

FOREWORD

Named after Shoolini Devi Goddess, Solan is the fastest growing district headquarters town of Himachal Pradesh. Situated on Kalka-Shimla National Highway-22, it has a unique location in between Chandigarh and Shimla. It is half way on Kalka-Shimla narrow gauge heritage railway line, built by the British. It is now popularly known as “**MUSHROOM CITY OF INDIA**”. At an altitude of 1453 metre above mean sea level, the town is surrounded by high hills. It is pleasant in summers and also not so cold in winters. It is well connected with Nalagarh, Bilaspur, Shimla, Rajgarh, Nahan & Chandigarh.

The need to bring Solan within the ambit of Himachal Pradesh Town & Country Planning Act, 1977 was being felt since 1980. The Act was even extended here in the year 1984 but the same was withdrawn later on in view of strong public protest. However vide State Government Notification No. TCP-F (6)-60/94, dated 1.3.1997, the Act was again extended to the Solan town as well as 67 villages around it. Subsequently, vide State Government Notification No. TCP-F (6)-60/94, dated 9.7.1998 published in the Rajpatra dated 31.7.1998, the provisions of the section-15 A of the Act were extended to the Solan Planning Area. Existing land use was adopted under section 15 of the Act vide Notification No. HIM/TP/ PJT/ DP-Solan/93-871-1027 dated 9.5.2000.

The Draft Development Plan has been prepared under provisions of Sections 18 and 19 of the Himachal Pradesh Town & Country Planning Act, 1977. The plan has been contemplated after detailed surveys and studies of the Planning Area as well as interaction with eminent citizens, public representatives, NGO's, and various State Government Departments. The Development Plan was notified for public objections and suggestions vide Notice No. HIM/TP/PJT/D.P. Solan/2003/Volume-II/5528-5746 Shimla, dated 12.9.03. Devised for the plan year 2021, the Development Plan envisages for additional area of 232.65 hectares for additional urban uses.

The plan proposals are proposed to be implemented by the Development Authority, Municipal Council and Gram Panchayats falling in Planning Area. Land pooling and reconstitution mechanism through public participation shall be the basis of implementation of this plan.

The contribution made by all Officers/Officials of Divisional Town Planning Office, Solan as well as Directorate in formulation and drafting of this Development Plan is hereby acknowledged.

Sd/-
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Chapter-I

THE CONTEXT

1.1 Solan is one of the fastest growing towns of Himachal Pradesh. Located on Kalka-Shimla National Highway No. 22, it has a unique location, it being in the midst of Kalka as well as Shimla. While it is pleasant in summer season it is not very cold like Shimla in the winter season. It is well and conveniently linked with Nalagarh, Bilaspur, Shimla, Rajgarh, Nahan and Chandigarh. It also falls on the internationally popular Kalka-Shimla narrow gauge railway line built by the Britishers nearly a century ago. In yester years industry has also come-up in this town. It is on these accounts that lot of people particularly employees have started settling down in Solan town. A lot many persons from Delhi, Punjab and Haryana etc. love to own a flat or bungalow with a view to spend their summers here. The Horticulture University at Nauni, Dental College near Oachhghat, Mohan Meakins Brewery at Chambaghat and cantonment within the heart of the town are some other factors leading to the rapid growth as well as importance of Solan town. Recently it has been christened as the "MUSHROOM CITY OF INDIA". The climate here is excellent for the production of mushroom, a highly nutritious vegetable.

1.2 The need to bring Solan within the ambit of Himachal Pradesh Town & Country Planning Act, 1977 was being felt since 1980. The Act was even extended here in the year 1984 but was later on withdrawn on strong public protest. At that time there was no office of the department functioning at Solan. However vide State Govt. Notification No. TCP-F (6)-60/94, dated 1-3-1997, the Act was again extended to the Solan town as well as 67 villages around it. Subsequently vide State Govt. Notification No. TCP-F (6)-60/94, dated 9-7-1998 published in the Rajpatra dated 31-7-1998, the provisions of section 15-A of the Act were extended to the Solan Planning area. Existing land-use was adopted in May, 2000 under section 15 of the Act.

The Development Plan has now been prepared under provisions of section 19 of the Himachal Pradesh Town & Country Planning Act, 1977. The plan has been conceived after detailed study of the area in its totality, through interaction with eminent citizens, public representatives, N.G.O.'s and various State Government departments and taking into account the potentials of physical growth trends as well as State Government policies etc. The document has been prepared by a planning team consisting of personnel qualified in various fields like architecture, civil engineering, economics, geography, surveying etc.

1.3 This plan is based upon the projections of the department for the year 2021 A.D. Now after its approval by the State Government, it is expected to play an important role in ensuring regulated and planned development of the so-called Solan Planning Area.

Chapter-2

TOWN OVER TIME

Solan is named after Shoolini Devi Goddess. A fair is held every year in the month of June. It begins with the worship of goddess Shoolini Mata. A 3-day mela is held at the central Thodo ground on this occasion.

2.2 Geographical setting

Solan town is located in the middle of National Highway 22 linking Kalka and Shimla. It is served by the internationally known narrow gauge railway line connecting Shimla with Kalka, the so called "Toy Train". The town is situated at an altitude of 1453 meters above mean sea level and geographically we have longitude 77°6' and latitude 30°54' passing through it. The town proper has high hills surrounding it. The Matiul peak is on the eastern side and is approximately 1986 meters high. The Karol peak on the Northern side is nearly 2000 meters high whereas the one near Deonghat is 1984 meters high. Solan town acts as a base station for many tourist destinations like Chail, Dagshai, Subathu, Kandaghat, Churdhar peak etc.

2.3 Historical Evolution

Solan is the headquarters of Solan district. The district derives its name from Solan town which came into existence after the construction of the cantonment here around last quarter of the 19th Century. The Mohan Meakins brewery was set up after the establishment of the cantonment here. The brewery was set up in the year 1855. The town has been headquarters of the princely Baghat State. The word Baghat is derived from Bau or Bahu said to be a hilly term meaning "many" and ghat meaning pass. Initially the state headquarters of the Baghat State was located at Bhoch in the Bhuchali pargana, but the headquarters of the state was shifted to Solan after the construction of cantonment over here. The railway line became functional 100 years before i.e. in 1902. Thus the evolution of the town can be spelt out in the following order or sequence :-

- (i) Setting up of a cantonment area at Solan.
- (ii) Establishment of a brewery on account of availability of excellent mineral water in the year 1855.
- (iii) Shifting of the headquarters of Baghat State from Bhoch to Solan.
- (iv) Start of Kalka-Shimla rail line in 1902.
- (v) Start of vehicular road movement on Kalka-Shimla road.
- (vi) The urban local body i.e. M.C. Solan came into existence around 1950.
- (vii) Consequent upon re-organisation of districts in Himachal Pradesh, Solan became an independent district on 1st September, 1972 and Solan town became its natural headquarters.

2.4 Nagar Parishad

Municipal Council, Solan is spread over an area of 896 hectares with a residential population of 34,199 persons as per 2001 census. The council area is thickly populated excepting the Solan Cantonment area which is outside the purview of H.P. Town & Country Planning Act, 1977 as well as H.P. Municipal Act, 1994. The town has 18,993 males against 15,206 females. It exhibited a growth rate of 57.23% during the decade 1991-2000. It reported an overall literacy rate of 91.84% and a sex ratio of 801. The urban local body here is not very sound from financial point of view. It has limited resources but vast areas of expenditure. The sewerage system is yet to start in the town. Proper water supply system is existing over here. The council has a waste recycling plant at Salogra which receives solid waste from the entire town.

Chapter-3

PLANNING AREA

The need to bring Solan within the ambit of Himachal Pradesh Town & Country Planning Act, 1977 (Act No. 12 of 1977) was being felt ever since 1980s. The Act was even extended here in the year 1984 but had to be withdrawn on account of strong public protest. At that time there was no office of the department functioning at Solan. This was certainly one of the reasons that led to the denotification of the then "SOLAN PLANNING AREA". However vide State Government notification No. TCP-F(6)60/94 dated 1-3-1997, the Act was again extended to Solan town and as many as 67 villages around it. Subsequently vide State Govt. Notification No. TCP-F(6)-60/94, dated 9-7-1998 published in the Rajpatra dated 31-7-1998, the provisions of section 15-A of the Act were extended to the Solan Planning Area. The next development in consonance with the provisions of the act ibid was preparation of existing land use for Solan planning area and extension of section 16 of the aforesaid act. In this regard, first of all the existing land-use prepared for the said planning area was placed for public examination with a view to call for their objections/suggestions. The notice to this effect was published by Director, Town & Country Planning Department, H.P. vide his office letter No. HIM/TP-PJT/DP-

Solan/93-871-1027, dated 9-5-2000. It appeared in the extra-ordinary Rajpatra dated 22-5-2000. After considering the objections and suggestions, the existing land use map was adopted and simultaneously section 16 came into operation vide letter No. HIM/TP/PJT/DP Solan/93-6217-67, dated 17-10-2000 of Director, Town & Country Planning Department.

The Solan Planning Area is defined as under :-

Sl.No.	Name of Mohal	Hadbast No.	Patwar Circle
1.	Ber-Ki-Ser	44	Salogra
2.	Ber Khas	44	"
3.	Dadog	43	"
4.	Parag	35	"
5.	Jarai	33	"
6.	Kothon	13	"
7.	Dadhog	30	"
8.	Daunsi	11	"
9.	Tikar	12	"
10.	Kathog	10	"
11.	Chatjera	9	"
12.	Phalog	8	"
13.	Ainda	7	"
14.	Salogra	5	"
15.	Andy	6	"
16.	Shamber	24	"
17.	Gan-Ki-Ser	21	"
18.	Ghalut Kalan	4	"
19.	Shamti	616	Shamti
20.	Damrog	615	"
21.	Balana	621	"
22.	Kavgri	617	"
23.	Syonthal	619	"
24.	Galanag	614	"
25.	Badlana	640	"
26.	Childi	639	"
27.	Chilla Kalan	636	"
28.	Chilla Khurd	633	"
29.	Bajhol	599	"
30.	Bagdol	637	"
31.	Dharanchdi Kalan	635	"
32.	Dharanchdi Khurd	634	"
33.	Badkhor	632	"
34.	Odna	618	"
35.	Jabal	620	"
36.	Anji	622	"
37.	Khandar	623	"
38.	Daroha	624	"
39.	Koti Kalan	625	"
40.	Babra	626	"
41.	Kundla	627	"
42.	Dharanji(Dhobtan)	628	"
43.	Kothon	629	"
44.	Majhgaon Khurd	630	"
45.	Majhgaon Kalan	631	"
46.	Chhamrog	602	"

<u>Sl.No.</u>	<u>Name of Mohal</u>	<u>Hadbast No.</u>	<u>Patwar Circle</u>
47.	Sharanu	642	Dehu (Saproon)
48.	Shamlech	643	"
49.	Bagar	641	"
50.	Raboun	644	"
51.	Anji	645	"
52.	Nagali	646	"
53.	Mobri	647	"
54.	Kathyala	648	"
55.	Sumti	649	"
56.	Gadleg	650	"
57.	Padgal	651	"
58.	Dehu	652	"
59.	Saproon	653	"
60.	Silradi	654	"
61.	Basal	48	Basal
62.	Bajrol	40	Jaunaji (only Kh.No. 39 to 66)
63.	Khanog	612	
64.	Matiul	613	
65.	Naroh	39	
66.	Jhanu	42	
67.	Bached	38	
68.	Nagar Parishad Solan	-	

North : Starting from meeting point of Jabal-Ka-Nala and outer boundaries of Karol Reserve Forest and then alongwith the outer boundaries of Karol Reserve Forest and upto the meeting point of outer boundaries of revenue village Ghalut Kalan Hadbast No. 4. Following the outer boundaries of revenue village Ghalut Kalan Hadbast No. 4 crossing the National Highway-22, following the outer boundaries of revenue village Salogra Hadbast No. 5 revenue village Shamber Hadbast No. 24, revenue village Gan-Ki-Ser Hadbast No. 21 and following the outer boundaries of Revenue village Gan-Ki-Ser, Hadbast No. 21 and upto the meeting point of outer boundary of revenue village Gan-Ki-Ser Hadbast No. 21 with Andy Dadhog Nala.

East : Starting from meeting point of outer boundaries of revenue village Gan-Ki-Ser Hadbast No. 21 with Andy Dadhog Nala and upto the meeting point of Andy-Dadhog-Nala with Chaunrightat-Bajrol Nala alongwith Chaunrightat-Bajrol Nala upto Khanog Dhar above Khanog village and then upto the meeting Khanog Dhar and upto the Bench Mark No. 1928 at top of Khanog Dhar.

South : Starting from the Bench Mark No. 1928 at top of Khanog Dhar, following the Majhgaon Nala, then crossing Solan-Rajgarh State Highway No. 6 upto meeting point of Majhgaon Nala with the outer boundaries of revenue village Badkhor Hadbast No. 632, then following the outer boundaries of revenue village Badkhor Hadbast No. 632, revenue village Chilla Khurd Hadbast No. 633, revenue village Chilla Kalan Hadbast No. 636, revenue village Childi Hadbast No. 639, revenue village Badlana Hadbast No. 640, revenue village Shamlech Hadbast No. 643, revenue village Raboun Hadbast No. 644 and revenue village Nagali Hadbast No. 646 and upto the meeting point of the outer boundaries of revenue village Nagali Hadbast No. 646 with outer boundaries of revenue village Mobri Hadbast No. 647.

West : Starting from the meeting point of outer boundaries of revenue village Nagali Hadbast No. 646 and outer boundaries of revenue village Mobri Hadbast No. 647 and following the outer boundaries of revenue village Mobri Hadbast No. 647, revenue village Dehu Hadbast No. 652, revenue village Saproon Hadbast No. 653 and revenue village Silradi Hadbast No. 654 and upto the meeting point of the outer boundaries of revenue village Silradi Hadbast No. 654 with the

Sapruon-Ka-Nala. Then alongwith Sapruon-Ka-Nala and upto the meeting point of Sapruon Ka Nala with Jabal Ka Nala. Alongwith Jabal Ka Nala and upto the meeting point of Jabal-ka-Nala with the outer boundaries of Karol Reserve Forest.

Chapter-4

REGIONAL SCENARIO

4.1 Regional setting

No settlement can be viewed in isolation for the purpose of Development Plan as it is an integral part of its hinterland. Solan town having a population of 34,199 persons as per 2001 census is almost saturated in development. Approximately 90% of the developable land has been actually utilized under different activities. The remaining land is fast getting reduced. Development has been taking place outside the M.C. limits in Kather, Basal, Dehunghat, Raboun, Anji, Shanti, Damrog and Salogra etc. The nearby settlements or towns like Subathu, Kandaghat, Chail, Rajgarh, Barog, Kumarhatti, Dharampur, Kasauli etc. are also dependent upon Solan town in many ways. People come here to use the health, educational, commercial and other infrastructure available and also bring various services as well as vegetables, food, milk etc. to meet with the growing requirements of Solan town. Thus Solan is fast acquiring the character of a regional town and has a number of activities in and around it. A brief list is given hereunder :-

- (i) N.R.C.M. (National Research Centre for Mushroom)
It is a Central Government Body.
- (ii) C.I.P.M.C. (Centre for Investigation of Pest Management & Control)
It is a Central Government Body.
- (iii) Z.S.I. (Zoological Survey of India)
It is a Central Government Body.
- (iv) Dr. Y.S. Parmar University of Horticulture & Forestry.
- (v) Engineering College at Bohli near Kumarhatti.
- (vi) K.T.S. Boarding school at Tatul.
- (vii) Dental College at Tatul.
- (viii) E.T.D.C. (Electronics Testing and Development Centre)
It is a Central Government Body.
- (ix) Anaj/Sabzi Mandi.
- (x) J.B.T. School and I.T.I.
- (xi) S.C.E.R.T. at Raboun.
- (xii) Railway Station.
- (xiii) H.F.C.L. (Himachal Futuristic Communications Limited)
- (xiv) S.I.S.I. (Small Industries Service Institute)
It is a Central Government Body.
- (xv) Cantonment.
- (xvi) Bon Monastery at Kalaghat near Oachhghat. Said to be a oldest in India.
- (xvii) Flats, Cottages, Clinics, Nursing Homes.
- (xviii) Zonal Hospital.
- (xix) Sand/lime mines.

4.2 Accessibility

The National Highway No. 22 is a prominent road passing through Solan town. It is an important road from many points of view. Firstly it is a defence road connecting Delhi, Dehradun, Ambala and Chandigarh to the China Border. Next it is the life line of our State as all raw products, building materials, passengers, goods etc. come through this route only. Our own products go out via it. It is on account of its significance that there are today 2 bye passes within Solan Planning Area. These are :-

- (i) Solan bye-pass linking Saproon and Chambaghat.
- (ii) Barog bye pass linking Saproon and Kumarhatti via Anji & Raboun. The Centre Government is also likely to undertake the 4-laning of this road. Surveys and studies have been completed in this regard.

Besides N.H.-22, we have many other important roads connecting Solan to its nearby areas, towns or settlements. These are: -

- (i) Solan - Rajgarh road.
- (ii) Solan - Subathu - Arki Road.
- (iii) Solan - Kandaghat road via Basal and Salumana.
- (iv) Solan - Jaunaji - road.
- (v) Solan - Damrog - Jatoli road.
- (vi) Solan - Ashwani Khad road. It will ultimately connect Solan to Herth as well as Chail.

4.3 Regional Attractions

Solan in itself may not be called a tourist station on this day. But it not only acts as a base point for nearby tourist stations but also has the potential to be a tourist town itself. Presently it is a place where one can have a halt and then proceed to stations like Chail, Sadhupul, Kandaghat, Giri Pul, Rajgarh, Barog, Kasauli, Subathu, Arki, Shimla etc. But it could be a tourist attraction in itself once the ropeway starts between Chambaght and Karol. This project is in the pipe-line. Then Matiul as well as Karol peaks have a big potential to be developed as picnic spots. So is Giripul, barely 20 Kms. from here on Rajgarh Road.

But the fact is that till today Solan has not earned any name as a tourist station. That is why the only tourist bungalow owned by the HPTDC and functioning near St. Lukes School on the Mall has been closed down more than 5 years ago.

4.4 Regional Resources

Solan town lies in the middle of a very resourceful region. Around it we have a very fertile agricultural land. So much so that it has the best organized Sabzi Mandi of Himachal Pradesh at Kather on by pass road. Solan is known for tomato, ginger, peas, cauliflower, capsicum, cabbage, lady finger, beans, pepper, pahari potato, kheera as well as stone fruits.

