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PREFACE

The L.P.A. Gobindgarh was declared u/s 56 (1) of the Punjab Regional and Town Planning and Development (Amendment) Act 2006 vide notification No. 12/42/2006-4HG1/893 dated 29/1/08 and Chief Town Planner, Punjab vide notification no. 12/42/2006-4HG1/899 dt. 29/1/08 was designated as the planning agency u/s 57 for formulation of comprehensive integrated master plan for L.P.A., Gobindgarh. The preparation of master plan involves the co-operation of several governmental departments as well as non-governmental agencies. Chief Town Planner, Punjab as planning agency would like to thank all the concerned departments/ agencies with particular mention of the members of a "Think Tank Committee" for their valuable suggestions and support.

The master plan document reflects the commitment and dedication of various departments/ agencies to this, whose help and guidance rendered is greatly appreciated.

This Report of L.P.A., Gobindgarh Master Plan 2010-2031 consists of the following sets of reports and supporting documents:-

- Executive summary
- LPA, Gobindgarh Master Plan
- Development Framework
- Existing Conditions
- Planning Parameters & analysis
- Planning Proposal
- Infrastructure Proposals
- Development Controls & Zoning Regulations

This Report is accompanied by L.P.A., Gobindgarh existing land use plan and proposed land use plan (A0 size).

Note:

In the event of conflict in Interpretation of data/ area within the study area; the information in the GIS format will be deemed as accurate version and shall prevail.

CHAPTER - I

EXECUTIVE SUMMARY

1 Introduction

- 1.1** Gobindgarh town, one of the most flourishing industrial towns in the state of Punjab is very rightly named as the “Birmingham of Punjab”. On account of its historical origin as a hub of steel industry & deriving further impetus from governmental incentives, it has witnessed substantial and unregulated industrial growth beyond its municipal limits. Therefore, recognizing the immediate need for regulating the development in its catchment/ influence area, Govt. of Punjab initially declared the L.P.A. Gobindgarh on 29.1.08 and subsequently amended the boundaries of L.P.A. Gobindgarh on 10.8.09 besides designation of the Chief Town Planner, Punjab as the Planning agency for preparation of the master plan of L.P.A. Gobindgarh. The L.P.A. Gobindgarh comprising of category II Gobindgarh town having Type A municipal status along with adjoining 53 villages covers an area of 13832 hect. (34165.04 on acs.) as per revenue record out of which 9 sq. km. (2223 acs.) is municipal area and the remaining is rural. According to 2001 census the total population of L.P.A. Gobindgarh was 1,18,796 out of which 60677 was urban.

Regional Setting

- 1.2** Gobindgarh town at a distance of 15 km. from Fatehgarh Sahib district head-quarter is strategically located on Ambala-Ludhiana National Highway no.1 and thus is well connected through road linkages to other important towns/cities. The town lies at 30°-40’ north latitude and 70°-18’ east longitude. The town has railway station on Delhi-Amritsar broad-gauge double railway line thereby connecting major cities of Punjab, Haryana and Delhi.

Historical Background

- 1.3** The sixth Guru Sri Hargobind Sahib while fighting war with Mughals came here, stayed and blessed this town to be the steel town. In 1902 Maharaja Hira Singh of Nabha laid the foundation stone of Mandi Gobindgarh got started some industrial units. The town was declared a free trade zone for steel by Maharaja Pratap Singh of Nabha in 1928. The first steel re-rolling mill was established in 1940. It developed as a small iron and steel market during Second World War without any rules regulations or controls.

Legal Framework

1.4 The Punjab Regional and Town Planning and Development (Amendment) Act 2006 provides the legal framework for preparation of Master Plan. The four stage process involves declaration of Local Planning Area, designation of Planning Agency, preparation of present land use map and preparation and approval of Master Plan. The contents of the Master Plan as laid down by the Act are;

- (a) Broad indication of the manner in which the land in the area should be used.
- (b) Allocation of areas or zones of land for use for different purposes.
- (c) Indication, definition and provision of the existing and proposed highways, roads, major streets and other lines of communication.
- (d) Indication of areas covered under heritage site and the manner in which protection, preservation and conservation of such site including its regulation and control of development, which is either affecting the heritage site or its vicinity, shall be carried out.
- (e) Regulations to regulate within each zone the location, height, number of storeys and size of buildings and other structures, open spaces and the use of buildings and structures

The Act also provides for “Control of Development and Use of Land in Area where Master Plan is in Operation”

Population growth

1.5 The population of LPA Gobindgarh was 1,18,796 persons (as per census 2001) growing at a decadal growth rate of about 33.28% during 1991-2001. The details are summarized in table below.

| Sr No. | Year | Gobindgarh town (M.C.) | | Gobindgarh M.C.+U.A. | | Rural | | Total | |
|--------|------|------------------------|------------------|----------------------|------------------|------------|------------------|------------|------------------|
| | | Population | Growth rate %age | Population | Growth rate %age | Population | Growth rate %age | Population | Growth rate %age |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 1981 | 26637 | - | 26637 | - | 41283 | - | 67920 | - |
| 2 | 1991 | 40175 | 50.82 | 42063 | 57.91 | 47071 | 14.02 | 89134 | 31.23 |
| 3 | 2001 | 55403 | 37.90 | 60677 | 44.25 | 58119 | 23.47 | 118796 | 33.28 |

Population Density

- 1.6** The average gross population density of Gobindgarh town is 62 persons per hectare. Density of population has risen from 30 persons per hectare in the year 1981 to 62 persons per hectare in the year 2001.

Employment

- 1.7** The occupational structure helps to determine the economic status of the town. During the period 1981-2001 as indicated in the Table no. 5, the growth of workers as percentage of total population of L.P.A. (participation rate) increased from 33.75% to 36.57% whereas during the same decade the percentage of Non-workers has decreased from 65.20 to 60.88 which clearly indicates a positive impact on the economy of the area.

Present Land Use and Transport Network

- 1.8** The preparation of Existing Land Use map was undertaken with the help of Punjab Remote Sensing Centre (PRSC), Ludhiana. The maps based on satellite imageries were updated by undertaking field surveys. Out of a total LPA area of 34165.04 acres (as per revenue record) maximum proportion of 84.62% is occupied by agricultural use followed by residential 6.82%, industrial 5.06%, and transport 2.50%. For Gobindgarh town, out of total area of 9 sq. km. (2223 acs.) 33.74% is occupied by industrial use, 31.49% by residential use, 13.68% by traffic & transportation & 10.66% by agriculture.
- 1.9** The regional road network of Gobindgarh comprises of Ambala-Ludhiana G.T. Road (NH-1) and forms the major spine. In fact the entire road network gravitates along this major spine. Apart from this central major spine, the other major roads are Gobindgarh-Amloh-Nabha-Bhawanigarh sheduled road No.33 and Khanna-Amloh link road. The above road network defines the connectivity of the town with other parts of the state along with various village link roads. The total length of above major roads within M.C limit is apprx.12.82 Km and within the Local Planning Area, it is apprx. **19.75** km. Inspite of adequate right of way of above major roads, numerous encroachments mainly within the municipal area have considerably reduced the usage/ efficiency of these major roads.

Physical Infrastructure

- 1.10** The system made operational in the year 1949 was completely based on ground water. With the city getting power supply, the shallow tube wells were replaced

by deep tube-wells. Keeping in view the growth of population in the town, 19 tube-wells were installed till today in order to meet the growing demand of water in the town along with 4 No. Over Head Reservoirs of capacity 5.30 lac gallons. For water supply, the Council has divided the entire town area of 9 sq.kms. into 19 wards. As per municipal sources, 85% of urban area is covered under water supply network which can be termed as Declared area whereas rest of the 15% is not yet covered/ served with water supply.

As regards sewerage 85% of the population of Gobindgarh town has access to sewerage system. The sewage of Gobindgarh is disposed off in Sirhind chowk which is about 5.80 km. away from the existing Disposal works.

As regards storm water network, the Gobindgarh town has neither the provision of storm water network nor does it seem to be on the top priority list of Municipal Council.

Though collection and transportation of municipal solid waste is managed by the Municipal Council headed by the President in the town but it is being dumped into trenches without paying proper attention to the leakages and disposal is not the form of sanitary land fill as required by the Municipal Solid Waste Rules of the Ministry of Environment and Forest. The present dumping site is likely to get filled up very soon.

Traffic

- 1.11** The recent surveys of the traffic indicate that more than 60% of the traffic on the G.T. Road passing through the major junction of G.T. road with Gobindgarh-Amloh road is through traffic which clearly necessitates the requirement of grade separation at this junction. In spite of the provision of truck stand by Local Govt. Department in village Kumbhara it is not being used for truck stand purpose or as Transport area with the result that trucks are being parked haphazardly along G.T. road and other roads creating unsightly environment and traffic problems. Transit bus stand on the G.T. road further leads to congestion, unsafe and chaotic traffic conditions.

Social Infrastructure

- 1.12** There is sufficient number of educational facilities in L.P.A.-Gobindgarh but health facilities are not up to the mark. The sports and recreational facilities are also not adequate as there is no national or state level sports complex, however

an indoor / outdoor stadium of lower hierarchy is available within the town. One cinema and two clubs also exist in town.

Environment

- 1.13** In terms of air quality, though the ambient concentration of SO₂ and NO_x is well below the permissible limits, SPM levels far exceed the norms. Ground water is unfit for human consumption on account of high contents of fluorides and chlorides. Surface water too gets contaminated on account of release of untreated waste water in choes at some places.

Population and Employment forecast

- 1.14** The population of LPA Gobindgarh is estimated to grow to 3.52 lacs out of which the population of Gobindgarh town along with that of the fringe villages is estimated to be 2.88 lacs by 2031. The employment by 2031 is estimated to be 1.19 lacs.

Vision-2031

- 1.15** A specially constituted Think Tank Committee comprising of official and non-official representatives from all walks of life articulated the Vision-2031 for Gobindgarh as below :

"To retain the existing character of Gobindgarh town with its predominant economic base as industrial along with almost at par development of residential use by augmenting regional connectivity and enhanced quality of life through improved physical and social infrastructure in an environmentally sustainable manner."

Strategies to attain the vision

- 1.16** Based on SWOT (strength, weakness, opportunity and threats) analysis during Think Tank Committee meetings, the following strategies are required to be developed so as to attain the above quoted vision-2031;

To save and improve the ambient air quality of Gobindgarh town after having been declared critically sensitive area of the state by Central Pollution Control Board by adopting the following planning measures;

- By designation of highly air polluting industrial zone viz special industrial zone in the master plan (as per the decision taken in the meeting of Think Tank Committee held on dt. 13/11/09 under the chairmanship of Deputy

Commissioner, Fatehgarh Sahib) which optimally satisfies the suggested idealistic parameters w.r.t. location criterion.

- Provision of sufficient buffer zones along roads/ canal/ distributary and between residential use zone and highly air polluting industrial zone.

1.17 Visualizing the future structure of a town/ city is a delicate ticklish issue because the extent of urbanization visualized cannot be narrowly linked to merely physical land requirement for the projected population and economic activities by 2031. Therefore for L.P.A. Gobindgarh the extent of urbanisable area has been based on the requirement for various activities along with desirable transport network and the areas that would acquire development potential on account of such transport network.

Proposed Land Use and Road Network

1.18 In the light of the above inferences, proposed land use plan and road network plan have been incorporated in the Master Plan. The land within L.P.A. has been zoned for Residential, Industrial, Rural and Agricultural purposes. However specific designation for public purposes like schools, hospitals, playgrounds etc have not been ear-marked. The arterial road network has been proposed. The proposed Transport Network is shown in DRG No. DTP (FGS) 1308/09 dt. 23/12/09.

The arterial road network proposed comprises of five categories of roads viz R1-(above 150 feet), R2-(100-150 feet), R3-(80-100 feet), R4-(60-80 feet) R5-(below 60 feet) has been shown on the proposed land use plan drawing no. DTP (FGS) 1546/10 dt. 29/7/10.

Zoning Regulations

1.19 The Punjab Regional Town Planning & Development (Amendment) Act, 2006 provides for the “Control of Development and Use of Land in Area where Master plan is in Operation.” However for control of development through parameters like sub-division of land, ground coverage, FAR, parking requirements, norms for building construction etc. have already been established on a state wide basis by the Government in the absence of statutory master plans. The zoning regulations included in the master plan are therefore confined to only

the use of land. For this purpose a two-dimensional framework has been used. Land use zones as shown in the Proposed Land Use Plan is one dimension and more detailed use classes patterned after the National Industrial Classification is the second dimension supplemented with the land use provisions as provided in various notifications issued by Punjab Government from time to time. A matrix shows the zones in which each use class is permissible.

CHAPTER - II

INTRODUCTION

2.1 State of Punjab

2.1.1 Punjab is the border state of Northern India, situated along the Indo-Pak border, and forms a part of the vast Indo-Gangetic Plain. The state covers a total area of 50,362 sq. kms. comprising of 12,329 inhabited villages and 120 towns and had a population of 20.28 millions as per 1991 census. On the sunrise of 1st March, 2001, population of state of Punjab rose to 24.29 million out of which 8.25 million persons lived in urban centres. Thus the percentage of urban population in the state recorded a growth of 37.58% during 1991-2001 decade in comparison with the national figure of 27.78% and this trend is likely to continue in the coming years. The process of rapid urbanization during the last 4 decades (1961-2001) gained momentum due to setting-up of Mandi townships and that of New Urban and Industrial Estates. This urban growth has been a natural consequence of various socio-economic factors and is mainly concentrated along the fast growing central corridor of Ludhiana-Amritsar (along G. T. Road, i.e. N. H. 1).

2.1.2 Punjab is urbanizing rapidly and its future seems to be urban. With urbanization standing at 33.95%, Punjab is ranked fifth major urbanized state of India after Tamil Nadu (43.86%), Maharashtra (42.40%), Gujarat (37.35%) and Karnataka (33.98%) and most urbanized state in the north west region of the country. The percentage of urban population in Punjab has been on the rise continuously.

Table No. 1
Trends in Urbanization-Punjab 1901-2001

| Census year | Total number of UAgg/Towns | Total Population | Total urban population | Percentage of urban population | <u>Decennial Growth</u> Absolute Percent | | Annual exponential growth rate(urban) |
|-------------|----------------------------|------------------|------------------------|--------------------------------|--|--------|---------------------------------------|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
| 1901 | 76 | 7544790 | 934766 | 12.39 | - | - | - |
| 1911 | 62 | 6731510 | 813224 | 12.08 | -121542 | -13.00 | -1.38 |
| 1921 | 59 | 7152811 | 869526 | 12.16 | 56302 | 06.92 | 0.67 |
| 1931 | 66 | 8012325 | 1168413 | 14.58 | 298887 | 34.37 | 3.00 |
| 1941 | 75 | 9600236 | 1657415 | 17.26 | 489001 | 41.85 | 3.56 |
| 1951 | 110 | 9160500 | 1989267 | 21.72 | 331853 | 20.02 | 1.84 |
| 1961 | 106 | 11135069 | 2567306 | 23.06 | 578039 | 29.06 | 2.58 |
| 1971 | 106 | 13551060 | 3216179 | 23.73 | 648873 | 25.27 | 2.28 |
| 1981 | 134 | 16788915 | 4647757 | 27.68 | 1431578 | 44.51 | 3.75 |
| 1991 | 120 | 20281969 | 5993552 | 29.55 | 1345468 | 28.95 | 2.58 |
| 2001 | 157 | 24289296 | 8245566 | 33.95 | 2252341 | 37.58 | 3.24 |

2.1.3 Looking at the growth of urban population vis-à-vis population of state during last century (1901-2001) it has been observed that while total population of the state merely increased approximately 3 times (7.5 to 24.28 millions), during this very period urban population recorded enormous increase of 9 times (0.9 to 8.25 million) indicating a sharp rise in urban population. However, during the same period rural population grew only by 2.5 times (6.61 to 16.02 millions). In 1901 when every 8th person was urbanite, in 2001 every 3rd person came to live in the cities/towns. The trends of urbanization were slow in the first half of century when urban population merely doubled (0.93 to 1.98 million) in the space of 5 decades (1901-1951). However, it picked up in the post-independence era and urban population grew by more than 4 times (1.98 to 8.25 million) during the second half of century (1951-2001). In absolute numbers, increase in urban population recorded during the last century was 73.11 lakh persons whereas level of urbanization increased merely from 12.39% to 33.95% indicating the massiveness of the state's urbanization. Last decade witnessed a sharp rise of 37.38% in urban population whereas in absolute number the addition to the urban centers was of the order of 22, 52, 341. From the ongoing trend it can be envisaged that urban growth will be much faster in years to come.

2.1.4 State of Punjab recorded a population of 2, 42, and 89.296 in 2001. During 1991-2001, population of state increased by 40.07 lakhs out of which addition to urban population was of the order of 22.52 lakh (56%) due to the fact that number of urban centers recorded a sharp increase from 120 to 157. Concentration of population in urban areas of Punjab is very high as compared to rural areas. Villages recorded low density as compared to urban areas giving a density ratio of 1:12 in favour of urban centres. Apparently, Punjab is one of the most densely populated state in India.

2.1.5 It is expected that by 2011, population of the state would be of the order of 305 lakhs out of which urban component would be 40% i.e. two out of every five Punjabis will be urban residents. In absolute numbers the urban population would be around 120 lakhs and decadal addition to urban centres would be 38 lakhs. Thus annual addition to urban population which was 2.3 lakh during 1991-2001 would go upto 3.8 lakh during 2001-11 period. This would further result in excessive concentration of urban population.

2.1.6 There has been polarization of population towards class I towns with major contribution coming from these towns. As against 17.38% of population living in Class-I towns in 1901, their share went up to 58.39% in 2001. However, Class -II town recorded a marginal growth from 12.97% to 16.45% whereas Class-III towns recorded decline in population from 15.67% to 12.50%. However, decline was sharp in the population of Class IV & V towns which came down from 20.45% & 27.47% to 9.82% and 2.52% respectively. Class-VI towns followed the same trend with their population share getting marginalized from 6.06% to 0.33%. Thus the share of Class III, IV, V & VI towns sharply declined from 69.63% to 22.16%. Table 2 shows class of towns wise trends in urban population in Punjab.

Table No. 2

Trends in Urban Population in Different Size-categories of Cities and Town

| Years | Class I | Class II | Class III | Class IV | Class V | Class VI | All Classes |
|-------|------------------------------|------------------------------|------------------------------|----------------------------|----------------------------|--------------------------|--------------------------------|
| 1951 | 3 [33.11] (658,725) | 2 [7.73] (153,719) | 17 [26.17] (520,558) | 20 [14.44] (287,223) | 36 [13.18] (262,197) | 2 [5.37] (106,845) | 110 [100.00] (1,989,267) |
| 1961 | 4 [38.25] (981,890) | 5 [10.15] (260,707) | 23 [28.11] (721,684) | 20 [10.44] (267,913) | 35 [10.38] (266,439) | 19 [2.67] (68,673) | 106 [100.00] (2,567,306) |
| 1971 | 4 [40.52] (1,303,128) | 8 [15.84] (509,389) | 22 [22.20] (714,176) | 31 [13.32] (428,413) | 29 [6.84] (219,911) | 12 [1.28] (41,162) | 106 [100.00] (32,161,79) |
| 1981 | 7 [46.38] (2,155,714) | 10 [14.39] (668,780) | 27 [20.24] (940,482) | 36 [11.28] (524,505) | 40 [6.50] (301,905) | 14 [1.21] (56,371) | 134 [100.00] (4,647,757) |
| 1991 | 10 [54.16] (3,246,224) | 18 [19.91] (1,193,171) | 25 [12.92] (774,453) | 46 [10.82] (648,230) | 14 [1.72] (102,945) | 7 [0.47] (28,202) | 120 [100.00] (5,993,225) |
| 2001 | 14 [58.38] (4,814,405) | 19 [16.45] (1,356,386) | 35 [12.50] (1,030,623) | 54 [9.82] (809,366) | 28 [2.52] (207,891) | 7 [0.33] (26,895) | 157 [100.00] (8,245,566) |

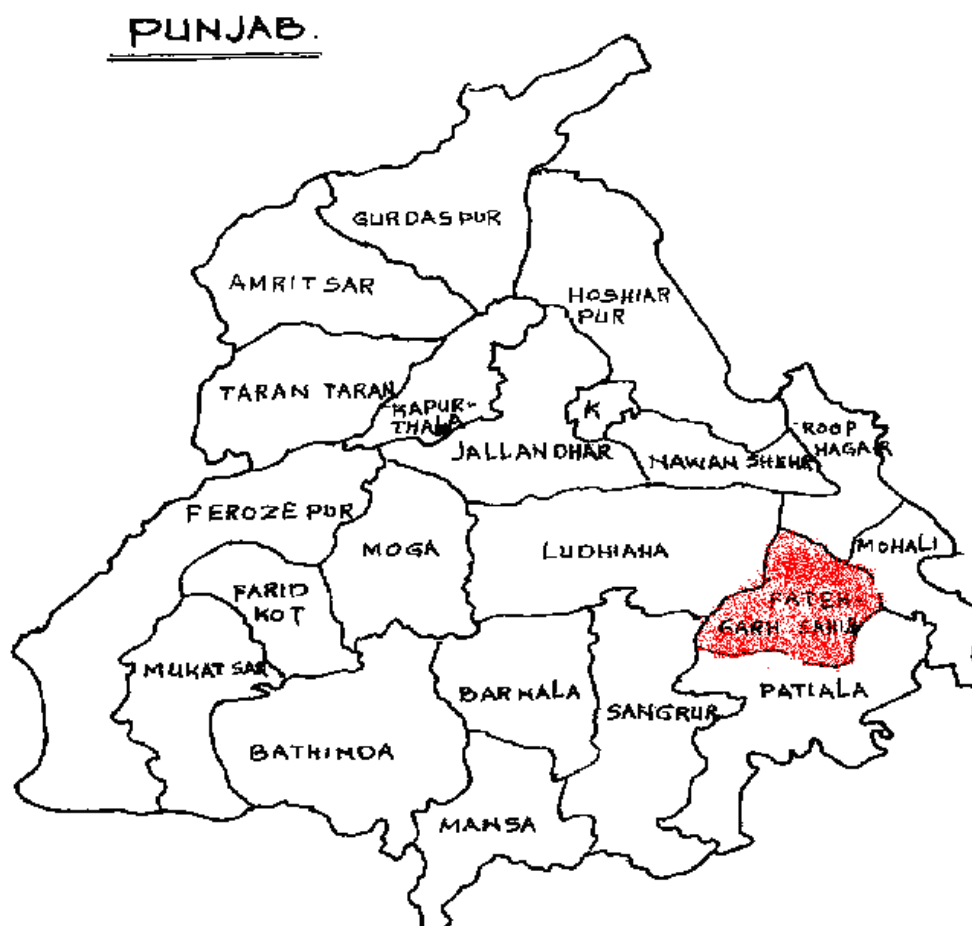
Source: Census of India, 1951,1961,1971,1981, 1991, 2001

Note: - (1) Number of towns in each category (without bracket) ,

(2) Percentage of in each class []

(3) Total population in each class ():

2.2 District Fatehgarh Sahib



2.2.1 Origin of the District

Fatehgarh Sahib District was constituted on April 13th 1992 by carving out portions of Ludhiana, Patiala and Ropar districts. The district derived its name from its headquarters place, Fatehgarh Sahib named after the name of historic Gurdwara Fatehgarh Sahib which is said to have derived its name from Sahibzada Fateh Singh, the youngest of the martyred sons of Guru Gobind Singh who were bricked alive at this place in 1704 by Wazir Khan, the then Fauzdar of Sirhind. According to another version, the name is also on account of Fateh (means victory) of Garh (means Fort) of Sirhind by Sikhs under the command of Banda Bairagi. The fort was built by Ferozeshah Tuglaq. A memorial with the name of Fatehgarh Sahib was raised in 1710 during days of Banda Bairagi over the remains of the fort.

2.2.2 Prior to the Independence, the main area of the present Fatehgarh Sahib was administered by the erstwhile Princely States of Patiala and Nabha except few villages which were part of British territory. At that time Bassi (now Bassi Pathana the tahsil headquarters of present Fatehgarh Sahib District) was the headquarters of Amargarh Nizamat (District) of Patiala State. Amloh (presently tehsil headquarters of the District) was Nizamat (District) of Nabha Sahib. After Independence with the formation of PEPSU, in 1948 Fatehgarh Sahib was made a district of the new State. In 1953 the Fatehgarh Sahib District was merged with Patiala District and Fatehgarh Sahib was made a tehsil/subdivision with its headquarters at Bassi Pathana which was later shifted to Fatehgarh Sahib. The Fatehgarh Sahib with its headquarters at Fatehgarh Sahib was again made a separate district on 13th April, 1992.

2.2.3 According to the 2001 Census, the population of the district was 5,38,041 persons (3,86,950 Rural and 1,51,091 urban) comprising 2,90,137 males and 2,47,904 females. In terms of population the district ranked 17th in the State having 2.20 % population of the State as a whole.

2.2.4 Inter-District Variation in Urbanisation

Within the state due to overall economic development of districts not being homogenous the disparity in level of urbanization is quite marked among the districts and accordingly percentage of urban population differs in different districts. If Ludhiana is the most urbanized district of the state with 55.80% of its population living in urban areas, Nawanshahar is the least urbanized district with merely 13.80% of urban population. Thus as against Ludhiana where every alternate person lives in urban centres, in Nawanshahar every seventh persons is an urbanite. In Patiala, Faridkot, Kapurthala

districts every third person is a resident of urban area. Four districts namely Ludhiana, Amritsar, Jalandhar and Patiala are the most urbanized districts of state which have higher level of urbanization than the state average as rest of 13 districts have lower level of urbanisation than state's average as indicated in the table below :

Table No. 3

Ranking of districts by percentage of urban population - 2001

| Sr. No. | State/District | Percentage of Urban Population to total population of the district | Rank 2001 |
|------------|------------------------|--|-----------|
| | | 2001 | |
| | 1. | 2. | 3. |
| | Punjab | 33.95 | |
| 1. | Ludhiana | 55.80 | 01 |
| 2. | Jalandhar | 47.45 | 02 |
| 3. | Amritsar | 40.00 | 03 |
| 4. | Patiala | 34.98 | 04 |
| 5. | Faridkot | 33.89 | 05 |
| 6. | Kapurthala | 32.59 | 06 |
| 7. | Rupnagar | 32.46 | 07 |
| 8. | Bathinda | 29.78 | 08 |
| 9. | Sangrur | 29.26 | 09 |
| 10. | Fatehgarh Sahib | 28.08 | 10 |
| 11. | Firozpur | 25.81 | 11 |
| 12. | Muktsar | 25.52 | 12 |
| 13. | Gurdaspur | 25.46 | 13 |
| 14. | Mansa | 20.68 | 14 |
| 15. | Moga | 20.04 | 15 |
| 16. | Hoshiarpur | 19.66 | 16 |
| 17. | Nawanshahar | 13.80 | 17 |

2.2.5 The concentration of urban population is increasing over a period of time with few districts dominating the state scenario. Ludhiana district alone accounts for one-fifth (20.50%) of the urban population of the state whereas its share of total population is merely one-eighth (12.48%). Three most urbanisation districts namely : Ludhiana, Amritsar and Jalandhar share about one-half (46.66%) of the states total population Jalandharwhile three least urbanized districts of Mansa, Fatehgarh Sahib, Nawanshahar account for merely 4.55% of states urban population. Nawanshahar district has merely 0.98% of state's urban population and occupies the position at the bottom thereby reflecting a wide disparity in the distribution of urban population in different districts of the state. Incidentally three highly urbanised districts namely Ludhiana, Amritsar and

Jalandhar are all located along the G.T. road indicating the massive population concentration along central corridor due to the availability of effective road and rail linkages. This emphasizes the need for developing adequate rail and road linkages in other 14 districts of the state for connecting these districts with main centres of the state and the country so as to divert further population into these districts.

2.2.6 Location, General Boundaries and Total area of the District

Fatehgarh Sahib District falls in the Patiala division and lies between 30°-27' and 30°-46' North latitude & 76°-04' and 76°-38' East longitude. It lies in the south-eastern part of the state and is surrounded by Patiala, Ropar, S.A.S Nagar, Ludhiana and Sangrur Districts.

2.2.7 The Fatehgarh Sahib District comprises of 455 villages (450 inhabited and 5 uninhabited) spread over four Tehsils and one sub-tehsil viz. Amloh, Bassi-Pathana, Fatehgarh Sahib, Khamano and Sub-tehsil Gobindgarh of Tehsil Amloh.

2.2.8 According to Director of land of records, Punjab, Jalandhar, the area of Fatehgarh sahib district during 2000-2001 was 1, 147, 79 sq.km which accounts approximately 2.34 percent of the area of the state. Fatehgarh Sahib district is the smallest district in the state in terms of area. The Tehsil wise area of Fatehgarh sahib district is given below:

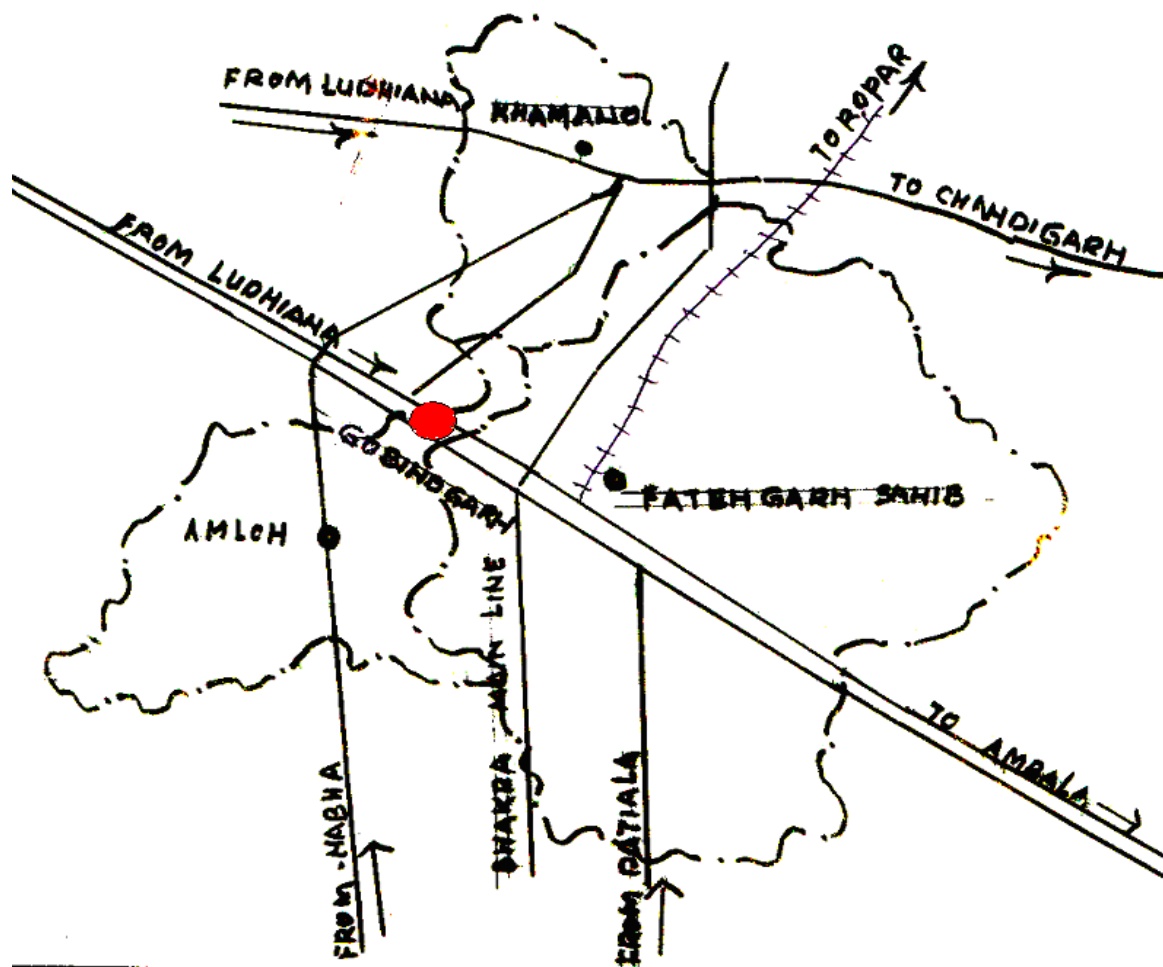
Table No. 4

Tehsil wise area - District Fatehgarh Sahib

| Sr. No. | Tehsil | Area(Sq.km) |
|----------------|------------------------|--------------------|
| 1 | Fatehgarh Sahib | 484.09 |
| 2 | Bassi Pathana | 206.57 |
| 3 | Amloh | 261.20 |
| 4 | Khamano | 195.93 |
| Total | | 1,147.79 |

(Source: Director Land Records, Punjab, Jhalandhar)

2.3 Town Profile – Gobindgarh



2.3.1 Historical Background and Economic Base

Old records of State of Nabha, Mughal history of Sirhind Suba and Sikh history from Shiromani Gurudwara Parbandhak Committee (SGPC) have been consulted for tracing the history of Mandi Gobindgarh. Mughal history reveals that during Mughal empire prior to 1763, Mandi Gobindgarh was known as Barri Dhab, a big Sarovar, and Rulers of Suba Sirhind used to come here for Shikar. The then Governor, Jani Khan was defeated at the erstwhile State of Patiala, Nabha and Jind in the battle field and this area was taken over by the then Maharaja of Nabha Estate during 1763. Thereafter, Maharaja Heera Singh laid the foundation stone of Mandi Gobindgarh in 1902. He built Mandi (market place) within 4 gates while constructing similar types of shop-cum-residential accommodation which can also be seen today. However, the gates were demolished by the Municipal Committee, later on for want of space and expansion of roads etc.

2.3.2 According to historian, Bhai Kahan Singh of Nabha, Mandi Gobindgarh has been named after the name of a small village Gobind situated in tehsil and police station.

Amloh where 6th Guru of Sikhs "Shri HarGobind Singh" stayed for 2 months during 1646, at the bank of a big Sarovar known in those days as Barri Dhab in Punjabi.

Yadgari Gate Gobindgarh



He was accompanied by his followers and warriors. Some clash occurred between Guru Sahib Lashkar (Sepoys) and the then Mughal Fauz in which swords of some Sepoys went blunt and broke. They then requested Guru Sahib that there was not even a piece of steel in this area for repairs of their weapons, so how they could fight further. Guru Sahib smilingly said, "someday this place will be a big steel producing centre in the country wher you say that no steel is available for repair of the weapons". Then, the Sepoys were directed to a nearby place, where they found some steel scrap and repaired their weapons. The village (repair place) is known as Lahar Majra. Guru Sahib stayed nearby a big sarover where Gurudwara Chhevin Patshai is built now.

2.3.3 Further, during the British Regime in 1940-42, some restrictions were imposed under the Iron & steel licensing system declaring that no person could produce Iron rounds etc., without the permission of the Govt. At that time, the area of Gobindgarh was under Nabha State and was a free trade zone. There were some factories of steel re-rolling functioning at Khanna, a nearby town which was under the British rule. Due to the ban, these factories opted to shift to Mandi Gobindgarh being a free trade zone.

2.3.4 The first re-rolling mill started functioning during 1940 and till the end of 1959, there were only 32 steel re-rolling mills at this place. Thereafter, the Government of India announced a general relaxation in rules on 14-04-1960 and everyone was free to install a steel re-rolling mill anywhere in the country. By virtue of this relaxation, the steel re-rolling industry started flourishing at Mandi Gobindgarh and nearby stations like Khanna, Sirhind and Amloh. According to a latest survey, there are about 310 steel re-rolling mills, collectively in Mandi Gobindgarh & Khanna, spread over a radius of 10 Km.

2.3.5 The town lies on Sher Shah Suri Marg i.e. G.T. Road (N.H.1) between Khanna and Sirhind and is about 7 km. east of Khanna. It is well connected to tehsil headquarter i.e. Amloh and is a railway station on Delhi-Amritsar railway line. It is the most flourishing industrial town in Fatehgarh Sahib District as well as in the state and is well known as 'Steel Town' of India contributing 25% of national steel requirement. Gobindgarh town covers a total area of 9 sq kms and has population of 60667 persons as per 2001 census. Town falls in the category of class-II town and has TYPE-A municipal status. The sixth Guru Sri Hargobind Sahib while fighting war with Mughals came and stayed here and blessed this town to be the steel town. In 1902 Maharaja Hira Singh of Nabha got started some industrial units and this town was declared a free trade zone for steel by Maharaja Pratap Singh of Nabha in 1928. The first steel re-rolling mill was established in 1940. It developed as a small iron and steel market during Second World War without any rules regulations or controls. Starting as small shop-keepers, the enterprising business began to make bigger investments and set-up re-rolling mills with encouragement from the state government as the result that now the town is rightly called as “Birmingham of Punjab” and famous as steel town of India catering to domestic as well as international steel requirements. Gobindgarh town as per General Manager, District Industries centre, Gobindgarh has about 252 rolling mills, 63 induction furnaces, 49 steel rolling mill parts manufactory units, 41 Foundaries & 16 forging units. Besides PSIEC has developed an Industrial focal point for an area of 209.62 acres approved by the Punjab government on the southern end of N.H. No. 1 & adjoining to it, an additional area of 200 acres has been reserved for expansion of Industrial focal point. Due to vast industrial activity Gobindgarh town has almost touched Khanna town (in Ludhiana district). And both towns look like as one town. Since now expansion towards Khanna town is not possible a number of re rolling mills are being established on Gobindgarh-Amloh road.

2.3.6 The town also has a small regulated grain market and also is fast emerging into a hub of professional technical education centre.

2.3.7 Historical/Religious Places

Gurdwara Sri Har Gobind Sahib Ji, Chhevin Patshai, Mandi Gobindgarh:-

This magnificent gurdwara built in 1922 is situated near railway station. It has been built in the sacred memory of Guru Hargobind who stayed here for two months. The Guru stayed nearby a big sarovar (tank) where the present gurdwara has been built.

Ram Mandir, Mandi Gobindgarh:- This temple maintained by 'Ram Mandi-Trust' has been built near the GT road. It is visited by a large number of people. There are grand idols of Lord Hanuman, Durga Mata, Ram, Laxman and Sita installed in the temple. Adjacent to the temple is a grand dharmshala known as 'Ram Bhavan' built by the trust.

2.3.8 Tourism

Floating Restaurant constructed over the Sirhind Canal is an important tourist spot run by Punjab Tourism Development Corporation. It is at a distance of about 5 KM. from Sirhind on the Sher Shah Suri Marg. It attracts a large no of tourists, especially during summers. There is also provision for night stay. It has eight (8) suites. It is a unique type of restaurant in the whole of Punjab. Built in the middle of the canal, it presents a picturesque view to the visitors.

2.3.9 Regional setting and Linkages

Location

The town is located 15 km away from Fatehgarh Sahib district head quarter on Ambala-Ludhiana national highway no. 1 (G.T. road). The town lies at 30°-40' north latitude and 70°-18' east latitude. It is well connected with road and railway network having facility of railway station on Delhi-Amritsar broad-gauge double railway line thereby connecting major cities of Punjab, Haryana and Delhi.

Topography

The town forms part of Punjab plains or Indo-Gangetic plain & is characterized by flat featureless surface with deposition of alluvial soils in recent geological past brought by rivers originating in Himalayas. The elevations are higher in the east than west suggesting that like whole of Punjab plains, the slope of the town is from northeast to southwest.

2.3.10 Rivers/Water Resources

Presently, no major river crosses through town. The major source of water supply is Bhakhra Main Line adjacent to distributory 1R passing through the town.

2.3.11 Climate, Soil and Rainfall

The town being in North India, experiences extreme climate. It experiences three major seasons-Summer, winter and the monsoons. Summers (March-June) are hot, humid and extremely hot. Temperature varies from 20° to 45° C. However winters (November to February) are extremely cold when the temperature ranges between 2-15° C. Monsoon generally arrives in last week of June till first half of October with annual average rainfall as given below:

Table No. 5
Annual Rainfall

| Year | Annual Rainfall in mm |
|-------------|------------------------------|
| 1970 | 171.4 |
| 1980 | 873.9 |
| 1990 | 1195.7 |
| 1999 | 315.7 |
| 2000 | 364.2 |
| 2001 | 399.0 |
| 2002 | 285.7 |

(Source: Statistical Abstract of Punjab)

It may be mentioned that local climate is influenced by the air pollution levels. Two major industrial towns- Mandi Gobindgarh and Khanna, very closely located, contribute apprx. 50 tons of Suspended Particulate Matter in an area of around 40 sq. km. Because of this, MoEF/CPCB has declared Mandi Gobindgarh a highly polluted town in Punjab. The ground water table in this town as reported by the MC is 70-80 feet.

2.3.12 Winds

Winds are generally light with some strengthening in force during the period February to June. In the post monsoon and cold season the winds are predominantly from the northwest. In March and April easterly to southeasterly winds also blow on some days especially in the mornings. In the period May to September easterlies and southeasterlies predominate but on many days northwesterlies also blow in the afternoon.

CHAPTER - III

NEED FOR MASTER PLAN

3.1 Background

3.1.1 The rapid growth of urbanisation and inability to effectively organise the physical growth has brought with it large number of complex urban problems such as encroachment on roads, haphazard and sub-standard physical development, squatting on public land, mixed land use, sub-standard and haphazard construction in shape of unauthorised colonies and pressures on existing infrastructures etc. This unplanned and uncontrolled sprawling growth posed a serious problem of unhealthy environment in human settlements leading to proliferation of slums. Due to economic constraints, the local agencies have not been able to meet the growing demand for urban service land which has led to mushroom growth of industries along the highways and unauthorised residential colonies without basic services and amenities in and around cities/towns. Life and living conditions of people in these human settlements are fast deteriorating.

