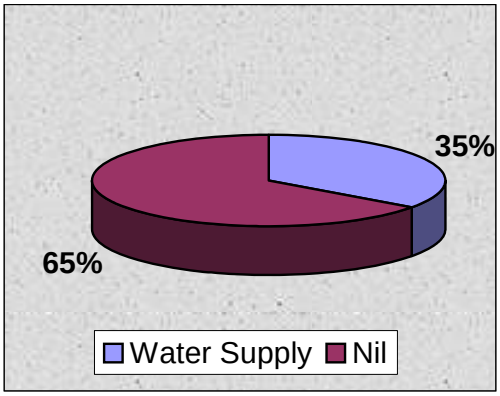
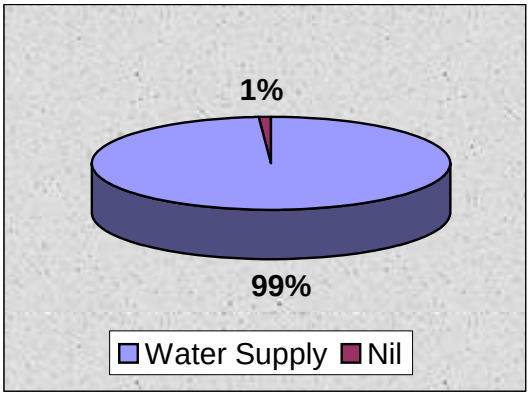



**Fig. 11.16:Availability of WaterSupply**
**Private Schools**




**Source: Town & Country Planning Survey**

**Fig 11.17: Availability of Toilets**
**Government Schools**

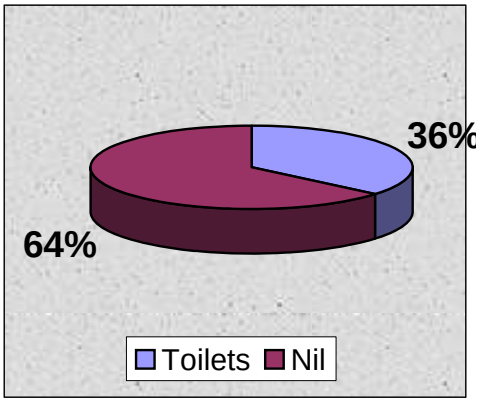
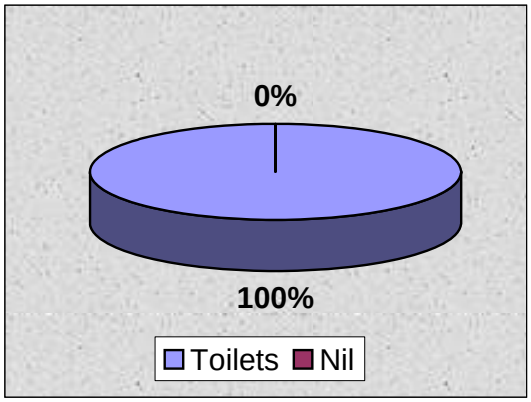



**Fig 11.18: Availability of Toilets**
**Private Schools**




Source: Town & Country Planning Survey

## 11.2 IMPERATIVES

Modernisation of education in view of technological advancement is required to be ensured. Requisite basic amenities are required to be provided. Availability of water is required to be improved. Parking facilities require attention. Repair and maintenance of old buildings is needed. Environment of Schools in built up areas is required to be improved. Multistorey concrete buildings have come up in the University complex, which do not coincide with the surrounding natural environs. There is a mushroom growth around the complex. The deteriorating environs of the complex is the prime concern. Environmental improvement scheme is therefore, required to be devised and implemented in the complex. Similarly, improvement schemes for other educational complexes are required to be prepared and implemented by involvement of local communities, parents-teachers associations, public representatives and N.G.Os.

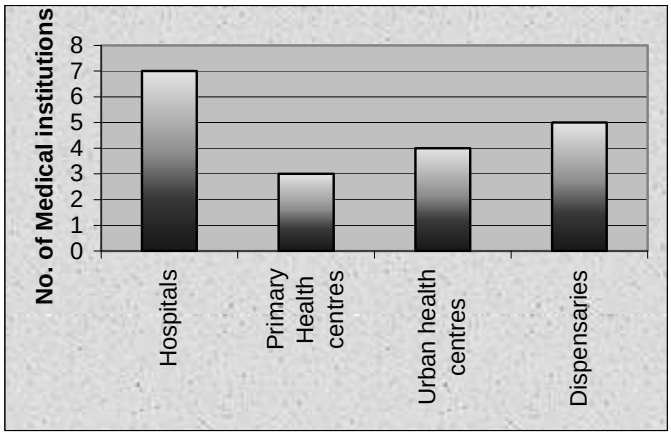
## 11.3 HEALTH FACILITIES

Shimla being a capital city, all kinds of health care facilities are available in it for city as well as regional population. State level Allopathic, Ayurvedic and Veterinary Hospitals are located in it. District level and regional level hospitals include Rippon, Kamla Nehru, Army Hospital and a few private hospitals namely Indus, Sanatorium and Tara hospital. Major hospitals are located in core area of the city. Presently, area under medical facilities is about 13.44 Hectares. The following health care centres/Hospitals exist in Shimla Planning area:

**Table 11.5: Health Facilities**

| Description | Number |
|---|---|
| Hospitals | 7 |
| Primary Health centres | 3 |
| Urban health centres | 4 |
| Dispensaries | 5 |

**Figure 11.19:Health Facilities**




**Source: Town & Country Planning Deptt. Shimla Survey**

**Table 11.6: Capacity of Govt. Hospitals**

| Govt. Hospitals | No. of Doctors | Bedding Capacity |
|---|---|---|
| IGMC | 750 | 715 |
| Kamla Nehru | 20 | 125 |
| Rippon | 35 | 150 |
| Ayurvedic | 14 | 35 |
| Dental Hospital | 40 | 20 |
| Tara Hospital | 3 | 15 |
| Sanatorium | 6 | 49 |

### 11.3.1 Snowdon Hospital and Indira Gandhi Medical College

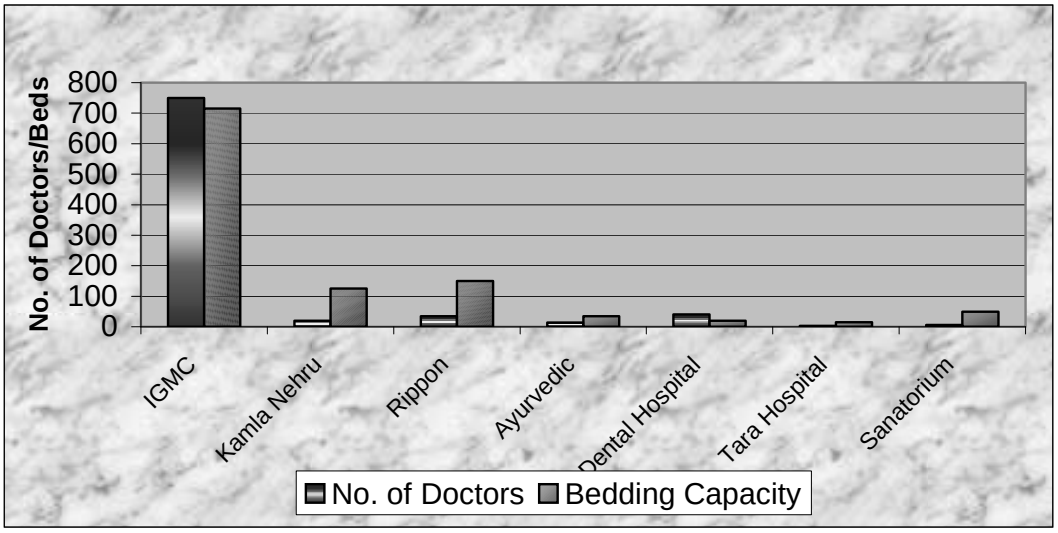
Snowdon is a state level hospital, which renders specialized medicare facilities. Indira Gandhi Medical College came into existence in the Year 1966. Attached with State Medical College it has 400 students. At present, it is equipped with 750 doctors and has bed capacity of 715. About 600 patients are taking regular medical services. Modern medical facilities in Medicine, Chest and Tuberculosis, Surgery, Cardiology, adiotherapy, Neurology, Plastic Surgery, Pediatrics Surgery, Obst and Gynae, Neonatology, Urology, Neuro-Surgery, Gastroentology, ENT, Radiology, Orthopaedics, Nuclear Medicine and Ophthalmology are available in the institute which are of all India level.

Indira Gandhi Medical College

### 11.3.2 Dental Hospital and College:

It is situated along the IGMC and Snowdon amidst sprawling Oak, Pine and Rhodendron trees. The 40 doctors cum professors and lecturers are imparting Dental education to students as well as serving the dental patients. About 100 patients are attended daily. Bedding capacity is 20.

**Figure: 11.20: Status of Medical Institutions**




### 11.3.3 District level Hospital (Ripon)

It is the oldest Hospital of Shimla, which caters for city as well as regional population. Located near the Bus stand, it has 150 beds and 35 doctors in the hospital. About 550 patients regularly visit for medical treatment. On an average a doctor is attending about 15 patients.

### 11.3.4 Kamla Nehru Hospital

Traditionally known as Lady Reading, it renders specialized services. There are 20 doctors in the hospital. About 350 pregnancies take place every year in it. It has a bedding capacity of 125 beds.

### 11.3.5 Walker Hospital

The hospital was a premier British Heritage building. However, it has been burnt. The Ministry of Defence has sanctioned a grant of Rs. 22 crore for total overhauling of the Historic Walker Building-burnt Military Hospital. The old façade has been proposed to be retained. It will be equipped with ultra-modern infrastructure and will cater for requirements of soldiers, ex-servicemen and their dependents. Alongwith separate inlet and outlet, it will help in easing the traffic congestion on Cart Road.

### 11.3.6 Ayurvedic Hospital

This hospital is located in Chhota Shimla. It caters for the city as well as regional population. It has a bedding capacity of 35 beds and there are 14 doctors. On an average 135 patients regularly given Ayurvedic treatment.

### 11.3.7 Veterinary Hospital

There is one veterinary hospital and about 20 veterinary dispensaries in Shimla Planning Area. About 60 animals are treated daily.

## 11.4 IMPERATIVES

11.4.1 The medical institutions have 859 doctors. There are 1225 beds in these institutions. About 2200 patients visit for medicare daily. Two private hospitals namely Indus and Sanatorium are also serving the population. Presently, in Shimla Planning Area number of beds per 1000 persons is seven and number of doctors per 1000 persons is 5 only. As IGMC is only state level hospital, therefore it is proposed to increase the carrying capacity of this hospital in terms of Number of doctors and beds.The Snowdon complex being located on the northern face has limited sun during the winters. This area becomes very cold during winters. Moreover, due to multi-storey construction of hospital, on one hand and increasing congestion in and around the complex, on the other call for concrete measures for up-gradation of its deteriorating environs.

11.4.2 It has been observed that health institutions are located either in congested localities or at lop-sided locations. Therefore, proper width and maintenance of roads is a major concern, so that the ambulance services can be provided effectively. Lack of proper disposal of hospital waste, is a matter of concern. It is imperative that all medical institutions should furnish their requirements of space for expansion and shifting of their activities as deemed fit, in view of paucity of space in existing complexes. Preparation and implementation of improvement schemes for the complexes need no emphasis. Improvement schemes are required to be devised for important hospitals and implemented by involvement of local communities, elected representatives and N.G.Os.

## 11.5 PUBLIC SERVICES

11.5.1 Shimla is growing beyond its leaps and bounds. Population pressure is increasing because of better services and facilities. There are six Police Stations, three Fire Stations, Banking and insurance services, 9 petrol pumps and various services catering for the local and regional population as well as tourists. Presently these services are not adequate to cater for the existing demand of local and regional population as well as tourists. A rapid growth of population, floating population and tourists require more facilities to be provided to cater for the needs by the year 2021. The area requirement for various facilities and services is given in the 16th chapter. The description of above services is as under:

**Table 11.7: Public Services**

| Description | Number |
|---|---|
| Library | 5 |
| Reading Room | 2 |
| Post Office | 5 |
| Sub-Post Office | 15 |
| Telegraph Office | 5 |
| Police Station | 6 |
| Police Post | 12 |
| Cremation Site | 13 |
| Cinema Hall | 4 |
| Community Hall | 8 |
| Club | 3 |
| Auditorium | 4 |
| Local Park | 6 |
| Petrol Pump | 9 |

**Source: Town and Country Planning Department Survey**.

### 11.5.2 Imperatives

The above public services lack proper environs. In view of inherent requirements of specific services, alike library requiring peaceful and pleasing atmosphere, community hall and club having distinct premises, they need to be planned and developed accordingly. As many cremation sites have now been surrounded by the maze of new development and constructions, the same are required to be shifted and relocated. Similarly, local parks require foremost attention, as in the absence of proper recreational spaces, children are forced to play on the roads and streets.

# CHAPTER –12
## BASIC INFRASTRUCTURE

### 12.1 WATER SUPPLY

Water is vital renewable but finite resource. Water supply system in Shimla largely depends on the surface sources like springs, nallahs or streams for its safe water demand. Shimla had no systematic potable water supply till 1875. Later serious efforts were made when some land was acquired from the neighbouring Rana of Koti and first ever reservoir of 2MG (9 ML) capacity was constructed at Sanjauli in 1884 for systematic supply.

### 12.1.1 SOURCES AND INSTALLED CAPACITY

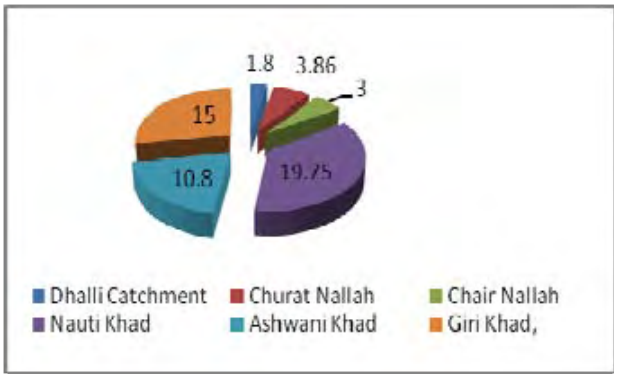
Water to the City is tapped from main six sources namely, Dhalli catchment area, Churat Nallah, Chair Nallah, Giri Khad,, Nauti Khad and Aswhani Khad. About 54.21 MLD water has been tapped from these sources and have installed capacity of 47.50 MLD. City has mainly 11 old reservoirs, which cater for water needs of about 1.42 lac persons in M.C area as well as adjoining 18.44 % population of the Planning Area. Total intake from above sources is as under:

Intake point at Gumma station

**Table: 12.1 Intake Sources**

| Source | Capacity ( in MLD |
|---|---|
| Dhalli Catchment | 1.80 |
| Churat Nallah | 3.86 |
| Chair Nallah | 3.00 |
| Nauti Khad | 19.75 |
| Ashwani Khad | 10.80 |
| Giri Khad, | 15.00 |
| **Total** | **54.21** |

**Figure 12.1: Intake Sources**

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**Source:** Water Supply & Sewerage Division, New Shimla

Out of major six sources, Nauti Khad source contributes 19.75 MLD followed by AshwaniKhad 10.80 MLD. Girikhad 15 MLD. Besides, Dhalli catchment, Chair and Churat nallahs collectively contribute 8.66 MLD. Sources are situated in different directions of Planning Area. Hill environs of Shimla adequately Ashwani Khad water supply scheme provide for constructing dams on all sides on the streams, which will on one hand cater for water supply of the city and on the other will add to the attraction for tourists in Shimla.

## 12.1.2 RESERVOIRS

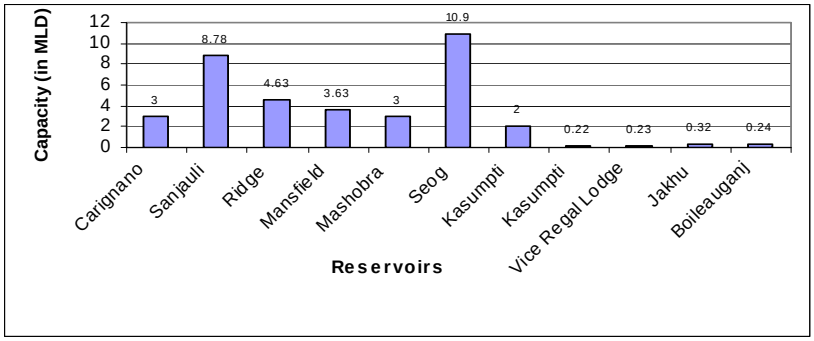
12.1.2.1 Reservoirs are spatially distributed in and around the Municipal Area as well as Planning Area. Presently, there are 11 major reservoirs having storage capacity of 36.92 mld. Besides, 28 reservoirs having capacity of 5.8 mld, water reservoirs are also available in different localities as per requirements of the various sectors. Existing reservoirs are as under:

**TABLE 12.2 : EXISTING RESERVOIRS AND THEIR CAPACITY.**

| Sr. No. | Reservoirs | Capacity (mld) |
|---|---|---|
| 01 | Carignano | 3.0 |
| 02 | Sanjauli | 8.78 |
| 03 | Ridge | 4.63 |
| 04 | Mansfield | 3.63 |
| 05 | Mashobra | 3.00 |
| 06 | Seog | 10.9 |
| 07 | Kasumpti | 2.00 |
| 08 | Kasumpti | 0.22 |
| 09 | Vice Regal Lodge | 0.23 |
| 10 | Jakhu | 0.32 |
| 11 | Boileauganj | 0.24 |
| | **Total** | **36.95** |

**Source : Deptt. of I&PH Division II, Shimla**

**Figure: 12.2 Water Reservoirs' Capacity**




Capacity of reservoirs has been installed in accordance with population size and commercial activities. 16 reservoirs have been proposed in order to ensure fulfillment of the demand of water supply for city residents, which are spatially distributed at various locations along the main reservoirs in Municipal Area, as well as Planning Area. 23 small and medium reservoirs are under construction at various strategic locations as per population size and commercial activities.

12.1.2.2 As per survey conducted by Town and Country Planning Department, there are about 41,060 water taps. The category wise description of water taps is as under:

**Table: 12.3 Number of Water Taps**

| Sr. No | Heads | No. of Taps | % |
|---|---|---|---|
| 01 | Private | 25800 | 62.83 |
| 02 | Public | 12730 | 31.00 |
| 03 | Well water | 1610 | 3.93 |
| 04 | Tank & others | 920 | 2.24 |
| 05 | Total | 41060 | 100.00 |

**Figure: 12.3: Water Taps**

### 12.1.3 Demand and Supply

12.1.3.1 As per records of the Department of Irrigation and Public Health, in lean period availability of water supply to the city is 12.38 mld whereas 30.60 mld during non lean period. The installed capacity of water supply system is 47.40 mld against present availability of water intake sources of 39.21 mld. Cost of water supply is Rs. 28 per 1000 litres. The water supply is inadequate to city residents as well as Planning Area population due to rapid growth of population. Presently, as per 2001 Census, 1.74,789 persons are residing in Planning Area, which has been anticipated to increase to about 3,18,560 persons for the year 2021. Existing water supply is not sufficient to rural settlements and water for these settlements is managed through local natural sources i.e 'Baulies', springs and nallah's which have also been tapped for various Government water supply schemes.

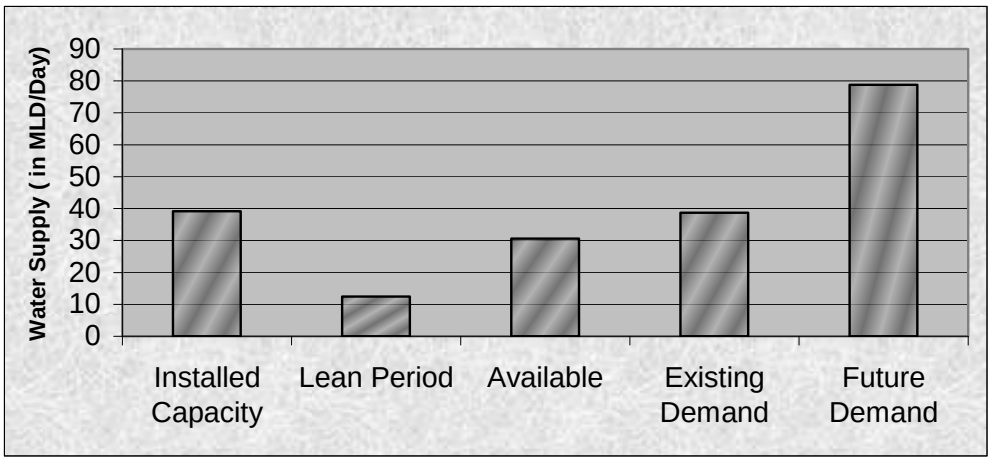
**Table 12.4: Water Requirement (2021)**

| Sr. No. | Sector | Demand of water ( in mld ) | |
|---|---|---|---|
| | | 2004 | 2021 |
| 1 | Residential | 24.50 | 39.00 |
| 2 | Commercial | 0.71 | 4.10 |
| 3 | Institution | 1.65 | 5.51 |
| 4 | Industrial | 1.2 | 5.1 |
| 5 | Fire | 1.31 | 4.6 |
| 6 | Floating Population | 8.07 | 15.57 |
| | **Total** | **37.44** | **73.88** |

**Source: Department of I & PH, Shimla**

12.1.3.2 As 135 liter per capita per day water is required to residents, the same is being inadequately supplied due to acute shortage at water sources. So far as demand and supply is concerned, only 30 mld water is available, against demand of 39 mld. In order to cater water requirement of the city by the year 2021 reliable water sources like Giri River, availability of which is about 20 mld have been proposed to be tapped to augment the existing water supply system. It is imperative to adopt rainwater harvesting techniques and water conservation strategies to cater for the future requirements.

**Figure 12.4: Existing and Future Scenario**




12.1.3.3 A sum of Rs.78 Crore has been sanctioned by the Centre for early completion of the drinking water supply scheme for the state capital from the Giri river. 10 tubewells had also been installed.

12.1.3.4 At present Rs. 70 to 80 crores are being invested every year on ensuring supply of water. The energy bill works out to the tune of Rs. 50.00 crores per year.

## 12.2 SEWERAGE SYSTEM

12.2.1 Sewerage system is an essential urban utility and forms an integral part of physical planning. Sewerage system for Shimla was designed for a population of 18000 persons in 1880. The system continued for around 100 years without any augmentation. Population in the intervening period has increased to about 1,50,000. As a result, system has become grossly inadequate. Therefore, due to excess load certain portions have led to frequent leakages, causing environmental hazards and air pollution. The State Government has now taken steps to modernise the system to manage the city sewage and sullage efficiently for congenial environment of Shimla city. This milestone dream has been fulfilled by the financial patronage of OPEC and State Govt. Therefore, the city has now systematic and properly designed sewerage system and most areas are covered with necessary sewerage networks.

### 12.2.2 EXISTING SEWERAGE SYSTEM

As per information received from City Sewerage Division, 192.7 km. long sewerage networks have been laid down in the entire urban area and adjoining rural areas. Sewerage Treatment plants have been installed at

strategic locations namely, Lalpani, Dhalli, Malyana, North Disposal, Snowdon and Summer hill, having gross capacity of 36 mld. Sullage is also to be carried through sewer lines to the Treatment Plants. Zone wise Sewerage Treatment Plants are as under:

**Table: 12.5 Zone wise Sewerage System and Treatment Plants**

| Sr. No | Location of Sewage Treatment Plant | Capacity in Mld |
|---|---|---|
| 01 | Lalpani | 19.35 |
| 02 | Dhalli | 0.76 |
| 03 | Sanjauli & Malyana | 4.44 |
| 04 | North Disposal (Golcha) | 5.80 |
| 05 | Snowdon | 1.80 |
| 06 | Summer hill | 3.93 |
| | **Total** | **36.08** |

**Source: Sewerage Division, IPH Deptt., Shimla.**

Lalpani zone caters for half of the city population. It has a capacity of 19.35 mld. North disposal (Golcha) zone has capacity of 5.80 mld. Besides, treatment plants have also been proposed at Sanjauli and Malyana with a capacity of 4.44 mld. Keeping in view, the present as well as future population growth, Sewerage Treatment Plants have been proposed at Tutu, Rahai, Mashobra, Chharabra and Shoghi. The cost of sewerage per person is Rs. 1000/-.

## 12.3 SOLID WASTE

12.3.1 Once known for cleanliness, Shimla has presently become a dirty city. Shimla city generates 50 to 60 tons garbage per day, out of which only 50% is collected and managed by the Municipal Corporation. It has provided dustbins and dumpers for the collection of waste at different places

**Solid Waste Disposal in Forest Area Near Dhalli**

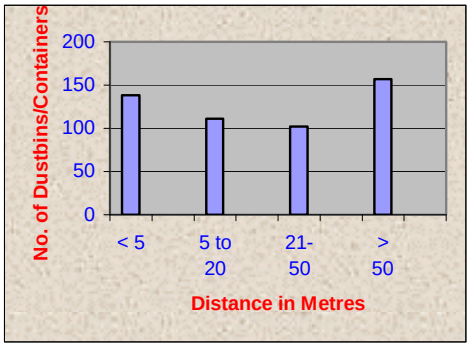
in the city. Only the Mall and the Ridge are cleaner areas. Remaining areas predominantly residential localities namely, Subzi Mandi, Lower Bazaar, Jakhu, Kaithu, Sanjauli, Kasumpti, Boileauganj and Summer Hill are witnessing acute garbage problem. Sanjauli locality is a dense residential area and is not under effective management of solid waste system causing environmental problems and nuisance to residents. As per Municipal Corporation information, 220 dumper containers, 288 manual dustbins, 10 dumper placers, 6 Tippers and 1 Tata Mobile have been pressed into service and solid waste is disposed off at Dharni Ka Bhagicha. 550 Safai Karmcharis are engaged in cleaning, collecting and disposal of waste. A few number of local NGOs are also involved in waste management namely Pragati, Sudhar Sabha, Yuva Sanstha and Green Carpet. The Municipal Corporation has also tendered to provide door-to-door waste collection service for a reasonable amount of Rs. 35/- as collection fee per household. As more than 50 % areas are not accessible by vehicles, therefore it is imperative to enforce the Door-to-Door collection scheme strictly.

**Table 12.6 Location of Bins**

| Distance In Metres from road | No. of Dustbins/ Containers | % AGE |
|---|---|---|
| < 5 | 138 | 27.16 |
| 6-20 | 111 | 21.85 |
| 21-50 | 102 | 20.08 |
| > 50 | 157 | 30.91 |
| **Total** | **508** | **100** |

Source: Municipal Corporation Shimla

**Figure 12.5: Location of Dust Bins**




12.3.2 Sanjauli, Bus stand, Lower Bazaar and Lalpani are provided with dumpers that can easily be cleared every day. There are some areas, which generate less garbage, such areas are provided with iron or concrete dustbins and manual labour is used to empty them.

12.3.3 Shimla City has been experiencing severe environmental degradation over the past few years, damaging the ecology of the area and threatening human health. The Municipal Corporation is trying to motivate and educate people regarding problem of solid waste in the City. It has been observed that Dustbins/containers are not placed at appropriate locations and there is no scientific practice of garbage disposal and appropirate site even for land fill. Municipal Corporation Shimla has installed a Garbage Treatment Plant at Darani Ka bagicha, but it is not fuctioning properly. It is estimated that garbage generation by the year 2021 is likely to be about 90 - 100 tons per day. Therefore, it is imperative to develop suitable sites for Garbage Disposal and Treatment at strategic locations in view of topographical and future development imperatives of Shimla.