The recently constructed Sabzi Mandi is becoming very popular and is fast emerging as a regional Mandi.

Then we have lime and sand quarries as well as stone mines. Solan also has sweet mineral water in and around it. That is why the Solan breweries was set up here in the year 1855.

Solan stands christened as the "MUSHROOM CITY OF INDIA". It has an excellent climate for growth of mushroom. That is why the Centre Govt. has also set up the N.R.C.M. (National Research Centre for Mushroom) here at Chambaghat.

4.5 Dependency of Population

As stated above, Solan has a rich and vast hinter land. Lot of people pass through this town on way to other destinations like Chail, Shimla etc. since it is an obligatory point. Besides this thousands of men, women & children visit Solan daily on following counts :-

- (i) For education in colleges, University etc.
- (ii) For health facilities.
- (iii) For specialized commercial & other facilities e.g. Sabzi Mandi, lime, stone and sand mines, other building material, cinemas, offices etc.

The total population of Solan Planning Area is projected at 95, 150 persons in the year 2021 A.D. in chapter 6 ahead. Besides this it is estimated that on an average 5 to 7 thousand persons are daily commuters. The infrastructure of the town is required to cater to this population as well.

Chapter-5

PHYSICAL AND ENVIRONMENTAL CONSIDERATIONS

5.1 Climate

Situated at an altitude of 1500 metres on an average, Solan can be called as a cool station. Lying in the middle of the Parwanoo - Shimla segment of N.H.-22 it has a moderate set of conditions i.e., neither so cold as Shimla, nor too hot as Kalka. That is why it is considered as an ideal station from residential point of view. In summer the maximum temperature rarely crosses 37°C whereas in winter the minimum temperature is about 2°C.

The Meteorological department was requested to provide information pertaining to Solan town. The following data was provided by the deptt. with specific regard to the year 1999 :-

- | | | | |
|-------|----------------------------|---|------------------|
| (i) | Predominant wind direction | = | SW to NE. |
| (ii) | Maximum temperature | = | 32.4°C |
| (iii) | Minimum temperature | = | 2.6°C |
| (iv) | Total rainfall in the year | = | 983.9mm |
| (v) | Maximum relative humidity | = | 88% in September |
| (vi) | Minimum relative humidity | = | 22% in April |

While town proper may be slightly warm in summer days, the areas atop Karol, Matiul and Barog hills are cool.

5.2 Vegetation

Solan Planning area contains scrub forests on lower elevations and Chil, Deodar, Ban and Kail at higher elevations. Oak forests also exist at higher elevations around moist locations. In scrub forests the proportion of bamboo, khair and a few other broadleaved species is relatively very low. Among conifer species, chil is the most predominant one. Besides this natural or indigenous vegetation there is ornamental and alien plantation too. It consists of silver oak, jhakranda, bottle brush, weeping willows, kachnar, grasses etc.

5.3 Geology and soil strata

The study of rocks has revealed that some 1200 to 1500 million years ago this area was a part of the Tethys ocean. The sand stone, shale or lime stone were deposited as thin layers after layers and type of rock formed was dependent upon many factors such as the nature of material being dumped in the sea by rivers, depth of the sea, whether near the shore or in the deeper areas, bacterial and chemical reactions going on in the sea water. Accordingly there are limestone

deposits, minor minerals like masonry stones, boulders, sand etc. in various parts of the planning area. The Himalayan mountain ranges started rising about 25 to 30 million years ago and about 2 to 3 million years ago the strata started getting folded thus forming the Shivalik ranges. Solan town has abundance of hill formations. Only some 30 to 40 percent area is suited for building activity. Rest of the area comprises of steep slopes, forested area, nallah formations, loose and sinking sites etc. where building activity is a risky operation.

5.4 Configuration of the ground

Shimla - Kareru - Taradevi - Kaithlight - Kandaghat - Solan- Dagshai is the main ridge forming partition line between the Sutlej and Yamuna catchments. Thus a drop of rain falling on the eastern part of Karol hill ultimately goes into the Bay of Bengal whereas the drop falling on the western part ultimately leads to the Arabian sea.

5.5 Fauna

Owing to a variety of vegetation due to altitudinal variations, there occurs a variety of fauna in the tract. The himalayan black bear & panther are the carnivora whereas the Ghoral and the barking deer are the herbivora in and around the Solan Planning Area. The non game animals include the jackal, mongoose, the Jangli billi, monkeys & langurs etc.

The game birds include jungli murga, kabutar, ghughi, dhaula teetar and kolsa etc.

5.6 Environment

The physical environment of Solan is changing rapidly on account of the forces of urbanisation and commercialisation along N.H.-22 and other important roads/highways. R.C.C. is visible everywhere and multi-storey culture has been gaining momentum over the years. Flat roofs are seen everywhere even though Solan sometimes experiences snowfall but usually a heavy rainfall. Linear development is taking place along major roads resulting thereby into a finger plan type of growth in Solan Planning Area. The rich agricultural fields and orchards are being threatened by the forces of urbanisation. The social environment too is undergoing deterioration on account of large inflow of commuters as well as growing population size of the town.

Chapter-6

DEMOGRAPHIC & SOCIO-ECONOMIC PROFILE

6.1 Demography of Solan Town

Solan is the district headquarters of Solan District. It is a highly growing town of H.P. State. It is the fastest growing district headquarter town as is evident from the table below: -

Table 6.1

Decadal growth rate of District Headquarter towns during 1981-91 & 1991-2001

Sr.No.	Name of Town	Growth Rate 1981-1991	Growth Rate 1991-2001
1.	Solan	65.69%	57.53%
2.	Shimla	56.31%	39.12%
3.	Hamirpur	42.59%	37.27%
4.	Bilaspur	31.58%	23.08%
5.	Una	31.06%	32.49%
6.	Chamba	24.98%	13.13%
7.	Mandi	24.04%	15.76%
8.	Kullu	22.75%	25.65%
9.	Dharamshala	20.46%	8.81%
10.	Nahan	8.90%	18.71%

The exceptionally high growth rate of Solan town can be judged from the table given above. It leads the rest of the district headquarters in terms of growth rate of population during the decade 1991-2001 as well as 1981-1991. The growth rates for previous decades of the Solan town are given in Table 6.2 below: -

Table 6.2
Growth rate of Solan Town since-1971

Sr. No.	Year	Population	Growth Rate
1	1971	10120	54.17%
2	1981	13127	29.71%
3	1991	21751	65.70%
4	2001	34199	57.23%

(These figures have also been shown in the enclosed graph)

As per secondary data collected during survey, the Irrigation and Public Health Department had released 1150 water connections in the town till 1999. The source of water supply to the town is from Nallah Lambi Dhar & Ashni Khud. In addition to these connections the Municipal Council had released 4,924 connections in the town till the year 1999. The H.P. State Electricity Board had released 15,549 connections in the town till December 1999.

6.2 Demography of Solan Planning Area

So far as Solan Planning Area is concerned it had a population of 24,666 persons in 1981 and 32,454 persons in 1991. Thus the overall decadal growth rate of population was 31.51%. Whereas the town proper exhibited a growth rate of 65.70%, the rural areas registered a growth rate of 7.24%. The demographic survey of 3345 hectares land was conducted during 1999 in Solan Planning Area that cover 67 revenue villages and 13 M.C. wards. This 100% survey was conducted w.e.f. September 1999 to April 2000. From the results of this survey it has been found that Solan Planning Area has 9970 households having 45,975 population. Detail is given below in table-6.3

Table 6.3
Solan Planning Area

Sr No.	Persons	Male	Female	House holds	House hold size
1.	Urban (13MC Wards) 28142 (61%)	14861(53%)	13281(47%)	6426(64%)	4.37
2.	Rural(67 villages) 17833(39%)	9152(51%)	8681(49%)	3544(36%)	5.03
3.	Planning Area 45975(100%)	24013(52%)	21962(48%)	9970(100%)	4.61

(These figures have also been shown in the enclosed graph)

According to Table 6.3, the total population in Solan Planning Area is 45,975 persons out of whom 28,142 (61%) persons are residing in Solan Town and 17,833 (39%) persons residing in rural areas of Solan Planning Area. The average household size as per Table 6.3 is 4.61 for whole Solan Planning Area, 5.03 for rural areas of Solan Planning Area & 4.37 for urban area of Solan Planning Area. Solan town and surrounding villages that constitute Planning Area had total Population of 45,975 persons in 1999, against 32,454 persons in 1991, registering a growth rate of 41.66% during 1991 to 1999.

Table 6.4
Growth of population in Solan Planning Area

Sr. No.	Year	Town Population	Growth Rate	Rural Population	Growth Rate	Planning Area Population	Growth Rate
1.	1981	13127	-	11539	-	24666	-
2.	1991	21751	65.70	10703	7.24	32454	31.57
3.	1999	28142	29.38	17833	66.62	45975	41.66

The above table 6.4 indicates that over-all population of Planning Area has increased from 24,666 persons in 1981 to 32,454 persons in 1991 registering a decadal growth rate of 31.57% whereas the growth rate within the town was 65.70% and within rural areas 7.25%. The total population of the Planning Area was 32,454 persons in 1991 whereas total population recorded as per survey conducted in 1999-2000 is 45,975 persons, which shows 41.66% growth during 1991-99. This also shows growth rate of 29.38 % in Urban Area & 66.62% in Rural Areas.

6.3 Population Projections

The population for Solan Planning Area has been projected in the following table 6.5(a). Population has been projected by taking same population variation growth for 2011 and 2021 that has come from 1999 survey i.e. 1610. In table 6.5(b) the population has been projected by taking same percentage variation to 2011 and 2021 that has come from 1999 survey i.e. 3.67 % per year. The population in table 6.5(c) has been projected by taking the growth rate of 1991-2001 i.e. 49% decadal growth rate. The final population has been projected by taking mean of the 3 projections in table 6.5(d).

Table 6.5(a)

Population Projections upto 2021

Year	Population	Variation	%age variation
1981	24666	-	-
1991	32454	7788	31.57
1999	45975	13521	41.66
2001	49357	3382	7.35
2011	66260	16903	34.25
2021	83163	16903	25.51

Table 6.5(b)

1991	32454	-	-
1999	45975	13521	41.66
2001	49357	3382	7.35
2011	67496	18139	36.75
2021	93285	24805	36.75

Table 6.5(c)

Year	Population	Variation	%age variation
1991	32454	-	-
1999	45975	13521	41.66
2001	49357	3382	7.35
2011	72539	24184	49.00
2021	108083	35544	49.00

Table 6.5(d)

Mean value by	Year 2001	Year 2011	Year 2021
1999 Year Population Growth	49357	66260	83163
1999 Year % Valuation Growth	49357	67496	92301
1991-2001 Year decadal growth rate	49357	72539	108083
Total of three method	49357	206295	285447
Mean Value	49357	68765	95150

(These figures have also been shown in the enclosed Graph)

6.4 Sex Ratio

The following tables 6.6, 6.7 & 6.8 indicate the sex ratio composition in Solan Planning Area as well as the urban and rural areas separately.

Table - 6.6

Sex Composition of Population in Planning Area

Year	Persons	Males	Females	Females per1000 males
1981	24666	14116	10551	747
1991	32454	17852	14602	818
1999	45975	24013	21962	914

Table 6.7

Sex Composition of Population in Town

Year	Males	Females	Females per 1000 males
1981	7558	5569	736
1991	12065	9686	803
1999	14861	13281	894

Table 6.8

Sex Composition of Population in Rural Areas

Year	Males	Females	Females per 1000 males
1981	6558	4981	759
1991	5787	4916	849
1999	9152	8681	948

(These figures of table 6.6, 6.7 & 6.8 have also been shown in the enclosed Graph)

According to survey conducted by this Department in 1999-2000, Solan Planning Area has 914 females per 1000 males whereas Solan town has 894 and rural area has 948. Sex ratio is low in town in comparison to Planning Area and rural area figures, that indicates migrants to town due to job opportunities from other parts of the District. The above three tables 6.6, 6.7 & 6.8 indicate sex composition of population.

6.5 Literacy

According to survey conducted during 1999-2000, there are 40,696 literate persons and 5,279 illiterate persons in Solan Planning Area. The literacy rate of Solan Planning Area is 89%. The following table 6.9 clearly indicates % of literates and illiterates in rural and urban areas.

This shows more illiterates in rural areas. Literacy in the town as well as Planning Area is as under: -

Table 6.9

	Literates	%age	Illiterates	%age	Population	%age
Planning Area	40696	89	5279	11	45975	100
Rural	15235	85	2398	15	11833	100
Urban	25461	90	2681	10	28142	100

The classification of the literacy in Solan town, rural as well as in Planning Area can be viewed from the following table Nos. 6.10, 6.11 & 6.12.

Table 6.10

Literacy in Planning Area

Sr.No.	Classification	No. of persons	%age
1.	Illiterate	5279	11
2.	Up to Primary	7797	17
3.	Up to Middle	6580	14
4.	Up to matric	7600	17
5.	Plus two	5184	11
6.	Graduate	6042	13
7.	Post graduate	3246	7
8.	I.T.I.	1645	4
9.	Diploma Engineering	1405	3
10.	Degree & above Engineering	1197	3
	Total	45975	100

(These figures have also been shown in the enclosed Graph)

Table 6.11

Literacy in Solan Town

Sr. No.	Classification	No. of Persons	%age
1.	Illiterate	2681	10
2.	Up to Primary	4313	15
3.	Upto to Middle	3737	13
4.	Upto to matric	4813	17
5.	Plus two	3394	12
6.	Graduate	4417	16
7.	Post Graduate	2297	8
8.	I.T.I.	985	4
9.	Diploma Engineering	825	3
10.	Degree & above Engineering	680	2
	Total	28142	100

Table 6.12**Literacy in Rural Area**

Sr.No.	Classification	No. of persons	%age
1.	Illiterate	2598	15
2.	Up to Primary	3484	20
3.	Upto to Middle	2843	16
4.	Upto to matric	2787	16
5.	Plus two	1790	10
6.	Graduate	1625	9
7.	Post Graduate	949	5
8.	I.T.I.	660	4
9.	Diploma Engineering	580	3
10.	Degree & above Engineering	517	3
	Total	17833	100

(These figures of table 6.11 and 6.12 have also been shown in the enclosed Graph)

6.6 Age group and Sex Structure

As per survey conducted by the Department during 1999-2000 the following table 6.13 shows that maximum %age of males and females falls in the age group of 20 to 29 i.e. 19% and 21% respectively whereas minimum %age of males & females falls in the age groups of 0-5, 50-59 and 60 and above i.e. 7% to 8%.

Table 6.13**Age Group and Sex Structure**

Age Group	Persons	Male	Female
0-5	3752 (9%)	1960 (8%)	1792 (8%)
5-9	4734 (10%)	2381 (10%)	2353 (11%)
10-19	8600 (19%)	4499 (18%)	4200 (19%)
20-29	9157 (20%)	4620 (19%)	4537 (21%)
30-39	7759 (17%)	4036 (17%)	3723 (17%)
40-49	5505 (12%)	3202(13%)	2303(10%)
50-59	3476(6%)	1858 (8%)	1618 (7%)
60 & above	2992(6%)	1556(7%)	1436(7%)

(These figures have also been shown in the enclosed Graph)

6.7 Marital Status

The following table 6.14 indicates that out of total population of Planning Area, the marital status ratio i.e. single persons are 47% whereas 43% persons are married and only 10% persons are widow/widower.

Table 6.14

Sr. No.	Description of Marital Status	Persons	%age
1.	Single	21808	47
2.	Married	19725	43
3.	Widow/Widower	4442	10
	Total	45975	100

6.8 Income Group

The following Table 6.15 shows that 35.72% persons falls in the income of Rs. 2,100 to 4,500 and 24.94% in the group of 4,500-7,500. There are only 2.42% persons that have income of Rs. 20,000/- and above.

Table 6.15
Income Group

Sr. No.	Income Group	No. of H/H	%age
1.	Upto 2100	1444	14.48
2.	2100 to 4500	3561	35.72
3.	4500 to 7500	2487	24.94
4.	7500 to 10000	1458	14.62
5.	10000 to 15000	490	4.92
6.	15000 to 20000	289	2.90
7.	20000 and above	241	2.42
	Total	9970	100.00

(These figures have also been shown in the enclosed Graph)

6.9 Employment

The survey conducted during 1999-2000 reveals that out of total population of 45,975 of Solan Planning Area, 44.58% are engaged in service sector, 14.89% in self employment and 40.53% are un-employed. The following table 6.16 clearly indicates the position of regular, temporary, daily wages and temporary daily wages/seasonal persons. The table 6.17 shows the categories taken in services sector. The tables 6.18 & 6.19 indicate the categories in self-employment and un-employed sectors. This is also presented through graphs.

Table 6.16
Persons engaged in service, self-employment and un-employment

Sr. No.	Category	Persons	%age
1.	Services	20493	44.58
	(i) Regular	9350	20.34
	(ii) Temporary	3830	8.33
	(iii) Daily wages	3873	8.43
	(iv) Temporary daily wages/Seasonal	3440	7.48
2.	Self Employment	6847	14.89
3.	Un-employed	18635	40.53
	Total	45975	100

(These figures have been shown in the enclosed Graph)

Table 6.17

Persons engaged in Service Sector

Sr. No.	Classi- fication	Regular	%age	Tempor ary wages	%age	Daily	%age wages	Temp. Daily Wages Seasonal	%age	Total Nos.	%age
1.	Govt. Service	4205	45	493	13	682	18	575	15	5895	29
2.	Semi Govt. Service	942	10	566	15	490	13	427	13	2425	12
3.	Private Ind. Service	1454	16	645	17	599	15	420	12	3118	15

4.	Pvt. Agr. Hort.	623	7	540	14	460	12	457	13	2080	10
5.	Pvt. Mining/quarrying	623	7	517	13	473	12	515	15	2137	10
6.	Private construction	615	6	563	15	567	15	514	15	2259	11
7.	Others	879	9	506	13	602	15	592	17	2579	13
	Total	9350	100	3830	100	3873	100	3440	100	20493	100

Table 6.18

Population Engaged in self employment

Sr.No.	Classification	No. of persons	%age
1.	Industry	500	7.30
2.	Agri/Horticulture	1838	26.38
3.	Mining/Quarrying	532	7.77
4.	Trade/Shop	1461	21.34
5.	Construction	585	8.54
6.	Others	1931	28.20
	Total	6847	100.00

Table 6.19

Population unemployed

Sr. No.	Classification	No. of Persons	%age
1.	Retired with pension	1367	7.34
2.	Not working (old age but no regular pension)	1203	6.46
3.	Unemployed and seeking employment	5516	29.60
4.	Underage	10549	56.60
	Total	18635	100

6.10 Workers

The following table 6.20 indicates the position of workers in Solan Planning Area, urban and rural area during 1999-2000. According to the survey 51.99% are main workers in Planning Area, 55% in urban area and 47.22% in rural area. Non-workers in Planning Area are 40.53%, in urban area are 37.02% and in rural area 46.07%. This indicates that in rural area non-workers are more as compared to planning/urban area. Employment is also less in rural area. The table 6.21 indicates the distribution of workers in three sectors. The workers are mostly in tertiary sector and less in primary sector. These figures are also represented through enclosed graphs.