3.1.2 Master Plan has been considered as one of the most effective mechanism to promote planned growth of the urban centers. It provides a tool for the authorities to take decision with regard to current and future development related issues. Master Plan provides the framework for rationalizing the orderly movement of traffic and transportation within the city and defines the area for laying down net-work of various services. The plan is used for promoting integrated development of the urban centre by rationalizing its pattern of land use and their interrelationship. It also defines the strategies and solutions for overcoming the existing problems of the urban centers and to overcome its infrastructural and service related inadequacies. In addition, it provides options for accommodating the future addition to population which is likely to come to the urban centre due to natural growth and migration. Master Plan acts as a tool for determining the infrastructure cost which would be required to make the city sustainable. It also suggests ways and means to overcome the existing inadequacies and weaknesses of the urban centre to remove all bottlenecks in the rational development to make the urban centre a vibrant entity. It also envisages appropriate quality of life to all the existing and future residents of the city, including poorest of the poor.

3.2 LEGAL FRAMEWORK FOR PREPARATION AND IMPLEMENTATION MASTER PLAN

3.2.1 LEGAL SET UP

3.2.2 Legislative support is an essential tool to control the planning and development activity in a state. Some states like Goa, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Manipur and Mizoram etc have comprehensive legislation which provided for urban planning and development in a regional perspective beyond the city limits and coordinated with the overall framework of economic development, priorities and resource availabilities.

3.2.3 Punjab state is the new entrant in this field. The first ever legal tool namely The Punjab Regional and Town Planning and Development Act, 1995 (PRTPDPA) was enacted in the year 1995 (Punjab Act No.11 of 1995) which has been amended in the year 2006 and now this act is known as “The Punjab Regional and Town Planning and Development (Amendment) Act 2006” (Punjab Act No. of 2006). This is an act to make provision for better planning and regulating the development and use of land in planning areas delineated for that purpose, for preparation of Regional Plans and Master Plans and implementation thereof, for the constitution of a State Regional and Town Planning and Development Board, for guiding and directing the planning and development processes in the State, for the constitution of a State Urban Planning and Development Authority, Special Urban Planning and Development Authorities and New Town Planning and Development Authorities, for the effective and planned development of planning areas and for undertaking urban development and housing programs and schemes for establishing new towns and for matters connected therewith or incidental thereto.

3.2.4 Prior to the enactment of the Act ibid the Town Planning Activity within urban areas was being governed by different legislations such as The Town Improvement Act 1922, The Punjab Municipal Act 1911, The Punjab Municipal Corporation Act 1976, The Punjab Urban Estates (Development and Regulation) Act 1964 etc and for areas falling outside municipal limits in the periphery of urban centers, these was ‘The Punjab Scheduled Roads And Controlled Areas Restriction of Unregulated Development Act 1963(Now repealed) but no comprehensive legislation was available for the overall control and development at local and regional level.

3.3 MAIN PROVISIONS OF THE LAW

3.3.1 THE PUNJAB REGIONAL AND TOWN PLANNING AND DEVELOPMENT (AMENDMENT) ACT 2006

3.3.2 This act is the sole legal framework available for preparing Master Plans and Regional Plans. It is a comprehensive act and provides for the manner in which the use of land in the area of a planning authority shall be regulated. The act also prescribes specific time period for various steps in the plan preparation process.

3.3.3 The act intends to achieve the following main objectives:

- I. To consolidate, with suitable modifications, in one place laws dealing with the different aspects of urban development.
- II. To set up a high powered Board to advise the State Government and to guide and direct planning and development agencies, with respect to matters pertaining to the planning, development and use of urban and rural land.
- III. To set up a State level Urban Planning and Development Authority and to provide for the setting up of a Special Urban Planning and Development Authorities and New Town Planning and Development Authorities to promote and secure better planning and development of different regions, areas and cities.
- IV. To create a legal and administrative set up for the preparation and enforcement of Master Plans for regions, areas and for existing and new cities.
- V. To make the whole programme of urban development mainly a self - sustaining and self - paying process.
- VI. To interlink land development and house construction permitting full exploitation of the urban land resource to provide a boost to the programme of house construction, especially the Economically Weaker Sections of the Society.
- VII. To provide a legal, administrative and financial framework for the preparation and execution of Town Development Schemes aimed at filling the gaps in the required civil infrastructure and securing the renewal and redevelopment of congested and decayed areas in the existing towns.

3.4 The following sections of the Act dealing with the preparation of Master Plans:

3.4.1 U/S 56(1)

Under section 56(1) of this chapter, Local Planning Areas are notified in the official gazette for preparing Master Plan. Once an area has been declared under section-56 (1), no person can institute or change the use of land for any purpose or carry out any

development in respect of any land without the previous permission of competent authority until the Master Plan comes into operation. However, this prohibition does not apply to any area comprised in abadi deh of any village falling inside its lal lakir or phirni.

3.4.2 U/S 57

This section deals with the designation of Planning Agencies. As soon as may be, after declaration of a local planning area or a site for new town, the State Government may designate planning agency for that area.

3.4.3 U/S 58

Section 58 of the act states that;

- (1) The Designated Planning Agency will work under the overall directions and control of the State Government.
- (2) The state Government may assign any or all of the following functions to the Designated Planning Agency, namely to
 - (i) Carry out survey of the regional planning area, local planning area or a site for new town, as the case may be, and prepare reports on the surveys so carried out;
 - (ii) prepare an existing land use map and such other maps as may be necessary for the purpose of preparing regional plan and outline master plan, a new town development plan or a comprehensive master plan, as the case may be;
 - (iii) Prepare a regional plan, an outline master plan, a new town development plan or a comprehensive master plan.
- (3) Subject to and in accordance with the directions of the Govt., a designated planning agency shall exercise all such powers as may be necessary or expedient for the purposes of carrying out its functions under this act and also perform any other functions which are supplemental, incidental or consequential to any of the functions specified in sub section (2) or as may be prescribed.

3.4.4 U/S 59

This section deals with the preparation of present land use map and fixes six months time for this purpose, which may be extended by the State Govt. from time to time.

3.4.5 U/S 60

Section 60 provides for expenses that the State Government may determine for payment to the designated planning agency as contribution towards the expenses incurred by it in the discharge of its functions.

3.5 Chapter X

This chapter deals with the preparation and approval of Master Plans of towns / cities.

3.5.1 U/S 70 (1)

This section states that the planning agency shall not later than one year after declaration of planning area and after the designation of that agency for that area shall prepare and submit to the state government a master plan for its approval. The Master Plan so prepared shall –

- a) Indicate broadly the manner in which the land in the area should be used.
- b) Allocate areas or zones of land for use for different purposes.
- c) Indicate, define and provide the existing and proposed highways, roads, major streets and other lines of communication.
- d) Indicate areas covered under heritage site and the manner in which protection, preservation and conservation of such site including its regulation and control of development, which is either affecting the heritage site or its vicinity, shall be carried out.
- e) Include regulations to regulate within each zone the location, height, number of storeys and size of buildings and other structures, open spaces and the use of buildings, structures and land.

3.5.2 U/s 70 (2)

Section 70(2) regulates the form and contents of the master plan and shall include such maps in descriptive matter as may be necessary to explain and illustrate the proposals in the master plan.

3.5.3 U/s 70 (3)

This section has the provision for the state government to direct the designated planning agency to publish the existing land use plan and master plan and the information regarding the place or places where copies of the same may be inspected by the public for inviting objections in writing with respect to existing land use plan and master plan within a period of 30 days from the date of publication.

3.5.4 U/s 70 (4)

Under this sub section, the state government after considering the objections and in consultation with the board may direct the designated planning agency to modify the master plan or approve it as such.

3.5.5 U/s 70 (5)

Under this sub section, the Designated Planning Agency after approval of the state government shall publish the final master plan in the official gazette after carrying out the modification if any under intimation to the state government within a period of 30 days from the date of according approval by the state government.

3.5.6 U/s 75

According to this section, the Master Plan shall come into operation from the date of publication. Refer to sub section 5 Of section 70.

3.5.7 U/s 76

This section provides for the amendment in the master plan and says that at any time after the date on which the master plan for an area comes into operation, and at least once after every ten years, after that date, the Designated Planning Agency shall after carrying out such fresh surveys as may be considered necessary or as directed by the government, prepare and submit to the government, a Master Plan after making alterations or additions as it considers necessary.

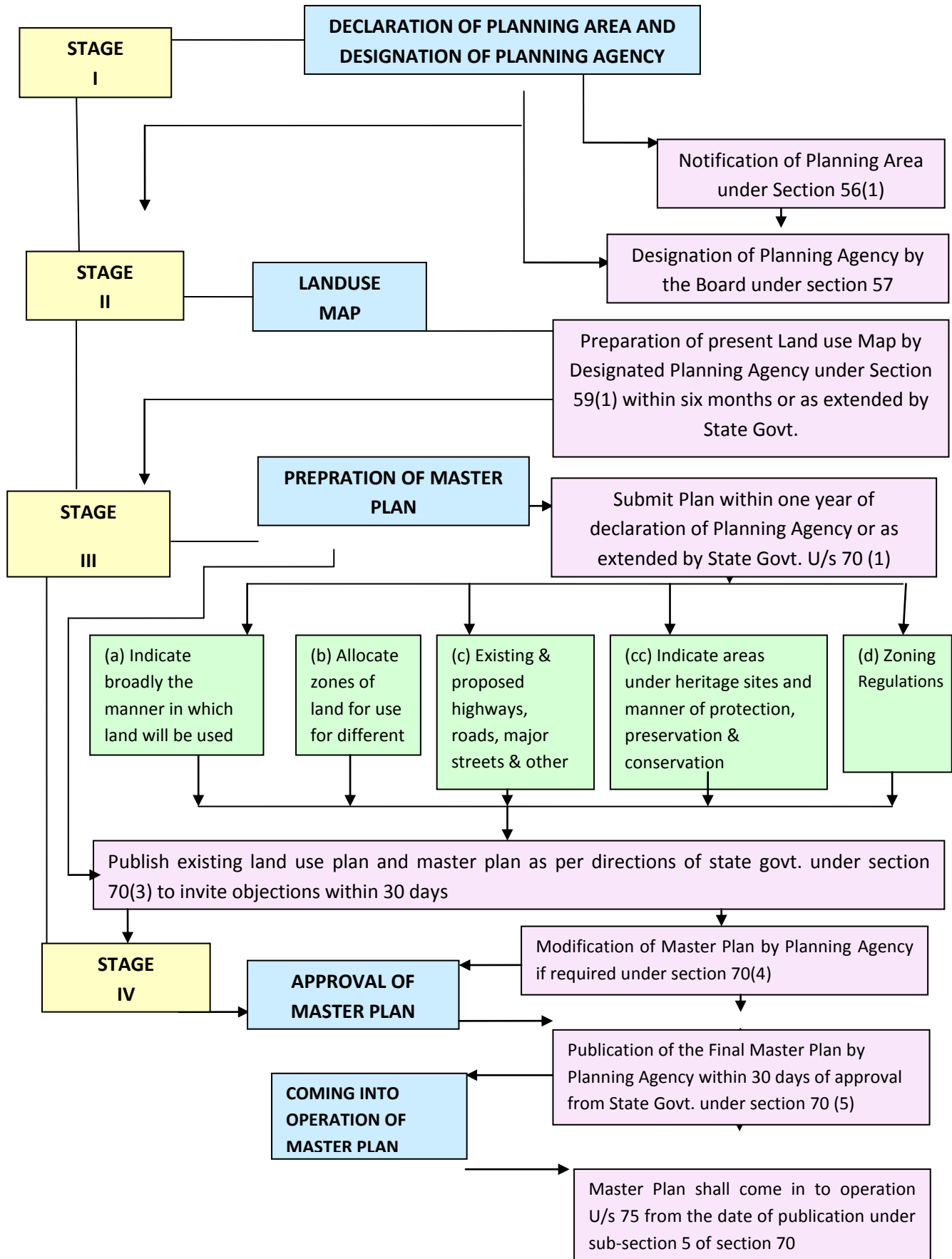
The flow chart showing the process of Master Plan preparation and approval is illustrated below:

STAGES OF MASTER PLAN PREPARATION

As per the provisions of the Punjab Regional & Town Planning & Development Act

1995

(Amendment 2006)



3.6 Context with respect to Gobindgarh

3.6.1 From 1971 to 2001 (as shown in the Table No. 5) Gobindgarh Town has shown tremendous increase in population which has brought with it large no of complex urban problems such as unplanned and uncontrolled sprawling growth of industry particularly re-rolling mills and furnaces posing a serious problem of unhealthy environment in this industrial town and leading to sub-standard, unregulated and haphazard construction resulting in slum like environmental conditions, lot of air, water and noise pollution along with pressures on existing infrastructures etc. The town has only one Industrial Focal Point approved by the Punjab Government and developed by the Punjab State Industrial Export Corporation (P.S.I.E.C.) for an area of 209 Acres. The famous steel town lacks adequate infrastructure and facilities to accommodate the coming industrial units resulting in unplanned growth of industry.

3.6.2 The town also lacked planned shopping centres with organized parking which gave birth to mushrooming of commercial activities in the form of Ribbon Development along important roads namely N.H.1, Gobindgarh-Amloh and Khanna-Amloh Road and the traditional bazaars came to be set up without adequate parking and loading/unloading facilities.

3.7 Previous Efforts/Review In Terms of Master Plan:-

3.7.1 The first Master Plan (1983-2003) for Gobindgarh town drawing no. DTP (P) 1882/84 dated 20.3.84 was prepared and notified for seeking public suggestions and objections vide Punjab Govt. notification no. 8/9/84-1 HG IV/1079 dated 18.1.89 but unfortunately, it could not be implemented due to lack of statutory framework support. As per notification this master plan had three categories of industrial use zones:-

- Light Industry
- Medium and Extensive Industry
- Obnoxious and extractive

3.7.2 The unabated, unregulated and haphazard industrial/ residential growth of town caused serious concerns leading to filing of civil writ petition no. 16130/1994 S.P-sabharwal of jalandhar Vs state Govt. in the public interest in the Hon'ble Punjab and Haryana High Court regarding reduction of pollution levels and for disposing of bio-medical waste in the states of Punjab, Haryana and U.T Chandigarh. As per court orders dated 20.10.97 and decisions taken in the meeting held on 3-1-2001 under the chairmanship of Chief Secretary, Punjab (**Annexure-1**) regarding formulation of policy

for shifting of hazardous industries away from M.C limit, master plan, Gobindgarh drawing no. DTP (FGS) 184/2001 dt 11.5.2001 & later on due to some changes the revised drawing no. D.T.P (F.G.S) 354/2002 dt 13.9.02 (**Annexure-2**).was prepared & approved by Chief Town Planner, Punjab which made provision for two industrial zones namely **I) Light, medium & Extensive II) Medium, Extensive, obnoxious & Extractive** but without any zoning regulations.

3.7.3 In the meeting held under chairmanship of Chief Town Planner dt. 11.5.01 regarding siting of industries vis-a –vis Master Plan Gobindgarh drawing no. DTP (FGS) 184/2001 dt. 11.5.01, decision was taken to reserve **Zone no. 1 i.e. light, Medium and Extensive industry zone exclusively for Green Category and exempted industries specified by P.P.C.B and zone no. 2 i.e Medium, Extensive, Obnoxious and Extractive industry zone for Red Category (specified by P.P.C.B.)** but there would be no restriction on location of Green category of Industry in this zone.

3.7.4 Thereafter, a representation made by Punjab Pradesh Vyopar Mandal to Hon'ble Chief Minister, Punjab dt 16.7.2002, put forward the ironical situation with respect to provisions of Master Plan which provided for only Light, medium & extensive industry zone within M.C limit where only Green Category industry can be established whereas the existing Steel rolling mills & induction Furness as per Punjab Pollution Control Board (P.P.C.B) norms are not covered under Green Category of industries. Moreover, expansion & modernization of existing units could also not be taken care of by this categorization/specification of industrial zones.

3.7.5 In the District level committee held on dated. 5/12/2002, decision was taken to spot zone the existing industries and to allow only Green Category Industries as per PPCB norms in the industrial zone no1 (Light, medium & Extensive industry zone) within Municipal Limits.

3.7.6 Further during District Town Planning committee meeting held on 5.12.02 under the chairmanship of Deputy Commissioner , Fatehgarh Sahib, industrial representatives again stressed the critical issue that Gobindgarh should not be adjudged at parity with other towns like Amritsar, Ludhiana, Jhalandhar, Patiala etc where industries came to support already existing residential areas whereas Gobindgarh owed its origin to establishment of industry first and residential development came later on to support it. Thus, it was decided to Spot zone the existing industrial units & to make recommendation to the Punjab Govt. for declaration of this town as an "Industrial Township".

3.7.7 Thereafter, based on above decisions, master plan Drawing No. 354/02 dt 13-9-02 was revised and drawing no. DTP(FGS) 540/04 dt 1.10.04 (**Annexure-3**) was prepared and approved by Chief Town Planner, Punjab.

3.8 Delineation of Local Planning Area Gobindgarh

- For the preparation of Master Plan Gobindgarh under the Punjab Regional and Town Planning and Development Act 1995 Local Planning area for an area of 6642 hectares as shown on the drawing no. DTP(FGS) 358/02 dated 20.9.02 was notified by the Govt. vide notification No. 12/42/2006-4HG/ 9518, dated 12.10.06.
- Later, enlarging the scope of area, L.P.A drawing No. DTP (FGS) 358/02 dated 20.9.02, was superseded by drawing no. DTP (FGS) 770/07 dated 19.11.07 for 14267 hectares comprising of 56 villages including Gobindgarh town and was notified U/S 56(1) of The Punjab Regional and Town Planning and Development (Amendment) Act 2006 vide notification No. 12/42/2006-4HG1/893 dated 29/1/08 (**Annexure-4**). and Chief Town Planner has been designated as the planning agency u/s 57 of "The Punjab Regional and Town Planning and Development Act, 1995" vide notification no. 12/42/2006-4HG1/899 dt. 29/1/08 (**Annexure-5**).
- Based on findings of Satellite imagery data by Remote sensing centre Ludhiana, revised L.P.A **drawing no. DTP (FGS) 1041/09 dt.27.2.09** for an area of 13832 hectares comprising of Gobindgarh Town and adjoining 53 villages, has been notified vide notification No12/42/06/4HG1/2218 dt. 10/8/09 u/s 56(7) (**Annexure-6**) of the Punjab Regional and Town Planning and Development Act (Amendment) Act 2006.

3.8.1 While delineating Local Planning Area of Gobindgarh, the relevant factors (with respect to Gobindgarh Town) mentioned in Rule 22 of the Punjab Regional and Town Planning and Development (General Rules) 1995 have been considered.

CHAPTER - IV

SOCIO-ECONOMIC AND DEMOGRAPHIC PROFILE

4.1 Introduction

4.1.1 Modern day cities have complex structure comprising of numerous & intertwined/ interwoven relationships due to which town planning judgments cannot be merely treated as technical-oriented as they affect the lives and interests of the whole community. In the present context, the slogan " Planning by the people and Planning for the people " exhibits a shifts from Physical design oriented basic concept of town planning to more of a socially relevant and sensitive model of town Planning encompassing socio-economic richness and viability of existing communities.

4.1.2 The economic sectors i.e. primary, secondary and tertiary form the economic base of the town. Nothing can hamper the physical growth/ development of an area more than the economic incompetence. It is imperative to lay more stress on tertiary sector activities like I.T., ITES, Commerce, development of wholesale markets and informal sectors etc. Modernization/ up gradation of existing industries in any urban settlement along with provision of necessary infrastructural facilities and services imparts further impetus to economic growth. An economically viable area is adjudged by its ability to sustain certain magnitude of economic activity along with its capacity to provide employment opportunities which in turn affects not only the size of population but its dispersal also, because any specific economic system tends to arrange people in specified pattern. For a predominantly industrial town like Gobindgarh, technological advancements further add another dimension controlling further population distribution and density.

4.1.3 The identity of a town depends upon the character of its population. Demographic profile determines the demographic character of the town area in terms of population, growth rate, density, literary rate etc. which further helps in determining the social as well as the economic character of the area. The decade wise study of Gobindgarh town has been done to bring out the trends about various demographic characters. The natural population growth has special significance because it is a vital index of economic development, social awakening, historical and cultural background of the town. The population per unit area defines the density of population with the help of which it is easy to know how dense the area is? High density means that the area needs to be decongested where as low density implies capacity to accommodate more people.

4.1.4 Therefore, the study of socio-economic and demographic factors plays an important role in defining the character of a town as well as the urban limits of a town/city. The following studies related to socio-economic and demographic factors for Gobindgarh town have been conducted to know the socio-economic and demographic character of this town.

4.2 POPULATION GROWTH

4.2.1 Local Planning Area of Gobindgarh

Gobindgarh Local Planning Area comprises of only one urban settlement i.e. steel town Gobindgarh and surrounding 53 villages. LPA experienced considerable growth rate of 33.28% for the decade 1991-2001.

Table No.1

Population growth rate of Local Planning Area

| S. no. | Year | Population | Decadal growth rate(%age) |
|--------|------|------------|---------------------------|
| 1. | 1981 | 67920 | - |
| 2. | 1991 | 89134 | 31.23 |
| 3. | 2001 | 118796 | 33.28 |

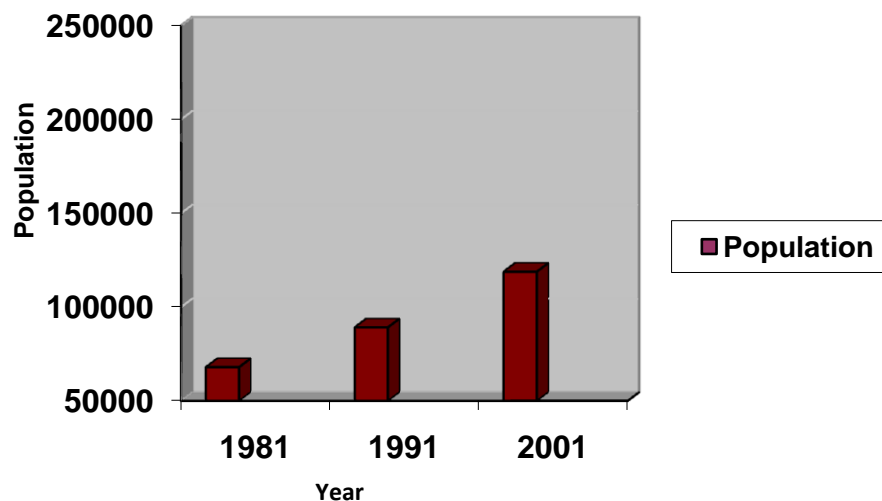


Figure no.1

Decadal Population

Source: District Census Handbook Patiala/Fatehgarh Sahib.

4.2.2 Gobindgarh is an important industrial Town of Punjab and the only urban settlement of its local planning area which is fast emerging into a hub of professional technical education centre.

4.3 Gobindgarh Town :

Industrial town, Gobindgarh is an important class-II tier town of Punjab having class A municipal status. The table No. 2 below clearly indicates sudden and phenomenal growth rate of 107.56% during the decade 1951-61 and growth rate of 183.76% during the decade 1971-81 where as population of Gobindgarh Municipal Council as percentage of total urban population of Punjab has risen from 0.002% in the year 1951 to 0.67% in the year 2001.

Table No-2

Growth trends - Urban Population in Punjab and Gobindgarh

| YEARS | URBAN POPULATION OF PUNJAB (PERSONS) | POPULATION OF GOBINDGARH MUNICIPAL COUNCIL (PERSONS) | POPULATION OF GOBINDGARH MUNICIPAL COUNCIL AS PERCENTAGE OF TOTAL URBAN POPULATION OF PUNJAB | DECADAL GROWTH RATE OF URBAN POPULATION OF PUNJAB (%) | DECADAL GROWTH RATE OF POPULATION OF GOBINDGARH TOWN (%) |
|-------|--------------------------------------|--|--|---|--|
| 1951 | 1989267 | 3385 | 0.002 | 20.02% | - |
| 1961 | 2567306 | 7026 | 0.27 | 29.06% | 107.56% |
| 1971 | 3216179 | 9387 | 0.29 | 25.27% | 33.60% |
| 1981 | 4647757 | 26637 | 0.57 | 44.51% | 183.76% |
| 1991 | 5993552 | 40175 | 0.67 | 28.95% | 50.82% |
| 2001 | 8245566 | 55403 | 0.67 | 37.58% | 37.90% |

Source : Census of India

The above Table clearly indicates that the decadal %age growth rate of Gobindgarh Town has been slightly faster as compared to the Punjab State.

4.4 Population

4.4.1 Gobindgarh Town had urban population of merely 3385 persons in the year 1951. However due to declaration of this town as “Free Trade Zone” , Steel re-rolling factories located in Khanna, a nearby town, Started shifted to Mandi Gobindgarh. Thereafter Govt. of India announced a general relaxation in rules on 14-04-1960 and everyone was free to install a steel re-rolling mill anywhere in the country. By virtue of this relaxation the Steel re-rolling industry and allied started flourishing at Gobindgarh thereby resulting in a drastic increase of 107.56% population by 1961.

4.4.2 Ward Wise Detail of Population

This municipal town comprises of 19 wards spanning over an area of 9 sq.km. Being a highly industrialised town, it constitutes very little green cover and recreational area. There are only 3 municipal parks and 40-50 kitchen gardens in big houses. The ward wise population is given below:

Table No.3
Ward Wise Population

| Ward No. | No. of Houses | Population (2001) |
|--------------|---------------|-------------------|
| 1 | 637 | 2276 |
| 2 | 445 | 2176 |
| 3 | 445 | 2698 |
| 4 | 430 | 3099 |
| 5 | 638 | 2331 |
| 6 | 808 | 2894 |
| 7 | 1099 | 2827 |
| 8 | 771 | 3286 |
| 9 | 379 | 2291 |
| 10 | 542 | 2853 |
| 11 | 702 | 3460 |
| 12 | 644 | 3466 |
| 13 | 750 | 3460 |
| 14 | 664 | 3112 |
| 15 | 764 | 3565 |
| 16 | 761 | 3160 |
| 17 | 668 | 2692 |
| 18 | 574 | 2481 |
| 19 | 629 | 3276 |
| Total | 12350 | 55403 |

(Source: Gazetteer of Fatehgarh Sahib and Project Proposal on Management of Municipal Solid Waste at Gobindgarh prepared by Punjab State Council for Science and Technology)

4.4.3 Population Density

The Density of population is the sole indicator to highlight the intensity of the developed area with the help of which area requirement can be determined.

Table No. 4
Population density

| Year | Population Density | |
|------|--------------------|-----------------|
| | Persons/Sq.Km | Persons/hectare |
| 1981 | 2960 | 30 |
| 1991 | 4464 | 45 |
| 2001 | 6156 | 62 |

Density of population has risen from 30 persons per hectare in the year 1981 to 62 persons per hectare in the year 2001.

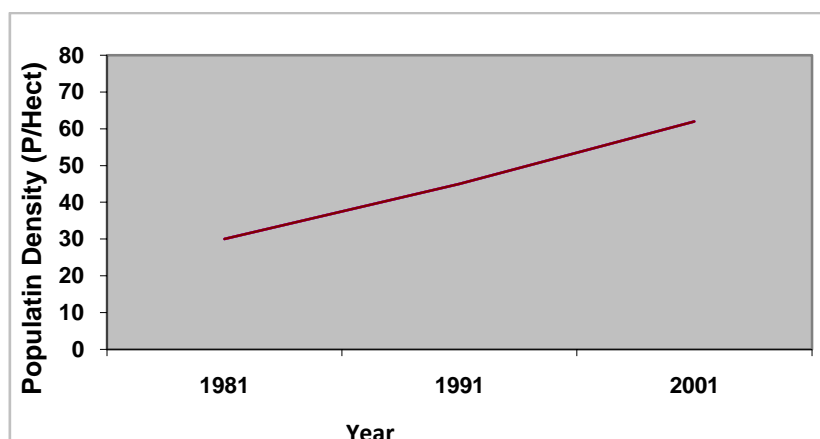


Figure no. 2

4.5 Sex Ratio

As per census 1981, the sex ratio was 770 females for every 1000 males in Local Planning Area of Gobindgarh, in 1991 it was 845 females where as in year 2001, the sex ratio was 795 females for every 1000 males which shows that the sex ratio has declined from 1991 to 2001. The sex ratio of the Local Planning Area Gobindgarh was comparatively lower than the Punjab state which was 876 in 2001.

Table No.5

Sex ratio

| Year | Total | Males | Females | Sex ratio |
|------|--------|-------|---------|-----------|
| 1981 | 67920 | 38370 | 29550 | 770 |
| 1991 | 89134 | 48312 | 40822 | 845 |
| 2001 | 118928 | 66271 | 52657 | 795 |

Source: District Census Handbook Patiala/Fatehgarh Sahib.

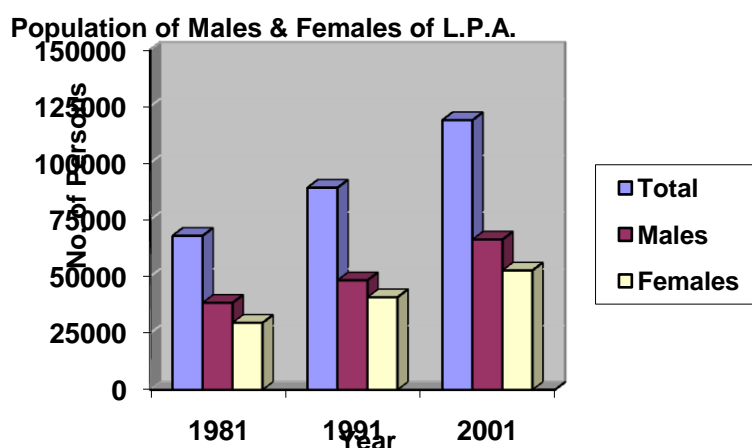


Figure no. 3

Population of Males and Females

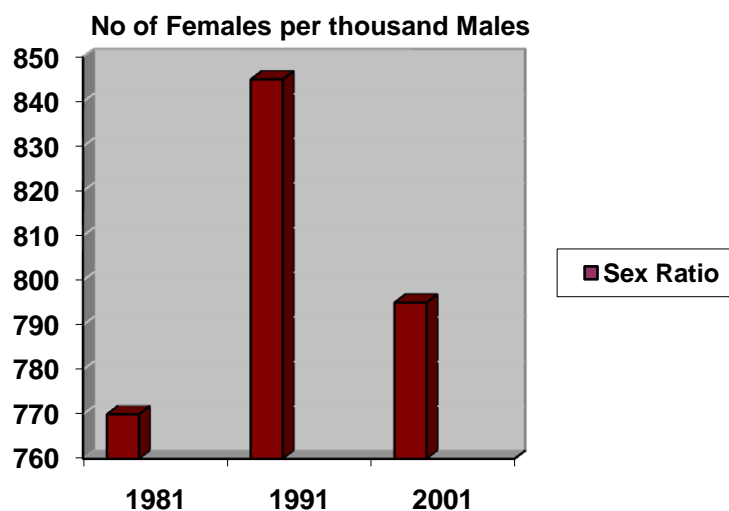


Figure no.4

Sex Ratio

4.6 Caste Composition

The Sheduled Castes population in the Fatehgarh Sahib district as per 2001 census constitutes 30.67 per cent of the total population as against 28.85 per cent of the State as a whole.

Table No.6

Schedule caste population & percentage of Schedule caste population to total Population

| S. no. | Year | Schedule caste population | | | %age of SC Pop. to total Pop. |
|--------|------|---------------------------|-------|--------|-------------------------------|
| | | Total | Male | Female | |
| 1. | 1981 | 16915 | 9356 | 7559 | 24.90 |
| 2. | 1991 | 23504 | 12732 | 10772 | 26.37 |
| 3. | 2001 | 29570 | 15969 | 13601 | 24.89 |

Source: District Census Handbook Patiala/Fatehgarh Sahib

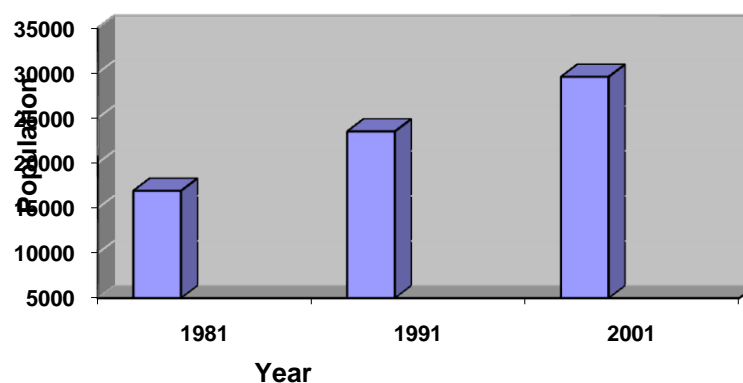


Figure no.5

Schedule caste population

4.7 Literacy

The District Fatehgarh Sahib has higher %age of literates (74.10%) as compared to the State average of 69.95%. The district occupies 7th rank in literacy amongst the districts of Punjab State whereas in Gobindgarh town & its surrounding area of Local Planning Area, the literacy rate is slightly lower i.e. 64.48%. Year-wise literacy is given below:

Table No-7
Literacy Rate

| Sr. no. | Year | Total Population of L.P.A. Gobindgarh | Total literates | | Males | | Females | |
|---------|------|---------------------------------------|-----------------|-------|--------|-------|---------|-------|
| | | | Persons | % age | Number | %age | Number | %age |
| 1. | 1981 | 67920 | 29159 | 42.93 | 18166 | 62.30 | 10993 | 37.70 |
| 2. | 1991 | 89134 | 48482 | 54.39 | 28444 | 58.67 | 20038 | 41.33 |
| 3. | 2001 | 118796 | 76596 | 64.48 | 44644 | 58.29 | 31952 | 41.71 |

Source: District Census Handbook Patiala/Fatehgarh Sahib

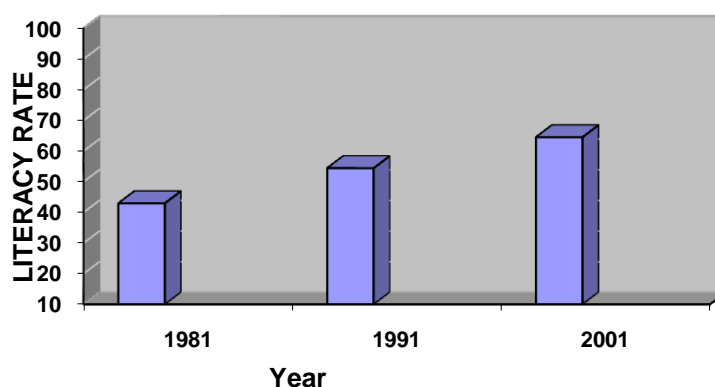


Figure no.6

Literacy Rate

4.8 Economic/ Industrial Base

4.8.1 Gobindgarh town is globally famous as a steel town. The economic base of the town is mainly industrial activities, with large number of steel rolling mills approx. 250 rolling mills which are serving 25% of secondary steel requirement of the country. There are about 100 Induction Furnaces producing raw material for rolling mills. There are 40 units which manufacture rolling mills parts and 5 units manufacture rolling mill parts on turnkey basis. Besides PSIEC has developed an Industrial focal point for an area of 209.62 acres approved by the Punjab government on the southern end of N.H. No. 1 & adjoining to it, an additional area of 200 acres has been reserved for expansion of this

Industrial focal point. Due to vast industrial activity Gobindgarh town has almost touched Khanna town (in Ludhiana district). And both towns look like as one town. Since now expansion towards Khanna town is not possible a number of re rolling mills are being established on Gobindgarh-Amloh road.

4.8.2 The town also has a small regulated grain market and also is fast emerging into a hub of professional technical education centre.

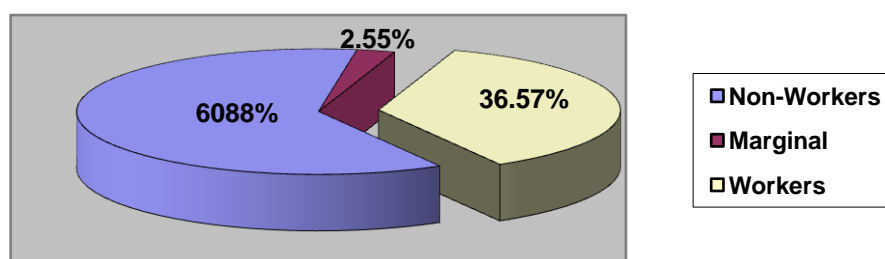
4.9 Occupational Structure

Table No-8

Growth of Workers & Non Workers in Local Planning Area-Gobindgarh

| Sr. No. | Year | Total Population | Total Workers | % age | Non-Workers | % age | Marginal Workers | % age |
|---------|------|------------------|---------------|-------|-------------|-------|------------------|-------|
| 1. | 1981 | 67920 | 22923 | 33.75 | 44282 | 65.20 | 715 | 1.05 |
| 2. | 1991 | 89134 | 27263 | 30.59 | 61750 | 69.28 | 121 | 0.13 |
| 3. | 2001 | 118796 | 43439 | 36.57 | 72327 | 60.88 | 3030 | 2.55 |

Source: Distt. census Patiala/ Fatehgarh Sahib



Year 2001

Figure no. 7

Table No- 9
Detail of Workers

| Sr. No. | Year | Total workers | Cultivators | | Agricultural labourers | | Household industries | | Others | |
|---------|------|---------------|-------------|-------|------------------------|-------|----------------------|------|--------|-------|
| | | | no | %age | No | %age | No | %age | no | %age |
| 1. | 1981 | 22923 | 5651 | 24.65 | 3826 | 16.69 | 261 | 1.14 | 13185 | 57.52 |
| 2. | 1991 | 27263 | 5541 | 20.32 | 4511 | 16.55 | 315 | 1.16 | 16896 | 61.97 |
| 3. | 2001 | 43439 | 5497 | 12.65 | 1775 | 4.09 | 412 | 0.95 | 35755 | 82.31 |

Source: District Census Handbook Patiala/Fatehgarh Sahib

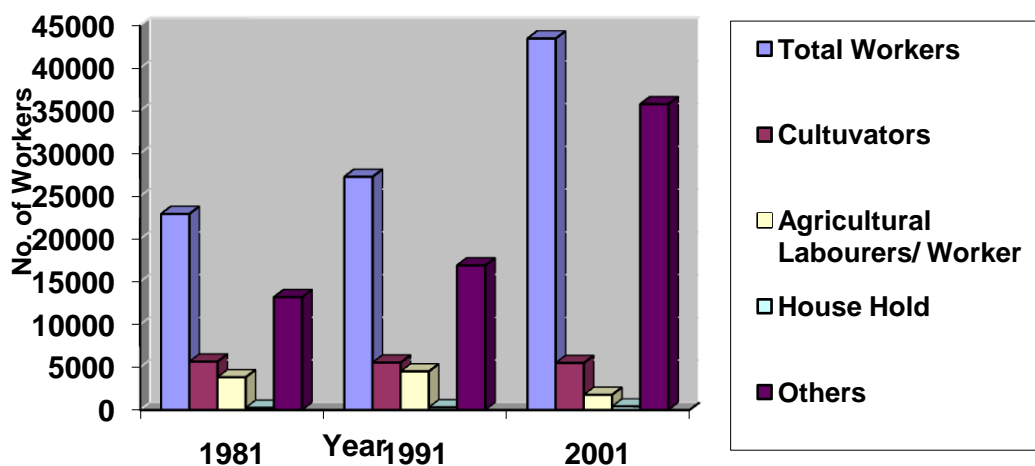


Figure no. 8

4.9.1 The occupational structure helps to derermine the economic status of the town. During the period 1981-2001 as indicated in the Table no. 7, the growth of workers as percentage of total population of L.P.A. (participation rate) increased from 33.75% to 36.57% whereas during the same decades the percentage of Non-workers has decreased from 65.20 to 60.88 which clearly indicates a positive impact on the economy of the area.

4.9.2 The decreasing agricultural labourers/worker population from the year 1981 to 2001 accompanied by increase in population of other workers during the same period is clear evidence of increasing urbanization and industrialization which has had a positive impact on the economy land use of the town and its surrounding area making it the richest municipal council of the country. The year-wise detail of the industrial units falling in Gobindgarh is given below:

Table No- 10**Year-wise detail of the industrial units in Gobindgarh**

| Sr. | Industries | Year | | | | | | | | | | Total |
|-----|------------------------------|------|------|------|------|------|------|------|------|------|------|-------|
| | | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | |
| 1. | 1) Large Scale Industry | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2) Medium Scale Industry | 28 | 33 | 12 | 12 | 10 | 11 | 11 | 11 | 11 | 3 | 3 |
| | 3) Industry | 280 | 286 | 297 | 305 | 318 | 323 | 326 | 340 | 341 | 346 | 346 |
| | Detail of Industries | | | | | | | | | | | |
| 2. | Rolling Mills | 210 | 212 | 215 | 219 | 225 | 232 | 240 | 246 | 250 | 252 | 252 |
| | Inductions furnaces | 25 | 28 | 30 | 34 | 36 | 41 | 43 | 50 | 56 | 63 | 63 |
| | Forging Unis | 4 | 7 | 9 | 10 | 12 | 12 | 13 | 14 | 15 | 16 | 16 |
| | Rolling Mills Parts | 18 | 22 | 26 | 30 | 34 | 36 | 41 | 43 | 47 | 49 | 49 |
| | Foundries | 15 | 17 | 18 | 19 | 20 | 25 | 28 | 32 | 35 | 41 | 41 |
| | Oxygen Plants | 5 | 6 | 9 | 11 | 12 | 14 | 15 | 15 | 17 | 18 | 18 |
| | Refrectries | 4 | 5 | 7 | 8 | 8 | 8 | 9 | 10 | 11 | 12 | 12 |
| | A.R.W. Pipes | 22 | 25 | 27 | 30 | 35 | 37 | 42 | 46 | 51 | 55 | 55 |
| | Thumplit Rolling Mill Plants | 2 | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 7 | 7 |
| | Total | 615 | 645 | 655 | 684 | 716 | 746 | 776 | 815 | 843 | 865 | 865 |

4.9.3 Besides above, the two industrial mega projects under the Industrial policy 2003 namely M/S Bhawani Industries Ltd. Vill: Ajnali, total cost of project 110 Crore and M/S Modern Steels Ltd. G.T. Road, Mandi Gobindgarh, total cost of project 210 Crore have been approved by the Punjab Govt.