## 12.4 ELECTRICITY

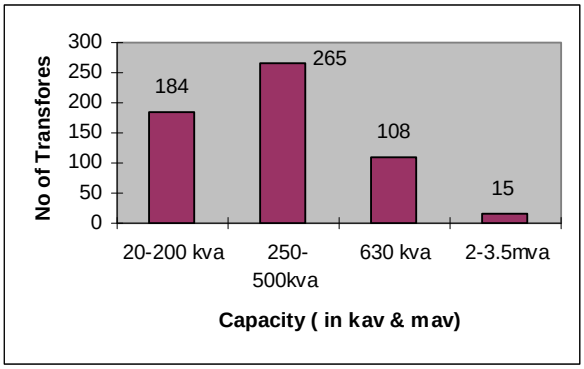
Shimla Planning Area is divided into nine major zones. The Electric sub-stations are placed in accordance with population size and commercial activities. About 577 medium and large range capacity electric transformers have been installed at different places. Major power supply to city comes from the Dehar Power Station, Northern Grid and other power houses. Main Electric Station is located at Totu, which is supplying power to urban as well as rural areas. Two main divisions are City as well as Rural and Urban. City Division serves localities namely, Boileauganj, Ridge, Kalibadi and Sanjauli, whereas Rural and Urban division caters

areas including Mashobra, Dhalli, Khalini, Jatog and Junga. The capacity details of transformers are as below:-

**Table 12.7: Transformers**

| Capacity | No. of Transformers | % age |
|---|---|---|
| 20-200 kva | 184 | 32.17 |
| 250-500kva | 265 | 46.33 |
| 630 kva | 108 | 18.88 |
| 2-3.5 | 15 | 2.62 |
| Total | 572 | 100.00 |

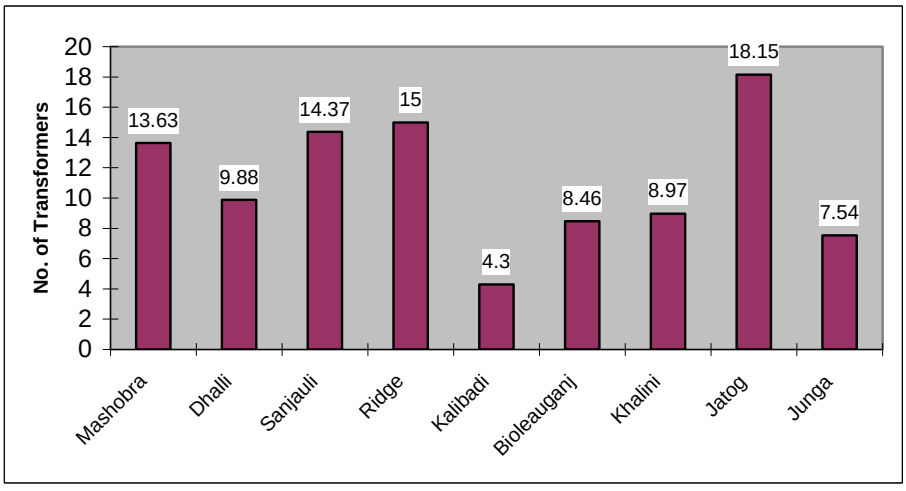
**Figure 12.6: Transformers**




Source: Shimla Division 1&2 HP. SEB

Shimla is not having any heavy industry. Provisions of HT lines are existing in Planning Area which accounts to 2.87 % of the total electric installation. In addition, 46.33 % of transformers having capacity of 250-500 kva are also installed followed by 20-200 kva, which constitute 32.17 % of the total installation. Spatial distribution of transformers is as below:-

**Figure 12.7: Spatial Distribution of Transformers**




The table reveals that highest number of transformers are existing at Jatog, which accounts for 18.15 % of the total including Cantonment area followed by 13.63 % at Mashobra. Sanjauli zone caters 14.37 % of the total. In addition, 15.00 % of total transformers have been installed at the Ridge and the Mall areas, which is the major hub of the city as well as socio-cultural space of the Planning Area. Adjoining rural areas have

also been provided with sufficient number of such facilities to cater for requirements of growing population efficiently. Number of different types of electric connections are as under:

**Table 12.8: Purposewise connections**

| Sector | No. Of Connections | % age |
|---|---|---|
| Domestic | 56141 | 82.80 |
| Commercial | 9081 | 13.39 |
| Industrial | 1895 | 2.80 |
| N.D,NC | 416 | 0.61 |
| Public & Semi Public | 65 | 0.10 |
| Others | 198 | 0.30 |
| Total | 67796 | 100 |

**Fig. 12.8: Purposewise connections**

**Source: H.P SEB Shimla Division I & II**

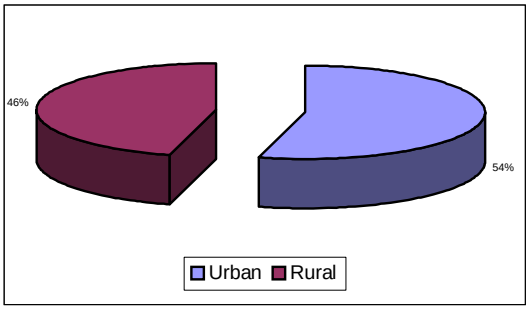
Domestic consumption of electricity in city is high as compared to other sectors on account of Shimla being an administratative and service city accommodating a huge influx of migrant population as well as possesses peculiar climatic conditions. Therefore, 82.80 % of the total connections are recorded in domestic sector followed by 13.39 % connections in commercial sector. 67796 connections have been recorded, out of which 54.05 % connections are in urban area and 45.95 % connections in rural areas. Percentage total rural and urban connections are given below:-

**Table 12.9: Total Connections**

| Sector | Connection | % age |
|---|---|---|
| Urban | 36646 | 54.05 |
| Rural | 31150 | 45.95 |
| Total | 67796 | 100.00 |

Source: Shimla Division I & II

**Fig. 12.9: Total Connections**



## 12.4 DRAINAGE

The Kufri- Dhalli- Sanjauli- Ridge-Totu spinal axis is a drainage divide of Shimla city. The tributaries on southern side go to the Yamuna and those on northern side to the Satluj. Encroachments on nallahs in the city is a common problem and same are susceptible to natural hazards like landslides, flooding and cloud bursts. Disposal of debris is choking natural drainage lines and the same is a matter of serious concern. The courses of many nallahs have been changed during the construction operations and such localities are witnessing drainage problems. There is no proper maintenance and cleanliness of drains along the roads. These aspects need proper attention. Many drains along roads have been encroached upon.

## 12.6 TELECOMMUNICATION

Shimla is being served by extensive networks of telecommunications. Private communication providers like Air-Tel, Reliance and BSNL are providing efficient services to the masses. Telephone exchanges are spatially placed at strategic locations in Planning Area. Majority of households are enjoying communication. Thus, Shimla being a capital has efficient telecommunication networks as compared to other areas.

## 12.7 IMPERATIVES

Shimla being a premier city and tourist destination has potential to strengthen economy of the state. Its basic infrastructure problems are required to be sorted out on priority. Round the clock water supply is required to be ensured. Water supply networks are required to be improved and losses be reduced to minimal. Structures under major electric networks have to be looked in terms of their safety and action against unauthorized constructions has to be ensured. Proper sewerage system for entire Shimla including newly developing peripheral areas need no emphasis. Drainage networks have to be fully geared up to meet with new challenges posed by haphazard construction activities, on one hand and coverage of nallahs, on the other. As infrastructural networks have inevitably to be laid along the roads, adequate width of the same, need no emphasis

# CHAPTER –13

# GOVERNMENT OFFICES AND INSTITUTIONS

## 13.1 INTRODUCTORY

Status of summer capital and cultural centre had been christened since the British Regime in the first half of 18th century. It continued throughout the "British Raj" during 1864-1944 A.D. After, independence and complete Statehood, it became permanent Capital of Himachal Pradesh State. At present, about 150 Central, State and Semi-Government offices exist in Shimla Planning Area. Shimla has become a multi-functional city with dominance of administrative, trade, commerce, traffic and transportation activities. The Secretariat, Vidhan Sabha, High Court, University, Indian Institute of Advanced Studies, Snowdon are like heart, mind and other vital organs of the human body over cityscape. Presently, area under Government and semi-Government offices is 65.57 hectares.

## 13.2 ACTIVITIES ASSOCIATED WITH GOVERNMENT OFFICES AND SPATIAL DISTRIBUTION

13.2.1 The major functional and integral activities associated with Government offices are Administration, Commerce, Technology, Research, Development, Tourism and transportation. Besides, Socio- economic development, preservation of culture and heritage, Spatial Planning and management of urban governance are essential functions of the Government Departments. To perform said activities, these offices are spatially located in different zones of the Planning Area.

**Table: 13.1 Spatial Location of Government Offices**

| Zones/ Location | No. of Departments | % age to Total |
|---|---|---|
| Core/ Mall & Ridge | 28 | 18.66 |
| Bharari | 7 | 4.67 |
| Sanjauli/ Dhalli | 7 | 4.67 |
| Totu/ Tuti Kandi | 3 | 2.00 |
| Summer hill | 13 | 8.67 |
| Kasumpti | 56 | 37.33 |
| Other Zones | 36 | 24.00 |
| **Total** | **150** | **100** |

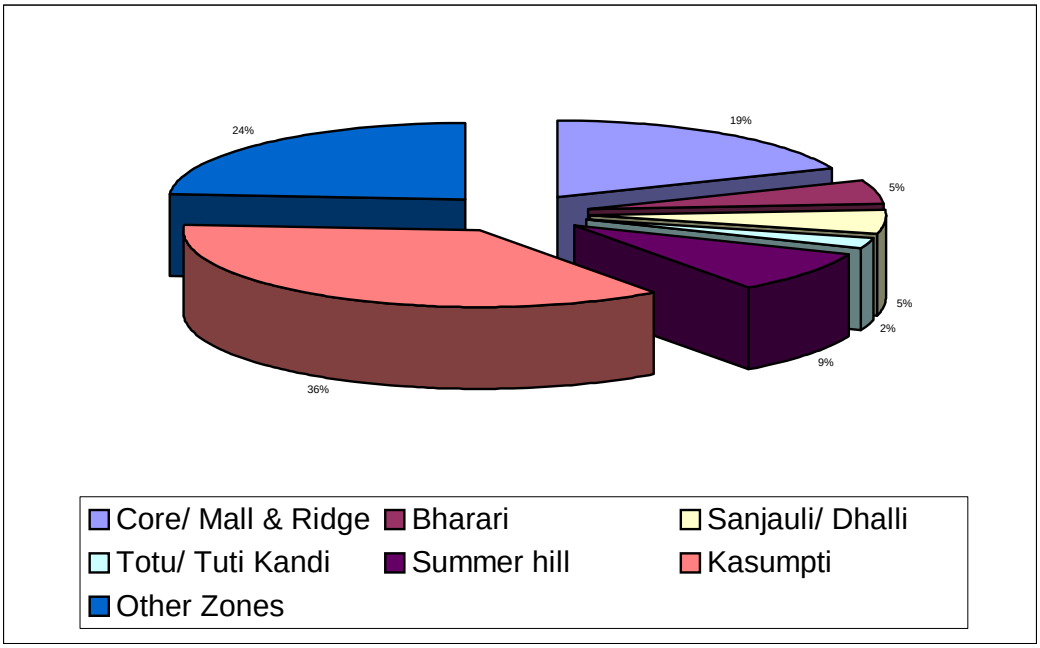
**Source: Town & Country Planning Survey**

Government Office complexes are spatially scattered as per availability of land resources, convenience of developers and its users with respect to physical settings in the absence of appropriate locational model.

13.2.2 As per Survey, 36% of Government offices are located in Kasumpti zone, whereas 19% of Govt. offices are located in the Core area. 10 % Govt. offices are located in Sanjauli and Bharari and 9% Govt. offices are located in Summer hill. 24 % Govt. offices are located in the periphery of Shimla Planning Area.

13.2.3 Tourism, housing, commerce and administration are intermixed with each other, particularly in core area, even though some of them have not any interrelationship. The haphazard location of Govt. and semi-Govt. offices and institutions is a matter of serious concern. Shifting of these institutions is not acceptable to the masses. It is, however, imperative that new offices and institutions may be located at viable locations, away from the existing complexes.

**Figure: 13.1 Spatial Location of Government Offices**

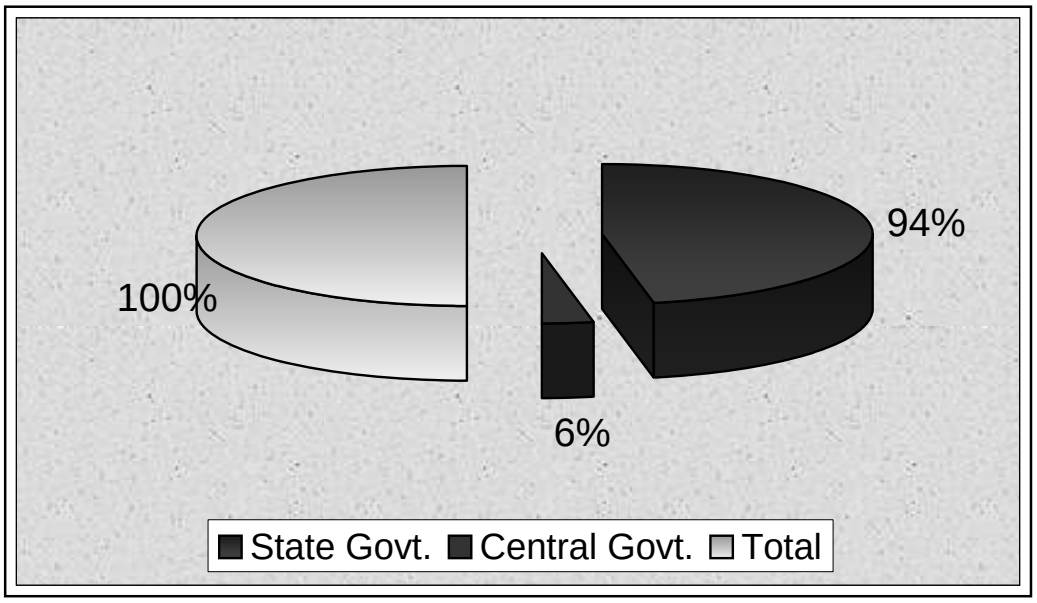


**Office Complex, Kasumpti**

## 13.3 EMPLOYMENT IN GOVT. OFFICES:

As per survey analysis, there are about 15000 permanent employees engaged in 150 Departments, out of which 94 percent employees are in State Government Departments and 6 percent employees in Central Government Offices.

**Figure 13.2 Employees in Government Office**

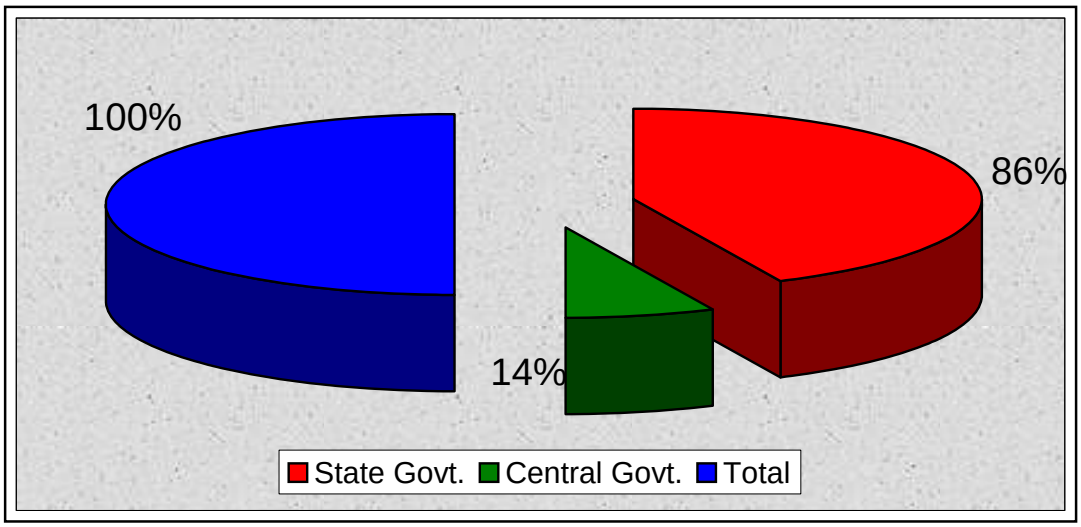



Source: Town & Country Planning Survey

## 13.4 PROPORTION OF STATE AND CENTRAL GOVT. OFFICES

Out of 150 Departments, 86 percent of Departments are under the jurisdiction of State Government and 14 percent are under the jurisdiction of Central Government. Besides this a few offices are under the control of semi-Government and local Government.

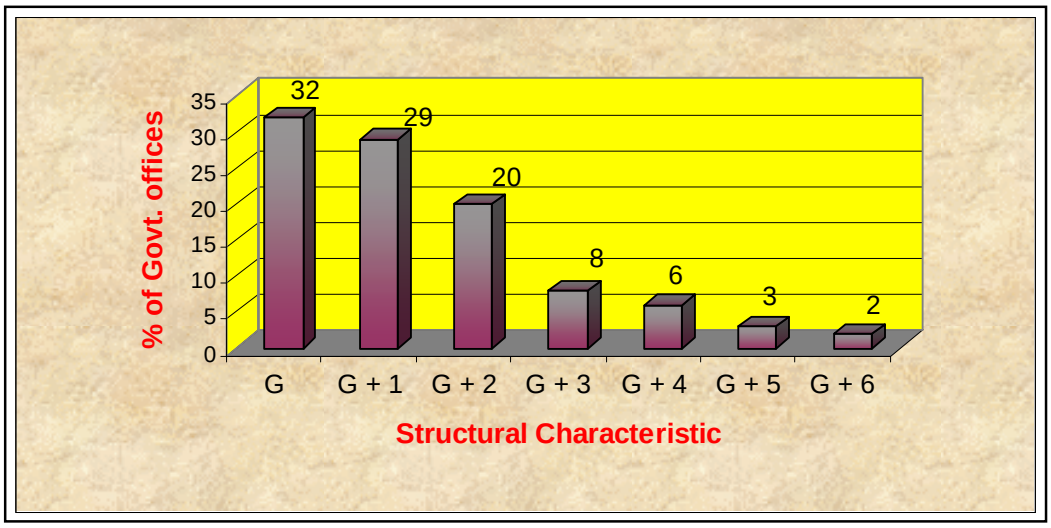
**Figure 13.3: Proportion of State & Central Govt. Offices**




## 13.5 CHARACTERISTICS OF GOVERNMENT OFFICES

### 13.5.1 Structural Characteristics

**Figure: 13.4 Building Height**




Source: Town & Country Planning Survey

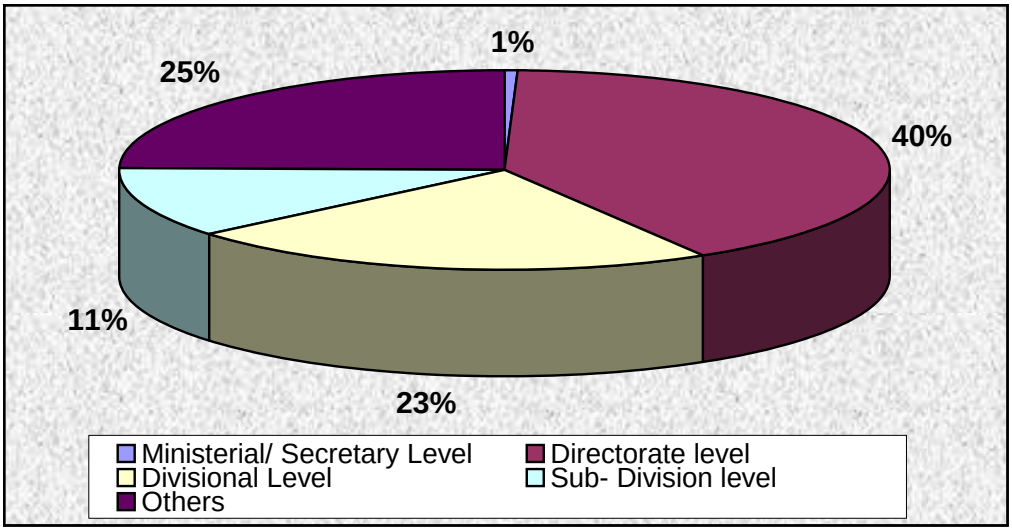
As per Town & Country Planning Survey, most of the Government Offices are functioning in 1 storey structure, which account for 32 percent of total Govt. offices. 29 percent offices are functioning in 2 storey structures. 20 percent of Government Offices are functioning in 3 storey structures, 8 percent in 4 storey and 11 % in more than 4 storey building.

**Table: 13.2 Classification of Government Offices**

| Sr. No. | Major Heads | No. of Offices | % Age to Total |
|---|---|---|---|
| 01 | Ministry/ Secretary Level | 01 | 0.67 |
| 02 | Directorate level | 61 | 40.6 |
| 03 | Divisional Level | 34 | 22.6 |
| 04 | Sub- Division level | 17 | 11.3 |
| 05 | Others | 37 | 24.6 |
| | **Total** | **150** | **100** |

Source: Town & Country Planning Survey

**Figure: 13.5 Classification of Government Offices**




Source: Town & Country Planning Survey

### 13.5.2 Availability of Vehicles

According to Town & Country Planning Survey, on an average vehicle availability in Government offices is three vehicles per office. It has been observed that about 46% offices have their own arrangement of parking, whereas 54 % offices do not have parking facility. Due to lack of

parking, most of the vehicles of Govt. offices are parked on the road, which creates congestion. It disturbs the smooth flow of vehicles on the public roads.

**Figure 13.6 Parking Facility**

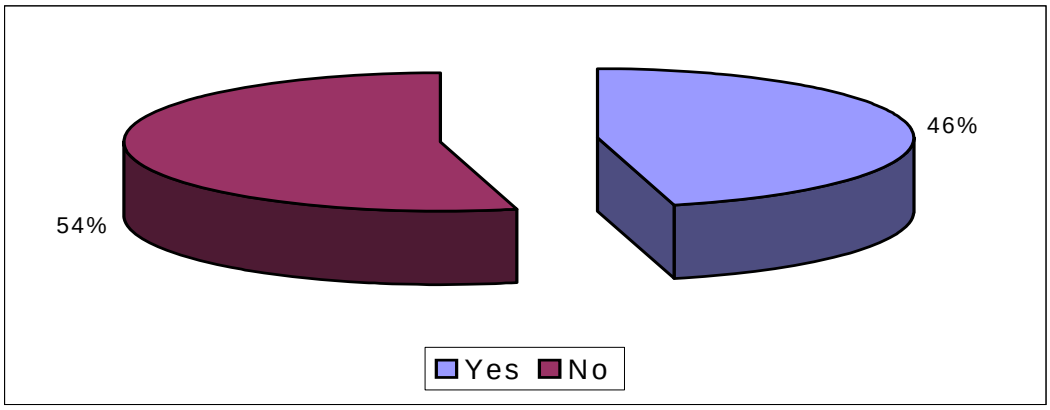
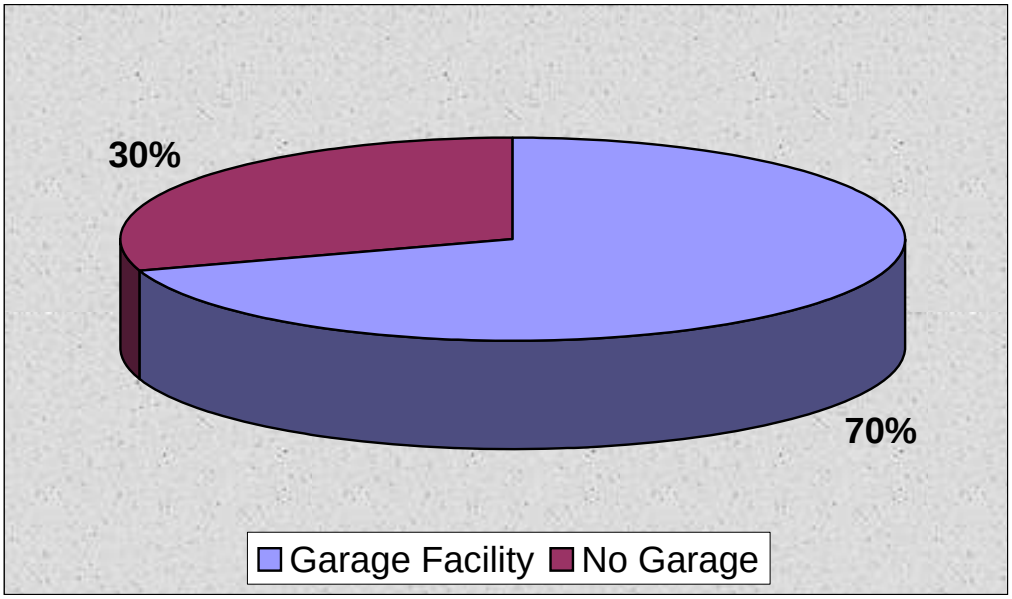



**Figure: 13.7 Garage Availability**




**Source: Town & Country Planning Survey**

## 13.6 INSTITUTIONS

Since British regime, most of the national, international and State level institutions are running in Shimla. Some of the significant institutions are as under: -

### 13.6.1 Indian Institute of Advanced Studies (IIAS)

Located in famous Summer Hill area, where about 25 researchers are doing research on various National and International issues pertaining to Socio- economic aspects, Gender Equality and Higher Studies. It has distinct premises.

### 13.6.2 Institute of Conifer Forest Research: (ICFR)

Located amidst of conifer forest area in Southeast of Planning Area at Panthaghati, this Institute is doing research on various kinds of Himalayan forests in North India and working on the concept of people participation in forest management.

### 13.6.3 Central Potato Research Institute: (CPRI)

A prime research institute in the field of Potato crop is located at Mahasu Peak, Kufri. The Institute provides best qualities of Potato seeds to Potato producing belts in India including Himachal Pradesh. Lahoul & Spiti District is one of the major Potato producing districts using seeds of this Institute.

### 13.6.3 Himachal Institute of Public Administration: (HIPA)

This institution is well known for State level public administrative training programmes for State Services officers/officials including HAS. It also organizes state level workshops and training programmes to officers and conducts Departmental examinations for various categories of public servants. State Institute of Rural Development (SIRD) is also functioning in the premises of the HIPA & imparting training to the Panchayat functionaries including Zila Parishad, Panchayat Samiti & Gram Panchayat.

## 13.7 IMPERATIVES:

The haphazard location of Govt.and semi-Govt. offices and institutions is a major concern. About 19% offices are located in the Central area. Housing, trade, commerce, tourism, offices and institutional activities are mixed with each-other. Core area has become over-crowded and congested. Therefore, it is imperative to decongest core area. Conservative surgery of central area appears to be a viable essential proposition with community participation. As most of the Govt. and semi-Govt. offices and institutions are presently located here and there in

isolation of each-other, and even against requisite traffic, transportation and infrastructure pre-requisites and at the same time, are clashing with prime function of tourism, on one hand and heritage, environment and green cover imperatives, on the other. To solve the problems of integration of major institutional and office complexes as well as to ensure improvement of their environs, proper schemes including their surrounding areas are required to be made and the same enforced strictly. The institutions including University, I.G.M.C. etc. may relocate their spill over activities as deemed fit, in view of paucity of space in existing complexes. In the larger interest and perspective development of the city, it is imperative that activities to the extent as the same can sustain in the requisite complexes be retained and rest be shifted to the satellite town proposed to be developed near Ghanahatti at Ghandal over looking the Dharamshala Highway. The Secretariat complex lacks safety and security due to National Highway Running through it. The road gets blocked and traffic becomes stand still during day hours. The problem is therefore required to be deliberated and sorted out through a comprehensive scheme of the area.

# CHAPTER – 14

# TRAFFIC AND TRANSPORTATION

## 14.1 ROAD NETWORK

The transportation network is predominantly road- based. The role of railway in meeting the requirements of commuters in Shimla is insignificant. The internal circulation pattern of the City is linear and the natural geographical hill spurs have governed the network pattern. The road pattern of Shimla resembles "so much as a dissection of some invertebrate, as elongated tangle of guts and nerves with two or three ganglia". Following are the main roads, which serve the Shimla Planning Area.

## 14.2 ARTERIAL ROADS

### 14.2.1 Cart Road/Circular Road

The Cart Road is the main arterial road of the city, which runs parallel to the Mall in the city area, serving the various parts of the Shimla city. The width of Cart road ranges from 5 metre to 8 metre. All other roads link the Cart road. Cart road is the only road that connects the main city with its either ends. The Lift is the only direct way to the Mall road from the Cart road. Most of the development has taken place between the Cart road and the Mall. Therefore, the main activity zone whether commercial or Government or cultural, is confined to the areas on both sides of the Mall and between the Mall and the Cart road. During the peak tourist season, the Cart road experiences the heavy traffic.

### 14.2.2 Chandigarh-Kaurick National Highway-22

Chandigarh-Kaurick National Highway-22 was also known as Grand Hindustan- Tibet Road. It passes through the city. It runs parallel to the Mall in a West to East direction. Within the city it is known as Cart road. At the foot of Mt. Jakhu it turns southward towards Chhota Shimla, encircling Mt. Jakhu, North-East toward Sanjauli. Total length of this Highway in Shimla Planning Area is about 40 Kilometre. The NH-22 connects Shimla with Solan, Kalka, Parwanoo and Chandigarh, on one hand and Narkanda and Rampur, on the other. Its width ranges from 10 metre to 12 metre.

### 14.2.3 Shimla -Mataur (Kangra) Road National Highway-88

Shimla -Mataur National Highway-88 connects Shimla city with Ghagas, Hamirpur, Jawala Ji, Kangra and Mataur on Pathankot-Mandi National Highway-20. Its width ranges from 6 metre to 9 metre. Its length within Shimla Planning Area is about 13 kilometres.i.e. from Shimla town to Ghanahatti. It acts as lifeline for populous belt of the state.

### 14.2.4 Tutikandi -Dhalli Bye Pass

This Bye-pass connects barrier with Khalini, New Shimla, Kasumpti and further Dhalli. It is acting as an alternate route and easing the heavy traffic load of the Cart road. Its length within Shimla Planning Area is about 25 kilometres and its width ranges from 9 metre to 12 metre.

### 14.2.5 The Mall

The Mall is a "Pedestrian Artery". The main town has grown up in the form of a crescent along it. The Commercial Central Area along the Mall is "hub of social life". The road nearly 8 kilometre in length starts from the Gate of the Vice Regal Lodge and ends at Chhota Shimla. It faces the sunny side of the hill and gloriously overlooks the valleys and distant mountain scenery. The Mall is the longest stretch of pedestrian road in the world , presenting an ambience that is difficult to be seen in any other urban area. The southern slopes immediately below the Mall in heart of the city are regarded to be one of the densely populated hill slopes.

### 14.2.6 Regional Roads

Major arterial roads which emanate from the city are Tara Devi-Jubbarhatti-Kunihar road, Dhalli-Tattapani road, Kufri-Chail road and Kasumpti-Junga road.

### 14.2.7 Local Roads

The local roads are important in the internal flow of traffic as these inter-connect the major/prominent areas of work, business and residential to each other. These important local roads are Chhota Shimla-Kasumpti-Panthaghati, New Shimla central road, Summer Hill road, Longwood-Bharari road, Jakhu road and Mehali-TaraDevi-Shoghi outer bye pass road.

## 14.3 TRANSPORTATION

Shimla suffers from outdated circulation pattern, which was initially designed to suit the pedestrian and animal traffic. The circulation network of Shimla has developed according to the restraints of hill topography and morphology of the city. Steep terrain has restricted the scope of road widening. On road parking is further aggravating the problem. The hill topography discourages the use of slow moving vehicles. The vehicular traffic which constitute mainly of trucks, buses, cars and jeeps is carried by the Cart road which circumscribes the city. Other roads being at different levels, their intersections require more space to function smoothly. However, it is difficult due to congestion at intersection points. Shimla had little traffic problem within the town till reorganization. The traffic problems aggravated with the increase in traffic volume due to administrative and tourism functions of the city. Moreover, due to multi-functional character of the city, the traffic has been increasing at a faster rate. There is a strain on the existing system in areas like Bus Stand-Veterinary Hospital on the southern side and Kaithu-Lakkar Bazaar on the northern side on circular road especially during peak tourist season as well as apple and potato season. The wholesale market for vegetable, fruits and grains being located in the commercial complex in the Lower bazaar, further complicates the transportation problems of the Central Area.

## 14.4. GROWTH OF VEHICLES

Shimla city is suffering from chronic traffic problems, aggravated by the ever-increasing number of vehicles, over the years. Designed for pedestrians, animal-drawn carts and wagons, the road network of Shimla finds it difficult to cope up with fast moving cars, taxis, jeeps, scooters, buses and trucks. As per Survey conducted by the Town and Country Planning Department, about 31 % persons in Shimla use buses as a mode of transport, while 15 % persons use their own private vehicles and 3 % use two wheelers. However, 51% go on foot to work places and education. Number of vehicles in Shimla Planning Area was 16450 in 1995. At present, there are about 22021 vehicles in Shimla Planning Area, which accounts to 34 % decadal growth rate.