Table 6.20

Sr.No.	Category	Planning Area		Urban		Rural	
		No.	%age	No.	%age	No.	%age
1.	Main Worker	23900	51.99	15480	55.00	8420	47.22
2.	Marginal Worker	3440	7.88	2243	7.98	1197	6.71
3.	Non Worker	18635	40.53	10419	37.02	8216	46.07
	Total	45975	100.00	28142	100.00	17833	100.00

(These figures have also been shown in the enclosed Graph)

Table 6.21

Sr.No.	Category	Planning Area		Urban		Rural	
		No.	%age	No.	%age	No.	%age
1.	Primary	3918	14.33	1614	9.11	2307	23.96
2.	Secondary	9131	33.40	5839	32.95	3292	34.23
3.	Tertiary	13291	52.27	10270	57.94	4021	41.81
Total		27340	100.00	17723	100.00	9617	100.00
Non Worker		18635	40.53	10419	37.02	8216	46.07

(These figures have also been shown in the enclosed Graph)

6.11 Educational Facilities

In Solan Planning Area according to survey conducted during 1999-2000, there are 9970 households. Out of these 67% have primary education facility available within 1 km. distance and 33% have over 1km. distance, 58% of house holds are availing middle education facility within 1 km and 42% of house holds are going over 1 km. distance to avail this facility. Out of total house holds 57% have a high school education facility within 2 km, 43% of house holds have over 2 km. Sr. Sec. School level facility is available to 61% house holds within 2 km. and 39% house holds have Sr. Sec. facility over 2 km. 62% house holds have a college within 5 km. distance, 31% house holds have a college within 25 km. distance and 7% house holds have over 25 km. distance. 66% house holds have post graduation facility within 10 km, 27% house holds have this facility within 25 km distance and 7% house holds have over 25 km. distance. ITI facility is available to 78% house holds within 20 km., 14% house holds have this facility within 50 km. and 8% house holds over 50 km. distance. Technical/Poly -technic facility is available to 77% house holds within 20 km. distance, 14% house holds within 100 km. distance, whereas 8% house holds are availing this facility over 100 km. distance. The above figures can be seen in following Table 6.22.

Table 6.22

Educational Facility & Distance

Sr. No.	Classification & Distance	No. Of house holds	%age
1.	Primary School within 1 km	6715	67
2.	Primary School over 1 km	3255	33
	Total	9970	100
3.	Middle School within 1 km	5811	58
4.	Middle School over 1 km	4159	42
	Total	9970	100
5.	High School within 2 km	5652	57
6.	High School over 2 km	4318	43
	Total	9970	100
7.	Sr. Sec. School within 2 km	6036	61
8.	Sr. Sec. School over 2 km	3944	39
	Total	9970	100
9.	College within 5 km	6184	62
10.	College within 25 km	3071	31
11.	College over 25 km	715	7
	Total	9970	100
12.	Post Graduation within 10 km	6588	66
13.	Post Graduation within 25 km	2669	27
14.	Post Graduation over 25 km	713	9
	Total	9970	100

15.	ITI within 20 km	6588	78
16.	ITI within 50 km	2669	14
17.	ITI over 50 km	713	8
	Total	9970	100
18.	Technical/Polytechnic within 20 km	7716	78
19.	Technical/Polytechnic within 100 km	1438	14
20.	Technical/Polytechnic over 100 km	816	8
	Total	9970	100

6.12 Recreation availability within Town/Locality

According to survey conducted during 1999-2000, the recreation facilities available in the town within 2 km & beyond 2 km are given in Table 6.23. The table shows that 35% and 49% house holds have indoor and outdoor game stadiums in locality within 2 km distance respectively, 35% and 36% house holds have indoor and outdoor stadiums within town beyond 2 km distance respectively and 30% & 15% house holds have neither indoor and outdoor sports stadium with locality nor beyond 2 km distance. Similarly 48% house holds have outdoor playground in locality within 2 km distance and 30% have outdoor playground beyond 2 km distance and 14% neither have out door playgrounds within locality nor have beyond 2 km distance. This table 6.23 also shows 53% and 51% house holds have cinema hall facility and club facility available in the locality within 2 km respectively. 39% and 38% house holds have cinema and club facility available within town beyond 2 km distance respectively and 8% and 11% house holds have neither cinema and club facility with locality nor beyond 2 km in the town respectively. Out of total 9,970 house holds 45% are having cable connections and 55% are without cable connections.

Table 6.23

Recreation availability within Town/Locality

Sr. No.	Description	Nos. of house holds	%age
1.	Sports stadium(indoor game within locality within 2 km distance)	3446	35
2.	Sports stadium(indoor game within locality beyond 2 km distance)	3474	35
3.	Sports stadium(indoor game facility neither within town/locality nor within/beyond within 2 km distance)	3050	30
	Total	9970	100
4.	Sports stadium(outdoor game within locality within 2 km distance)	4925	49
5.	Sports stadium(outdoor game within locality beyond 2 km distance)	3638	36
6.	Sports stadium(outdoor game facility neither within town/locality nor within/beyond within 2 km distance)	1407	15
	Total	9970	100
7.	Just Ground for outside games within town within 2 km distance)	4835	48
8.	Just Ground for outside games within town beyond 2 km distance)	3818	38

9.	Just Ground for outside games within town/locality within/beyond 2 km distance)	1317	14
	Total	9970	100
10.	Cinema Hall facility within locality within 2 km distance	5254	53
11.	Cinema Hall facility within town beyond 2 km distance	3841	39
12.	Without Cinema Hall facility within locality/town or within/beyond 2 km distance	875	08
	Total	9970	100
13.	Club facility within locality within 2 km distance	5070	51
14.	Club facility within town beyond 2 km distance	3745	38
15.	Without club facility within locality/town or within/beyond 2 km distance	1155	11
	Total	9970	100
16.	Cable connection available	4489	45
17.	Without cable connection	5481	55
		9970	100

6.13 Housing

The following Table 6.24 indicates the position of owners and tenants. Out of total 9,970 house holds, 41% are owners and 59% are tenants in Solan Planning Area. This shows that tenants are more in numbers than owners.

Table 6.24

Sr. No.	Occupied by	No. of house holds	%age
1.	Owners	4075	41
2.	Tenants	5895	59
	Total	9970	100

6.14 Building Detail

According to surveys conducted it has been observed that out of total 9970 house holds, 90.67% are living in pucca houses and 9.33% are living in kutcha houses. This reveals that there are very less old houses in Solan Planning Area. The following Table 6.25 shows the position.

Table 6.25

Sr. No.	Description	No. of house holds	%age
1.	House holds living in kutcha house	930	9.33
2.	House holds living in pucca houses	9040	90.67
	Total	9970	100.00

6.15 Kitchen

According to survey conducted following table 6.26 indicates that 87% house holds are using separate kitchen and 13% are without separate kitchen. This reveals the economic position of house holds in the planning area.

Table 6.26

Sr. No.	Description	No. of house holds	%age
1.	Separate Kitchen	8399	87
2.	Without separate kitchen	1571	13
	Total	9970	100

6.16 Type of Latrine

According to survey conducted by this Department, the following Table 6.27 shows that out of total house holds, 22% house holds are having sewerage system, 53% house holds have their own septic tanks, 3% house holds have flush it into open drain, 2% house holds have dry system manual carriage, 3% of the house holds have pit latrine and 17% house holds are without latrine facilities and use to go in open. This indicates that sewerage system is to be introduced in the town.

Table 6.27

Sr. No.	Description	No. of house holds	%age
1.	Connected with Sewerage system	2151	22
2.	Connected with own Septic Tank	5295	53
3.	Flush flowing into open Drain	320	3
4.	Dry system manual carriage	223	2
5.	Pit Latrine	281	3
6.	No latrine available	1700	17
	Total	9970	100

6.17 Drain

The following Table 6.28 reveals the position of drain in the Solan Planning Area. Out of total house holds, 61% of the house holds are having underground and surface drain facility, 39% house holds put the sullage in open drain and 4% house holds collected sullage in pits.

Table 6.28

Sr.No.	Description	No.of house holds	%age
1.	Underground drain	1856	19
2.	Surface Drain	4222	42
3.	Mode of disposal of Sullage water in open Drain	3462	35
4.	Mode of disposal of Sullage water collected in the pits	430	4
	Total	9970	100

6.18 Age of the House/Building

The following table 6.29 indicates the age of houses in Solan Planning Area. Out of total 9970 surveyed houses 23.93% are less than 10 Years old, 32.86% are 10 to 19 years old only 3.42 houses are more than 60 years and above. This position indicates that more than 50% houses are built with in 30 Years and there are only less houses that are old as above 50 Years.

Table 6.29

Sr. No.	Age of the House	No. of house holds	%age
1.	Less then 10 Year	2386	23.93
2.	10 to 19 Years	3276	32.86
3.	20 to 29 Years	1747	17.53
4.	30 to 39 Years	1102	11.05
5.	40 to 49 Years	707	7.09
6.	50 to 59	411	4.12

7.	60 and above	341	3.42
	Total	9970	100.00

6.19 Last Repaired

The following Table 6.30 shows that 49.32% of house holds has repaired their building within 1 Year and 42.79% within 5 Years. There are only 7% house holds who got repaired their building in between 5 & 30 Years. This shows the people are very much careful about their buildings in the town.

Table 6.30

Sr.No.	Period	No. of house holds	%age
1.	Less than 1 Years	4917	49.32
2.	1 to 5 Years	4266	42.79
3.	5 to 10 Years	496	4.97
4.	More than 30 Years	291	2.92
	Total	9970	100.00

6.20 Last Painted

The following Table 6.31 shows that, out of total house holds, 50% of the house holds got their houses painted within 1 year, 42% within 1 to 5 years. Only 8% house holds painted their houses between 5 to 30 years.

Table 6.31

Sr.No.	Period	No. of house holds	%age
1.	Less than 1 Years	5006	50.00
2.	1 to 5 Years	4227	42.00
3.	5 to 10 Years	450	5.00
4.	More than 30 years	287	3.00
	Total	9970	100.00

6.21 Approach to the Houses

The Table 6.32 reveals the position of path/road in the town. Out of the total house holds only 13% each of the house holds have the facility of motorable and jeepable roads. 15% house holds have more than 6 feet wide path and 18% house holds have less than 6 feet wide approach available to them, houses rest 41% have no proper approachable path to their house. This reveals the position of paths in the Solan Planning Area according to survey conducted by this department in 1999-2000.

Table 6.32

Sr. No.	Description	No. of house holds	%age
1.	Motorable road	1319	13
2.	Jeepable road	1312	13
3.	Footpath over 6 feet wide	1485	15
4.	Footpath less than 6 feet wide	1759	18
5.	No path	4095	41
	Total	9970	100

6.22 Electricity

It is obvious from the survey conducted, that Electricity supply in whole Solan Planning Area is adequate as 93% house holds have electricity. Only 7% house holds are without this facility. Out of total house holds 62.58% of house holds are availing the street light facility whereas 37.42% house holds are without this facility. It is also clear from the figure given in

table 6.33 that 90.24% house holds have no problem of voltage whereas 9.76% house holds are facing voltage problem.

Table 6.33

Sr. No.	Description	No.of house holds	%age
1.	Electricity available house holds	9254	92.82
2.	Electricity not available house holds	716	7.18
	Total	9970	100
3.	Street light facility available for households	6239	62.58
4.	Street light facility not available for house holds	3731	37.42
	Total	9970	100.00
5.	House holds with sufficient Electric Voltage	8997	90.24
6.	House holds without sufficient Electric voltage	973	9.76
	Total	9970	100.00

6.23 Source of Drinking Water

The water supply to Solan Town is from Nallah Lambi Dhar scheme and Ashni Khud Scheme. Out of total house holds 61% of the house holds have own tap whereas 39% of the house holds have to bring the water from common tap, neighbours tap and other than piped water. Table 6.34 shows that 85% of the house holds have a sufficient water supply only 15% of the house holds are facing the shortage of water supply. Per day consumption of water in Solan Planning Area is approximately 2410114 liters. This figure shows that per house holds per day 241.74 liters water is consumed approximately.

Table 6.34

Sr. No.	Source of water	No. of house holds	%age
1.	Own tap	6128	61%
2.	Common tap	2666	27%
3.	Neighbours tap	285	3%
4.	Other than piped water	891	9%
	Total	9970	100.00
5.	Water Supply sufficient	7546	85%
6.	Water Supply not sufficient	2424	15
	Total	9970	100.00
7.	Daily consumed by the family approximately	2410114 liters	-
8.	Per house holds daily water consumed	241.74 liters	-
9.	Per head daily water consumption	052.42 litres	-

24 Medical facilities

Table 6.35 indicates that in Solan Planning Area out of total house holds, 5% and 9% house holds have the nearest medical facilities within 1 km such as sub centre and dispensary. 9% house holds have dispensary over 1 km, sub centre over 2 kms. 42% house holds have district hospital within distance of 2 km and 36% house holds over 2 km.

6.25 Nearest Medical facility

Table 6.35

Sr.No.	Description	No. of house holds	%age
1.	Sub centre within 1 km	524	5%
2.	Sub centre within 2 km	100	1%
3.	Dispensary within 1 km	695	7%
4.	Dispensary within 2 km	656	7%

5.	District Hospital within 2 km	4166	42%
6.	District Hospital over 2 km	3633	36%
7.	Without medical facility	196	2%
	Total	9970	100.00

6.26 Disposal of Garbage

The following Table 6.36 shows that out of total house holds only 26% of the house holds have garbage collection facility available from house whereas 74% house holds are not having this facility. It has also been observed that 57% of the house holds have the garbage collection facility from the common garbage container and 43% of the house holds are not availing this facility. In the Solan Planning Area as per survey 91.42% of the house holds are being looking after by the Municipal Council for disposal of garbage and 8.58% of the house holds by Panchayat and any other local body. 71,310 kgms garbage is being produced daily by the house holds. The average garbage is produced 7.15 kgms per house holds in Solan Planning Area.

Table 6.36

Sr.No.	Description	No. of house holds	%age
1.	Garbage collection facility from house	2623	26
2.	House holds not having garbage collection facility from house	7347	74
	Total	9970	100
3.	House holds have available from common containers facility	4212	57
4.	House holds not having garbage collection facility available from common garbage container	3135	43
	Total	9970	100
5.	Looking after for disposal of garbage by Municipal Council	6746	91.42
6.	Looking after for disposal of garbage by Nagar Panchayat	457	6.19
7.	Looking after for disposal of garbage by local body	2867	2.39
	Total	9970	100
8.	How much garbage is being produced daily by the house holds in the planning area	713.10 kgms	-
9.	Average garbage produced per house holds	007.15 kgms	-

6.27 Cattle

As per survey conducted by the Department, there are total 5691 cattle's in Solan Planning Area, which have been kept only by 21% of the house holds.

6.28 Vehicles and Parking facility

The figures given at Table 6.37 clearly shows that 19% house holds are having their own vehicles and 81% house holds are without vehicles. Out of 19% house holds, 28% of house holds have the parking facilities on own land whereas remaining 72% house holds are parking vehicles on road side other depend on paid and free parking. The total No. of vehicles according to survey have been recorded as 2067. Average number of vehicles per house holds is 1.08. Out of the total house holds who have their own vehicles only 48% house holds are not facing parking problem whereas 52% house holds are facing parking problem.

Table 6.37**Vehicles and Parking Facilities**

Sr. No.	Details	No. of house holds	%age
1.	Who have own vehicles	1909	19
2.	Who have no vehicles	8061	81
	Total	9970	100
3.	Parking facility on own land	536	28
4.	Parking on road side	928	48
5.	Paid Parking	203	11
6.	Free Parking	242	13

6.29 Guest Visiting

Table 6.38 shows the number of tourist visiting in the Planning Area, which fluctuate the population of the Planning Area. In total, 158840 tourists visit the Planning Area. Out of which 51% visit in summer and 49% in winter. Therefore, while placing the facility/services this factor is to be kept in mind. During the year average 16 Nos. guests visit per house holds.

Table 6.38

Sr. No.	Guest visiting	Nos. of Guests	%age
1.	Summer	81,642	51%
2.	Winter	77,198	49%
	Total	1,58,840	100%

Average guests visiting per house holds during the year 16 Nos.

6.30 House/Land/Flats facilities

According to following Table 6.39 only 13% house holds are having plot/house/flat in the Planning Area, rest 87% house holds are not having plot/ flat/ house in the Solan Planning Area limits. The Table 6.40 shows that 25% house holds are willing to purchase Plot/ flat/ house in Solan Planning Area whereas 75% are not willing to purchase as they are either coming to Solan from near by villages or are not Himachali. Table 6.41 reveals that out of above 25% house holds 74% prefer to purchase plot/ House / flat from Govt. agency and 26% from private colonies.

Table 6.39

Sr.No.	Description	House holds	%age
1.	House holds having plot / house/ flat in the Planning Area	1264	13
2.	House holds having no plot/ house/ flat in the Planning Area	8706	87
	Total	9970	100

Table 6.40

Sr. No.	Description	House holds	%age
1.	House holds intending to purchase plot/ house/ flat in the Planning Area	2157	25
2.	House holds intending not to purchase plot/ house/ flat in the Planning Area	6549	75
	Total	8706	100

Table 6.41

Sr. No.	Description	House holds	%age
1.	House holds preferring to purchase plot/ house/ flat from Govt. Agency	1606	74
2.	House holds preferring to purchase plot/ house/ flat from private party	551	26
	Total	2157	100

6.31 Other facilities

The following Table 6.42 shows the facility available in Solan town. Out of total house holds 30% house holds have their own telephone, 59% of house holds have telephone facilities within 2 kms. and 41% have to go for availing this facility above 2 kms. 70% of the total house holds have post office facility within 2 kms and 30% have to go to avail this facility above 2 kms. 56% of the house holds have fire station within 2 kms whereas 44% have to go above 2 kms, 44% House holds have crematorium/ graveyard within 2 kms. 56% of the house holds have above distance of 2 kms. 62% house holds have police station within 2 kms and 38% of house holds have to go for this facility above the distance of 2 kms.