4.9.4 Therefore the above Table (No. 9) shows that on account of liberal industrial policy of Punjab State as well as single window system for clearance of Industrial

projects, there has been a considerable growth of industrial activities in the town and its vicinity, thereby leading to generation of vast employment opportunities as is clearly evident from the detail of industrial workers tabulated below:

Table No- 11
Year wise Industrial Workers

| Sr. No. | Year | No. of Industrial workers Gobindgarh | %age growth |
|----------------|-------------------|---|--------------------|
| 1. | 2004 | 17171 | - |
| 2. | 2005 | 17939 | 4.47% |
| 3. | 2006 | 18700 | 4.24% |
| 4. | 2007 | 19682 | 5.25% |
| 5. | 2008 | 20087 | 2.06% |
| 6. | 30-04-2009 | 20208 | 0.6% |

Source: District Industries centre

The above Table indicates that there is considerable increase in the no. of industrial workers during the last five years (17.70%) but at the decreasing rate.

CHAPTER - V

PLANNING PROBLEMS AND ISSUES

5.1 Environmental Problems

5.1.1 Every city/town whether planned/unplanned has got certain unique problems. Gobindgarh town developed primarily as an industrial town without rules, regulations or controls with due incentive from the State Government. Residential areas initially developed near industries as per their convenience and with passage of time, growth and development of residential and industrial zones continued unabatedly. As an aftermath, residential areas started complaining against pollution/nuisance caused by industries and on the other hand industrial associations started raising their concern against hurdles created against expansion & modernisation of existing industries by the residents and concerned organisations/government departments to safeguard the environment.

5.1.2 Gobindgarh Steel Chamber of Commerce and Industry raised such concerns on behalf of particularly trade/Industrial community and public in general in their representation to the Deputy Commissioner Fatehgarh Sahib stated as follows :

" The development projects in the district are always welcomed by the Trade & Industry and public in general but it evokes concern when the interests of the industry are jeopardized. The Master Plan prepared for the area aims at shifting the entire re-rolling industry from its present location, which shall prove disastrous. Mandi Gobindgarh is primarily an industrial town. The residential accommodation came up as per the liking of the inmates at a very later stage. The later development of the industry was avoided in the residential area. While, the industry is passing through a very critical phase and is facing financial crunch, most of the units have closed. Shifting of industry specially re-rolling mills is a total loss proposal. Lacs of rupees, in the shape of foundation, furnaces, channels dug in the ground, water treatment plants etc. cannot be retrieved and remain dumped which if ordered to be shifted shall amount to a death blow and industrial retardation in the state."

5.1.3 Though, the above-mentioned situational analysis seems quite convincing yet on the other hand unregulated/ haphazard growth of both industry and residential has created serious environmental concerns on account of rapidly deteriorating air and water quality as well as health hazards for the inhabitants of this town and surrounding areas. As per Central Pollution Control Board's figures of year-2006, Gobindgarh has the worst

air quality in India. With annual average concentration of Respirable Suspended Particulate Matter (RSPM) standing at 250 grams per cubic meter, this town outsmoked all other India Cities. On account of this dubious distinction, residents, here are suffering from various respiratory/skin ailments (As per survey conducted by Punjab Pollution Control Board in collaboration with P.G.I Chandigarh during-2003).

5.1.4 Gobindgarh, an industrial town has mainly industrial units like re-rolling mills, furnaces and foundries which basically belong to red category (Hazardous) industry creating lot of pollution in the form of industrial effluents, smoke, dust & noise causing serious environmental concerns with the result that the environment is deteriorating continuously due to lack of co-ordination between planning and implementing agencies, inadequate management system and lack of proper implementation of govt. policies relating to environment protection acts and rules. Existence of large number of units including the polluting industries, has adversely impacted the quality of air in the Gobindgarh town. Emission generated by fuel burnt by such polluting industries has contributed to the lowering of quality of the air. With a view to clearly assess and monitor the status & quality of ambient air in Gobindgarh town, data with regard to quantity of suspended particulate matter, SO₂ and NO₂ present in the air is being collected and analyzed by the Punjab Pollution Control Board as indicated below:

5.2 Permissible Levels :

The permissible levels of residual suspended particulate matter (RSPM), SO₂ and NO_x as per Punjab Pollution Control Board (PPCB) norms are as indicated in the table below:

Table No. 1

Permissible levels of residual suspended particulate matter in different Areas

| Parameters | Industrial Area | Residential, Rural & Other Areas |
|-----------------------|------------------------|---|
| RSPM | 120 | 60 |
| SO₂ | 80 | 60 |
| NO_x | 80 | 60 |

Table No. 2**Ambient Air Quality Monitoring data of Mandi Gobindgarh**

| Location of Ambient Air Station | Parameters | Annual Average Conc. ($\mu\text{g}/\text{m}^3$) | | | | | | | |
|--|-----------------|---|------|------|------|------|------|-------|------|
| | | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| M/s Raj Steel Rolling Mills, Guru ki Nagri, Mandi Gobindgarh | RSPM | 417 | 330 | 272 | 257 | 235 | 230 | 214.1 | 219 |
| | SO ₂ | 12 | 10 | 11 | 14 | 17 | 11 | 11 | 11.6 |
| | NO _x | 34 | 31 | 34 | 39 | 31 | 29 | 25.8 | 28 |
| M/s United Steel Rolling Mills, Amloh Road, Mandi Gobindgarh | RSPM | - | - | - | - | - | 226 | 251.8 | 216 |
| | SO ₂ | - | - | - | - | - | 11 | 12.8 | 11.7 |
| | NO _x | - | - | - | - | - | 30 | 30.1 | 28 |
| M/s Modi Oil & General Mills, Railway Road, Mandi Gobindgarh | RSPM | 414 | 317 | 271 | 252 | 242 | 223 | 249.2 | - |
| | SO ₂ | 12 | 10 | 10 | 14 | 16 | 11 | 12.6 | - |
| | NO _x | 35 | 28 | 33 | 40 | 31 | 30 | 30.5 | - |

Source: Punjab Pollution Control Board, Patiala

5.2.1 It is evident from the Table above that although the quantity of SO₂ and NO_x which are important constituents for determining the ambient air quality is well below the permissible limits and has been decreasing over the past years yet the amount of residual suspended particulate matter which is also contributor to the air quality, has been found to be more than the permissible limit.

5.2.2 The study conducted by the Central Pollution Control Board has showed that the groundwater at the shallow level is contaminated at Mandi Gobindgarh with cadmium and copper in quantities more than the permissible limits which is due to the effluents from the industries such as steel rolling mills, metals/alloy processing units, foundry, forging units and electroplating units etc. In addition copper, phenolic compounds, mg and total hardness were also found in excess of desirable limits prescribed for drinking water due to which it was recommended that the industrial effluents need to be treated before these are disposed off on to the ground or into the drain.

5.3 PROBLEMS BEING FACED BY THE INDUSTRY AND PUBLIC OF THE TOWN

5.3.1.1 Truck Stand or Parking

This is a major problem being faced for the last over 15 years. Trucks are being parked by the drivers/owners at every available space on the roads and even streets thus making the entire town as accident prone area as shown in the picture below. Though the town is a business centre and the transport is an essential part of it but due to lack of proper management and non-existing system of parking or a transport nagar, the menace is spread throughout the town.



5.3.1.2 Truck transport is creating its own problems with trucks parked haphazardly along G.T. road. The present situation demands immediate solution by way of properly planned truck transport nagar apart from provision of way side amenities for truck traffic.

5.3.1.3 Before 1994 an area of 66.60 acres for trucks stand in village Nasrali and Mughal Majra was acquired by the Local Government Department under centrally sponsored scheme namely Integrated Development of Small and Medium Town (I.D.S.M.T) scheme. The same was quashed following Civil Writ Petition No. 13173 of 1994 & 24151-52/02 by an order dated 13/3/2003 of Punjab & Haryana High Court. Site of truck-stand under I.D.S.M.T scheme was then shifted to village Kumbhra. An area of 73 bigha 15 biswa acquired by Municipal Council for dumping site in village Kumbhra was allowed to be used for Truck Stand by Local Government Department to utilise the funds received from Central and State Government for this purpose. This site as shown in the picture below, is still under construction and is presently not being used for truck stand purpose or as Transport Nagar.



5.3.2 Railway Over-Bridge

The plan for the construction of a Railway Over-Bridge linking Guru-Ki-Nagri and adjoining areas to the main township, requires expeditious execution. At present, Guru-Ki-Nagri is known for the congestion in traffic.

5.3.3 Grade-Separation on G T Road

5.3.3.1 The equally important requirement of the town is to link the population on both the sides of National Highway by grade-separation and to maintain the speed & safety of

through fast traffic moving on the GT Road, requires construction of fly over at the main crossing of GT Road with Gobindgarh-Amloh Road.

5.3.3.2 High intensity traffic is flowing on G T Road. The population is equally spread on both the sides whereas hospital, railway station, school, college and court etc. are located on one side. This necessitates the movement of public from Amloh road-side to other side and vice-versa. The heavy traffic and high speed poses risk to the public. To overcome this problem, it is imperative to have grade-separation at the following points:-

- Bus Stand
- Main Crossing
- Battan Lal Road

MAIN CROSSING



5.3.4 Housing Plan for Mandi Gobindgarh

5.3.4.1 The town along with surrounding area is becoming more populous day by day and labour alone is estimated at about 43,500 (2001 census) for Local Planning Area, Gobindgarh.

5.3.4.2 Gobindgarh inspite of being a predominantly industrial town, lacks affordable housing which has recently been made mandatory by the centre and state govt. policies to alleviate the deplorable situation of industrial workers.

5.4 PROBLEMS OF ENTREPRENEURS OF INDUSTRIAL FOCAL POINT, MANDI GOBINDGARH

5.4.1 Water Supply

The plot owners are not in a position to get the water supply from PSIEC which hampers the construction activity. During the absence of electric supply, there is no alternate arrangements with the water supply deptt. of PSIEC to manage the water supply and the entrepreneurs have to suffer the whole day. Some alternative arrangements are required so that the water supply may be made available in case of power failure.

5.4.2 Electricity Supply

In the absence of any grid stations at Focal Point, the electric connection are being provided from the other grids. PSEB arranges such connections depending upon the demand of the entrepreneurs and the plot holders have to bear the heavy charges of cable and other accessories required for the purpose. In case of the failure of power supply, domestic supply for street lights and drinking water become a cause of concern. Moreover, at present there is no complaint office and the complainant has to move a distance of 3 kms for making such complaints.

5.4.3 Security Measures

With the rapid development of the plots of focal point, cases of theft have also increased. Therefore, in the absence of proper infrastructure facilities from security point of view entrepreneurs who have invested large sums of money are at a greater risk due to increased theft cases.

5.4.4 Encroachments

With the day to day developments in focal points, a number of 'Khokhas' have come up at the entrance as well as exit passage of the Focal Point creating hindrances in the movement of vehicles.

5.4.5 Telephone Connections

Though the telecom department has made adequate arrangements for the new connections but for the maintenance/repairs, there is no complaint office or provision of STD/PCO booth facility in general.

5.4.6 Commercial/Residential Complex

As/layout of the Focal Point by PSIEC, a shopping complex/residential complex has been shown but till date nothing has come up.

5.4.7 ESI Dispensary, Bank and Post Office Facility

Neither ESI dispensary has been provided for the medical facilities to be given to the workers nor any bank and post office facility has been provided at the Focal Point causing lot of inconvenience to the workers as well as entrepreneurs.

5.5 Ribbon Development

5.5.1 The major transport network of the town comprises of Ambala- Ludhiana N.H. No.1 (G.T. road), Gobindgarh-Amloh Scheduled Road No. 33 and Amloh-Khanna road along which linear development be it industrial, commercial or residential have come up. On G.T. road, villages under ribbon development are Kukkar Majra, Ajnali, Ambe-Majra, Chatar Pur, Harbans Pur, Wazirabad and Talwara, On Gobindgarh-Amloh road villages under ribbon development are Lad Pur, Turran, Kumbh, Jalal Pur and on Khanna-Amloh road villages under ribbon development are Mughal Majra, Badinpur, Shahpur and Kahanpur. The concentration of predominately industrial along with commercial use has developed over the years. In the absence of service lanes and adequate parking along G.T road and Gobindgarh-Amloh road, smooth flow of raw material/finished products is hindered. The Traffic/transportation problem has reached alarming proportions resulting in adverse effect on level of service of Highway/roads like loss of comfort, increased congestion, reduced speed and high accident rate.

5.5.2 Thus, unless the situation is brought under control, future growth of population and urbanization trends might soon render the Highway/Major road network totally crippled although The Punjab Regional and Town Planning and Development Act 1995 does stipulate restriction on construction along scheduled roads be it National Highway, State Highway, Major District/Other District roads within M.C limits as well as outside.

5.6 Lack of wayside amenities:

Inadequate parking facilities coupled with lack of rest places, toilet facilities, eating places, vulcanizing shops and repair facilities along the major roads which resulted in unsightly growth of commercial along the roads has caused visual intrusion,

unhealthy and unsanitary conditions. Besides road-side rest areas are needed for car and other passenger traffic at places of scenic beauty while these are completely in existence.

5.7 Absence of Truck Stand/Truck Transport Nagar

5.7.1 Truck transport is creating its own problems with trucks parked haphazardly along G.T. road. The present situation demands immediate solution by way of properly planned truck transport nagar apart from provision of way side amenities for truck traffic.

5.7.2 Before 1994 an area of 66.60 acres for trucks stand in village Nasrali and Mughal Majra was acquired by the Local Government Department under centrally sponsored scheme namely integrated development of Small and Medium Town (I.D.S.M.T) scheme. The same was quashed following Civil Writ Petition No. 13173 of 1994 & 24151-52/02 by an order dated 13/3/2003 of Punjab & Haryana High Court. Site of truck stand under I.D.S.M.T scheme was then shifted to village Kumbhra. An area of 73 bigha 15 biswa acquired by Municipal Council for dumping site in village Kumbhra was allowed to use for Truck Stand by Local Government Department to utilise the funds received from Central and State Government for this purpose. This Site is still under construction and is presently not used for truck stand purpose or as Transport Nagar.

5.8 Industrial Solid Waste Management

Presently, there is no site earmarked for dumping of industrial non-hazardous and solid waste of industries with the result that Industrial waste as well as garbage is being dumped by the local authority at village Ajnali which is not in the interest of society. The town requires proper solid waste management for healthy environment. As per information received from local govt. deptt., garbage of this town will be dumped/treated at Ludhiana with the transit site at Khanna.

5.8.1 Dominance of Central Corridor

Population concentration is much larger in the central corridor i.e. along G.T. road due to well developed rail and road network. This concentration is also due to large investments made in this area by the state Government for the Industrial growth.

5.8.2 Shortage of Housing for Industrial Worker:

Gobindgarh city being predominantly an industrial town lacks affordable housing for industrial workers i.e. industrial worker colonies due to which they have to live in such areas which are like slums.

5.8.3 Lack of co-ordination between planning and implementing agencies

There is no coordination between planning and implementing agencies which is utmost important for effective implementation of planning proposals in letter and spirit.

CHAPTER - VI

TRAFFIC & TRANSPORTATION

6.1 Introduction

Urban transport is regarded as the single-most important component instrumental in shaping the development of cities and towns and urban living. While urban areas are termed as engines of economic growth, urban transport can be viewed as the wheels of that engine. Transportation is critical for the economic growth of the cities. Urban transport policy directly influences city efficiency and the welfare of the city-dwellers. It also contributes to alleviating poverty. Furthermore, there are strong linkages between urban development, transportation, energy and environment.

6.2 In Context of Gobindgarh town

6.2.1 Traffic & transportation is an inseparable and vital constituent of communication system which in the modern context is undoubtedly an indispensable link in all walks of life comprising of roadways, railway, airways, waterways, post & telegraph, telephones, radio, t.v. etc. It plays a prominent and meaningful role in stimulating the economic development of an area as well as influences its cultural life.

6.2.2 Traffic & transportation is considered as an inevitable function of land use planning. Urban transport is an integral part of urban planning because apart from defining the form of a town, the smooth functioning and productivity of any urban centre clearly hinges on the efficacy of traffic & transportation system. Since roads and streets or transport network are equated with arteries/veins of human body whereas traffic on roads/streets is comparable to blood flowing, so any blockage/ obstruction in this system acts like clot in the blood invariably leading to numerous complications.

6.2.3 Therefore, traffic & transportation has emerged as the most critical/sensitive issue in the context of effective planning & proper functioning of urban centres.

6.2.4 Due to lack of proper transport planning and non-integration of land use and transport plans, the transport scenario in most of the cities today poses a dismal picture. The total number of registered motor vehicles in India has gone up from 3.1 lakh in 1950-51 to 51.7 lakh in 1980-81 and 123.5 lakh in 1990-91. The phenomenal increase in the number of motor vehicles has resulted in considerable traffic congestion and air pollution especially on national highways.

6.2.5 Gobindgarh town strategically located on N.H. 1 has developed historically without rules/regulation as an industrial hub on Ambala-Ludhiana G.T. Road (N.H. No. 1) along with parallel running Delhi-Ludhiana Railway line, deriving thereby strong and due impetus/advantage due to this strategic location. Thus, the characteristic development has been central corridor dominated with further trends of development emerging along offshoots like Gobindgarh-Amloh-Nabha-Bhawanigarh S.R No. 33 and Amloh-Khanna roads.

6.2.6 The growth of town has largely been haphazard/ unplanned as a result of which road network within town does not follow any well-defined hierarchy and it is predominantly need based. With approximately only 15 to 18% area of the town under roads & streets, the road network is incapable of catering to the ever-rising traffic demand of the city.

6.2.7 Gobindgarh town being an important and renowned industrial town which is fast emerging as an educational/institutional hub resulting in large volumes of mixed traffic conditions due to which already pathetic/chaotic traffic & transport network has further deteriorated resulting in enormous suffering to the road-users.

6.3 Existing Network –Road

- (a) The major road network converges in the centre with Ambala-Ludhiana G.T. Road (NH-1) and Ambala-Ludhiana railway line forming the major spines. In fact the entire network gravitates along this axis. Apart from this central major spine, the other major roads are as below-
- (b) Gobindgarh-Amloh sheduled road No.33.
- (c) Khanna-Amloh link road. The above roadnetwork defines the connectivity of the town with other parts of the state and the total length of above roads within M.C limit is 12.82 Km and within Local Planning Area the length is **19.75 km.**

6.3.1 To prepare Master Plan and to meet the future traffic needs and to facilitate movement of vehicles on roads, the following transport studies relating to length of carriages, right of way & road cross section have been carried out :

Table No.1

Carriage way and length of major roads passing through local Planning area Gobindgarh

| Name of road | Length (Km) | Right of way | Road cross-section |
|---|-------------|--------------|--|
| Narional Highway | | | |
| G.T. Road (NH-1) | 9.908 km. | 274'0" | 79'-6",30'-0",15'-6", 26'-0", 123'-0" |
| Major Roads | | | |
| Gobindgarh-Amloh sheduled road No.33 | 5.526 km. | 70'0" | 20'-0",33'-0",17'-0" |
| Khanna-Amloh link road | 4.224 km. | 65'-0" | 23'-0",19'-0",23'-0" |

Source: Development plan, Gobindgarh (2007-2021)

6.3.2 The data given in the above tables gives the description of the length and width (in terms of right of way and carriage way) of the National Highway, and other major roads passing through the planning area Gobindgarh. The total road length of this network is 19.75 km appx.

6.3.3 In spite of the fact that the width of National Highway & scheduled road is adequate yet their right of the way varies at certain points due to encroachments, thereby, decreasing their usage/efficiency. High intensity traffic is flowing on G.T. Road & the population is equally spread on both the sides but facilities like Hospital, Railway Station, School, College and Court are located on one side of G.T. Road whereas bigger chunk of development along with certain facilities/services are situated on the other side which necessitates the movement of public from G.T. Road side to Amloh side and vice-versa. There is high speed and heavy volume of traffic on these major roads which is clearly evident from the traffic survey analysis conducted during peak hours as shown in the Table No. 2.



6.3.4

Table No. 2

Volume & Characteristic of Traffic on Major Roads

TRAFFIC SURVEY OF AMBALA - LUDHIANA G.T. ROAD (N. H. No. 1)

(Khanna Side)

| Time | Truck | Bus | Tempo/ 4 wheeler | Tractor Trolly | Car/ jeep | Three whee- ler | Two wheeler Scooter/ Moter- cycle | Cycle | Ricshaw | Animal Cart | Others | Total |
|-----------|-------|-----|------------------------|-------------------|--------------|-----------------------|---|-------|---------|----------------|--------|-------|
| 8-10A.M. | 301 | 131 | 125 | 72 | 982 | 90 | 1403 | 358 | 95 | 9 | 11 | 3577 |
| 12-2 P.M. | 363 | 180 | 130 | 45 | 1020 | 92 | 1150 | 205 | 60 | 1 | 3 | 3249 |
| 4-6 P.M. | 445 | 125 | 205 | 65 | 1275 | 80 | 1233 | 465 | 35 | - | 4 | 3932 |
| Total | 1109 | 436 | 460 | 182 | 3277 | 262 | 3786 | 1028 | 190 | 10 | 18 | 10758 |

(Sirhind Side)

| Time | Truck | Bus | Tempo/ 4 wheeler | Tractor Trolly | Car/ jeep | Three whee- ler | Two wheeler Scooter/ Moter- cycle | Cycle | Ricshaw | Animal Cart | Others | Total |
|----------|-------|-----|------------------------|-------------------|--------------|-----------------------|---|-------|---------|----------------|--------|-------|
| 8-10A.M. | 303 | 97 | 327 | 21 | 655 | 103 | 737 | 201 | 11 | - | 2 | 2457 |
| 12-2P.M. | 332 | 176 | 250 | 32 | 600 | 73 | 447 | 37 | 5 | - | 4 | 1956 |
| 4-6 P.M. | 208 | 130 | 219 | 11 | 642 | 113 | 437 | 132 | 29 | 1 | 7 | 1929 |
| Total | 843 | 403 | 796 | 64 | 1897 | 289 | 1621 | 370 | 45 | 1 | 13 | 6342 |

TRAFFIC SURVEY ON GOBINDGARH- AMLOH

Gobindgarh Side (Near Main Lights Point)

| Time | Truck | Bus | Tempo/ 4 wheeler | Tractor Trolly | Car/ jeep | Three whee- ler | Two wheeler Scooter/ Moter- cycle | Cycle | Ricshaw | Animal Cart | Others | Total |
|----------|-------|-----|------------------------|-------------------|--------------|-----------------------|---|-------|---------|----------------|--------|-------|
| 8-10A.M. | 212 | 45 | 102 | 88 | 335 | 90 | 758 | 265 | 260 | 2 | 45 | 2202 |
| 12-2P.M. | 420 | 135 | 55 | 70 | 730 | 415 | 1555 | 665 | 640 | 20 | 50 | 4755 |
| 4-6 P.M. | 185 | 36 | 36 | 65 | 405 | 208 | 1260 | 555 | 300 | 4 | 17 | 3095 |
| Total | 817 | 216 | 217 | 223 | 1470 | 713 | 3573 | 1485 | 1200 | 26 | 112 | 10052 |

(Amloh Side)

| Time | Truck | Bus | Tempo/ 4 wheeler | Tractor Trolly | Car/ jeep | Three whee- ler | Two wheeler Scooter/ Moter- cycle | Cycle | Ricshaw | Animal Cart | Others | Total |
|----------|-------|-----|------------------------|-------------------|--------------|-----------------------|---|-------|---------|----------------|--------|-------|
| 8-10A.M. | 103 | 18 | 17 | 33 | 162 | 42 | 952 | 406 | 23 | 11 | 4 | 1771 |
| 12-2P.M. | 127 | 17 | 10 | 31 | 223 | 24 | 752 | 303 | 17 | 3 | 1 | 1508 |
| 4-6 P.M. | 137 | 17 | 12 | 54 | 208 | 21 | 693 | 482 | 19 | - | 4 | 1647 |
| Total | 367 | 52 | 39 | 118 | 593 | 87 | 2397 | 1191 | 59 | 14 | 9 | 4926 |

TRAFFIC SURVEY ON KHANNA-AMLOH ROAD

(Amloh Side)

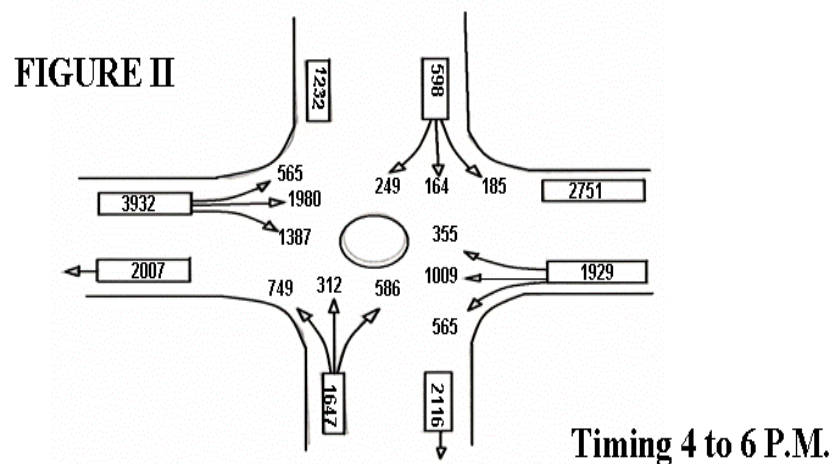
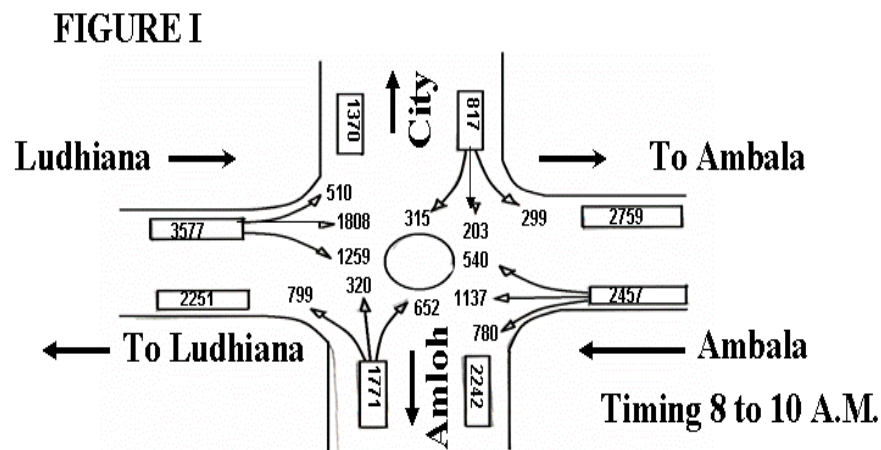
| Time | Truck | Bus | Tempo/ 4 wheeler | Tractor Trolly | Car/ jeep | Three whee- ler | Two wheeler Scooter/ Moter- cycle | Cycle | Ricshaw | Animal Cart | Others | Total |
|----------|-------|-----|------------------------|-------------------|--------------|-----------------------|---|-------|---------|----------------|--------|-------|
| 8-10A.M. | 27 | 30 | 60 | 21 | 360 | 46 | 880 | 440 | 231 | 6 | 61 | 2162 |
| 12-2P.M. | 23 | 29 | 56 | 35 | 332 | 35 | 1220 | 329 | 249 | 1 | 5 | 2314 |
| 4-6 P.M. | 29 | 26 | 91 | 56 | 697 | 83 | 1337 | 453 | 473 | 3 | 15 | 3263 |
| Total | 79 | 85 | 207 | 112 | 1389 | 164 | 3437 | 1222 | 953 | 10 | 81 | 7739 |

(Khanna Side)

| Time | Truck | Bus | Tempo/ 4 wheeler | Tractor Trolly | Car/ jeep | Three whee- ler | Two wheeler Scooter/ Moter- cycle | Cycle | Ricshaw | Animal Cart | Others | Total |
|-----------|-------|-----|------------------------|-------------------|--------------|-----------------------|---|-------|---------|----------------|--------|-------|
| 8-10A.M. | 29 | 19 | 39 | 30 | 421 | 61 | 1150 | 520 | 280 | 25 | 75 | 2649 |
| 12-2 P.M. | 43 | 27 | 35 | 23 | 435 | 43 | 1235 | 323 | 210 | 3 | 6 | 2383 |
| 4-6 P.M. | 37 | 17 | 61 | 9 | 430 | 42 | 1099 | 609 | 283 | 1 | 3 | 2591 |
| Total | 109 | 63 | 135 | 62 | 1286 | 146 | 3484 | 1452 | 773 | 29 | 84 | 7623 |

6.3.5 To determine the directional flow at the main chownk i.e. junction of G.T. Road with Gobindgarh - Amloh Road, the analysis of above data has been done particularly to assess the volume of through traffic as shown in the Figure below:

Directional Flow/ volume of traffic on Gobindgarh- Amloh, main chowk during peak hours (8 to 10 A.M. & 4 to 6 P.M.)



6.3.6 The above two figures (i & ii) depict that out of the total traffic volume of 8622 vehicles passing through this major junction, apprx. 65% of the traffic is through traffic during morning peak hours (8 to 10 A.M) and apprx. 60% of traffic is through traffic out of total traffic of 8106 vehicles during evening peak hours (4 to 6 P.M.). Therefore, It is obvious that more than 60% of the traffic on the G.T. Road passing through this major junction is through traffic which clearly necessitates the requirement of grade separation at this junction.

6.3.7 Trucks are being parked by the drivers/owners at every available space on the roads and even streets thus making the entire city as accident prone area. Though the town is a business centre and the transport is an essential part of it, but due to lack of proper management and non-existing system of parking or a non-functional transport nagar, the menace is spread though out the city. Truck transport is creating its own problems with trucks parked haphazardly along G.T. road. The present situation demands immediate solution by way of properly functional truck transport Area apart from provision of planned truck parking and way side amenities for truck traffic.

The plan for the construction of a Railway Over-Bridge linking Guru-Ki-Nagri and adjoining areas to the main township requires expeditious execution. At present, Guru-Ki-Nagri is known for the congestion in traffic.



6.4 Rail Network

The Indian railways had a modest beginning in this area in the 2nd half of the 19th Century. The rail lines were laid down by the Britishers with the agreement of the then rulers of the Patiala Princely State. This District falls within the jurisdiction of Ambala Central Division of Northern Railway. The Delhi-Amritsar line passes in this District as well as Gobindgarh town with the railway station falling on this line at Mandi Gobindgarh, Sirhind and Sadhugarh, The electric traction of the Delhi-Amritsar line (upto Ludhiana) has made travel quicker and attracted more business. It was completed on 31st, October 2003. This rail line cuts the various wards at level crossings which becomes centres of traffic bottlenecks. To facilitate the people for smooth flow of traffic, RUB is required at village Ajnali linking Guru ki Nagri to various parts.

Table No.3
No. of passenger trains passing through Gobindgarh daily

| Sr. No. | From | To | No. of Passenger trains |
|---------|---|--|-------------------------|
| 1. | Ludhiana-Amritsar, Jalandhar, Pathankot and Jammu | Ambala, Delhi, Mumbai | 47 |
| 2. | Ambala, Delhi, Mumbai | Ludhiana- Amritsar, Jalandhar, Pathankot and Jammu | 47 |

Source: Office of Station Supdt. Northern Railway Region, Ludhiana.

6.5 Bus Stand

The town has a bus stand with modern facilities located on G.T. Road. The Area of Bus Stand is 2.06 Acs. Most of the bus traffic is through traffic as neither it originates from here and nor it ends here. Basically traffic congestion on G.T. Road is due to the fact that mostly busses halt on the G.T. road itself rather than entering the bus stand. So keeping these facts in consideration, the present bus stand area is sufficient.



The apprx. volume of daily bus traffic halting on the G.T. road is as per table below:-

Table No. 4

Yearly Bus traffic route-wise

| Name of Route | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------------------|------|------|------|------|------|
| One side thru bus traffic | 250 | 300 | 350 | 400 | 450 |

6.6 Truck Terminal:

Truck transport is creating its own problems with trucks parked haphazardly along G.T. road. The present situation demands immediate solution by way of properly planned truck transport nagar apart from provision of way side amenities for truck traffic.

Before 1994 an area of 66.60 acres for trucks stand in village Nasrali and Mughal Majra was acquired by the Local Government Department under centrally sponsored scheme namely integrated development of Small and Medium Town (I.D.S.M.T) scheme. The same was quashed following Civil Writ Petition No. 13173 of 1994 & 24151-52/02 by an order dated 13/3/2003 of Hon'ble Punjab & Haryana High Court. Site of truck stand

under I.D.S.M.T scheme was then shifted to village Kumbhra. An area of 73 bigha 15 biswa acquired by Municipal Council for dumping site in village Kumbhra was allowed to use for Truck Stand by Local Government Department to utilise the funds received from Central and State Government for this purpose. This Site is presently not being used for truck stand purpose or as Transport Area. Gobindgarh being an industrial town, almost 1000 trucks are parked haphazardly along G.T. Roads and Gobindgarh- Amloh road. Daily approx. 500 trucks get loaded and unloaded here. There are presently approx. 100 transport goods booking agencies which abutting and operating on G.T. Road.

6.7 Management of Urban Transport

Existing scenario of urban transport management is marked by existence of multiplicity of agencies with overlapping areas of operation. G.T. road being a National Highway is under the jurisdiction of Ministry of Road Transport and Highways and Forest Department whereas under the Punjab Regional and Town Planning and Development act, it being a scheduled road also comes under the purview of the Punjab Urban Planning and Development Authority. Similarly Gobindgarh - Amloh scheduled road (No. 33), is under the purview of State Public Works Department, Building and Roads Deptt. as well as under the Punjab Urban Planning and Development Authority, S.A.S. Nagar/ Forest Deptt. Licensing of motorized vehicles is by District Transport Agencies and non motorized vehicles by Municipal Council. Rail services are under the control of Ministry of Railways whereas traffic rules are enforced by the State Traffic Police and so on. All these agencies plan their activities and operate independently without any coordination. The funds for development /management of transport are sourced independently and are spent by the concerned agency without any coordination with other related agencies/ departments.

6.8 Key issues:

Based on the study and analysis of existing scenario, key issues identified regarding planning and management of traffic and transportation in Gobindgarh are:-

- Absence of functional hierarchy of road network.
- Intermixing of local and regional traffic.
- Narrow Streets/ roads in core areas of the city with limited capacity resulting congestion
- Location of major traffic generators i.e. industries within the core area specified within Municipal limits.

- Large scale mixing of slow and fast moving traffic.
- Absence of grade separation mainly on the main junction i.e. G.T. Road with the Gobindgarh - Amloh Road leading to travel delays and lack of road safety.
- Large scale encroachments of the road space leading to further congestion.
- Lack of parking space leading to vehicles parked on the roadside again creating congestion and delays.
- Criss-crossing movement of vehicles and pedestrians on G.T. Road.
- Inadequate safety and visibility encroachment parameters like signage, marking, channel is lands, street name indicators/roads and other street furniture.
- There is footpaths but most of the footpaths encroached by informal activities.
- Poor level of traffic awareness and civic sense among road users.
- Lack of co-ordination between Planning and implementing agencies.

CHAPTER - VII

INDUSTRIES

7.1 Background

In the beginning of the twentieth century (in 1902), Maharaja Hira Singh of Nabha State got started some industrial units at Gobindgarh. It was declared a free trade zone for steel by Maharaja Partap Singh in 1928. The first steel rolling mill was established at Gobindgarh in 1940. The Maharaja of Nabha allotted free land for industrial plots at Gobindgarh for the installation of steel re-rolling mills. He exempted them from octroi duty and helped them in getting quotas of iron and steel. These concessions led to the establishment of a large number of re-rolling mills at Gobindgarh.

7.1.1 With a view to promote the growth of industry in the State, the Government of Punjab notified "Industrial Policy 1996" which provides for the growth of various incentives for new industrial units that come into production or undertake expansion on or after 1 April 1996. Under the Industrial Policy, 1996, the Punjab Government has notified the Punjab Industrial Incentive Code to implement the schemes of incentives for the development of industry in the State. According to the Industrial Incentive Code the Fatehgarh Sahib District has been placed under B Grade Growth Area Category. Under B Category area 20 per cent investment incentive (capital subsidy) of fixed capital investment, subject to maximum of Rs 30 lakhs is provided to the industrial units set up in the district. Besides, there are some special incentives which are provided to particular industries. A brief description of these incentives to these industries are as under:

7.1.2 The agro-based industrial units, export oriented units (except medium and large scale units), village industries and fly ash based units established in the Fatehgarh Sahib District are provided investment incentive at the rate of 30 per cent of fixed capital investment subject to maximum of Rs. 50 lakhs. Besides, the industrial units established under these categories are provided sales tax exemption of deferment upto 10 years, subject to a maximum of 300 per cent of fixed capital investment. The agro-based industrial units are also provided subsidy, to purchase and install a new generator set, at the rate of 50 per cent of the captive cost of generator set subject to maximum of Rs 15 lakhs.

7.1.3 The hotels, restaurants and amusement/adventure parks established in the district under the license / registration from Tourism Department of Central or State Government are provided investment incentive at the rate of 25 per cent of fixed capital

investment subject to the maximum of Rs 25 lakhs. The amusement parks established in the state are also given rebate in entertainment duty as it is charged at the rate of 75 percent instead of 125 per cent.

7.1.4 With a view to promote the growth of electronic industry, the new electronic units established in the district after June 24, 1991 are provided exemption from sales/purchase tax for a period of ten years from the date of production and the units which came to production after December 11, 1986 but before June 24, 1991 are charged sales/purchase tax at the rate of 1 per cent for a period 12 years after that for the next three years the rate of sale/purchase tax will be 3.5 percent. The electronic industrial units which opted for expansion/ modernization/ diversification by investing more than 25 per cent of the investment thus increasing their installed capacity/ production by more than 25 per cent are allowed to avail sales/ purchase tax exemption at par with new units.

7.1.5 Gobindgarh town is the most flourishing industrial town in Fatehgarh Sahib District as well as in the state and is well known as 'Steel Town' of India contributing 25% of national steel requirement. Now the town is rightly called as “Birmingham of Punjab” and is catering to domestic as well as international steel requirements. Despite the fact that Department of Industries of the Punjab (PSIEC) has developed and planned focal point in an area of 209.62 acres in vill. Ajnali, still large no of Industries are spread over the Gobindgarh town and adjoining area of the Gobindgarh particularly along the G.T. road, Gobindgarh-Amloh road and Khanna-Amloh road. For ensuring the quality product as well as to increase the efficiency of work force, the Govt. has established Industrial Development Centre at Gobindgarh and National Institute of Secondary Steel Technology (N.I.S.S.T).

7.1.6 Industrial Development Centre provides technical assistance to the rolling mill to improve the quality of finished product i.e. Iron bars, Channels, Girders etc. and help them in modernizing the units. This centre also provides facilities for testing of raw material as well as the finished products to the mill-owners where as N.I.S.S.T established by Govt. of India (Ministry of Steel) in May, 1988 provides assistance/technical know-how for upgradation of induction furnaces and forging units. This institute imparts training to the workers to improve their skills and also gives 2 years diploma in the trade of Secondary Steel Technology and also provides assistance regarding industrial services, pollution control, energy conservation measures for industrial units.

7.2 General guidelines for location of industries within M.C. limits of the towns/ cities

7.2.1 The Punjab Pollution Control Board vide its notification No. Admn/ SA-2/ F.No. 178/2001/98 dt. 11/4/2001 and their letter addressed to PSLG Govt. of Punjab vide endst. no. 5145 dt. 26/06/2002 to Chief Town Planner, Punjab (Annexure - 3) has decided that the cases of the industries for grant of consent to establish/ consent to operate in non-designated areas of the State shall be decided as per the following policy:

1. No new industry of any category shall be allowed in the approved residential area of any town of the State of Punjab. The approved residential area shall be designated either by PUDA/ Municipal Corporation/ Improvement Trust or any other designated authority of the State and it should be duly reflected in the Master Plan.
2. No new red category industry as per Annexure - shall be given consent to establish within municipal limits except in the designated industrial area of the State.
3. The Board may continue to grant consent to establish to green category of industries which are proposed to be located in the mixed category areas or predominantly industrial areas within municipal limits of a town/city after clarification of the area by CTP/ STP/ DTP.
4. The Board may grant consent to operate to the entire existing green category of industries in mixed category areas or predominantly industrial area.
5. The Board may grant consent to operate to old red categories of industries operating in the approved residential areas or mixed areas but required to be shifted, if they have installed adequate effluent treatment plants and air pollution control devices.
 - (i) Initial consent to operate shall be for a period of one year with the condition that it will shift to the designated industrial area within the stipulated period.
 - (ii) The Board may further extent this period on merit after the expiry of one year in the rarest of the cases subject to the approval of the Board of Directors.

7.2.2 Punjab Pollution Control Board has been entrusted with the task of implementation of environmental laws in the state of Punjab. It has categorised the industry into three different categories as per Annexure 5,6 and 7.

7.3 Industrial Growth - Gobindgarh

7.3.1 The growth of Industries during the initial period of post-independence period has been very rapid. However, the growth has slowed down in the last decade as indicated by the data in table No.1 shows that the growth has been of higher order in the small scale sector as compared to large scale and medium scale industries. Large scale industrial units constitute only 0.35% of the total industrial units existing in the town whereas share of small scale industries have been found to be of the order of 40%. The growth of large scale industrial units has been found to be stagnant, with total no. of units staying at 2 (two) from 1997 to 2001.