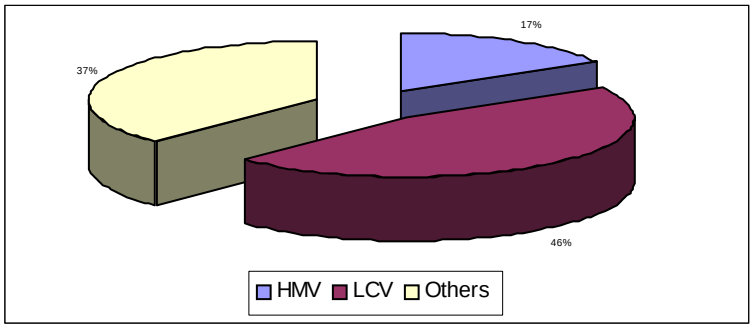
## Table 14.1: Number of Vehicles

| Sr. No. | Category | Private Vehicles | % to Total | Government Vehicles | % to Total |
|---|---|---|---|---|---|
| 01 | HMV | 3139 | 16.33 | 528 | 18.84 |
| 02 | LCV | 7979 | 41.52 | 2118 | 75.56 |
| 03 | Others | 8100 | 42.14 | 157 | 5.60 |
| 04 | Total | 19218 | 100 | 2803 | 100 |

**Source: Directorate of Transport Shimla.**

HMV- Heavy Motor vehicle, LCV-Light commercial vehicle, Others- two wheelers, fire Brigades, ambulances, Tractors and Trolleys etc.

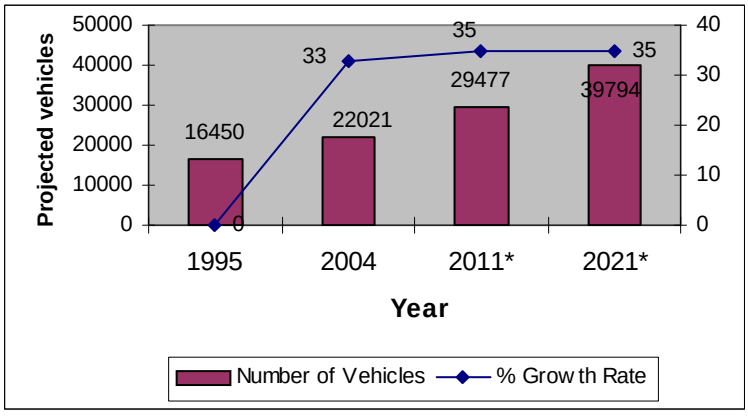
## Figure 14.1: Number of Registered Vehicles in Shimla Planning Area




## Table 14.2: Projected Vehicles

| Year | Number of Vehicles | % Growth Rate |
|---|---|---|
| 1995 | 16450 | 00 |
| 2004 | 22021 | 33.86 |
| 2011* | 29477 | 33.85 |
| 2021* | 39794 | 35.00 |

## Figure 14.2: Projected Vehicles




**Source: Directorate of Transport, Shimla.**

## 14.5 PARKING FACILITIES

Insufficient availability of spaces for parking is a major problem, being faced by the residents of Shimla as well as tourists who come to Shimla with their own vehicles. As per survey, about 40% tourists visit Shimla by their own vehicles. As number of vehicles has increased manifold, there has not been corresponding rise in number of public parking lots. Capacity of a few of parking lots located at the various places is as under:

**Table 14.3 Parking Areas and their capacity**

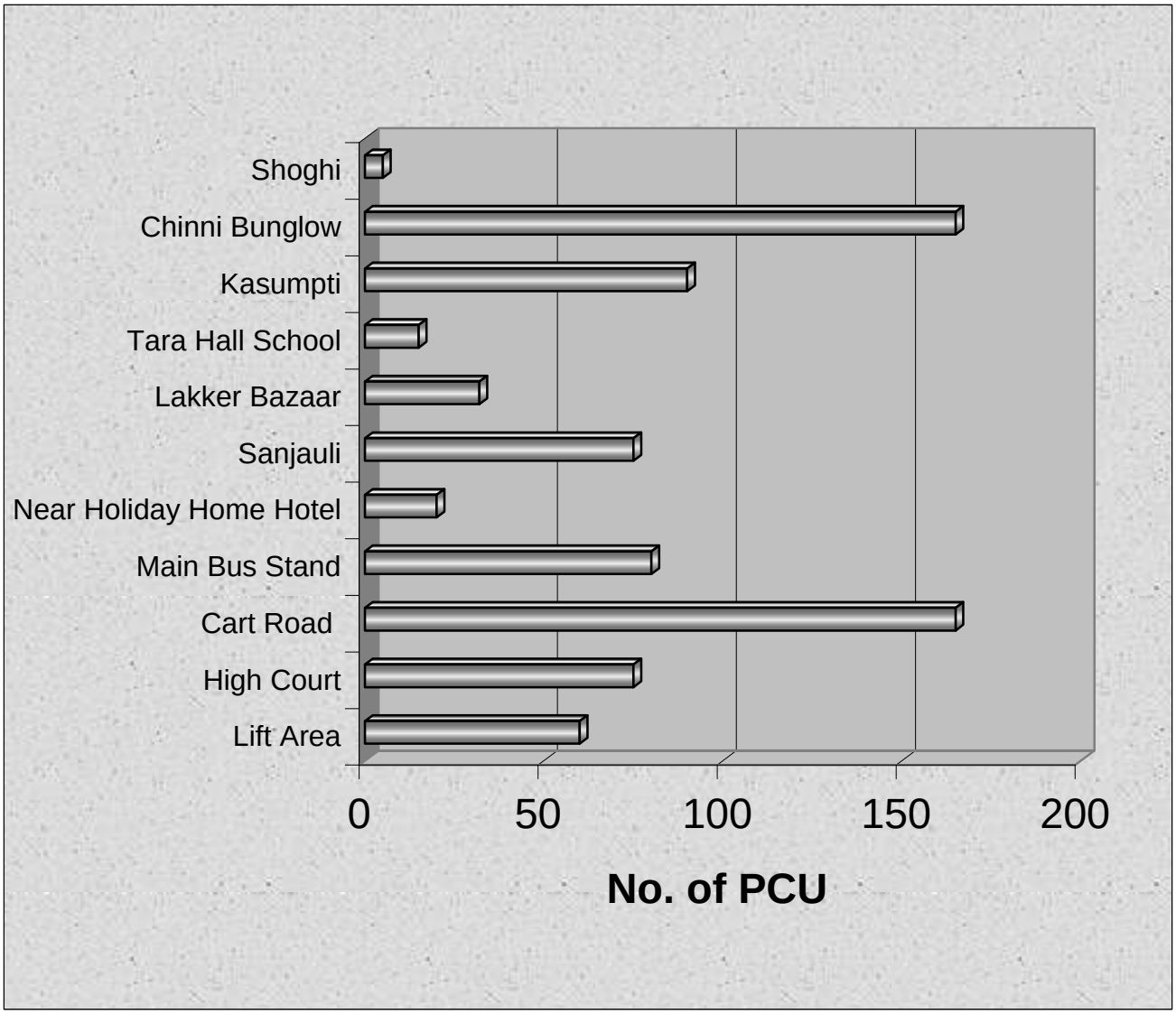
| Sr.No. | Location | Capacity in no. Vehicles |
|---|---|---|
| 01 | Lift Area | 60 |
| 02 | High Court | 75 |
| 03 | Cart Road | 165 |
| 04 | Main Bus Stand | 80 |
| 05 | Near Holiday Home Hotel | 20 |
| 06 | Sanjauli | 75 |
| 07 | Lakker Bazaar | 32 |
| 08 | Tara Hall School | 15 |
| 09 | Kasumpti | 90 |
| 10 | Chinni Bunglow | 165 |
| 11 | Shoghi | 5 |
| | **Total** | **782** |

**Source: Municipal Corporation, Shimla**

**Parking Lot Near Lift**

At present, there are eleven organised parking spaces for 782 Vehicles in Planning Area. Rest of the parking on the various roads is on the Cart Road, Sanjauli area, Tara Hall, Govt. Office Complex at Kasumpti, New Shimla, Totu, Boileauganj, Shoghi and almost everywhere in the city. On road parking is playing havoc with the traffic. Parking lots have to be provided at strategic locations and all the roads be made free from road side parking which is occupying 30 to 40% effective road width. Unauthorized parking is required to be heavily charged.

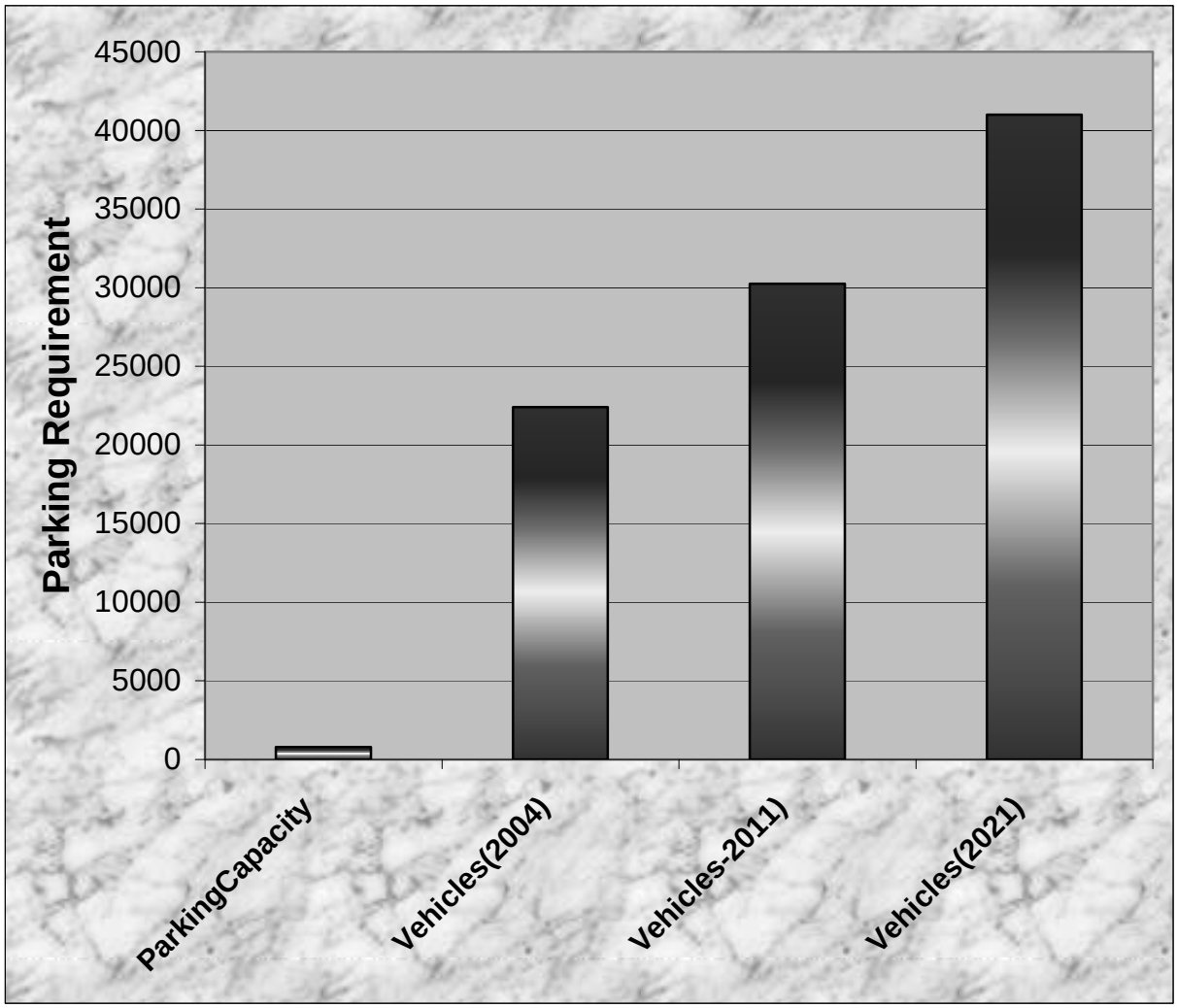
**Figure 14.3 Existing Parking Areas**




**Source: Municipal Corporation, Shimla**

To cope up with parking shortage, a few potential areas have been proposed in this plan as well as by other concerned Departments mainly on valley side of Sanjauli-Lakkar Bazaar road area near Manchanda Medical Shop, U.S. Club, Marina Hotel, Charlivella Chowk to Stocks Place and Chakkar. Parking in the Central Area, particularly in the sealed portion be allowed only after exhaustive studies in terms of already available parking facilities and availability of proper road accessibility. Misuse of any parking lot has to be dealt with stringently. So far as long-term solutions are concerned, multi-leveled self-sustained parking lots be constructed by the Development Authority as well as Municipal Corporation at strategic locations, in view of future requirements and elevators be provided for inter-connecting roads at higher levels.

**Figure: 14.4: Parking Requirement**



## 14.6 TRAFFIC VOLUME

Traffic Volume Survey was undertaken at the following nine locations during the hours 8.30 AM to 10. 30 AM and 4.30 PM to 6.30 PM on 19th October, 2004. Outcome of the survey is as under:-

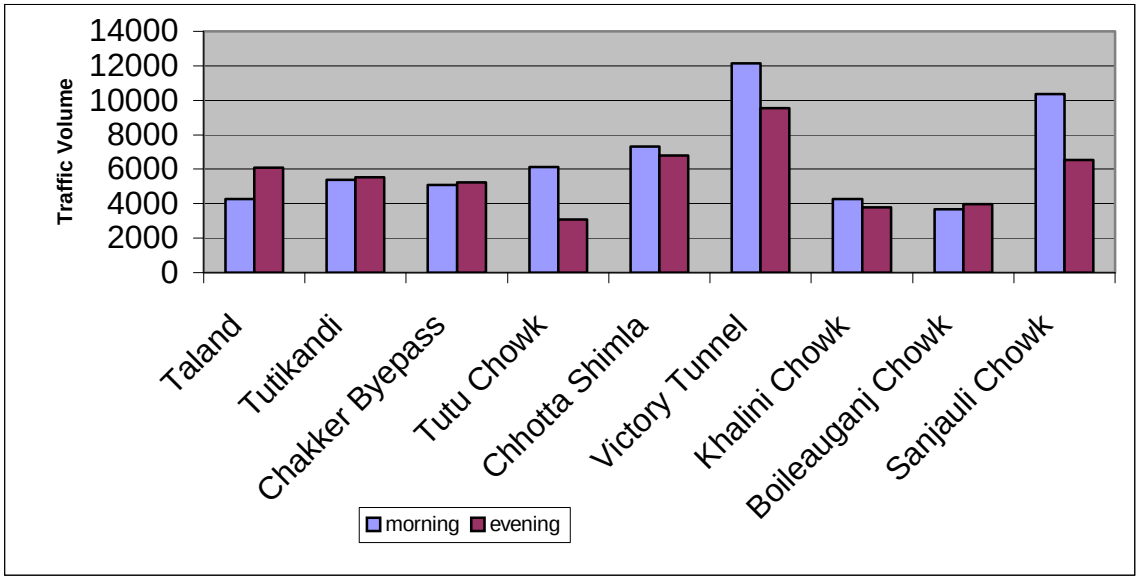
**Table: 14.4 Traffic Volume (Passenger Car Unit)**

| Junction | Duration | TW | LMV | Bus | Truck | Total |
|---|---|---|---|---|---|---|
| Talland | Morning | 274.5 | 3925 | 2127.5 | 81.4 | 6408.4 |
| | Evening | 246.75 | 3820 | 1950 | 85.1 | 6101.85 |
| Tutikandi | Morning | 303.7 | 3164 | 1117.72 | 810.3 | 5395.72 |
| | Evening | 246.75 | 3178 | 1198.82 | 901.8 | 5525.37 |
| Chakker Bye pass | Morning | 225.75 | 2726 | 1420.8 | 714 | 5086.55 |
| | Evening | 284.28 | 3130 | 1036 | 770.1 | 5220.38 |
| Totu Chowk | Morning | 443.25 | 2224 | 2153.4 | 1309.8 | 6130.45 |
| | Evening | 195.55 | 1358 | 1054.5 | 477.3 | 3085.35 |
| Chhota Shimla (near Secretariat) | morning | 373.5 | 5284 | 1409.7 | 251.1 | 7318.3 |
| | Evening | 653.46 | 4880 | 1209.9 | 62.9 | 6806.26 |
| Victory Tunnel | Morning | 702.75 | 7234 | 4070 | 136.9 | 12143.65 |
| | Evening | 528 | 5998 | 2923 | 92.3 | 9541.3 |
| Khalini Chowk | Morning | 377.85 | 2870 | 810.1 | 196.1 | 4254.05 |
| | Evening | 357.65 | 2582 | 699.1 | 150.4 | 3789.15 |
| Boileauganj | Morning | 479.65 | 1916 | 1198.8 | 81.4 | 3675.85 |
| | Evening | 296.5 | 1870 | 1561.4 | 240.5 | 3968.4 |
| Sanjauli Chowk | Morning | 702.75 | 8000 | 1409.7 | 251.1 | 10363.55 |
| | Evening | 653.46 | 4580 | 1209.9 | 92.3 | 6535.66 |

**Source: Traffic Volume Survey by TCP Department H.P.**

It has been observed that traffic volume is very high during peak hours at Sanjauli Chowk, Chhota Shimla near Secretariat, Victory Tunnel, Taland and Tutikandi. Comparative description of Traffic volume is as under:

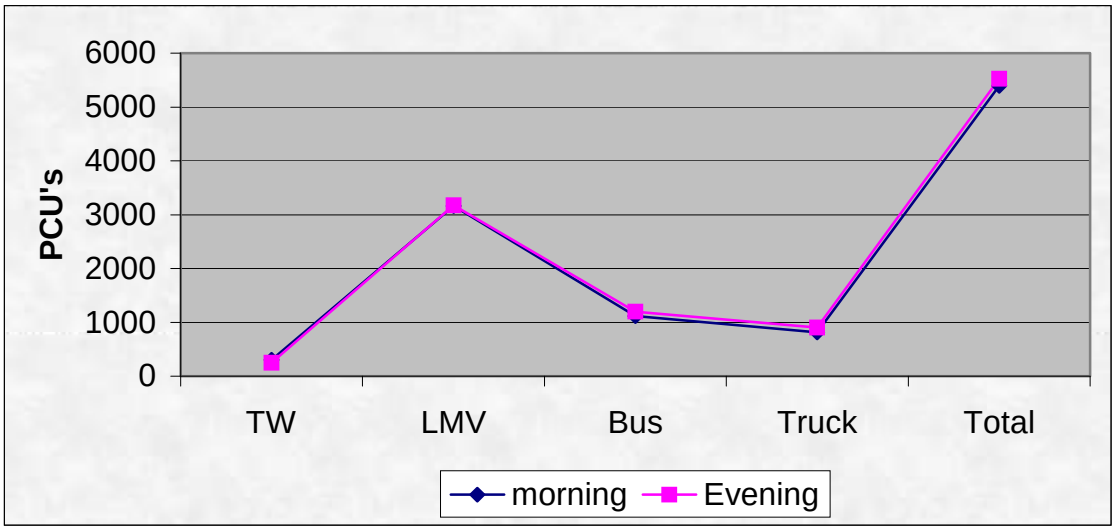
**Figure 14.5: Traffic Volume**




During Tourist season traffic volume increases manifold, which results in traffic congestion and reduces the smooth flow of traffic. Survey reveals that traffic often becomes standstill during daytime at Sanjauli and Chhota Shimla near Secretariat. The Secretariat complex lacks safety and security due to National Highway running through it. It is imperative that only uses conforming to the Secretariat be kept within a belt up to about 100 metres and traffic is restricted on the Highway. It has also been observed that pedestrian traffic is very high at Sanjauli Chowk, Chhota Shimla near Secretariat, near main bus stand and Boileauganj Chowk. It is imperative to maintain the pedestrian character of the Shimla town. In order to cater for pedestrian requirements in congested areas including Bus Stand area, Sanjauli area, Tara Hall area over-bridges have been proposed at strategic locations. Central Area has to be propagated for pedestrians and vehicles may be restricted up to the periphery. From the study of road Geometrics and traffic volume, it is clear that roads and intersections in the Planning Area particularly require engineering improvements and better management including removal of encroachments and unauthorized parking on roads in order to have smooth flow of traffic. The number of vehicles in the city is increasing day by day. The road width is however the same. Traffic and

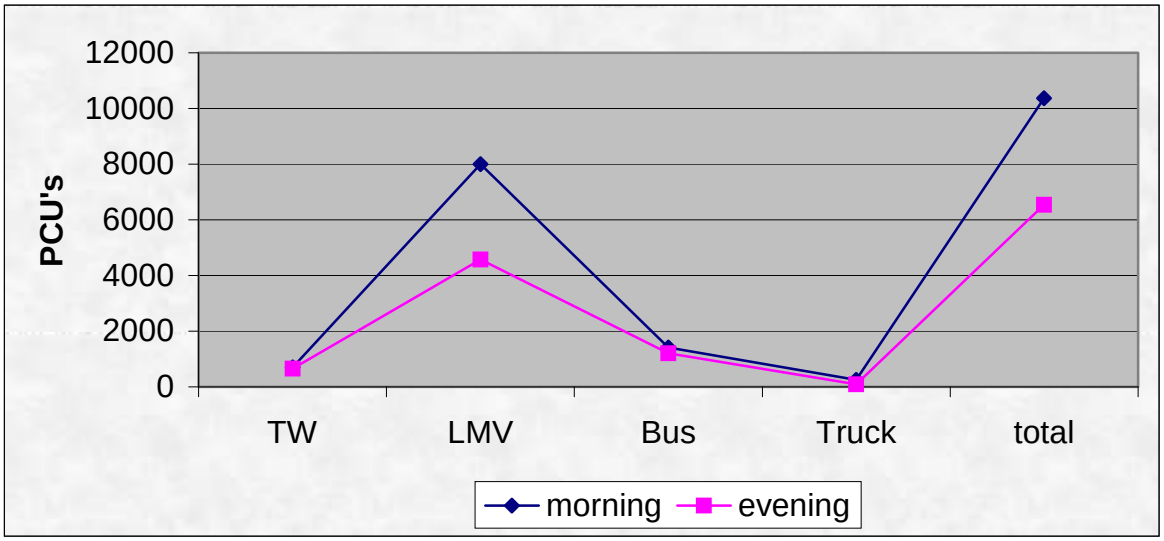
parking problem are therefore multiplying. The description of traffic volume at sensitive points is as under:

**Figure 14.6: Tutikandi**



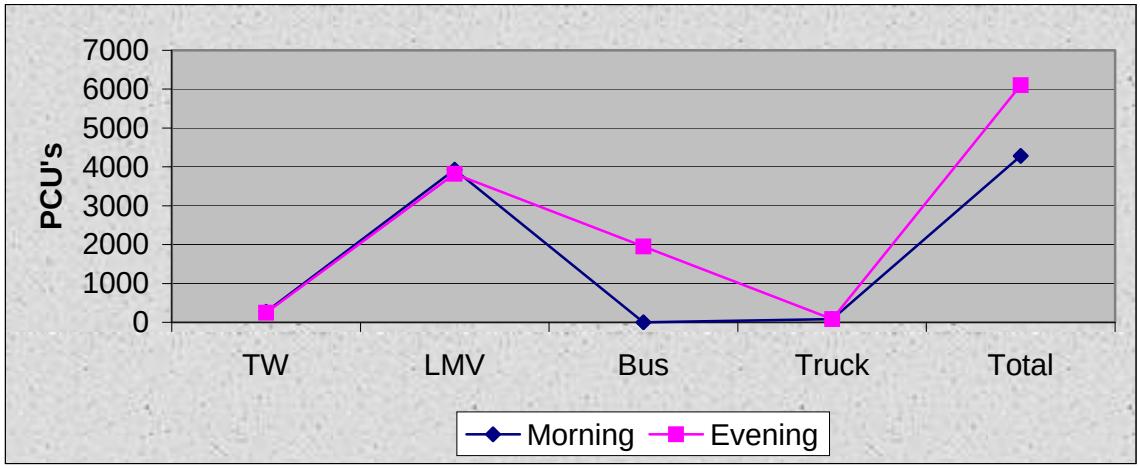

The morning and evening traffic volume is almost the same at Tutikandi

**Figure 14.7: Sanjauli Chowk**



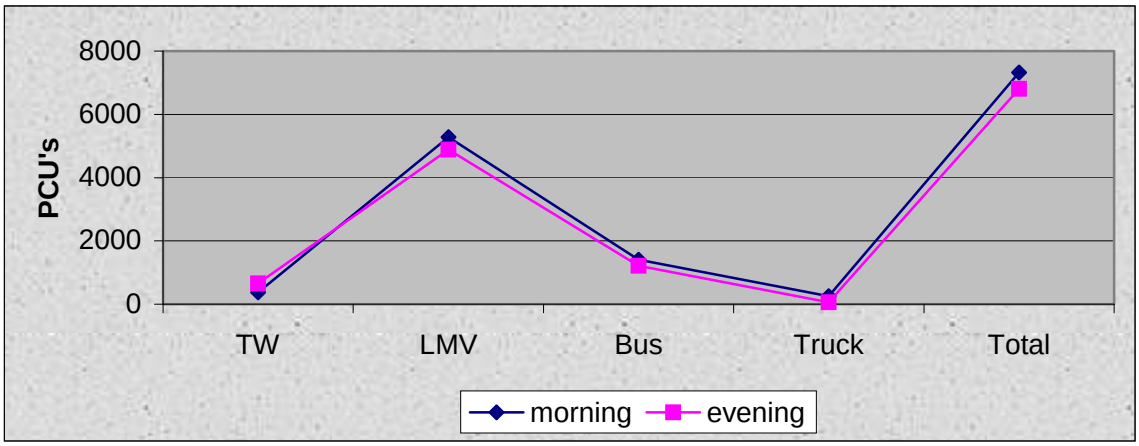

The volume of light motor vehicles and total volume in morning hours is quite high at Sanjauli Chowk in comparison to evening hours.

**Figure 14.8: Taland**



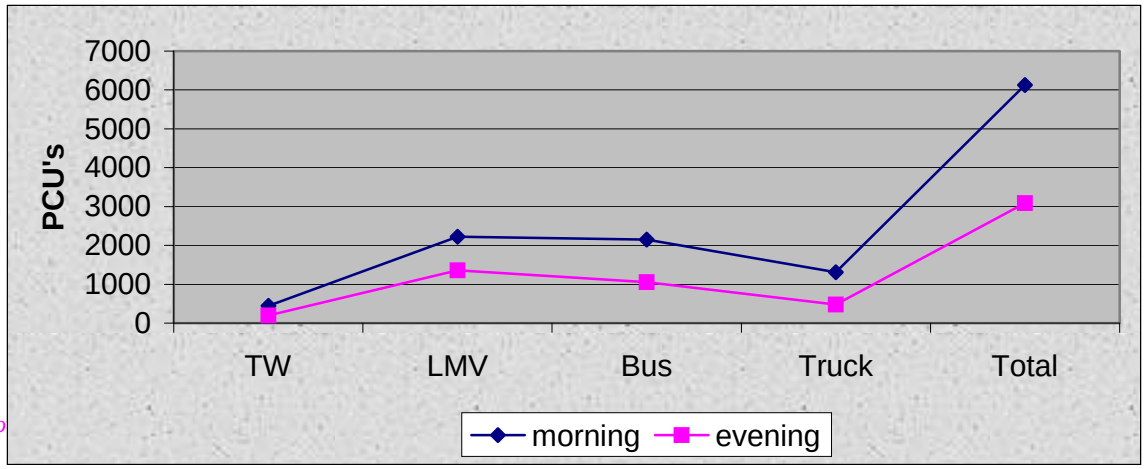

The total traffic volume and bus traffic is higher in evening hours at Talland.

**Figure 14.9: Chhota Shimla**




The morning and evening traffic volume at Chhota Shimla is almost the same.

**Figure 14.10: Tutu Chowk**



The morning traffic volume is higher than that in the specified evening hours.