Table 6.42

Sr. No.	Description	No.of House holds	%age
1.	House holds have own telephones	3778	38
2.	House holds without telephones	6192	62
	Total	9970	100
3.	House holds have telephone facility within 2 kms distance	3674	59
4.	House holds have telephone facility above 2 kms distance	2518	41
	Total	9970	100
5.	House holds have post office facility within 2 kms distance	5959	70
6.	House holds have post office facility above 2 kms distance	4011	30
	Total	9970	100
7.	House holds have fire station facility within 2 kms distance	5628	56
8.	House holds have fire station facility above 2 kms distance	4342	44
	Total	9970	100
9.	House holds have crematorium/graveyard facility within 2 kms distance	5576	56
10.	House holds have crematorium/graveyard facility above 2 kms distance	5576	56
	Total	9970	100
11.	House holds have police chowki/station facility within 2 kms distance	6185	62
12.	House holds have police chowki/station facility above 2 kms distance	3785	38
	Total	9970	100

Chapter - 7

DEVELOPMENT PATTERN AND REQUIREMENTS

Solan town has been growing in geometrical proportions. Reasons have been explained at length in previous chapters. However, the growth pattern is not desirable. The town has expanded along major roads & highways leading to the so-called finger plan. The linear expansion taking place along our life lines has its own demerits. The trend has no doubt been reversed to an appreciable extent since the extension of HP Town & Country Planning Act, 1977 to Solan Planning Area in the year 1998. New localities with proper paths, well shaped and sized plots have come up in pockets away from the road. Examples are Kather, Raboun (new), Anji, Ber Khas, Shanti, Deonghat etc. The stricter regulations introduced vide State Government notification No. TCP-F(5)-10/2001 dated 27-9-2002 convey the right message to the builders as well as general public to stop commercial vandalism along our important highways.

7.1 Trade and Commerce

Solan town is popular in the surrounding region. It has a good level of trade and commerce. As stated in the foregoing chapters, it is known for mushroom, then vegetables like peas, tomato, pahari potato, beans, ginger, cabbage, cauliflower, capsicum, pepper, Kheera, lady finger and also for stone fruits. That is why an organised sabzi mandi with supporting facilities has been constructed at Kather on Solan by pass. This Mandi is becoming very popular since farmers are getting handsome return of their produce. The role of middlemen has been highly reduced. This mandi has following facilities as per the layout:-

- (i) Auction platforms.
- (ii) Bank, post office, canteen, hall, worker's office, rest house.
- (iii) Shops, labour hut/ hall, parking, stores, daily need shops.
- (iv) Overhead water tank, electrical transformer, public toilets etc.

The industrial units working in the town are also boosting the trade here. The units like Exicom, Shivalik Bi-Metal, Decora Steel Furniture, Service Stations, Atta Chakki, Sand quarries. Himalayan Pipes etc. are creating multiple activities of trade, commerce & transportation etc. Recently the building materials sector has also gained prominence here. The setting up of a number of community halls, a cinema hall, restaurants & hotels plus schools over past 2-3 years points to the prosperity of the area and an increase in commercial activities. It is estimated that nearly 16.87 hectares of land is under commercial or commercial-cum-residential activity. As per data provided by the labour office there are over 1500 shops in the town. This is on the higher side. All along the roads whether National Highway or other roads, major or minor, shops or commercial activities have come up almost on every inch of them. Even if we take one shop against every 100 persons, it can be said that existing number of shops can cater to a population of $1500 \times 100 = 1,50,000$ persons.

Therefore, it can be concluded that there is already a surplus of commercial area in the town. One can easily see that out of every 100 shops some 15 to 20 do not fetch the minimum business. Lot of commercial space is waiting for tenants or offices.

There is a general trend to create shops at the ground level of every building on a road even though the shops may remain closed for years together.

Commercial sector needs to be allowed on planned pattern in future. Wherever commercial use is allowed, it should be given only after ensuring adequate parking, off loading & on loading, service lane, arcade and open space plus other facilities.

The building material units need to be organised at proper locations/sites.

7.2 Industry

Solan is also known for some industrial activity. The units worth name are :-

- (i) H.F.C.L. (Himachal Futuristic Communications Limited)
- (ii) Exicom (a sister concern of HFCL)
- (iii) Himalayan Pipe Factory
- (iv) Shivalik Bi-Metal
- (v) Decora Iron & Steel Industry.
- (vi) Some Pharmaceutical Units.
- (vii) Mohan Meakins Breweries.

The H.F.C.L. and the Exicom have a significantly high turnover. There is no obnoxious unit reported by the concerned departments. The District Industries Centre is on the look-out for a suitable patch of land for prospective units in view of the industrial package announced by the Central Government. In view of the character of the town, no unit requiring massive land and water can be allowed in Solan Planning Area. Moreover, no unit likely to cause air, water pollution should be permitted. No unit requires re-location as on this day. Some mining activity is going on within existing urbanised limits of the Planning Area. Such units be disallowed in the overall interest.

There are approximately 1000 workers in various industrial units. This is not a big size. Moreover, majority of the workers belong to Solan town or nearby areas.

The industrial activity is presently concentrated at Chambaghat only. There is no scope for the expansion of this area in future. If at all some proposal for additional industrial units comes up, the same can be considered on following 2 roads:-

- (i) Solan-Rajgarh road.
- (ii) Chambaghat-Basal-Salumana road.

The existing industrial units in Solan Planning Area cover an area of about 25.31 hectares.

7.3 Water Supply and Sewerage

Solan town was initially provided with water through gravity water supply scheme during the year 1944. As the requirements started growing, augmentation was done in 1971 from Ashni Khud by lifting water in three stages to the existing storage tanks on tank road. Yet another major augmentation of lift water supply scheme, Solan from Ashni Khud was granted approval by the State Government in the year 1983 for Rs. 50.50 lacs. The scheme was designed for an ultimate population of 39,424 persons upto 2009 A.D. This scheme envisages a lifting capacity of 53.20 lakh litres/day with 16 hours of pumping. The distribution network was augmented in 1994-95 under an estimate amounting to Rs. 1,58,08,000 only.

At present 22 to 24 hours of pumping is being done at all the three stages of LWSS, Solan and about 46.31 lakh litres of water is supplied to M.C., Solan per day which further distributes water to the city residents. As on today itself there is a considerable gap between demand and supply. This gap is widening day by day in view of fast growth of Solan town as well as the increasing influx of commuters in the town. Even if we assume the per capita per day quantum of water required from the sources as 100 litres and the aggregate population as on this day at 50,000 persons (including the daily commuters), the total requirement of town works out to 50 lac litres/day which is far ahead of the figure of 42 lac litres supplied to MC, Solan per day. Then considering the usual losses on account of leakages in pipe distribution system as well as thefts, the situation becomes chaotic in itself. Within the town proper, certain pockets are highly under

privileged as these are supplied with the barest quantum of water. Water supply, therefore, can be declared as problem No. 1 of Solan town as on today.

The Irrigation and Public Health department has prepared an ambitious scheme to lift water from Giri river to tide over this problem. A project report for this purpose was submitted to the Central Agencies. The DPR (Detailed Project Report) amounting to Rs. 51.46 Crores had been submitted to the Government for approval and finalisation by the funding agency. The project was under consideration of HUDCO to whom it was sent for financial assistance on 12-11-2002. HUDCO has conveyed its approval and has sanctioned an amount of Rs. 27.44 crore for Phase-I of this project. The scheme envisages to execute the project in two phases. On completion it will supply water to Solan town, 23 villages having urbanization trend around it and Kumarhatti plus Dharampur areas comprising of 91 villages. Thus it proposes to supply 22.08 MLD @ 120 litres/capita/day for urban population and 70 litres/capital/day for rural population. Floating population too has been taken care of.

Sewerage System

Presently no area of Solan town is served with sewerage scheme. A sewerage scheme at an estimated cost of Rs. 4,55,38,000 was granted A/A and E/S by the State Government in the year 1995. Work on this scheme is going on, though at a very slow speed. Sewerage treatment plant for zone 3 has been constructed below Degree College. The following are the salient features of this scheme: -

- | | | |
|-------|---|---|
| (i) | Design population (upto 2029 AD)- | 49,776 persons & non-domestic population. |
| (ii) | Design period | - 30 Years |
| (iii) | Peak factor | - 2.5 |
| (iv) | Per capita sewer flow | - 80% of water flow |
| (v) | Number of treatment units | - 3 Nos (one in each zone) |
| (vi) | Total proposed length of CI pipes for sewer lines | - 42.5 km |
| (vii) | Dia of pipe | - 150mm (min) C.I.
350mm (max) C.I. |

It may take time before the entire Solan town gets connected and served with the sewerage system.

7.4 Tourism

As on today Solan itself is not any important tourist spot. However it is known as a base or reference station for many places of tourist importance nearby. The list includes Chail, Kasauli, Dagshai, Subathu, Kandaghat, Churdhar peak etc. Many visitors destined for Shimla, Kinnour & other areas of the state use this town as a halting station sometimes. The tourist infrastructure as on today includes following hotels:-

- | | |
|----------------------------------|-----------------------------------|
| (1) Ambusha Resorts, Chambaghat. | (2) Pine Grove, Deonghat |
| (3) Mayur, The Mall | (4) Utsav, The Mall |
| (5) Yogesh, The Mall | (6) Himani Resorts, The Mall |
| (7) Konark, Chambaghat | (8) Harsh Palace |
| (9) Flora Holiday Resorts | (10) Premjee's Paradise, The Mall |
| (11) Surbhi | (12) Ashok |
| (13) Krishna | (14) Shingar |
| (15) Shere Punjab | (16) Thakur |

- (17) Kumar
(19) Ashray
(21) Kashyap

- (18) Sharma
(20) Green
(22) Tip Top

Significantly, a tourist bungalow being run by HPTDC near St. Lukes School has been closed down since the year 2000. The occupancy is maximum during Shoolini Mela held every year in June. Moreover, in the Govt. sector, the circuit house, the HP PWD Rest House, the M.C. Rest house, the Sainik Rest House & the Sabzi Mandi Rest House also cater to the tourist population. It can be assumed that there is sufficient tourist accommodation for the visitors in Solan town. The aggregate number of beds available in the above mentioned hotels and rest houses is about 600. It is only on a few occasions in the year that overall full occupancy is experienced. Barring a few cases there is serious shortage or nil availability of parking space in various hotels. This also discourages the tourists to stay within Solan town. The shortage of water supply is another discouraging factor in many cases.

The tourist face of the town is in for a better change. A ropeway is likely to be installed between Chambaghat and Karol Tibba. The latter has an important historical background. The Pandavas, it is said, stayed here while in exile. A cave is believed to link this hilltop to Pinjore near Kalka. One can get a lovely view of surroundings from here. On a clear sunny day after rain we can also have a glimpse of towns & rivers in the plains down below. A hotel is also proposed to be constructed by M/S K.K. Ropeways who are to undertake this project. This proposal can act as a big tourist attraction within Solan town.

The National heritage park proposed to be set up by the Mohan Shakti Trust at village Herth near Ashni Khud is going to be the most ambitious project in this region. The foundation stone of the same was laid by the Hon'ble Prime Minister of India Shri Atal Bihari Vajpayee in November, 2002. Brain child of Brigadier Kapil Mohan who is the owner of Mohan Meakins Breweries, the project consists of following salient features :-

- Big temples with exquisite architectural marvels.
- Meditation centre inside a cave.
- Theme park.
- Herbal Plantations.
- Fountains and landscaped gardens.
- Ropeway trolley.
- Research Centre.
- Ayurvedic healing.
- Yagyashala etc. etc.

The site measures just 11 kms from Solan town. Significantly an alternative road link to Chail is also being developed, connecting it to Solan via Ashwani Khud near Jaunaji. The road is only 1 Km. from the site of the proposed heritage park at Herth.

Hence Solan is in for good days so far as tourist potential is concerned. However hotel activities must come up in a planned manner as per the regulations of TCP department as well as the policies of the Tourism Department.

Presently following are some of the tourist attractions in the near vicinity of Solan town:-

- (i) Karol Tibba
- (ii) Shoolini Devi Temple
- (iii) Giripul at Yashwant Nagar.

- (iv) University of Forestry at Nauni.
- (v) Jatoli Temple on Rajgarh Road.
- (vi) Parks-Children's park, Mohan Park & Jawahar Park.
- (vii) Mohan Meakins Brewery alongwith Summer Hall.
- (viii) NRCM (National Research Centre for Mushroom)
- (ix) Bon Monastery (Yung Drung Ling) near Oachhghat.
- (x) The Gorkha fort at Dharon Ki Dhar.
- (xi) Kathni (Ayurveda and Yog Centre)
- (xii) Barog & Solan Railway Stations.

The Giripul can be developed as a very attractive picnic/excursion spot. Bathing ghats, boating, fishing, parks, eating points etc. if developed could make this a lovely place to visit. In case of the Karol Tibba horse rides could also be introduced besides the ropeway project. The Matiul Peak also is a potential site worth development as a picnic or excursion spot.

Dagshai, Subathu, Chail and Kasauli are the other British towns in the proximity of Solan. These towns are located on their hilltops, are accessible by all-whether roads, have rich historical and architectural heritage and thus can be clubbed as a circuit for the tourists. The Town & Country Planning Department has already begun efforts to highlight the heritage of these towns. There is a lot to learn from their building styles.

7.5 Traffic and Transportation

Solan is a highly growing town. So is the case with the traffic and transportation aspect. The town is located on NH-22 which is a defence road leading to China Border. It is also an important life line of the State as all items say bread, butter, goods, men & machinery come to the districts of Solan, Shimla & Kinnaur through this route only. The town also falls on the popular Kalka-Shimla narrow gauge. But it is only men that come or go by this mode. Very limited goods are transported by the rail running on this track. Following are key features of the traffic and transportation aspect in respect of Solan town:-

1. Solan is an obligatory point for all vehicles travelling on NH-22. Then it is also linked by major district roads with Rajgarh, Jaunaji, Subathu, Kandaghat via Basal & Salumana. The magnitude of traffic passing through the town is increasing day by day. Especially during tourist and the apple season, one can see long queues of vehicles as well as traffic jams around the town. The traffic delays as well as accidents are increasing in the process. Some mechanism needs to be evolved to take care of this situation. Parking is going to be an alarming problem.

2. The increasing number of scooters, cars & other vehicles are going to choke the road network which already is unable to hold the running traffic even. It is not incorrect to say that while water supply is problem No. 1 of Solan town, parking is problem No. 2 or 3 in any case. There has been enough talk on this matter. Time has come to take straightforward action to solve this problem which is going to assume gigantic scale. Some remedies have been suggested in forthcoming chapters. The local authority has to step even beyond these suggestions/recommendations.

3. Pedestrian travel is getting dangerous on account of increasing traffic and decreasing road width due to encroachments. Recommendations have been made in this regard in next chapters.

4. Idle truck and bus parking too is becoming a matter of concern. It reduces the carrying capacity of our roads built at phenomenal costs. No scope should be left for allowing or permitting it on road sections. A detailed exercise has been undertaken to suggest sites for idle truck/bus parking.

5. A new bus stand building has come up near PWD office on Solan bye pass. It is expected to cater to the requirements over next 5-10 years. Measures aimed at improving the traffic system on the lines of a traffic operation plan (TOP) need to be spelt out. Recommendations have been given in the next chapter.

7.6 Educational facilities

Solan town can boast of excellent educational facilities. There is a Degree college on Rajgarh road, a higher secondary school for boys on tank road, a higher secondary school for girls on the Mall road, high schools at Salogra, Gugaghat, Bhoj Anji, then middle schools at Kothon, Dadhog, Saproon & Shilly and a number of primary Schools.

Besides this, there are a number of privately run recognised schools. These include MRA DAV Public School, St. Lukes School, B.L. Central Public School, Dayanand Adarsh Vidyalaya, S.D. Sr. Scondary School which are all 10+2 schools. A good number of other private schools of middle or primary level too are there.

Solan has a number of specialised educational facilities in and around it. These are :-

- (i) Govt. Polytechnic at Kandaghat, 16 Kms away.
- (ii) H.P. University of Forestry and Horticulture at Nauni, 18 Kms away.
- (iii) Dental college at Tatul, 15 Kms away.
- (iv) K.T.S. boarding school at Tatul, 15 Kms. away.
- (v) Urdu Training Centre at Saproon.
- (vi) Privately run B.Ed College.
- (vii) Solan Homeopathic Centre at Chambaghat.
- (viii) Art and Craft Teacher Training Institute, Saproon.
- (ix) I.T.I.
- (x) J.B.T.
- (xi) S.C.E.R.T.
- (xii) Green Hills Engineering College at Bohli near Kumarhatti, 20 Kms. away.

Further we have Army Public School and Dagshai Public School at Dagshai, Central School at Subathu, Jawahar Navodaya Vidyalaya at Kunihar, Lawrence Sanawar School and Pine Grove School at Kasauli, DAV Centary & Sarvahitkari Shiksha Sansthan at Kumarhatti and Chinmaya Vidyalaya at Nauni. Thus there are schools and schools in and around Solan. Yet another boarding school of 10+2 level is coming up at village Sharanu below Barog Bye pass within Solan Planning Area. It also has the ultimate provision for a college of girls.

Hence we may say that there isn't any dearth of educational facilities in Solan Planning Area. However, some pockets need to be extended educational facilities keeping in view the desirable journey distance as well as the supporting population.

7.7 Government & Semi Government Offices

Solan is a district headquarter town. It has a number of district level officers & their offices located here. Almost all key departments are having their offices located here. A good number of offices are running in Govt. buildings. These are :-

- (1) Mini Secretariat containing D.C. Office, S.P. Office, SDM Office, NIC, DYSSO, District Statistical Office, D.R.O., Copying Agency, DRDA, Zila Parishad, District Treasury Office, ASP, DSP, DF&SC etc.