7.3.2 As compared to the large scale industries, the growth of small scale industrial units have been better placed during the last decade. In absolute terms, the number of small scale units have grown from 280 to 346 during the period 1997-2006 unlike large scale industries, no negative growth in the number of small scale industrial units has been recorded. Accordingly Gobindgarh continues to be known as hub of the small scale industries. Gobindgarh town as per department of Industry Punjab (District Industries centre, Gobindgarh) as shown in the Table below has total no. of 865 industrial units comprising of 252 rolling mills, 63 induction furnaces, 49 rolling mills parts, 41 Foundries, 18 oxygen plants, 12 refractories, 55 A.R.W. pipes, 7 Thumplit rolling mill plants, forging units whereas the total no. of above industrial units was 615 in the year 1997 there by indicating **growth trend of almost 41% in the decade 1997-2006**. The trend of growth of small & large scale industrial units has been indicated below:-

Table No.1

**Growth of Large & Small Scale Industrial Units in Gobindgarh during 1997-2007
(excluding the year 2006)**

| Sr. | Industries | Year | | | | | | | | | | Total |
|-----|------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2007 | |
| 1. | 1) Large Scale Industry | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2) Medium Scale Industry | 28 | 33 | 12 | 12 | 10 | 11 | 11 | 11 | 11 | 3 | 3 |
| | 3) Cuttage Industry | 280 | 286 | 297 | 305 | 318 | 323 | 326 | 340 | 341 | 346 | 346 |
| | Detail of Industries | | | | | | | | | | | |
| 2. | Rolling Mills | 210 | 212 | 215 | 219 | 225 | 232 | 240 | 246 | 250 | 252 | 252 |
| | Inductions farnaces | 25 | 28 | 30 | 34 | 36 | 41 | 43 | 50 | 56 | 63 | 63 |
| | Forging Unis | 4 | 7 | 9 | 10 | 12 | 12 | 13 | 14 | 15 | 16 | 16 |
| | Rolling Mills Parts | 18 | 22 | 26 | 30 | 34 | 36 | 41 | 43 | 47 | 49 | 49 |
| | Faundries | 15 | 17 | 18 | 19 | 20 | 25 | 28 | 32 | 35 | 41 | 41 |
| | Oxygen Plants | 5 | 6 | 9 | 11 | 12 | 14 | 15 | 15 | 17 | 18 | 18 |
| | Refectories | 4 | 5 | 7 | 8 | 8 | 8 | 9 | 10 | 11 | 12 | 12 |
| | A.R.W. Pipes | 22 | 25 | 27 | 30 | 35 | 37 | 42 | 46 | 51 | 55 | 55 |
| | Thumplit Rolling Mill Plants | 2 | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 7 | 7 |
| | Total | 615 | 645 | 655 | 684 | 716 | 746 | 776 | 815 | 843 | 865 | 865 |

Source: District Industrial Centre, Gobindgarh

7.4 Employment

Industrial units are the generator of major proportion of employment in the city. Out of the total registered employment generated in the District Fatehgarh Sahib (assuming 85% registered employment in Gobindgarh as per Deputy Director Factories Gobindgarh), it is clearly evident from the table no. 2 below that the quantum of employment generated by the industrial sector has significantly increased from 4.36% to 10% during the years 2005 to 2007. The details of employment generated alongwith the growth rate and %age of total employment generated are given in Table 2 below:

Table No. 2
Employment in Industrial Sector upto 2007

| Year | Industries | | |
|------|--------------|------------|-------------|
| | No. of Units | Employment | %age Growth |
| 2005 | 815 | 17,200 | - |
| 2006 | 843 | 17,950 | 4.36% |
| 2007 | 865 | 19,700 | 10% |

Source: District Industries Centre, Gobindgarh

7.5 Investment & production

7.5.1 Keeping in view the positive contribution made by the industrial units in the employment generation and industrial production, these units have also attracted considerable investment. It can be observed that contribution of these units to the economy of the town and the State has been considerable. The Table No. 3 indicates the trends of investment & production in the industrial sector during the Period 2002-2007.

Table No. 3
Industrial investment and production (1997-2006)

| Year | Investments (Rs. In Lacs) | Production (Rs. In lacs) |
|---------|---------------------------|--------------------------|
| 2002-03 | 21973.73 | 184695.86 |
| 2003-04 | 21701.81 | 186116.36 |
| 2004-05 | 22320.19 | 245393.21 |
| 2005-06 | 24124.69 | 281107.67 |
| 2006-07 | 22020.80 | 271486.05 |

Source: District Industries Centre, Gobindgarh

7.5.2 The above table clearly shows that with the advancement of technology and modernisation techniques during past years, with merely 0.21% increase in investment, manifold increase in production has taken place.

7.6 Industrial Focal Points:

The Punjab Small Industries and Export Corporation Ltd. came into being in 1982 after the merger of the Punjab State Small Scale Industries Corporation Ltd. (established in 1963) with the Punjab Export Corporation Ltd. (established in 1962).



7.6.1 The Punjab Small Industries and Export Corporation is the nodal agency for promoting industries in Punjab through the development of industrial infrastructure namely industrial focal points in various important cities and towns. Main emphasis is laid down on the development of focal points for small-scale sector, which further helps in increasing employment and balanced growth.

7.6.2 The corporation has established an industrial focal point on 209-62 acre of land at Mandi Gobindgarh in Fatehgarh Sahib District. In this focal point, 523 industrial plots of different sizes have been allotted as per detail below:

Table No. 4

Detail of Plots at Industrial Focal Point

| Sr. No. | Size | No. of Plots |
|---------|--------------------|--------------|
| 1. | 1.5 acre and more | 9 |
| 2. | 1 acre and more | 14 |
| 3. | Half acre and more | 60 |
| 4. | 1000 sq. yard | 188 |
| 5. | 500 sq. yard | 180 |
| 6. | 250 sq. yard | 72 |
| Total | | 523 |

Source: District Industries Centre, Gobindgarh

7.6.3 Apart from the above, Punjab Government has set up three Rural Industrial Focal Points at village Ramgarh (H.B. No. 18), Chattarpura (H.B. No. 68) and Ferozepur (H.B. No. 78) of area 8.29 acre, 8.55 acre & 5.47 acre respectively. The detail of No. of Plots and size is given below:

Table No. 5
Detail of Plots at Rural Industrial Focal Points

| Sr. No. | Village Name/H.B. No. | Plot Size | | | | No. of Plots |
|---------|-----------------------|-----------|----|----|----|--------------|
| | | 10M | 1K | 2K | 4K | |
| 1. | Ramgarh-18 | 19 | 12 | 7 | 5 | 43 |
| 2. | Chattarpura-68 | 19 | 10 | 9 | 4 | 42 |
| 3. | Ferozepur-78 | 14 | 6 | 4 | 3 | 27 |
| Total | | 52 | 28 | 20 | 12 | 112 |

7.7 Key issues:

With a view to rationalize the growth and development of industries in Gobindgarh and to provide a supportive and enabling environment which would attract higher investment, generate more employment and improve productivity of the industrial units, following key issues have been identified:-

- i) Large scale planned industrial development needs to be taken up to provide for existing shortfall and future land requirement of the industrial units.
- ii) The infrastructure and services within the existing focal points needs to be upgraded in order to improve the environment and productivity of the existing units.
- iii) Open spaces provided within the industrial focal point should be developed / landscaped. Plantation of environmentally suitable trees should be taken up along the road berms and the open spaces.
- iv) Approach to the existing focal points needs to be appropriately upgraded to facilitate the movement of traffic within and outside these units.
- v) Level crossings on the railway line at vill. Nasrali needs to be replaced by underpasses (RUB) for eliminating delays and traffic jams.
- vi) All polluting industries operating from the residential areas needs to be shifted on priority to the defined zones.
- vii) Polluting industries should be provided with Effluent Treatment Plants in order to treat the toxic industrial waste. The treated industrial waste should be recycled

to be used by the industrial units in order to minimize pollution of the ground water or surface water sources.

- viii) Polluting industries should be located and segregated from the residential areas by creating appropriate green buffer.

CHAPTER - VIII

ENVIRONMENT

8.1 Introduction

Environment concerns came to be highlighted in India only from the 1970s onward, when the progress of development in general, and the increasing pace of industrialization in particular, began to leave visible adverse environment impact.

8.1.1 The National Policy on environment was formulated with the following main objectives mentioned below:

- (i) To ensure sustained and equitable use of resources for meeting the basic needs of the present and future generations without causing damage to the environment.
- (ii) To prevent and control further deterioration in land, water and air which constitute our life support system.
- (iii) To take steps for restoration of ecologically degraded areas and for environmental improvement in our rural and urban settlements.
- (iv) To conserve and nurture the biological diversity and resources through environmentally sustainable development and management of ecosystems with special emphasis on our mountains, marine and coastal desert, wetlands and riverine ecosystems.

8.1.2 Environment Protection has emerged as a biggest challenge to the human society in the recent times. Where, industrialization is the answer to the ever increasing needs of growing population for the survival of human race, at the same time, preservation of the natural resources, control of pollution are the need of hour. We need to follow the path of sustainable development in harmony with the environment. Reuse, Recycling & Re-circulation are the necessities to reduce waste/ pollutants to minimize environmental pollution.

8.1.3 In order to have uniform laws, all over the country for broad environmental issues endangering the health & safety of our people as well as of our flora and fauna and also to check environmental degradation, the Parliament of India has enacted the following laws.

1. The Water (Prevention & Control of Pollution) Act, 1974 as amended to date.
2. The Water (Prevention & Control of Pollution) Cess Act, 1977.
3. The Air (Prevention & Control of Pollution) Act, 1981 as amended to date.

8.1.4 The aforesaid laws have been adopted by the Govt. of Punjab to control environmental pollution in the State.

8.1.5 Punjab Pollution Control Board has been entrusted the task of implementation of environmental laws in the State of Punjab and District Fatehgarh Sahib falls under the Jurisdiction of Environmental Engineer, Punjab Pollution Control Board, Nabha Road, Patiala.

8.2 Quality of underground water

8.2.1 In the Fatehgarh Sahib, distt. the depth of shallow tubewells range from 70 feet to 280 feet, 38 number of samples were collected during random sampling from different existing shallow tubewells ranging from 70 feet to 280 feet in depth from different villages of different blocks viz. Bassi, Pathana, Amloh, Khera, Sirhind Khanano. These samples were got chemically analysed for the following parameters:

Co₃²⁻, Hco₃⁻, Ca+Mg, cl⁻. RSc, Ec & ph.

The results of the chemical analysis revealed that the ground water quality (from irrigation point of view) is generally fit in all the blocks of Fatehgarh Sahib District.

8.2.2 In order to study the groundwater contamination due to effluents released by different industries, ground water monitoring was done at Mandi Gobindgarh under the project of Central Pollution Control Board, Government of India. Five number Groundwater stations (hand pumps) were selected for collecting monthly ground water samples during the year 1994. **The study showed that the groundwater at the shallow level contains quantities of more than the permissible limits which is** due to the effluents from the industries such as steel rolling mills, metal/alloy processing units, foundry and forging units, electroplating units etc. In addition copper, **phenolic** compounds, Mg and total hardness were also found in excess of desirable limits prescribed for drinking water. It was recommended that the industrial effluents need to be treated before these are disposed off on to the ground or into the drain.

In Gobindgarh town, the industry has not only been found to be the major growth driver of the town but also major polluter of the city environments. Impact of pollution has been witnessed in the town in the form of quality of air, quality of water both surface and underground, noise pollution, degradation of the natural resources, low vegetation cover etc. These environmental problems have already reached a critical stage, calling for an immediate action.

8.2.3 The intensity of the pollution in terms of air, water and noise have been evaluated in order to clearly understand the level and causes of pollution existing within the town so that appropriate strategies are put in place to tackle the problem of pollution.

8.3 Air Pollution:

8.3.1 Existence of large number of units including the polluting industries, has adversely impacted the quality of air in the Gobindgarh town. Emission generated by fuel burnt by such polluting industries have contributed to the lowering of quality of the air. With a view to clearly assess and monitor the status & quality of ambient air in Gobindgarh town, data with regard to quantity of suspended particulate matter, SO₂ and NO₂ present in the air is being collected and analyzed by the Punjab Pollution Control Board as indicated below:

Permissible Levels:

Table No. 1

Permissible Levels of major parameters - Area wise

| Parameters | Industrial Area | Residential, Rural & Other Areas |
|-----------------------|------------------------|---|
| RSPM | 120 | 60 |
| SO₂ | 80 | 60 |
| NO_x | 80 | 60 |

(Source: Punjab Pollution Control Board, Patiala)

Table No. 2**Ambient Air Quality Monitoring data of Mandi Gobindgarh**

| Location of Ambient Air Station | Parameters | Annual Average Conc. ($\mu\text{g}/\text{m}^3$) | | | | | | | |
|--|-----------------|---|------|------|------|------|------|-------|------|
| | | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
| M/s Raj Steel Rolling Mills, Guru ki Nagri, Mandi Gobindgarh | RSPM | 417 | 330 | 272 | 257 | 235 | 230 | 214.1 | 219 |
| | SO ₂ | 12 | 10 | 11 | 14 | 17 | 11 | 11 | 11.6 |
| | NO _x | 34 | 31 | 34 | 39 | 31 | 29 | 25.8 | 28 |
| M/s United Steel Rolling Mills, Amlah Road, Mandi Gobindgarh | RSPM | - | - | - | - | - | 226 | 251.8 | 216 |
| | SO ₂ | - | - | - | - | - | 11 | 12.8 | 11.7 |
| | NO _x | - | - | - | - | - | 30 | 30.1 | 28 |
| M/s Modi Oil & General Mills, Railway Road, Mandi Gobindgarh | RSPM | 414 | 317 | 271 | 252 | 242 | 223 | 249.2 | - |
| | SO ₂ | 12 | 10 | 10 | 14 | 16 | 11 | 12.6 | - |
| | NO _x | 35 | 28 | 33 | 40 | 31 | 30 | 30.5 | - |

Source: Punjab Pollution Control Board, Patiala

8.3.2 It is evident from the Table above that although the quantity of SO₂ and NO_x which are important constituents for determining the ambient air quality is well below the permissible limits and has been decreasing over the past years yet the amount of residual suspended particulate matter which is also contributor to the air quality, has been found to be more than the permissible limit.

8.3.3 Major contributors to the air pollution have been found to be :-

- i) Vehicular exhaust due to the presence of large number of heavy vehicles.
- ii) Narrow road width (with average varying between 16'0" to 22'0"), low capacity of the roads and high intensity of traffic.
- iii) Smoke emitted by the large scale use of kerosene/diesel based power generators
- iv) Smoke emitted by Industries.

8.4 WATER POLLUTION

8.4.1 Rapidly increasing urbanization and industrialization of Gobindgarh has not only adversely impacted the quality of ambient air in the town but also has affected the town's water resources also. In order to study the groundwater contamination due to effluents released by different industries, ground water monitoring was done at Mandi Gobindgarh under the project of Central Pollution Control Board, Government of India. Five number Groundwater stations (hand pumps) were selected for collecting monthly ground water samples during the year 1994. The study showed that the groundwater at the shallow level is contaminated at Mandi Gobindgarh with, cadmium and copper in quantities more than the permissible limits which is due to the effluents from the industries such as steel rolling mills, metals/alloy processing units, foundry and forging units, electroplating units etc. In addition copper, phenolic compounds, Mg and total hardness were also found in excess of desirable limits prescribed for drinking water it was recommended that the industrial effluents need to be treated before these are disposed off on to the ground or into the drain.

8.4.2 There was a recent study of the ground water samples collected from various points at Mandi Gobindgarh which is shown in the table below:

Table No. 3
Ground Water Characteristics as per IS 10500

| Sr. No. | Test Parameters | Unit | Desired limit as per IS: 10500 | Permissible limit (IS: 10500) |
|---------|------------------------|-----------|--------------------------------|-------------------------------|
| 01 | Colour | Hazen | 5 | 25 |
| 02 | Odour | - | Unobjectionable | Unobjectionable |
| 03 | Taste | - | Agreeable | Agreeable |
| 04 | Turbidity | NTU | 5 | 10 |
| 05 | pH value | - | 6.5-8.5 | 6.5-8.5 |
| 06 | Total Dissolved Solids | mg/L | 500 | 2000 |
| 07 | Total Hardness | mg/L | 300 | 600 |
| 08 | Total Alkalinity | mg/L | 200 | 600 |
| 09 | Iron as Fe | mg/L | 0.3 | 1.0 |
| 10 | Chloride as Cl- | mg/L | 250 | 1000 |
| 11 | Residual Free Chlorine | mg/L | 0.2 (Min) When Chlorinated | |
| 12 | Nitrate as NO3- | mg/L | 45 | 100 |
| 13 | Fluoride as F- | mg/L | 1.0 | 1.5 |
| 14 | Lead as Pb | mg/L | 0.05 | 0.05 |
| 15 | Arsenic as As | mg/L | 0.05 | 0.05 |
| 16 | Cadmium as Cd | mg/L | 0.01 | 0.01 |
| 17 | Calcium as Ca | mg/L | 75 | 200 |
| 18 | Copper as Cu | mg/L | 0.05 | 1.5 |
| 19 | manganese as Mn | mg/L | 0.1 | 0.3 |
| 20 | Sulphate as SO4- | mg/L | 200 | 400 |
| 21 | Mercury as Hg | mg/L | 0.001 | 0.001 |
| 22 | Selenium as Se | mg/L | 0.01 | 0.01 |
| 23 | Cyanide (CN) | mg/L | 0.05 | 0.05 |
| 24 | Chromium (as CR+6) | mg/L | 0.01 | 0.05 |
| 25 | Mineral oil | mg/L | 0.01 | 0.03 |
| 26 | Boron (as B) | mg/L | 0.03 | 0.2 |
| 27 | Total Coliform | mg/L | 1 | 5 |
| 28 | Total Coliform | MPN/100ml | N.S | N.S |
| 29 | Faecal coliform | MPN/100ml | N.S | N.S |

Source: Punjab Pollution Control Board

Table No. 4
Details of Ground Water Samples of Mandi Gobindgarh

| Sr. No. | Point of ground water sample collection | Designated used of the area | Depth of hand pump | Parameters | | | | | | | | | | | | |
|---------|---|-----------------------------|--------------------|------------|-----|----------------|----------|---------|----------|----------|--------|---------|-----------|--------|--------|------|
| | | | | pH | TDS | Total Hardness | Flouride | Nitrate | Chloride | Sulphate | Sodium | Calcium | Magnisium | Nicked | Chorme | Zine |
| 1. | Hand pump in the premises of M/s Sangam Steel Rolling Industries. R.G. Mill Road, Mandi Gobindgarh | Indl. | 70 | 7.3 | 628 | 312 | 0.16 | 0.29 | 42 | 28 | 57 | 75 | 30 | ND | ND | 0.16 |
| 2. | Hand pump near the backside boundary of M/s S.N.A.S Sr. Sec. School. Railway Road, Mandi Gobindgarh | Resi. | 60 | 7.1 | 683 | 324 | 0.11 | 0.17 | 39 | 20 | 46 | 85 | 27 | ND | ND | 0.05 |
| 3. | Hand pump in the premises of M/s D.R. Castings, Guru Ki Nagri, Mandi Gobindgarh | Indl. | 70-80 | 7.3 | 624 | 304 | 0.10 | 0.19 | 30 | 23 | 52 | 74 | 29 | ND | ND | 0.18 |

Source: Punjab Pollution Control Board

8.4.3 It is evident from the tables above that the amount of various constituents determining the quality of groundwater are well within the permissible limits.

8.5 Quality of Under Groundwater for Irrigation:-

In district Fatehgarh Sahib.

Ground water pollution

- i) Hand pumps and shallow tube wells drawing water from first aquifer are found susceptible to ground water pollution in areas close to industrial units.
- ii) Not only the industrial areas but also the areas having mixed land use are being adversely affected due to the presence of toxic pollutants like cyanide and hexavalent chromium in excessive proportion in the ground water.
- iii) Ground water available along the G.T.Road has also been found to contain large volume of polluting contents like Chrome etc. Effluents containing toxic metals from large number of electroplating units is seeping into ground water due to discharge of untreated/partially treated effluents into the ground.
- iv) The pollution of the soil & ground water has also been caused by the dumping of the industrial wastes (effluents and solid waste) into the open ground leading to stagnation which leads to various environmental problem.
- v) The use of polluted ground water for agricultural purposes has also led to the degradation of the soil and presence of heavy metals into soil and vegetable crops grown in the area

CHAPTER - IX

WATER SUPPLY NETWORK

9.1 Background

The constitution (74th Amendment) Act envisages the provision of water supply to be a legitimate function of the Municipalities. The system was made operational in the year 1949 and was completely based on ground water. With the town getting power supply, the shallow tube wells were replaced by deep tube-wells and system of pumping/extracting the water was made through new electrical motors. Keeping in view the growth of population in the town, 19 tube-wells were installed till today in order to meet the growing demand of water in the town along with 4 No. Over Head Reservoirs of capacity 5.30 lac gallons.

9.2 System of water supply and area coverage:

9.2.1 Supply, operation and maintenance of water is one of the prime and basic service, provided by the Municipal Council. However, the role of Municipal Council is limited to funding the entire cost of the project, making the system operational, maintain it besides collecting the revenue from the end users. The entire process of planning, designing, construction and laying the major net-work and construction of tube-wells & OHRs is handled by the State level agency i.e. Punjab Water Supply and Sewerage Board (PWSSB). Board undertakes this work for and on behalf of the Municipal Council and after completing the system it is handed over to Municipal Council concerned.

9.2.2 For water supply, the Council has divided the entire town area of 9 sq.kms. into 19 wards. As per municipal sources, 85% of urban area is covered under water supply network which can be termed as Declared area whereas rest of the 15% is not yet covered/ served with water (0.4 km²) making it supply undeclared area. Declared area (85%) of the town comprises 85% population of the city area and houses 85% of the population i.e. 47093 persons, the un-declared constitutes (15%) of the total area of the city i.e. 0.4sq.kms and houses an equal proportion of population. As it stands today, supply of water by the Municipal Council is limited only to declared areas falling within the city limits whereas un-declared area is not served by the system. The coverage of the declared area (85% of total urban area) is to the extent of 100% in terms of water supply network. However, the undeclared area which houses 8310 population remains outside the ambit of water supply by the Municipal Council. This area is totally dependent upon

their own sources of water supply. Declared and Undeclared areas are detailed in Table No. 1

Table no. 1
Area under water supply coverage

| Item | Area (In sq.km) | Area under Coverage (%) | Population under coverage (%) |
|----------------------|------------------------|--------------------------------|--------------------------------------|
| Total Municipal Area | 9 | 85 | 85% |
| Declared Area | 7.65 | 100 | 100 |
| Un-declared area | 1.35 | Nil | Nil |

(Source: Municipal Council, Mandi Gobindgarh PWSSB)

9.2.3 Dual system of water supply (direct and indirect) is followed in the declared area. In one system, the water is extracted from ground through tube-well and directly supplied into the main lines via pumping. This system does not involve any kind of storage of water, neither in sump well nor in overhead reservoir. While the second system serves dual purpose. In this system tube-well have an additional facility to pump water and store it into overhead reservoir attached with it or it can supply water directly to the water mains via pumping. The overhead reservoirs are useful for supplying water through gravity and for achieving required head. It can also be used as storage for meeting the requirements of fire safety by the Fire Brigade Department.

9.2.4 Right from the day of supplying water, the system is completely dependent on ground water as source of water supply (domestic as well as industrial) and the system of pumping the water was based on the Tube-wells. At present a net-work of 19 tube-wells spread over the town area are used by the Municipal Council to supply water. Tubewells are used for pumping the ground water and keeping in view the safe drinking water requirement, the concerned authority has installed deep tubewells. Deep tube-wells extract water from a depth of 400ft. approx. Total amount of water extracted by these tube-wells is to the tune of 33.04 mld. All the tube-wells are equipped with chlorinators wherein 0.2 ppm of bleaching powder is added for treatment for providing 100% chlorinated water. The detail of tube-wells and their location is given below:-

Table No: 2**No. of Tube-wells and amount of water extracted**

| Item | Quantity Nos. | Remarks |
|--|---------------|------------------------|
| Total no of tube-walls | 19 | - |
| Shallow | - | - |
| Deep Tube wells | 19 | Depth 400 ft and above |
| Total amount of extracted ground water | 33.04 MLD | |

(Source: Municipal Council & PWSSB)

Water supply network of Local Planning Area Gobindgarh has been shown on the plan.

Out of 19 tube-wells, 15 tube-wells are used for direct supply of water in the system without any intermediate storage. 4 tube-wells are connected with the dual system involving supply of water with or without intermediate stage. The amount of water supplied through the direct system is 26.08 mld whereas the quantum of water supplied through the dual system is 6.96 mld. There are 4 OHSR which have storage capacity of 5.30 lac of gallons. In case of failure of electricity and resultant non-operation of the motors for pumping, the city faces hardship in terms of supply of water. The details of tube-wells under the different system and the amount of water pumped is detailed below in the Table 3

Table No. 3**Type of network system**

| Network system | No. of tube-wells | No. of water tanks (overhead) | Capacity (MLD) |
|---|-------------------|-------------------------------|----------------|
| System 1-Direct supply i.e. without intermediate storage) | 15 | - | 26.08 |
| System 2-Dual supply system (with or without intermediates storage) | 4 | 4 | 6.96 |
| Total | 19 | 4 | 33.04 |

*(Source: Mandi Gobindgarh, PWSSB)***9.3 Connections**

9.3.1 The city at present has 9,574 registered water connections. However, post independence period witnessed a rapid growth of the population, industrialization, higher economic growth, increased number of households and accordingly number of water connections have been increasing. The number of connections are likely to grow very fast once un-declared area is also brought under the system of organized water supply by the Municipal Council.

9.3.2 A detailed analysis has been made with regard to number of connections registered in the domestic commercial and industrial segments of the town. It has been observed that larger proportion of the connections fall under the category of domestic use whereas commercial water connections constitute only 7% of the total water connections. The increased population, increased number of dwelling units and commercial establishments has resulted into more water demand in Gobindgarh town. Moreover, the affordability level of people has to increase in the number of connections during the last three years. Growth of water connections has been higher in case of domestic category as compared to commercial use. The details of the water connections in both these categories is given in Table 4

Table No 4

Increasing profile of water supply connections during last three years

| Years | Water Supply | | | |
|---------|--------------|------------|------------|-------|
| | Domestic | Commercial | Industrial | Total |
| 2006-07 | 8447 | 652 | 170 | 9276 |
| 2007-08 | 8642 | 663 | 177 | 9482 |
| 2008-09 | 8723 | 674 | 177 | 9574 |

(Source: Mandi Gobindgarh, PWSSB)

Figure: Increasing profile of water supply connections during last four years

9.4 Water supply and duration

The total water supply in Gobindgarh in the year 2008 on daily basis was of the order of 16.22 MLD. Based on the population of the town Gobindgarh, the amount of water supplied on per capita basis works out to be more than 160 lpcd. As per revised manual, it is required that the amount of water to be supplied is to be taken as 34.10% g/h/d (155 liters per head per day). Accordingly, the amount of water supplied is higher than the prescribed norms. The duration of water supply is 3-times a day and the total duration works out to be 12hrs. on daily basis.

Table No. 5

Water demand and supply

| Category | Area (in Sq. Kms) | Amount of Water supplied | Regd. connections | Population |
|----------------|-------------------|--------------------------|-------------------|------------------------------|
| Municipal area | 9 | 16.22 | 9574 | 55,403 |
| Declared area | 7.65 | 16.22 | 9574 | 47,096(Avg. household size 5 |

(Source: Mandi Gobindgarh, PWSSB)

9.5 Key issues:

9.5.1 Multiplicity of Agencies.

Because of multiplicity of development agencies including PUDA, PSIEC, (Deptt. of Industries) etc. operating in Gobindgarh Council area, there has been found to be lack of coordination and integrated planning in the provision of services and amenities. All these agencies have focused on their areas taken up for development without bothering about the town level infrastructure. For ensuring appropriate quantity and quality of water supply in town particularly in the Local Planning Area, a Nodal Agency needs to be designated for balanced Development.

The constitution (74th Amendment) Act, although envisages the provision of water supply to be a legitimate function of the Municipalities, yet this does not mean that the production of water is to be directly undertaken by the municipal bureaucracy. Institutional mechanisms like municipal water companies, private sector participation, etc. need to be fully explored in the interest of greater efficiency, quality and lower costs to the public. Where urban water supply is required to be managed by specialised agencies for reasons of efficiency, ways and means need to be found to ensure their accountability to the public in service delivery.

9.5.2 UN-DECLARED AREAS - WATER SUPPLY SYSTEM

The city has sufficient supply of water but still approximately 15% of the area remains unserved by the water supply network. The so called un-declared area does not have any provision of water supply and the requirement of the residents are met by the water supplied by the bore-wells dug out by the individuals. The quality of water through this source is highly un-reliable due to contamination of first layer of ground water. Thus more than 8000 population of this town continue to suffer due to the absence of water supply network and absence of coverage by the water supply system.

9.5.3 Considering the perspective growth of town, it has become important that alternative sources of water supply should also be explored so as to reduce dependence on the ground water and to minimize the fast depletion of the ground water table. Appropriate mechanism of reducing the consumption of water needs to be explored including recycling of the waste water by the industry for irrigation purposes. Mechanism of rain water harvesting should also be encouraged with community participation at the household/institutional level to reduce dependence on the ground water.

9.5.4 The other major issues in the present water supply are:-

- Low overhead storage capacity
- Illegal water connections.
- Poor maintenance of service network
- High degree of water loss due to leakages

CHAPTER - X

SEWERAGE NETWORK

10.1 Introduction

On the analogy of providing safe drinking water, provision and disposal of domestic as well as industrial, commercial and institutional sewerage facility in the city is one of the mandatory functions of the Municipal Council because of its impact on the quality of life and quality of environment in the town. Efficient disposal of sullage also assumes importance in the context of saving the precious ground water resources from pollution and also to avoid spread of epidemics caused due to unscientific disposal of the waste. Considering the role and importance of proper sewage disposal, creating appropriate level of effective and efficient system of sewerage assumes great significance.

10.2 Existing Sewerage Facilities:-

The major part of the town has already been covered with sewerage system with 85% of the town's area served with sewerage facilities. This includes waste generated both from domestic, industrial, commercial and institutional units operating in the city. Despite the fact that sewage disposal is one of the critical activity of the Council but still in the existing scenario the total town area is yet to be covered under this facility. Out of the total city area of 9.0 sq.kms. the coverage under the sewerage system is to the extent of only 85% . Accordingly, remaining 15% of the area under Municipal Council is still to be provided with the sewerage network.

The sewage of Gobindgarh is disposed off in Sirhind chow which is about 5.80 km. away from the existing Disposal works. The adjoining farmers along the rising main are using this sewage water for irrigation in farming sector which creates very serious problems to the human health. So sewerage treatment plant is required for treatment of sewage water as well as solid waste.

10.2.1 With regard to availability of sewage system at the micro level, it has been found that declared area is better placed as compared to undeclared area. Out of 7.65 sq.kms. of Covered/ declared area, the extent of area covered under the sewerage system is 6.50 sq.kms. which works out to be 85% of the this area. In the declared area 1.15 sq.km. area still remains to be provided with the sewerage system. Therefore, the declared area which has total coverage under water supply still has 15% area uncovered under the sewerage network With regard to undeclared area which comprises of 1.35

sq.km., there exists no provision of sewerage system and the population living therein are using septic tanks, soak pits and open drains as the mechanism for disposal of sullage.

10.2.2 In some areas of the town which is highly congested and where the network has been laid, the quality of sullage disposal is not at all satisfactory due to the sewer lines getting choked frequently. In the absence of storm water drainage facility available within the town, during the rainy season, the storm water also gets discharged into the sewer system thus overloading the network leading to backflow of sullage in the households etc. Further discharge of storm water into the network leads to heavy silting of the pipes reducing its overall capacity and discharge. Due to lack of periodic cleaning of the network, the efficiency of the system further goes down. The satisfaction level with regard to disposal of sullage even where the network exists has been found to be quite low among the end users.

10.2.3 The sewerage network covers an area of 72% of the total urban area and 85% of the declared area of the Council. The sewerage network laid within the declared area of 7.65 sq.km. Comprises of main sewer and distribution network. In all approx. 110 Km. length of the sewerage network has been laid so far.

Coverage of the town in terms of sewerage network has been shown on the plan.

10.2.4 It is estimated that the remaining area of Municipal Council to the tune of 28% of total urban area would require an additional network. The length of the network has been estimated to be 12 km. for an area of 2.5 sq.km. (comprising of area not under coverage/un-declared area) shall be the main sewer whereas the 900 kms. shall be the distribution network to cover the entire existing population and the area falling within the Municipal Corporation, Ludhiana.. The detail showing the area coverage and the extent of network laid besides the additional network requirement to cover the entire city is given in Table No. 1

Table No. 1

Detail of Existing & additional Sewerage Network required

| Sewerage network | Year -2008 | |
|----------------------|------------------|------------------------|
| | Current Coverage | Additional requirement |
| Area (Sq.Km) | 6.50 | 2.50 |
| <i>Sewerage Line</i> | 110 Km | 12 km. |

(Source: Municipal Council and PWSSB)

10.3 Population Coverage:

With regard to the population coverage, 72% of the total population of 0.55 lacs persons (2001 census) has the facility of sewerage system whereas 28% population does not have any access to the system with the result that they continue to suffer on account of polluted ground water and poor environment in and around their habitat. In the declared area which houses 47,093 (0.47 lac) population, only 40,029 (0.40 lac) persons have the facility of sewage disposal. Thus in the existing scenario, about 28% of the town area and 28% of the population is deprived of the basic facility of sullage disposal which has contributed to a large extent to the degradation of environment and quality of life in the town. The detail of municipal area, declared area and the population covered under the sewerage network is given in Table 2.

Table No. 2

Extent of area and population covered under the sewerage system

| Item | Area(in sq.km) | Area under coverage(%) | Population(in lacs) | Population coverage(%) |
|--------------------------------|-----------------------|-------------------------------|----------------------------|--|
| Total M.C. Area | 9.00 | 72% | 0.55 lac | 72% |
| Declared area | 7.65 | 85% | 0.47 | 85% |
| Area under coverage | 6.5 | 85% of declared area | 0.40 | 72% of declared area population |
| Area not under coverage | 1.15 | 15% of declared area | 0.07 | 13% of the total population |
| Un-declared area | 1.35 | 28% of the total area | 0.08 | 15% of the total population |

(Source: Municipal Council and PWSSB)

10.4 Waste Disposal:

In order to dispose of the sullage waste of the city, presently there is only one disposal works unit within the Municipal Council limit which is inadequate as per the study conducted by the Punjab Water Supply and Sewerage Board (PWSSB) total waste water for the projected population of this town in 2031 (2.88 lac persons) will be 55 mld out of which 14.78 cusecs will be industrial discharge for which STP of 55 mld capacity will be required and for this purpose 6.5 acre of land is required. The land for Sewerage Treatment Plant (STP) has been indentified in the vill. Kumbhra (HB No. 40) as shown on the map.

10.5 Key Issues:

- The area and the population still uncovered by the sewerage network.

- Low efficiency of the existing network particularly in the congested areas of the town.
- Poor maintenance and upkeep of the existing network.
- Large volume of untreated waste due to non-existence of sewerage treatment plant.
- Poor awareness about the scientific disposal of sullage waste.
- Disposal of rainwater into the sewerage network.
- Inadequate capacity of the existing net work.
- Disposal of non-organic solid industrial waste from industries.
- Existence of illegal connections.

It shall be desirable that drainage and sewerage projects are planned as integral parts of water supply systems. Recovery of costs for drainage and sewerage can be conveniently tagged to water supply charges.

CHAPTER - XI

STORM WATER DRAINAGE

The rain water in the present context is a precious source of water but neither the Gobindgarh town has any storm water network nor does it seem to be on the top priority list of Municipal Council so far. Moreover no concrete efforts are underway to conserve this valuable resource by ingenious methods of rain water harvesting due to which the rain water is largely discharged into the existing sewerage network leading to choking of the sewer pipes, overflow of the sullage and backflow of the sewerage water.

Therefore, it is a matter of great urgency to have a separate storm water network designed and put in place for this town along with the preservation of existing natural drainage network as an integral part of the developmental process by declaring them as protected areas.

It would also be worthwhile to explore the mechanism of rainwater harvesting to be made applicable for large industrial, residential, commercial and institutional areas to recharge the ground water.

CHAPTER - XII

SOLID WASTE MANAGEMENT

12.1 Introduction:

12.1.1 Solid waste can be defined as material that no longer has any value to the person who is responsible for its generation. At the same time, it is generally disposed off in open. The terms garbage, trash, refuse and rubbish are also commonly used to denote solid waste. Solid waste management includes all activities that seek to minimize its adverse impacts on health, environmental and aesthetics.

12.1.2 Growing urbanization and industrialization have led to generation of large quantities of solid waste which can be broadly classified as Municipal solid waste commercial and residential wastes generated in a Municipal of notified areas in either solid or semi solid form.

12.1.3 India produces approximately 36.5 million tones of MSW every year. The urban local bodies spend approximately Rs. 500 to Rs. 1500 per ton on solid waste for collection, transportation, treatment and disposal. About 60-70% of this amount is spent on collection, 20-30% on transportation and less than 5% on final disposal (India Country report, Taiwan). Out of the total solid waste collected, on an average 94% is dumped on land and 5% in composted. The uncollected waste finds its way into sewer, some is eaten by stray animals, some burnt on roadsides and some is left to rot in the open. All these practices lead to air and water pollution, clogging of sewers and ill health effects.

12.1.4 Today, no town is devoid of the heaps of garbage piled up in the street corners and road sides with the result that the total hygiene of the people and the environment has been mindlessly compromised. Today, the public and civic authorities are seriously looking into the solution of this mounting crisis. The existing methods of management of municipal solid waste in India are not only unscientific but also inadequate. At present not even 5% of the total waste produced is subjected to processing methods like biomethanation, composting, etc. for its reuse. This deplorable situation exists inspite of obligation on the part of the Local Authorities under the "Municipal Solid Waste (Management & Handling) Rules, 1998". These rules apply to every municipal authority responsible for collection, segregation, storage, transportation, processing and disposal of municipal solid wastes.

12.1.5 Punjab Pollution Control Board (PPCB) engaged Punjab State Council for Science & Technology (PSCST) to carry out detail study of solid waste management practices in the town of Gobindgarh to study the existing mechanism of storage, collection, transportation and disposal of municipal solid waste so as to develop economically viable strategies for its scientific management. The report below presents the findings of above agency:

12.2 Administrative structure for municipal solid waste management

Gobindgarh town is the class-II tier with Type A municipal council covering an area of 9sq. km. with existing population for the year 2007 worked out as 77,144 with additional floating population of 19,500 divided into 19 wards and each ward being represented by elected councilor. Municipal solid waste management in the town is carried out by the Municipal Council headed by the President. The administrative head of the municipal council is Executive Officer who carries out the work with the help of sanitary inspectors, sanitary supervisor and sanitary mates. Municipal council handles the collection and transportation of municipal solid waste from 12 wards where as rest of the 7 wards are covered by a private contractor. The overall manpower employed for municipal solid waste collection and transportation is 178 (including contractor's employees).

12.3 Present status

12.3.1 The storage and collection practices in Gobindgarh town vary from family to family. MC/Contractor employees or private sweepers engaged by the owner, collect the waste from source and then either dump it at designated Primary Collection Centers (P.C.C.) or throw it in the open. A total of 26 designated PCCs and approximately 100 open dump sites have been identified. Most of the PCCs are on private property except two on MC's land.

No segregation of municipal solid waste is being practiced at individual house. However, ragpicker (approximately 150 in number) do pick up lot of recyclable waste (apprx. 7.5 tons) from PCCs and open dump sites.

12.3.2 For estimating the quantity of municipal solid waste generated from Gobindgarh town, door-to-door survey of the town was done by PSCST engineers. Solid waste from Residential, Commercial, Vegetable & Fruit market, Hotels & Restaurants, Slaughter Houses, Dairy & Cattle Shed Waste, Construction & Demolition waste etc. was estimated separately.

12.3.3 "It was found that the total municipal solid waste generation from the town is 44 tons/day, thus resulting to per capita generation of 420 g against a population of 96,654. Out of 44 tons, residential area alone generates 31 tons of waste, thus leading to 320g/capita for residential waste.

12.3.4 It was noticed that on a particular day from collection and transportation perspective, Municipal Council and contractor both are able to cover only 60-70% of the town. One Dumper Placer and four tractor trolleys are being used to transport the waste from PCCs to the final landfill site, currently located on Ajnali road. The present land fill site measuring 2 acres, belongs to municipal council Gobindgarh and is located around 4 kms. from the office of MC/ Bus Stand and lies between railway track and G.T. Road. There is proper boundary wall with gate and drinking water arrangement. The solid waste is being dumped into trenches without paying proper attention to the leakages. An earlier land fill site measuring 16 acres near Ambe Majra (in operation from 1987 to 2004) located in vill. Kumbhra has been converted into a truck stand. Since, the present site is likely to get filled up very soon, MC is negotiating with some farmers to acquire new site called 'Bagh Sikander' measuring 6 acres between vill. Dadheri and Bagh Sikander. This site is about 9-10 kms from the office of MC and is on other side of the railway track. At the new proposed site, transportation of waste could be time consuming due to frequent closure of railway crossing on a busy Ludhiana-Ambala railway line.

12.3.5 Municipal council Gobindgarh was recommended to keep the following crucial points in mind while selection the new landfill site:

1. Baseline data of ground water quality in the area shall be collected and kept in record for future reference.
2. Waste from land-fills leaches into the aquifer below. Hence, hydrological attributes of the possible site as well as the water usage must be taken into consideration.
3. The land-fill should be preferably away from habitation zones, forest areas, water bodies, monuments, national parks, wetlands and other places of significance.
4. A buffer zone of no-development should be maintained around the land-fill site.
5. It should be away from airports/ railway stations etc.
6. It should be nearer to the solid waste processing facilities.

7. Ideally, waste processing facilities should be designed as an integral part of a land-fill site.
8. It should be large enough to last for twenty to twenty five years.
9. Direction of wind should be kept in view while selecting the site.

The municipal solid waste can be divided into following three categories

| A | B |
|---------------------|--------------------------|
| Residential | Industrial |
| a. Organic Waste | a. Inorganic solid waste |
| b. Inorganic Waste | |
| c. Recyclable Waste | |

12.3.6 About 27% of total solid waste (worked on the 7 day generated and 6 day lifting basis) remains uncollected. Some of this waste finds its way in sewers, some is left to rot in the open and some is burnt on road sides.