**Figure: 14.11: Boileauganj Chowk**

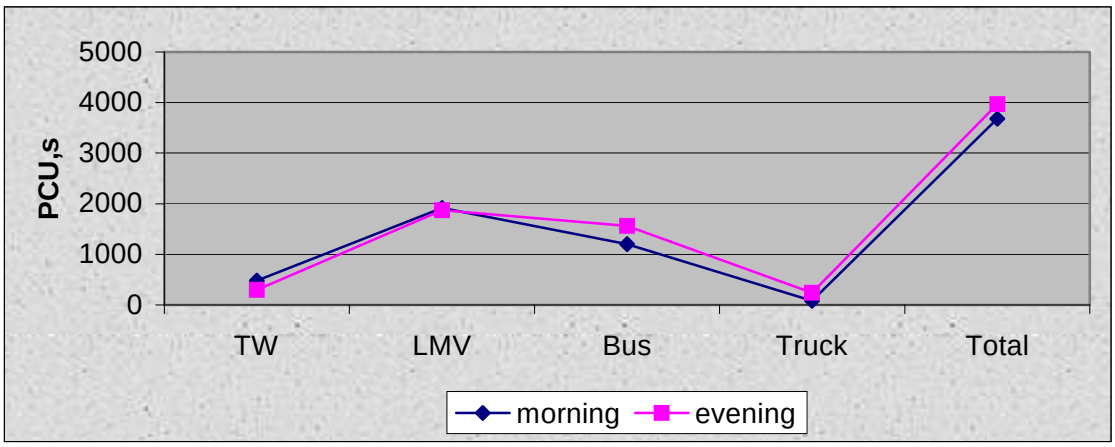



**Figure: 14.12: Chakker Bye pass**

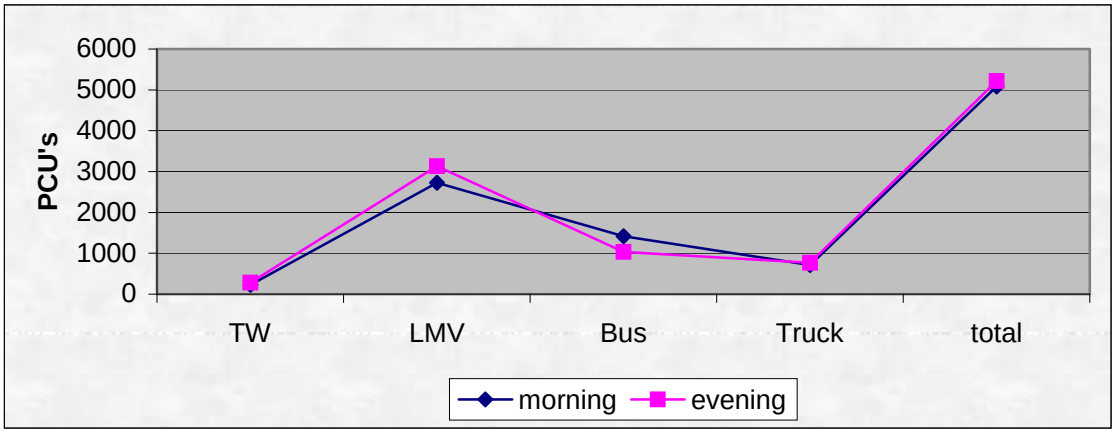



**Figure 14.13: Khalini Chowk**

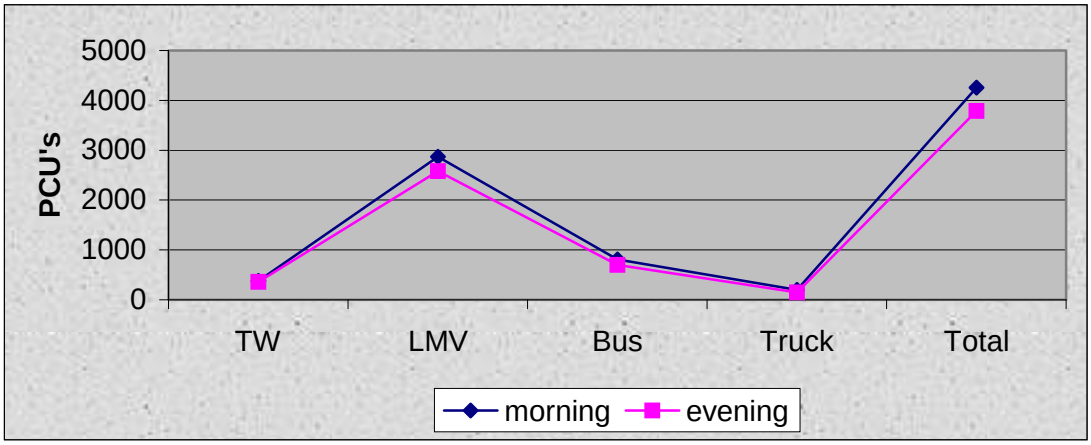
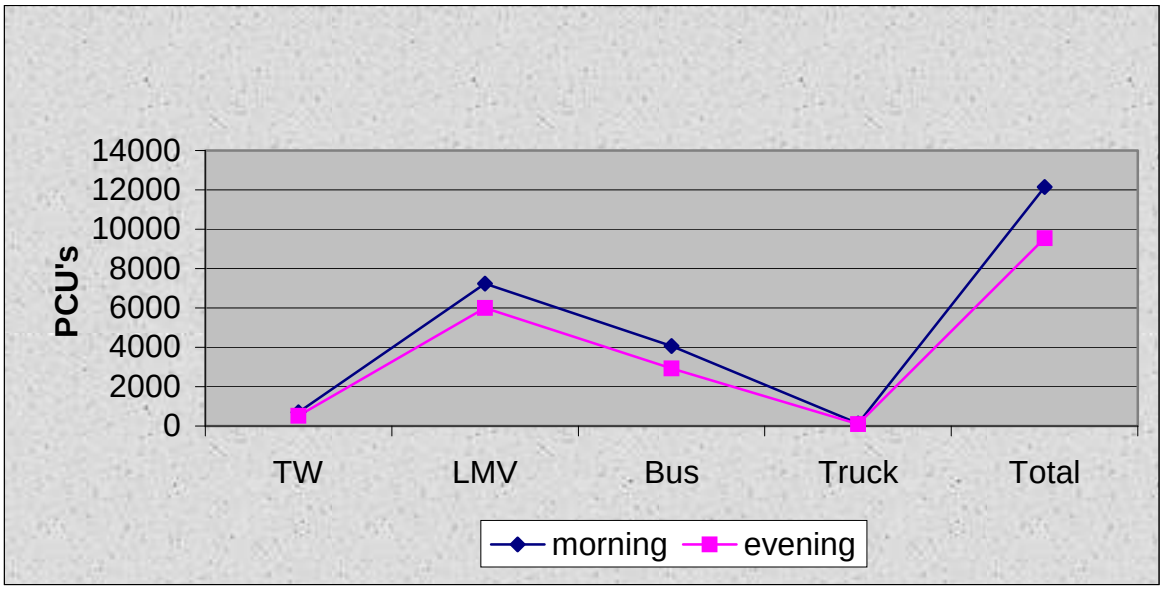


**Figure 14.14:Victory Tunnel**




The morning and evening traffic volume at Boileauganj Chowk, Chakkar Bye Pass, Khalini Chowk and Victory Tunnel is by and large the same.

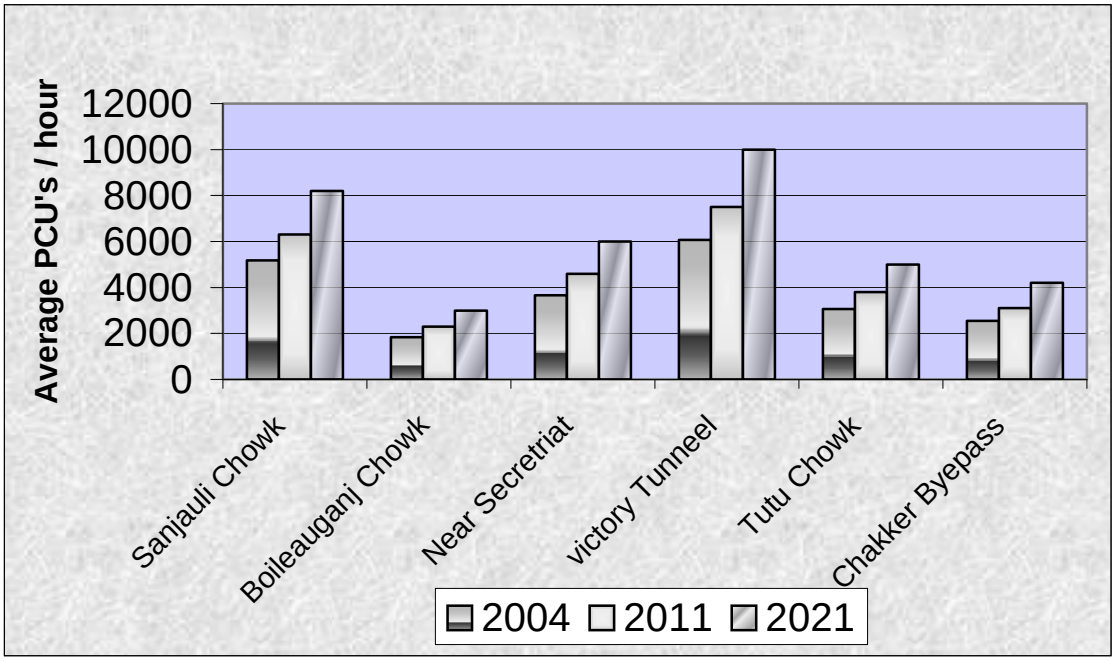
### 14.6.1 Traffic Volume Projection

Based on existing scenario of traffic volume and growth of vehicles, traffic volume has been projected for the year 2011 and 2021. The projections illustrate average peak hour traffic. On the basis of existing trend of tourists, traffic volume survey, the volume of traffic is likely to increase three to four times by the year 2021. Therefore, it is imperative to provide sufficient parking lots at strategic locations and to increase existing widths of the roads. Besides improving the existing road network, traffic management and control measures have to play a crucial role in solving the traffic problems.

**Table 14.5: Projected Traffic Volume**

| Road Junction | 2004 | 2011 | 2021 |
|---|---|---|---|
| Sanjauli Chowk | 5181.77 | 6300 | 8200 |
| Boileauganj Chowk | 1837.92 | 2300 | 3000 |
| Near Secretriat | 3659.1 | 4600 | 6000 |
| Victory Tunnel | 6071.82 | 7500 | 10000 |
| Tutu Chowk | 3065.22 | 3800 | 5000 |
| Chakker Byepass | 2543.27 | 3100 | 4200 |

**Figure 14.15: Projected Traffic Volume**




## 14.7 TERMINAL FACILITIES

### 14.7.1 Inter-State Bus Terminus

The existing Bus terminal is located on the Cart Road. The area of this bus terminal is 300 sq. metres, which is quite inadequate and the same is located in the congested Central Area. It has a capacity to accommodate about 35 buses. It has been observed that traffic volume on this place is about 8000 PCUs per hour. This bus terminal has become over-crowded and traffic often becomes standstill during peak hours. This bus terminal is no more sufficient to cater for the increasing requirements of Shimla Planning Area, regional population and tourists. Construction of the new bus terminal is under way at Tutikandi and same shall be shifted to that location along with requisite parking.

### 14.7.2 Lakkar Bazaar Bus Terminus

This bus terminal is located on the Circular Road below the ridge on northern face. The area of this terminal is about 200 sq. metres and has a capacity of 8 buses. It caters for the needs of Upper Shimla as well as City.

It is inadequate to cater the exiting requirements. Therefore, new Bus Terminal is proposed to be built at Bhattakufar to cater for upper region and it will continue to act as local bus stand.

### 14.7.3 Truck Terminal

There is no organised Truck Terminal in Shimla city. Being a capital city and tourist paradise, Shimla has become a hub of various kinds of commercial activities. Main commercial areas are located on the Cart road. Vegetable, Grain and timber markets as well as wholesale activities are located in the Central Shimla. Due to lack of Truck terminal, loading/unloading facilities, all pursuits pertaining thereto take place on main road which causes traffic congestion, on one hand and is disturbing to the smooth flow of traffic, on the other. Therefore, it is imperative to develop Truck terminals at the periphery of Shimla Planning Area in activities zone in the West in the vicinity of Shimla - Chandigarh National Highway. All out-efforts are required to be made to decongest Central area by shifting of non-conforming activities including truck parking and said markets, so that long awaited urban renewal process is made effective.

## 14.8 BOTTLENECKS AREAS

The entire circulation would obviously continue to be pedestrian oriented, with vehicular traffic almost restricted to the Cart Road. The problems along these roads are numerous. The major bottleneck points are the Bus Stand, Gurudwara to Veterinary Hospital, near St.

Bottleneck in Lakkar Bazaar area

Bottleneck in Sanjauli Chowk area

Edward School, Chhota Shimla Bazaar, Kasumpti Bazaar, Sanjauli Bazaar, Kaithu, Lakkar Bazaar, Boileauganj and Totu. The stretch between the Bus

Stand to Lift need an immediate attention as this place serves as a unloading area for the trucks. The warehousing facilities located in the central area are also required to be replaced and the same provided in the proposed market areas on periphery. The coal depots and warehousing are few of the incompatible uses and the same need immediate relocation. Since the vegetable, fruit and grain markets are located below the Lower bazaar, during apple and potato seasons the problems aggravate manifold. Accidents also occur here at a higher rate as compared to other roads. Blind curve, steep gradient and narrow width of the road near Himland and Bamloe cause traffic congestion. The Mandi Road that goes uphill near Tilak Nagar becomes very steep and narrow near the Boileauganj Bazaar and police station causing obstruction in smooth flow of traffic. Along the Circular Road, local bus stand near skating rink area is probably the most congested area and the wood products reach this point for unloading up to Lakkar Bazaar. The Timber market near skating rink also poses a problem of traffic on Circular Road and the same is required to be shifted to Shoghi.

## 14.9 ROAD ACCIDENTS

It has been found that 149 accidents occurred on the major roads during the year 2003. The analysis reveals that highest number of accidents (34 accidents) occurred on Cart/Circular Road. 22 accidents occurred each on Byepass Road, as well as on Shimla-Chandigarh National-Highway. The reasons for road accidents are negligence in driving, obstructions posed by roadside parking, congestion, inadequate road width, frequent punctures from highways and ribbon development. High traffic volume leads to major accidents. Many stretches on the various roads require scientific management to abate this problem.

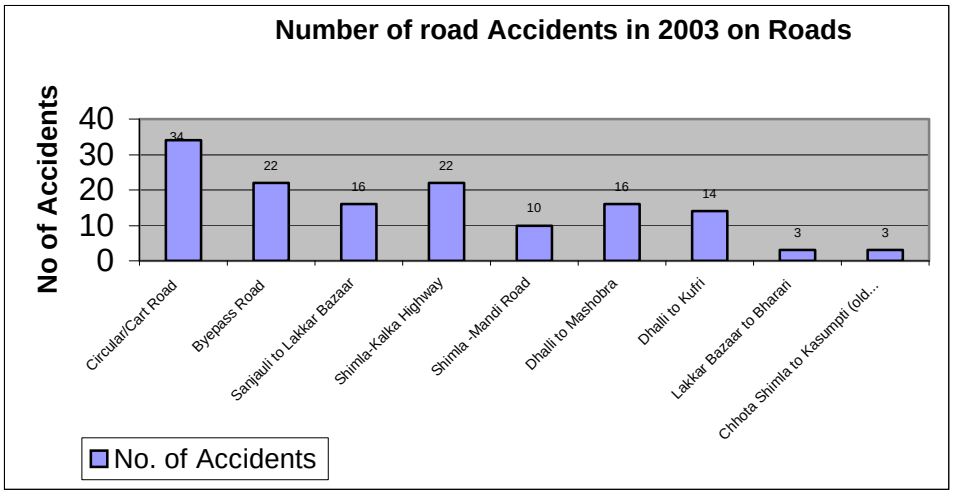
**Table 14.6: Road Accidents**

| Name of Road | No. of Accidents |
|---|---|
| Circular/Cart Road | 34 |
| Byepass Road | 22 |
| Sanjauli to Lakkar Bazaar | 16 |
| Shimla-Kalka Highway | 22 |
| Shimla -Mandi Road | 10 |
| Dhalli to Mashobra | 16 |
| Dhalli to Kufri | 14 |
| Lakkar Bazaar to Bharari | 3 |
| Chhota Shimla to Kasumpti (old Junga Road) | 3 |

| | |
|---|---|
| Mall Road, U.S. Club, Kaithu, Chaura Maidan and Boileauganj | 9 |
| Total | 149 |

**Source: Police Statistics Shimla**

**Figure # 14.16**




## 14.10. RAILWAY


Kalka-Shimla Rail Line

The 96.5 km. Kalka- Shimla Section of the Northern Railway is considered to be one of the most spectacular narrow gauge lines in the world. Built in 1903 by the DLI-UMB-KLK Railway Company, Kalka-Shimla rail route was commissioned for service on January 1, 1906. Connecting Kalka at an altitude of 656 metres with Shimla at 2075 metres, Rail route has 919 mind-boggling curves with sharpest curve being of 48 degrees. There are large number of bridges, longest one is No. 226 with a length of 112.14 metres.There are 103 tunnels, longest being 1143 metres. By declaration of this line as world heritage railway line, a new feather has been added to heritage of premier city of Shimla.

## 14.11 AIRPORT

The airport is located atop a ridge at Jubberhatti, about 12 kilometres from Shimla situated at an elevation of about 5000 feet. It occupies 140 acres of land and has a runway of 3800 feet length. This is just sufficient to allow operations by aircrafts of the size of the 18-seater dornier. The airport is required to be expanded so that bigger planes can be landed on it. It will lead to manifold increase in high class and international tourists.

## 14.12 MAJOR CONCERNS

14.12.1 In the absence of proper land sub-division at individual ownership level, lack of Land Pooling and Reconstitution Schemes for joint contiguous ownerships and proper schemes by the local bodies and Panchayats, there is haphazard network of zig-zag streets, leading to chaos. In the absence of enforcement of provisions of section 16-C by the revenue authorities in terms of registration of irregular and zig zag 'Khasra' plots without directing the land owners for proper layouts illustrating and earmarking proper road network in a hierarchical fashion, various haphazard and congested localities have come up and are now looking eyesores and blots on the townscape of Shimla. Most of these localities have no proper road network. Upcoming ribbon development along the National/State Highways and regional roads emanating from the city and thereby reducing the efficiency of roads is a matter of serious concern. The roadside parking all along the roads further adds fuel to the fire. Due to lack of accesses to the constructions on the slopes vehicles by individuals are parked on the roads.

**Constructions without Proper Roads at Sanjauli**

14.12.2 Shimla, a hill top city, has steep slopes on northern face and comparatively gentle slopes on southern face. It has densely forested areas on eastern side and highly rugged terrain on the western side. Peculiar nature of complicated topography therefore, poses serious

challenges for ensuring an efficient and economical transportation network. As many people intend to settle in Shimla, it is bound to grow, even at the higher cost of living and transportation. As the Old Shimla is completely exhausted and is over-burdened, on one hand and New Shimla as well as major hubs of Sanjaouli, Kasumpti, Chhota Shimla, Khalini, Chakkar, Summer Hill and Totu have also got congested, Shimla has to grow beyond these nodes. On one hand, these areas are required to be decongested and made hazard-free, on the other, new areas have to be developed to cater for future requirements. The transportation network being the major factor to give relief to the existing city and to give way for establishment and development of new areas, the same requires foremost attention. The transportation network in the town has been directed by the rigorous constraints imposed by the rugged topography, characterized by steep slopes. On this account, the vehicular accessibility in the town has been restricted. A large number of people have to walk because of inadequate public transport.

## 14.13 IMPERATIVES

As serious challenges are posed to Shimla, on one hand and environmentally sensitive areas in and around it, traffic and transportation networks require serious thought and meticulous planning. The ribbon development problems, endangering tourists potential, on one hand and causing traffic hazards, on the other, have to be tackled on war footing. To cope up with this problem, all uses including shops, hotels and workshops practically dependent on the roads, must be heavily charged and rigorous steps under the mandatory provisions be taken to curb them from coming up adjacent to major community roads. As the National, State and Regional roads are to serve not only the present generation and are inevitably required to serve the future generations, their sanctity be maintained by ensuring their adequate width and by neither allowing ribbon development nor haphazard accesses. In order to make Shimla an efficient city, it is imperative to ease the traffic movement. Traffic Management Plan be devised by the collaborated efforts of Police Department, Municipal Corporation, SADA's, PWD, Development Authority and Town and Country Planning Department. Besides provision of parking in existing and newly developed areas including New Shimla, it is imperative to develop bus stands and parking lots on the entrance points of various regional roads from where the bye-passes are likely to take off. Bhattakufar Bus

stand for upper area has been proposed to be developed. However, a major parking lot be also developed at Bhatta-Kuffer. The planning and development of an alternate bye pass in between upper and lower bye passes on the Southern face and a new bye pass on the northern face is the foremost necessity. A bye pass interconnecting Ghanahatti with Shoghi on the Western fringes has been proposed to be developed along which activities zone has been proposed to be developed for uncalled for, spill over and non-coforming activities to be shifted from the Central area. In order to shorten the distance of long curvatures and to solve the local problems a few alternate tunnel routes are required to be developed. Planning and development of a few ropeways to cater for the requirements of tourists and to add to life in the city is also necessitated. In view of latest technological advancement metro-underground and partially opening out railway network is also the foremost necessity of this major tourist and institutional destination. Besides the said mass transit systems, planning and development of inter- connecting roads and Sectoral roads need no emphasis. As far as possible public transport be propagated.

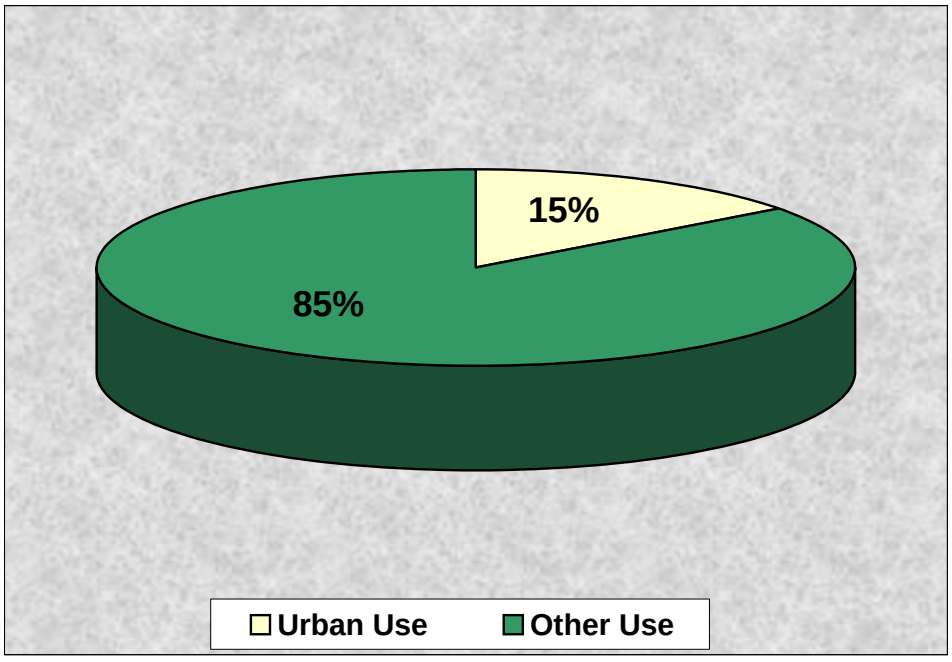
# CHAPTER – 15

# EXISTING LAND USE

## 15.1 STATUS

For ensuring planned and regulated growth of Shimla Planning Area, Government of Himachal Pradesh extended the Himachal Pradesh Town and Country Planning Act, 1977 vide Notification No. 9-12/72-PW (B) dated 24.3.1977. Subsequently, the Planning Area was constituted vide Notification No. 9-12/72/PW (B) dated 30.11.1977. Existing landuse of Planning Area was frozen/adopted vide notice No. DIR-1/77 dated 14.3.1978, whereby change of landuse became mandatory requirement. Subsequently, the Interim Development Plan for Shimla Planning Area was devised and notified vide Notification No. 9-12/72/PW (B) dated 24.3.1979. Total area of Shimla Planning Area is 9950 hectares.Area under urban uses is 1475.76 hectares, which accounts to 15% of total Planning Area. The land use-wise description of various areas is given in following paragraphs.

**Figure 15.1 Proportion of Urban Use**




## 15.2 RESIDENTIAL USE

It comprises of 913.03 hectares, which works out to 9.07 % of the Planning Area and 61.19 % of Urban Area. As per 2001 census, 1,74,789

persons are residing in the Planning Area. Net residential density per hectare is 191 persons. Number of housing units is 45,163. The main housing areas in Shimla are the city core, Kaithu, Shankli, Longwood, Chhota Shimla, New Shimla, Jakhu, Kasumpti, Sanjauli, Summer Hill, Boileauganj and Tutikandi. Most of the housing areas in the form of developed colonies are on the gentle slopes. Presently, city's dwelling units are coming up in the form of private bungalows, concrete houses and residential flats. Presently, the pattern of residential development in Planning Area is along the Highways in the form of ribbon development. Residential cum commercial use is a common sight.

## 15.3 COMMERCIAL USE

The commercial activities are concentrated in the core area of the city. These include Hotels, Restaurants, trade, Commerce, wholesale, vegetable, grain and timber markets. Posh shopping areas are concentrated along the Mall near Ridge. Other important old bazaars are Lower Bazar, Lakkar Bazaar and Middle Bazaar. Presently, there are about 3000 commercial establishments as per survey conducted by the H.P. Town and Country Planning Department. Shopping areas have developed at New Shimla, Sanjauli, Dhalli, Mashobra, Kufri, Chhota Shimla, Kasumpti, Khalini, Boileauganj,Totu, Katchighati, Ghanahatti and Shoghi. Presently, there is 25.22 Hectares area under commercial use, which accounts to 1.71% of the Urban Area. Ribbon development of shops along the arterial roads is a prime concern. Ribbon development is making more harm than good. The construction of repair shops along the highways has posed threats for the smooth flow of traffic. Shops in the Ground floor and residences in down below and upper floor is a common feature. Commercial activity has intermingled with the vital use of tourism, institutional, offices, facilities and services. Unplanned and haphazard commercial activity has posed threat to tourism, transportation and community life.

## 15.4 TOURISM USE

The Salubrious climate and lovely scenery of Shimla attract a number of Indian and Foreign tourists. Shimla acts as a base station to 25 % of the total State tourists. It has been observed that 10000 tourists per day visit Shimla in peak season. As per tourist statistics 1418035 tourists visited Shimla in 2003. Presently, 4049 persons are engaged in this sector and revenue generation is about 2.10 crores. About 205 Hotels and Guesthouses are existing in the Planning Area and 96% of tourist accommodation is concentrated in the central part of city. Presently, area

under tourism use works out to 21.70 hectares, which accounts to 1.47% of the Urban Area.

## 15.5 INDUSTRIAL USE

The small- scale and cottage industries have gradually come up in Sanjauli, Lalpani, Shoghi and Totu localities. Presently, there are about 450 small-scale industrial units and 2300 persons are engaged in this sector. There is 9 hectares area under this activity, which accounts to 0.62% of the Urban Area.

## 15.6 PUBLIC AND SEMI-PUBLIC USE

15.6.1 It comprises of 138.78 hectares area, which works out to 9.40 % of the urban area. Having status of capital city, Shimla is equipped with multifarious facilities and services, Govt. & Semi Govt. offices and specialized institutions. Presently, area under facilities, utilities and services is about 73.21 hectares, which works out to 4.9% of urban area. The utilities including, water supply, sewerage, drainage, electricity, telephone establishments, garbage disposal sites, services including Police, Banking, Fire Fighting and postal services, the facilities like cremation ground, graveyard, cinema halls, theatres, sports complex and museum comprise of 24.92 hectares area.

15.6.2 The facilities of education and health occupy an area of 48.29 hectares. Being an administrative and tourist city, it is the most important educational city of the state. It has a University, medical college, 5 Govt./Semi Govt. Colleges, 21 Senior Secondary Schools, 22 High School and 24 middle schools in Shimla Planning Area. Presently, area under educational facilities is about 34.85 Hectares. All kinds of health care facilities are available for city as well as regional population. State level Allopathic, Ayurvedic and Veterinary Hospitals are also located in it. District level and regional level hospitals include Rippon, Kamla Nehru and a few private hospitals namely Indus, Sanatorium and Tara hospital. Army Hospital is also located in it. Major hospitals are located in core area of the city. Presently, area under medical facilities is about 13.44 hectares. Area under Govt. and semi-Govt. offices is 65.57 hectares, which works out to 4.45% of urban area. At present, about 150 Central, State and Semi-Government offices exist in Shimla Planning Area. About 19% offices are located in core area.

## 15.7 ORGANIZED PARKS AND OPEN SPACES

At present 6 hectares area is under use of organized parks and open spaces which works out to 0.41% of urban area.

## 15.8 TRAFFIC AND TRANSPORTATION

The major city traffic and transportation system takes place on seven major roads, which interconnect with the well known seven hills of the city. Through these roads, about 22000 private and public vehicles are plying daily for office workers and other commuters. Frequent traffic snarls, congestion, bottlenecks and blind curves are the major problems. The existing roads are well inter-connected with the different localities of the city. Area under roads, Bus terminals and taxi stands works out to 357.99 hectares. Area under parking is 1.44 Hectares and Railway lines occupy 12.50 Hectares. Thus, total area under this use has been worked out as 371.93 hectares area which accounts to 25.20% of the Urban Area.

## 15.9 AGRICULTURE USE

Presently, there are 136 villages in Shimla Planning Area. The majority of rural people are engaged in agricultural activities. As per 2001 Census, about 10 % workers of Planning Area are engaged in this sector. Area under agriculture use works out to 2174.75 hectares, which accounts to 21.85% of the Planning Area.

## 15.10 FOREST USE

Geographically, Shimla city comes under lesser Himalayas. It has sub-tropical and temperate forests. Spread over seven hills/ spurs, it is covered with various tree species of deodar, pine, Oak, Kail, Rai and rhododendron. Shimla has eco-sensitive environs. An area of 6080.15 hectares is under forest use, which accounts to 61.12% of the total area.

## 15.11 WATER BODIES, UNDEVELOPABLE LAND AND STEEP SLOPES

The altitude of city from Mean Sea Level is about 1820 metres to 2450 metres. Geologically, its topographic formation is comprised by sub Himalayan hard rocks. The structure formation of topography is rugged, spurs and undulating. Its upper pleatues are therefore, not in a position to cater substantial water symptoms like wells, ponds and lakes. There are a number of nallahs in its vicinity. Some of the hilly terrain not suitable for

any kind of development, is known as Undevelopable land or barren steep slopes. This category comprise of 219.34 hectares, which accounts to 2.20% of the Planning Area.