- (2) PWD circle office near hospital on tank road. It houses the office of S.E., HP PWD, Solan circle.
- (3) Public Works Department complex on Solan bye pass. It has offices of Executive Engineer (National Highways), Executive Engineer, HP PWD Solan Division, Assistant Engineer Horticulture Sub Division etc.
- (4) District Industries Centre at Chambaghat. It has offices of GM, Industries and Mining Officer. Residential colony is also located alongwith.
- (5) Tehsil Office at Kotla Nallah on Rajgarh road. It has also residential colony alongwith.
- (6) District Public Relations Office near Gurudwara at Saproon.
- (7) Town & Country Planning Office near Dohri Dwar on Barog Bye-pass.
- (8) XEN, Public & Health office near Dohri Dwar on Barog bye pass.
- (9) Deputy Director, Animal Husbandry on Jaunaji road
- (10) District Agriculture office & District Horticulture office at Chambaghat.
- (11) Chief Medical Officer's Office at Chambaghat.
- (12) District Education Office (Primary & Secondary) at Chambaghat.
- (13) Offices of HPSEB near Power House at Saproon.
- (14) District Courts on the Mall road near Saproon.
- (15) Municipal Committee, Solan near Thodo Ground.

A number of Central Govt. Offices too have their own departmental buildings.

However, many offices are running in privately rented buildings too.

7.8 Medical

Presently there is a zonal hospital at Solan. It is providing specialised medical facilities to a vast hinterland. Patients even from Sirmour do come to this hospital. Earlier there was a proposal to shift the hospital to a new site adjoining police lines on Solan bye pass at Kather. Land for this purpose too was allotted by the State Government and foundation stone for the proposed complex had been laid in the year 1998. However the proposal in question has been reversed and the existing hospital building on tank road is being renovated at a huge cost. Besides the Zonal Hospital, we have an E.S.I. dispensary at Chambaghat and sub centres at Salogra, Anji, Jatoli & Shamti. The town proper has many private clinics providing specialised facilities like orthopaedics, dentists, gynaecology, ENT, eyes, paediatrics etc.

An Ayurvedic hospital is also proposed at Khasra No. 883 measuring 1885 square meter in Mauza Dehun. It shall have 50 beds. Then there is an Ayurvedic dispensary at main Bazar and at Anji.

A homeopathic unit is also functioning within the zonal hospital complex itself.

The town has many private Ayurvedic & homeopathic clinics.

7.9 Post & Telegraph

Presently there is one main post office, one head post office and four sub post offices in Solan planning area. The main post office is in front of PWD Rest house on the Mall Road, the head post office at Saproon and sub post offices at Chambaghat, Brewery, Saproon & Kotla Nallah.

Then there are 5 telephone exchanges, one near Jawahar Park, one at Chambaghat, at Deonghat, at Shamti & at Salogra. A residential colony of Telecom department (BSNL) is coming up at Kather. There is no proposal of the department for next 3-5 years.

7.10 Electricity

There is a power house of HPSEB at Saproon. Various offices of the concerned department as well as its residential colony are also located nearby to it. A 33 KV electrical sub-station has been commissioned just recently in August, 2003 at Kather. There is no further proposal of the department for next 3-5 years in respect of physical expansion of the electrical network.

7.11 Cinemas

Solan town has the distinction of having the best cinemas in State as on today. There are 3 cinema houses namely Sunder, Laxmi and Anand. Anand cinema which was started in the year 2002 is the first of its kind in Himachal Pradesh, being a Sr. Dolby cinema.

7.12 Playgrounds, Parks etc.

The town has three lovely and well maintained parks. These are :-

- (i) **Jawahar Park** - Located at the highest point of the town proper, it has fountains, rides, baby train, small play field etc.
- (ii) **Childrens' Park** - Located on the Mall road itself near DC Office, it has animal rides, rides, musical fountain & a cafe etc.
- (iii) **Mohan Park** - Built by Mohan Meakins breweries near Chambaghat on the Mall road, it has a beautiful terrace garden, rides etc.

There are following grounds in the town :-

- (i) **Thodo ground** - Near MC Office, it is the centre of all cultural, official & sports activities.
- (ii) **Police ground** - Adjoining Police lines at Kather it is an upcoming ground & has the potential of making of a stadium. VIPs' helicopters land on this ground.
- (iii) **Radhaswami Satsang** - A large ground coming up at Anji.

The town has a number of community halls. Some hotels nearby also have excellent facilities for arranging marriages, functions, meetings or parties. There are religious institutions too offering such facilities. MC Solan has its own community hall near Thodo ground.

7.13 Heritage

Solan is primarily a cantonment town because this is the very first function that came up here on account of establishment of an army cantonment. Though it can be called a British town, however the Britishers did not do more beyond the military functions. Thus this town is not as privileged as Dagshai, Subathu and Kasauli have been where the British art and architecture flourished in many ways. Solan cantonment is still the best and the most well planned part of this area. Buildings have been planned keeping in view the contours and least hill cutting was done for this. The blocks also face the south to achieve maximum sun. However so far as buildings are concerned, only the church inside Solan cantonment is fit to be called heritage building. Built in stone and wood work, it has bold and elegant sloping roofs plus arches reminiscent of the British architecture. Then we have some other few buildings worth the heritage importance. The overall list of heritage buildings in solan town & nearby is as below :-

1. The Church at Solan cantonment.
2. The Solan railway station.
3. The Barog railway station.
4. The railway station and the railway rest house at Salogra.
5. The DC residence on Shilly road.

6. Anees villa of Salman Rushdie near DC residence.
7. S.E., PWD office which used to be a durbar hall of Baghat State.
8. Old guest house in the palace of Baghat state.
9. Khalifa lodge (it has the JBT school running in it).
10. Nanak villa on tank road, colonel Chopra's building adjoining NCC Office on Rajgarh road and Kishan Niwas building on circular road and some of the private buildings near St. Lukes School, the Mall built in typically hill architecture.

7.14 Hazard Prone Areas

In view of the State Government directions, it is imperative to identify the hazard prone areas. The central areas of Solan are highly congested and one can only imagine the loss of life in the event of any disaster. This is highly important from disaster management point of view. There is a general impression in the minds of the local public that core areas already being congested and commercial in nature, here no open spaces or set backs have to be left. This is a disastrous opinion. The central areas which were built long ago due to the absence of any formal check or due to commercial forces need a curative therapy. Regulations to be framed must be based on this concept.

Even outside the core area, situation is not good here too. Over a period of 13 months during the years 1999 & 2000, as many as 3 brand new structures, 5-storeyed each, fell on their own in different parts of the town. Then constructions do or might come up occasionally below HT lines, near waste recycling plant at Salogra, on steep slopes, adjoining upcoming sewage treatment plants of I&PH department etc. etc. Hence a policy has to be framed to have a control on such constructions in future. A strong political will backed with administrative support, framework of regulations plus public education campaign are needed to achieve the desired goal.

7.15 Solid Waste Management

Municipal Council, Solan has a well organised network of solid waste collection & disposal. Waste is collected from 132 collection points with the help of 115 sanitation workers. Out of these 132 collection points, as many as 42 are the dumpers. The council has 2 placers and 1 tipper which is privately hired. It has 4 drivers. A total of 10 tons of solid waste is collected every day and transported to the waste recycling plant at Salogra. The plant is fully capable of meeting with the requirements of the town.

The waste recycling plant situated at Salogra is a unique thing in itself. Firstly it's only at Shimla and Solan that we have the waste recycling plants in Himachal Pradesh. Salogra plant has the distinction of being the first in HP. It is till date being maintained by a non-government organisation (NGO) known by the name of "Jan Seva Ashram" which has its head office in New Delhi. The plant has land and processing plant capable of handling a total of upto 20 tons of solid waste. Presently on an average, upto 10 tons of waste arrives here. On festival days the quantum reaches upto 13 tons. As and when a dumper placer or a tipper arrives from a unit, the constituents are segregated by the workers into polythene, stone, medical waste, paper, kitchen waste & such categories. Paper is recycled in the paper recycling plant. The organic waste is kept in open heaps which decomposes in a period of 40-45 days reducing it to compost. The other part of the waste being sanitary in nature is dumped on open land.

There are a number of facilities here. There is a JCB, a plant processor, soil testing & compost testing lab and an office.

Generally wind blows away from the plant towards higher or eastern side. Nevertheless during the process of segregation and compositing there is possibility of foul odour reaching the nearby settlements towards Salogra. Therefore, it is essential to have a green belt around the unit

with thick vegetation and especially an aromatic plantation in it. There is also a need to identify suitable sites as sanitary land fill.

The waste collection network also needs to be strengthened by providing additional/requisite sanitation workers, dumpers, placers, tippers, dust bins and drivers. It is imperative to collect solid waste from individual houses to prevent defacement of hill slopes, streets, forest, open spaces & to avoid blockades of drainage system.

Chapter-8

EXISTING LAND USE

Solan Planning Area was notified or declared as such on 1-3-1997. Section 15-A of the H.P. Town & Country Planning Act, 1977 was extended vide State Govt. notification No. TCP-F(6)-60/94, dated 9-7-1998. As per the requirements of the Act, the existing land use of Solan Planning Area was prepared by the department. After inviting public objections and suggestions and considering the same, the existing land use of Solan Planning Area was adopted and notified vide notification No. HIM/TP-PJT/DP-Solan/93-871-1027, dated 9-5-2000. Solan Planning Area covers 3343.00 hectares of land. Description of the existing land use is given in the following paragraphs:

8.1 Residential Use

The residential use comprises of 208 hectares of land. This works out to 23% of the planning area. The residential areas are densely located in the core of the town, then in Kather, Raboun, Shamti, Deonghat, Saproon, Chambaghat, Ber Khas, Basal & Salogra etc. Earlier there was a trend of residential areas coming up along roads. Since past 2-3 years, on account of strict control of T.C.P. Department, developments have reduced along major highways. Rather residential pockets are fast coming up in localities away from main roads. Examples are Kather, Bawra, H.P.H.B. colony at Basal, Raboun, Shamti etc. Along N.H. & other major roads there is a common trend to take out shops at the road level. This trend needs to be discouraged by way of zoning regulations & strict enforcement thereof.

8.2 Commercial use

All along Upper bazar, Lower Bazar, Mall road & other roads, commercial use has been coming up at ground floor or the road level. Presently approximately 17 hectares of land is covered under commercial use. However in many cases there are shops at road level but residences, offices, go-downs or some other activities at other levels. Thus there is mixed land use in such cases.

8.3 Industrial use

Nearly 25 hectares of land is covered under industrial use. This activity is mostly concentrated at Chambaghat where an industrial area was set up in an organized manner.

8.4 Public and Semi-public use

An area of 22 hectares presently falls under this use. Govt./Semi-Govt. Offices, Schools, Colleges, institutions fall under this category.

8.5 Green belt

An area of 2,932 hectares is covered with organised parks & open spaces, forests, orchards and agricultural fields etc. The need of the hour is to protect all parks, open spaces centrally located, orchards and rich agricultural land plus forests. Solan planning area does not have too much forest cover. Though plantations & orchards are in abundance there are only 2 pockets of notified forest areas. Just touching the planning area, we have high mountains at Karol, Matiul, Deonghat etc. where one can see forest area in abundance. The forest pockets within Solan Planning Area cover only 28.0 hectares land.

8.6 Traffic and transportation

An area of 138 hectares falls under this use i.e. roads, bus stands, parking lots, HRTC workshop etc.

The existing land-use table is as under: -

S.No.	Land-use	Area in hectares	%age of total area
1.	Residential	208.12	6.22
2.	Commercial	16.87	0.50
3.	Industrial	25.13	0.75
4.	Parks & open spaces, forests, agricultural lands etc.	2932.46	87.74
5.	Public & Semi-public	22.50	0.67
6.	Traffic & transportation	137.92	4.12
		3343.00	100.00

Chapter-9

PROJECTIONS, REQUIREMENTS AND DEVELOPMENT PROPOSALS

9.1 Residential use

Presently an area of 208 hectares falls under residential use. Residential areas are developing in Raboun, Anji, Deonghat, Kather, Basal, Ber Khas, Parag, Salogra, Jaunaji road, Shanti, Damrog etc. Assuming a gross (overall) density of 250 persons per hectare we need an aggregate of 400 hectares of land by the year 2021 A.D. for the ultimate design population of 1,00,000 for Solan Planning Area. The urbanisable area has been worked out after deducting steep areas, unsuitable areas, plantation and green areas etc. Provision for the required residential land has been made in the plan document. Though in table No. 6.5(d), the projection of population of Solan Planning Area has been worked out at 95,149 for the year 2021 A.D., we however fix it at 1,00,000 to be on the higher side & to make a round figure. Out of this, the urban component is expected to be 75,000 and the rural component to be 25,000 by way of natural growth.

9.2 Optimum size of the town

Though the figure of 75,000 persons works out as the expected population of Solan town by the year 2021 A.D., this is being recommended as the optimum population of the town from various considerations. We know that every settlement has an optimum size beyond which it becomes an un-economical and an inconvenient entity. The threshold of population for sustainable development is much less for a hill town than for a valley or plains town. It is imperative to fix a suitable size of a town or city lest it becomes unwieldy and unmanageable like Shimla town.

Solan too has started showing signs of deterioration in certain respects. For instance right now, water supply has emerged as the biggest problem of this town. It is so serious that the issue has been becoming political in some dimensions. Next come solid waste management, parking, traffic and transportation, unauthorised constructions etc. It may not be wrong to say that if creative measures are not taken, Solan may just lead to where Shimla has already arrived at. Therefore it is recommended that the ultimate and optimum population of Solan town is 75,000 persons. This aim can be fulfilled through following techniques :-

- (i) Discouraging high rise and dense development within the core areas.

- (ii) Encouraging shifting of certain activities from the central areas to the fringe / rural areas.
- (iii) Planning and development of a new township in between Shimla and Solan.
- (iv) Suitable zoning regulations and tariff structure to be proposed to achieve the results.

The urbanisable area has been worked out keeping in view the existing growth trend, future potential for development, public opinion and other considerations. Though road sides have been covered under urbanisable area, actually future construction or development shall be discouraged on main roads & highways so that linear growth is checked and compact plus balanced development achieved. The urbanisable area has been divided into 4 sectors. Sector 1 shall be the existing core area, sector 3 shall be bounded by Rajgarh road and Barog Bye Pass, sector 4 shall be bounded by Barog Bye pass and Kalka-Shimla road whereas Sector 2 shall be bounded by Kalka-Shimla road and Rajgarh road.

9.3 Commercial use.

At present nearly 16.87 hectares of land is under commercial or commercial-cum-residential use. There are over 1500 shops in the town. Even if we consider 1 shop against just 100 persons, it can be said that these shops can cater to $1500 \times 100 = 1,50,000$ persons. Hence there is hardly any shortage of commercial space in Solan town. Rather there is a surplus of it as many a shop, hall or commercial floor are yet to get any customer.

Therefore there is not any need to propose additional area under commercial use. However, it is natural that cluster shopping shall develop in planned colonies in various parts of the planning area. Like the Housing Board colony coming up at Basal shall have its own cluster shopping. Nevertheless, there is need to organise the building materials activity in the town. The building material units spread out their items upto the edge of the acquired width of roads and sometimes even encroach upon the road sections. These also occupy huge space for loading & off loading. Hence it is proposed to have organised building materials markets - one at Basal with an area of 3.37 hectares, the other on Subathu road with an area of 1.40 hectares. A regulated market, informal in nature, is proposed in front of the Sabzi Mandi at Kather. It will cater to the requirements of truck drivers, conductors and farmers coming in large number to Anaj Mandi. A sulabh shouchalya is also proposed. Besides, idle truck parking shall be provided in an organised manner. An area of 0.84 hectare is reserved for informal market.

Elsewhere commercial use may be allowed on various roads but in a strictly professional manner. Only where adequate set backs, parkings space, loading unloading facilities, service lane etc are provided shall a commercial proposal be considered. Cluster shopping may also be allowed in planned residential colonies for day to day requirements. So far as town proper is concerned, there is an intense concentration of retail and wholesale activity. Zoning regulations should allow no more concentration. There is a deep rooted thinking on part of the common man that the central areas don't need any management, curative measures or control. This thinking is to be reversed by public education campaign. The fire incident of Diwali night in the year 1999 is sufficient to prove the utility of open spaces and low rise development in the core areas. This is significant from disaster management point of view also.

9.4 Parks and open spaces

Existing parks and open spaces shall all be meticulously preserved and protected. No building activity of any sort shall be permitted in Childrens' park, Jawahar park and Mohan park. The Thodo ground is to be maintained as such. Police ground has the cope for being developed into a stadium. It may continue to act as a helipad also. As stated in previous chapter, 2 regional parks are being proposed though both lie outside Solan Planning Area as on this day. One is adjoining the famous Jatoli Temple and the other on Barog bye pass beyond Shamlech. A

childrens' park is being proposed on Basal road. Besides, regulations are being framed to ensure parks & open spaces in every case of sub division of land. Green belts/buffer zones are also being proposed around sewerage treatment plants and the waste recycling plant. An area of 3.0 hectares is proposed for stadium at Kather and 1.12 hectares for childrens' park on Basal road. The proposed regional parks on Rajgarh road and Barog bye pass shall measure 2.81 hectares and 3.00 hectares respectively.

9.5 Public and Semi-public

Presently an area of 22 hectares falls under this use. In view of requirements of govt. offices and institutions an area of nearly 21.0 hectares is being proposed on account of additional requirements under this use. Mostly government land is being earmarked under this use.

9.6 Industry

Though Industries department had tried to locate some suitable land for prospective industrial units to be established in or around Solan town, it has almost dropped the idea now. The new industrial units are making a bee-line for Baddi, Barotiwala, Parwanoo & Nalagarh. In or around Solan we don't have any major chunk of suitable land for the above stated purpose. Hence no additional area is being reserved under industrial use. There is no problem with the existing industrial units. However Mohan Meakins breweries may be made to follow the procedures for treatment of effluents scrupulously.