12.4 Infrastructure Available

12.4.1 The infrastructure employed for municipal solid waste management in the town (available with the council and the private contractor) is given below:

Table No. 1
Detail of Infrastructure

| Sr. No. | Equipment | No. of equipments |
|----------------|------------------------------|--------------------------|
| 1. | Dumper Placers | 2 |
| 2. | Tractor Trolleys | 5 |
| 3. | Road Cleaning Machine | 1 |
| 4. | Water Tankers | 2 |
| 5. | Wheel Barrows | 124 |
| 6. | Tricycles | 46 |

12.4.2 There is no container in Ward #s 10,11 and 15, due to which open dumping is being practiced. In case of open dumping sites, sweepers & residents throw the waste haphazardly and one can observe very unhealthy and unsightly conditions around these dumping sites. This waste is ultimately being transported to the landfill site by tractor trolleys.



12.4.3 The present landfill site is expected to get filled very soon, MC authorities are looking for a new landfill site. However, due to non availability of any suitable site presently, the local Govt. deptt. has decided to transport the solid waste to Ludhiana and the town Khanna will be the transit/transfer station (a station in between the PCCs and disposal/ processing site where waste can be segregated). This process/ system will provide the city healthy environment which is the basic need of the people.

CHAPTER - XIII

EXISTING LAND USE

13.1 Preparation of base map

The work of preparation of base map for the Local Planning Area, Gobindgarh was assigned to Punjab Remote Sensing Centre, P.A.U., Gobindgarh as per the decision taken in the meeting held on dated 20th October 2007 in the committee room of PRSC, Ludhiana and as per the instructions issued to Punjab Remote Sensing Centre, Ludhiana by Chief Town Planner, Punjab vide their memo no. 4827 CTP (Pb.)/ SP 480 dt. 22-10-2007. The base map of entire Local Planning Area, Gobindgarh was prepared on scale 1:25,000 using Cartosat I data. The Cadastral maps of the villages falling in Local Planning Area were procured from the District Revenue Office by the office of District Town Planner, Gobindgarh and these maps have been scanned in the office of PRSC, Ludhiana and registered with Cartosat I data to demarcate village boundaries. The features like roads, rails, high and low lands, canals, minors, drains and settlements etc. have also been delineated from Cartosat I data by the concerned agency and shown on the draft base map prepared on the basis of satellite imagery. After editing the details of map, the attributes to different features were assigned. After the preparation of Local Planning Area, Gobindgarh drawing. no. {DTP (FGS) 1041/09 dt. 27-02-2009} on **scale 1:25,000** using Cartosat I data, the google sheets for densely populated built up areas of Gobindgarh town (core areas) were supplied by the PRSC, Ludhiana using Quickbird satellite data received by the PRSC, Ludhiana from National Remote Sensing Agency, Deptt. of Space, GOI, Hyderabad.

13.2 Enhancement through field surveys- Land use and Road network

The draft base map for the Local Planning Area, Gobindgarh and the densely built up areas (i.e. core areas) received from Punjab Remote Sensing Centre, P.A.U., Ludhiana were updated through ground truthing conducted by the office of District Town Planner, Gobindgarh. The various land uses have been identified at the site and earmarked accordingly. Similarly the road network, drains, distributaries and other communication zones have been verified and checked at site. After conducting field surveys, the necessary feedback was supplied to P.R.S.C. Ludhiana which after incorporating the same ultimately prepared an updated base map. The Office of District Town Planner, Gobindgarh again conducted second round of field verification (ground truthing) and the corrections were then supplied to P.R.S.C. and the staff of D.T.P. office

personally assisted the concerned staff of PRSC in getting them incorporated and a final Existing Land Use Plan thus was prepared.

13.3 Existing Land use: L.P.A. Gobindgarh

The base map Drg no. DTP (FGS) 1257/09 dt. 13/10/09 prepared by the Punjab Remote Sensing Centre, Ludhiana as described above shows the existing landuse of Local Planning Area Gobindgarh, the break up of Existing Landuse of Local Planning Area Gobindgarh is as under:

Table No.1

EXISTING LAND USE OF LOCAL PLANNING AREA GOBINDGARH-2009

| Sr. No. | Land-Use | Area (Acs) | % age |
|----------------|----------------------------|-------------------|-----------------|
| 1. | Residential | 2330.00 | 6.82 % |
| 2. | Commercial | 106.00 | 0.31 % |
| 3. | Industrial | 1727.00 | 5.06 % |
| 4. | Traffic & Transporation | 854.00 | 2.50 % |
| 5. | Public & Semi Public | 186.00 | 0.54 % |
| 6. | Recreational | 33.00 | 0.10 % |
| 7. | Governmental | 16.00 | 0.05 % |
| 8. | Agriculture & water bodies | 28913.04 | 84.62 % |
| Total | | 34165.04 | 100.00 % |

13.4 Existing Land Use - Gobindgarh (M.C.)

The total area of Municipal Council Gobindgarh is 9 sq. kms. The detail of major existing land uses within Municipal Council is given as below:

Table No. 2

DETAIL OF AREA WITHIN M.C. GOBINDGARH

(Area 2223 Acres) - Year 2009

| Sr. No. | Land Use | Area (Acres) | %age |
|----------------|--|---------------------|-------------|
| 1. | Residential | 700 | 31.49 |
| 2. | Commercial | 97 | 4.36 |
| 3. | Industrial | 750 | 33.74 |
| 4. | Traffic & Transportation | 304 | 13.68 |
| 5. | Facilities and Utilities Public & Semi public (including Governmental) | 102 | 4.59 |
| 6. | Recreational | 33 | 1.48 |
| 8. | Agriculture & water bodies | 237 | 10.66 |
| Total | | 2223 | 100% |

13.5 Residential

It is clearly evident from the table above that residential use has developed at almost purity in this industrial town because out of the total area of 2223 Acs., 700 Acs. has developed as residential use in comparison to 750 Acs which has developed as industrial use. Out of this 700 Acs. area under residential use, detail of planned regulated area as per table - 3 below & plan attached overtly indicates that merely 9.43 Acs. i.e. (1.35%) area has developed as planned/ regulated scheme for residential where as rest of large Chunk of residential area has developed organically without rules/ regulation & comprising of narrow roads, lack of proper/enough parking spaces, open spaces, etc.

Table No. 3

Planned Regulated Areas

| Sr. No. | Name of Scheme | Name of agency | Area in acres |
|----------------|-------------------------------|---|----------------------|
| 1. | Grain Market | Punjab Agriculture & Marketing Board | 45 |
| 2. | Industrial Focal Point | PSIEC | 209.62 |
| 3. | Residential Colony | Town & Country Planning, Punjab | 9.43 |
| | Total | | 264.05 |

13.6 Commercial

The commercial use is the most important use of the urban areas. It may have lesser share in area but plays and important role in town character. In case of Gobindgarh town the total area covered under commercial use is 4.36% of the total Municipal Council area. The main commercial hub of town in Gobindgarh which acts as CBD of the town is located along railway road at the main junction of G.T. with Gobindgarh-Amloh road. Besides this motia-khan market located in Subhas Nagar has commercial area mainly dealing with sale/purchase of industrial raw material as well as manufactured products.

13.7 Industrial

13.7.1 The town being predominantly an industrial town has developed 750 Acs. (33.74%) out of total area of 2223 Acs. as industrial use. Gobindgarh town is the most flourishing industrial town in Fatehgarh Sahib District as well as in the state and is well known as 'Steel Town' of India contributing 25% of national steel requirement. Now the town is rightly called as “Birmingham of Punjab” and is catering to domestic as well as international steel requirements. Despite the fact that Department of Industries of the Punjab (PSIEC) has developed and planned focal point in an area of 209.62 acres in vill. Ajnali, still large no of Industries are spread over the Gobindgarh town and adjoining area of the Gobindgarh particularly along the G.T. road, Gobindgarh-Amloh road and Khanna-Amloh road. For ensuring the quality product as well as to increase the efficiency of work force, the Govt. has established Industrial Development Centre at Gobindgarh and National Institute of Secondary Steel Technology (N.I.S.S.T). Industrial Development Centre provides technical assistance to the rolling mill to improve the quality of finished product i.e. Iron bars, Channels, Girders etc. and help them in modernizing the units. This centre also provides facilities for testing of raw material as well as the finished products to the mill-owners where as N.I.S.S.T established by Govt. of India (Ministry of Steel) in May, 1988 provides assistance/technical know-how for upgradation of induction furnaces and forging units. This institute imparts training to the workers to improve their skills and also gives 2 years diploma in the trade of Secondary Steel Technology and also provides assistance regarding industrial services, pollution control, energy conservation measures for industrial units.

13.7.2 Large scale industrial units constitute only 0.35% of the total industrial units existing in the town whereas share of small scale industries have been found to be of the order of 40%. The growth of large scale industrial units has been found to be stagnant, with total no. of units staying at 2 (two) from 1997 to 2001. As compared to the large scale industries, the growth of small scale industrial units have been better placed during the last decade. In absolute terms, the number of small scale units have grown from 280 to 346 during the period 1997-2006 unlike large scale industries, no negative growth in the number of small scale industrial units has been recorded. Accordingly Gobindgarh continues to be known as hub of the small scale industries.

13.7.3 MIXED LAND USE ZONES

The co-existence of residential with commercial and residential with industrial activities is a common character of our cities. This character is more prevalent in organically grown towns like Gobindgarh as per Existing land use plan. This character of land use generally called “Mixed Land use” has developed over a period of time necessitated by the socio-economic habits of the people. The economic role played by these areas cannot be ignored. Hence it is imperative to make these areas continue to play an active economic role and the suitable strategy is required for allowing mixed use activities appropriate to the character of the areas with greater flexibility in terms of permitting green and low air polluting industries along with residential use in these areas.

13.8 Traffic and Transportation

This land use comprises of roads, railway line & station, truck terminus, bus stand, bridges etc. As per table no. 2 of existing landuse, the total area covered by this land use is 854 Acs. which is 2.50% of the total M.C. area which is inadequate.

13.9 Public & Semi-Public

This land use comprises of areas covered under Govt./ Semi Govt. offices, Education, Health Socio-cultural, Cremation grounds etc. As per table no. 2 of existing land use, the total area covered by this use is 102 Acs. which is 4.59% of the total M.C. area 2223 Acs. and is adequate.

13.10 Recreational

This land use comprises of playgrounds, stadiums, sports complex, parks and gardens. As per the table no. 2 of existing landuse, the total area covered by this use is 33 Acs. which is 1.48% of the total M.C. area. It comprises of mainly floating restaurant on the G.T. road, Maharaja Agarsain Park, Babu Nand Kumar Gupta Memorial Green Park



13.11 Agricultural

There are small unevenly distributed chunks of agricultural land falling within M.C. limits which comprises of 237 Acs. which is 10.66% of the total M.C. area.

CHAPTER - XIV

SOCIAL INFRASTRUCTURE

14.1 Introduction

14.1.1 Social infrastructure constitutes various facilities pertaining to education, health, recreational, cultural and other public amenities/ facilities available in urban areas at various levels whose availability and accessibility determines the quality of life of an urban centre. Therefore, provision of social infrastructure of appropriate level assumes high significance in the context of growth and development of urban areas for which it becomes essential pre-requisite to properly assess the adequacy/ inadequacy of existing Social infrastructure based on population norms defined, qualitatively, quantitatively and spatially because for efficient functioning of urban areas, it is not merely the quantity or quality of social infrastructure but more importantly the spatial distribution of these facilities in a manner that will help in improving the operational efficiency of the town as well as the surrounding areas.

14.1.2 In addition, it needs to be ascertained that spatial distribution of the social infrastructure is such that it is available to the entire population and is within their easy reach. Often it is found that social infrastructure are concentrated in few pockets of the town whereas certain areas have been found to be deficient. This adversely impact the community living in deficient areas which are required to travel considerable distance to avail them. In the process, town faces problems due to unnecessary travel necessitated by irrational distribution of these services. According for proper and efficient functioning of the urban centres it is not only critical, that urban infrastructure in appropriate quality and quantity are provided but also it will be important that they are spatially distributed in a manner. So as to cover the entire town and its population. This would not only minimize travel with in the town but would also improve the operational efficiency of the town and its community. Based on this premise the available social infrastructure in the Gobindgarh metropolis have been studied and evaluated.

14.2 Educational Facilities

Educational Facilities certainly impact the quality of manpower available in the urban areas. In addition, these facilities have been found to leverage the economic growth development and employment. The Local Planning Area Gobindgarh has adequate academics and technical education facilities as is clearly evident from the Table No.1.

Table No. 1
No. of Educational Institutions in the Local Planning Area-Gobindgarh

| Sr. No. | Name of Facility | Existing in Numbers | Govt. | Private organization | Urban Area Gobindgarh | Rural Area |
|--------------|--------------------------|---------------------|-------------------|----------------------|-----------------------|------------|
| 1. | Elementary Schools | 55 | 55 | - | 7 | 48 |
| 2. | Middle Schools | 7 | 7 | - | - | 7 |
| 3. | High Schools | 7 | 7 | - | - | 7 |
| 4. | Senior Secondary Schools | 7 | 4+1=5 Govt. Aided | 2 | 5 | 2 |
| 5. | Degree College | 2 | 1 | 1 | 1 | 1 |
| 6. | Technical Institutions | 3 | 1 | 2 | 1 | 2 |
| 7. | I.T.I | - | - | - | - | - |
| 8. | B.Ed College | 2 | - | 2 | 1 | 1 |
| 9. | University | - | - | - | - | - |
| Total | | 83 | 76 | 7 | 15 | 68 |

(Source DEO. & DSO, Fatehgarh Sahib)

The above academic/ technical educational facilities are well distributed especially as shown on the plan attached and are as per norms framed by the Centre as well as the State Govt.

14.3 Medical Facilities

The work of providing medical relief was greatly accelerated after Independence. Under the democratic set-up the need of healthy life has been realised. Since the launching of the Five Year Plans, rapid strides have been made in the expansion of medical services in this area. As per shown in the table below, number of medical institutions such as hospitals, clinics and dispensaries have been established which have adequate and qualified staff. The detail of the medical facilities is given below:

Table No. 2
Medical Facilities

| Sr. No. | Name of the Facility | Existing in No. | Urban | Rural |
|--------------|------------------------------|-----------------|-----------|----------|
| 1. | Hospital | | | |
| | i) upto 25 beds | Nil | - | - |
| | ii) upto 50 beds | 1 | 1 | - |
| | iii) upto 100 beds | Nil | - | - |
| 2. | Primary Health Centre | Nil | - | - |
| 3. | Sub-Health Centre | 7 | - | 7 |
| 4. | Ayurvedic Dispensary | 1 | 1 | - |
| 5. | E.S.I. Dispensary | 2 | 2 | - |
| 6. | Private Nursing Home | 6 | 6 | - |
| Total | | 17 | 10 | 7 |

(Source: Health Department)

Apart from the above medical facilities, there are enough veterinary institutes for the live stocks population of this area as shown in the table below:-

Table No. 3
Veterinary Facilities

| Sr. No. | Name of the Facility | Existing in No. | Urban | Rural |
|---------|----------------------|-----------------|-------|-------|
| 1. | Hospital | 4 | 1 | 3 |
| 2. | Dispensary | 6 | 1 | 5 |
| Total | | 10 | 2 | 8 |

14.4 Post and Telegraph:

The new age technology has taken great strides as far as modes of communications are concerned which are not only faster but cheaper also. Still, post and telegraph remains the most popular option of communication for vast chunk of population which in the Indian context is still from the rural strata.

There are 12 post offices operational in the L.P.A. Gobindgarh out of which eleven are number branch level post offices and sub-post office at Gobindgarh as shown in the table below :-

Table No. - 4
Post Offices

| Sr. No. | Name of the Facility | Existing in Numbers |
|---------|----------------------|---------------------|
| 1 | Branch Post Office | 11 |
| 2 | Sub Post Office | 1 |
| 3 | Head Post Office | - |

(Source: Superintendent Post office)

It is obvious that Local Planning Area Gobindgarh is well served as far as this mode of communication i.e. post & telegraph is concerned. The town also has a telephone exchange facility located in the centre of the town.

14.5 Recreational Facilities:

14.5.1 Recreational facilities constitute an important element of physical and social development of an individual and for that reason, their provision and balanced spatial distribution at the local, sub-city and town level assumes importance. This town being predominantly an industrial town has negligible recreational facilities. There is only one cinema in dilapidated condition and apart from it, the town does not have any town level library, stadium or auditorium etc. as evident from the table below:

Table No-5
Recreational Facilities

| Sr. No. | Name of the Facility | Existing in Numbers |
|---------|----------------------|---------------------|
| 1 | Parks | 3 |
| 2 | Cinemas | 1 |
| 3 | Multiplex | - |
| 4 | Stadium | - |
| 5 | Museum | - |
| 6 | Swimming Pool | - |
| 7 | Clubs | 1 |
| 8 | Library | - |
| 9 | Amusement Park | - |

(Source: Municipal Council, Gobindgarh)

Even the existing level of parks which are aesthetically landscaped/ maintained
(as shown in the pictures)





but are inadequate and do not conform to the planning norms specified for parks and open spaces. Thus there is an urgent need to create adequate number of additional parks and open spaces in the town as per the specified norms besides ensuring their rational distribution in the town in order to ensure their availability to all the residents of the town including poorest of the poor.

14.5.2 In addition to the open spaces, city would require the creation of sports facilities at the neighbourhood level and at the town level with the aim of development of sports and play areas for all age groups at appropriate levels. To achieve this objective, sports facilities at various levels of the town. Including housing clusters, neighbourhood, district and town on as per norms should be created. Sports facilities should be developed based on a well defined layout plan and landscape plan with adequate parking facility. In addition, the existing sports infrastructure should be upgraded and efficiently replanned to improve the level of facilities. New play field areas should be preferably provided / developed in the vicinity of educational institutions and landscaped areas. In order to facilitate the provision of sports related facilities available open spaces within

the existing educational or other institutions should be considered as the best options in order to optimize the use of scarce open spaces available within the town. The sports facilities should be made integral part of institutional development for making their optimum use.

14.5.3 In the present scenario, with the advancement of technology in the sphere of Telecommunication sector, large number of private investors have entered into this sector for providing these services to the public. Keeping in view the enormous communication network by private investors and increasing population, the govt. sector is also required to expand/ upgrade its existing operational system of communication for the overall development of economy as well-fare of the public at large.

CHAPTER - XV

PROJECTIONS AND PROPOSAL FOR PLANNING AREA GOBINDGARH-2031

15.1 Introduction

Considering the role, impact, growth and contribution made by the town Gobindgarh to the economy, the task of preparation of Master Plan, Gobindgarh under the Punjab Regional and Town Planning and Development (Amendment) Act 2006 with the perspective year 2010-2031 has been undertaken. "For retaining the Sanctity of Gobindgarh town as an important industrial centre of Punjab as well as to develop it as an institutional hub by augmenting its regional connectivity and to achieve the quality of life through the provision of better Physical and Social infrastructure in a sustainable manner", population projection for the decade 2011, 2021 and 2031 etc. is required for the provision of amenities and facilities.

15.2 Population Projection

15.2.1 The population is the basic human factor for which planning is done. The future development of any town mostly depends on trade expansion, development of industries, and expansion of civic infrastructure etc. These elements may produce sharp rises or slow growth or stationary or decreasing conditions for the population. The requirements of different types of infrastructure for Gobindgarh town and for surrounding villages of LPA Gobindgarh in 2031 would be based on the projected population for that year and also migration of population that seeks livelihood in the town. For the purpose of population projections, following two methods have been applied:

1. Ratio method or sharing pattern method.
2. Extrapolation method: Extrapolation of the past trends and assuming that the trend will continue in future.

15.2.2 In addition to this, the government policies, specifically industrial policies and the opportunities affecting the growth of Gobindgarh town and rural areas of LPA Gobindgarh have also been kept in mind.

The table below gives the detail of decadal growth rate of population of Gobindgarh town, population of rural areas and total population of LPA Gobindgarh.

Table No. 1**Growth rate of Population of Gobindgarh town, Rural Area and L.P.A.****Gobindgarh - 1981, 1991, 2001**

| Sr No. | Year | Gobindgarh town (M.C.) | | Gobindgarh M.C.+U.A. | | Rural | | Total | |
|--------|------|------------------------|------------------|----------------------|------------------|------------|------------------|------------|------------------|
| | | Population | Growth rate %age | Population | Growth rate %age | Population | Growth rate %age | Population | Growth rate %age |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 1981 | 26637 | - | 26637 | - | 41283 | - | 67920 | - |
| 2 | 1991 | 40175 | 50.82 | 42063 | 57.91 | 47071 | 14.02 | 89134 | 31.23 |
| 3 | 2001 | 55403 | 37.90 | 60677 | 44.25 | 58119 | 23.47 | 118796 | 33.28 |

Source: District Census Handbook 1981,1991,2001, Fatehgarh Sahib

15.2.3 The above table clearly indicates that the average growth rate of two decades i.e. 1981-1991 & 1991 to 2001 for Gobindgarh town (along with urban agglomeration) is 51.08% and for rural, it is about 18.75%.

Method - 1**Ratio Method of Sharing Pattern Method**

15.2.4 In order to achieve more realistic picture of projected population it has been decided to follow the share of urban and rural population of LPA Gobindgarh to the total urban and rural population of Punjab state. Report of the technical group on Population projections constituted by the National Commission on Population entitled "POPULATION PROJECTIONS FOR INDIA AND STATES 2026" has provided projection of Punjab urban, Punjab rural and their share in the total population of the state upto year 2026 as represented in table below:

Table No. 2**Projected population of Punjab Urban 2001-2026 (population in lacs)**

| Year | 2001 | 2006 | 2011 | 2016 | 2021 | 2026 |
|---|--------------|--------------|--------------|--------------|--------------|---------------|
| Punjab Total | 24359 | 26059 | 27678 | 29112 | 30323 | 31345 |
| Punjab Urban | 8263 | 9439 | 10681 | 11940 | 13185 | 16456 |
| Percentage Urban | 33.92 | 36.22 | 38.59 | 41.01 | 43.48 | 52.50 |
| Growth rate of Punjab Urban in % | - | 14.23 | 13.16 | 11.79 | 10.43 | 24.81 |
| Punjab Rural | 16096 | 16620 | 16997 | 17172 | 17138 | 14889 |
| Percentage Rural | 66.08 | 63.78 | 61.41 | 58.99 | 56.52 | 47.50 |
| Growth rate of Punjab rural in % | - | 3.28 | 2.26 | 1.03 | -0.20 | -13.14 |

(Population in Thousands)

15.2.5 The percentage share of Gobindgarh town and rural population of LPA Gobindgarh to total urban and rural population respectively of Punjab is calculated and is given in table below:

Table No. 3

Percentage share of Gobindgarh town and rural population of LPA Gobindgarh to Total Urban and Rural Population respectively of Punjab is calculated and is given in Table below:

| Sr. No. | Percentage share of Gobindgarh town to the Total Urban Population of Punjab 1981-2001 | | | Gobindgarh M.C.+U.A. | | | Rural | | |
|----------------|--|-------------|-------------|-----------------------------|-------------|-------------|--------------|-------------|-------------|
| | 1981 | 1991 | 2001 | 1981 | 1991 | 2001 | 1981 | 1991 | 2001 |
| 1. | | | | | | | | | |
| 2. | 0.57 | 0.67 | 0.67 | 0.57 | 0.70 | 0.73 | 0.34 | 0.33 | 0.36 |

(Source: Census of India 1981, 1991, 2001)

15.2.6 For projecting the urban population of Gobindgarh town, the percentage of urban population (including population of Urban agglomeration) of the town to that of total urban population of Punjab for the year 2001 which works out to be 0.73% has been used constantly for projecting the urban population upto 2031. Besides this, the floating population of about 25% has also been added to the projected population.

Similarly, for projecting the rural population of LPA Gobindgarh, the percentage share of villages of LPA Gobindgarh to that of rural population of Punjab state which works out as 0.36%, has been constantly used upto the year 2021. Because the growth rate of Punjab Rural population during the year 2016-2021 and 2021-2026 is negative, therefore for the decade 2021-2031, the growth rate of 0.30% has been used for projecting the population.

The projected population of Gobindgarh town and LPA rural is given in the table below:

Table No. 4

Projected Population and Growth rate of Gobindgarh M.C. (including Urban Agglomeration) and Rural Area and Local Planning Area Gobindgarh

| Year | Gobindgarh M.C.+U.A. | | | Rural Areas | | LPA Gobindgarh | |
|-------------|--|--|-------------------------|--|-------------------------|--|-------------------------|
| | Projected population in thousands | Total projected population including 25% of total as floating population in thousands | Growth rate %age | Projected population in thousands | Growth rate %age | Projected population in thousands | Growth rate %age |
| 2006 | 63 | 79 | - | 59 | - | 138 | - |
| 2011 | 82 | 102 | 29.11 | 60 | 1.69 | 162 | 17.39 |
| 2016 | 106 | 132 | 29.41 | 61 | 1.67 | 193 | 19.41 |
| 2021 | 137 | 171 | 34.09 | 62 | 1.64 | 233 | 20.72 |
| 2026 | 177 | 222 | 29.82 | 63 | 1.61 | 285 | 22.32 |
| 2031 | 230 | 288 | 29.73 | 64 | 1.59 | 352 | 23.51 |

Method - 2

Population Projection by Extrapolation Method

15.2.7 Apart from above method, another method is extrapolation of past trends and assuming that the trend will continue in future.

The average growth rate of Gobindgarh town for past two decades 1981-1991 and 1991-2001 comes out 44.36% whereas for rural areas it is about 24.04%. For calculating the projected population of Gobindgarh town, the average growth rate of 45% is assumed for year upto 2031. For rural areas, taking into account the trend of growth rate for the decade 2001-2011 it is assumed as 18% and then again taking.

Population projection is to analyze the past data for a number of years and to extrapolate the past trends assuming that the conditions will continue in the future. The following data show the present and the projected population for the year 2031:

Table No. - 5

**Projected Population for Gobindgarh city and Rural Areas of Local Planning Area
Gobindgarh**

| Sr. No. | Year | Gobindgarh M.C.+ U.A. | | Rural Areas | | LPA Gobindgarh |
|---------|------|---|----------------------------|---|----------------------------|-------------------|
| | | Population in thousand persons | Growth rate in % age | Population in thousand persons | Growth rate in % age | |
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| 1. | 2001 | 61 | - | 58 | - | 119 |
| 2. | 2011 | 93 | 45% | 68 | 18% | 161 |
| 3. | 2021 | 141 | 45% | 77 | 13% | 218 |
| 4. | 2031 | 214 | 45% | 83 | 8% | 297 |

Source: District Handbook 1981,1991,2001

15.3 Assumptions for Population Projection

1. Gobindgarh town is a renowned steel town of national/ international importance with type A municipal status.
2. Strategic location of the town on the N. H. NO. 1 and its well developed rail/ road network makes it highly attractive for large investments by the enterpreneurs.
3. Vast industrial activity of Gobindgarh town has resulted in expansion towards Sirhind town, Khanna and Amloh side.
4. The town is an important link on the centrally sponsored Kolkatta- Ludhiana freight railway corridor.
5. The present industrial policy of the state has given special incentives to the Industries in the form of concessions granted by way of waving of C.L.U and Licence fees etc.

15.3.1 The following table gives the comparative picture of projected population for Gobindgarh town, Rural areas and LPA Gobindgarh for 2031 by two methods:

Table No. 6

Comparison of Projected Population of Gobindgarh M.C., Gobindgarh M.C.+U.A., Rural Areas and LPA Gobindgarh by Two Methods: in 2031

| Sr. No. | Method | Gobindgarh M.C.+U.A. Projected Population in thousand persons | Rural Area Projected Population in thousand persons | LPA Gobindgarh Projected Population in thousand persons |
|----------------|-----------------|--|--|--|
| 1. | 2. | 3. | 4. | 5. |
| 1. | Method 1 | 288 | 64 | 352 |
| 2. | Method 2 | 214 | 83 | 297 |

Source: District census 1981,1991,2001

15.3.2 Out of the above two methods, Population Projected by Method No. 1 is adopted for the plan formulation, because development of trade commerce, industrial sector in planned manner and new govt. industrial policies at present & likely to be framed by the Govt. will aggravate the pace of development of this region. Despite the decreasing growth rate of Gobindgarh town, it is likely to retain its share of urban population. The Projected Population of Gobindgarh town therefore has been taken as 2,88,000 persons for the year 2031.

15.4 Villages of Urban Fringe Gobindgarh Town

15.4.1 Eight villages of LPA Gobindgarh which are situated near the M.C. limit are assumed to attain urban character in near future and will act as an urban fringe around the town. The villages along with their population for the years 1981 to 2001 included in this fringe area as shown in table below:

Table No. 7**Villages and Population included in Urban Fringe (1981-2001)**

| Sr. No. | Name of Village | H.B. No. | Population | | |
|---------|------------------|----------|------------|------|-------|
| | | | 1981 | 1991 | 2001 |
| 1. | 2. | 3. | 4. | 5. | 6. |
| 1. | Jassran | 2 | 1185 | 1795 | 2354 |
| 2. | Majri Misri Wali | 3 | 91 | 119 | 139 |
| 3. | Turan | 4 | 794 | 1262 | 1764 |
| 4. | Mughal Majra | 62 | 410 | 488 | 731 |
| 5. | Ajnali | 65 | 1364 | 1778 | 3965 |
| 6. | Ambe Majra | 69 | 820 | 1027 | 1647 |
| 7. | Kotla Dadheri | 201 | 909 | 1192 | 1656 |
| 8. | Daheri | 202 | 1884 | 2099 | 2511 |
| Total | | | 7457 | 9760 | 14767 |

Source: District census Handbook 1981,1991,2001

15.4.2 Population projection of above villages have been done separately to assess the urban thrust and has been calculated as per the method no. 1 adopted for calculating the projections for villages falling in LPA Gobindgarh but with the constant growth rate of 0.36% upto the year 2031. The projected population of these villages is given in table below:

Table No. 8**Projected Population of villages included in Urban Fringe**

| Year | 2006 | 2011 | 2016 | 2021 | 2026 | 2031 |
|----------------------|-------|-------|-------|-------|-------|-------|
| Projected Population | 15000 | 15300 | 15600 | 15900 | 16200 | 16500 |

The consolidated population of Gobindgarh town and its fringe area are given in table below:

Table No. 9**Projected Population of Gobindgarh M.C.+U.A. and its Urban Fringe**

| Year | 2006 | 2011 | 2016 | 2021 | 2026 | 2031 |
|----------------------|------|------|------|------|------|------|
| Projected Population | 94 | 117 | 148 | 187 | 238 | 305 |

(In thousands)

15.5 Workforce Projections

For calculating the workforce projection, LPA Gobindgarh is divided into two parts:

1. Gobindgarh town (including urban agglomeration)
2. Villages in LPA, Gobindgarh

Employment data category wise is available for Gobindgarh town, Fatehgarh Sahib, LPA Gobindgarh, Rural and Urban. For the year 2001 and forecast for the year 2031 are calculated as given in tables below:

Table No. 10

Detail of Main Workers of Gobindgarh town (Including U.A) to the Total Population and Category wise Employment to Main Workers (Year 2001)

| Sr. No. | Category | Gobindgarh M.C.+U.A. | Main workers as % of population and Category as % of Main workers | L.P.A. Rural | Main workers as % of population and Category as % of Main workers | L.P.A. Gobindgarh | Main workers as % of population and Category as % of Main workers |
|---------|------------------------|----------------------|---|--------------|---|-------------------|---|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
| 1. | Population | 60677 | - | 58119 | - | 118796 | - |
| 2. | Main Workers | 19559 | 32.23% | 23880 | 41.09% | 43439 | 36.57% |
| a) | Cultivators | 155 | 0.79% | 5342 | 22.37% | 5497 | 12.65% |
| b) | Agricultural Labourers | 62 | 0.32% | 1713 | 7.17% | 1775 | 4.09% |
| c) | House Hold Industries | 175 | 0.89% | 237 | 0.99% | 412 | 0.95% |
| d) | Others | 19167 | 98.00% | 16588 | 69.47% | 35755 | 82.31% |

Source: District census Handbook 2001

Table No. 11

Projected Main Workers and employment category wise in LPA Gobindgarh 2031

| Sr. No. | Data and Assumption 2031 | Gobindgarh M.C.+U.A. | L.P.A. Rural | Total |
|---------|--------------------------|----------------------|--------------|----------|
| | Population | 2,88,000 | 64,000 | 3,52,000 |
| | Main Workers | 92,800 | 26,300 | 1,19,100 |
| 1. | Cultivators | 730 | 5880 | 6610 |
| 2. | Agricultural Labourers | 300 | 1890 | 2190 |
| 3. | House Hold Industries | 830 | 260 | 1090 |
| 4. | Others | 90940 | 18270 | 109210 |

Source: District census Handbook 2001

15.6 Population Density

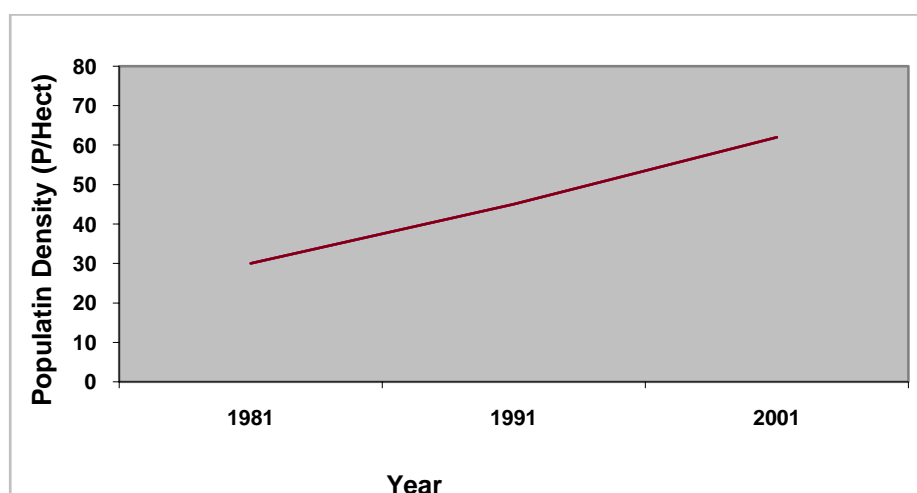
The Density of population is the sole indicator to highlight the intensity of the developed area with the help of which area requirement can be determined.

Table No. 12

Population density

| Year | Population Density | |
|------|--------------------|-----------------|
| | Persons/Sq.Km | Persons/hectare |
| 1981 | 2960 | 30 |
| 1991 | 4464 | 45 |
| 2001 | 6156 | 62 |

Density of population has risen from 30 persons per hectare in the year 1981 to 62 persons per hectare in the year 2001.



15.7 Occupational Structure

Table No-13

Growth of Workers & Non Workers in Local Planning Area-Gobindgarh

| Sr. No. | Year | Total Population | Total Workers | % age | Non-Workers | % age | Marginal Workers | % age |
|---------|------|------------------|---------------|-------|-------------|-------|------------------|-------|
| 1. | 1981 | 67920 | 22923 | 33.75 | 44282 | 65.20 | 715 | 1.05 |
| 2. | 1991 | 89134 | 27263 | 30.59 | 61750 | 69.28 | 121 | 0.13 |
| 3. | 2001 | 118796 | 43439 | 36.57 | 72327 | 60.88 | 3030 | 2.55 |

Source: Distt. census Patiala/ Fatehgarh Sahib

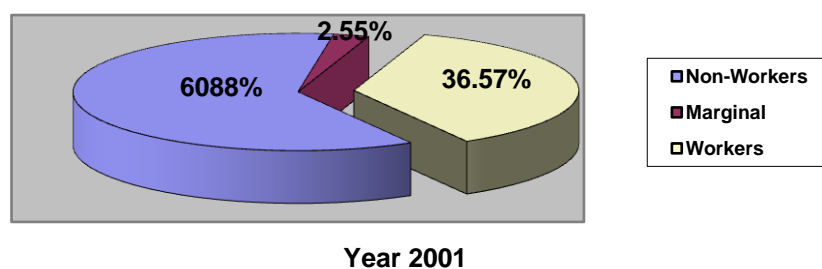
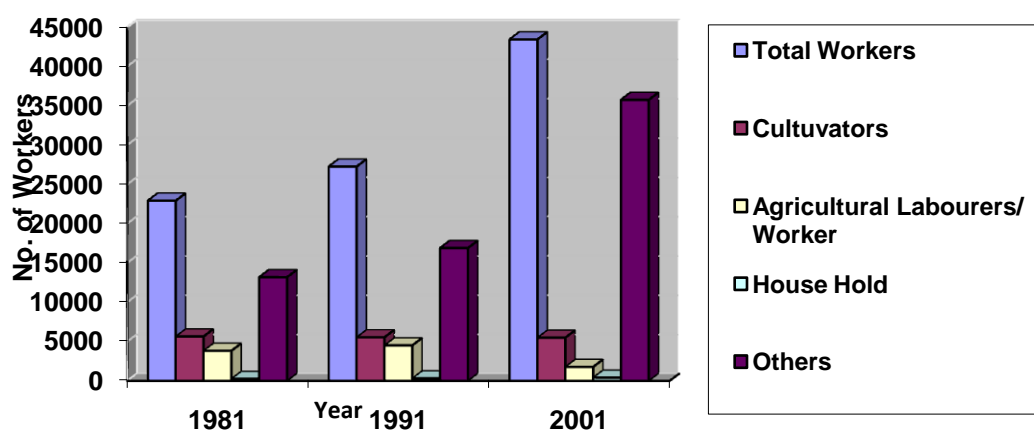


Table No- 14
Detail of Workers

| Sr. No. | Year | Total workers | Cultivators | | Agricultural labourers | | Household industries | | Others | |
|---------|------|---------------|-------------|-------|------------------------|-------|----------------------|------|--------|-------|
| | | | No. | %age | No. | %age | No. | %age | No. | %age |
| 1. | 1981 | 22923 | 5651 | 24.65 | 3826 | 16.69 | 261 | 1.14 | 13185 | 57.52 |
| 2. | 1991 | 27263 | 5541 | 20.32 | 4511 | 16.55 | 315 | 1.16 | 16896 | 61.97 |
| 3. | 2001 | 43439 | 5497 | 12.65 | 1775 | 4.09 | 412 | 0.95 | 35755 | 82.31 |

Source: District Census Handbook Patiala/Fatehgarh Sahib



15.7.1 The occupational structure helps to derermine the economic status of the town. During the period 1981-2001 as indicated in the Table no. 5, the growth of workers as percentage of total population of L.P.A. (participation rate) increased from 33.75% to 36.57% whereas during the same decades the percentage of Non-workers has decreased from 65.20 to 60.88 which clearly indicates a positive impact on the economy of the area.

15.7.2 The decreasing agricultural labourers/worker population from the year 1981 to 2001 accompanied by increase in population of other workers during the same period is clear evidence of increasing urbanization and industrialization which has had a positive impact on the economy of the town and its surrounding area making it the richest municipal council of the country. The year-wise detail of the industrial units falling in Gobindgarh is given below:

Table No- 15

Year-wise detail of the industrial units in Gobindgarh

| Sr. | Industries | Year | | | | | | | | | | Total |
|--------------|-----------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | |
| 1. | 1) Large Scale Industry | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2) Medium Scale Industry | 28 | 33 | 12 | 12 | 10 | 11 | 11 | 11 | 11 | 3 | 3 |
| | 3) Industry | 280 | 286 | 297 | 305 | 318 | 323 | 326 | 340 | 341 | 346 | 346 |
| | Detail of Industries | | | | | | | | | | | |
| 2. | Rolling Mills | 210 | 212 | 215 | 219 | 225 | 232 | 240 | 246 | 250 | 252 | 252 |
| | Inductions farnaces | 25 | 28 | 30 | 34 | 36 | 41 | 43 | 50 | 56 | 63 | 63 |
| | Forging Unis | 4 | 7 | 9 | 10 | 12 | 12 | 13 | 14 | 15 | 16 | 16 |
| | Rolling Mills Parts | 18 | 22 | 26 | 30 | 34 | 36 | 41 | 43 | 47 | 49 | 49 |
| | Faundries | 15 | 17 | 18 | 19 | 20 | 25 | 28 | 32 | 35 | 41 | 41 |
| | Oxigen Plants | 5 | 6 | 9 | 11 | 12 | 14 | 15 | 15 | 17 | 18 | 18 |
| | Refrectries | 4 | 5 | 7 | 8 | 8 | 8 | 9 | 10 | 11 | 12 | 12 |
| | A.R.W. Pipes | 22 | 25 | 27 | 30 | 35 | 37 | 42 | 46 | 51 | 55 | 55 |
| | Thumplit Roling Mill Plants | 2 | 2 | 3 | 4 | 4 | 4 | 5 | 5 | 6 | 7 | 7 |
| Total | | 615 | 645 | 655 | 684 | 716 | 746 | 776 | 815 | 843 | 865 | 865 |

15.7.3 Besides the above, two industrial mega projects under the Industrial policy 2003 namely M/S Bhawani Industries Ltd. Vill: Ajnali, Total cost 110 Cr. (an ammount of Rs. 42.08 Cr. already incurred) and M/S Modern Steels Ltd. G.T. Road, Mandi Gobindgarh, Total cost 210 Cr. (an ammount of Rs. 51.00 Cr. already incurred) have been approved by the Punjab Govt.

15.7.4 Therefore the above Table (No. 7) shows that on account of liberal industrial policy of Punjab State as well as single window system for clearance of Industrial projects, there has been a considerable growth of industrial activities in the town and its vicinity, thereby leading to generation of vast employment opportunities as is clearly evident from the detail of industrial workers tabulated below:

Table No. 16
Detail of Industrial Workers

| Sr. No. | Year | No. of Industrial workers Gobindgarh | %age growth |
|---------|------------|---|----------------|
| 1. | 2004 | 17171 | - |
| 2. | 2005 | 17939 | 4.47% |
| 3. | 2006 | 18700 | 4.24% |
| 4. | 2007 | 19682 | 5.25% |
| 5. | 2008 | 20087 | 2.06% |
| 6. | 30-04-2009 | 20208 | 0.6% |

Source: District Industries centre

The above Table indicates that there is considerable increase (17.70%) in the no. of industrial workers during the period of last 5 years i.e. 2004- April 2009 but at the decreasing rate.