Existing land use has been worked as under:

**Table: 15.1 Existing Landuse of the Shimla Planning Area**

| Sr. No. | Land Use | Area (in Hectare) | % of urban area | % of Planning Area |
|---|---|---|---|---|
| 1 | Residential | 903.13 | 61.19 | 9.07 |
| 2 | Commercial | 25.22 | 1.71 | 0.25 |
| 3 | Industrial | 9.00 | 0.62 | 0.09 |
| 4 | Tourism | 21.70 | 1.47 | 0.22 |
| 5 | Public & semi- public | 138.78 | 9.40 | 1.39 |
| 6 | Parks & open spaces | 6.00 | 0.41 | 0.06 |
| 7 | Traffic and Transportation | 371.93 | 25.20 | 3.75 |
| | **Total** | **1475.76** | **100.00** | |
| 8 | Agriculture, | 2174.75 | | 21.85 |
| 9 | Forest | 6080.15 | | 61.12 |
| 10 | Water bodies and undevelopable land | 219.34 | | 2.20 |
| **Grand Total** | | **9950.00** | | **100.00** |

**Figure 15.2 Existing Landuse of Shimla Planning Area (2004)**

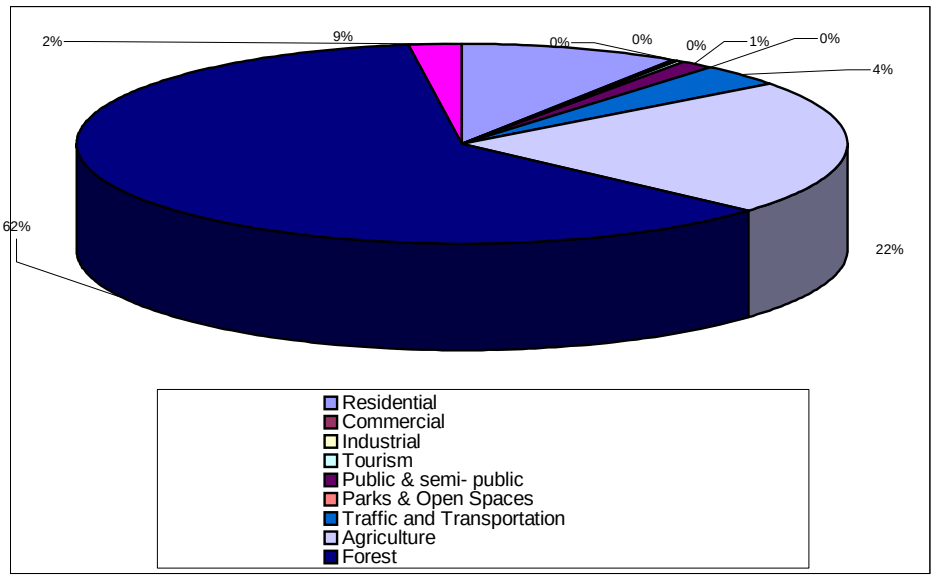
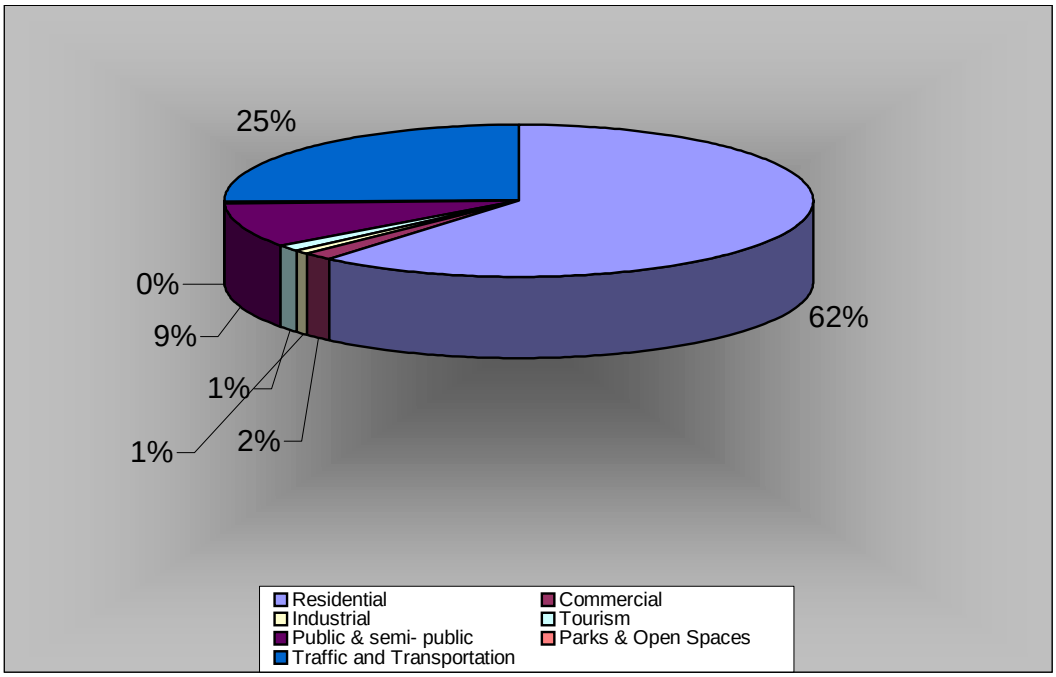


**Figure 15.3 Proportion of Urban Uses**




## 15.11 CRITICAL AREAS

The city is witnessing unprecedented landuse transformation. The residential use is being succeeded by commercial and tourism pursuits. Commercial use is colliding with transportation, tourism and institutional uses. Non-conforming and incompatible uses like workshops, wholesale, grain, vegetable and timber markets and on road parking are badly affecting the predominant and befitting uses as well as community life. The parks, open spaces, forest areas, drainage lines, roads and steep slopes are being encroached upon and threatened by consumerism forces. Over-development of many localities even on steep slopes without requisite infrastructure including roads and parking is a dismal part of the critical landuse scenario susceptible to hazards.

## 15.12 IMPERATIVES

In order to preserve the predominant use of the areas in terms of residential neighborhood, commercial area, tourism, institutional and transportation uses, except incidental uses pertaining thereto, no other use be allowed therein. The non-conforming and incompatible uses are required to be shifted to the Activities Zone proposed in the West. Balanced landuse pattern with maximum upto 60 percent plotted area in

any locality needs no emphasis. Over-developed localities and central area require conservative surgery forthwith to combat their over development crisis.

# CHAPTER –16

# PROJECTIONS AND REQUIREMENTS

## 16.1 PERSPECTIVE

16.1.1 Projections for the Development Plan have been worked out in view of analysis of surveys, studies and the anticipations thereof, on one hand and public aspirations, on the other. Population of Shimla Planning Area is anticipated to be 3,18,560 by the year 2021. As 40% of the total population is anticipated to be workforce, there are likely to be 1,27,724 workers. Out of 9950 hectares of land within Planning Area, 1475.76 hectares is existing under different urbanisable uses namely residential, commercial, tourism, industrial, parks and open spaces, recreational, public and semi -public and traffic and transportation uses, whereas 8474.24 hectares is left under agriculture, forests, barren and undevelopable land.

## 16.2 HARD REALITIES

16.2.1 People are involved in constructions generally three to 10 times than their requirements. Consumerism and urbanization forces are playing havoc with land resources of this premier hill station. Affluent sections of society have badly exploited the city for their personal ends. However, an order has to be established in the city. The cause of economically weaker sections of the society and low-income group has to be fully addressed. Accordingly the land requirements have been worked out on the basis of spatial norms and standards in vogue.

**16.2.2 IDP Shimla Regulations have undergone changes overtime as under:-**

| **Year** | **Maximum FAR** | **Maximum Permissible** | |
|---|---|---|---|
| | | **No. of storeys** | **Coverage** |
| 1979 | 1.80 | 3 | 75% |
| 1990 | 2.00 | 4 | 75% |
| 2000 | 1.75 | 4 | 50% |

**Causes for degradation of the premier city may be underlined as under:-**

(i) Instead of creation of serviced land, SDA engaged in building construction activities, leaving entire Planning Area at the prey of urbanisation forces.

(ii) Haphazard sub-divisions of land and 'Khasra' permissions played havoc with the city.

(iii) Repetitive Ammendments (37) and Retention Policies played havoc with the city, its environment, urban design and heritage.

(iv) Consumerism and urbanisation forces mainly affluent people were instrumental in devastation of the "Queen of hill Stations" and reducing it to a concrete jungle.

(v) Lack of coordinated efforts of authorities led to piecemeal and lop-sided development and thereby waste of resources.

## 16.3 LANDUSE ANTICIPATION

### 16.3.1 Residential Use:

In order to cater for the requirements of housing for the anticipated population of 3,18,560 persons in Planning Area, 80,000 dwelling units shall be required. At the rate of 4 persons per family, presently there are 45163 dwelling units in Planning Area. Thus there will be additional requirement of 34837 dwelling units by the year 2021. It is estimated that there will be requirement of 2124 hectares land at the rate of 150 persons per hectare by the year 2021. As 903 hectares area is existing under residential use, therefore 1221 hectares area is the additional requirement.

### 16.3.2 Commercial Use:

There are 3000 commercial establishments in Planning Area. In view of increase in number of tourists and population, it is anticipated that there will be 5300 commercial establishments in Planning Area by the year 2021. The land requirement for additional shops at the rate of 40 square metre area per shop which includes parking and circulation area, works out to be 21.20 hectares. Besides this an area of about 5.0 hectares of land is required for wholesale and warehousing activity. The total requirement therefore works out to 51.20 hectares. As existing area under commercial use is 25 hectares, total additional requirement works out to 26.20 Hectares.

### 16.3.3 Tourism Use:

In order to cater for the anticipated 22000 tourists in a day during peak season by the year 2021, land required at the rate of 40 sq. metre area per tourist works out to 98 Hectares. As 22 hectares of land is existing under tourism use, therefore 76.30 hectares land is the additional requirement. Eco- tourism is required to be developed. Entire area towards east of Jatogh- Kamna-Devi- Tara Devi Range free from constructions is required to be landscaped and beautified, so that the tourists as well as residents are attracted to the same for recreational purposes. To ease the rush of existing mall, alternate axis are required to be developed in between Ghanahatti and Ghandal along the ridge line of hill running on the north west direction at almost similar altitude Master pieces in view of spill over and future activities are required to be developed along it.

### 16.3.4 Industrial Use:

Existing Industrial activity is in the form of household, manufacturing and small scale. In view of premier hill station character, only eco-friendly industrial establishments are proposed to be developed in the activity zone in West of the city. An additional area of 8.00 hectares has been earmarked under this use.

### 16.3.5 Public And Semi-Public Use:

Shimla being an administrative city, on one hand and tourists' paradise, on the other is equipped with the multifarious institutions, government and semi-Government Offices facilities and services. The entire regional population depends upon the Shimla City for their regional requirements. Major Government and Semi-Government Offices, institutions, health, educational, postal, banking and police facilities and services are existing in the Core Area. Keeping in view, the anticipated population, tourist traffic and regional dependent population, the requirements for amenities, offices and institutions have been worked out. The total requirements for public and semi-public use work out to 274 hectares. As 139 hectares of land is existing under this use, therefore additional requirement by the year 2021 works out to 135 hectares. Presently, area under Government and semi Government offices is 65 hectares. Additional requirement for Government and semi-Government offices works out to 7.00 hectares. The total area requirement for facilities and services works out to 202

hectares. As 73 hectares of land is existing ,total additional requirement for facilities and services works out to 128.50 hectares.

### 16.3.6 Organized Parks And Open Spaces:

At present, 6 hectares of land is under organized parks and open spaces in Planning Area. The low proportion of land under this use is due to scarcity of developable land. Most of the potential Government land is under forests, which accounts to 61.12% of the Planning Area and is serving as green lungs of the city. To meet with the requirements of organized parks and open spaces by the year 2021, sector level parks are required in each sector. Total requirement for this purpose works out to 32.00 Hectares. As 6 hectares of land is under this use, therefore, total additional requirement for organised parks and open spaces works out to 26.00 Hectares.

### 16.3.7 Traffic And Transportation Use:

In order to cater for city traffic and transportation needs efficiently, the existing road network is required to be upgraded in terms of engineering design and widening of roads. The frequent traffic jams, blind curves and bottlenecks have to be addressed. Presently, there are about 22000 vehicles in the Planning Area. However, parking space in the city is available only for 1000 vehicles. Effective road width is getting reduced due to roadside parking all along the Highways and city roads. Therefore, it is imperative to develop parking lots at the strategic locations. The Development Plan envisages for bye pass roads, tunnels, ropeways, development of parking lots, truck terminals, Transport Nagar and Bus Terminals. Auto workshops along the Highways and bye pass have to be shifted, as on one hand they look ugly and on the other, pose enormous traffic problems. An area of 113 hectares shall be additional required. As 372 hectares of land is existing under this use, total requirement for traffic and transportation use therefore, works out to 485 hectares. An Interstate Bus Terminal is being developed at Tuti Kandi and another bus terminal is required to be established for the upper region at Bhatakufar.

### 16.3.8 Agriculture Use:

An area of 1605.87 hectares is the additional requirement under different uses, which shall be met out of existing agricultural and grassland uses, from such areas which are susceptible for urbanisation.

### 16.3.9 Forest Use:

At present 6080.15 hectare area is under forest use. An area of 51.53 hectares has inevitably to be used for bye passes and regional roads to sustain the city. 6028.62 under remain under Forest use.

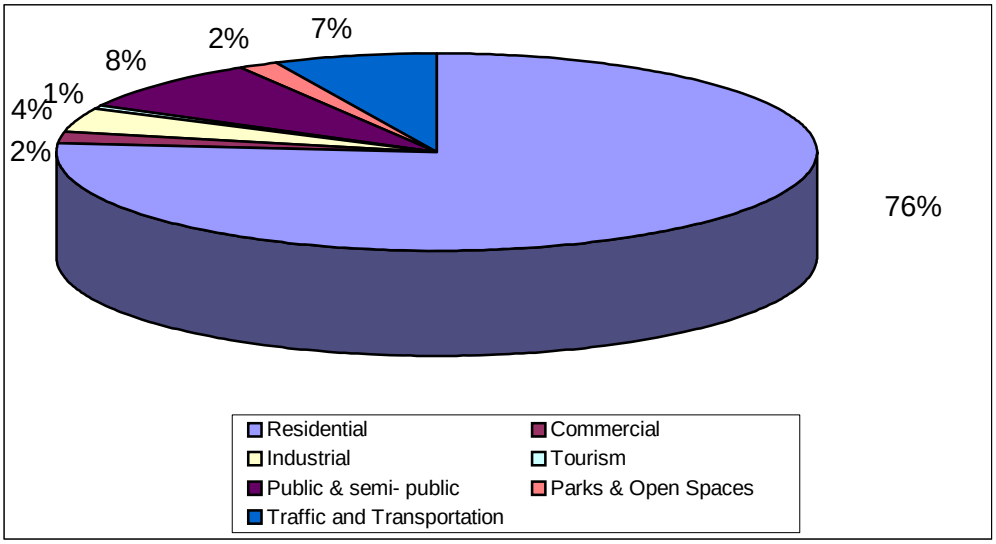
### 16.3.10 Water Bodies And Undevelopable Lands

The land under water bodies and Undevelopable slopes is 219.34 hectares. It shall remain as such.

**Table- 16. 1: Additional Area requirements for Urban Uses**

| Category of Land Use | Area | % of Urban Use |
|---|---|---|
| Residential | 1220.87 | 76.02 |
| Commercial | 26.20 | 1.63 |
| Tourism | 76.30 | 4.75 |
| Industrial | 8.00 | 0.50 |
| Public & semi public | 135.50 | 8.44 |
| Parks & Open Spaces | 26.00 | 1.62 |
| Traffic & Transportation | 113.00 | 7.04 |
| **Total** | **1605.87** | **100.00** |
| Agriculture | 620.63 | |
| Forests | 6028.62 | |
| Water bodies & Undevelopable slopes | 219.34 | |

**Figure 16.2: Additional Area Requirement**




## 16.4 IMPERATIVES

The city has overdeveloped and is under utmost strain. The sunny slopes and spurs have become highly congested and the same require relief by decongesting them. Lack of accessibility to many structures and localities is a matter of serious concern. The localities susceptible to hazards have to be dealt with. The multi-storey culture against hill development imperatives has to be effectively addressed. The city being overweight, whereby it is underrated for tourism purposes, calls for stringent regulatory control mechanism to restore its lost glory and make it sustainable for coming generations as well as tourists. The city is therefore, crying for the following:-

(i) To inculcate culture for planned development.

(ii) Stringent regulations and penalties in respect of Green Areas.

(iii) Heritage features be carried to entire city.

(iv) Survey of constructions susceptible to hazards on slopes and measures thereof.

(v) Restrictions on construction activities in the existing city.

(vi) Conservative surgery of Central Area and Crowded localities.

(vii) As Eco-sensitivity increases from West to East, accordingly stringent control towards east of Jatog-Kamna Devi-Tara Devi range.

(viii) As 4 to 6 storeys are more susceptible for damage during earthquakes, measures are required to be taken regarding constructions having more than 3 storeys.

(ix) As 1/3rd road space is occupied by vehicular parking the same is required to be restored for movement purposes, by ensuring parking lots at strategic locations off the roads.

The requirements, therefore worked out have to be met with primarily in the Activities Zone in the vicinity of premier city site, across the Jatogh-Kamna-Taradevi Range. All non-conforming and incompatible uses are required to be shifted and accommodated in this Zone. Entire area towards east free of inhabited localities and forest cover is to be beautified, landscaped for harnessing tourism and to give relief to local population.

## 16.5 CONSULTATION PROCESS

16.5.1 12 deliberations were held prior to initiating process of preparation of Development Plan with stake holders, representatives of various departments, N.G.Os, public representatives etc. and common masses.

16.5.2 National Seminar of Institute of Town Planners was held on 19.12.2003 to 20.12.2003 theme of which was “Development of Hill Capitals”.

16.5.3 19 Deliberations were held during finalisation of Plan, major of which are as under:-

(i) Institute of Spatial Planning and Environmental Research including Chief Town Planners of adjoining States held on 19.6.2004.

(ii) Municipal Corporation House on 11.8.2004 (including Hon’ble Local M.L.A. Sh. Harbhajan Singh Bhajji).

(iii) Hearing of public objections/suggestions on 24 & 25.9.2004 (including Hon’ble Local M.P. Sh. Dhani Ram Shandil and local M.L.A. Shri Harbhajan Singh Bhajji).

(iv) Various issues including Tourism, Transportation, Infrastructure, Housing, Regulations etc. were deliberated with stakeholders and intelligentsia on October 5, 8 , 13, November 10, 20 and December 1,4. 2004

(v) A specific deliberation was held with Practicing Architects on 20.12.2004

**Note**: Proceedings of the deliberations and recommendations thereof have separately been documented for reference.

# CHAPTER -17

# DEVELOPMENT PROPOSALS

## 17.1 PERCEPTION

17.1.1 The Development Plan caters for entire Shimla Planning Area, which consists of Municipal Area, Special Areas. It envisages for the requirements of population of Planning Area, dependent regional population and tourists based on season. Hence, proposals have been finalized in view of community aspirations, potentials of land and recommendations of series of deliberations held with professional experts, stakeholders and the community. The Development Plan is a document of common man, a document of the public/community and that of the local bodies, Development Authority, Special Area Development Authorities and the Government.

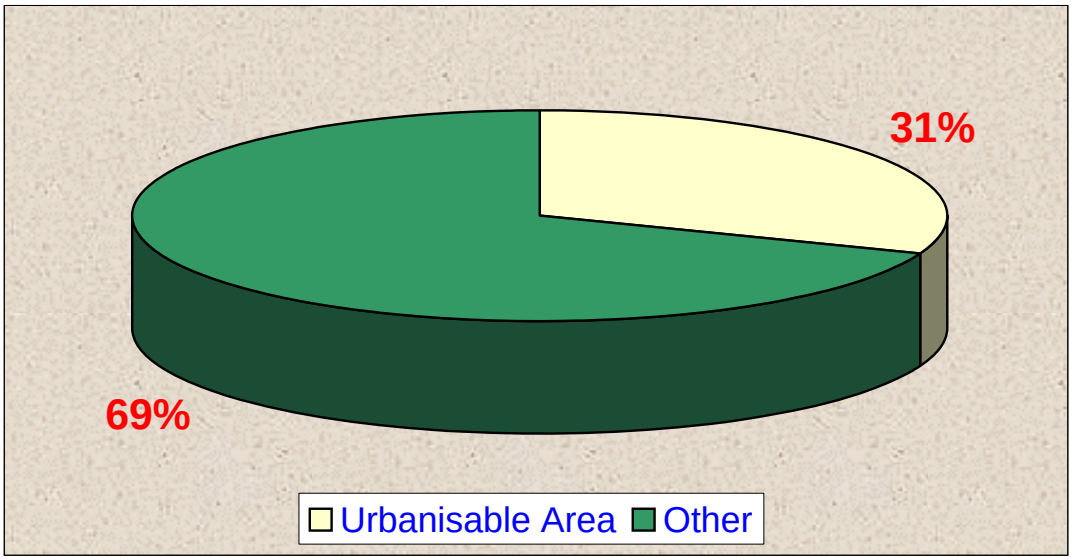
17.1.2 The northern, eastern and southern fringes are highly eco-sensitive and fragile for development. Need based construction for original local inhabitants shall therefore be allowable in these areas. Those who have already purchased lands in these areas may be allowed need based single storey and attic constructions. Obviously as spinal east -west axis of development namely Dhalli-Sanjauli-Snowdon-Central Shimla-Boileauganj-Tutu and slopes on either side have already over-developed, no more development should be allowable in these areas. The western fringes from Shoghi to Ghanahatti along an outer bye pass is therefore, required to be developed for all those activities which are required to be shifted from the Central Areas and congested pockets. These include non-conforming uses like grain market, wholesale, timber market, workshops, transport Nagar and truck stands. For spill over functions and residential purposes, a township has been proposed at Ghandal near Ghanahatti along the spur projecting towards West. The spill over educational functions have to be accommodated at Vaknaghat. Fagu may accommodate the tourist spill over activities, wherein the single storey huts shall be allowable in consonance with ecological imperatives.

## 17.2 IMPERATIVES

17.2.1 The Development plan envisages allocation of land for urban uses to meet the future requirements and proposed land use structure has been devised accordingly. Hence various land uses have been proposed, keeping in view, the availability of developable land in each sector, holding capacity in terms of population and

activities, conformity of land uses of surrounding areas, site characteristics ,convenient distance of work place from residential areas, land values, heritage and eco-logical imperatives.

**Figure 17.1: Proportion of Urbanisable Area**




17.2.2 Out of 9950 hectares of land within Planning Area, 3081.41 hectares is earmarked under the different urban uses. Non-Urban uses comprise of 6868.59 Hectares. Agriculture use comprises of 620.63 hectares, forests have 6028.62 hectares and undevelopable, barren land and water bodies comprise of 219.34 hectares. As the Government land is scarce, entire development has to take place on the land of individuals and in agricultural areas as well as grasslands on less than $45^0$ slope.

## 17.3 PROPOSED LANDUSE

### 17.3.1 Residential use:

17.3.1.1 An area of 2124.00 hectares has been earmarked for residential use in Planning Area, depending upon the availability of developable land. As area of nursery schools, sub-post offices, dispensaries, convenient shopping, hawkers and other lower order amenities can not be detailed out in Development Plan, their landuse requirements have been included in residential area. Presently, the population of Shimla Planning Area is 1,74,789 persons and there are 45,163 dwelling units. By the year 2021, population of Planning Area is likely to be 3.18,560. It is estimated that total demand

for housing by the year 2021 will be 80,000 units. Overall residential density is likely to range from 100 to 150 persons per hectare.

17.3.1.2 In order to cater for the demand for housing, areas for residential use have been proposed as per availability of developable land in Planning area namely at Ghanahatti, Shoghi, and on west periphery in the vicinity of Activities Zone along the Ghanahatti and Shoghi Bye pass. The Central Shimla has become over- crowded. Population density in a few pockets of Central Shimla is above 2000 persons per hectare. Many structures have out-lived their life and same have to be reconstructed. No more construction shall be allowed in Central Shimla and congested pockets. Conservative surgery has been proposed to be applied to this area under patronage of Shimla Municipal Corporation. In the process of conservative surgery, the residents are to be provided with residences on the western periphery and workplaces in the central area.

17.3.1.3 In order to cope up with the housing requirements for projected population and migrants, three Satellite Towns have been proposed namely at Vaknaghat, Ghandal and Fagu. Ghandal will cater for spill over activities of Shimla and supporting population. Vaknaghat will fulfill the educational requirements and Fagu will cater for tourists' requirements. In order to control the migration from different parts of state, a counter-magnet in the vicinity of Ghagus, central and nodal location has been proposed to be developed.

### 17.3.2 Commercial use:

17.3.2.1 The commercial activities have come up here and there in every nook and corner of the city. Presently, there are 3000 commercial establishments in Planning Prea. It is anticipated that number of commercial establishments is likely to increase to 5300 by the year 2021. Therefore 51.20 hectares of land has been allocated for commercial use. An area of 15 hectares has been proposed for wholesale and warehousing activities.

17.3.2.2 Haphazard commercial pursuits, encroachments on the roads and intrusion and collision thereof with other activities is presently playing havoc. It has been observed that more than 65% commercial establishments are located in Central Shimla. All out-efforts are required to be made to decongest Central Shimla by shifting of wholesale commercial activities, grain market, vegetable market, timber market and non-conforming activities from the Central Shimla to the western activity zone.

Efforts have to be made to uphold the original character of Central Shimla that was primarily developed by the British and has unique heritage.

17.3.2.3 The development Plan envisages to restore the original character of Shimla. The plan, therefore proposes for dispersal of commercial activities to the periphery of the Planning Area. Modernized District Commercial Centres at Ghanahatti, Shoghi and Jathia Devi on Kunihar road are proposed to be developed. Satellite towns are to be developed with attractive complexes to cope up with more population and commercial activities.

**17.3.3 Tourism use:**

17.3.3.1 Shimla is the "Queen of Hill Stations" and destination for tourists from all over the world. Shimla's salubrious climate, its built heritage, easy accessibility, the splendid views of the snow-clad ranges of the Himalayas, fine walks through oak and flowering rhododendron, enchanting resorts within easy reach, Golf at Naldera and Skiing at Kufri and Narkanda shall continue to make Shimla an attractive destination for tourists throughout the year. Presently, 10000 tourists visit Shimla per day in peak season. On the basis of existing trend of tourists, it is estimated that there will be 22,000 tourists per day traffic during peak season by the year 2021. There are 205 hotels in Shimla planning area, out of which 96% hotels are located in Central Shimla. It is also anticipated that there will be a requirement of 22000 beds for tourists in peak season. Hence, total area of 98.00 hectares has been proposed under this use, out of which 21.70 hectares area is already existing.

17.3.3.2 About 96% of hotels and guesthouses are located in Central Shimla, causing undue congestion and degradation of environmental quality. To cope up with congestion problem of the Central Area, it has been envisaged for dispersal of tourists' accommodation and other infrastructure to the periphery of Planning Area, either to Fagu and to other strategic locations on the spurs. Tourism development has been envisaged to be ensured in consonance with ecological and heritage imperatives. In order to make Shimla a year round attraction for tourists Ropeways have been proposed interconnecting at Tara Devi-Kamana Devi- - Peteroff-Grand Hotel- Jakhu-Dhingu-Kufri. Another ropeway has been envisaged to be Tara Devi-Kasumpti-Jakhu. A parallel Mall is proposed to be created in Ghandal Satellite town on the spur.

### 17.3.4 Industrial use:

In order to encourage local arts and crafts, to accommodate workshops and to establish necessary industries a strategic location in the vicinity of Shimla-Chandigarh National Highway-22 has been proposed. Only eco-friendly industries shall be allowed in this zone. Total area of 17 hectares has been proposed for this use, out of which 9 hectares of land is already existing under industrial use.

### 17.3.5 Public and Semi-Public

17.3.5.1 The Public and semi- Public use includes Government and semi-Government offices, educational, medical, utilities, services, civic centres, socio- cultural facilities, cremation grounds and other public amenities. Presently there are about 150 Government and semi-government offices. Out of these, 20 % are located in the core area. The haphazard location of facilities, services, govt. and semi-govt. offices and institutions is a matter of a serious concern. Most of the Govt./semi Govt. offices and institutions are presently located here and there in isolation of each other. Traffic, transportation and infrastructural problems are negatively affecting the tourism, on one hand and heritage, environment and green cover imperatives, on the other. The Secretariat complex lacks safety and security due to National Highway running through it. It has been observed that traffic volume near the Secretariat complex is more than 3500 Passenger Car Units per hour during peak periods. Bye passing of traffic is therefore of foremost necessity.

17.3.5.2 The total area of 274.28 hectares has been proposed under this use, out of which 138.78 hectares is already existing. An area of 128 hectares has been kept for various facilities, utilities and services like education, medical, sectoral parks, community halls, auditorium etc. and about 7 hectares for Government and semi Government offices. Only sustainable activities are proposed to be further continued. Additional load has either to be shifted to the Activities Zone in the West or to satellite towns at Ghandal and Waknaghat.

### 17.3.6 Organized Parks and Open Spaces:

Presently, 6 hectares area of land is under organised parks and open spaces, which is insufficient to cater for the needs of local residents as well as tourists. However, 61.12% of the total area is under forests and is serving the vital purpose of green

cover. The Development Plan further envisages to provide Sector level parks in each sector. Therefore, total area of 32 hectares has been proposed, out of which 6 hectares is already existing.

### 17.3.7 Traffic and Transportation use:

17.3.7.1 The Central Area is heavily loaded with traffic. East- west National Highway and Circular road are problematic. Most of the traffic is proposed to be diverted by following existing and proposed bye passes as under:

1) Sanjauli Bye pass (4.7 km.): It has been observed that traffic volume at the Sanjauli Chowk is about 5000 PCU,s per hour and by the year 2021 traffic volume is likely to be about 10000 PCU,s on an average. Therefore, Sanjauli Bye Pass road is existing from Government Boys Hostel (on circular road) to the junction of the Kufri- Mashobra Road.
2) Kufri Bye pass (0.7 km): In order to reduce the traffic congestion in Kufri Bazaar Area, this bye pass has been constructed from P.H.C Kufri to beyond Kufri Bazaar on Kufri- Fagu road.
3) Panthaghati- Tara Devi alternate bye pass in between existing upper and lower bye passes measuring 8 kms. has been proposed to be constructed.
4) Totu to Kufta Dhar-Naldehra bye pass measuring 12 kms. has been proposed.
5) Ghanahatti-Jubbarhatti-Shoghi bye pass measuring 15 kms. to bye pass the traffic of both the National Highways.

17.3.7.2. In order to combat the massive regional and tourist traffic, mass transit system through circular railway and public motor transport via bye passes has been proposed to be developed.

17.3.7.3. Tunnels: To solve the traffic congestion problems, four tunnels have been proposed namely:

1)Tunnel No. I : From Tawi to Barrier measuring 0.7 km. at an altitude of 1990 metres from mean sea level.

2) Tunnel No. II : From Kanlong to Shanahan measuring 2.2 km. at an altitude of 1960 metres from mean sea level, on Shimla Bye pass.

3)Tunnel No. III : From HimFed Petrol Pump on Cart Road to Cancer Hospital Nallah at Snowdon area measuring, 0.9 km. at an altitude of 2180 metres from mean sea level.

4) Tunnel No. IV: Below Bharari-Poabo Spur for northern bye pass road

17.3.7.4 Tutikandi and Bhatakufar Bus Terminals are proposed to be developed and made functional. Small bus stands shall be developed at junction locations with outer Circular bye pass road at the spur sites.

17.3.7.5 Parking lots have been proposed at strategic locations and are to be interlinked by Elevators with the Mall road namely:

i) Lakkar Bazaar Bus Terminal to the Ridge

ii) Near Snowdon on Cart road to Lakkar Bazaar

iii) Bemloe on Cart road to Mall

iv) Office Complex Kasumpti from Bye-Pass to Kasumpti road.

17.3.7.6 Pedestrian over bridges have been proposed at bus stand, Near Tarahall, Lakkar Bazaar Bus Stand, Auckland, at Sanjauli, St. Bedes, Chhota Shimla, Police Headquarter and near Holiday Home.