9.7 Tourism

Within Solan town no additional area is being earmarked under tourism. Additional hotels/ guest house may come up provided these fulfil the policy of the Tourism department and the zoning regulations prescribed in next chapter. A rope way project under pipe line connecting Chambaghat with Karol has been taken care of in the land use map. Following proposals are hereby made to boost tourist potential of Solan town:-

- (i) A tourist information office be opened at Solan. It may have a tourist cafe and a few tourist mini buses so that travels could be arranged to Dagshai, Kasauli, Subathu, Chail, Giripul etc.
- (ii) Tourist complexes on a humble size & scale are proposed at Matiul, Karol and Giripul.
- (iii) A regional park is being proposed near Jatoli temple. It shall have an area of 2.81 hectares. The site however falls outside planning area as on today.
- (iv) A regional park is being proposed on Barog bye pass beyond Shamlech. It will give a lovely view of Solan town & upper hills. The park may be developed without carrying out any construction activity as the land falls under forest department. Sitting points, childrens' rides, walkways etc. could be developed in this. This site too falls out of Solan Planning area.
- (v) A Childrens' park near Pipal tree on Basal road is being proposed on an area of 1.12 hectares.

9.8 Agricultural land & green belt

There are rich agricultural lands and orchards in and around the town which are proposed to be preserved. Urban activity shall be permitted on barren/banjar and ghasni lands only. In the green belt outside the urbanisable limits following activities shall be permissible :-

- (i) Self residential houses or farm houses upto 2 storeys and a plinth area not exceeding 200 m² with a set back of 2.0 metres on all sides. A simple application may be submitted by the owner to the competent authority before raising the construction as per procedure mentioned in the last chapter.

- (ii) Various activities to be performed by private individuals and panchayats etc. as explained in the last chapter.

9.9 Forest Areas

Presently there are 2 pockets of protected forests within Solan Planning Area. Other than this, there are some private or govt. patches or pockets having rich plantation of trees. It is proposed to preserve these pockets. Two additional pockets are being proposed under plantation - one between brewery and Salogra and the other between Deonghat - Nagali section of existing NH-22 and the upcoming Barog bye pass. These sites are steep and found unfit for residential development.

Then buffer zones are also proposed around existing plus proposed sewerage treatment plants as well as the waste recycling plant existing at Salogra.

9.10 Traffic and transportation

As stated earlier, traffic and transportation is the next most important aspect to be taken care of after water supply and sanitation. Solan town is said to be having highest level of vehicle ownership per person in Asia. It may be just right. Every week one can see a vehicle or two coming on the road - brand new with HP-14 number series. Presently an area of 138 hectares is covered under this use. Following recommendations are being made with a view to improve traffic & transportation in Solan town :-

- (1) Additional road linkages need to be developed to serve various upcoming pockets and also to dissuade regional traffic from passing through the town. One such road link is proposed between Solan-Rajgarh road and Barog bye pass. Another connecting Chambaghat-Basal-Salumana road and Solan-Subathu road. And a road connecting N.H.-22 and Jaunaji road.
- (2) No bus/truck movement is to be allowed through city proper. All regional traffic shall follow the Solan bye pass route only. Long-route buses may pass through the old bus stand between 10.00 PM and 6.00 PM only. This arrangement too be withdrawn after due course of time, say 5 years.
- (3) To ensure road safety, pedestrian bridges (over bridges or sub-ways) are proposed at following vantage points :-
 - (a) Saproon Chowk
 - (b) Dohri Diwar
 - (c) D.C. Office junction
 - (d) Chambaghat junction
 - (e) Sabzi Mandi, Kather
 - (f) New bus stand on bye pass
 - (g) Kotla Nallah
 - (h) Salogra bazar

While these points may be taken care of in next 5 years, additional points shall be identified thereafter.

- (4) Parking is an area where situation is worsening day by day. The traffic system may just collapse if organised parking lots away from the roads are not developed without any further loss of time. There can not be any realistic assessment of parking requirement. As on this day parking provision is no match with the parking space actually required. Then growing number of vehicles is adding to the overall requirement. Finally, as we provide parking facilities, more demand may crop up. Parking is to be provided in each and every locality. Ultimately every building, house and institution must have its own parking provision commensurate with its genuine requirements. Zoning regulations are being framed for this purpose.

An area of 6.0 hectares is being proposed under parking lots. Following important points/spots are being recommended as parking places besides the existing area :-

- (i) Old bus stand
- (ii) Military area adjoining old bus stand
- (iii) Near S.E., HP PWD Office - the two vacant spots
- (iv) Rajasthan ground near D.C. Office.
- (v) Along Mall road touching the railway station land.
- (vi) Jaunaji road and Mall road junction.

A separate "parking fund" is suggested to be created for Solan Town. It shall be maintained by M.C., Solan. All proceeds from auction of parking lots shall go to this fund. In the initial years some points along roads may continue to act as parking points but ultimately all roads should remain free from all such activities. The local body must also borrow money from banks to develop select parking lots. The loan can be repaid from the income on this account.

(5) Schools within Solan town must stagger their timings both in the morning as well as in the afternoon & in order to avoid peak hour rush. St. Lukes school attracts a large number of LTV's during closing hours of the school. The school administration must make an efficient system to deport students to the nearest desirable stations on subsidised or even free basis. For instance 5 medium size buses destined for Salogra, Raboun, Kotla Nallah, Ghatti, Basal etc. can help reduce the PCU's (passenger car units) to a great extent. If this is not feasible in near future, the closing times can be staggered for group of classes e.g., primary, middle & senior sections etc.

(6) The new bus stand may fall short of requirements in 5 years time. It is proposed to have an additional bus stand so that problems of single bus stand are done away with. Both the bus stands shall be connected with a mini bus service. For the second bus stand, the existing workshop of HRTC at Chambaghat shall be shifted to some alternative place.

(7) A transport nagar is already contemplated at Kather near existing HRTC workshop. It shall accommodate idle parking of govt./private buses and public transport. Even repair functions & other facilities shall be provided in the transport nagar. It is planned on an area of 2.35 hectares.

(8) A mini bus service is proposed for the purpose of reducing PCU's on the pattern of mudrika in metropolitan cities

(9) Following junctions & road sections need improvement :-

- (i) D.C. Office junction
- (ii) Saproon
- (iii) Dohri Diwar
- (iv) Junction of Mall road and Jaunaji road.
- (v) Section of road near smaller gate of PWD rest house.
- (vi) Section of road in front of Sabzi Mandi at Kather.
- (vii) Chambaghat.

(10) A railway over bridge or a road fly-over is imperative to be provided at Chambaghat where there is a level crossing of rail line and NH-22.

(11) Pedestrian paths need to be developed along all vehicular roads in order to ensure safety of pedestrian traffic.

(12) Points notified for loading & off loading by the District Administration may not be used for idle parking at all. Time zoning may also be introduced for such functions where felt necessary.

(13) Taxation be introduced on all such vehicles as permanently remain parked on city roads. This money can be used to develop new parking lots. The step will also encourage public to develop their parking lots. Ultimately, however, roads must be freed from all road-side parking.

(14) Following sites are proposed to be developed for traffic related aspects :-

- (i) A site near HP Housing Board colony at Basal for idle parking of trucks engaged in the mining activity. It measures 1.12 hectares and shall be developed by way of dumping.
- (ii) A site at Chambaghat measuring nearly 0.50 hectares. It shall be developed by dumping and would be used for idle parking plus as the starting station for Chambaghat-Karol ropeway project.
- (iii) A site near Shivalik bimetal on Solan bye pass. It measures nearly 0.50 hectares and shall be developed through dumping and would be used for idle parking.
- (iv) The site in front of Sabzi Mandi approximately 2.25 hectares shall be developed by dumping. A regulated market, plantation/buffer zone plus idle parking etc. shall be developed on it.
- (v) A site on Saproon-Subathu road to be developed for idle parking of trucks. It measures 0.50 hectares.
- (vi) A site on Barog bye pass (NH-22) near cremation at Anji Nallah shall be developed for idle parking of trucks. The site measures 0.56 hectares.

(15) The existing mining site near Pipal tree on Basal road be closed as it is creating huge traffic nuisance and is within urbanisable area.

(16) The auto repair units at Deonghat, Chambaghat & elsewhere need to be organised and disciplined. These generally function by way of encroachment on main roads/highways. Following sites are proposed to be developed for this purpose :-

- (i) An area measuring 1.68 hectares near junction of Rajgarh road with Damrog-Jatoli road.
- (ii) An area measuring 1.40 hectares near cremation at Anji on Barog bye pass.
- (iii) At the proposed transport nagar likely to come up at Kather.

(17) A short term T.O.P. (traffic operation plan) shall be prepared to improve the traffic & transportation system in Solan town. Techniques such as one way regulation, Zebra crossings, traffic lights, road dividers, islands, speed and time zoning etc. could be employed to minimize the pressure on existing traffic system.

(18) The old bus stand is to be replaced with car parking and autos. The site of old police station may have a taxi stand. The spot in front of Murari market may be earmarked as bus stop and auto stop.

Table : Proposed land use of Solan Planning Area

<u>S.No.</u>	<u>Description</u>	<u>Existing Area</u>	<u>Additional provision made</u>	<u>Proposed Area</u>
1.	Residential	208.12	(+) 191.88	400.00
2.	Commercial	16.87	(+) 4.77	21.64
3.	Industrial	25.13	-	25.13
4.	Public & Semi Public	22.50	(+) 15.00	37.50
5.	Traffic & transportation	137.92	(+) 21.00	158.92

6. Parks & open spaces, Forest, Agricultural lands etc.	2932.46	(-) 232.65	2699.81
	3343.00	-	3343.00

9.11 Hazard Prone Areas

After the recent earthquake of Gujarat, the State Government constituted an expert group on natural disaster prevention, preparedness and mitigation in regard to housing and related infrastructure. It made a number of recommendations. One of these recommendations is to indicate natural hazard prone areas in a Development Plan and to prescribe controls and guidelines for the development of such area. Accordingly an attempt has been made to do the same hereunder.

No body knows how many buildings constructed in and around Solan town are safe from various points of view like wind force, seismic forces or bearing capacity of soil/strata. But this can be surely stated that barring Government and some private buildings, rest all have been constructed without following any structural design. Over the years, a number of private structures have either collapsed on their own or have shown trends of sinking/sliding due to reasons whatsoever. The State Government has already made it compulsory to seek a structural stability certificate from an applicant before raising a structure. However, henceforth in Solan Planning Area, a detailed structural design shall have to be submitted by an applicant in the following cases :-

- (i) All constructions involving 4th & 5th storeys (if otherwise permissible under rules).
- (ii) Constructions proposed on hill tops and along spurs likely to be visited by strong winds from SW to NE.
- (iii) Constructions on the valley side along major highways. Already three buildings, 5 storeyed each, collapsed on their own during the years 1998 & 1999 in Solan town. All these were new structures and incidentally on the valley side of existing roads.
- (iv) Constructions in areas of poor geological formation as marked in the Development Plan.

Some restrictions in terms of numbers of storeys and type of construction have been suggested in respect of (iv) above under the chapter of zoning regulations. The plan sanctioning authority may also insist on geological investigation in case a site requires the same. No construction below an HT/LT line of electricity department shall be allowed unless an applicant brings an N.O.C. from the electricity department. The NOC must have been issued by the concerned Executive Engineer of HP State Electricity Board clearly stating the maximum height to be permitted in case of the proposed structure or addition. Then the existing or proposed sewerage treatment plants under Solan sewerage scheme are going to be potential hazard. As per the provisions of the manual on sewerage and sewage treatment published by the Central Public Health Environment Engineering Organisation (CPH EEO), Ministry of Urban Development, Govt. of India, the residential areas should be separated by atleast 300 metre from a sewerage treatment plant. Hence this factor is taken care of. Similarly the waste recycling plant at Salogra is yet another obnoxious activity from environmental aspect. While it is so essential as it is taking care of the solid waste of Solan town, it nevertheless needs to be provided with a buffer around it to prevent possibility of any residential activity coming up in its vicinity. It is proposed to have a green buffer around it and the same be grown with thick plantation having aromatic fragrance. Some alternative sites too need to be kept ready to be used as dumping sites for the rejected matter.

A number of steep sites have been proposed to be reserved under green use so as to check the possibility of constructions coming upon them. All steep slopes shall be disallowed for any urban use.

9.12 Public Education

This appears to be a philosophical issue but it is of great relevance in achieving the cause of planned development. Much of our actions are based on pecuniary considerations and have a short-sighted merit in them. For instance why an owner of a building located on the Mall road wants to raise an additional storey even though he has exhausted all parameters prescribed under prevailing zoning regulations. The biggest temptation is that the additional construction shall fetch a handsome financial return to him or her. He for the time being, forgets all other worldly considerations - be it structural safety or the pressure on city infrastructure or even the availability of adequate light & ventilation to the neighbours. Some developers as well as builders lead the rest of the society by raising flats or cottages overnight and disposing them off to other parties. The buyers step into highly unsafe & problematic structures.

Hence public needs to be constantly made aware about the ill-effects of such a bad development/construction on our health, economy as well as moral development. Printed material at a nominal price must be made available to any prospective applicant. Moreover seminars, exhibitions & meetings should be organized at regular intervals. The agencies responsible for sanction of plans and check on unauthorised constructions must earmark an annual budget for this purpose. The Divisional Town Planning Office, Solan has already initiated such efforts though on a small scale. Disaster management is yet another field which could be highlighted by co-relating it with construction techniques and zoning regulations.

Chapter-10

PHASING, COSTING AND IMPLEMENTATION

10.1 Phasing

- (a) The plan period is 2004 to 2021 A.D. The following activities having top priority are proposed to be undertaken in the first 6 years i.e. 2004 to 2010 A.D. :-
- (i) Regulated market in front of Sabzi Mandi at Kather with facilities like informal market, sulabh shauchalya, idle truck parking etc.
 - (ii) Building materials market at Basal.
 - (iii) Opening of a tourist information office.
 - (iv) Traffic operation plan (T.O.P.) for Solan town.
 - (v) Transport nagar at Kather.
 - (vi) Parking sites within Solan town.

Remaining activities shall be taken up in the period after 2010 A.D.

10.2 Costing and Implementation

The Development Plan does not envisage any major acquisitions for residential, commercial and infrastructure development. Most of the proposals are being made on government land. However some acquisition is imperative for development of parking sites and traffic improvement as well as other aspects.

It is proposed to have a revolving fund with a seed capital of Rs. 50 crore for giving effect to various proposals under this plan. The state level urban development authority shall be responsible for overall implementation of the plan document. However majority of the proposals are required to be implemented by concerned State Govt. departments as a part of their routine

functions. Therefore actual costing of the plan proposals shall be worked out by the respective agencies as and when these are taken up in hand.

Majority of the residential and commercial development may come up in private sector only in accordance with the zoning regulations.

In order to ensure inter-departmental coordination, a committee under the chairmanship of Deputy Commissioner, Solan is hereby recommended. It shall have following members: -

- | | | |
|-----|--|------------------|
| 1. | Deputy Commissioner, Solan | Chairman |
| 2. | S.D.M., Solan | Member |
| 3. | Tehsildar, Solan | -do- |
| 4. | Executive Engineer (B&R) HP PWD, Solan | -do- |
| 5. | Executive Engineer (I&PH) Solan | -do- |
| 6. | Executive Engineer (HPSEB), Solan | -do- |
| 7. | DFO, Solan | -do- |
| 8. | President, MC, Solan | -do- |
| 9. | Executive Officer, MC, Solan | -do- |
| 10. | Regional Manager, HRTC, Solan | -do- |
| 11. | Pradhans, Gram Panchayats, Basal, Salogra, Dehun, Anji, Raboun, Shamti | -do- |
| 12. | Executive Engineer (NH) Solan | -do- |
| 13. | Three key NGO's | -do- |
| 14. | Town & Country Planner, Solan | Member Secretary |

The Committee may meet at least twice in a year and devise ways and means to ensure implementation of development plan proposals.

A Sub-committee shall henceforth deal with planning permission cases and unauthorised constructions in Solan Planning Area. It shall meet once in a month and have following composition:-

- | | | |
|----|---|------------------|
| 1. | Deputy Commissioner, Solan | Chairman |
| 2. | Executive Engineer (NH), Solan | Member |
| 3. | Executive Engineer (I&PH) Solan | Member |
| 4. | Executive Engineer (B&R), HP PWD, Solan | Member |
| 5. | Executive Engineer, HPSEB, Solan | Member |
| 6. | Tehsildar, Solan | Member |
| 7. | Town & Country Planner, Solan | Member Secretary |
| 8. | Executive Officer, M.C., Solan. | Member |

Chapter-11

ZONING AND SUB-DIVISION REGULATIONS

11.1 Regulations

11.2 Procedure

- (a) The application for development of land to be undertaken on behalf of the Union or State Government under Section-28 and under Section-29 by a local authority or any authority specially constituted under the Himachal Pradesh Town and Country Planning Act, 1977 shall be accompanied by such documents as prescribed under Rule-11 of the Himachal Pradesh Town and Country Planning Rules, 1978.
- (b) 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 Himachal Pradesh 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 HP Town and Country Planning Rules, 1978.
- (c) The application under section 30-A for construction of farm house for agricultural purpose shall be a simple application to the Director for seeking his permission subject to the conditions as envisaged under Section-30 -A of the Himachal Pradesh Town & Country Planning Act, 1977.
- (d) Apart from above the applicant shall furnish the following additional documents namely :
 - (i) Location plan in the scale 1:1000 indicating the land in question, main approach roads, important physical features of the localities/area, important public buildings like school, hospital, cinema, petrol pump etc. and surrounding ownership.
 - (ii) Site plan in the scale of 1:200 indicating the proposed site, approach road, adjoining buildings, the existing sewerage and drainage showing the built up and open area clearly. Site plan must tally with the shape and dimensions of plot shown in the tatima. Otherwise suitable revenue documents supporting/verifying the change in shape and area to be enclosed. Suitable site and size of rain water harvesting tank shall also be indicated in the site plan.
 - (iii) Two sets of plans, elevations and sections in the scale of 1:100 or 1:50.
 - (iv) The Architectural drawings duly signed by the registered Architect/ Planner/ Engineer/ Draughtsman alongwith his/her address and registration number.
 - (v) Copy of Treasury Challan form vide which requisite fee has been deposited.
 - (vi) Latest original khasra map showing khasra number of land in question, adjoining khasra numbers on all sides of plot and approach path with its dimensions.
 - (vii) Ownership documents such as copy of latest Jamabandi and attested photo copy of sale deed/registration deed.
 - (viii) In the site plan the distance of electricity line from development as per Indian Electricity Rules (as amended upto date) in case any electricity line is passing over or nearby the proposed site for development be shown.
 - (ix) A certificate from the Nagar Parishad/Nagar Panchayat and Revenue Authority shall be enclosed in support of taking over the land surrendered for development

of road or path and designating it as public street as per the provisions of the Himachal Pradesh Municipal Act, 1994 in case own share of land is made available by the owner of such land and where no public road or path exists.