Table No. 17
Projected No. of Industrial Workers

| Sr. No. | Year | No. of Industrial workers |
|---------|------|---------------------------|
| 1. | 2004 | 17,171 |
| 2. | 2009 | 20,208 |
| 3. | 2019 | 26,500 |
| 4. | 2029 | 36,040 |
| 5. | 2031 | 37,500 |

Table No. 18
Existing population of Gobindgarh town and its Urban Fringe
(8 villages and 3 colonies abutting M.C. Gobindgarh)

| Year | M.C. Gobindgarh | Population of Urban Fringe | Total population (M.C.+ Urban Fringe) | Combined growth rate (%age) |
|------|-----------------|----------------------------|---------------------------------------|-----------------------------|
| 1981 | 26637 | 7457 | 34094 | - |
| 1991 | 40175 | 11648 | 51823 | 52.00% |
| 2001 | 55,403 | 20,041 | 75,444 | 45.58% |

Source: District census 1981, 1991, 2001

Table No.19

Projected population of Urban Fringe - Gobindgarh town

| Existing population (2001) | Projected population (2011) | Projected population (2021) | Projected population (2031) |
|----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 20041 | 34690 | 60850 | 87000 |

Table No. 20

Projected population of Gobindgarh town and its Urban Fringe

| Existing population (2001) | Existing population (2007) including floating / unregistered population | Projected population (2011) | Projected population (2021) | Projected population (2031) |
|----------------------------|---|-----------------------------|-----------------------------|-----------------------------|
| 75,444 | 96,000 | 1,06,000 | 1,48,000 | 2,07,000 |

15.8 PROJECTED POPULATION OF GOBINDGARH TOWN AND ITS URBAN FRINGE

Population in 2001 = 75444

Hence for population projection, the figure of **20,7000** population is being considered for the year 2031 of the census figure of **75,444** persons (year 2001) with the assumed decadal/ growth rate taken as 40%.

A) PROJECTED POPULATION OF LOCAL PLANNING AREA UPTO 2031

Table No. 21

Projected population of Local Planning Area

| Existing population (2001) | Projected population (2011) | Projected population (2021) | Projected population (2031) |
|----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1,18,796 | 1,62,450 | 2,29,000 | 3,21,000 |

CHAPTER - XVI

MASTER PLAN GOBINDGARH

16.1 Master Plan Components

Master Plan endeavours to achieve integrated growth of a town with emphasis on preservation of ecology and creation of physical and social environment for improved quality of life of its residents. It is an important instrument for guiding and regulating development of a city over a period of time and contributes to planned development both conceptually and operationally. Under the Punjab Regional & Town Planning & Development Act, 1995, Amended Act, 2006 master plan of a Local Planning Area shall;

- a) indicate broadly the manner in which the land in the area should be used;
- b) allocate areas or zones of land for use for different purpose;
- c) indicate, define and provide the existing and proposed highways, roads, major streets and other lines of communication.
- cc) indicate areas covered under heritage site and the manner in which protection, preservation and conservation of such site including its regulation and control of development which is either affecting the heritage site or its vicinity, shall be carried out;
- d) include regulations (hereinafter called "Zoning Regulations") to regulate within each Zone the location, height, number of storey's and size of buildings and other structures, open spaces and the use of buildings, structures and land.

16.2 Master Plan Objectives

16.2.1 Keeping in view the planning problems elaborated earlier, the town needs proper planning so that these problems are well taken care of and fulfill the following objectives:-

1. Planning of Local Planning Area is planned as an integrated single entity as an integrated single entity.
2. To co-relate the growth trends within Local Planning Area with the growth trends /development proposals of the adjoining Local Planning Areas.
3. To develop the economic base of the town by providing planned industrial area and improved organised commercial centre at the sectoral level.

4. To achieve improved hygienic & sanitary conditions by providing a proper system of sewerage, surface drainage and better drinking water facilities in the town.
5. To achieve balanced development of Social, Cultural-Recreational amenities & other public facilities through provision of planned parks, open spaces, playgrounds, social & cultural centres etc. to meet the needs of the population, both at Sector & City level.
6. To increase the accessibility of the area to the region.
7. To make the town development self financing.
8. To effect minimum dislocation of people and their activities.
9. To make land allocation in an environmentally sustainable manner.
10. To make land available for public purpose.

16.2.2 Other objectives related to urban management, urban finance and local economic development etc. are outside the scope of Master Plan and hence not deliberated because the scope of master plan is confined to the broad proposals and allocation of land for various uses such as residential, industrial, commercial, recreational, public and semi-public etc.

16.3 Vision 2031 - Local Planning Area, Gobindgarh

16.3.1 Government of Punjab has undertaken preparation of master plans throughout the State. Master Plans need to be guided by the shared long-term vision of the city and not merely by projections of current trends. However, visualising future city is not a technical activity to be performed by the town planners alone. Enlightened citizens have to contribute to the process. Therefore Chief Secretary to Govt. of Punjab, Chandigarh vide U.O. letter dt. 2.12.08 to all the Deputy Commissioner of the state proposed to set up a think tank committee (comprising of 10-12 members) in each city/ town to develop vision 2031 for the city/ town under the Chairmanship of Deputy Commissioner with the District Town Planner acting as the member secretary along with members drawn from Public Sector, Private Economic Sector and Social Sectors. For preparation of Gobindgarh Master Plan, the Think Tank Committee constituted consisted of the following members:-

- 1) S.D.M., Amloh.
- 2) Additional Chief Administrator, PUDA, Patiala.
- 3) Xen, PSEB, Gobindgarh.
- 4) Xen, B & R, Gobindgarh.

- 5) Xen, Public Health, Gobindgarh.
- 6) District Forest Officer, Fatehgarh Sahib.
- 7) Environmental Engineer, PPCB, Nabha Road, Patiala.
- 8) District Education Officer (Senior), Fatehgarh Sahib.
- 9) District Manager, District Industries Centre, Gobindgarh.
- 10) E.O., Municipal Council, Gobindgarh.
- 11) Senior Medical Officer, Gobindgarh.
- 12) Sh. Bharat Bhushan, President, Chamber of Commerce.
- 13) Sh. Vinod Vashishat, President, All India Steel Re-rolls Association,
- 14) Principal, Desh Bhagat College, Gobindgarh.
- 13) Head of the Department (Civil), R.I.M.T. College, Mandi Gobindgarh.

Based on the inferences drawn during the meetings of Think Tank Committee and keeping in view the present scenario, vision 2031 for Gobindgarh town finalised is as below:

"To retain the existing character of Gobindgarh town with its predominant economic base as industrial along with almost at par development of residential use by augmenting regional connectivity and enhanced quality of life through improved physical and social infrastructure in an environmentally sustainable manner."

Strategies to attain vision

16.3.2 Based on SWOT (strength, weakness, opportunity and threats) analysis during Think Tank Committee meetings, the following strategies are required to be developed so as to attain the above quoted vision-2031;

- 1) To save and improve the ambient air quality of Gobindgarh town, after having been declared critically polluted area of the state by:-
 - Ensuring that designated highly air polluting industrial zone (special industrial zone) in the master plan as per the decision taken in the meeting of Think Tank Committee held on dt. 13/11/09 under the chairmanship of Deputy Commissioner, Fatehgarh Sahib optimally satisfies the suggested idealistic parameters w.r.t. location criterion.
 - Provision of sufficient buffer zones between residential and low air polluting industrial zones as well as between highly air polluting industrial zone.

- 2) To provide social infrastructure like education, health and recreational etc. following methods will be adopted:-
- By utilization of vacant govt./ M.C./ Panchayat/ Wakf Board lands etc.
 - By encouraging planned development as provided in PAPRA Act, 1995, Town Development Schemes, Development Schemes of Improvement Trust.
 - By introducing Land Pooling Policy, transfer of Development Rights concept etc.
 - Acquisition of land through Land Acquisition Act, 1894 may also be carried out for the execution of projects which are of state/ national importance in public interest.
- 3) To provide utilities that will satisfy the needs of the residents of Local Planning Area, it would be imperative:-
- To ensure 100% coverage of the city in terms of Sewerage System.
 - To ensure 100% coverage of the city in terms of Water Supply partly supplemented by canal based water supply.
 - To promote eco-friendly decentralized sewage treatment plant.
 - To ensure provisional Sewerage Treatment Plant rain water harvesting and recycling of water.
- 4) To promote an eco-friendly Solid Waste Management system following steps need to be adopted:-
- Promote recycling of solid waste.
 - Installation of Solid Waste Processing Plants to reduce the waste for disposal and at the same time generating energy from the solid waste of preparing manure.

16.4 Visualising the future

It is of utmost significance for the balanced and development of a town to project the future requirement in order to formulate the proposals of master plan. Population & employment forecast are the vital ingredients to attain/ formulate future vision for a town/ city.

16.5 Population Projections 2031

16.5.1 Indian urbanisation has shown different trends in the year 2001 as compared to past trends. As per census 2001 reduction in growth rate of urban population and also reduction in URGD (Urban Rural Growth Differential) has been observed. Hence population forecast instead of projection trend is based on the estimates of Punjab total and its share towards national urban component projected by report of technical group on population projections constituted by the National Commission on Population May 2006 entitled "POPULATION PROJECTIONS FOR INDIA AND STATES 2001-2026" has been considered. The basic assumption that the share of Gobindgarh town population to Punjab Urban as observed in 2001 will remain constant for coming years until 2026.

Table No. 1

Projected population of Punjab Urban 2001-2026 (population in lacs)

| Year | 2001 | 2006 | 2011 | 2016 | 2021 | 2026 |
|---|--------------|--------------|--------------|--------------|--------------|---------------|
| Punjab Total | 24359 | 26059 | 27678 | 29112 | 30323 | 31345 |
| Punjab Urban | 8263 | 9439 | 10681 | 11940 | 13185 | 16456 |
| Percentage Urban | 33.92 | 36.22 | 38.59 | 41.01 | 43.48 | 52.50 |
| Growth rate of Punjab Urban in % | - | 14.23 | 13.16 | 11.79 | 10.43 | 24.81 |
| Punjab Rural | 16096 | 16620 | 16997 | 17172 | 17138 | 14889 |
| Percentage Rural | 66.08 | 63.78 | 61.41 | 58.99 | 56.52 | 47.50 |
| Growth rate of Punjab rural in % | - | 3.28 | 2.26 | 1.03 | -0.20 | -13.14 |

(Population in Thousands)

Percentage share of Gobindgarh town and rural population of LPA Gobindgarh to total urban and rural population respectively of Punjab is calculated and is given in table below:

Table No. 2

| Sr. No. | Percentage share of Gobindgarh town to the Total Urban Population of Punjab 1981-2001 | | | Gobindgarh M.C.+U.A. | | | Rural | | |
|-----------|---|-------------|-------------|----------------------|-------------|-------------|-------------|-------------|-------------|
| 1. | 1981 | 1991 | 2001 | 1981 | 1991 | 2001 | 1981 | 1991 | 2001 |
| 2. | 0.57 | 0.67 | 0.67 | 0.57 | 0.70 | 0.73 | 0.34 | 0.33 | 0.36 |

(Source: Census of India 1981, 1991, 2001)

16.5.2 For projecting the urban population of Gobindgarh town, the percentage of urban population (including population of Urban agglomeration) of the town to that of total urban population of Punjab for the year 2001 which works out to be 0.73% has been

used constantly for projecting the urban population upto 2031. Besides this, the floating population of about 25% has also been added to the projected population.

16.5.3 Similarly, for projecting the rural population of LPA Gobindgarh, the percentage share of villages of LPA Gobindgarh to that of rural population of Punjab state which works out as 0.36%, has been constantly used upto the year 2021. Because the growth rate of Punjab Rural population during the year 2016-2021 and 2021-2026 is negative, therefore for the decade 2021-2031, the growth rate of 0.30% has been used instead of 0.36% for projecting the population.

The projected population of Gobindgarh town and LPA rural is given in the table below:

Table No. 3

Projected Population and Growth rate of Gobindgarh M.C. (including Arban Agglomeration) and Rural Area and Local Planning Area Gobindgarh

| Year | Gobindgarh M.C.+U.A. | | | Rural Areas | | LPA Gobindgarh | |
|-------------|--|--|-------------------------|--|-------------------------|--|-------------------------|
| | Projected population in thousands | Total projected population including 25% of total as floating population in thousands | Growth rate %age | Projected population in thousands | Growth rate %age | Projected population in thousands | Growth rate %age |
| 2006 | 63 | 79 | - | 59 | - | 138 | - |
| 2011 | 82 | 102 | 29.11 | 60 | 1.69 | 162 | 17.39 |
| 2016 | 106 | 132 | 29.41 | 61 | 1.67 | 193 | 19.41 |
| 2021 | 137 | 171 | 34.09 | 62 | 1.64 | 233 | 20.72 |
| 2026 | 177 | 222 | 29.82 | 63 | 1.61 | 285 | 22.32 |
| 2031 | 230 | 288 | 29.73 | 64 | 1.59 | 352 | 23.51 |

16.6 Workforce Projections, 2031

16.6.1 Projections of workforce by different sectors of economy of Gobindgarh can be attempted by assuming that the ratio of total workforce to population as observed in 2001 would hold good for 2031 and the sectoral distribution of the workforce as observed in 2001 would also remain unchanged. This may not be a rigorous method but provides a broad approximation considering available data.

For calculating the workforce projection, LPA Gobindgarh is divided into two parts:

1. Gobindgarh town (including urban agglomeration)
2. Villages in LPA, Gobindgarh

16.6.2 Employment data category wise is available for Gobindgarh town, as well as villages of L.P.A., Gobindgarh and for LPA Gobindgarh Rural and Urban. For the year 2001 and forecast for the year 2031 are calculated as given in tables below:

Table No. 4

Detail of Main Workers of Gobindgarh town (Including U.A) to the Total Population and Category wise Employment to Main Workers (Year 2001)

| Sr. No | Category | Gobindgarh M.C.+U.A | Main workers as % of population and Category as % of Main workers | L.P.A. Rural | Main workers as % of population and Category as % of Main workers | L.P.A. Gobindgarh | Main workers as % of population and Category as % of Main workers |
|--------|------------------------|---------------------|---|--------------|---|-------------------|---|
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. |
| 1. | Population | 60677 | - | 58119 | - | 118796 | - |
| 2. | Main Workers | 19559 | 32.23% | 23880 | 41.09% | 43439 | 36.57% |
| a) | Cultivators | 155 | 0.79% | 5342 | 22.37% | 5497 | 12.65% |
| b) | Agricultural Labourers | 62 | 0.32% | 1713 | 7.17% | 1775 | 4.09% |
| c) | House Hold Industries | 175 | 0.89% | 237 | 0.99% | 412 | 0.95% |
| d) | Others | 19167 | 98.00% | 16588 | 69.47% | 35755 | 82.31% |

Source: District census Handbook 2001

Table No. 5

Projected Main Workers and employment category wise in LPA Gobindgarh 2031

| Sr. No. | Data and Assumption 2031 | Gobindgarh M.C.+U.A. | L.P.A. Rural | Total |
|---------|--------------------------|----------------------|--------------|----------|
| | Population | 2,88,000 | 64,000 | 3,52,000 |
| | Main Workers | 92,800 | 26,300 | 1,19,100 |
| 1. | Cultivators | 730 | 5880 | 6610 |
| 2. | Agricultural Labourers | 300 | 1890 | 2190 |
| 3. | House Hold Industries | 830 | 260 | 1090 |
| 4. | Others | 90940 | 18270 | 109210 |

(Source: District census Handbook 2001)

16.6.3 Quantitatively the above assumptions and output imply that:

- 1) The workforce participation rate that was 36.75% in 2001 remain unchanged for 2031.
- 2) The main workers residing in Local Planning Area urban are also expected to witness a threefold increase in different economic activities.

16.7 Land Use Requirements

Before proceeding to prepare proposed land use plan and transport network the areas required for different purposes are to be worked out on the basis of norms and standards of various organizations.

16.7.1 Residential Use

Keeping in view the present residential land use development as percentage of total Local Planning Area, the future requirement of land for residential use by 2031 has been worked out as per table below :-

Table No. 6
Residential Area Requirement

| Sr. No. | Year | Area under residential use | % age of Total LPA area |
|---------|------|----------------------------|-------------------------|
| 1. | 2001 | 2330 | 6.82 |
| 2. | 2011 | 3200 | 9.36 |
| 3. | 2021 | 4500 | 13.20 |
| 4. | 2031 | 6950 | 20.35 |

- Existing area under residential use = 2330 Acs.
- Projected area required for residential use-2031 = 6950 Acs.
- Proposed increase in residential use = 4620 Acs.

16.7.2 Commercial Use

As per norms given in the UDPFI Guidelines the area requirements for commercial activity has been worked out. As per the classification of towns given, medium size town has a population upto 5 lakhs whereas the large city size starts from population of minimum 25 lakhs. The projected population of L.P.A Urban by 2031 would be 2.80 lacs. Therefore logically Gobindgarh would remain a medium size town, so the norms of medium size town have been taken for calculating area requirements for commercial use as per table given below:

Table No. 7**Hierarchy of commercial centers**

| Planning unit | Class of settlements | | | Population served | Hierarchy of commercial centre |
|-----------------|----------------------|---|---|--------------------|--------------------------------|
| | S | M | L | | |
| Housing cluster | - | * | * | 1000-4000 | Cluster centre |
| Sector | - | * | * | 5000-20000 | Sector centre |
| Community | * | * | * | 25000-100000 | Community centre |
| District | - | * | * | 125000-500000 | District centre |
| Sub city | - | - | * | 25 lakhs -50 lakhs | Sub City centre |
| City | - | - | * | 50 lakhs+ | City |

S = Small towns; M=Medium towns; L= Large towns

Table No. 8**Area for commercial centres**

| Hierarchy of commercial centre | Area per 1000 persons sq.m |
|--------------------------------|----------------------------|
| Cluster centre | 220 |
| Sector center | 300 |
| Community Centre | 500 |
| District Centre | 880 |
| Total | 1900 sq. m |

As per the figures given in the table above 1900 sq.m area for different categories of commercial areas has been proposed for 1000 persons, thus 1.9 sq .m (say 2 sq. m) area is required per person . The total projected population of L.P.A Urban workes out to 2.80 lacs persons, therefore total area required for commercial use is estimated to be 174 acres.

16.7.3 Industrial Use

The total projected industrial workers for L.P.A Urban as per table no. 5 works out to be 1,09,210 workers for the year 2031. This works out to be incremental industrial employment of 65,771 workers during 2010-2031. Area required for incremental workforce at a denstiy of 100 workers / ha. (As recommended by UDPFI Guidelines) would be 657 ha. (1622 acres). Keeping in view predominantly industrial character of the town/ growth of industrial units, the area proposed for industrial land use in 2031 has been kept on a higher side.

16.8 Transport Network Requirements

16.8.1 From the study and findings of the chapter - VI (Traffic and Transportation) it has been observed that there is high speed and heavy volume of through traffic on the major roads within LPA which requires fly over on the main junction of GT road with

Gobindgarh-Amloh road so as to allow the high speed vehicles without any hurdle so as to improve the efficiency of Transport Network by reducing delays and by minimising the no. of accidents. Further in spite of the fact that the width of National Highway No.1 & Gobindgarh-Amloh scheduled road is adequate yet their right of the way varies at certain points due to encroachments, thereby, decreasing their usage/efficiency. High intensity traffic is flowing on G.T. Road & the population is equally spread on both the sides but facilities like Hospital, Railway Station, School, College and Court are located on one side of G.T. Road whereas bigger chunk of development along with certain facilities/services are situated on the other side which necessitates the criss-cross movement of public from G.T. Road side to Amloh side and vice-versa which can be well covered and taken care of by the provision of the fly-over as stated above.

16.8.2 Bus Stand

The town has a bus stand with modern facilities located on G.T. Road. The Area of Bus Stand is 2.06 acs. The present bus stand area is adequate.

16.8.3 Truck Terminal:

In spite of the existing Truck Terminal, truck transport is creating its own problems with trucks parked haphazardly along G.T. road and other major roads. An area of 73 bigha 15 biswa acquired by Municipal Council for dumping site in village Kumbhra was allowed to be used for Truck Stand by Local Government Department to utilise the funds received from Central and State Government for this purpose. This Site is presently not being used for truck stand purpose or as Transport Area. Gobindgarh being an industrial town, almost 1000 trucks are parked haphazardly along G.T. Roads and Gobindgarh- Amloh road. Daily apprx. 500 trucks gets loaded and unloaded here. There are presently apprx. 100 transport goods booking agencies which are abutting and operating mainly from the G.T. Road. The proper development and optimum utilisation of the existing truck stand area can solve the above stated problem to a large extent.

16.8.4 Proposed Road Hierarchy

R1: above 150 feet

R2: 150 feet

R3: 100 feet

R4: 80 feet

R5: 60 feet

The ROW (Right of Way) of above roads will incorporate provisions for footpaths and cycle tracks where needed as per standards given below:

16.8.4.1 Footpath

The provision of footpath shall be made as per Govt. policies/ guidelines/ NBC.

16.8.4.2 Cycle Track

The minimum width of cycle tracks should be 2m. Each additional lane, where required, should be one meter.

16.9 Space Norms for Social Infrastructure and Public Utilities

Comparative statement of Norms and Standards suggested by Master Plan Zoning Regulations / Punjab Govt. Policies, UDPFI Guidelines and Delhi Master Plan is given as under:-

| Aspect | As per zoning regulations and sub division clauses for Master Plans in Punjab / Govt. Policies | UDPFI Guidelines | Delhi Master Plan |
|-------------------------|--|---|---|
| Primary School | Population: 3,000-4,000 Number of students: 600 Area a) Old city (over 650 ppha): 0.2 ha b) Outer areas (less than 650 ppha): 0.5 ha | Population: 5,000 Number of students: 500 Area per school: 0.4 ha Covered area: 0.20 ha Minimum play field area: 0.20 ha | Population: 10,000 Area: 2000-4000 sq m |
| Senior Secondary School | Population: 12,000 to 20,000 Number of students: 1000 Area a) Old city (over 650 ppha): 1.00 ha b) Outer areas (less than 650 ppha): 2.5 ha | Population: 7,500 Number of students: 1,000 Area per school: 1.60 ha Covered area: 0.60 ha Minimum play field area: 1.00 ha | Population: 10,000 Area: 6000-8000 sq m |
| College | Population: 30,000 Number of students: 800 Area a) Old city (over 650 ppha): 2.50 ha b) Outer areas (less than 650 ppha): 5.00 ha | Population: 1,25,000 Number of students: 1000-1500 students Area per college: 4.00 ha Covered area: 1.80 ha Play field area: 1.80 ha Residential / hostel area: 0.40 ha | Population: 5,00,000 Area: As per UGC Norms |

| | | | |
|----------------------------|--|--|---|
| University | N.A. | New University Area: 60.00 ha | 4 sites in urban extension to be provided at city level Area: Up to 20.00 ha |
| Technical Education Centre | N.A. | Population: 10,00,000 Area per centre: 4.00 ha Area per technical centre: 2.10 ha Area per ITI: 1.40 ha Area per coaching centre: 0.30 ha | Population: 5,00,000 Area: 4000 sq m |
| New Engineering College | Number of students: 300 Area a) Old city: (over 650 ppha): 1.00 ha b) Outer areas (less than 650 ppha): 2.50 ha | 2 numbers to be provided in urban extension Number of students: 1500-1700 Area per college: 60.00 ha | Population: 5,00,000 Area: As per AICTE norms |
| Medical / Pharmacy College | Area: 5 acres (Rural) Area: 2.5 acres (Distt. Headquarter Corporation Limit) | 2 site of 15 ha each in urban extension including space for specialized general hospital. | Population: 10,00,000 Area: As per Medical Council of India / Regulatory Body |
| Dispensary | Population: 5,000 Area: 0.1 ha | Population: 15,000 Area: 0.08 to 0.12 ha | Population: 10,000 Area: 800-1200 sq m |
| Primary Health Center | | | |
| Nursing Home | N.A. | Population: 45,000-1,00,000 Capacity: 25 to 30 beds Area: 0.20 to 0.30 ha | Population: 50,000 Area: 1000-2000 sq m |
| General Hospital | Population: 50,000 Area: 2.5 ha | Population: 2,50,000 Capacity: 500 beds Area for hospital: 4.00 ha Area for resi accommodation: 2.00 ha Total area: 6.00 ha | Population: 5,00,000 Capacity: 501 beds and above Area: 25,000-45,000 sq m |
| Veterinary Hospital | N.A. | N.A. | Population: 5,00,000 Area: 2,000 sq m |
| Community Hall and Library | N.A. | Population: 15,000 Area: 2,000 sq m | N.A. |
| Club | N.A. | Population: 1,00,000 Area: 10,000 sq m | Population: 5,00,000 Area: 5000 sq m |
| Amusement Park | N.A. | N.A. | Up to 10 ha |
| City level park | N.A. | N.A. | Population: 5,00,000 Area: 10 acres |
| Neighborhood level park | N.A. | N.A. | Population: 10,000 Area: 10,000 sq m |
| Golf Course | N.A. | N.A. | Population: 10,00,000 Area: 10-30 ha |
| Sports Centre / Stadium | N.A. | N.A. | Population: 5,00,000 Area: 3-10ha |

| | | | |
|---|---|---|--|
| Post and Telegraph Office | Population: 10,000 Area: 0.1 ha | N.A. | Population: 10,00,000 Area: 2,500 sq m |
| Religious Building | Population: 15,000 Area: 0.1 ha | N.A. | Population: 10,00,000 Area: 40,000 sq m |
| Old Age Home | N.A. | N.A. | Population: 5,00,000 Area: 1,000 sq m |
| Orphanage / Children Centre | N.A. | N.A. | Population: 5,00,000 Area: 1,000 sq m |
| Multipurpose Ground (Exhibition cum Fair Ground) | N.A. | N.A. | Population: 1,00,000 Area: 20,000 sq m |
| Burial / Cremation Centre | N.A. | N.A. | Population: 10,00,000 Area: 10,000 sq m |
| Electric Sub Station | Population: 50,000 Area: 0.4 ha | N.A. | Population: 5,00,000 Area: 29,600 sq m |
| Police Post | N.A. | Population: 40,000-50,000 Area: 0.16 ha (area inclusive of essential residential accommodation) | Population: 1,00,000 Area: 1000 sq m |
| Police Station / Police Division | Population: 50,000 Area: 0.8 ha | Population: 90,000 Area: 1.5 ha Area inclusive of essential residential accommodation 0.05 ha additional to be provided for civil Defence and home guards | Population: 2,50,000 Area: 10,000 sq m |
| Police Line | N.A. | Population: 20,00,000 Area: 4.00 to 6.00 ha | 1 for each administrative zone to be provided at city level Area: 2.0 ha |
| District Jail | N.A. | Population: 10,00,000 Area: 10.00 ha | Population: 25,00,000 Area: 5.0 ha |
| Fire Station | N.A. | 1 fire station or sub-fire station within 1 to 3 km to be provided for 2 lakh population Area for fire station with essential residential accommodation: 1.00 ha Area for sub-fire station with essential residential accommodation: 0.60 ha | 3 Fire Stations for 5,00,000 population within radius of 5 to 7 km Area: 10,000 sq m |

From the comparative table of norms and space standards as given above, the norms suggested by UDPFI Guidelines have been found more suitable for the preparation of Master Plan Gobindgarh because of the following reasons:

- The norms and standards suggested by UDPFI Guidelines are more detailed and cover almost each and every physical and social infrastructure as compared to Govt. policies.
- Norms and standards suggested by UDPFI Guidelines are more realistic and suitable to local conditions such as prevailing development controls, availability of land, land prices etc.
- UDPFI Guidelines suggest different norms and standards for different category of towns like small and medium towns, large cities and hill areas which are not available in other guidelines.
- Norms and standards suggested by Delhi Master Plan have not been found suitable for L.P.A. Gobindgarh because these norms are of higher level, formed especially for Mega cities like Delhi, where development controls are very stringent and, population is more than 1.25 crores and the land is scarce & costly.

However it has not been possible to designate the location and extent of the above mentioned facilities in the proposed land use plan. While preparing the detailed sector / zonal plans, the standards listed above and the strategy adopted for obtaining land for public purposes will be taken into account in designating land for above mentioned facilities.

Stage Wise Land Requirements For Projected Population L.P.A Patiala - 2031

| Sr. No | Aspect | Norms and Standards | Existing No. | Additional Requirement by 2031 (in no.) | Stage Wise Requirement (Number and area in hectares) | | | | | | Total area (in ha) |
|--------|-------------------------|---|--------------|---|---|--------------|------|--------------|------|---------------|--------------------|
| | | | | | 2011 | | 2021 | | 2031 | | |
| | | | | | No. | Area(in ha.) | No. | Area(in ha.) | No. | Area (in ha.) | |
| 1 | Primary School | Population: 5,000 Number of students: 500 Area per school: 0.4 ha Covered area: 0.20 ha Minimum play field area: 0.20 ha | 55 | 15 | 8 | 3.20 | 5 | 2.00 | 2 | 0.08 | 6.0 |
| 2 | Senior Secondary School | Population: 7,500 Number of students: 1,000 Area per school: 1.60 ha Covered area: 0.60 ha Minimum play field area: 1.00 ha | 7 | 33 | 6 | 9.60 | 9 | 14.40 | 18 | 22.80 | 52.80 |
| 3 | College | Population: 1,25,000 Number of students: 1000-1500 students Area per college: 4.00 ha Covered area: 1.80 ha Play field area: 1.80 ha Residential / hostel area: 0.40 ha | 2 | 1 | | - | - | - | 1 | 4.00 | 4.00 |
| 4 | New Engineering College | 2 numbers to be provided in urban extension Number of students: 1500-1700 Area per college: 60.00 ha | 3 | - | No additional requirement for the New Engineering College | | | | | | - |

| | | | | | | | | | | | |
|----|------------------------------------|--|----|----|---|------|---|------|----|------|-------|
| 5 | Dispensary | Population: 15,000 Area: 0.08 to 0.12 ha | 10 | 13 | 3 | 0.36 | 4 | 0.48 | 6 | 0.72 | 1.56 |
| 6 | Nursing Home | Population: 45,000-1,00,000 Capacity: 25 to 30 beds Area: 0.20 to 0.30 ha | 6 | - | - | - | - | - | 3 | - | - |
| 7 | General Hospital | Population: 2,50,000 Capacity: 500 beds Area for hospital: 4.00 ha Area for resi accommodation: 2.00 ha Total area: 6.00 ha | 1 | 1 | - | - | - | - | 1 | 6 | 6 |
| 8 | Veterinary Hospital/ Dispensary | Population: 5,00,000 Area: 2,000 sq m (0.2 ha) | 4 | - | No additional requirement for the Veterinary Hospital/ Dispensary | | | | | | - |
| 9 | Library | Population: 15,000 Area: 2,000 sq m (0.2 ha) | - | 23 | 3 | 0.6 | 4 | 0.8 | 16 | 3.2 | 4.6 |
| 10 | Club | Population: 1,00,000 Area: 10,000 sq m (1.0 ha) | 1 | 2 | - | - | 1 | 1.00 | 1 | 1.00 | 2 |
| 11 | City level park | Population: 5,00,000 Area: 10 acres (4.0 ha) | - | 1 | 1 | 4.0 | - | - | 1 | 1 | 4.0 |
| 12 | Neighborhood level park | Population: 10,000 Area: 10,000 sq m (1.0 ha) | 3 | 32 | Neighborhood level park are required to be provided within proposed urbanisable area. | | | | | | 32.00 |
| 13 | Golf Course | Population: 10,00,000 Area: 10-30 ha | - | - | - | | | | | | - |
| 14 | Sports Centre / Stadium | Population: 5,00,000 Area: 3-10 ha | - | - | - | | | | | | - |
| 15 | Post and Telegraph Office | Population: 10,000 Area: 0.1 ha | 11 | 24 | 4 | 0.4 | 6 | 0.6 | 14 | 1.4 | 2.4 |

| | | | | | | | | | | | |
|----|----------------------------------|---|---|---|---|------|---|------|---|------|------|
| 16 | Police Post | Population: 40,000- 50,000 Area: 0.16 ha (area inclusive of essential residential accommodation) | 3 | 4 | 1 | 0.16 | 1 | 0.16 | 2 | 0.32 | 0.64 |
| 17 | Police Station / Police Division | Population: 90,000 Area: 1.5 ha Area inclusive of essential residential accommodation 0.05 ha additional to be provided for civil Defence and home guards | 4 | - | - | - | - | - | - | - | - |
| 18 | Fire Station | 1 fire station or sub-fire station within 1 to 3 km to be provided for 2 lakh population Area for fire station with essential residential accommodation: 1.00 ha Area for sub-fire station with essential residential accommodation: 0.60 ha | 1 | 1 | - | - | 1 | 1 | - | 1 | 1 |

16.10 Strategies for Obtaining Land for Public Purpose

16.10.1Conventionally, master plan proposals relied on the powers of compulsory acquisition of land designated in the master plan for public purposes. However limitations of this approach have been painfully exposed. At the same time not addressing the question of land for public purposes may limit the utility of the master plan itself. A city typically requires 40 to 50% of its area for variety of public purposes. Where land is owned by the state, it is easier to allocate land for public purposes. However where private land market is active, to ensure land for public purpose is a major challenge in preparing Master Plan. As described below some of the strategies are suggested which can be tried/ implemented for land acquisition:

1. Identifying vacant Govt. (including municipal) land and using it as source for providing land for public purposes. However such vacant govt. pockets should preferably be used for projects which are remunerative in nature and generate financial resources.
2. Rationalizing the use of public land is another method which can be adopted so that the use of govt. lands which has outgrown its utility/ purpose, can be put to immediately required uses/ needs.
3. To make specific designations on the master plan and then compulsorily acquire the land (although in the present scenario this method do most of the times prove to be highly impracticable due to growing awareness of land-owning community).
4. Another method could be award of Transfer Of Development Rights concept which has been successfully implemented in other states like Maharashtra and Gujarat etc.
5. Layout and sub-division regulations: These regulations depending upon the total area of layout can provide for some reservation for general public purpose in addition to local requirements. This is currently being done under the rules of PAPRA Act.
6. Land pooling or Town Planning (Development) Schemes: This essentially pools the small individual plots to enable re-plotting with proper roads and open spaces and equitably spread the burden on all benefiting landowners.

16.10.2The possible alternatives for obtaining land for public purposes such as roads, educational, health, parks, water supply, sewerage, social institutes, old age homes, community centers etc. with their limitations are listed as below:

| Alternative | Land Acquisition through 1894 Act | TDR | Development of land through PAPR Act 1995, TDS under PRTPD Act 2006 and Development Schemes under PTI Act, 1922 | Land Pooling | Govt / Panchayat / Waqf Board lands |
|-------------------------------|---|---|---|---|--|
| Plan Proposal | Land designated for public purposes | Land designated for public purposes | Land designated for public purposes | Land designated for public purposes | Land designated for public purposes |
| Regulation | No separate regulatory provision necessary | Regulation about use of TDR on receiving plots is necessary | Certain proportion (about 40%) of land is dedicated for public purposes. | This requires a separate legal process to be followed for reconstitution of plots along with evaluation of compensation and betterment as provided in Chapter XII of the 1995 Act. | No separate regulatory provision necessary |
| Means of securing land | Compulsory acquisition by paying monetary compensation | Monetary compensation substituted by Transfer of Development Rights (TDR) | Availability of land through layout plan provisions | | Land can be made available through transfer of ownership from one department to another. No monetary compensation is involved. |
| Limitations | <input type="checkbox"/> Lack of finances for compensation <input type="checkbox"/> Landowners' resistance <input type="checkbox"/> Iniquitous distribution of costs and benefits. Cost borne by those who lose land and benefits enjoyed by surrounding landowners | <input type="checkbox"/> Lack of finances for compensation <input type="checkbox"/> Landowners' resistance <input type="checkbox"/> Iniquitous distribution of cost and benefit. Cost borne by those who lose land and benefits enjoyed by surrounding landowners <input type="checkbox"/> But where real estate prices are high particularly where land price | <input type="checkbox"/> This is the method currently relied upon where minimum area for colony is set at 10 – 75 acres, as I case of PAPRA. <input type="checkbox"/> This is market driven and present response is said to be not so encouraging. | <input type="checkbox"/> Comprehensive Land Pooling Policy is required to be framed. <input type="checkbox"/> Difficulty in pooling of land of large number of owners. <input type="checkbox"/> Time consuming and complicated process <input type="checkbox"/> Equitable distribution of costs and benefits to different share holders. <input type="checkbox"/> New concept difficult to be | <input type="checkbox"/> Locational disadvantages in certain cases. <input type="checkbox"/> Minimum area requirement may not be fulfilled <input type="checkbox"/> Source of revenue for Panchayat Bodies / Waqf Board gets depleted. |

| | | | | |
|--|--|--|--------------|--|
| | <p>is several times the construction cost, chances of success are high.</p> <p><input type="checkbox"/> Could also be used for heritage conservation.</p> <p><input type="checkbox"/> New concept difficult to be implemented.</p> | | implemented. | |
|--|--|--|--------------|--|

The above lays down a broad frame work for obtaining land for public purpose. However, no specific proposals are included in the Master Plan as they will be dealt with in the detailed zonel plans.

16.11 Planning Proposels

Based on the studies conduceted by the office of DTP Fatehgarh Sahib pertaining to LPA Gobindgarh, the proposed land use plan and transport network has been finalised after various discussions held at different levels.

The following land use zones have been adopted for the proposed land use plan keeping in mind the govt. policies/ instructions and UDPFI Guidelines:-

- Residential Zone
- Industrial Zone
- Industrial Mix Zone
- Wholesale & Warehousing Zone / Logistic Park
- Rural & Agricultural Zone

The concerned aspects of above different landuse zones are to be read with Zoning Regulations specified for different land uses.

16.12 Proposed Land Use Plan (2010-2031)

Although it has been observed from the studies that there is a tendency of growth along transport corridors, considering areas of potential development, wider areas of development have been considered. Therefore the proposed areas under various landuse zones will exceed the areas calculated for different uses which are the minimum required. Based on above consideration proposed land use plan has been prepared and presented in Drg. No. DTP (FGS) 1546/10 dt. 29-7-10. The land use distribution of the urbanisable area/ net planned area of the total area of Gobindgarh LPA 2010-2031 is given in table below:

Table No. 9**Detail of Net Planned/ Urbanisable Area**

| Sr. No. | Land Use Zone | Area (in acs.) | % age |
|----------------|----------------------|-----------------------|--------------|
| 1 | Residential | 6350.88 | (34.37%) |
| 2 | Industrial | 9893.28 | (53.55%) |
| 3 | Industrial Mix | 137.13 | (0.74%) |
| 4 | Recreational | 530.50 | (2.87%) |
| 6 | Transportation | 1564.95 | (8.47%) |
| Total | | 18476.74 | (100.00%) |

Break-up of Major Proposed Landuse Zones with in Urbanisable area of LPA (2009-2031)

| | |
|--|-------------------------|
| LPA Area - | 34165.04 Acres |
| Net Planned/ Urbanisable Area- | 18476.74 Acres (54.08%) |
| Area under Agriculture and Water Bodies- | 15688.30 Acres (45.92%) |

- Residential Zone**

The projected population of Gobindgarh Town (Urban Agglomeration) and the villages falling in urban fringe works out to be 3.52 lacs persons by the year 2031 which is almost double the number of 2001 census. Therefore the rise in demand for residential areas is inevitable. In order to accommodate the growing population within the limits of proposed urbanisable area of Gobindgarh, an area of about 6350.88 acres for residential purpose for Gobindgarh town (U.A.) including fringe area by the year 2031 has been proposed in the Proposed Landuse Plan Drawing No. (DTP)-1546/10 Dated 29-07-2010. Keeping in view the trend of growth of residential areas, accessibility and prevalent wind direction etc. some potential pockets have been indentified suitable for residential purposes as shown on the proposed land use plan. However, as stated above in the detail of areas, at L.P.A. level a total area of 6350.88 Acres (including urban and rural) of net planned/ urbanisable area of 18476.74 acres which is proposed for residential use works out to be 34.37% of the total net planned area.

It is proposed that within existing M.C. limits, in the area designated as high density residential (RD-1) gross residential density shall be upto 300 persons per acres and in the area designated as medium density residential zone (RD-2) outside M.C. limits, gross residential density shall not be more than 200 persons per acres.

In the Proposed Land Use Plan care has been taken to accommodate already existing residential area within the Gobindgarh L.P.A. However, residential area has been rationalized keeping in view the existing distribution of population in the town and the density pattern to be achieved in the Master Plan.

In order to encourage flatted residential development and to preserve the valuable agriculture land, residential density @ 60 dwelling units per acre shall be permissible for stand-alone group housing projects.

- **Industrial Zone**

Gobindgarh continues to be known as hub of steel industry. The town as per department of Industry, Punjab (District Industries centre, Gobindgarh) has total no. of 865 industrial units comprising of 252 rolling mills, 63 induction furnaces, 49 rolling mills parts, 41 Foundaries, 18 oxygen plants, 12 refectories, 55 A.R.W. pipes, 7 Thumplit rolling mill plants, forging units whereas the total no. of above industrial units was 615 in the year 1997 there by indicating growth trend of almost 41% in the decade 1997-2006.

Keeping in view the above stated present scenario, growth trends, wind direction etc. an area of 9893.28 acres (53.55%) of net planned area has been year marked for industrial purposes excluding industrial mix. Punjab Pollution Control Board vide their letter no. 3522 dt. 7/10/09 has requested to PSHUD to ear-mark special industrial zone for Induction/ Arc/ Forging/ Cupola Furance units & the zone to be earmarked should be:-

- i) Atleast 2 km. from Municipal boundary, 1 km. from urbanizable limit, 1 km. from the Phirni of every village and 1 km. from the approved residential area.
- ii) Atleast 1 km. from the National/ State Highway and scheduled road.
- iii) Atleast 1 km. from the recognized/ affiliated educational institution, historical religious place, protected monuments, wild life sanctuary, zoo.
- iv) The zone should be in the leeward direction of the pre-dominant wind direction in the area.
- v) There should be atleast 30 mts. wide green belt around the zone.

With the help of Remote Censing Centre, Ludhiana through GIS system a site having an area of 305 hectares was indentified between villages namely Lohar Majra and Baghsikandar and sent for comments to PPCB, who after considering all the parameters about this site intimated vide their letter no. 4269 dt. 5/11/09 (**Annexure - 7**) that a meeting of Think Tank may be convened to look into all the aspects regarding location of the zone like the predominant wind direction, accessibility to the zone, basic infrastructure to be provided, disposal of wastewater to be generated from the zone etc.