17.3.7.7 Transport Nagar and Truck Terminals have been proposed to be developed in the west activities zone in between both National Highways as per availability of suitable land. Existing area under Traffic and Transportation is 371.93 hect. and additional requirement works out 113.00 hect. Thus total land prpposed under Traffic & Transportation is 484.03 hec. .

**17.3.8 Agriculture use**:

There is additional requirement of 1605.87 hectares for different uses. As Government land is scarce, 620.63 hectares agricultural and grass land which is susceptible for conversion of landuse.has been proposed for urban uses.

17.3.9 **Forest use:**

At present 6080.15 hectares land is under forest use, out of which 51.53 hectares area has to be inevitably proposed for roads and Bye passes, as there is no alternate option. However, except arterial roads of regional and city importance, no road shall be allowed to be constructed through the forest areas. However, the private land/village falling within forest use (except notified 17 Green Pockets) shall be exempted for carrying out development activities as per the provisions of Development Plan Shimla regulations envisaged for respective zones.

**17.3.10 Water Bodies and Undevelopable land:**

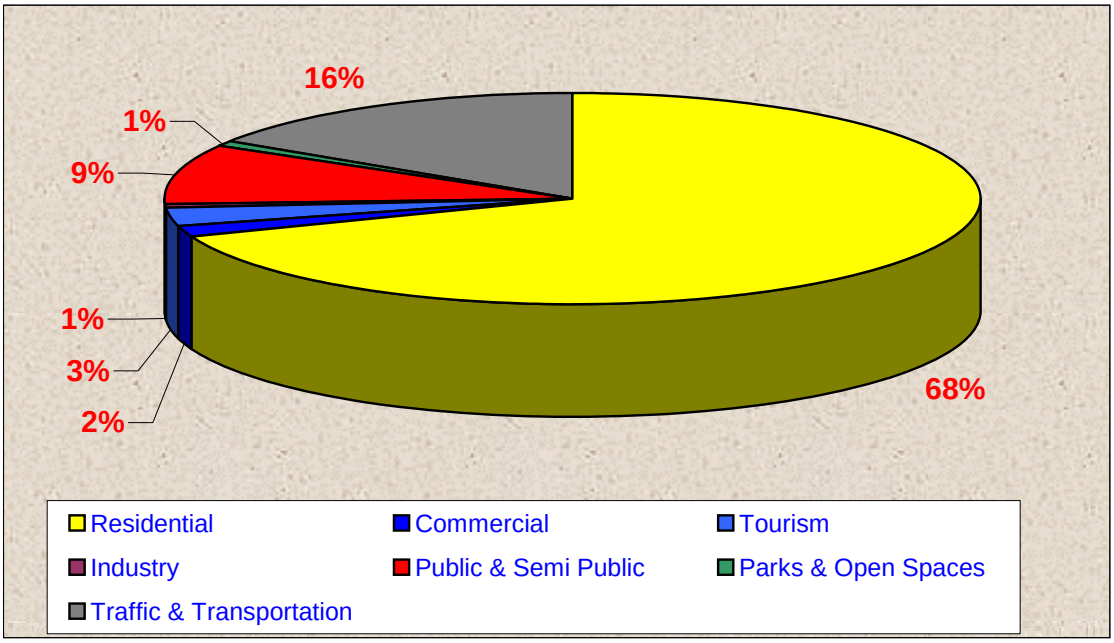
The land under khads, drainage lines, water bodies and undevelopable slopes is 839 hectares. It shall remain as such. Moreover green buffers are proposed to be developed along the drainage lines.

Proposed land use of Shimla Planning Area for the year 2021 is as under:

**Proposed Land Use of Shimla Planning Area 2021**

| Land use | Area in Hectare | % of Urban Area | % of Planning area |
|---|---|---|---|
| Residential | 2124.00 | 68.00 | 21.35 |
| Commercial | 51.20 | 2.00 | 0.51 |
| Tourism | 98.00 | 3.00 | 0.98 |
| Industry | 17.00 | 1.00 | 0.17 |
| Public & Semi Public | 274.28 | 9.00 | 2.76 |
| Parks & Open Spaces | 32.00 | 1.00 | 0.33 |
| Traffic & Transportation | 484.93 | 16.00 | 4.87 |
| **Total** | **3081.41** | **100.00** | |
| Agriculture | 620.63 | | 6.24 |
| Forest | 6028.62 | | 60.59 |
| Water bodies & Undevelopable slopes | 219.34 | | 2.20 |
| **Total** | **6868.59** | | |
| **Grand Total** | **9950.00** | | **100.00** |

**Figure 16.2: Proportion of Different Urban Uses**



## 17.4 Planning Zones

In order to dovetail the Development Plan through Zonal and Sectoral Plans, the Planning Area has been divided into 8 zones in view of physical barriers and catchments as under:-

**(i)** **Central Zone:** Bounded by Cart/Circular Road and upto Boileauganj and Summer Hill.

**(ii)** **Eastern Zone:** Mashobra-Kufri

**(iii)** **Northern Zone-I:** In between Naldera-Durgapur range and Bharari range.

**(iv)** **Northern Zone-II:** In between Bharari Range and Hiranagar-Ghanahatti range.

**(v)** **Western Zone:** Towards west of Ghanahatti-Kamna Devi-Tara Devi range.

**(vi)** **Southern Zone-I:** Tara Devi Range to Kasumpti Mehali Range.

**(vii)** **Southern Zone-II:** Kasumpti-Panthaghati range to Cemetery-Bhatta Kufer Range.

**(viii)** **South Eastern Zone:** Cemetery-Bhatta Kufer Range to Kufri Range.

Each zone is proposed to be divided into 3 to 5 Sectors for their detailed planning process.

## 17.5 Satellites and Regional Proposals

17.5.1 Three satellite towns at Waknaghat, Ghandal near Ghanahatti and Fagu are proposed to be developed for spillover activities as well as tourism. These shall be self-contained for all lower order amenities.

17.5.2 In order to tackle the problems of Shimla at regional scale, the region upto about 30 kilometres crow fly distance is proposed to be planned and developed in accordance with Capital City Regional Plan.

17.5.3 To counter the migration trend to Shimla from the populous belt of the state, a countermagnet is proposed to be planned and developed on BOT basis in the vicinity of Ghagas, as it is a nodal central and potential location for the same.

# CHAPTER- 18

# PLAN IMPLEMENTATION

## 18.1 PERSPECTIVE

18.1.1. The Development Plan is a document of public, community, local bodies, Special Area Development Authorities and the Government. It is a document of present and future generations. The Plan envisages for planned and sustainable development of Shimla Planning Area.

18.1.2. The proposals have been worked out in view of public aspirations, on one hand and potentials and propensities of the city, on the other by the Exhaustive surveys, studies, analysis and series of deliberations held to reach the conclusions, recommendations and the same have been envisaged in this document.

18.1.3. The Development Plan contains provisions for a projected population of 3,18,560 by the year 2021. Out of 9950 Hectares of Shimla Planning Area, 6874 hectares is under forests, agriculture, undevelopable land and water bodies.

18.1.4. The city has shortage of developable Government land for public purposes. Developable private land is also scarce. As the city is fast growing and over flowing, proposals are going to cover larger areas leaving undevelopable areas amidst them. Implementation has inevitably to be done with the joint efforts of the public-private partnership, Development Authority, Municipal Corporation, Gram Panchayats, Revenue Department, Infrastructural Departments, Town and Country Planning Department etc.

18.1.5 An additional urbanisable area of 3076 hectares is proposed to be developed by the year 2021. Phasing, costing and implementation of Development Plan have been contemplated keeping in view development priorities to meet the needs of growing population, socio-economic dynamics likely to persist after every five years, on one hand and in consonance with the national policy of preparation of rolling plans, on the other. So far as the question of mobilizing/ managing funds for development of external infrastructure is concerned, the financial resources for implementation of basic infrastructure proposals related to bulk services including water supply, sewerage, drainage, electricity and communication etc. are already used to be allocated by the Government under major capital outlays of various development Departments/ Authorities/Boards. It is just matter of utilizing the same in accordance with proposals of the Development Plan through regulatory control of the proposed Plan Implementation and Enforcement Committee. However, resource

generation for providing internal infrastructure has to be ensured by the various stakeholders under the Land Pooling and Reconstitution mechanism. The various executive agencies for development proposals of the Development Plan may further augment resources required for their purposes by mobilzing funds from the sources both, internal and external institutional finance.

## 18.2 PHASING

18.2.1 Development Plan is a mandatory document to guide the future development. Implementation of Development Plan is divided into four phases coinciding with five year plans namely:

**1.** 2007 -2012
**2.** 2012-2017
**3.** 2017-2021

### 18.2.2 First Phase – 2007 to 2012

The following proposals are proposed to be implemented in first phase:

1. Land Pooling and Reconstitution Schemes for 50 hectares at Ghanahatti, Banuti on Jablog road,Sayri on Kunihar road, Batlana near Shoghi and Khalag near Jubbarhatti are to be devised and implemented.
2. To create land bank and to make headway for acquisition of land for community purposes including transportation.
3. To create parking lots at strategic locations.
4. Development and construction of modernized District Centres on 13 hectares at Ghanahatti, Jathia Devi on Kunihar Road Shoghi and in satellite towns.
5. Parking lots and Elevators are to be developed at old Lakkar Bazzar Bus Terminal to Ridge, from Circular Road near Snowdon to Lakkar Bazzar and Bamloe to Mall Road.
6. Construction of Bye Pass Roads: -

    a) Sanjauli Bye pass (4.7 Kilometers): From Government Boys Hostel to Junction of Kufri -Mashobra road.
    b) Kufri Bye pass (0.7 kilometers) from Public Health Centre Kufri to Junction of Kufri-Fagu road
7. Tutikandi and Bhatakufar bus terminals are to be developed and made functional.

8. Auto Work Shops from Dhalli, Bhatakufar, bye pass and arterial roads in Planning Area to be shifted to Transport Nagar and truck terminals to be developed on South-West periphery of the city.
9. Development of Wholesale Grain, vegetable and timber market, Ware housing at Shoghi and Ghanahatti on 5.0 hectares.
10. Acquisition and development of land for Sectoral roads in different sectors.
11. Construction of Tuti Kandi - Tara Devi road.
12. Construction of Tara Devi-Kamna Devi- Peterhoff-Grand Hotel- Jakhu Ropeway.

18.2.4 In view of implementation of proposal in each phase priorities of subsequent phases shall be worked out, resources generated and accordingly implementation has to be ensured.

## 18.3 COSTING

The plan envisages for residential development by the landowners through Land Pooling and Reconstitution mechanism. Land Pooling and Reconstitution Schemes are to be implemented by the Development Authority by organizing landowners with the help of Revenue Authorities, Local Bodies, Special Area Development Authorities, Panchayats and Infrastructural Departments. The Development Authority will be responsible for preparation of such schemes. The funds are to be raised from potential buyers of developed plots who are going to be allotted the same. 40% surrendered land for amenities, roads, parks, open spaces and other public purposes will be ultimately vesting with the Development Authority. It will earn in terms of charges to be levied on services infrastructure likely to be provided to the inhabitants. So far as arterial roads and major proposals including ropeways, bus terminals, Transport Nagar, truck terminals, parking lots and infrastructural networks are concerned, the land has to be arranged, acquired and same implemented by the Development Authority and respective agencies by public-private partnerships on BOT basis. Therefore, entire funding is to be done through the inbuilt mechanism as envisaged in the Development Plan.

## 18.4 FINANCING AND RESOURCE GENERATION

18.4.1 Shimla being a potential tourist and multifunctional city, financing of plan is required to be geared by the Development Authority by raising resources from the betterment levies on development pursuits. Conversion of land use may be charged suitably in view of enhancement of land values. The development that has come up along the National Highways and public roads is required to be suitably charged.

18.4.2 The cost of residential development including road network, sewerage, drainage, electricity, parks, open spaces, parking and other amenities is to be borne by the landowners, through the mechanism of Land Pooling and Reconstitution and thereby enhancement of land values. The benefits likely to occur by the sale of plots would be sufficient to meet with the cost of development.

18.4.3 The Bus Terminals are to be developed by Himachal Pradesh Bus Stand Development Authority. The wholesale and Ware Housing is to be developed by Marketing Committee. The Department of Industries/H.P. State Industrial Development Corporation will be responsible for the development of industrial area and shifting of workshops . Similarly, the respective agencies and Government undertakings by raising resources from the beneficiaries will be responsible for development of utilities, facilities and services including water supply, sewerage, drainage, electrification, telephone etc. at the city level. Sector parks are to be developed by the Development Authority by arranging land for the purpose. Truck Terminals are to be developed by the joint efforts of Transport Companies and Marketing Board.

18.4.4 Development Plan for tourist city of Shimla is therefore, going to be self-financing proposition by making the optimum utilization of Spatial Planning know-how. Development Authority shall be responsible for the creation of serviced land and its optimum utilization, on one hand and implementation of vital provisions like bye-passes, Ropeways, Tunnels, transport Nagar, tourist Townships, Truck Terminals, Bus Terminals, Parking at strategic locations, on the other. The finances can also be geared up from even external aid, as Shimla is a premier city with unique British heritage and a destination of tourists from all over the world. For the Development of Ropeways, Tunnels, Elevators and Bus Terminals private entrepreneurs are to be invited. Build, Operate and Transfer

mechanism through private sector of major proposals may be the cardinal theme for implementation of this Development Plan.

18.4.5 The various resource generation measures in accordance with statutory provisions and regulatory control are as under:-

1) Landuse conversion charges
2) Development charges and betterment levies
3) Layout, Sub-Division and Building Permit Fees
4) Building Regularization Fees
5) Building Use Regularization Fees
6) Vacant Land Tax.
7) Non-Conforming use penalities.
8) Ribbon Development hazard charges.
9) Unauthorised change of building/landuse penalities.

City Development Fund shall be maintained by the Development Authority and same revolved and utilized for infrastructural provisions, landscaping and beautification of the city. Economically weaker sections of the society shall not be charged for basic amenities.

## 18.5 EXECUTION

18.5.1 As the Development Plan is a document of people, community, Government and all democratic institutions including local bodies, the same are therefore required to come forward for its **i**mplementation. Execution of the Development Plan has to be ensured by Land Pooling and Reconstitution Mechanism by coordinated efforts of the landowners, Development Authority, Revenue Department, Municipal Corporation, SADAs, Panchayats and Infrastructural Departments. Besides landowners, Municipal Corporation, Development Authority, Gram Panchayats and Special Area Development Authorities shall be responsible for creation of serviced land.

18.5.2 New Development Authority under the Town and Country Planning Act is inevitably required to be revived for implementation of this Development Plan. It may be provided with a revolving fund by the Government, which shall have to be returned by such Authority within a stipulated period of time. However, overall control and monitoring of implementation of proposals of development in terms of land use zoning and regulatory control shall be vested with the

Town and Country Planning Department. The Development Authority is required to act at three levels namely: -

1. To rehabilitate incompatible uses like truck and idle bus parking, timber market, grain market, vegetable market, workshops and miscellaneous non- conforming uses in cooperation with local bodies and public participation and the same are to be shifted from the Core Area to South-Western periphery of the city in a time bound manner
2. To create Serviced Land on the periphery in the west and in satellite towns to cater for the demand of additional population. As long as Development Authority is not in a position to cater for demand of serviced land, it shall not take up any other activity.
3. To develop three satellite towns at Waknaghat, Fagu and Ghandal near Ghanahatti.

In order to implement the major proposals of Ropeways, Tunnels and elevators multinational companies may be invited on prescribed terms and conditions including BOT mechanism.

18.5.3 In order to ensure co-coordination, monitoring and effective implementation of Development Plan the Director may constitute a committee.

18.5.4 Ironically, benefits of infrastructure and new proposals including roads, as shall be implemented by the various Departments are to be harnessed by the Development Authority.

18.5.5 The developable Government land is required to be vested with the Development Authority and the same shall be used as Land Bank. The ownership of Government land as occupied and used by the private owners has to be specifically looked into and same used for community purposes, accommodating the legitimate occupants on specified terms and conditions.

# CHAPTER –19

# PLANNING AND DEVELOPMENT REGULATIONS

## 19.1 PROCEDURE AND REQUIREMENTS

### 19.1.1. APPLICATION FOR PERMISSION

19.1.1.1 The application for development of land to be undertaken on behalf of the Union or State Government under **Section *28 and a local authority or any authority specially constituted under the H.P. Town and Country Planning Act,1977 under Section 29 shall be a*ccompanied** by such documents as prescribed under Rule-11 of the H.P. Town and Country Planning Rules, 1978 including design by a registered Architect/ Planner/ Engineer/ Draughtsman and structural design by a Structural Engineer/ Architect.

19.1.1.2 The application for development of land to be undertaken under Section -30 by any person not being the Union or State Government, local authority or any authority specially constituted under the H.P. Town & Country Planning Act, 1977 shall be in such forms alongwith the specifications sheet and schedule attached with these forms and containing such documents and with such fee as prescribed under Rule 12 of the H.P. Town & Country Planning Rules, 1978.

19.1.1.3 Apart from above the applicant shall furnish the following additional documents namely:-

(i) Location Plan in the scale of 1:1000, indicating the land in question, main approach roads, important physical features of the locality or area, important public buildings like School, Hospital, Office and surrounding ownership.

(ii) Site plan in the scale of 1:200 indicating the proposed site, approach road, adjoining buildings, existing sewerage and drainage, set backs and showing the built up and open area clearly be submitted. Site plan must tally with the shape and dimensions of plot shown in the tatima. The revenue documents supporting and verifying the shape and area be enclosed.

(iii) Five sets of the Architectural drawings (Plans, Elevations and Sections) in the scale of 1:100 duly signed by the registered Architect/ Planner/ Engineer/ Draughtsman alongwith his/ her address and registration number.

(iv) Copy of Treasury Challan form vide which requisite fee has been deposited or receipt of deposit either through demand draft or cash.

(v) Latest original 'khasra' map showing khasra number of land in question, its dimensions adjoining khasra numbers from all sides of plot and approach path with its width.

(vi) Ownership documents such as copy of latest 'Jamabandi' in original and attested photocopy of Registration deed.

(vii) Demarcation Certificate from revenue authority shall be submitted only in case of any dispute with adjoining land owner.

(viii) In case any electricity line is passing over or nearby the proposed site for development, the distance of electricity line from development as per Indian Electricity Rules (as amended upto date) be shown in the site plan.

(ix) The applicant shall furnish the undertaking in the shape of affidavit with regard to availability of power, water and maintaining the safe distances from HT/LT line as prescribed by the HPSEB.

(x) The land surrender for road/path as a public street shall have to be transferred to the Municipal Corporation /Nagar Parishad/ Nagar Panchayat/SADA and Revenue Authority shall enter the surrender land in the revenue record as public path/road. No compensation shall be paid to the person for the surrendered land for path/road.

(xi) For the plots abutting highways under ***National Highway Authority of India,*** National Highways, State Highways, bye-passes and other public works Department schedule roads, the No Objection Certificate (NOC) from Public Works Department/ ***National Highway Authority of India*** alongwith site plan showing verified acquired and controlled width of road shall be submitted. as per the format appended below:-

**NO OBJECTION CERTIFICATE FROM H.P.**
**PUBLIC WORKS DEPARTMENT**

The Himachal Pradesh Public Works Department has no objection on carrying out any development on land bearing Khasra Number _____ of revenue village/ mohal_____abutting National Highway/ State Highway/ Scheduled Road_____ by the owner Sh./Smt._____ resident of _____ _____with respect to the provisions of the H.P. Road Side Land Control Act, 1968 in this behalf as shown in the site plan.

Seal of Executive Engineer
N.H.A.I./N.H./H.P.PWD

(x) No access shall be permissible from the major roads without prior approval of the competent authority.

*(xi)* Applicant shall have to submit any other certificate/ documents/ Plan such as No Objection Certificate (NOC) from the H.P. State Pollution Control Board, water and electricity availability certificates from the concerned departments***/ Boards.***

*(xii)* The structural design is not mandatory only structural stability certificate is required which shall be issued by the Structural Engineer. The Structural Engineer shall follow all the relevant IS Codes along with Seismic Code for the safety of the building and the Engineer who has issued the certificate, shall be responsible along with owner for the stability of the structure. ***Structural Engineer shall mean any Civil Engineering Graduate having three year experience in structural engineering practice with designing and field work as defined in the National Building Code.***

**19.1.2 PROCEDURE FOR SERVICE CONNECTIONS**

19.1.2.1 The procedure for issuance of No Objection Certificate (N.O.C.) for water supply and electricity connections shall be as under:-

(a) Temporary ***connection*** = At plinth level.

(b) ***Regular connection*** = ***On completion of each dwelling unit/ floor/ whole building.***

**19.2 DEFINITIONS:**

**(i) Definitions of various types of housing.**

(a) Row housing means where two side walls are common and plots created specifically for houses in the row.

(b) Semi-detached housing means where one side wall is common and plots created as such for this purpose.

(c) Detached houses mean where there are no common walls and plots created as such for independent houses.

(ii) **Floor Area Ratio (F.A.R.):** Means the ratio between the total built up area of all the floors of the building to the area of plot.

$$\text{F.A.R.} = \frac{\text{Total area of all floors}}{\text{Plot Area}}$$

**(iii) Builder:** Will refer to the one who is involved in constructing flats or houses or other establishments for commercial purposes and by way of sale thereof he will be involved in acquiring profits.

**(iv) Colonizer**: Will refer to the one who is involved in development of plots for various purposes including residential and will be transacting the developed land for earning profits thereof.

**(v) Light Weight Material:-** Shall refer to stone or brick walls in foundations, brick dhajji walls in superstructure, wooden joinery with proper seismic bonds and pitched roof with wooden truss at the top.

**19.3 RESTORATION AND CONSERVATION REGULATIONS**

19.3.1 In order to ensure healthy environment in areas, which have deteriorated considerably, schemes are to be framed by the local bodies and Special Area Development Authorities and same implemented by participatory process.

19.3.2 As far as possible, open spaces shall be created by shifting non-conforming uses from congested and unhealthy localities by the concerned local bodies and Special Area Development Authority.

## 19.4 LAND POOLING AND RECONSTITUTION OF PLOTS REGULATIONS

19.4.1 On commencement of these regulations, no person shall be allowed to carve out plots of zig-zag 'Khasra' Numbers in his ownership and the same have to be organized alongwith other such adjoining chunks of land to ensure proper dimensioned plots to the purchasers, on one hand and in the interest of urban design, safety, economy, functionality, aesthetics and optimum use of land, on the other.

19.4.2 Maximum upto 60 percent plotted area shall be made available to the land owners, proportionate to their land ownerships, in accordance with prescribed regulatory provisions of this Development Plan. The remaining 40 percent area shall have to be surrendered and the same be utilized for circulation, infrastructural networks, parking, parks, open spaces, playgrounds and recreational pursuits.

19.4.3. In case of any person whose plot comes within the roads or community amenities, he shall be suitably compensated by the parties who are going to be benefited in lieu of his land in such scheme.

## 19.5 LAND SUB-DIVISION REGULATIONS

19.5.1 The Sub-Division of land into plots amounts to "Development" under the Himachal Pradesh Town & Country Planning Act, 1977. No person shall subdivide his land unless permitted to do so in accordance with Rules and Regulations in force.

19.5.2 Similarly no 'Registrar or the Sub-Registrar shall register any sale deed or documents of any sub-division of land on share basis unless the sub-division of land is duly approved by the Director in accordance with provisions of Section 16 C of the Himachal Pradesh Town & Country Planning Act, 1977 and sub- division of land regulations as contained in this Development Plan.

19.5.3 The application for sub-division of land shall be submitted as per the procedure laid down under regulation 19.1.1.1 to 19.1.1.3.

19.5.4 The sub-division of land shall be permitted in accordance with natural profile of topography as shown on a contour map, drainage of the land, accessibility, road alignment, wind direction, local environmental imperatives and in accordance with prescribed landuse of the Development Plan. Natural flora and fauna shall have to be preserved.

19.5.5 Natural nallahs which pass through land involving sub-division shall be developed and maintained according to discharge of water during the peak rainy season.

19.5.6 The sub-division of land shall not be permitted in area where basic services like paved roads, drainage, water supply, sewerage disposal, electricity, street lighting etc. do not exist or unless the applicant undertakes that these services shall be provided at his own cost.

19.5.7 ***The minimum width of road/path shall be 3.05 m. for upto 5 plots, 5.00 m. for 6 plots to 10 plots, 7.00 m. for 11 to 20 plots and 9.00 m. for more than 20 plots in number respectively.***

19.5.8 In case of plots or land abutting the existing or proposed roads or paths, width of the same shall have to be increased to meet requirements of width for requisite plots as prescribed in regulation 19.5.8.

19.5.9 Average slope gradient for regional roads shall have to be 1:20. However, local roads in town may be allowed with slope gradient upto 1:10 and additional width of carriage way shall be provided on curves for ensuring smooth flow of vehicular traffic, which shall not obstruct view or vista.

19.5.10 Minimum area of a plot for a detached house shall not be less than 200 Sqm.

19.5.11 Semi-detached house construction shall be allowed on minimum 200 sqm. plot and row housing on plots of minimum 200 sqm. area subject to maximum number of such plots does not exceed 8 in a row after which a gap of 6.00 m. shall have to be left. Although minimum size of plot for construction in a row, with two common walls, has been kept as 200 sqm, yet in exceptional circumstances, considering economic/site conditions the minimum ***40 Sqm***. plot for construction in a row with two common walls may be allowed, so as to provide smallest possible residential

construction in a planned manner for the benefit of economically weaker sections of the society.

***19.5.12*** ***For schemes approved by the Government, relaxation can be given by the Government.***

19.5.13 Minimum area of a plot for residential development in Group Housing Scheme shall be 1000 Sqm. in accordance with provision of Apartment Act.

19.5.14 The minimum area for open/green space for the scheme having more than 5 plots (1000 $m^2$) shall be 10% of the scheme area. Where a sub-division of land involving plots exceeding 10 in number (2000$m^2$) by individual colonizer or any Society is proposed, the provisions of parks/tot-lots and open spaces shall be made on a central suitable location in the scheme. Such parks cannot be built upon and sold in any manner in future. Provision shall also have to be made for education, medical, fire fighting, religious, socio-cultural and other community facilities based on actual requirements in the cases of sub - division of land in accordance with prescribed ***norms and standards in the Urban Development Plan Formulation Implementation Guidelines***. The ownership of such land shall be transferred/ surrendered to the Development Authority/Local body for its development and future maintenance.

19.5.15 While carving out plots, the orientation of the plots shall be made in such a manner, so as to be in conformity with the existing plots/infrastructure, wind direction, availability of Sun and Natural flow of surface drainage to allow unobstructed rain water discharge.

19.5.16 Minimum area for septic tank and soak pit etc. irrespective of number of plots shall be 5% of the scheme area.

## 19.6 ZONING REGULATIONS

19.6.1 In order to regulate the construction activities in view of carrying capacity, physical thresholds, environmental, ecological and heritage imperatives, the Planning Area has been divided into following zones:-

(i) Core Area

(ii) Restricted Area

(iii) Green Areas

*(iv)* Heritage ***Area***

(v) Sinking/Sliding Area

(vi) Other Area

*(vii)* High Security ***Area***

*(viii)* ***Abadi Deh***

## 19.6.2 CORE AREA

(i) Central Shimla bounded by the circular Cart Road starting from Victory Tunnel and ending at Victory Tunnel via Chhota Shimla and Sanjauli and the area bounded by Mall Road starting from railway Board Building to Ambedkar Chowk, covering Museum Hill by road starting from Ambedkar Chowk, on the north side, joining the Chowk of Indian Institute of Advanced Studies and following the road joining Summer Hill, Post Office and via upper road to Boileauganj Chowk and then joining the Cart Road, along Cart Road to Victory Tunnel.

(ii) From junction of Tribunal road and Cart Road near Secretariat then along the Tribunal road / path joining boundary/ Dhobi Ghat path and then following Dhobi Ghat boundary path upto the Shimla Junga road near Boundary. Then following Chhota Shimla Himalvi Bhawan path upto house of Sh. Amin Chauhan, then along with house of Sh. Amin Chauhan, Sh. Mansa Ram, Block No. 4,6,8,9,7,5,2 (all the blocks of H.P. Housing Board) and house of Sh. Ramesh Negi, Sh. Diwan Chand Gupta, Sh. N.S. Pal, Sh. Indervir Singh Pal, Sh. Ashwani Kumar, Sh. Y.K. Gautam and then along the path joining to the Chhota Shimla-Kasumpti path near AIRA HOLME's Public School. Following Chhota Shimla Kasumpti path towards Kasumpti upto junction of Shimla- Junga road and SDA Complex road. Then following Shimla Junga road towards Chhota Shimla upto Cart

Road near Ashiana Restaurant. The following Cart Road upto junction of Tribunal road and Cart Road near Himachal Pradesh Secretariat building.

### 19.6.3 RESTRICTED AREA

Area outside the Core Area, defined vide Para 19.6.2. (x) (a) above and bounded by bye-pass road starting from Barrier to Tutikandi-Khalini-Vikas Nagar, Pantha Ghati, Malyana, Bhattakufar to Dhalli Tunnel. The Restricted Area shall also include a belt of 50 meter on valley side of National Highway-22 starting from Barrier to Dhalli Tunnel. Sanjauli area starting from Dhalli Tunnel to old house of Smt. Shanti Devi along Tibetian Hospital (excluding Tabetian Hospital) to Dhingu Temple via Municipal Corporation path to electricity transformer all along defense boundary and then following the nalla cremation ground. From cremation ground to Sanjauli along existing Forest and Government land boundary and 50 meter on valley side of the Cart Road from Sanjauli Chowk to Victory Tunnel, Long Wood- Shankli, Ruldubhatta area bounded by upper Bhrari road on East upto Harvington to Power House along sewerage line path on west to cart road from above point to Tara Hall School to Tapovan to lower Kaithu along road on East to Cart Road along External Municipal road on North and West meeting cart road near Hotel Hans.

**19.6.4 GREEN AREA:-**The Green Area shall comprise of the following areas, namely:-

(i) The Area bounded by bye-pass and cart road starting from junction of barrier following the cart road to Parivahan Bhawan Nallah near Government Press than alongwith houses of Shri Yog Raj Sharma, U.N. Kaushal, Government Press Welfare Department to Tutikandi following the path meeting at bye-pass road near Government High School, then following the bye- pass and back to the junction of barrier.