- (x) For the plots abutting National Highways, State Highways, bye passes and other Public Works Department scheduled roads, the No Objection Certificate (NOC) shall be on the format appended below :-

FORMAT

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

(Seal)

Competent Authority
of
Himachal Pradesh

- (xi) The applicant shall have to submit any other certificate/documents/plan eg. No Objection Certificate (NOC) from the H.P. State Pollution Control Board, Water and electricity availability certificate from the concerned departments etc. as may be required by the Director. For obtaining NOC from HP State Electricity Board, the same shall be submitted as per format appended below: -

FORMAT

The Himachal Pradesh State Electricity Board has no objection on carrying out any development of land bearing Khasra No. _____ of revenue village/Mohal _____ under the _____ line by the owner/Sh./Smt. _____ resident of _____ with respect of provisions of Indian Electricity rules, 1956 inforce in this behalf.

(Seal)

Competent Authority
of
Himachal Pradesh

- (xii) Demarcation shall be taken from revenue authority before undertaking any construction activity.

11.3 General Regulations

The following general regulations shall apply to all development activities in each area/zone of the Solan Planning Area.

- (i) No building or other structure shall be erected, re-erected or materially altered without the permission of the Director.
- (ii) General land use in the Development Plan has been contemplated for specific uses. However, mixed land use shall not be prohibited unless otherwise a particular land use is hazardous in nature to the predominant use and fulfils the regulations fixed for the same at the time of coming into force of these regulations.

- (iii) No yard or plot existing at the time of coming into force of these regulations shall be reduced in dimension or area below the minimum requirement set forth herein. The yards or plots created after the effective date of these requirements shall meet at least the minimum requirements established by these regulations. All the plots registered prior to the extension of section 15-A of H.P. Town & Country Planning Act, 1977 to Solan Planning Area shall be treated as plots irrespective of their size subject to the condition that 3.00 metres wide path abutting one side of the plot will be the basic requirement. If 3.00 metres wide path is not available at site then the owner should surrender the remaining area from his plot to make the path 3.00 metres wide. However in future no plot to be created shall have a path/ road less than 5.0 metre in width.
- (iv) Areas zoned for public/pemi-public use and parks and open spaces shall not be built upon in any way or used for any purpose other than parks, play grounds and recreation. These may, however, with the prior permission of the Director be permitted temporarily for a period not exceeding 30 days to be used for public entertainment purposes and shall be removed at the end of the period and shall in no case be permanently erected.
- (v) The height limitations of these regulations shall not apply to all kind of religious places e.g. temples, mosques, gurudwaras and churches etc. provided it is so designed and approved by the Director. The chimneys, elevators, poles, tanks and other projections not used for human occupancy may extend above the prescribed height limits. The cornices and windowsills may also project into any required yard.
- (vi) In the public interest and in the interest of town design or any other material consideration the Director may relax minimum size/area of plot, plot coverage, set backs, and floor area ratio (F.A.R.) etc. The decision of Director shall be final. However change of land use shall be allowed by State Government only.
- (vii) The existing non-conforming uses of land and structures shall not be allowed in contravention of provisions of section-26 of the Himachal Pradesh Town and Country Planning Act, 1977.
- (viii) Natural nallahs which pass through land involving division shall be developed and maintained according to discharge of water in rainy season.
- (ix) Where it is essential to develop a plot by cutting, it shall be the responsibility of the plot owner to provide according to the engineering specifications, retaining and breast walls so that such cutting of natural profile shall not exceed more than one storey (3.5 mtr.) height in any case having a provision of diaphragm wall for step housing.
- (x) Development proposal for part of land or khasra number shall not be considered and proposal shall be submitted for complete land holding. However in case of inordinately big land holdings where the owner wants to submit sub-division for a part of it, he shall submit a proposal for not less than 10 plots at a time. Adequate provision of paths, open spaces as per regulations shall be made. Scope of path/road shall be shown for remaining land as well.
- (xi) No wall, fence and hedge along any yard or plot shall exceed 1.50 metres in height.
- (xii) On a corner plot bounded by a vehicular road in any land use zone/area, nothing shall be erected, placed, planted or allowed to grow in such a manner so as to

materially impede vision to avoid accidents and for smooth running of vehicular traffic.

- (xiii) No planning permission for development shall be granted unless the road/path on which land/plot abuts is properly demarcated and developed.
- (xiv) Drainage shall be regulated strictly according to natural profile of land with a view to prevent land slides and soil erosion and also to maintain sanitation and public health.
- (xv) No building shall be erected on slope forming an angle of more than 45° .
- (xvi) In case of plot or land abutting road or path, width of the same shall be increased to meet requirements of the development plan by getting additional strip of land surrendered by the land owner(s) on either sides of each road or path equitably or in accordance with topography of land and feasibility. Right of ownership of use of such land which is earmarked for path or road shall be surrendered or transferred to the Development authority or Local Body by owner(s) of the plot(s) without any compensation for maintenance purpose. The registering authority shall have binding with this provision to effect all registrations as per approved layouts from the Director, Town and Country Planning or through authorized Officers. The registering authority shall effect the transfer of such lands to Government or local authority.
- (xvii) The constructions conforming to the traditional hill Architecture with conical roof with slates/C.G.I. sheets painted in maroon or green colour, façade rendered preferably in local material like stone, slates & wood etc. shall only be permitted.
- (xviii) Roof slab/chhajja projection over door/window openings shall be limited upto 0.45 metres over set backs on all sides.
- (xix) Height of plinth level shall be 0.45 metres. Minor adjustment can be permitted keeping in view technical requirements of site.
- (xx) The set backs shall not be applicable to services like Electric Sub Station, road side infrastructure/facilities such as rain shelters, land- scaping etc. which are specifically permitted by the HP Public Works Department on the acquired width of a road with temporary structures.
- (xxi) 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 8.00 mtrs. If the rear and side set backs are not mentioned in the layout plan of (IOC) then the minimum sides and rear set backs shall be 2.00 metres.
- (xxii) No construction shall be permitted on a piece of land left with buildable width less than 5.00 metres after maintaining set backs with reference to the size/area of plot when the same lies in between two roads.
- (xxiii) Not more than three dwelling units per floor shall be permissible in residential building constructed on plot having an area upto 250 sq.mtr. For plot measuring more than 250m^2 one additional dwelling unit for every additional 100m^2 area shall be permissible in each floor.
- (xxiv) 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 Minimum width	4.50 m ² 1.80 m
(c)	Bath room	Minimum floor area Minimum width	1.80 m ² 1.20 m
(d)	W.C.	Minimum floor area Minimum width	1.10 m ² 0.90 m
(e)	Toilet	Minimum floor area Minimum width	2.30 m ² 1.20 m
(f)	Corridor	For Residential For other uses	1.00 mtr. wide minimum 1.20 mtr. wide minimum
(g)	Stair	(i) For residential (ii) For Hotel/Flats/Hostel Group Housing/Edu- cational Institutions like school, college etc. iii) Hospital/Auditorium/ Theatre/Cinema Hall	1.00 mtr. wide minimum 1.50 mtr. wide minimum 2.00 mtr. wide minimum
(h)	Width of treads without nosing	For residential For other uses	25 cm minimum 30 cm minimum for internal staircase
(i)	Height of riser	For residential For other uses	19 cm maximum (15 Nos. maximum in a flight) 15 cm maximum (15 Nos. maximum in a flight)
(j)	Spiral stair Case	In commercial building of three or more storeys, provision of spiral stair case having not less than 1.50 mtr. dia with adequate tread as fire escape in addition to regular stair case.	
(k)	Openings	For sufficient air and light the windows and ventilators provided should have minimum area equivalent to 1/6th of the floor area.	
(l)	Balcony	1.00 mtr. wide balcony complete open at two sides with restriction upto 50% of building frontage where minimum front set back is 3.0 mtr. shall be permissible.	

(xxv) Parking floor shall be allowed on floor which comes at road level, subject to the condition that the height of parking floor shall not exceed 2.30 mtr. This parking floor shall be over and above the permissible F.A.R. limits. Both parking floor as well as garage can be given. If the applicant raises a parking floor to the full/normal height of a storey, it shall account for F.A.R.

(xxvi) In case space as per requirement of parking is available in open over and above the set backs, condition of parking floor shall not be insisted.

(xxvii) Minimum and maximum height of floor shall be 2.70m and 3.50m respectively (for all land uses) and 25% variations in floor heights, if required for specific functional requirement of an activity shall be permissible with restriction for overall height of the structure. No mezzanine floor shall be permitted.

- (xxviii) Sloping roofs with slates/C.G.I. sheets/RCC slab with tile topping painted in maroon or green colour. Height of sloping roof zero at eaves and maximum 2.50 mtr at centre shall be maintained.
- (xxix) 1/3rd area of the top floor shall be allowed as open terrace wherever sloping roof is provided.
- (xxx) F.A.R. shall not exceed **1.75**
- (xxxi) No building block to be constructed shall ordinarily exceed 250 m² area keeping in view aesthetics.
- (xxxii) No construction shall be permissible above vision line (1.50 mtr.) on valley sides in case of following sections of roads so that valley view is fully preserved and protected.
- (i) Shimla-Solan-Kalka road via Chambaghat, Kather, Saproon and Dehughat.
 - (ii) Barog Bye pass.
- (xxxiii) Minimum front set back from the line of controlled width of National & State Highways falling within the planning area limits shall 3.00 mts. The minimum front set back on other PWD roads shall be at par with the regulations of H.P.P.W.D.
- (xxxiv) Minimum front set back for non-scheduled roads and municipal roads shall be 3.00 mtrs.
- (xxxv) Minimum 2.00 mtr. wide arcade in front of shops construction in a row.
- (xxxvi) The number of storeys permissible shall be invariably related to the width of the road/path abutting a plot. And in no case F.A.R. shall exceed 1.75.
- i) Maximum 2½ storeys where a path is less than 3.0 mts wide.
 - ii) Maximum 3 storeys where a path is less than 5.0 metre but more than 3.0 metre wide.
 - iii) Maximum 3½ storeys where a path is more than 5.0 metre but less than 7.0 metre wide.
 - iv) Maximum 4 storeys where a path is more than 7.0 metre wide.
- Provided the storeys are other- wise permissible under other rules for respective zone. Parking floor shall be in addition if otherwise feasible at site.
- (xxxvii) No construction shall be allowed within a radius of 5.00 metres from the forest/green belt boundary and within a radius of 2.00 mtrs from an existing tree. The distance shall be measured from the circumference of the tree.
- (xxxiii) For the plots abutting highways, bye pass and other H.P.PWD scheduled roads, N.O.C. from the concerned department shall be mandatory.
- (xxxix) For the plots/buildings, where electricity line is passing over the land
- 1) NOC from the H.P.S.E.B. authority shall be mandatory.
 - 2) In the site plan the distance of electricity line from development as per following Indian electricity rules as amended up to date be shown: -

<u>Voltages</u>	<u>Vertical clearance</u>	<u>Horizontal clearance</u>
1) Low and medium voltage and Service line.	8' (2.439m)	4' (1.219m)
2) a) For high voltage lines up to and including 11,000 volts	12' (3.658m)	4' (1.219m)
b) For high voltage lines 11,000 to and including 33,000 volts.	12' (3.658m)	6' (1.829m)
3) For extra high voltage line (For every additional 33,000 volts or parts thereof)	12' (3.658m) +1' (0.305)	6' (1.829m) + 1' (0.305)
(xxxx) Re-construction shall be permissible on old lines. Any addition, if required, shall be allowed to the extent of 20% of existing built-up area of ground floor subject to fulfillment of other planning regulations. 2 or 3 photographs shall have to be given to establish the existing building line.		
(xxxxi) The competency for preparation of structural design and its certification shall be as under:-		
a) For residential buildings to be constructed/completed on plot area upto 500 m ² and up to 3 storeys or 11.00 m height.		Registered Architect/ Graduate Civil Engineer.
b) For buildings more than above.		Graduate Civil Engineer having 3 years experience in engineering structure practice with design and field experiences.
(xxxxii) Building shall not be put to use prior to issue of completion certificate by the Director, Town & Country Planning Deptt. in areas falling out side Municipal Corporation/Nagar Parishad/Nagar Panchayat but within the Planning Area. At the time of submission for request of completion certificate, the applicant shall produce photocopy of an agreement signed between Architect or Engineer for design, supervision and completion of building as per sanctioned plan.		
(xxxxiii) The procedure for issue of N.O.C. for water supply and electricity connection shall be as under: -		
(a) Temporary		At plinth level.
(b) Permanent		On completion of dwelling unit/floor/ whole building.
<p>Provided that before applying for N.O.C. for permanent water connection the applicant shall have raised construction as per approved map, constructed drain, path, septic tank, soak pit, sloping roof, rain harvesting tank etc. The plot must have defined boundaries as per demarcation obtained from revenue department. Photographs shall also be submitted by the applicant showing structure raised or completed by him.</p>		
(xxxxiv) Any no objection certificate (NOC) issued by the Town & Country Planning Department shall be liable for withdrawal on breach of terms and conditions of		

reference of the issuance of such NOCs and undertaking to this effect shall be rendered by the applicant.

11.4 Sub-division of land regulations

The sub division of land into plots amounts to "Development" under the Town & Country Planning Act, 1977 and as such no person can sub-divide the land unless permitted to do so as per rules framed under section 16(c) of HP Town & Country Planning Act 1977 as follows: -

No Registrar or the Sub-Registrar appointed under the Indian Registration Act, 1908 shall in any planning area constituted under section-13, register any deed or document of transfer of any sub-division of land by way of sale, gift, exchange, lease or mortgage with possession, unless the sub-division of land is duly approved by the Director, subject to such rules as may be framed in this behalf by the state Govt.

Provided that the Registrar or Sub-Registrar may register any transfer in the following cases:-

- (i) where the land is owned by a person and the transfer is made without involving any further division.
 - (ii) where the sub-division of land is made in a joint Hindu family.
 - (iii) where the lease is made in relation to a part or whole of a building.
 - (iv) where the mortgage is made for procuring loan for construction or improvement over land.
- 2.
- (i) The application for sub-division of land shall be submitted as per procedure & requirement under Town & Country Planning Act, 1977.
 - (ii) The general regulations and directions issued from time to time by the H.P. Govt. shall be kept in view while permitting sub-division of land.
 - (iii) The sub-division of land shall be permitted in accordance with natural profile/orientation, wind direction and other environmental requirements and according to prescribed land use in the Development Plan. Natural flora and fauna shall be preserved. Unless site conditions prohibit, plots shall be permitted at right angle to the road with proper shape and dimension so that optimum use of land is ensured.
 - (iv) The development of land shall not be permitted where basic services like paved roads, drainage, water supply, sewerage disposal, electrical supply line, street lighting etc. do not exist or unless the applicant undertakes that these services shall be provided at his own cost.
 - (v) The minimum width of path/road abutting one side of plot shall be 5.00 mtrs. In case of dead ends cul-de-sacs shall be provided.
 - (vi) In case of plots exceeding twenty in number the minimum width of road shall be 7.00 mtrs.
 - (vii) 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 may not obstruct view or vista.
 - (viii) Minimum area of a plot for detached house shall not be less than 150 sqm. In case of plots meant for semi detached & row housing, minimum area shall be 120 sq. mtr. and 90 sqm respectively. In exceptional circumstances, considering economic/site conditions minimum size of plots in a row, with two common walls upto 60 sqmtr. of houses may be allowed, so as to provide smallest possible

residential construction in planned manner for the benefit of economically weaker sections of the society. However this shall be permitted in Govt. schemes or very big planned lay-outs in the private sector. Minimum permissible distance between two blocks constructed on a plot shall be 5.00 mtr.

- (ix) One common wall construction shall be allowed in plots upto 250 sq. mtrs & two common walls construction in plots upto 120 sq.mtr. subject to the condition that maximum number of such plots does not exceed 8 in a row, after which a gap of 7 mtrs shall be left.
- (x) In row houses, where common wall is constructed rear set back shall be two mtrs and side set backs shall be 2 mtrs in plots upto 150 sqmtr and 3.00 mtrs in plots from 151 to 250 sqmtrs.
- (xi) The plots allotted by the Govt. under Gandhi Kutir Yojna, Indira Awas Yojna and economically weaker section/IRDP families schemes may be considered and permission accorded in relaxation of regulations.
- (xii) Minimum area of a plot for residential development on Group Housing Scheme basis shall be 0.50 Hectares (5000 sqm.)
- (xiii) Where a sub-division of land involves plots exceeding 10 in number by individual/ colonizer or any society, provision of parks/tot-lots shall be made on suitable location in the scheme. Such parks can not be built upon and sold in any manner in future. The areas earmarked for parks/ open spaces shall not be less than 10% of the total area. If the plot area exceeds 5000 sqmtr. in area provision shall have to be made for educational, religious, socio-cultural and other community facilities based on actual requirements. The ownership of this land shall be transferred/ surrendered to the Development Authority/ Local body for its development and future maintenance without any compensation. Similarly, the area earmarked for roads/ paths shall also be transferred/ surrendered to the Development Authority/ Local Body without any compensation for development and maintenance as per provisions.
- (xiv) While carving out plots the orientation of the plots shall be provided in such a manner so as to be in conformity with the integration of existing plots/ infrastructure, wind direction, natural flow of surface drainage to allow unobstructed rain water discharge.
- (xv) Spots for garbage collection shall also be earmarked in big layouts.

11.5 ZONING REGULATIONS

Under the provisions of H.P. Town and Country Planning Act, 1977 control is to be exercised on the future constructions after sub-division of land under sub-division regulations.

The whole planning area has been divided into following broad segments:-

1. Built-up area.
2. Semi-built up area.
3. Other areas.
4. Agricultural belt.
5. Forest area.
6. Village abadi or abadi dehs.

The cantonment town of Solan is not covered under Solan Planning Area. As per section-1 (4) of H.P. Town and Country Planning Act, 1977, the Act is not applicable to lands comprised within a cantonment under the cantonment Act, 1924.