Keeping in view the suggestion of PPCB a meeting of Think Tank Committee under the chairmanship of Deputy Commissioner Fatehgarh Sahib was held on dt. 23/11/09 (**Annexure - 8**). In the meeting for setting up Induction/ Arc/ Forging/ Cupola Furnace units an area of about 1000 hectares falling in few villages mainly in the village Ambe Majra, Chhatarpura, Kumbhra, Wazir Nagar, Wazirabad, Mullanpur kalan and Harbanspura etc. was decided to be earmarked in the proposed land use plan of Local Planning Area of Gobindgarh instead of the site having an area of 305 hectare falling between village Lohar Majra and Baghsikandar because of its connectivity and availability of physical infrastructure etc. Thereafter Proposed Land Use Plan Drawing No. DTP (Fgs) 1310/10 dt. 23-12-09 in which Industrial Land Use was sub-zoned into Industrial / special industrial zone as per the decision of Think Tank Committee was published u/s 70 (3) of the PRTD (Amendment) Act, 2006 for inviting / objections / suggestions. The Punjab Government in consultation with the PRTD Board w.r.t. public objections / suggestions, approved the Master Plan with some revisions u/s 70 (4) of the PRTD (Amendment) Act, 2006 and revised Proposed Land Use Plan Drawing No. DTP (Fgs) 1546/10 dt. 29-7-10 incorporating the decision of the board regarding revisions was prepared in which the disticing between Industrial / Special Indtrial zone was eliminated by designating the whole sub-zoned area as Industrial zone where location of different kind of Industries shall be as per the location / siting guidelines of the PPCB for each type of Industry.

Industrial Mix Zone

The mixed industrial land use has been proposed in the master plan only for the area where no. of industries and no. of residential developments already exist. This mixed use area of 137.13 acres is mainly within the M.C. limits and thus this mixed industrial use shall be permissible in the areas earmarked in the master plan as industrial mixed use.

General Terms and Conditions Governing Industrial Mix Use

Mixed land use shall be permissible subject to the following terms and conditions:

- ☐ The existing red category industries shall continue subject to approval of competent authority and provisions in the Act. Any change over to environment friendly technology shall be permissible subject to approval of PPCB and any other competent authority.

- No new industry other than green and low air polluting industry as specified by Punjab Pollution Control Board shall be permissible in this zone.
- Parking shall be provided within the premises as per State Govt.'s prescribed norms.
- The existing obnoxious, hazardous, inflammable, non-compatible and polluting industries who voluntarily shift within 5 years to the designated industrial zones, the owner shall be eligible to put his/her plot, so vacated, to any other compatible use (including commercial use) subject to the provision of building bye laws and master plan conditions applicable for that particular land use in that particular area without paying conversion charges otherwise section 79 of the Punjab Regional Town Planning and Development (Amendment) Act 2006 will be applicable.

• **Traffic and Transportation Zone**

For Master Plan of L.P.A., Gobindgarh extensive road net work has been proposed taking into account the existing road network and connectivity requirements. The entire net works may develop in phases as the traffic demand builds. However, it would be desirable that landuse proposals of Master Plan may be reviewed as the road network actually develops.

For the integrated planning of urban and rural growth in L.P.A., Gobindgarh, the transportation system is required to provide an integrated, safe and efficient system for transportation of people and goods for which an area of about 1564.95 (8.47%) acres of net planned area has been earmarked for traffic and transportation.

I. Proposed Road Network :

The proposed road network for L.P.A., Gobindgarh, has been developed in collaboration with the proposed land use pattern as shown in the Plan drawing no. DTP (FGS) 1308/09 dt. 23/12/09 as well as on Proposed Land use drawing no. DTP (FGS) 1546/10 dt. 29/07/2010 Efforts have been made to follow the existing road net work while proposing the new hierarchy of the roads.

The following hierarchy of roads has been proposed:-

| | |
|-----|-----------------|
| R-1 | above 150 feet. |
| R-2 | 150 feet. |
| R-3 | 100 feet. |
| R-4 | 80 feet. |
| R-5 | 60 feet. |

As per the projected volume of traffic the major roads of L.P.A. are going to be over crowded. Therefore, for the efficacious, safe and smooth flow of traffic, the fly-over on the main junction of Gobindgarh G.T. road with Amloh road has been proposed and two R.U.B.(s) have also been proposed one at village Nasrali and the second at village Talwara for hassle free and safe flow of traffic across railway line.

G.T. Road, other scheduled Roads along with R-1, R-2 and R-3 (Existing and proposed roads) within the L.P.A. shall have 5 mts. no-constructions zone on both side of Right of Way (R.O.W.) of these roads.

- **Recreational Zone**

Inspite of being industrial town, there is great need to develop regional level parks and play grounds etc. Therefore, for the well-being of the public, suitable area of 530.50 acres (2.87%) of net planned area has been ear-marked keeping in view the environmental surroundings.

6.13 DEVELOPMENT CONTROLS AND ZONING REGULATIONS

16.13.1 Special and Detailed Development Controls

The purpose of the Development Control Regulations (DCR) is to assist developers and end-users within the L.P.A. Gobindgarh to strive for more quality and environmentally-friendly development.

In addition to the common development control parameters applicable in the state of Punjab, there are certain special and detailed controls that are applicable specifically within the L.P.A. Gobindgarh due to industrial character of the town.

These DCRs are applicable to new and future developments and developers are required to abide by the zoning and planning intentions of the master plan. However, development proposals that have been granted approval by the Competent Authority previously will continue to be honored and shall not be affected by these controls.

The Chapter XI of the Punjab Regional and Town Planning and Development Act, 1995 provides for 'Control of Development and Use of Land in Area where Master Plan is in Operation.' The chapter lays down the procedural framework for exercising the development control. "Development" as defined by the Act means the carrying out of building, engineering, mining, quarrying or other operation in, on, over or under land or making of any structural or material changes in any building or land including that which affects the appearance of any heritage site and includes demolition of any part or

whole of the building or change in use of any building or land and also includes reclamation, redevelopment, a layout or sub-division of any land.

It would have normally been expected that a Master Plan includes regulations dealing with all facets of “development”. However since statutory Master Plans were not available, Government has issued many regulations on state-wide basis to govern key facets of development such as sub-division and layout of land under PAPRA, FAR, ground coverage, parking, building design and construction etc. It is therefore proposed to retain these regulations out of which key regulations currently in force in L.P.A. Gobindgarh are reproduced below:

Residential

Note I:

Minimum road width in residential areas shall not be less than 40' (12mts). If the existing road is less than 40' (12mts) the proposed land on both sides shall be safeguarded for widening to comply with the minimum requirements. The building heights on these roads shall not exceed ground +2 (G+2 storeys).

Note II: F.A.R., height and ground coverage for individual residential plots within municipal areas, building byelaws of municipal council shall be applicable and outside municipal council limit, the building bye-laws of respective Development Authority shall apply.

Parking requirement for plotted developments

| Plot size * | Parking requirement |
|---|--|
| 85 sq m less (100 sq yd or less) | 2 scooter parking spaces |
| 86-168 sq m (101 -200 sq yd) | 1.5 car parking spaces within plot area |
| 168-425 sq m (201-500 sq yd) | 2 car parking spaces within plot area |
| 425 sq m or more (500 sq yd and above) | 3 car parking spaces within plot area |

* Deviation of up to 10 % of this control is allowed, if it is arising from site conditions/ constraints.

Group Housing

| | | |
|----------|---|---|
| 1 | Minimum Plot size | |
| | • Within MC limits | As per municipal byelaws (within M.C. limits) 4000 Sq mt. (outside M.C. limits). |
| | • Outside MC limits a) For General Category b) For EWS | As per decision of the govt. time to time. |
| 2 | Minimum Road width | For group housing stand alone projects, minimum |

| | | |
|---|--------------------|--|
| | | width of approach road is 60' but the promoter is required to leave space from his own land for widening it to 80' and the space so left shall be public space. In the planned colony, group housing shall not be permissible on a road less than 60' wide. |
| 3 | Minimum Frontage | 20 meters |
| 4 | Permissible FAR | 1:1.75 |
| 5 | Permissible Height | There shall be no restriction on the height of building subject to clearance from Air force Authorities and fulfillment of other rules such as setbacks, distance between buildings etc. However structural safety and fire safety requirement as per National Buildings Code shall be compulsory. |
| 6 | Parking provisions | For group housing residential developments, the requisite parking provision is 1.5 ECS per 100 sq m of covered area. The maximum provision allowable for group housing projects is 3 ECS per dwelling unit. |

Note:

- i) Construction of residential houses sold by promoters on floor basis shall also be considered as group/ flatted housing development and parking requirements shall be as per the norms applicable to group housing.
- ii) Size of front gate on boundary wall and construction of front boundary wall is optional to meet the parking requirements.

Farm House

| | |
|-------------------|--|
| Minimum area | 2.5 acres |
| FAR | 0.04 |
| Ground Coverage | 2% |
| Number of storeys | 2 |
| Height | Single Storey 18'-0" Double Storey 28'-0" |
| Hard Surface | 10% |

Note:

In case of farm houses, an independent access from a "Revenue Rasta" or a public road shall suffice.

Commercial

Commercial uses in residential and Industrial zones located within and outside the municipal limits shall be permissible along 80 feet-wide roads with minimum frontage of 20 meters. However area requirement for such commercial development shall be as per the municipal bye-laws, rules and regulations within the M.C. limit. Single storey commercial on 60 feet wide road shall be permissible.

For stand-alone commercial complexes with height greater than three storeys within as well as outside the Municipal limits, the additional criteria listed in table shall apply.

Table No. 10

Additional criteria for stand-alone commercial complexes (more than three storeys)

| | | |
|-----|-----------------------------|---|
| 1. | Minimum area required | Within M.C. limits as per municipal bye-laws outside M.C. limit 1000 square meters. |
| 2. | Minimum frontage | 20 meters |
| 3. | Maximum F.A.R. | 1:1.75 |
| 4. | Maximum height | There shall be no restrictions on the height of building subject to clearance from Air Force Authority and fulfillment of other rules such as setbacks, distance between building etc. However, structural safety and fire safety requirements as per N.B.C. shall be compulsory. |
| 5. | Maximum ground coverage | 40% |
| 6. | Parking | For projects with no multiplexes, the minimum parking shall be 2 ECS per 100 sq m of covered area (including circulation area) |
| | | For projects with multiplexes/ cinemas/ theatres, the minimum parking shall be: a) 3 ECS per 100 sq m of covered area, in respect of the covered area of the multiplex component + 30 % of the total covered area of that component and b) 2 ECS per 100 sq m of covered area, in respect of balance commercial component and circulation area. |
| | | Parking norms within the municipal limits shall be the same as that notified by the Department of Local Government. |
| 7. | Basement | Multi level basement will be allowed behind the building in zoned area except in setbacks provided it is proposed for parking purposes only and satisfy the public health and structural requirements. |
| 8. | Minimum approach road width | 80 feet |
| 9. | Land scape | Minimum 15% of the total area is to be reserved for landscaping purposes. |
| 10. | For movement of fire tender | The minimum Setback distance is to comply with the existing norms and standards. |

The E.C.S. shall be counted as below:

- 23 square meters for open parking.
- 28 square meters for parking under stilts on ground floor.

- 32 square meters for parking in the basement.

Commercial at local level

There will be provisions for small-scale, single-storey commercial facilities at the local level within as well as outside the Municipal limits, subject to these abutting roads with a minimum width of 18 m (60 feet) with minimum setback of 6 meters from the road for parking purpose.

These commercial facilities are intended to serve the needs of local residents only, and will not be shown separately on the master plan. Instead, they are subsumed under the predominant residential land use.

Vehicular Access

Vehicular access to all properties within and outside the municipal limits that abut national highways and scheduled roads shall be via service lanes with a minimum width of 6 m (20 feet).

The front setback for these properties is:

- Within municipal limits: 5 m;
- Outside LPA limits: 30 m (of which 10 m towards the road side shall form the greenbelt).
- **Institutional :**

Minimum area and size shall be as per affiliating authority norms with minimum frontage of 20 mts and road width 60 feet, (except in case of nursery and primary schools) F.A.R. 1:1, ground coverage 40%. Zoning plan shall be got approved from competent authority. Other building regulations shall be governed by zoning plan approved by competent authority.

Industrial

This is the predominant land use that will bring out the distinctive character of Gobindgarh town. All kinds of industries including I.T. Park/ Industrial Park, Logistic Park, Educational Institutions, Hotels, Warehouses, Storage, Cold Storage shall be permissible in the designated industrial Land use zone subject to meeting with the norms regarding distance from residential area, social Institutes etc. & environmental standards notified by PPCB and state govt. policies/ directions from time to time.

The setting up of Induction/ Arc/ Cupola Furnace/ Forging Units within Industrial Zone shall be permissible subject to the clearance from PPCB and various distance parameters shall be adhered to as suggested by PPCB from time to time . Commercial activities are allowed on 80 feet road within Industrial use zone.

Size of Industrial Plot and F.A.R.

The size of plot shall be governed by the nature of industrial activity.

- Industrial/ I.T. Park shall have minimum 10 acres area. In I.T. park, I.T. component shall have F.A.R. 1:2 and in industrial park for industrial component F.A.R. shall be 1:1 and other components shall have F.A.R. as mentioned for different land uses in Master Plan. In industrial park, only green and orange industries shall be allowable.
- **Residential component:** Residential component in the industrial plot/ premises shall not exceed 5 % of the area of the site and shall be within the maximum permissible area.
- **Height:** There shall be no restrictions on height of buildings subject to clearance from Air Force Authority and fulfillment of other rules such as setbacks, distance between building etc. However, structural safety and fire safety requirements as per N.B.C. shall be compulsory.
- **Road width:** Minimum road width in industrial areas shall not be less than 40' (12mts). If the existing road is less than 40' (12mts) the proposed land on both sides shall be safe guarded for widening to comply with the minimum requirements.
- **Parking and loading & unloading:** All industrial units falling in this zone shall make adequate arrangement for parking and loading & unloading of goods within their premises. No parking of vehicles and loading and unloading of goods shall be permissible on road side.

Logistic Park

The main usage for this use is a warehouse space for both fast turnover storage and distribution as well as for bulk and long term storage centre. There can be a business centre located at the main entrance to each of the logistics block to serve as a business hub with offices and adequate amenities catering to the logistics industry.

- **Building Intensity (Floor Area Ratio)**

The floor area ratio for the logistics zone is 0.6. The calculation of minimum floor area ratio shall exclude the land set aside for future extension.

- **Building Coverage and Height Control**

The building coverage for the logistics use shall not exceed 50%. The floor to ceiling height for a single storey logistics uses is 7.0 meters.

Environment considerations:

- Minimum buffer of 15 meters green belt of broad leaf trees should be provided between residential areas and industries.
- All residential colonies, commercial establishments like shopping malls, multiplexes etc shall maintain a minimum distance of 250 meters from the hazardous (maximum accident hazardous) industries notified by Director General, Factory Adviser Service Labour Institute. The distance should be measured from source of pollution/ hazard in the industrial premises to the building lines as per zoning plan of the colony/ complex. However for specified type of industries such as rice shellers/ sella plant, brick kilns, stone crushers, hot mix plants etc. standards prescribed by PPCB and other concerned deptt. shall apply.

Other development controls and guidelines required

- Regulation for village abadi: Special building regulation shall be prepared for the development and regulation of area falling within the Lal Dora or phirni of the villages falling in the Local Planning Area.
- The existing High Tension lines shall be shifted along the road but outside the Right of way to ensure unhindered ROW for traffic and other services for all times.
- The minor/ drains shall have minimum 10 meters wide green strips on each side. Other major water bodies shall have minimum 30 meters green strips on each side as shown on the proposed land use plan 2010-2031. Realignment of water bodies shall be permissible wherever feasible, subject to the certification by the Engineering Department to ensure free flow of storm water.
- Contiguous expansion of village abadi in non-residential zones of master plan is permissible up to the extent (100 mts.) as shown in the Proposed Land Use Plan. However for the village abadi falling in the residential zone of Master Plan no such limit has been earmarked as the area around these villages is already proposed as residential.

Land for Public Purposes

To facilitate development, it is necessary to accord top priority to the implementation of public utilities and infrastructure (such as roads, parks, green belts etc.) which will in

turn encourage urbanisation. However, the respective technical agency or authority will not be able to proceed with its implementation programmes until the ownership of private land affected by these public utilities and infrastructure has been transferred to the state or to the concerned authority (s).

Acquisition of private land for this purpose can be carried as per the Govt. policies.

Transferable Development Rights

It is necessary to speed up the process of development. For that, the development of public utilities such as roads, parks, green belts etc., should be done on top priority. To make it realistic, it is necessary that the land falling under roads, parks and green belts should be transferred to Urban Development Authorities. To acquire this land, the prevalent way adopted till date, is the cash payment of land acquired and 2nd option is to get the land through land pooling scheme which is time consuming process. To speed up the development process and to protect the interest of land owners, the land owners may be given the option of transfer development rights on the pattern of Maharashtra because it is relatively simple and straightforward to implement and execute. The requisite public infrastructure projects can be implemented quickly, thus facilitating rapid urban development and most importantly, the interests of affected land owners will be protected.

The TDR scheme shall be restricted to development projects for public infrastructure and facilities which shall be announced from time to time. The additional FAR shall not be transferable from one LPA to another.

Detailed policy guidelines on the operation and implementation of TDR Scheme should be prepared and announced by the competent authority in due course of time.

All norms / standard and regulation given in the Master Plan shall be subject to any decision by the Government from time to time.

Local Planning Area Gobindgarh Master Plan

16.13.2

Zoning Regulations

Chief Town Planner, Punjab being the planning agency designated u/s 57 of the Punjab Regional and Town Planning and Development (Amended) Act, 2006 for the Local Planning Area, Gobindgarh declared u/s 56 of the said Act, following the requirement under clause (d) of sub section 1 of section 70 of the Punjab Regional and Town Planning and Development (Amended) Act, 2006 hereby makes following Zoning Regulations as part of the Master Plan prepared for the Local Planning Area, Gobindgarh.

These zoning regulations shall cover the use and development of land in the Local Planning Area Gobindgarh as shown in the proposed land use plan 2010-2031 drawing no. DTP (FGS)/ 1546/10 dated 29/7/10.

The requirements of these zoning regulations shall extend to the whole of the Local Planning, Area Gobindgarh covered by the Master Plan proposals shown on the above mentioned drawing.

In view of the above the zoning regulations proposed under this master plan are essentially concerned with the control of land use. The proposed land use plan includes following land use zones

- Residential
- Commercial
- Industrial
- Industrial Mix
- Warehousing and Godowns / Logistic Park
- Rural and Agricultural

SHORT TITLE, SCOPE, EXTENT & COMMENCEMENT

Title

These Regulations shall be called the Zoning Regulations for Local Planning Area, Gobindgarh Master Plan 2010-2031 (hereinafter referred to as “these Regulations”).

Scope of the Regulations

The scope of these regulations is limited to defining permissible land uses in various land use zones depicted in the proposed land use plan forming part of the Master Plan. Other aspects of “development” such as sub-division and layout of land or

intensity of development measured through FAR, ground coverage, parking requirements, building design and construction etc. will be governed by other acts and regulations promulgated by Government from time to time. Competent Authorities under such regulations shall ensure that the developments permitted by them are in conformity with these regulations.

Jurisdiction

These regulations shall apply to all “development” in the Local Planning Area, Gobindgarh declared under section 56 of the Punjab Regional and Town Planning and Development (Amendment) Act, 2006 vide notification no 12/42/06-4HGI/893, dt. 29.1.08 and which was revised vide notification No. 12/42/06-4HGI/2218, dt. 10.8.09

Date of Coming into Force

These Regulations shall come into force on the day on which the designated Planning Agency publishes the final Master Plan along with these regulations in the *Official Gazette* after obtaining the approval of the State Government under sub section (5) of section 70 of the Punjab Regional and Town Planning and Development (Amendment) Act, 2006. Till such approval, the authorities in considering the application for permission for development shall have due regard to the draft proposals including these regulations.

DEFINITIONS

For the purpose of these zoning regulations, the following definitions, unless the context otherwise requires, shall apply:

- i) **“Act”** means the Punjab Regional and Town Planning and Development (Amendment) Act, 2006 (Punjab Act No.11 of 1995).
- ii) **“Government”** means the Government of the State of Punjab.
- iii) **“Chief Town Planner”** means the Chief Town Planner of the Department of Town & Country Planning, Punjab or any other officer to whom his powers are delegated.
- iv) **“ Planning Agency”** means the Town and Country Planning Department, Punjab designated as such under Section 57 of the Punjab Regional and Town Planning and Development Act(Amendment)2006 for Local Planning Area Gobindgarh **“ Proposed Landuse Plan”** means the plan showing the proposed and admissible uses of different areas and land use zones covered in the Local Planning Area, Gobindgarh.

- v) **“Existing Landuse Plan”** means the plan showing the different landuse existing at the time of preparation of the Existing Land Use Plan of Local Planning Area, Gobindgarh and as indicated on Drawing No. DTP (FGS)/1257/09 dated 13-10-09.
- vi) **“Local Planning Area”** means the Local Planning Area declared under section 56(1) of the Punjab Regional and Town Planning and Development (Amendment) Act 2006 vide notification No. 12/42/06-4HGI/893,dt. 29.1.08 and revised vide notification No. 12/42/06-4HGI/2218,dt. 10.8.09 published in the Punjab Govt. Gazette.
- vii) **“Non-Conforming Building or Use”** means use in respect of any land or building in the Local Planning Area, the existing use of which land or building is contrary to the prescribed landuse.
- viii) **“Proposed Landuse Plan”** means the plan showing the proposed and admissible uses of different areas and Land use zones covered in the Local Planning Area, Gobindgarh and as indicated on Drawing No. DTP (FGS) 1546/10 dt. 29-7-10.
- ix) **“Sector Plan”** means the Layout Plan of a part of master plan approved by the Chief Town Planner, Punjab showing all or any of the following:-
 - a) Plots, streets, roads, public open spaces, parking areas.
 - b) Area temporarily or permanently prohibited for the building operation.
 - c) Any other condition or restrictions provided in the layout plan.
- x) **“ Zoning Plan”** means the plan of area or part thereof or supplementary layout plan approved by the Chief Town Planner and maintained in the office of Competent Authority showing the permitted use of land and such other restrictions on the development of land as may be prescribed in the zoning regulations, for any part or whole of the area such as sub-devision of plots, open spaces, streets, position of protected trees and other features in respect of each plot, permitted land use, building, height, coverage and restrictions with regard to the use and developement of each plot in addition to such other conditions as laid down in these regulations hereafter.
- xi) **“Knowledge Park”** Such parks in residential land use zones can have only such activities which are absolutely non –polluting, non hazardous Environment friendly, free from noise & vibrations, having no polluting

effects on air and water and causing no nuisance whatsoever. Uses in such parks will be determined by Chief Town Planner, Punjab.

- xii) **“Logistic Park”** is an integrated facility to serve as a business hub for storage, insurance and distribution purposes for the trading of manufactured products.
- xiii) **“Farm House”** Farm house means a building allowed on a holding of agricultural land for residential and agricultural activity of the land holder. The total floor area of such farm house shall not exceed 2 per cent of the area of holding or 200sq.m.whichever is less.
- xiv) **“Atta Chakki”**: Atta Chakki is categorized as service industry where:
- Grinding of only food grains is carried out through the process of crushing under the load rotational movement of two plates or blocks.
 - The maximum electric load does not exceed 20 kW.
 - The Atta Chakki shall be used for grinding food grains supplied by the consumers only and no sale/ purchase of food grains/ flour be carried out by the Atta Chakki owner at commercial level.
 - The Atta Chakki shall only be permitted on roads having minimum 13.5 m Row.
- xv) **“House Hold Industry”** House Hold Industry means house hold occupation/ Industry conducted only by family members/persons residing in the dwelling with or without power and not contrary to the provisions of the Water Pollution (Prevention and Control) Act 1974 Air pollution (prevention and Control) Act 1981 and Environment (Protection) Act 1986.
- xvi) **“Cottage Industry”**: Industrial units employing less than 10 workers, not creating excessive traffic and not omitting fumes, noise and effluents injurious to the existing sewers and not contrary to the provisions of the Water Pollution (Prevention and Control) Act 1974, Air Pollution(Prevention and Control) Act 1981 and Environments (Protection) Act 1986.
- xvii) **“Micro, Small and Medium Enterprises engaged in manufacture or production of goods”** have the meaning assigned to them in clause (a) of sub-section (1) of section 7 of Micro, Small and Medium Enterprises Development Act 2006 of Government of India.

- xviii) **“Large Industries”**: Large Industries are the industries in which the investment in fixed assets in plant and machinery is more than Rupees 10 crores.
- xix) **“Public and Semi Public activities”**: Public and semi public activities means governmental/ semi governmental offices, educational, medical institutions, recreational and entertainment facilities, cultural and religious institutions etc.
- xx) Terms and phrases used, but not defined in these regulations, shall have the same meaning as assigned to them in the Act.
- xxi) **"Mixed land use"** means the multiple use of land is allowed to co-exist. This cover two distinct forms of mixed landuse viz. **commercial mix**: areas where residential, commercial and some other uses except polluting industry may co-exist. **Industrial mix**: areas where industry can also co-exist with residential and commercial activities.

Terms and phrases used, but not defined in these regulations, shall have the same meaning as assigned to them in act.

LAND USE ZONES

The proposed land use plan incorporated in the Master Plan of LPA, Gobindgarh depicts the following land use zones

1. Residential
2. Commercial
3. Industrial
4. Insustrial Mix
5. Warehousing and Godowns / Logistic Park
6. Rural and Agricultural

LAND USE CLASSES

For the purposes of these Regulations various land uses are grouped into following land use classes.

| Sr.No. | Land Use Class | Use Class Code |
|---------------|---|-----------------------|
| 1 | Housing | A |
| 2 | Trade and Commerce | B |
| 3 | Manufacturing | C |
| 4 | Transport, Storage & Warehousing | D |
| 5 | Offices | E |
| 6 | Education, Training and Research Institutes | F |

| | | |
|----|-----------------------------------|---|
| 7 | Healthcare facilities | G |
| 8 | Recreation, Entertainment | H |
| 9 | Public utilities and services | I |
| 10 | Agriculture, forestry and fishing | J |

16.13.3 USE PROVISIONS IN LAND USE ZONES

Following table describe the land use classes and their further sub-classes permitted in various land use zones. The shaded cells in the table indicate that the use is generally permissible. A number in the cell indicates the conditions listed at the end of the table subject to which the use is permissible.

| LAND USE ZONES AND PERMISSIBLE LAND USES | | | | | | | |
|--|--|----------------|------------|------------|-------------|-----------------------------------|--------------------------------|
| USE CLASS | | LAND USE ZONES | | | | | |
| Sub Code | Description | Residential | Commercial | Industrial | Warehousing | Rural and Agricultural | |
| | | | | | | Abadi deh and 200 m around Phirmi | Rest of Rural and Agricultural |
| A | Housing | | | | | | |
| A1 | Residential houses in the form of plotted development, group housing, farm houses for customary residence including household industry. | | | | | | 1 |
| A2 | Old age homes, Orphanages, Hostels for students, working women etc. | | | | | 2 | 2 |
| A3 | Service apartments, Hotels including Star Hotels, Motels, Guest Houses, Dharamshalas, Lodging Houses | | | | | | |
| A4 | Jails, asylums, reformatories and the like | | | | | | |
| A5 | Residences for watch and ward staff, residences for industrial workers/ management | | | | | | |
| A6 | Housing not classified above | | | | | | |
| B | Trade and Commerce | | | | | | |
| B1 | Retail trade including markets for fruits and vegetables, meat and fish; super markets | | | | | | |
| B2 | Department stores, Malls including super market, retail trade, restaurants and multiplexes | | | | | | |
| B3 | Personal and community services like laundry, hair dressing, beauty parlors, tailoring, coaching classes, cyber cafes, Atta Chakki, Repair of Household Appliances, Bank Branches, ATM | | | | | | |
| B4 | Wholesale trade with storage of commodities | | | | | | 3 |
| B5 | Filling Station ** | | | | | | |

| LAND USE ZONES AND PERMISSIBLE LAND USES | | | | | | | |
|--|---|----------------|------------|------------|-------------|-----------------------------------|--------------------------------|
| USE CLASS | | LAND USE ZONES | | | | | |
| Sub Code | Description | Residential | Commercial | Industrial | Warehousing | Rural and Agricultural | |
| | | | | | | Abadi deh and 200 m around Phirmi | Rest of Rural and Agricultural |
| B6 | Kerosene Storage/Gas Godown and storage of fire works*** | 6 | | | | | |
| B7 | Gas Distribution (without storage of cylinders)*** | | | | | | |
| B8 | Trade Fares, Exhibition and Conventional centers | | | | | | |
| B9 | Showroom of Mills/ Factory Retail Outlets | | | | | | |
| B10 | Trade not classified above | | | | | | |
| C | Manufacturing (NIC Section C) * | | | | | | |
| C1 | Rolling/ Re-rolling Mill | | | | | | |
| C2 | Induction/ Arc/ Cupola Furnace/ Forging units | | | | | | |
| C3 | Foundary/ Refractory/ Galavanizing units | | | | | | |
| C4 | Acid pickling units/ Lead smelting units | | | | | | |
| C5 | Warehousing, Logistic Park, Storage and Godown, , Freight complex, Container Yards | | | | | | |
| C6 | Manufacture of wood and products of wood and cork, except furniture; (NIC Division 16) | | | | | | |
| C7 | Manufacture of paper and paper products (NIC Division 17) | | | | | | |
| C8 | Printing and reproduction of recorded media (NIC Division 18) | | | | | | |
| C9 | Manufacture of coke and refined petroleum products (NIC Division 19) | | | | | | |
| C10 | Manufacture of chemicals and chemical products (NIC Division 20) | | | | | | |
| C11 | Manufacture of pharmaceuticals, medicinal chemical and botanical products (NIC Division 21) | | | | | | |
| C12 | Manufacture of rubber and plastics products (NIC Division 22) | | | | | | |
| C13 | Manufacture of other non-metallic mineral products (NIC Division 23) | | | | | | 4 |
| C14 | Manufacture of basic metals (NIC Division 24) | | | | | | |
| C15 | Manufacture of fabricated metal products, except machinery and equipment (NIC Division 25) | | | | | | |

| LAND USE ZONES AND PERMISSIBLE LAND USES | | | | | | | |
|--|--|----------------|------------|------------|-------------|-----------------------------------|--------------------------------|
| USE CLASS | | LAND USE ZONES | | | | | |
| Sub Code | Description | Residential | Commercial | Industrial | Warehousing | Rural and Agricultural | |
| | | | | | | Abadi deh and 200 m around Phirmi | Rest of Rural and Agricultural |
| C16 | Manufacture of computer, electronic and optical products (NIC Division 26) | | | | | | |
| C17 | Manufacture of electrical equipment (NIC Division 27) | | | | | | |
| C18 | Manufacture of machinery and equipment n.e.c.(NIC Division 28) | | | | | | |
| C19 | Manufacture of motor vehicles, trailers and semi-trailers (NIC Division 29) | | | | | | |
| C20 | Manufacture of other transport equipment (NIC Division 30) | | | | | | |
| C21 | Manufacture of furniture (NIC Division 31) | | | | | | |
| C22 | Other manufacturing (NIC 32) | | | | | | |
| C23 | Repair of machinery and equipment (NIC Division 33) | | | | | | |
| C24 | Milk Chilling(independent plot), Pastuerization plant, Cold Storage*** | | | | | | |
| C25 | Rice Shellers, Processing of Farm Products, Brick Kilns, Lime/ Charcoal Kilns*** | | | | | | |
| C27 | Cottage Industry, Repair of Household Articles, Cycles and scooters | | | | | | |
| C28 | I.T. Parks, Knowledge Park & Industrial Park | 8 | | | | | |
| C29 | Cement, Sand and Concrete Mixing Plant(Batching plant), Bitumen, Sand, Concrete Mixing Plant(Hot Mix Plant)*** | | | | | | |
| D | Transport Storage and Warehousing | | | | | | |
| D1 | Warehousing and storage activities for transportation (NIC Division 52) and Loading & unloading yard | | | | | | 5 |
| D2 | Rail and Air Freight Terminals | | | | | | |
| D3 | Truck Terminals | | | | | | |
| D4 | Bus Terminals, Auto-Rickshaw/ Taxi Stand | | | | | | |
| E | Offices | | | | | | |
| E1 | Publishing of books, periodicals and other publishing activities (NIC Group 581) Software publishing (NIC Group 582) | | | | | | |
| E2 | Motion picture, video and television programme production, sound recording and music publishing activities (NIC Division 59) | | | | | | |
| E3 | Broadcasting and programming activities (NIC Division 60) | | | | | | |

| LAND USE ZONES AND PERMISSIBLE LAND USES | | | | | | | |
|--|---|----------------|------------|------------|-------------|-----------------------------------|--------------------------------|
| USE CLASS | | LAND USE ZONES | | | | | |
| Sub Code | Description | Residential | Commercial | Industrial | Warehousing | Rural and Agricultural | |
| | | | | | | Abadi deh and 200 m around Phirmi | Rest of Rural and Agricultural |
| E4 | Telecommunications (NIC Group 61), Govt/ Semi-Govt / Private Business offices | | | | | | |
| E5 | Computer programming, consultancy and related activities (NIC Division 62) | | | | | | |
| E6 | Information service activities (NIC Division 63) | | | | | | |
| E7 | Finance, Banking and insurance (NIC Section K) | | | | | | |
| E8 | Real estate activities (NIC Section L) | | | | | | |
| E9 | Professional, scientific and technical activities (NIC Section M) | | | | | | |
| E10 | Administrative and support services (NIC Section N) | | | | | | |
| E11 | Public administration and defence; compulsory social security (NIC Section O) | | | | | | |
| E12 | Professional Services like Lawyers, Accountants, Architects, Chartered engineers | | | | | | |
| F | Educational, Training and Research Institutes | | | | | | |
| F1 | Pre-Primary Schools, Play schools Kinder Garten | | | | | | |
| F2 | Primary Schools, | | | | | | |
| F3 | Secondary Schools, Colleges, Vocational Training Institutes, | | | | | | |
| F4 | Research and Training Centres, Universities, Centres of Advanced Education and training like IIM or IIT | | | | | | |
| F5 | Educational, Training and Research Institutes not classified above | | | | | | |
| G | Health care facilities | | | | | | |
| G1 | Medical and Dental Clinics and Dispensaries | 7 | | | | | |
| G2 | Hospitals (NIC Group 861) and Health Center | 7 | | | | | |
| G3 | Nursing care facilities (NIC Group 871) | 7 | | | | | |
| G4 | Residential care activities for mental retardation, mental health and substance abuse (NIC Group 872) | | | | | | |
| G5 | Residential care activities for the elderly and disabled (NIC Group 873) | | | | | | |
| G6 | Veterinary services | | | | | | |

| LAND USE ZONES AND PERMISSIBLE LAND USES | | | | | | |
|--|--|----------------|------------|------------|-------------|---|
| USE CLASS | | LAND USE ZONES | | | | |
| Sub Code | Description | Residential | Commercial | Industrial | Warehousing | Rural and Agricultural |
| | | | | | | Abadi deh and 200 m around Phirmi Rest of Rural and Agricultural |
| G7 | Health care facilities not classified above. | | | | | |
| H | Arts, entertainment, recreation, cultural and religious activities | | | | | |
| H1 | Arts, entertainment and recreation (NIC Section R) and Multimedia | | | | | |
| H2 | Libraries, archives, museums and other cultural activities (NIC Division 91) | | | | | |
| H3 | Gambling and betting activities (NIC Division 92)e.g.Race Course | | | | | |
| H4 | Sports activities and amusement and recreation activities (NIC Division 93) tot-lots, playgrounds, stadia, golf courses etc. | | | | | |
| H5 | Places of worship | | | | | |
| H6 | Marriage Palaces | | | | | |
| H7 | Arts, entertainment and recreation activities not classified above | | | | | |
| I | Public Utilities and Services | | | | | |
| I-1 | Electricity, gas, steam and air conditioning supply (NIC Section D) | | | | | |
| I-2 | Water collection, treatment and supply (NIC Division 36) | | | | | |
| I-3 | Sewerage (NIC Division 37) | | | | | |
| I-4 | Waste collection, treatment and disposal activities; materials recovery (NIC Division 38) and Carcass Disposal Site | 6 | | | | |
| I-5 | Postal and courier activities (NIC Division 53) | | | | | |
| I-6 | Police station | | | | | |
| I-7 | Fire Station | | | | | |
| I-8 | Public utilities and Services not classified above | | | | | |
| I-9 | Cemeteries, Graveyards, Cremation grounds | | | | | |
| J | Agriculture, forestry and fishing (NIC Section A) | | | | | |
| J1 | Crop and animal production, hunting and related service activities (NIC Division 01) | | | | | |
| J2 | Land Conservation and Preservation measures such as Storage, Check Dams and other water harvesting measures | | | | | |
| J3 | Fishing and aquaculture (NIC Division 03) | | | | | |

| LAND USE ZONES AND PERMISSIBLE LAND USES | | | | | | | |
|--|---|----------------|------------|------------|-------------|-----------------------------------|--------------------------------|
| USE CLASS | | LAND USE ZONES | | | | | |
| Sub Code | Description | Residential | Commercial | Industrial | Warehousing | Rural and Agricultural | |
| | | | | | | Abadi deh and 200 m around Phirmi | Rest of Rural and Agricultural |
| J4 | Quarrying of stone, sand and clay (NIC Group 081) | | | | | | |
| J5 | Plant Nursery and Greenhouses related to Nursery, Floriculture | | | | | | |
| Notes: | | | | | | | |
| NIC | National Industrial Classification (All Economic Activities) 2008, Central Statistical Organisation, Ministry of Statistics and Programme Implementation, Government of India, www.mospi.nic.in | | | | | | |
| A | Shaded areas indicate that the use class is permissible in the zone | | | | | | |
| B | Shaded area with number /notation indicates the conditions attached | | | | | | |
| | Only farm houses permissible | | | | | | 1 |
| | Old age homes and Orphanages only | | | | | | 2 |
| | Wholesale trade in agricultural commodities only | | | | | | 3 |
| | Only Manufacture of bricks, earthen pots, cement tiles, country tiles etc. | | | | | | 4 |
| | Warehousing for agricultural commodities only. | | | | | | 5 |
| | Only in Low Density Residential Zone | | | | | | 6 |
| | Subject to fulfillment of conditions of Pb. Govt. Notification No. 17/17/5-Hg2/311 dated 11.01.08 and instructions issued from time to time | | | | | | 7 |
| | Only Knowledge Parks as defined at Sr. No. 11 (Page No. 72) | | | | | | 8 |
| * All types of industries permitted in the designated land use zone are subject to the fulfillment of requirements of different departments. | | | | | | | |
| ** The siting of petrol pumps shall be subject to instruction / guidelines of IRC/ MORTH/TCPO/Punjab govt. issued from time to time. | | | | | | | |
| *** Siting of marriage palaces shall be subject to instructions/ guidelines of Punjab Govt. issued from time to time. | | | | | | | |
| C | Minimum area required for Educational and Health care facilities shall be as prescribed by government or the accrediting authorities from time to time | | | | | | |
| | All developments will be subject to Environmental Clearance wherever required. | | | | | | |
| | Minimum width of the access road for all public places and involving “Assembly” occupancy shall be 18 m. | | | | | | |

DESIGNATED AREAS

Following areas have been specifically designated in the proposed land use plan.

- Traffic and Transportation
- Utilities and Services
- Public & semi public (including Govt. & Semi Govt. offices)
- Government Land
- Recreational

USE PROVISIONS IN DESIGNATED AREAS

Following uses are permissible in the designated areas.

Traffic & Transportation: Permissible uses

Rail yards, Railway station & sidings, Transport Nagar (including, Post & Telegraph offices & Telephone exchange, dhabas, labour yards, areas for loading and unloading, stores, depots, and offices of goods booking agencies, Petrol Filling station & service garages, parking spaces, public utilities and buildings broadcasting station, Bus Terminus & depot, bus-queue shelter, taxi/ tonga/ rickshaw/ scooter stands, parking spaces).

Utilities: Permissible uses

Water supply, Sewrage system (including main pumping station and Sewage Treatment Plant {STP}), drainage, storm water, waste processing and disposal, electricity, communication systems and related installations etc.

Public and semi-public activities: Permissible uses

Governmental and semi governmental offices, Governmental administrative centres, Secretariat, Educational- Cultural and Religious institutions including Theaters, Auditoriums etc. Medical Health Institutions, Community Centres, Club, Orphanage, Old Age Home, Banks, Police Stations etc.

Recreational uses: Permissible uses

Sports Complex, Sports training centers, Swimming Pools with built up areas not exceeding 2%, Regional parks, Local Parks, Green Belts, Play Grounds, Holiday Resorts with ground coverage not exceeding 2%, Open air cinema/ auditorium, Shooting ranges, with built up areas not exceeding 2%.

SPECIAL CONDITIONS

- The sitting of Petrol Pump/ Filling Stations shall be subject to fulfillment of instructions/ guidelines of IRC/MORTH/TCPO/ Punjab Govt. issued from time to time.
- Minimum width of access road for warehousing uses shall be 80 feet.
- All public and semi-public uses in residential zone shall be located on independent plots with minimum access of 80'.
- All types of industries permitted in the designated land use zone are subject to the fulfillment of conditions issued by Punjab Govt. from time to time.

EXCEPTIONS

- Any use not listed above under a specific zone will not be permissible in the respective zone.
- Notwithstanding the, above the uses specifically provided for in the Sector Zoning Plans shall be permissible or as may be allowed by the Chief Town Planner, Punjab after special appeal where Sector Zoning Plan is not prepared.
- Uses determined by the Chief Town Planner, Punjab as compatible with uses permissible shall be allowed in respective zones.
- Developments approved prior to coming into force of these Regulations shall be deemed to be in compliance with these Regulations.
- Uses of Land covered under Optimum Utilisation of Vacant Govt. Land (OUVGL) Scheme of the State Government shall be determined by the Government at any appropriate time notwithstanding the provisions of these regulations subject to the fulfillment of other requisites like minimum area, road width and frontage etc. of the respective landuse.