(ii) Nabha Area bounded by bye-pass and cart road from Tutikandi near Government High School following the path to cart road to Nabha road

and following down along with HPPWD Godown Block No.28, Hostel I.T.I. Block No.25-A, Block No. 23, Block-D, Block No.21, Block L-II/84 and Block-II/83 along nallah meeting at bye-pass road and back to Tuti Kandi near Government High school.

(iii) Phagli and Lalpani Area bounded by Cart road and bye pas starting from Phagli path from the bye-pass to railway parking to cart road and then alongwith railway quarter Block No.62, house of Sh. Gopal Singh, Shiv Rajan, Directorate Education Office to Municipal Corporation Quarter to Sr. Sec. School Lalpani then alongwith, Ladakhi Mohalla path upto house of Smt. Janki Devi, Sunder Singh and Naresh the following the Nallah meeting at bye pass road and back to the phagl path.

(iv) Bemloe Area bounded by Cart road and bye pass starting from lift nallah moving along cart road then following down the path near Government quarters meeting at junction on Cart road to Bemloe road along with post office building C.P.R.I. Complex, house of Shri Sumer Chand, I.D. Garg, Tripta Devi, Uma Vati, Sawarn Lata, Block D & C to Bemloe road & Bye pass and following back the bye pass upto the lift Nallah.

(v) Himland Area starting from CPRI Complex, on Bemloe road to house of Shri Ram Dhan Lal, Darshan Lal, Joginder Pal D.P. Sharma to Cart road then following the Cart Road to Himland Nallah meeting at Bye-pass to Bemloe road and back to CPRI Complex.

(vi) Khalini & Chotta Shimla Area bounded by Cart Road starting from the Nallah near Palika Bhawan then following the Nallah to Bye-Pass road then to B.C.S. Road via Khalini Chowk to the house of Shri Prithvi Sen. Telecom Office. house of B.S. Chauhan, Hukmi Devi, H.T. Upadhya, Savitri Niwas & Suman Niwas meeting bye-pass and following bye-pass to B.C.S. Dhobighat, Servant Quarters, Hospital, School Gate, Linlithgo Cottage, Gate Cottage, Pine Cottage, Jr. School of B.C.S. meeting Bye-Pass then alongwith Bye-pass upto the junction of S.D.A. road to

Kasumpti Junga Road alongwith SDA Blocks to Tibetian School to house of Shri Vinod Sood, O.C. Bali, Parshotam Dass, M.M. Gulati, Brij Lal Gupta, K.S. Dhaluta, M.R. Sood, Balbir Singh, Joginder lal, Varsha Vohra, Sarita Jaidk, Sant Kumar, R.R. Jain, B.L. Pandit, P.S. Negi, Bhupinder Obraia, T.L. Sharma, I.D. Gupta, Sudershan Mahajan, Penajit Singh, Army Servant Quarter then alongwith Cart road upto Palika Bhawan Nallah.

(vii) Chhota Shimla Area above card road starting from Eastern path near/ Military quarter to Mall Road to Western path meeting at Cart road.

(viii) Kasumpti Area starting from the junction of Kasumpti Mehli Path and Police Colony Road near H.P.PWD enquiry office then following Mehli Kasumpti path upto Geeta Mandir along Jammu Castle Road upto junction.

(ix) Charlie Villa Area starting from Himachal Pradesh Public Service Commission building alongwith Himachal Pradesh Housing Board Building, houses of Shri Joginder Singh Kanwar, Manta Niwas, Sanjeev Sharma, Urvashi Sharma, Dr. Amba Charan, B.R. Malhotra, Mahinder Singh, O.P. Gupta, Army building, Fakir Chand Tada to Mall Road to C.M. residence then following the nallah near the house of Shri Satish Kumar Goel meeting at Cart Road.

(x) Area starting from the nallah near Himfed Petrol Pump following the nallah upto the junction of path and Nallah then following the path to the Himachal Pradesh Secretariat Building and following the Cart Road upto Himfed Petrol Pump.

(xi) Jakhoo Area starting from the junction of Raj Bhawan Road and Cart Road to Radha Swami Bhawan along U.S. Club Road to Lift Nallah to Titla Hotel following the road to Oak Wood through Northern road then following the Nallah down ward to Snowdon Pump House via Snowden Road to house of Shri T.D. Gupta, Sukhvinder Singh, M.C. Commissioner residence, Corner House (M.C. Qrt) Nehar Singh Thakur

and Govt. Sr. Sec. School Sanjauli to Cart Road then following Cart Road upto the junction of Raj Bhawan Road and Cart Road.

(xii) Starting from Ram Chandra Chowk to Chief Minister residence via Raj Bhawan Road and Mall Road to Challet Day School then along U.S. Club Road to Ram Chandra Chowk.

(xiii) Area bounded by Cart Road and Snowdon Road starting from Sanjauli Chowk to Snowdon Hospital.

(xiv) Bharari, Shankli and Ruldhu Bhatta Area starting from RKMV College along Keleston Road to Harvingtion to Lower Bharari road to Sewerage line path alongwith house to Shri M.L. Sharma (Geeta Bhawan), Prem Bhawan house of Shri Desh Raj to Cart Road along Nallah then following Cart Road upto R.K.M. V College.

(xv) Summer Hill area starting from the Boileauganj Chowk to Summer Hill Post Office alongwith Summer Hill road, then following ITI road upto the gate of Advance Studies via Chaura Maidan road upto Police Station Boileauganj encircling the Hillock.

(xvi) Starting from the junction of Boileauganj and NH-22 near C.M.P. post to Boileauganj ground Wakaf Board Building Shop No. 32 and Wakaf Board building Shop No.34 alongwith Chaura Maidan road upto nallah near Press Building and down the nallah meeting at Cart Road.

(xvii) Starting from the gate of advance Studies along Elesyum Hill road to Ambedkar Chowk encircling Elesyum Hill via Chaura Maidan Road upto gate of Advance Studies.

**19.6.5. HERITAGE AREA:-**The Heritage Area shall comprise of the following areas, namely:-

(i) Vice Regal Lodge Complex complete.

(ii) One building depth on either side of road surrounding Vice Regal Lodge Complex.

(iii) One building depth on either side of Mall Road from Gate of IIAS upto Chhota Shimla Chowk via SBI, Scandal Point, Shimla Club and Oak Over.

(iv) One building depth on either side of the path/road from Parkash Niwas (Housing Shimla Type Writer) near SBI via Kalibari to Scandal Point.

(v) The area bounded by Scandal Point, Ridge, Regal, Takka Bench, Church, Ritz, U.S. Club Gate, PWD Office, Chalet Day School and The Mall Road.

(vi) One building depth on either side of the road from Oak Over to Barnes Court (Governor's Residence) via Woodvilla.

(vii) Any building/buildings falling outside the above zone but declared as heritage building/buildings by the State Government.

(viii) Green patches within Heritage Area.

(ix) The following buildings falling inside the heritage area shall be the heritage building , namely:-

| **Sr. No.** | **Name of building** | **Sr. No.** | **Name of building** |
|---|---|---|---|
| 1. | Post office Summer Hill | 20. | Building of the ICICI Bank Bank |
| 2. | Indian Institute of Advanced Study | 21. | The whole range of buildings starting from Northern Railway Booking Agency opposite to Telegraph Office building and upto Ramji Dass Dina nath Building on the Mall Road. |
| 3. | Post Office Chaura Maidan | 22. | Town Hall |
| 4. | The Cecil | 23. | Gaiety Theatre |
| 5. | Carton House | 24. | Band Stand |
| 6. | Clermont | 25. | M.C.Library, Ridge |
| 7. | Race View | 26. | Christ Church |
| 8. | Vidhan Sabha Himachal Pradesh | 27. | Ladies Park |
| 9. | Gorton Castle | 28. | United Services Club |
| 10. | Railway Board Building | 29. | The Clarks |
| 11. | ParkashNiwas | 30. | The Chalet |
| 12. | State Bank of India | 31. | The Cedars |
| 13. | St.Mark's | 32. | Oak Over |

| | | | |
|---|---|---|---|
| 14. | Kali Bari Temple | 33. | Cemetery near oak over |
| 15. | Grand Hotel | 34. | Woodvilla |
| 16. | Bantony | 35. | Erneston |
| 17. | Telegraph Office | 36. | Yates, Place |
| 18. | St. Andrew's Church | 37. | Raj Bhawan |
| 19. | General Post Office | 38. | Police Station Sadar at Boileauganj |

(x) The following buildings falling outside the above area shall be the heritage building, namely:-

| **Sr.No.** | **Name of Building** | **Sr. No.** | **Name of Building** |
|---|---|---|---|
| 1. | Y.M.C.A. | 28. | The Bemloe Cottages |
| 2. | St.Michael's Cathedral | 29. | Spring Field |
| 3. | Deen Dayal Upadhyaya Hospital (Formerly, Ripon Hospital) | 30. | South Gate |
| 4. | Green Gate | 31. | Foswell |
| 5. | Rothney Castle | 32. | Emm villa |
| 6. | Tara Hall | 33. | CraigGardens |
| 7. | Auckland House | 34. | Dimple Lodge |
| 8. | Chapslee | 35. | Delphine Lodge |
| 9. | Convent of Jesus and Mary | 36. | Eddleston |
| 10. | Aira Holme | 37. | Eaglemount |
| 11. | Sterling Castle | 38. | Railway Station Summer Hill |
| 12. | Hainault | 39. | Winter Filed |
| 13. | Jakhoo Temple | 40. | St.Thomas Church |
| 14. | Corner House | 41. | Shimleshwar (Shiva Mandir) |
| 15. | Torrentium | 42. | St.Edward School |
| 16. | Parimahal (old building) | 43. | Wood Bank Officers Rest House |
| 17. | Holly Lodge (Main Building) | 44. | Thistle Bank |
| 18. | Walsingham(D.C.Residence) | 45. | Y.W.C.A. |
| 19. | Kamla Nehra Hospital (Old) | 46. | Office of the Deputy Commissioner |
| 20. | Manorville | 47. | Ellerslie Building |
| 21. | Bishop Cotton School | 48. | Police Station,Chhota Shimla |
| 22. | Govt. Boy's Degree College, Sanjauli | 49. | The Burj |
| 23. | Sidhowal Lodge | 50. | Armsdell |
| 24. | The Kalka Shimla Railway Line | 51. | Benmore Estate |
| 25. | Crow-Borough | 52. | Toryne House |
| 26. | Inverarm (State Museum) | 53. | Morvyn (I.T.I. Shimla) |
| 27. | Strawberry Hill | 54. | Police Station Sadar at Sabzi Mandi, Shimla |

## (xi) Cemeteries

| | |
|---|---|
| 1. | Cemetery below the Barrier, Bouleauganj |
| 2. | Cemetery at kanlog |
| 3. | Cemetery below St.Bede's |
| 4. | Cemetery at Sanjauli |

**(xii) No Construction heritage Zone /protected Ancient Monuments:**

- Tara Devi Temple at Tara Devi, Tehsil Shimla Distt. Shimla.
- Vice Regal Lodge, Rashtrapati Niwas, Shimla.

**(i) Tara Devi Temple/Vice Regal Lodge, Rastrapati Niwas, Shimla**:-

**(ii)** As per recently amended Ancient Monuments and Archeological Sites and Remains (Amendment & Validation) Act, 2010, Tara Devi Temple and Vice Regal Lodge has been identified and listed for conservation and preservation and the regulatory control of the Monument shall be adhered as specified in the Ancient Monuments and Archeological Sites and Remains (Amendment & Validation) Act, 2010.

**19.6.6 Sinking And Sliding Areas:-**The Sinking and Sliding Area shall comprise of the following area, namely:-

(i) **High Sinking Prone Area**:- This includes the northern slopes of the Ridge extending upto Grand Hotel in the West and covering Lakkar Bazar including Central School extending Aukland Nursery School and extending down below upto Dhobi Ghat below the Idgah Electric Sub-station.

(ii) **Sliding Areas**:- This includes Ladakhi Mohalla, the spurs below the office of the Director of Education and the surrounding areas on Clarke's Hotel.

**19.6.7 Other Areas:-** ***The Other Area shall comprise of all other parts of Shimla Planning Area excluding Core and Redistricted Areas.***

**19.6.8 Regulations:-** The following building regulations shall be applicable in Shimla Planning Area, namely :-

**(i) Residential Use:-**

| Sr. No | Description of Area | Minimum Plot Size (in $m^2$)* | Minimum Set Backs (m) | | | | Maximum Floor Area Ratio |
|---|---|---|---|---|---|---|---|
| | | | F | R | LS | RS | |
| 1 | 2 | 3 | 4 | | | | 5 |
| 1. | **CORE AREA** | | | | | | |
| | Detached | 250 | 2.50 | 2.00 | 2.00 | 2.00 | 1.50 |
| | Semi detached House with one side dead wall | 250 | 2.50 | 2.00 | 2.00 | | 1.50 |
| | Row Housing House with two side dead wall | 250 | 2.50 | 2.00 | Nil | | 1.50 |
| 2. | **RESTRICTED AREA** | | | | | | |
| | Detached | 200 | 2.50 | 2.00 | 2.00 | 2.00 | 1.50 |
| | Semi detached House with one side dead wall | 200 | 2.50 | 2.00 | 2.00 | | 1.50 |
| | Row Housing House with two side dead wall | 200 | 2.50 | 2.00 | Nil | | 1.50 |
| 3. | **OTHER AREA** | | | | | | |
| | Detached | 200 | 2.50 | 2.00 | 2.00 | 2.00 | 1.75 |
| | Semi detached House with one side dead wall | 200 | 2.50 | 2.00 | 2.00 | | 1.75 |
| | Row Housing • House with two side dead wall | 200 | 2.50 | 2.00 | Nil | | 1.75 |

**19.6.9 Regulations for Green Areas:-** The spirit behind the Notification dated 7.12.2000 regarding the Green Belts was to preserve the environment of the Shimla , but the execution of the same on blanket basis has created resentment among the public. The private land which has come inside all the 17 pockets of Green Belts are scattered plots. Keeping in mind the fair justice and in the interest of public the following regulations shall be applicable in Green areas notified

vide Government Notification No. HIM/TP/ RW-AZR/2000-III, dated 7.12.2000 as shown in 19.6.4.

(i) The plot should be in the name of original owner existing prior to the cutoff date of 7.12.2000 i.e. the date of notification of Green Belts. However, this criterion shall not apply to any subsequent owner on account of inheritance through ***succession*** as per clause (c) of Section 16 of the H.P. Town & Country Planning Act, 1977 (Act No.12 of 1977).

(ii) Re-constructions on old lines in green area shall be permissible with same plinth area and no. of storeys.

(iii) No tree should be cut.

***(iv) The maximum FAR shall be 1.00***

***(v) The maximum number of storey 2.***

***(vi) The built in parking to be counted in maximum permissible FAR of 1.00.***

***(vii) The permitted use shall be residential only.***

**19.6.10 Regulations for Heritage Area:-** The Core Area regulations as specified in clause 19.6.8 alongwith following additional regulations shall be applicable in Heritage Areas, namely:-

(i) the façade of the building/blocks shall be maintained on old lines in case of reconstruction of existing buildings, however the internal changes shall be permissible;

(ii) the façade of new building on vacant plots shall be in conformity with the architectural features and elements of the adjoining buildings for maintaining aesthetic and heritage features of existing surrounding buildings; and

(iii) ***the existing parks and green open spaces shall be preserved as such.***

**19.6.11 Regulations for Sinking and Sliding Areas:-** The Core and Restricted Area regulations specified in clause 19.6.8 along with the regulation to the effect

that reconstruction and new construction on vacant plot shall be allowed on the basis of a structural design in consonance with Geological Report from the ***State Geologist or registered Geologist s***hall be applicable in these Areas.

### 19.6.12 The following regulations shall be applicable in the Shimla Planning Area for the existing plots:-

(i) the minimum residential plot size of 150 Sqm. Shall be permissible in Core Area prior to the notification dated 22.8.2002 the regulations prevailing at that time shall be applicable in case of such plot;

(ii) in the case of plots in the areas other than Core Area, the minimum plot size shall be regulated as per the regulations that were applicable in the Shimla Planning Area from time to time; and

(iii) no plot size restriction shall be applicable for the plots existing prior to 31.3.1979, however, Interim Development Plan regulations applicable immediately after coming into operation of notification dated 31.3.1979 regarding Interim Development Plan for Shimla Planning Area shall be applicable.

### 19.6.13 Common regulations for all areas under Shimla Planning Area:-

The following common regulations shall be applicable in Shimla Planning Area, namely:-

(i) Mixed landuse shall be permissible .

(ii) Sub-division of land shall be permissible ***as provided in 19.5***.;

(iii) Minimum width of path in new sub-division of land shall be as under:-

| | | |
|---|---|---|
| (a) | Minimum width of path/road for sub-division of land having upto 5 plots | ***3.05meters*** |
| (b) | Minimum width of path/road for sub-division of land having cluster of plots from 6 to 15 | 5.00meters |
| (c) | Minimum width of path/road for sub-division of land having group of plots between 16 to 25 | 7.00meters |
| (d) | Minimum width of path/road for sub-division of land in case plots exceeding 25 in number. | 9.00meters |
| (e) | Minimum area for open/green spaces for the scheme having | 10% of scheme area |
| (f) | Minimum area for soakage pit / ***septic tank etc***. (irrespective of number of plots) | 5% of the scheme area. |

(iv) Maximum height of plinth level shall be 2.00 metre;

(v) Minimum and maximum Floor Height shall be 2.70 metre and 3.50 metre respectively, however, in an attic floor ceiling height upto 2.40 metre shall be permissible;

(vi) Sloping roof shall be mandatory with $2/3^{rd}$ coverage of roof area. The height of sloping roof, zero at eaves and maximum 2.50 M at center shall be maintained. In case of larger span the truss will be design at an angle of $30^0$ with option of having more than one trusses. CGI sheets roof shall be painted in Post Office red or Forest Green Colour.

(vii) Basement***s*** and attic floor shall be considered as storeys and included in FAR;

(viii) Plot holders shall have choice to go for detached, semi-detached and row housing subject ***to written consent of adjacent plot holders*** with the condition that on a sandwiched plot conformity to authorized abutting building shall be essential, provided that the word authorised shall not include any relaxation as a result of composition of offences and relaxation;

(ix) Reconstruction and additions/alterations shall be permissible subject to fulfillment of these regulations. In the case of buildings on plots falling under the provisions of regulation 19.6.12 reconstruction, addition /alteration shall be allowed on the basis of old lines.

(x) (i) Parking floor ***shall be allowed with approach wherever feasible*** subject to the condition that the maximum height of parking floor shall be ***2.30 m***. from the

bottom of ***beam. This parking floor shall be*** over and above the permissible FAR limits. (ii) Provision for parking shall be made at the rate of one Equivalent Car space (ECS) per dwelling unit in residential buildings and at the rate of one Equivalent Car Space per 50sqm. of built up area in other non-residential buildings, on plots having access to a motor road. Any additional built up area of 20 Sqm. over and above a multiple of 50 Sqm.. built up area shall require an additional Equivalent Car Space for parking. However extra provision of parking ***other than the parking floor*** shall be included in F.A.R. These guidelines shall be subject to any relaxation/ addition in bye-laws of the Municipal Corporation for proximity to types of roads i.e. sealed, restricted and others;

(xi) Minimum distance of 5.00m. from Forest boundary shall be maintained and minimum distance from existing tree shall be 2.00m.;

(xii) In case of Educational, Health, Tourism Institutions, ***Indian Oil Corporation, Transport Infrastructure, Power Projects*** and Industries, the building norms of respective competent authorities under their respective laws shall be applicable in addition to the building regulations prescribed for various areas as per regulations detailed in Regulation No.19.6.8;

(xiii) In case of Industrial use, the same shall be permissible only outside the Municipal Corporation limits of Shimla Planning Area;

(xiv) In case of plots abutting ***NHAI/ National highways, bye-passes and other scheduled roads*** owned by the Public works Department/ ***National Highway Authority of India,*** No Objection Certificate from Himachal Pradesh Public Works Department shall be mandatory;

(xv) A plinth level certificate as well as completion certificate on the specified format from empanelled private practitioners shall be sufficient for grant of NOC / completion certificate in Municipal Corporation/SADAs. The concerned Junior Engineer shall verify the same at site and duly signed.

(xvi) Submission of structural stability certificate on completion of building shall be mandatory;

(xvii) Any No Objection Certificate issued by the department shall be liable for withdrawal on breach of terms and conditions of references of such No Objection Certificate and undertaking to this effect shall be given by the applicant;

(xviii) No Objection Certificate from the Himachal Pradesh State Electricity Board Limited shall be obtained and attached with the application seeking planning permission;

(xix) No construction shall be permissible above vision line (1.50 meter) on valley sides of highways/ major road;

(xx) Minimum width of path abutting at least one side of the plot shall be 3.05 metre;

(xxi) Sub-division of land into plots amounts to development under the Himachal Pradesh Town and Country Planning Act, 1977 and as such, no person shall sub-divide the land unless permitted to do so as per rules framed under the said Act. The development proposal for a part of land or khasra number shall not be considered and proposal for complete land holding shall be submitted;

(xxii) Roof slab/chajja projection over door and window opening shall be limited upto 0.45 metre over set backs on all sides;

(xxiii) The ***floor*** height limitations of these Regulations shall not apply to all kind of religious places e.g. Temples, Mosques, Gurudwaras, Churches, etc. provided it is so designed and approved by the competent authority ***which can put overall height restrictions***. The chimneys, elevators, poles, tanks and other projections not used for human occupancy may extend above the prescribed height limits. The cornices and window sills may also project into any required yards.

(xxiv) Natural Nallahs which passes through land involving division shall be developed and maintained according to discharge of water or ***realigned with the approval of Competent Authority after taking views of adjacent plot holders and consent of local authority.***

(xxv) Drainage shall be regulated strictly according to natural profile of land with a view to prevent landslides, soil erosion and to maintain sanitation.

(xxvi) In case of petrol filling station, the layout plan/norms of the Indian Oil Corporation (IOC) shall be adopted. However, on National Highways and State Highways the front set back shall be kept as 8.00 M from acquired width of the Highway. If the rear and side set backs are not mentioned in the layout plan of IOC, the sides and rear set backs shall be 2.00 M minimum ***in addition to above***.

(xxvii) ***The provision of stair cases shall be as per clause 4.6.2 of part-IV of National Building Code of India, 2005 from life safety point of view in the event of fire.***

(xxviii) Every development proposal shall have explicit mention of muck disposal.

(xxix) Septic Tanks/ Soak Pit should be pucca in all sides and bottom. Its effluent should be discharged in soak pit. The soak pit shall be lined with brick bats on its sides. ***These structures shall be atleast 1.00 m. inside from the property line.***

(xxx) Permissible area standard/norms for different parts of a building shall be as under:-

## Minimum size of different parts of a building shall be as under:-

| | | | |
|---|---|---|---|
| a. | Habitable Room | Minimum floor area | 9.50 $m^2$ |
| | | Minimum width | 2.40 m |
| b. | Kitchen | Minimum floor area | 4.50 $m^2$ |
| | | Minimum width | 1.80 m |
| c. | Bathroom | Minimum floor area | 1.80 $m^2$ |
| | | Minimum width | 1.20 m |
| d. | W.C. | Minimum floor area | 1.10 $m^2$ |
| | | Minimum width | 0.90 m |
| e. | Toilet | Minimum floor area | 2.30 $m^2$ |
| | | Minimum width | 1.20 m |
| f. | Corridor | For residential | 1.00 m wide minimum |
| | | For other uses | 1.20 m wide minimum |
| g. | Stair | (i) For residential | 1.00 m wide minimum |
| | | (ii) For Hotel/ Flats/ Hostel/ Group Housing/ Educational Institutions like School, College etc. | 1.50 m wide minimum |
| | | (iii) Hospital/ Auditorium/ Theatre/ Cinema Hall | 2.00 m wide minimum |

| | | | |
|---|---|---|---|
| h. | Width of treads Without nosing | For residential | 25 cm. minimum for internal stair case. |
| | | For other uses | 30 cm. minimum for internal stair case. |
| i. | Height of riser | For residential | 18 cm. maximum (15 nos. maximum in a flight). |
| | | For other uses | 15 cm. maximum (15 nos. maximum in a flight). |
| j | Openings | For sufficient air and light the windows and ventilators provided should have minimum area equivalent to 1/6th of the floor area. | |
| k. | Balcony projections | ***1.00*** m wide balcony complete open on two sides with restriction upto 50% of building frontage where minimum front set back is ***2.50*** m shall be permissible. | |

## 19.6.14 Constitution of Single Umbrella Committee.

For the purpose of according building plan approvals in all types of areas in Municipal Corporation Area established under the provisions of Municipal Corporation Act, 1994, there shall be a Single Umbrella Committee (hereinafter referred to as the 'SUC') which shall comprise of the following:-

- Commissioner, Municipal Corporation Shimla — Chairman
- Town & Country Planner (Shimla) — Member
- Executive Engineer (Urban Development) — Member
- Architect Planner, Municipal Corporation Shimla — Member Secretary

### 19.6.14.1 The Single Umbrella Committee (SUC), shall discharge the following functions, namely:-

(i) In cases where relaxation of provisions is required, the SUC shall send those cases to the State Government for decision under provisions of Section-76 of the H.P. Town & Country Planning Act, 1977. The cases, where relaxation is sought from the Government, such relaxations will be properly justified by the SUC or the cases will be rejected;

(ii) In case of non-residential building e.g. commercial, education, health ***Industry Indian Oil Corporation, Power, tourism and Transport*** etc.

having covered area of more than 1000 Sqm., the SUC shall co-opt officers of the concerned Department/Agency having specialization in relevant field for processing such cases;

(iii) The empanelled private architects /practitioners shall submit maps after certifying that maps are in accordance with the relevant regulations and also the bye-laws of the local body, if any, involved. These maps shall be thoroughly by the concerned Junior Engineer. If any wrong submission of maps/plinth level / completion certificate by empanelled private practitioners the competent authority may recommend cancellation of license /registration.

(iv) The SUC shall meet at least once every month and decide a fix-day for this purpose;

(v) In context of Heritage ***Area***, the Single Umbrella Committee shall consider cases of Heritage Area only on the recommendation of the Heritage Advisory Committee comprising of the following:-

(1) Director, Town and Country Planning Department.

(2) Two experts, having knowledge in the field of Conservations of Heritage, Architecture, Archeological, Environment, Natural Heritage etc.

## 19.6.15 Simplification of the Map Approval Process:-

1. The whole map approval process in the MC area will be under the domain of Single Umbrella Committee (SUC)
2. For Other Areas of Shimla Planning Area out side the Municipal Corporation Shimla Area, the map approval process shall be as under:-

(i) The empanelled Private Practitioner(s) shall be registered by the Town and Country Planning Department;

(ii) The empanelled Private Practitioner(s) shall be competent to approve maps and after certifying that maps are in accordance with the relevant regulations and also the bye-laws of the local body, if any, involved, they shall file these maps with the ***SADA/ TCP Department*** concerned;

(iii) The ***SADA / TCP Department*** shall have to the right to review maps submitted to it and if found contrary to any of the regulations it may take action against the concerned practitioner(s)

(iv) After construction, a certificate on a specified formal from a empanelled private practitioner shall be sufficient for grant of the completion certificate (CC) by the ***SADA/ TCP Department***; and

(v) The ***SADA/ TCP Department*** concerned shall have the right to review the certificate given by it and may take penal action in relation to such structure and against empanelled private practitioner(s) as per law and these regulations. If empanelled private practitioner is found to have approved maps in violation of these regulations or issued wrong certificates for obtaining a completion certificate, he shall be liable to have his registration cancelled on the recommendations of the SADA concerned under provisions of para-5 of Appendix-II of the Himachal Pradesh Town and Country Planning Rules, 1978. In addition, the recommendation shall be made by the Town & Country Planning Department to the respective professional institute for revoking the license of the empanelled private practitioner who is found in default of the prescribed norms.

**19.6.16. Constitution of Inspection Squad:-(1)** To perform the inspection and monitoring of the plan approval and implementation process, there shall be an inspection squad comprising of the following :-

(1) State Town Planner/Town & Country Planner(H.Q.) - Chairman.
(2) Tehsildar (TCP) - Member
(3) Planning Officer (H.Q.) - Member

(2) The Inspection squad shall discharge the following functions, namely:-

(i) conduct random checks of the construction activities and perform inspection of records pertaining to planning permissions NOC and unauthorized constructions going on in Shimla Municipal Corporation area;

(ii) take cognizance of the deviations committed by the individuals/sanctioning authorities with reference to the provisions of Municipal Corporation Act, 1994 and Himachal Pradesh Town and Country Planning Act, 1977 and shall bring the same to the notice of the authorities concerned including Commissioner, Municipal Corporation Shimla for taking further action;

(iii) co-op executive Engineer, Municipal Corporation Shimla or any other functionary of Municipal Corporation Shimla, as a member of the Inspection Squad for the purposes of monitoring and facilitating compliance to the provisions of the Himachal Pradesh Town and Country Planning Act, 1977; and

(iv) periodic reports, along with recommendations of Insction Squad shall be shared with concerned Municipal Corporation, Shimla, Urban Local Bodies and Special Area Development Authorities for including qualitative improvement of management system;"

## 19.7 *High Security Zone*

***The High Security Zone shall comprise area bounded by Charrabra-retreat/Kalyani Helipad road starting from taking off point of Punjab Raj Bhawan road then along old Hindustan - Tibet road upto the house / Garage of Sh. Inderjeet Rikhi and following line bounding forests upto kucha jeepable road leading to retreat and then along the said road upto first nallah after sharp hairpin bend, then descending along nallah upto Shimla-Tattapani road near spring. Thereafter following Shimla-Tatapani road upto taking off point of Mashobra-Bhekhalti road upto taking off point of a pedestrian path joining Helipad road near Punjab Raj Bhawan.***

## 19.8 Apartments Regulations

**(i) Site selection**

The apartment site shall be finalized on the basis of No Objection Certificates obtained by promoters from related Departments including Town and Country Planning Department.

**(ii) Processing of Apartment Applications**

***The proposal for apartments shall be processed for registration and license based on provisions under rule 24(1) and 10(1) of the Himachal Pradesh Apartment Rule, 2005.***

**(iii) Size and Shape of Scheme Area.**

The cases for permission of apartments shall be considered in the form of complexes and not on ribbon development pattern along Highways/Major Roads. The minimum area for developing an apartment, colony shall be 1000 Sqm. In general, overall length and width ratio of the site shall be up to 3:1.

**(iv) Slope**

Apartments shall be allowed upto $45^0$ slope.