BUILT UP AREA

The area defined below shall be known as the built up area of Solan Planning Area. The built up Area shall comprise of the following:-

- (1) Starting from meeting point of N.H.-22 and Jaunaji Road near HP PWD rest house and then following Jaunaji road upto Nallah near house of Sh. Raghu Nath and Sh. Jagdish Chand and one building depth on valley side of Jaunaji Road.
- (2) Then following Nallah upto the meeting point of Nallah and Shilly Road near the house of Sh. Shri Kant Sharma and Sh. Om Prakash (Near Old Thermometer factory on Shilly road.
- (3) Then following Shilly road upto meeting point of Shilly road and Tank road near S.E. Office and one building depth on hill side of Shilly road.
- (4) Then following the Tank road upto the meeting point of Tank road and Kotla Nallah and one building depth on hill side of this road.
- (5) Then following the Kotla Nallah upto the meeting point of Kotla Nallah and Rajgarh road.
- (6) Then following the Rajgarh road upto DC Office & one building depth on valley side of Rajgarh road.
- (7) Then following the Mall road, Solan upto the meeting point of bye pass road and mall road and one building depth on left side of the Mall.
- (8) Then following the Mall Solan coming back from Saproon, Bus Stand to old bus stand and one building depth on left side of the Mall upto meeting point of the Mall & Jaunaji road near HP PWD rest house.

In this area following **regulations** shall be applicable :-

- (i) No building shall exceed three storeys. An extra floor can be permitted for parking purpose only, provided it is upto 2.30 m height.
- (ii) Coverage on plot shall not exceed 80% in any manner.
- (iii) Front set back shall not be compulsory in case of existing authorised building provided existing building line is maintained.
- (iv) Rear set back shall not be less than 2.0 mtr.
- (v) In existing built up areas, commercial activities shall only be allowed in floor, which comes at road level. Professional offices and the offices of commercial establishments shall be allowed on subsequent floors.

RE-CONSTRUCTION IN BUILT-UP AREA

- (i) Re-construction shall be permissible subject to the condition that plinth area and number of storeys on old lines shall remain the same as were existing earlier.
- (ii) Any addition if required shall be allowed to the extent of 20% of existing built up area of ground floor subject to fulfillment of other norms of these regularizations.
- (iii) To establish the existing building line, at least two/three photographs of 15cm x 25 cm shall have to be submitted by the applicant.

Permission for construction of existing building line shall be granted on following grounds :-

1. Building line refers to the alignment of buildings along the specific road, whereby future course of permission and construction is to be guided and regulated. It shall generally be a guiding factor for permission in the built-up areas of the town/planning areas.
2. Building line shall essentially be specified on the basis of following criteria:-
 - (i) Buildings that existed prior to coming into force of Municipal Act, whereby permission in Municipal Areas became mandatory.
 - (ii) Buildings that were erected in Planning Area other than Municipal Area covered in point (i) above prior to freezing of landuse.
 - (iii) Buildings that have been erected in accordance with planning permission, accorded in planning area under the provision of H.P. Town and Country Planning Act, 1977 and rules made thereunder.
 - (iv) H.P. Town and Country Planning Act and in accordance with provision of the Development Plan.
3. The principle of conservative surgery (to conserve heritage and to remove eyesores and problematic structure) has to be inevitably followed in the built up areas in view of an unprecedented increase in traffic load on one hand and thereby bottle necks, delays, noise pollution etc. on the other hand. The affected property owners shall be mobilized and well compensated in order to ensure widening of roads and better living conditions in this process.
4. Generally regulations of built up area shall be operative for permissions on the existing building line. However, as and when permissions in these areas are to be considered on building lines local character of the area on one hand and implications thereof be kept in view.

SEMI BUILT UP AREA

The semi built up area shall comprise of the following: -

Remaining part of M.C. Solan area other than built up areas as defined above. In this zone the total number of storeys permissible shall be four only including one parking floor wherever feasible. If parking provision with-in the building is not feasible or possible only three storeys shall be allowed. Fourth storey including parking floor shall be permissible only in such plots which are abutting a road at least 5.00 mtr. wide. The height of the parking floor shall not exceed 2.30 mtr. Other regulations like set backs, F.A.R. etc shall be same as for other areas.

OTHER AREAS

Area other than that under built- up or semi-built up category and upto urbanisable area limits/boundary shall be known as the other area. In this area the total number of storeys permissible shall be five including one parking floor wherever feasible subject to the following conditions :-

- (i) Maximum number of storeys shall be 2½ storeys where the plot abuts a path which is less than 3.0 mtr. wide.
- (ii) Where plot abuts path/road 3.00 mtr to 5.0 mtr wide, number of storeys shall be three + one parking floor.
- (iii) Number of storeys shall be 3½ storeys where plot abuts a path 5.0 mtrs. to 7.0 mtrs. wide and 4 storeys where the path is more than 7.0 mtrs.
- (iv) If parking is not feasible, the benefit of additional storey on account of parking floor shall not be given to an applicant. The parking floor if feasible shall have a maximum height of 2.30 mtr.

- (v) The applicant shall be required to submit the detailed structural design duly signed and stamped by a qualified civil/structural engineer. The construction shall be undertaken under the supervision of such engineer who shall give a certificate to this effect after completion of the part or full building as the case may be.

AGRICULTURAL BELT

Agriculture as per definition under section 2(a) of the Himachal Pradesh Town and Country Planning Act, 1977 includes horticulture, farming, raising of annual or periodical crops, fruits, vegetables, flowers, grass, fodder, trees or any kind of cultivation of soil, the reserving of land for fodder, grazing or thatching areas, breeding and keeping of livestock including cattle, horses, donkeys, mules, pigs, breeding of fish & the use of land ancillary to the farming of land.

- (i) Sub-Division of land in this zone shall be allowed only for agriculture purposes. As per section 16(a) of the Town & Country Planning Act 1977 the Director shall not refuse permission if the change of use of any land is for the purpose of agriculture.
- (ii) The permissible uses in agriculture zone shall be as follows: -
- (a) Construction of a cow shed, green house, overhead or underground water tank, latrines, temporary or katcha shed/structure purely incidental to agriculture purpose and live stock etc., pump houses and biogas plants. No sanction of any kind shall be required for such activities.
- (b) Construction of schools, libraries, Dispensaries, Post Offices, Panchayat Ghars, Patwarkhanas, Mahila Mandal Buildings, religious buildings by Central or State Govt. or village panchayats, provided that no such building shall exceed two storeys.
- (c) Pucca structure for self-residential use upto 200 sqmtr. plinth area farm house shall be permissible provided such buildings do not exceed 2 storeys & 2.0 mtrs. set backs shall be kept on all sides of the farm house. However, the applicant shall have to submit a simple application to the competent authority before undertaking any construction. The application shall include the following description:
- (i) Name of the applicant.
- (ii) Activity/construction proposed.
- (iii) Description of land i.e. Kh. No., Mohal/Name of revenue village.
- (iv) Line plan of the proposed construction.

Each such application shall be accompanied with a re-recommendation of the Pardhan that the proposed activity/construction is not going to cause any nuisance and that there is a proper approach/path existing or proposed by the applicant.

FOREST AREAS

Every effort shall be made to preserve and protect the existing forest areas. While Govt. forests are expected to maintain their status quo, the private forests shall also be preserved and protected. Activities promoting afforestation, wild life, picnics and tourism alone shall be permissible.

Under tourism only such activities with the permission of Forest Deptt. shall be allowed whereby tented, temporary, small and make shift accommodations are proposed. Felling of trees shall no be allowed for any of the activities mentioned above.

VILLAGE ABADIS OR ABADI DEHS

Areas coming under existing abadis or abadi dehs shall have separate regulations for them.

- (a) Construction of a residential house, shops, nursery, primary and middle schools, buildings of public utility and service industry shall be permissible. No obnoxious activity as may pose any danger to the living environment would be permissible in such an area.
- (b) No building shall exceed three storeys in any case.

A simple application shall have to be submitted to the competent authority before undertaking any construction. The application shall contain the following description: -

- (i) Name of applicant.
- (ii) Activity/construction proposed.
- (iii) Description of land i.e. Mohal/Name of revenue village.
- (iv) A location/site plan (not to scale).
- (v) Line plan of proposed construction.
- (vi) Recommendation from the Pradhan of village panchayat.

REGULATIONS FOR EACH LAND USE

RESIDENTIAL USE

The general regulations as laid down under this Development Plan shall be kept in view while permitting any development under this use.

The construction of buildings for residential use shall not be permitted on any plot which has an area of less than 90 sqmtr. Plots registered before 31-7-1998 shall however, be considered. Relaxation shall be granted in such plots & in case of Govt. Housing Schemes for houseless namely Gandhi Kutir Yojna, Indira Awas Yojna, E.W.S. and any other such schemes of the Govt.

The maximum covered area & set backs shall be governed by the following table:-

Sr.No.	Plot size in Sqmtr. construction	Type of coverage	Maximum	Set backs		
			permissible	F.	S.	R.
1.	Upto 120 Sqm.	Row	75%	3.0	-	2.0
2.	120-150	Semi Detached	75%	3.0	2.0	2.0
3.	150-250	Detached	60%	3.0	2.0	2.0
4.	250-500	Detached	50%	4.0	2.0	2.0
5.	Above 500	Detached	40%	5.0	3.0	3.0

Note :

- (a) Maximum permissible coverage shall be subject to fulfillment of prescribed set backs.
- (b) For plots having side set back of 3.0 mtr. and more construction of garage upto 5m depth and height not exceeding 2.30 mts in ground floor shall be permitted touching rear boundary of the plot provided total coverage remains within the maximum permissible limit and no opening is left on the side of the adjoining plots. This provision shall be in addition to parking floor as permissible under rules.

- (c) Roof slab/chhajja projection over door/window opening shall be limited upto 45cm over set backs on all sides.
- (d) Minimum and maximum floor height for residential buildings shall be 2.70 mtr. and 3.50 mtr. respectively.
- (e) No projection and opening shall be provided on the sides of common wall in case of row and semi detached houses. However, the owner of plots of either sides shall have an option to construct a common wall.

COMMERCIAL ZONE/AREA

The general/special regulations as laid down under this Development Plan shall be kept in view while permitting any development in this zone/areas.

MINIMUM AREA OF PLOT

(a) SHOPS

The minimum size of shopping booth/shop be 20 sqmtrs. including covered corridor (Arcade) with minimum width of 2.5 mtrs in front of shops.

(b) ORGANISED SHOPPING CENTRE

(i) The maximum coverage of the commercial area shall not be more than 50%. The remaining area of shopping centre shall be used for parking lots/movement space and re-creation. The layout indicating location of parking areas shall depend on the size of the commercial centres and its location and design which shall be approved.

(ii) Maximum F.A.R. for these shopping centres shall be 1.75.

(iii) Adequate parking space, loading/off loading, turning of vehicle, service lane which shall be open to sky shall be provided.

(c) CINEMA

(i) The plot area required for cinema is directly related with the capacity, adequate vehicular parking within premises, incidental shops and open spaces around the cinema building for ventilation and safety measures against the fire hazards. The area thus required for cinema plots shall be at the rate of 3.70 sqmtr per seat capacity.

(d) HOTELS/GUEST HOUSES

The hotels shall be permitted in specified commercial areas. Minimum plot size for hotel shall be 1000 m².

Maximum number of storeys

For hotels maximum number of storeys shall be 4+1 parking floor. Parking provision shall be compulsory.

Maximum height of building

The maximum height of hotel building shall be 18.80 metres (including 2.50 metres maximum of sloping roof and 2.30 metres height of parking floor). The plot size/plot area, maximum coverage, set backs and F.A.R. shall be governed by following table: -

Plot size in Sq. metres	Maximum coverage	Set backs in metres			Maximum F.A.R.
		F.	S.	R.	
Hotel					
Upto 1000	40%	10.0	5.00	5.00	1.75
Above 1001	40%	10.0	5.00	5.00	1.40
Guest Houses					
250 to 1000	50%	3.00	2.00	2.00	2.00

The hotels/ guest houses shall be permitted provided following regulations are met with :-

- (i) The proposed guest houses/hotels must have a vehicular access atleast with a width of not less than 3.00 mtrs and 5.00 mtrs respectively.
- (ii) The proposed guest houses/hotels must have congenial environment including open spaces around and should not in any manner be disturbing to the residential houses around.
- (iii) Each suite shall have an attached independent toilet.
- (iv) Guest Houses with minimum five rooms can also be permitted in residential land use zone/area.

Note

- (i) The minimum and maximum plot size/area as mentioned above shall not be applicable in the cases where sub division of land has taken effect before the commencement of this development plan.
- (ii) Front set back 3.00 mtrs which will form an arcade and rear set back of 2.00 metres is must for commercial plots i.e. shops upto 20m².
- (iii) The side set backs shall not be necessary in commercial area having common walls of shops, but in newly developed commercial 7.00 mtr. wide alley (gap) shall be left after each block of not more than 45.00 metres in length.
- (iv) If commercial building/plot abuts on two or more streets (Path/roads) the building/plot shall be deemed for the purpose of this regulation to face upon the street (Path/road) that has greater width.
- (v) Parking provision shall be compulsory for hotels.
- (vi) Adequate parking space for cars, scooters, bicycles etc. shall be provided in case of cinema/guest house plots.
- (vii) Parking if proposed on existing/proposed roads shall not be permitted in any case.
- (viii) Maximum width of path/road abutting one side of plot shall be 3.0 mtrs.

INDUSTRIAL USE

For Industrial use/activities following regulations shall be applicable: -

(i) Minimum area of plot

- (a) The minimum area of an industrial plot for small-scale industry shall be 250 m².
- (b) The services/light manufacturing industries shall have plot area between 501 m² to 1000 m².

- (c) The minimum area of medium industry shall be from 1001 m² to 5000 m².
- (d) The minimum plot area for a heavy industry shall be above 5000 m².
- (e) The plot area as mentioned in clause (a) to (d) above would not be applicable in the cases wherein the sub-division of land has taken effect before the commencement of this Development Plan.
- (f) The individual plots, if any, created/allotted by the Himachal Pradesh Industries Department and Himachal Pradesh State Industrial Development Corporation (HPSIDC) or any other Authority prior to coming into force of the Development Plan, the above plot area under clause (a) to (d) would not be applicable.
- (g) The layout and design of industrial area, if any, shall be as per requirement of the Industry and shall be got approved from the Director.

(ii) Height of building

- a) The minimum floor/storey height of industrial building shall be 3.60 metres and sloping roof height shall be 2.50 metres.
- b) The plot size/area, maximum coverage, set backs and Floor Area Ratio (F.A.R.) shall be governed by following table: -

Sr.No	Type of Industry	Minimum plot size (in square metres)	Maximum coverage	Minimum Set back (in metres)				Max. FAR	Maximum height (in metres)
				Front	Left	Right	Rear		
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1.	Small Scale Industries	250 to 500	60%	3.00	2.00	2.00	2.00	1.50	-
2.	Services/Light Industries	501 to 1000	60%	5.00	2.00	2.00	3.00	1.25	12.00
3.	Medium Industries	1001 to 5000	55%	10.00	5.00	5.00	5.00	1.00	12.00
4.	Large and Heavy Industries	Above 5000	50%	15.00	7.50	7.50	7.50	0.60	12.00

Note :- Maximum height of industrial shed shall be 12.00 metres or depending upon the nature of requirement of particular industry. In case of roof trusses, height of building should be adjusted/relaxed accordingly.

PUBLIC AND SEMI PUBLIC / GOVT. & SEMI GOVT. OFFICES

- 1. The general regulations as laid down in this development plan shall be kept in view while permitting any development in this zone/area.
- 2. **MINIMUM AREA OF PLOT**
The minimum area/size of plot shall depend on the specific requirements, however it should not be less than 150 m²
- 3. **MAXIMUM NUMBER OF STOREYS**
The maximum number of storeys shall be 4 + parking floor.
- 4. **MAXIMUM HEIGHT OF BUILDING**

The maximum height of public and semi public buildings shall be 18.80 metres (including 2.50 mtr. maximum height of sloping roof and 2.30 mtr. height of parking floor)

5. The maximum coverage, set backs and F.A.R. shall be governed by following table: -

Sr. No.	Description	Maximum coverage	Set backs in mtrs.			Maximum F.A.R.
			F.	S.	R.	
1.	Educational Building	40%	5.0	3.0	2.0	2.00
2.	Police Station/Fire Station	40%	5.0	3.0	2.0	2.00
3.	Medical	40%	5.0	3.0	2.0	2.00
4.	Community Hall	40%	5.0	3.0	2.0	2.00
5.	Library/Religious building	40%	5.0	3.0	2.0	2.00
6.	Govt./Semi Govt. office	40%	5.0	3.0	2.0	2.00

Note :

1. Upto 50% of open area shall be utilized for open parking and roads and the rest shall be land scaped.
2. Maximum width of path/road abutting one side of plot shall be 3.00 meters.
3. In case of petrol/diesel filling stations, the layout plan/norms prescribed for set backs etc. by the Indian Oil Corporation (I.O.C.) shall be adopted. However, on National Highways the front set back shall be kept 8.00 mtr. If the rear and side set backs are not mentioned on the layout plan (IOC) then the sides and rear set backs shall be kept as 2.0 mtrs.
4. In case of godowns for liquefied Petroleum Gas (LPG) cylinders the norms as prescribed by the oil and Natural Gas Commission (ONGC) shall be adopted. However, On National Highways and State Highways the front set back shall be kept 8.0 mtrs. If the rear and side set backs are not mentioned on the layout plan (I.O.C.) then the sides and rear set backs shall be kept as 2.00 mtrs.
5. The set backs shall not be applicable to services like electric sub-stations, road side infrastructure/facilities such as rain shelters, land scaping etc. which have specially been permitted by the HP Public works Department (Building and roads) in the acquired width of roads.
6. Every plot shall have minimum vehicular access of 5.0 metres.

HERITAGE ZONE/AREA

The following zoning regulations shall be applicable to the heritage buildings :-

1. The existing number of storeys and floor heights shall not be altered during course of re-construction of old buildings.
2. The original facade shall be maintained. The facade shall have the admixture of wood, stone, glass, slate and tiles as in the original buildings. If natural materials are not available, alternative materials can be used to give look of the original facade.

3. The aesthetics of bay windows in the existing buildings shall be enhanced by providing window boxes for flowers. In case of re-construction of buildings, bay windows shall essentially be provided to enhance aesthetics and functionality. Maximum 45cm projection of bay window shall be permitted on the set backs.
4. The applicant seeking planning permission for reconstruction or construction of heritage buildings shall follow the following architectural elements: -
 - (i) Dormer
 - (ii) Windows
 - (iii) Doors
 - (iv) Bay Windows
 - (v) Facade
 - (vi) Chimney
 - (vii) Sloping roof
5. Only such Architects shall be allowed to prepare and submit drawings pertaining to the heritage buildings who are registered with the Council of Architecture, New Delhi.