IMPLEMENTATION OF THESE REGULATIONS

- (a) All authorities competent to grant permission for layout or sub-division of land or construction of building or development of land in any other form shall ensure that the permitted development is in compliance with these regulations.
- (b) Land owners desirous of developing their land can obtain by applying to the designated authority a list of permissible uses by

applying to the authority in writing and giving details of their land along with necessary maps.

- (c) Similarly land owners proposing development of certain uses on their land can obtain a certificate of "Compliance with Master Plan" from a designated authority.
- (d) Projects approved / C.L.U granted by the Housing and Urban Development department prior to the notification of Master Plan shall stand adjusted in the Master Plan irrespective of their land use shown on the Proposed Land Use plan provided that such projects fulfill the terms and conditions of Approval / C.L.U.

MINUTES OF THE MEETING HELD UNDER THE CHAIRMANSHIP OF CHIEF SECRETARY TO GOVT. PUNJAB ON 3.1.2001 at 12.00 P.M. REGARDING FORMATION OF POLICY FOR SHIFTING OF INDUSTRIES OF HAZARDOUS NATURE AWAY FROM MUNICIPAL LIMITS.

Present

1. Sh. Rajan Kashyap,
Principal Secretary to Govt. Punjab, Deptt. Of Science, Technology, Environment and Non- Conventional Energy.
2. Sh. D.S. Guru,
Director of Industries & Commerce, Punjab.
3. Sh. Yash Mahajan,
Joint Managing Director, Punjab Small Industries & Export Corporation Ltd.
4. Sh. Ajay Kumar Mahajan,
Chairman, Punjab Pollution Control Board.
5. Sh. H.S. Bhogal,
Chief Town Planner, Punjab, Chandigarh.
6. Sh. M.S. Aujla,
Chief Town Planner, Deptt. Of Local Govt. Punjab.
7. Sh. Sadhu Ram,
Deputy Town Planner, Punjab.

At the outset, Sh. Viswajeet Khanna, IAS, Special Secretary to Govt. Punjab Deptt. Of Science, Technology, Environment & Non-Conventional Energy and other members of the Sub Group (i.e. Chairman Punjab Pollution Control Board, Commissioner, Municipal Corporation & Export Corpn. Limited and Chief Coordinator, Udyog Shayak) were complimented for preparing their report titled “Shifting of Polluting & Hazardous Industrial Units Outside the Municipal Limits in the State of Punjab.”

After considering all the Chapters Contained in the report in detail and recommendations made upon deliberation, it was decided as under:-

- 1 The Deptt. Of Local Govt. should enforce the esisting Statutory provisions of the Punjab Municipal Act, 1911 and Punjab Municipal Corporation Act 1976 especially Section 203, Sector 204, Section 342 and Section 343 of the Punjab Municipal Corporation Act, 1976 for shifting of existing polluting industries.

(Action by Deptt. of Local Govt.)

- 2 Master Plans for the towns of Jalandhar, Ludhiana, Batala, Amritsar and Mandi Gobindgarh should be notified by the concerned deptt. immediately. This should be accorded top priority. Action plans for all other towns should be notified in a time bound manner.

(Action by Deptt. of Housing and Urban Dev. Town & Country Planning.)

- 3 The areas Contiguous to existing designated industrial areas which have become largely industrial areas which have become largely industrial area should be regularized as industrial areas by imposing environmental check and improvement of existing infrastructure in the non-designated areas proposed to be declared as industrial area will be met by levying conversion charges on account of change in the use of land for the entrepreneurs running their industrial units in the non-designated industrial areas.

(Action by Deptt. of Industrial & Commerce,
Punjab Pollution Control Board & Deptt. of Local
Govt.)

- 4 Conversion of landuse from agricultural to non-agricultural purposes outside the master plans or municipal limits should be regulated on the pattern of such provisions made in the State of Haryana.

(Action by Deptt. of Town Country Planning Deptt.
of Revenue.)

- 5 The areas vacated by shifting of hazardous industries should be allowed to be exploited for Commercial purposes. To achieve this purpose, if necessary, the existing y laws can be amended accordingly.

(Action by Deptt. of Local Govt.)

- 6 Alternative area for shifting of Hazardous industries, not located in the above newly converted areas, should be identified and developed. Such areas may be identified by the Deptt. of Industries & Commerce. While identifying the new Industrial Areas, it is required to be kept in view that the areas should be sufficient to absorb all the polluting units of similar type or of a hazardous nature. Such area can be notified as industrial areas by the Govt. or by the Consortium or Association of Industries. Whenever feasible, common treatment facilities for development be feasible, common treatment facilities for development be considered. The cost of acquisition of land, development considered. The cost of acquisition of land, development and estt. of ETPs would be borne by the Industries. The Govt. can assist the industries to acquire land at their cost, and also pass on any subsidies for ETPs available under schemes of the State or Central Govt. as is the practice in enlightened economics abroad, the industrial Estates should be managed by the industries themselves.

(Action by Deptt. of Industries & Commerce/
PSIEC)

- 7 The process for shifting of the polluting industries out of the municipal limits will be taken up in phases. In the first phase, the process for physically shifting the 17 Red category of highly pollution industries in the five towns of Amritsar, Jalandhar, Ludhiana, Mandi Gobindgarh and Batala outside the municipal limits shall be taken within one year. In the second phase, the process for physically shifting of these 17 Red Category of industries outside the municipal limits in the remaining towns will be taken within one year after the master plans of these areas are notified. The identification of the industries to be shifted out shall be carried out by Pollution Control Board.

(Action by Deptt. of Local Govt., Industries & Commerce and Pb. Pollution Control Board)

- 8 If Common effluent treatment plants (CETP) are established , the respective industrial associations would be responsible for incurring expenditure on the commissioning of the Common Effluent Treatment Plant for a cluster of similar type of industrial units. The responsibility for operation and maintenance of the Common Effluent Treatment Plant would be of the concerned industrial Association. They may be encouraged to treat a CETP as a commercially viable project by levying user charges on all units in the cluster.

(Action by Deptt. of Industries & Commerce/, Punjab Pollution Control Board.)

- 9 For persuading the entrepreneurs of the industrial units to shift out of the municipal limits, they should be offered the following incentives:-
- a) Under the present municipal laws, the commercial use of the present industrial use in permissible. This can act as a strong incentive for the shifting of industrial units since the price of the land of the existing industrial units within the municipal limits is much higher than it would be of the proposed new sites in the identified industrial areas. It needs to be consciously encouraged by giving formal permission and charging conversion charges.

(Action by Deptt. of Local Govt.)

Contd.....

**GOVERNMENT OF PUNJAB
DEPARTMENT OF HOUSING & URBAN DEVELOPMENT
(HOUSING-1 BRANCH)
NOTIFICATION**

Date:29/1/08

No. 12/42/06-HG1/893 Whereas it appears to the Governor of Punjab that to meet the challenge of rapid growth of Gobindgarh City and to provide for a workable framework comprehensive planned and regulated development, preparation of Statutory Master Plan of Gobindgarh City is very essential. Hence in order to develop Gobindgarh City and its surroundings in orderly manner and to prepare its Master Plan under "The Punjab Regional and Town Planning and Development Act, 1995", the Governor of Punjab is pleased to declare the Local Planning area of Gobindgarh City within the meaning of sub section (1) of section 56 of the Punjab Regional and Town Planning and Development (Amendment) Act, 2006. The total area proposed for Local Planning Area is 14267 Hectares (35239.49 Acs.) including Gobindgarh City and adjoining 56 villages. The schedule of boundary of Local Planning Area is given below:-

Schedule of Boundary

NORTH: Starting from point 'A' located on the right edge of the Ambala-Ludhiana G.T. Road (N.H.No.1), crossing Ambala-Ludhiana Railway line, moving Eastwards along Western revenue boundaries of village Nasrali (H.B.No.63), village Gobindgarh (H.B.No.1) and village Dadheri (H.B.No.202), thenon along Southern revenue boundaries of village Fatehgarh Niuan (H.B.No.204) and village Kotla Ajner (H.B.No.206) and thereafter moving along Northern revenue boundaries of village Kotla Ajner (H.B.No.206), village Fatehgarh Niuan (H.B.No.204), village Shiraj Majra (H.B.No.199), village Lohar Majra (H.B.No.200), village Ferozepur (H.B.No.78), crossing Bhakhra Canal, village Sadiqpur (H.B.No.310) and thereafter along Eastern revenue boundaries of village Sadiqpur (H.B.No.310), village Dera Mir Miran (H.B.No.76), village Harlalpura (H.B.No.72), village Majri Azim (H.B.No.71), crossing Ambala-Ludhiana Railway line, village Chanalon (H.B.No.128) upto Point 'B' which is the tri-junction point of revenue estate of village Chanalon (H.B.No.128), village Khanpur (H.B.No.126) & village Malak Pur (H.B.No.133).

EAST: Thence from point 'B' moving Southward along Eastern revenue boundaries of village Chanalon (H.B.No.128), crossing National Highway No.1, Sirhind Choe & Narwana Canal, village Malko Majra (H.B.No.129), village Rampur Jadid (H.B.No.47), village Saundha (H.B.No.49), village Jallah (H.B.No.50), crossing Bhakhra Canal upto point 'C' which is the tri-junction point of revenue estate of village Jallah (H.B.No.50), village Sidhwan (H.B.No.308) & village Sunder Pur (H.B.No.51).

SOUTH: Thence from point 'C' moving Westwards along Southern revenue boundaries of village Jallah (H.B.No.50), village Majra Nidhe Wala (H.B.No.48), village Kheri (H.B.No.37), village Kumbhra (H.B.No.40), crossing Sirhind Choe village Baraunga Jer (H.B.No.33), village Baraunga Baland (H.B.No.32), village Jalalpur (H.B.No.31), village Saliani (H.B.No.66), then crossing the Gobindgarh-Amloh Schedule Road No.33, village Khumana (H.B.No.12) & crossing Khanna-Amloh road, village Majri Arain (H.B.No.15), village Salana Jiwan Singh Wala (H.B.No.11), village Ramgarh (H.B.No.18), village Rattan Palon (H.B.No.162) upto point 'D' which is the tri-junction point of revenue estate of village Rattan Palon (H.B.No.162), village Kale Majra (H.B.No.161) & village Naraingarh (H.B.No.242) of Tehsil Khanna, District Ludhiana.

WEST: Thence from point 'D' moving Northwards along Western revenue boundaries of village Rattan Palon (H.B.No.162), village Ramgarh (H.B.No.18), village Salana Jiwan Singh Wala (H.B.No.11), village Kahanpura (H.B.No.10) crossing Khanna-Amloh road, village Shahpur (H.B.No.7), village Badinpur (H.B.No.8), village Mughal Majra (H.B.No.62), village Nasrali (H.B.No.63), then crossing the Ambala-Ludhiana G.T.Road upto point 'A' which is the point of start.

The boundaries of Local Planning Area Gobindgarh are specially shown on the drawing No.DTP(FGS) 770/07, dt:19-11-07. All the provision laid down u/s 56(2) of "The Punjab Regional and Town Planning and Development Act, 1995 (Amended 2006)" and all the concerned rules framed under this Act have been taken into consideration.

Chandigarh
Dated: 24-1-2008

Sd/-
(Arun Goel, I.A.S.)
Secretary to Government of Punjab
Housing & Urban Development Department.

Endst.No. 12/42/2006-4HG1/

Date, Chandigarh, the:

A copy along with spare copy is forwarded to the Controller, Printing & Stationary, Punjab, Chandigarh with the request that this notification may be published in the official gazette (Extra ordinary) and 100 copies of the printed notification may be sent to the Government for record.

Sd/-
Additional Secretary
Department of Housing & Urban Development

Endst.No. 12/42/2006-4HG1/ 895

Date, Chandigarh, the:29-1-08

A copy is forwarded to the Chief Town Planner, Punjab, Chandigarh w.r.t. his letter No. 226-CTP(PB)/ SG-45 dated 15-01-2008 for information & necessary action.

Sd/-
Additional Secretary
Department of Housing & Urban Development

Endst.No. 12/42/2006-4HG1/

Date, Chandigarh, the:

A copy is forwarded to the Chief Administrator , PUDA, S.A.S. Nagar for information & necessary action.

Sd/-
Additional Secretary
Department of Housing & Urban Development

Endst.No. 12/42/2006-4HG1/

Date, Chandigarh, the:

A copy is forwarded to the Deputy Commissioner, Fatehgarh Sahib for information & necessary action.

Sd/-
Additional Secretary
Department of Housing & Urban Development

Endst.No. 12/42/2006-4HG1/

Date, Chandigarh, the:

A copy is forwarded to the Director Information Technology, Punjab with a request that this notification may kindly be published on the website of Government of Punjab.

Sd/-
Additional Secretary
Department of Housing & Urban Development

ਨਗਰ ਅਤੇ ਗਰਾਮ ਯੋਜਨਾਬੰਦੀ ਵਿਭਾਗ, ਪੰਜਾਬ ।

ਪਿੱਠ ਅੰਕਣ ਨੰ: 3008-09-ਸੀਟੀਪੀ(ਪਬ)/ ਐਸਜੀ-45, ਮਿਤੀ:28-2-08

ਇਸ ਦਾ ਇੱਕ ਉਤਾਰਾ ਜ਼ਿਲ੍ਹਾ ਨਗਰ ਯੋਜਨਾਕਾਰ, ਫਤਹਿਗੜ੍ਹ ਸਾਹਿਬ/ ਸੀਨੀਅਰ ਨਗਰ ਯੋਜਨਾਕਾਰ, ਮੋਹਾਲੀ ਨੂੰ ਸੂਚਨਾ ਅਤੇ ਲੋੜੀਂਦੀ ਕਾਰਵਾਈ ਹਿੱਤ ਭੇਜਿਆ ਜਾਂਦਾ ਹੈ ।

ਸਹੀ/-
ਸੀਨੀਅਰ ਨਗਰ ਯੋਜਨਾਕਾਰ(ਸਮ),
ਵਾ: ਮੁੱਖ ਨਗਰ ਯੋਜਨਾਕਾਰ,
ਪੰਜਾਬ, ਚੰਡੀਗੜ੍ਹ ।

ANNEXURE-5

**GOVERNMENT OF PUNJAB
DEPARTMENT OF HOUSING & URBAN DEVELOPMENT
(HOUSING BRANCH-1)**

NOTIFICATION

DATED:29-1-08

No. 12/42/2006-4HG1/899 Whereas the Governor of Punjab was pleased to declare the Local Planning Area of Gobindgarh City and its surrounding area u/s 56 (1) "The Punjab Regional and Town Planning and Development Act, 1995" vide notification No.12/42/2006-4HG1/ 893, dated 29-1-08.

Further the Governor of Punjab is pleased to designate the Chief Town Planner, Punjab as Planning agency for the above Local Planning area under Section 57 of "The Punjab Regional and Town Planning and Development Act, 1995".

Dated, Chandigarh
24-01-2008

Sd/-
Arun Goel
Secretary to Government of Punjab
Housing & Urban Development Department

ANNEXURE-6

GOVERNMENT OF PUNJAB DEPARTMENT OF HOUSING & URBAN DEVELOPMENT (HOUSING-1 BRANCH) NOTIFICATION

Date:10-8-09

No. 12/42/06-4HGI/2218 Local Planning Area, Gobindgarh city for the preparation of master plan of this city was notified vide notification No.12/42/06-4HG1/893, dated:29/01/08, however as per satellite imagery data the Local Planning Area boundary needs rectification and in view of above the boundaries of Local Planning area have been revised. The total area proposed for Local Planning Area is 13832.00 Hectares (34165.04 Acs.) including Gobindgarh and adjoining 53 villages. The Governor of Punjab is pleased to notify the revised boundaries of Local Planning Area Gobindgarh within the meaning of section 56(7) of "The Punjab Regional and Town Planning and Development Act (Amendment), 2006" . The revised schedule of boundary is given below:-

Schedule of Boundary

NORTH: Starting from point 'A' located on the right edge of the Ambala-Ludhiana G.T. Road (N.H.No.1), moving along Northern revenue boundary of village Mughal Majra (H.B.No.62), Western/ Northern revenue boundary of village Nasrali (H.B.No.63) & crossing Ambala-Ludhiana Railway line, along Northern revenue boundary of village Gobindgarh (H.B.No.1), thence along Western revenue boundary of village Dadheri (H.B.No.202) & village Lohar Majra Kalan (H.B.No.200), then along Southern, Western & Northern revenue boundaries of village Fatehgarh Niuan (H.B.No.204) and moving along Northern revenue boundaries of village Shiraj Majra (H.B.No.199), village Lohar Majra Kalan (H.B.No.200), village Ferozepur (H.B.No.78), village Bagh Sikander (H.B.No.77) & then again village Ferozepur (H.B.No.78), crossing Bhakhra Canal moving along Eastern revenue boundaries of village Bagh Sikander (H.B.No.77), village Ferozepur (H.B.No.78) again village Bagh Sikander (H.B.No.77) again village Ferozepur (H.B.No.78), village Bagh Sikander (H.B.No.77) again village Ferozepur (H.B.No.78) & village Bagh Sikander (H.B.No.77), village Dera Mir Miran (H.B.No.76), village Harlalpur (H.B.No.72), village Majri Azim (H.B.No.71), then crossing Ambala-Ludhiana Railway line moving along Northern revenue boundary of village Chahalon (H.B.No.128) upto Point 'B' which is the right edge of Ambala-Ludhiana G.T.Road (N.H.No.1).

EAST: Thence from point 'B' moving along Eastern revenue boundary of village Chahalon (H.B.No.128), crossing Sirhind Choe again along Eastern revenue boundary of village Chahalon (H.B.No.128) then along Northern revenue boundary of village Malko Majra (H.B.No.129), crossing Narwana Canal along Western/ Northern revenue boundaries of village Chahalon (H.B.No.128) alongwith crossing Narwana Canal again, then moving along Eastern revenue boundary of village Chahalon (H.B.No.128), village Malko Majra (H.B.No.129), village Saundha (H.B.No.49), village Rampur Jadid (H.B.No.47) again village Saundha (H.B.No.49) & then village Jallah (H.B.No.50) upto point 'C' which is the right edge of Bhakhra Canal.

SOUTH: Thence from point 'C' crossing Bhakhra Canal moving along Southern revenue boundaries of village Jallah (H.B.No.50), village Majra Nidhe Wala (H.B.No.48) & Southern/ Western revenue boundaries of village Kheri (H.B.No.37), then along Western revenue boundaries of village Mullanpur Khurd (H.B.No.43), village Mullanpur Kalan (H.B.No.42), village Wazir Nagar (H.B.No.41) & thereafter along Southern revenue boundaries of village Fatehpur (H.B.No.39) & along

Southern/Western revenue boundaries of village Baraunga Jer (H.B.No.33) alongwith crossing Sirhind Choe & moving along Western revenue boundary of village Baraunga Baland (H.B.No.32), then along Southern revenue boundaries of village Jalalpur (H.B.No.31), village Saliyani (H.B.No.66), crossing Gobindgarh-Amloh (Scheduled Road No.33), then along the Southern revenue boundary of village Saliyani (H.B.No.66), village Khumna (H.B.No.12), crossing Amloh-Khanna road, village Salana Jiwan Singh Wala (H.B.No.11), village Ramgarh (H.B.No.18) & then along Western revenue boundary of village Ramgarh (H.B.No.18) & village Salana Dula Singh Wala (H.B.No.17) upto point 'D' which is the right edge of Distributory.

WEST: Thence from point 'D' crossing the Distributory moving along Western revenue boundary of village Salana Dula Singh Wala (H.B.No.17), Southern/ Western revenue boundaries of village Rattan Palon (H.B.No.162), then along Northern revenue boundaries of village Salana Dula Sing Wala (H.B.No.17), village Salana Jiwan Singh Wala (H.B.No.11), crossing Khanna-Amloh road, village Kahanpura (H.B.No.10), village Badinpur (H.B.No.8), village Mughal Majra (H.B.No.62), crossing Ambala-Ludhiana G.T.Road upto point 'A' which is the starting point.

The revised boundaries of Local Planning Area Gobindgarh are shown on the drawing No.DTP(FGS)1041/09, dt:27-2-2009 all the provision laid down u/s 56(2) of "The Punjab Regional and Town Planning and Development Act (Amendment), 2006" and all the concerned rules framed under this Act have been taken into consideration.

Chandigarh
Dated:28-7-2009

Sd/-
ARUN GOEL, I.A.S.
Secretary to Government of Punjab
Housing & Urban Development Department.

Endst.No. 12/42/2006-4HG1/

Date, Chandigarh, the:

A copy along with spare copy is forwarded to the Controller, Printing & Stationary, Punjab, Chandigarh with the request that this notification may be published in the official gazette (Extra ordinary) and 100 copies of the printed notification may be sent to the Government for record.

Sd/-
Additional Secretary
Department of Housing & Urban Development

Endst.No. 12/42/2006-4HG1/ 2220

Date, Chandigarh, the:10-8-09

A copy is forwarded to the Chief Town Planner, Punjab, Chandigarh w.r.t. his letter No. 5329-CTP(PB)/ SG-45 dated 03-07-2009 for information & necessary action.

Sd/-
Joint Secretary
Department of Housing & Urban Development

Endst.No. 12/42/2006-4HG1/

Date, Chandigarh, the:

A copy is forwarded to the Chief Administrator , PUDA, S.A.S. Nagar w.r.t. vide endst.No.12/42/200664HG1/896 dated 29-01-2008 for information & necessary action.

Sd/-
Joint Secretary
Department of Housing & Urban Development

Endst.No. 12/42/2006-4HG1/

Date, Chandigarh, the:

A copy is forwarded to the Deputy Commissioner, Fatehgarh Sahib w.r.t. vide endst.No.12/42/200664HG1/897 dated 29-01-2008 for information & necessary action.

Sd/-
Joint Secretary
Department of Housing & Urban Development

Endst.No. 12/42/2006-4HG1/

Date, Chandigarh, the:

A copy is forwarded to the Director Information Technology, Punjab w.r.t. vide endst.No.12/42/200664HG1/898 dated 29-01-2008 with a request that this notification may kindly be published on the website of Government of Punjab.

Sd/-
Joint Secretary
Department of Housing & Urban Development

ਨਗਰ ਅਤੇ ਗਰਾਮ ਯੋਜਨਾਬੰਦੀ ਵਿਭਾਗ, ਪੰਜਾਬ ।

ਪਿੱਠ ਅੰਕਣ ਨੰ: 6811-12-ਸੀਟੀਪੀ(ਪਬ)/ ਐਸਜੀ-45, ਮਿਤੀ:2-9-09

ਇਸ ਦਾ ਇਕ ਉਤਾਰਾ ਜ਼ਿਲ੍ਹਾ ਨਗਰ ਯੋਜਨਾਕਾਰ, ਫਤਿਹਗੜ੍ਹ ਸਾਹਿਬ ਅਤੇ ਸੀਨੀਅਰ ਨਗਰ ਯੋਜਨਾਕਾਰ, ਮੋਹਾਲੀ ਨੂੰ ਸੂਚਨਾ ਅਤੇ ਯੋਗ ਕਾਰਵਾਈ ਹਿੱਤ ਭੇਜਿਆ ਜਾਂਦਾ ਹੈ ।

ਸਹੀ/-

ਜ਼ਿਲ੍ਹਾ ਨਗਰ ਯੋਜਨਾਕਾਰ(ਸ.ਮੁ),
ਵਾ: ਮੁੱਖ ਨਗਰ ਯੋਜਨਾਕਾਰ,
ਪੰਜਾਬ, ਚੰਡੀਗੜ੍ਹ ।

ਫੋਨ:0175-2228132

ਪੰਜਾਬ ਪ੍ਰਦੂਸ਼ਣ ਰੋਕਥਾਮ ਬੋਰਡ
ਖੇਤਰੀ ਦਫਤਰ, ਵਾਤਾਵਰਣ ਭਵਨ, ਨਾਭਾ ਰੋਡ, ਪਟਿਆਲਾ

ਨੰਬਰ 4269

ਮਿਤੀ: 5-11-09

To

The District Town Planner,
District Administrative Complex,
Fatehgarh Sahib.

**Subject: Allowing the upcoming induction furnaces in Mandi Gobindgarh,
Distt. Fatehgarh Sahib.**

**Reference: Your office memo no. 1197-DTP(FGS)/ M-52 dated
27-10/2009.**

It has been desired vide letter under reference for sending comments/ approval regarding zone earmarked for setting up of induction/ arc/ forging/ cupola furnace units.

In this regard, it is suggested that a meeting of 'Think Tank' constituted to prepare the Master Plan of Mandi Gobindgarh under the 'the Punjab Regional & Town Planning & Development (Amendment) Act, 2006' may be convened to look into all the aspects regarding location of the zone including the predominant wind direction, accessibility to the zone, basic infrastructure to be provided, disposal of wastewater to be generated from the zone etc.

**Sd/-
Enironmental Engineer
Regional Office, Patiala**

ਮਿਤੀ:23-11-2009 ਨੂੰ ਸਵੇਰੇ 11.00 ਵਜੇ ਮਾਨਯੋਗ ਡਿਪਟੀ ਕਮਿਸ਼ਨਰ, ਫਤਹਿਗੜ੍ਹ ਸਾਹਿਬ ਜੀ ਦੀ ਪ੍ਰਧਾਨਗੀ ਹੇਠ "ਦਿ ਪੰਜਾਬ ਰਿਜ਼ਨਲ ਐਂਡ ਟਾਊਨ ਪਲੈਨਿੰਗ ਐਂਡ ਡਿਵੈਲਪਮੈਂਟ (ਅਮੈਡਮੈਂਟ) ਐਕਟ, 2006" ਤਹਿਤ ਮਾਸਟਰ ਪਲੈਨ ਗੋਬਿੰਦਗੜ੍ਹ ਵਿਜ਼ਨ-2031 ਬਣਾਉਣ ਹਿੱਤ ਗਠਿਤ "ਥਿੰਕ ਟੈਂਕ ਕਮੇਟੀ" ਦੀ ਮੀਟਿੰਗ ਦੀ ਕਾਰਵਾਈ:-

ਵਿਸ਼ੇ ਤਹਿਤ ਮਿਤੀ:23-11-2009 ਨੂੰ ਰੱਖੀ ਮੀਟਿੰਗ ਵਿੱਚ ਹੇਠ ਲਿਖੇ ਅਧਿਕਾਰੀ ਸਾਹਿਬਾਨ ਸ਼ਾਮਲ ਹੋਏ:-

1. ਸ਼੍ਰੀਮਤੀ ਪੂਨਮਦੀਪ ਕੌਰ, ਉਪ ਮੰਡਲ ਮੈਜਿਸਟਰੇਟ, ਅਮਲੋਹ ।
2. ਸ਼੍ਰੀ ਰਕੇਸ਼ ਕੁਮਾਰ ਸਿੰਗਲਾ, ਅਸਟੇਟ ਅਫਸਰ, ਪੁੱਡਾ, ਪਟਿਆਲਾ ।
3. ਸ਼੍ਰੀ ਸੁਰਿੰਦਰ ਲੁੰਬਾ, ਕਾਰਜਕਾਰੀ ਇੰਜੀਨੀਅਰ, ਪੀਐਸਈਬੀ, ਗੋਬਿੰਦਗੜ੍ਹ ।
4. ਸ਼੍ਰੀ ਸੋਹਨ ਲਾਲ, ਐਸ.ਡੀ.ਓ., ਭਵਨ ਤੇ ਮਾਰਗ ਸ਼ਾਖਾ, ਸਰਹਿੰਦ ।
5. ਸ਼੍ਰੀ ਪਰਮੋਦ ਚੰਦ, ਐਸ.ਡੀ.ਓ., ਪਬਲਿਕ ਹੈਲਥ, ਫਤਹਿਗੜ੍ਹ ਸਾਹਿਬ ।
6. ਸ਼੍ਰੀ ਬਲਵੀਰ ਸਿੰਘ, ਵਣ ਮੰਡਲ ਅਫਸਰ, ਫਤਹਿਗੜ੍ਹ ਸਾਹਿਬ ।
7. ਸ਼੍ਰੀ ਸਮਰਜੀਤ ਕੁਮਾਰ ਗੋਇਲ, ਵਾਤਾਵਰਣ ਇੰਜੀਨੀਅਰ, ਪੀ.ਪੀ.ਸੀ.ਬੀ., ਪਟਿਆਲਾ ।
8. ਸ਼੍ਰੀ ਸੁਚਿੰਦਰ ਸਿੰਘ, ਜ਼ਿਲ੍ਹਾ ਕੁਆਡੀਨੇਟਰ, ਦਫ: ਜ਼ਿਲ੍ਹਾ ਸਿੱਖਿਆ ਅਫਸਰ (ਸੈ:), ਫਤਹਿਗੜ੍ਹ ਸਾਹਿਬ ।
9. ਸ਼੍ਰੀ ਮਹੇਸ਼ ਖੰਨਾ, ਜ਼ਿਲ੍ਹਾ ਮੈਨੇਜਰ, ਜ਼ਿਲ੍ਹਾ ਉਦਯੋਗ ਕੇਂਦਰ, ਗੋਬਿੰਦਗੜ੍ਹ ।
10. ਸ਼੍ਰੀ ਲਵ ਕੁਮਾਰ, ਸੁਪਰਡੈਂਟ, ਦਫ: ਕਾਰਜ-ਸਾਧਕ ਅਫਸਰ, ਨਗਰ ਕੌਂਸਲ, ਗੋਬਿੰਦਗੜ੍ਹ ।
11. ਡਾ.ਰਣਜੀਤ ਸਿੰਘ, ਸੀਨੀਅਰ ਮੈਡੀਕਲ ਅਫਸਰ, ਗੋਬਿੰਦਗੜ੍ਹ ।
12. ਸ਼੍ਰੀ ਹਰਮੇਸ਼ ਜੈਨ, ਆਲ ਇੰਡੀਆ ਸਟੀਲ ਰੀ-ਰੋਲਰ ਐਸੋਸੀਏਸ਼ਨ, ਗੋਬਿੰਦਗੜ੍ਹ ।
13. ਸ਼੍ਰੀ ਬੀ.ਐਨ.ਗੁਪਤਾ, ਈ.ਓ., ਆਲ ਇੰਡੀਆ ਸਟੀਲ ਰੀ-ਰੋਲਰ ਐਸੋਸੀਏਸ਼ਨ, ਗੋਬਿੰਦਗੜ੍ਹ ।
14. ਸ਼੍ਰੀ ਰਜੀਵ ਸੂਦ (ਐਮ.ਸੀ.), ਜਨਰਲ ਸੈਕਟਰੀ ਸਮਾਲ ਸਕੇਲ ਸਟੀਲ ਰੀ-ਰੋਲਿੰਗ ਐਸੋਸੀਏਸ਼ਨ, ਗੋਬਿੰਦਗੜ੍ਹ ।
15. ਸ਼੍ਰੀ ਸੰਦੀਪ ਸਿੰਘ, ਹੈਡ ਆਫ ਦੀ ਡਿਪਾਰਟਮੈਂਟ (ਸਿਵਲ) ਰਿਮਟ ਕਾਲਜ਼, ਗੋਬਿੰਦਗੜ੍ਹ ।

ਜ਼ਿਲ੍ਹਾ ਨਗਰ ਯੋਜਨਾਕਾਰ, ਫਤਹਿਗੜ੍ਹ ਸਾਹਿਬ ਵੱਲੋਂ ਬਤੌਰ ਮੈਂਬਰ ਸਕੱਤਰ ਮੀਟਿੰਗ ਦੀ ਕਾਰਵਾਈ ਆਰੰਭ ਕਰਦੇ ਹੋਏ ਲੋਕਲ ਪਲੈਨਿੰਗ ਏਰੀਆ, ਗੋਬਿੰਦਗੜ੍ਹ ਦੇ ਸਬੰਧ ਵਿੱਚ ਤਿਆਰ ਕੀਤੇ ਜਾ ਰਹੇ ਮਾਸਟਰ ਪਲੈਨ ਵਿੱਚ ਉਦਯੋਗਿਕ ਮੰਤਵ ਲਈ ਤਜਵੀਜ਼ ਕੀਤੇ ਜਾ ਰਹੇ ਰਕਬੇ/ ਜ਼ੋਨ ਆਦਿ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿੱਤੀ ਗਈ । ਮੀਟਿੰਗ ਵਿੱਚ ਹਾਜ਼ਰ ਮੈਂਬਰਾਂ ਵੱਲੋਂ ਲੋਕਲ ਪਲੈਨਿੰਗ ਏਰੀਆ, ਗੋਬਿੰਦਗੜ੍ਹ ਜਿਸ ਦਾ ਮਾਸਟਰ ਪਲੈਨ ਉਲੀਕਿਆ ਜਾ ਰਿਹਾ ਹੈ, ਵਿੱਚ Induction/ Arc/ Forging/ Cupola Furnace Units ਲਈ ਵੱਖਰਾ ਜ਼ੋਨ ਤਜਵੀਜ਼ ਕਰਨ ਸਬੰਧੀ ਵਿਚਾਰ ਕਰਦੇ ਹੋਏ ਡਾਇਰੈਕਟਰ, ਪੰਜਾਬ ਰਿਮੋਟ ਸੈਂਸਿੰਗ ਸੈਟਰ, ਲੁਧਿਆਣਾ ਵੱਲੋਂ ਜੀ.ਆਈ.ਐਸ. ਰਾਹੀਂ ਪੰਜਾਬ ਪ੍ਰਦੂਸ਼ਣ ਕੰਟਰੋਲ ਬੋਰਡ ਦੇ ਪੱਤਰ ਨੰ:3522, ਮਿਤੀ:7-10-09 ਵਿੱਚ ਦਰਸਾਏ ਨਾਰਮਜ਼/ ਫਾਸਲੇ ਆਦਿ ਦੇ ਮੁਤਾਬਿਕ ਅਡੈਟੀਫਾਈ ਕੀਤੇ ਗਏ 305 ਹੈਕਟੇਅਰ ਰਕਬੇ ਦੀ ਸਾਈਟ ਜੋ ਕਿ ਪਿੰਡ ਲੁਹਾਰ ਮਾਜਰਾ (ਹ.ਬ.ਨੰ:200) ਅਤੇ ਪਿੰਡ ਬਾਗ ਸਿਕੰਦਰ (ਹ.ਬ.ਨੰ:77) ਵਿਚਕਾਰ ਪੈਂਦੀ ਹੈ, ਨੂੰ ਸਹੂਲਤਾਂ ਦੀ ਘਾਟ ਅਤੇ ਮੌਜੂਦਾ ਹੋ ਰਹੇ ਵਿਕਾਸ ਤੋਂ ਇਕ ਪਾਸੇ ਪੈਂਦੀ ਹੋਣ ਕਾਰਨ ਭਾਵ ਕੁਨੈਕਟੀਵਿਟੀ ਆਦਿ ਨਾਂ ਹੋਣ ਕਾਰਨ ਢੁੱਕਵਾਂ ਨਹੀਂ ਪਾਇਆ ਗਿਆ ।

ਫਰਨਸ ਲਈ ਤਜਵੀਜ਼ਤ ਮਾਸਟਰ ਪਲੈਨ ਦੀ ਡਰਾਇੰਗ ਤੇ ਜ਼ਿਲ੍ਹਾ ਨਗਰ ਯੋਜਨਾਕਾਰ, ਫਤਹਿਗੜ੍ਹ ਸਾਹਿਬ ਵੱਲੋਂ ਉਪਰੋਕਤ ਸਾਈਟ ਤੋਂ ਇਲਾਵਾ ਅਲਟਰਨੇਟਿਵ ਸਾਈਟ ਦਾ ਸੁਝਾਅ ਪੇਸ਼ ਕੀਤਾ ਗਿਆ ਜੋ ਜੀ.ਟੀ. ਰੋਡ ਤੋਂ ਸਰਹਿੰਦ ਵੱਲ ਪੱਛਮ-ਦੱਖਣ ਵੱਲ ਅਮਲੋਹ ਮਾਈਨਰ ਅਤੇ ਭਾਖੜਾ ਨਹਿਰ ਦੇ ਦੋਵੇਂ ਪਾਸੇ ਪੈਂਦੇ ਰਕਬੇ ਵਿੱਚ ਪੈਂਦੀ ਹੈ ਜਿਸ ਵਿੱਚ ਮੁੱਖ ਤੌਰ ਤੇ ਪਿੰਡ ਚਤਰਪੁਰਾ, ਅੰਬੇਮਾਜਰਾ, ਮੁੱਲਾਂਪੁਰ ਕਲਾਂ, ਵਜ਼ੀਰਨਗਰ, ਵਜ਼ੀਰਾਬਾਦ ਅਤੇ ਕੁੱਝ ਹੋਰ ਪਿੰਡਾਂ ਦਾ ਵੀ ਰਕਬਾ ਪੈਂਦਾ ਹੈ । ਪੰਜਾਬ ਪ੍ਰਦੂਸ਼ਣ ਕੰਟਰੋਲ ਬੋਰਡ ਤੋਂ ਹਾਜ਼ਰ ਮੈਂਬਰਜ਼ ਵੱਲੋਂ ਇਸ ਜ਼ੋਨ ਵਿੱਚ ਵਿਚਾਰੇ ਜਾਣ ਵਾਲੇ ਇੰਡਕਸ਼ਨ ਫਰਨਸ ਯੂਨਿਟ ਨੂੰ ਨੈਸ਼ਨਲ ਹਾਈਵੇ/ ਸਟੇਟ ਹਾਈਵੇ/ ਸ਼ੁਡਿਊਲ ਰੋਡ ਅਤੇ ਪਿੰਡਾਂ ਦੀ ਅਬਾਦੀ ਤੋਂ 500 ਮੀਟਰ ਦੇ ਫਾਸਲੇ ਤੇ ਰੱਖੇ ਜਾਣ ਬਾਰੇ ਸੁਝਾਅ ਦਿੱਤਾ ਗਿਆ, ਜਿਸਨੂੰ ਵੀ ਸਮੂਹ ਮੈਂਬਰਾਂ ਵੱਲੋਂ ਇਸ ਸਾਈਟ ਦੀ ਬਣਤਰ ਭਾਵ ਸਭ ਤੋਂ ਵੱਧ ਪ੍ਰਦੂਸ਼ਿਤ ਹਵਾ ਰਾਹੀਂ ਵਾਤਾਵਰਣ ਨੂੰ ਗੰਦਾ ਕਰਨ ਵਾਲੀ ਇੰਡਸਟਰੀ ਹੋਣ ਦੇ ਕਾਰਨ ਸੁਝਾਏ ਗਏ 500 ਮੀਟਰ ਦੇ ਫਾਸਲੇ ਨੂੰ ਮੌਜੂਦਾ ਤੌਰ ਤੇ ਰੱਖੇ ਜਾਣ ਬਾਰੇ ਪ੍ਰਵਾਨ ਕੀਤਾ ਗਿਆ । ਜਿਸਦੇ ਸਨਮੁੱਖ ਇਸ ਅਲਟਰਨੇਟਿਵ ਸਾਈਟ ਨੂੰ ਸਮੂਹ ਮੈਂਬਰਾਂ ਵੱਲੋਂ ਹਰ ਪੱਖੋਂ ਢੁੱਕਵੀਂ ਪਾਉਂਦੇ ਹੋਏ ਇਸਨੂੰ Induction/ Arc/ Forging/ Cupola Furnace Units ਲਈ ਰਾਖਵਾਂ ਰੱਖਣ ਸਬੰਧੀ ਪ੍ਰਸਤਾਵ ਨੂੰ ਪ੍ਰਵਾਨ ਕੀਤਾ ਗਿਆ ।

ਜ਼ਿਲ੍ਹਾ ਮੈਨੇਜਰ, ਜ਼ਿਲ੍ਹਾ ਉਦਯੋਗ ਕੇਂਦਰ, ਗੋਬਿੰਦਗੜ੍ਹ, ਆਲ ਇੰਡੀਆ ਸਟੀਲ ਰੀ-ਰੋਲਰਜ਼ ਐਸੋਸੀਏਸ਼ਨ ਅਤੇ ਸਮਾਲ ਸਕੇਲ ਸਟੀਲ ਰੀ-ਰੋਲਿੰਗ ਐਸੋਸੀਏਸ਼ਨ ਦੇ ਹਾਜ਼ਰ ਮੈਂਬਰਾਂ ਵੱਲੋਂ ਪਿੰਡ ਤਲਵਾੜਾ ਦੇ ਰਕਬੇ ਜੋ ਰੇਲਵੇ ਲਾਈਨ ਤੋਂ ਹੇਠਾਂ ਭਾਵ ਜੀ.ਟੀ.ਰੋਡ ਵੱਲ ਪੈਂਦਾ ਹੈ, ਨੂੰ ਮੌਜੂਦਾ ਵਿਕਾਸ ਦੇ ਸਨਮੁੱਖ ਉਦਯੋਗਿਕ ਜ਼ੋਨ ਦੇ ਤੌਰ ਤੇ ਰੱਖਣ ਬਾਰੇ ਸੁਝਾਅ ਦਿੱਤਾ ਗਿਆ, ਜਿਸਨੂੰ ਕਮੇਟੀ ਵੱਲੋਂ ਮੌਕੇ ਤੇ ਹੋਏ ਵਿਕਾਸ ਦੇ ਸਨਮੁੱਖ ਉਦਯੋਗਿਕ ਜ਼ੋਨ ਰੱਖੇ ਜਾਣ ਸਬੰਧੀ ਪ੍ਰਵਾਨ ਕੀਤਾ ਗਿਆ ।

ਸਮੂਹ ਮੈਂਬਰਾਂ ਦੇ ਧੰਨਵਾਦ ਸਹਿਤ ਮੀਟਿੰਗ ਦੀ ਸਮਾਪਤੀ ਕੀਤੀ ਗਈ ।

ਸਹੀ/-
ਡਿਪਟੀ ਕਮਿਸ਼ਨਰ,
ਫਤਹਿਗੜ੍ਹ ਸਾਹਿਬ।