**(v) Landuse structure of apartment complex:-**

| **Landuse** | **% age to total Area** |
|---|---|
| Area under apartments | 45-50% |
| Commercial | 2 - 5% |
| Public/ Semi Public | 5 -10% |
| Traffic and transportation | 8-15% |
| Parks & Open Spaces | 10- 15% |
| Area under set backs, pavement, plantation and landscaping. | 15-20% |

Under commercial use, convenience shops @ of one shop per 150 persons shall have to be provided. These will include service shops like vegetable, shoe repair, dry cleaning, tailor, barber, general merchandise etc. The purpose of these shops should clearly be mentioned in the plan and should be accordingly allotted after completion. In case public and semi-public amenities like schools, health etc. are available in the vicinity and the

same are adequate to cater for the requirements of inhabitants, detail thereof shall have to be given in the check list. However, provision of toilets and urinals @ two toilets, one each for ladies and gents, per 1000 persons and Kindergarten/ totlots etc. shall have to be made in every scheme.

**(vi) Means of Access:**

***a) The minimum access for an area of apartments or colony with a population of upto 1000 persons shall be 5.00m., upto 2000 persons 7.00 m. and 9.00 m. above 2000 persons.***

***b) Walkways of more than 1.20 m. width shall have to be provided on both sides of the main internal roads having width 9.00 m. and above.***

c) The cul-de-sac streets extending ***beyond*** 150 m. in length shall have an additional turning space of not less than 81.00 sqm. with dimension not less than 9.00 m. at an interval of 150.00 m. length.

**(vii). Parking Provision**

Parking provision shall be @ one vehicle i.e. ***20.00 Sqm***. area per 100 Sqm. floor area. Maximum height of parking floor shall be 2.30 m. below the depth of beam.

**(viii) Floor Area Ratio (F.A.R.)**

Maximum permissible F.A.R. shall be 1.75. However the maximum F.A.R. with respect to apartments shall be 1.50. The rest 0.25 F.A.R. shall however be meant for public-semi-public and commercial purposes in view of the requirements of locality as well as surrounding areas.

**(ix). Floor height:**

The floor height of apartments may vary from 2.70 m. to 3.50 m.

**(x). Set backs:**

Block to Block ***minimum*** distance shall be 6.00 m. Distance of apartments from the adjoining properties and side setbacks shall not be less than 5.00 m . However, in the interest of better layout, skyline and functionality arrangement of blocks ensuring proper light, air, ventilation and wind direction may be ascertained within prescribed F.A.R. Minimum 3.00 m. distance from internal roads shall have to be maintained.

**(xi). Expansion Joints**

The structures exceeding 45.00 m. in length shall be divided by one or more expansion joints as per design calculation in National Building Code (NBC) 2005.

**(xii). Structural Stability:**

The structural stability provisions have to be strictly adhered as enshrined in Section 31-A of the H .P. Town and Country Planning Act, 1977. Monitoring of the structure stability certificate and completion certificate at each floor level shall be ensured by the competent authority.

**(xiii). Environment and Health**

a) Proper air, light and ventilation to each dwelling unit shall have to be ensured. At least 3 hours sun may be available for each flat during winters. Kitchen and services shall have to be provided along the external walls. However, if the water closets and bathrooms are not opening on to front, side, rear and interior open spaces, these shall open on to the ventilation shaft.

b) The developer has to ensure prior environmental clearance under the provisions of Environment Protection Act, 1986 from the competent authority besides consent of the State Environment Protection and Pollution Control Board under Water Act, 1974 and Air Act, 1981.

**(xiv). Safety Measures:**

***The provision of stair cases shall be as per clause 4.6.2 of part-IV of National Building Code of India, 2005 from life safety point of view in the event of fire.***

**(xv). Potable Water Supply and Rain Water Harvesting:**

No objection certificate from the IPH Department regarding availability of adequate water supply and viability of design of rain water harvesting shall have to be furnished. Adequate provision for rain water harvesting @ 20 liters per Sqm. of the roof top area shall have to be made underground in the parks and open spaces and same shall be used for the purposes other than drinking and cooking.

**(xvi). Parks and open spaces:**

Area under parks and tot lots shall have to be properly organized in regular shape, amidst the blocks. Proper landscaping of the apartment area in accordance with the design shall be ensured by the builder.

**(xvii). Existing trees and plantation:**

The builder shall ensure plantation of local variety of trees for preserving the trees.

**(xviii). Distance from Roads**

Distance of structures from roads shall have to be adhered as under:-

- National/ State Highways/ PWD Scheduled roads and bye-passes. = 10.00 metre
- Other District Roads. = 7.00 metre

**(xix). Assessment of Power Requirement**

In case power assessment exceeds 50 KW, proper space for installation of transformer is required to be provided in the layout plan and provision has to be made for coming 11 KV line. The proposed space is to be got verified from the concerned A.E.E. of the H.P.S.E.B. and accordingly N.O.C. alongwith verification of provision in the layout plan shall have to be furnished.

**(xx) Reservation for Economic Weaker Section**

In case the total area of the scheme is 40 bighas, the promoter shall reserve at least 10% of numbers of residential plots or apartments for Economic Weaker Sections, as per the provision of sub-section (8) of Section (5) of the H.P. Apartment and Property Regulation Act, 2005 (Act No. 21 of 2005).

**(xxi) Development of Infrastructure and its Maintenance:**

The builder/developer shall construct roads, drains, lay electricity lines, sewerage and make provision for disposal of solid waste etc. Suitable site has to be reserved for placement of dumpers. The provision of services infrastructure shall be made through a duct on sides of the road and the same have to be ascertained by the **promoters** during the course of development at site. The developer has to provide street light poles each at a distance of 30.00m on both sides of the roads. The provision of Community Overhead water reservoir has to be made in the scheme. The infrastructural services shall be maintained till such time that a society is formed and got registered by the residents of the

scheme or Municipal **Body/** SADA / Panchayat undertakes the maintenance pursuits of the area.

**(xxii). Control on registration of apartments and release of service connections.**

The Sub-Registrar shall not register sale deed of a flat which has been constructed in violation of an approved plan. Similarly, the H.P.S.E.B. as well as I&PH Department shall not release any service connection without obtaining N.O.C. of the competent Authority under the H.P. Town and Country Planning Act, 1977, provision of Section 83-A.

**(xxiii) Supervision**

***The licensed Architect registered with Council of Architecture for area upto two hectare, an Engineer-Graduate in Civil Engineering,/ Architectural Engineering registered with Institution of Engineers (India) and Town Planner- Associate Member of the Institute of Town Planners or Graduate or Post Graduate degree holder in Town & Country Planning for land of all areas as per Annexure-A of part-2 of National Building Code of India, 2005.***

**(xxiv) Integration**

Proper integration of the apartment area shall have to be ensured with the surrounding uses and infrastructural provisions like roads, drainage, sewerage etc.

**(xxv) Protection of Local Heritage**

As far as possible local heritage imperatives shall have to be incorporated in the designs in terms of facades, sloping roof, windows, doors etc.

**(xxvi)** In case of any clarification with reference to any proviso or if there is no any specific provision, the provisions as envisaged in Urban Development Plan Formulation and Implementation Guidelines (UDPFI) of Government of India or National Building Code of India shall have to be adhered to.

## 19.9 RAIN WATER HARVESTING REGULATIONS

19.9.1 The Rain Water Harvesting Structures are allowed to be constructed in set backs below ground level. If the storage is desired at any level above ground level, it has to be away from set backs within the permitted covered area.

19.9.2 The community rain water harvesting structure shall also be permissible.

19.9.3 Proper system for rain water capturing, storage as well as integration & distribution shall be ensured.

19.9.4 The stored rain water shall be utilized regularly for non drinking, usages including fire fighting, landscaping, gardening apart from domestic usages.

19.9.5 No water supply connection shall be given to any building till rain water harvesting system is put in place and subsequently operationalised.

19.9.6 The minimum capacity of rain water harvesting structure shall be worked out @ of 20 litres per Square Metre of the roof top area.

19.9.7 Rain Water Harvesting System Inspection Committee under the Chairpersonship of local S.D.M. shall be responsible for periodical inspection to ensure continual use of Rain Water Harvesting System.

19.9.8 Violator shall be liable for disconnection of Public Water Supply connection.

19.9.9 The owners of existing buildings without Rain Water Harvesting System shall have to install Rain Water Harvesting System within eighteen months after coming in the operation of these regulations.

19.9.10 The Rain Water Harvesting System Inspection Committee shall be competent to allow any exemption and minor deviations from these regulations in view of limitations for providing Rain Water Harvesting System in any existing building and any departure from the approved norms.

19.9.11. The Deputy Commissioner shall be Appellate Authority to hear any appeal under these regulations.

## 19.10. SOLAR PASSIVE BUILDING REGULATIONS

19.10.1 Provision of Solar Passive heating and cooling features shall be mandatory in Government and Semi-Government buildings, Industrial Complexes, Tourist Resorts and Hotels in private sector also. Solar lights shall be used for lighting the premises of above complexes. The regulations for Solar Passive Housing Design are as under:-

**19.10.2. Building Map**

The map for the building should accompany a statement giving details of Solar Passive Heating/Cooling/Day Lighting features alongwith technical specifications of Solar Space Heating/ Cooling System, Solar Photo Voltaic, Energy Efficient

and other renewal resource devices to be installed alongwith expected energy saving in the building.

**19.10.3 Site Selection**

The site should preferably be selected on southern slopes/ side. Survey of the site has to be got done to determine adequate solar energy availability and solar access alongwith data on climatic conditions.

**19.10.4 Orientation**

The longer axis of the building should lie along east/west directions to trap maximum solar energy.

**19.10.5 Planning Spaces**

The main habitable spaces of a building should be planned and designed in such a manner, so that natural day light is available. The stair cases, garages, toilets and stores to be planned preferably in northern side. Minimise door and window openings on north side to avoid heat losses and maximize south facing glazing to capture maximum heat as per site and climatic conditions.

**19.10.6 Integrating Solar Space Heating Systems in Building Design.**

(i) Passive solar heating systems like Solar Air heating/ Water heating/Sun space/Solar walls/Solar Trombe wall etc. are to be integrated in the building design on southern side so as to allow maximum direct solar access to the system.

(ii) The suitability of space heating systems to be installed or incorporated in the design of a solar passive building, is to be decided by the architect/solar expert as per the building site/ climate/space heating requirements.

(iii) All solar/ water heating systems should have an automatic electric backup system so as to function during cloudy/non sunshine days.

(iv) The solar water heating system/solar photo voltaic Panels are to be integrated preferably, in the roof of the building, so that the panels become a part of the roof. The Solar Collectors on the roof inclined at angle of 45 to 50 degrees for receiving maximum solar radiation, will be allowed.

(v) The Sunspace/Solarium/Solar Green House/Solar wall/Solar chimneys etc. will be allowed on the roof top for utilizing Solar Energy for heating of the building.

(vi) Provision in the building design itself is to be kept for an insulated pipeline from the rooftop in the building to various distribution points where hot water/hot air is required.

**19.10.7 Solar Photovoltaic Panel (SPV) for lighting**

Solar Photovoltaic panels are to be integrated preferably in the building design for lighting/emergency lighting in order to reduce electricity usage/save energy.

**19.10.8 Solar Passive Cooling Design Features**

**(i) Cross Ventilation:** Windows on opposite sides of rooms be provided for proper circulation and ventilation of fresh and cool air.

**(ii)** South windows are to be fixed with overhangs to provide shade from summer.

**(iii) Colour and shading:** The external surface of the wall is to be painted white/light colours to reflect instant solar radiations.

**(iv) Ground embankments:** Ground Floor be provided with earth beaming to a height of around one meter for taking the advantage of constant temperature of the earth through out the year.

**(v)** Outside temperature be modified by landscaping.

**(vi) Reducing thermal losses:** The building structure and materials are to be utilized to meet the heating and cooling requirements by means of storing warmth and coolth.

**(vii) Outer Wall Thickness:** Outer walls of the building should be made atleast 9” thick/or with cavity/or with insulation for thermal comfort and to avoid the transfer of heat from outer environment to inner environment and vice-versa.

**19.11 MAINTENANCE AND CLEANLINESS REGULATIONS.**

19.11.1 Each locality will be responsible for its cleanliness, beautification and plantation. The respective Departments which own the lands amidst the localities including forest department will be responsible to take care of their respective chunks of

land. In case of any carelessness on the part of agencies, the Director or Municipal Corporation or Development Authority may serve the notice to violators .

19.11.2 As many buildings give a shabby look in the city, the owners shall be responsible to repair, renovate, maintain them, so that they give a pleasing look. If compliance of this provision by owner is not made, the requisite authority may serve upon a notice.

19.11.3 No Garbage Storage Bin/ Dumper shall be allowed to be kept by any authority on the carriage-way of the roads. Suitable sites have to be identified and ensured for the purpose.

## 19.12 LANDSCAPE DESIGN REGULATIONS

19.12.1 Landscaping of building premises, roads community spaces etc. shall be ensured by the landowners, requisite departments and concerned authorities will mobilize them for the same and shall form the integral part of planning process.

## 19.13 REGULATIONS FOR THE PERSONS WITH DISABILITIES

### 19.13.1 Scope

These regulations shall be applicable to all buildings, recreation areas and facilities used by public. These shall not apply to private residential buildings.

### 19.12.2 Site Planning

Every public and semi-public building shall have at least one access to main entrance/exit to the disabled which shall be indicated by proper signage. This entrance shall have approach through a ramp together with stepped entry. The ramp should have a landing after 9 metre run and in front of the doorway. Minimum size of landing shall be 1000 x 2000 mm.

### 19.13.3 Access path/walkway

Access path from plot entry and surface parking to building entrance shall be minimum of 1800 mm wide having even surface without any step. Slope if any

shall not be greater than 5%. Selection of floor material shall be made suitably to attract or to guide visually impaired persons (limited to floor material hose colour texture is conspicuously different from that of the surrounding floor material or the material that emit different sound to guide visually impaired persons). Finishes shall have a non-slip surface with texture traversable by a wheel chair. Curbs wherever provided should blend to common level.

**19.13.4 Parking Provision**

Surface parking for two equivalent car spaces shall have to be provided near entrance with maximum travel distance of 30 metre from building entrance. Width of parking bay shall be minimum 3.6 metre. Guiding floor materials shall be provided or a device which guides visually impaired persons with audible signals or other devices which serves the same purpose shall be provided.

**19.13.5 Approach to plinth level**

Ramp shall be provided with non-slip material to enter the building. Minimum clear width of ramp shall be 1800 mm with maximum gradient of 1:12 between top and bottom of the ramp. Length of ramps shall not exceed 9.00 metres having 800 mm high handrail on both sides extending 300 mm beyond the ramp. Minimum gap from the adjacent wall to the handrail shall be 50 mm. For stepped approach size of tread shall not be less than 300 mm and maximum riser shall be 150 mm. Provision of 800 mm high handrails on both sides of the stepped approach similar to the ramped approach shall be provided.

**19.13.6 Entrance Door**

Minimum clear opening for the entrance door shall be 1000 mm.

**19.13.7 Corridor connecting the entrance/exit**

The corridor connecting the entrance/ exit for handicapped leading directly outdoors to a place where information concerning the overall views of the specific

building can be provided to visually impaired persons either by a person or signs shall be provided as follows:-

Guiding floor materials shall be provided or devices that emit sound to guide visually impaired persons. The minimum width shall be 1500 mm. In case there is a difference of level, slope ways shall be provided with a gradient of 1:12. Handrails shall be provided for ramps/ slope ways.

**19.13.8 Lift**

For the buildings with more than 15.00 metre in height one lift shall be provided for the wheel chair user with the following clear dimensions:-

| | |
|---|---|
| Clear internal depth | 1100 mm |
| Clear internal width | 2000 mm |
| Entrance door width | 910 mm |

A handrail not less than 600 mm long at 900 mm above floor level shall be fixed adjacent to the control panel. The lift lobby shall be of an inside measurement of 1800 mm x 2000 mm or more. Operational details of lifts shall conform to the National Building Code of India.

**19.13.9 Toilets**

One special toilet in a set of a toilets shall be provided for use of handicapped with following specifications:-

(a) Provision of washbasin near the entrance.
(b) The minimum size shall be 1500 mm. X1750 mm
(c) Minimum clear opening of the door shall be 900 mm. and the door shall be swinging/sliding type.
(d) Suitable arrangements for vertical/horizontal handrails with 50 mm clearance from wall shall be made in the toilet.
(e) The W.C. seat shall be 500 mm from the floor.

**19.13.10 Refuge Area**

Refuge area shall have to be provided at the fire protected stair landing on each floor having doorways with clear opening width of 900 mm that can safely hold one or two wheelchairs. The alarm switch should be installed between 900 and 1200 mm from the floor level.

## 19.14 ECONOMICALLY WEAKER SECTION

19.14.1 The plots allotted by the Government under Gandhi Kutir Yojna, Indira Awas Yojna and Economically Weaker Section (E.W.S.) Schemes may be considered and permission accorded in view of regulations prescribed as under:-

19.14.1.1 The minimum size of plot in case allotted by the Government under any scheme for Economic Weaker Section may be considered as ***40.00 Sqm.***

19.14.1.2 In continuous plots, there shall be row housing. However, in case two adjacent plots are allotted to the Economic Weaker Section, applicants may be allowed to construct semi-detached houses with one common wall.

19.14.1.3 Maximum permissible coverage in any case shall be 50%. Accordingly, the set backs may be relaxed. However, set back on any side shall not be less than 1.00 metre.

19.14.1.4 For an accommodation upto two room set, single line plan shall be submitted by the applicants to the Department/ Authority vested with the powers of the Director under H.P. Town & Country Planning Act, 1977 in case the site is located in the urbanisable area. However, in case of areas outside the urbanisable limits in the Planning/Special Areas simple applications illustrating dimensions of the constructions may be entertained. Layout at the site may be ensured accordingly.

19.14.1.5 Un- obstructed approach path may be available at site which may be at least1.50 metre in width.

19.14.1.6 Maximum number of storeys shall be two.

19.14.1.7 Single flight open stairs to the upper storey shall be permissible on set backs.

19.14.1.8 Assistance in preparation and submission of case by the Economically Weaker Section of the society may be rendered by the concerned office.

## 19.15 RULES FOR INSTALLATION OF COMMUNICATION TOWERS.

### 19.15.1 Definition

Communication Tower-shall include antenna fixtures, fabricated antenna, tower to install the telephone lines and transmission towers. This will not include the Antennas installed for domestic purpose, namely Television

Antennas or Dish Antennas.

### 19.15.2 Application for Permission

Any person or stakeholder who intends to erect any communication tower shall make an application to the competent authority alongwith the following documents and requisite fee as prescribed:

(i) Revenue documents namely tatima and jamabandi in original.

(ii) Site plan in the scale of 1:200 and location plan in 1:1000.

(iii) Affidavit from owner of the land containing his consent alongwith proof of ownership.

(iv) Drawing of tower with complete details including the specifications of foundations and design parameters.

(v) Height of the tower alongwith its elevation.

(vi) In case the tower is in the vicinity or adjoining to high or low tension line- then its distance from the same shall be clearly indicated in the drawings.

(vii) Structural safety certificate of tower from a graduate structural engineer who should be a member of Institute of Engineers (India).

(viii) Indemnity Bond to take care of any loss or injury due to accident caused by the tower (including a declaration to the effect that the applicant shall take special precaution for fire safety and lightning and he shall be solely responsible for paying all kinds of compensation and damages and would be responsible for any civil or criminal case arising there from.)

(ix) Mobile Companies shall indicate the capacity of Tower or antenna in Megawatt.

(x) In case the Mobile Tower is proposed to be installed in the residential area or in vicinity thereof or near school or hospital or public, semi-public buildings, NOC from owners of adjoining buildings and concerned Education or Health Department and requisite stakeholders shall have to be obtained.

(xi) No Objection Certificate to this effect shall be submitted from the Himachal Pradesh Pollution Control Board.

(xii) In case the Mobile tower is proposed to be installed in the vicinity of any Airport, No Objection Certificate from Airport Authority shall have to be submitted.

### 19.15.3 Fee

Installation and renewal fee shall be deposited at the following rates:-

(i) **Municipal Corporation, Shimla:-** Installation Fee @ Rs. 20,000/- per tower and Annual Renewal Fee @ Rs. 10,000/- per annum per tower.

(ii) **Urban Areas:-** Installation Fee @ Rs. 15,000/- per tower and Annual Renewal Fee @ Rs. 8,000/- per annum per tower.

(iii) **Rural Planning Areas and Special Areas:-** Installation Fee @ Rs. 10,000/- per tower and Annual Renewal Fee @ Rs. 5,000/- per annum per tower.

(iv) **Special Areas located in Tribal or Difficult Areas:-** Installation Fee @ Rs. 4,000/- per tower and Annual Renewal Fee @ Rs. 2,000/- per annum per tower.

(v) There shall be an option for lump sum payment of renewal fee given in block of 5 years (with 40% discount for upfront payment of the entire amount including renewal fees for 5 years). The renewal fee will increase by 25% after every 5 years.

(vi) An additional amount @ 60% shall be levied for every additional antenna which shares the same tower.

### 19.15.4 Location

Location of communication towers is governed by radio frequency system and cellular operators shall avoid residential areas for erection of the same. The location shall be decided as follows:-

(i) First preference shall be given to the location of tower in the Forest areas.

(ii) Second preference shall be given to the location of tower in the open or public areas away from residential locations.

(iii) Where it is not possible to avoid the location of the tower in residential area, the same shall be located in open space or park, with prior consent of owners of adjoining residential houses.

(iv) Erection of tower shall not be allowed within a radius of 100 metre from residential building, school and hospital.

**19.15.5 Installations**

(i) In order to avoid any eventuality due to thunder storm, lightning conductors have to be installed.

(ii) Generator set installed at the tower site to cater to the power requirements of the antenna shall conform to the noise and emission norms prescribed by the Himachal Pradesh Pollution Control Board.

**19.15.6 Set Backs of Tower**

(i) The area equivalent to height of tower shall be left as set back around it.

(ii) The distance of tower from electric line or pole or tower thereof shall not be less than height of tower plus requisite distance from respective high tension or low tension line.

**19.15.7 Sharing of Sites**

The Telecom Operators may share the towers for fixing their respective antennas. The same are however, required to adhere to the prescribed technical requirements, so as to curtail multiplicity of towers as well as to optimize the use of the existing ones.

**19.15.8 Deemed Approval**

A final decision shall be taken within 30 days from the date of submission of all the documents. In case the documents submitted for permission are complete in all respects and decision is not conveyed within 30 days, deemed permission shall be assumed, provided that the same is in accordance with the prescribed Rules.

## 19.16 PARTS OF OTHER AREAS WHERE EXEMPTIONS ARE AVAILABLE.

19.16.1 Sub-Division of land in this zone shall be allowed only for agriculture purposes.

19.16.2 The villages related activities or pursuits by the bonafides himachalies are hereby exempted and no development and planning permission shall be required for the

same in Agriculture Zone. However, the ceiling of a maximum plinth area of 200 Sqmt. and No. of storey up to 2+1 parking floor shall be applicable for such activities.

19.16.3 All the development activities as specified below upto prescribed limits shall be exempted from permission under this Development Plan in rural areas beyond urbanisable limits:-

(i) Residential activities such as farm-houses and residential houses upto three storeys, cattle shed, toilet, septic tank, kitchen, store, parking shed or garage and rain shelter.

(ii) Commercial activities such as basic commercial activities like shops of general merchandise, cobbler, barber, tailoring, fruit, vegetable, tea or sweet, eating places and dhabas, chemist and farm produce sale depot.

(iii) Service Industries such as cottage or house-hold, service industries like carpentry, knitting, weaving, blacksmith, goldsmith, atta-chakki with capacity upto five horse power, water mill, agriculture equipments or machinery repair, electrical, electronic and house-hold appliances.

(iv) Public amenities such as public amenities like panchayat offices, schools, mahila mandals, yuvak mandals, community halls, post offices, dispensaries and clinics (including health, veterinary and Indian System of Medicines) information technology kiosks, patwar khanas, guard huts, anganwaries, electricity and telephone installations and connections, roads and paths, ropeways, water tanks, rain harvesting tanks, overhead or underground water tanks, pump houses, check dams, temples, churches, mosques, graveyards, cemeteries, cremation grounds and other religious buildings, bathing ghats, cremation shelters, rest sheds, baths, drainage, toilets, latrines, urinals, sewerage installations, wells, tube wells, baulies, garbage disposal bins, depots and other installations.

(v) Agriculture and horticulture related activities including rain harvesting structures, milk chilling plant, farm level godowns, seeds and fertilizer stores, farm clinics, pre-cooling units, primary processing units, green houses and poly houses.

(vi) Heritage related activities such as lakes, reservoirs, dams, baulies, wild life sanctuaries, cemeteries, graveyards, railway lines.

19.16.4. All other development activities beyond prescribed limit shall be regulated as provided in Rules.

## 19.17 REGULATIONS FOR EXEMPTED AREA

**1. Residential Buildings and Farm Houses**

| | | | |
|---|---|---|---|
| (i) | Maximum floor area | = | 600.00 $m^2$ |
| (ii) | Maximum number of storeys | = | 3+***one parking floor*** (if feasible) |

**Note:-** The applicant may have a maximum floor area of 600.00$m^2$ distributed over not more than three storeys.

**2. Commercial Use**

| | | | |
|---|---|---|---|
| (i) | Maximum floor area | = | 100.00 $m^2$ |
| (ii) | Maximum number of storeys | = | 2 +parking (if feasible) |
| (iii) | Minimum access | = | 3.00 Metre |

(iv) Parking = For loading, un-loading and parking purpose suitable community parking space has to be arranged by the shop owners.

**Note:-** The applicant may have a maximum floor area of 100.00$m^2$ distributed over not more than two storeys.

**3. Service Industries**

| | | | |
|---|---|---|---|
| (i) | Maximum floor area | = | 100.00 $m^2$ |
| (ii) | Number of storeys | = | 1 +parking (if feasible) |
| (iii) | Minimum access | = | 3.00 Metre |

(iv) Parking = For loading, un-loading and parking purpose suitable community parking space shall have to be ensured by the Industrialists.

**4. Public Amenities**

(i) Maximum floor area = As per requirement of the

| | | | |
|---|---|---|---|
| | | | particular amenity. |
| (ii) | Maximum number of storeys | = | 3 +parking (if feasible) |
| (iii) | Minimum access | = | 3.00 Metre |
| (iv) | Parking | = | @ 0.50 to 1.50 equivalent car space per 100 $M^2$ of floor area. |
| (v) | Play fields in case of educational buildings. | = | 0.20 Hectare to 1.60 Hectare is Desirable, however, as per Availability of land |

**5. Other Imperatives**

I. Structural safety and seismic proofing should be ensure.
II. Attic or basement shall be counted as a storey.
III. Sloping roof shall have to be ensure.
IV. No construction shall be raised within a distance of 5.00metre from the centre of the roads in respect of all other village roads.
V. No construction shall be raised within controlled width of major District roads.
VI. Minimum front set back of 3.00Metre from controlled width of national Highways, State Highways and Scheduled Roads under the Himachal Pradesh Road Side Land Control Act shall be kept.
VII. Construction on valley side of nation and State Highways has to be restricted upto 1.50 Metre above the road level.
VIII. Minimum set back of 2.00Metre from the adjoining property, government land and 5.00Metre from Forest land shall have to be maintained.
IX. Minimum horizontal and vertical clearance from HT/LT lines shall have to be maintained in accordance with provisions of Indian Electricity Rules, as provided in the national Building Code of India 2005, as under:-

| **Electricity line** | **Vertical distance (Metre)** | **Horizontal distance (Metre)** |
|---|---|---|
| Low and medium voltage lines and service lines. | 2.50 | |
| High voltage lines upto and including 11000V | 3.70 | 1.20 |
| High voltage lines above11000V and upto and including 33000V | 3.70 | 2.00 |
| Extra High voltage lines beyond 33000V | 3.70 (Plus 0.30 M for every additional 33000 V or part thereof. | 2.00 (Plus 0.30 M for every additional 33000 V or part thereof) |

X. Hill side cutting may be done upto 3.50Metre height.
XI. Provision of Rain Water Harvesting System @ 20 liter per square meter of roof area should be made.
XII. Septic Tank and Soak Pit should be made.
XIII. Preference shall be given for Solar Passive Building Design.

XIV. Locational attributes, aesthetics, local building material, heritage and environmental aspects should also be taken into account.

## 19.18 Abadi Deh

(a) Construction of a residential house, shops, nursery, primary & middle schools, buildings of public utility and service industry shall be permissible. No obnoxious activity as may pose any danger to the living environment shall be permissible in such area, provided such constructions are acceptable to adjoining owners and shall be uncontroversial.

(b) The maximum number of storey shall be three.

# CHAPTER-20

## CO-ORDINATION AND MONITORING FOR IMPLEMENTATION AND ENFORCEMENT

20.1 The implementation and enforcement of Shimla Development Plan shall have to be a collective venture. In view of degradation of environment of the city, on one hand and utmost disregard towards the vital heritage on the other, it is imperative that a massive public awareness is ensured to sensitise common masses and stakeholders regarding the mounting crisis in these respects. The haphazard development has caused a lot of harm to the cityscape. The eco-sensitive areas in the east and vital green areas all over the city and its environs are witnessing unprecedented stress. Traffic, transportation, infrastructural and non-conforming landuse problems have acquired serious proportions. Haphazard sub-divisions of land have played havoc with the precious and scarce land resources. It is therefore, imperative that common man, land owners and concerned authorities rise to the occasion to make sincere efforts for the sake of their own city.

20.1.1 The land owners owe a mandatory responsibility to get the proper sub-divisions approved in accordance with provisions of Section-16-C of the Himachal Pradesh Town and Country Planning Act, 1977. They are required to develop their land by construction of roads, make provision for basic services infrastructure including roads/paths, drains, electrification and sewerage and only then sell their land.

20.1.2 In order to ensure proper implementation and enforcement of the plan by participation of requisite Authorities including Development Authority, Municipal Corporation, Shimla, Special Area Development Authorities, Infrastructural Departments, on one hand and land owners on the other, the Development Plan envisages co-ordinated approach for its implementation and enforcement. Land Pooling and Reconstitution Schemes have been proposed to be implemented by joint efforts of the land owners and the said authorities in the interest of both sellers/developers and purchasers.


5
EXISTING
LANDUSE
DEVELOPMENT PLAN
FOR
SHIMLA PLANNING
AREA