

CHAPTER-I

INTRODUCTION

I.1 BACKGROUND HISTORY OF CHANDIGARH

Chandigarh, the dream city of India's first Prime Minister, Sh. Jawahar Lal Nehru, was planned by the famous French architect Le Corbusier. Picturesquely located at the foothills of Shivaliks, it is known as one of the best experiments in urban planning and modern architecture in the twentieth century in India.

Historical Background

“Chandigarh derives its name from the temple of “Chandi Mandir” located in the vicinity of the site selected for the city. The deity ‘Chandi’, the goddess of power and a fort or ‘garh’ laying beyond the temple gave the city its name” (Chandigarh-The City Beautiful).

The city has a pre-historic past. The gently sloping plains on which modern Chandigarh exists, was in the ancient past, a wide lake ringed by a marsh. The fossil remains found at the site indicate a large variety of aquatic and amphibian life which was supported by that environment. About 8000 years ago the area was also known to be a home to the Harappans. (Source: www.citco.nic.in)

Since the medieval thru' modern era, the area was part of the large and prosperous Punjab Province which was divided into East & West Punjab during partition of the country in 1947. The city was conceived not only to serve as the capital of East Punjab, but also to resettle thousands of refugees who had been uprooted from West Punjab.

In March, 1948, the Government of Punjab, in consultation with the Government of India, approved a 114.59 sq. kms. tract of land at the foothills of the Shivaliks as the site for the new capital. The location of the city site was a part of the erstwhile Ambala district as per the 1892-93 gazetteer of District Ambala. The site was selected by Dr. M.S. Randhawa, the then Deputy Commissioner of Ambala. Before the new city came up, the original site had about 59 villages (Singh *et.al.*, 1998). The foundation stone of the city was laid in 1952. Subsequently, at the time of reorganization of the state in 1966 (01.11.1966) into Punjab, Haryana and Himachal Pradesh, the city assumed the unique distinction of being the capital city of both, Punjab and Haryana while it itself was declared as a Union Territory and under the direct control of the Central Government.

Basic Statistics

The basic geographical and demographic profile of Chandigarh is as under:-

Area	114 sq kms. (+25.42 sq kms. additional hilly catchment area declared as Wildlife Sanctuary)
Longitude	76° 47' 14E
Latitude	30° 44' 14N
Altitude	304 – 365 meters above MSL with 1% drainage gradient
Annual Rainfall	86.06 mm/year average (April-2022 to March-2023)
Monsoon	July – September
Temperature	Winter Min. (Nov.21-Jan.,2022) 3°C–18°C Summer Max. (April-July,2021) 27°C – 45°C
Prevalent Winds	From the North West to South East in Winter and reverse in Summer.
Total Villages	22
Inhabited	22
Villages	At present 22 villages namely Kaimbwala, Sarangpur, Dhanas, Raipur Khurd, Raipur Kalan, Makhanmajra, Khuda Alisher, Kishangarh, Daria, Mauli Jagran, Behlana, Khuda Lahora, Khuda Jassu , Badheri, Butrela, Burail, Attawa, Hallomajra, Kajheri, Palsora, Maloya and Dadumajra have been merged in the Municipals limits of Chandigarh (in the year 2006 and 2018).
Population	10,55,450
Density of population/sq. km.	9,258 (As per 2011 Census)
Sex Ratio (females per 1000 males)	818 (As per 2011 Census)
Decennial Population Growth	17.2% (2001-2011)
Literacy Rate	86.0% (As per 2011 Census)
Birth Rate (per 1000)	9.25 (2023)
Death Rate (per 1000)	4.83 (2023)
Infant Mortality Rate (per 1000)	20.39 (2023)

Geology

The Union Territory of Chandigarh is located in the foothills of the Shivalik hill ranges in the north, which form a part of the fragile Himalayan ecosystem. It is occupied by Kandi (Bhabhar) in the north east and Sirowal (Tarai) and alluvial plains in the remaining part. The subsurface formation comprises of beds of boulders, pebbles, gravel, sand, silt, clays and some kankar. The area is drained by two seasonal rivulets viz. Sukhna Choe in the east and Patiala-Ki-Rao Choe in the west. The central part forms a surface water divide and has two minor streams. The stream passing through the central part is called N-Choe and the other is Choe Nala which initiates at Sector 29.

Climate

Chandigarh falls under Koeppen's Cwg category i.e. it has cold dry winter, hot summer and sub tropical monsoon. Evaporation usually exceeds precipitation and the weather is generally dry.

The area experiences four seasons: (i) Summer or hot season (Mid-March to Mid-June) (ii) Rainy season (late-June to mid-September); (iii) Post monsoon autumn/transition season (mid September to mid-November); (iv) Winter (mid November to mid-March). The dry spell of summer is long but with occasional drizzles or thunder storms. May and June are the hottest months of the year with mean daily maximum & minimum temperatures being about 45°C & 19°C, respectively. Maximum temperatures can rise up to 45°C. Southwest monsoons with high intensity showers commence in late June. The weather at this time is hot and humid. The variation in annual rainfall on year to year basis is appreciable i.e. 700 mm to 1200 mm. The 20 year average rainfall for Chandigarh is 1100.7 mm. January is the coldest month with mean maximum and minimum temperatures being around 25°C and 3°C respectively. Winds are generally light and blow from northwest to southeast direction with exception of easterly to southeasterly winds that blow on some days during the summer season.

The Master Plan of Chandigarh

Le Corbusier conceived the master plan of Chandigarh as analogous to human body, with a clearly defined head (the Capitol Complex, Sector 1), heart (the City Centre, Sector 17), lungs (the leisure valley, innumerable open spaces and sector greens), the intellect (the cultural and educational institutions), the circulatory system (the network of roads, the 7 Vs) and the viscera (the Industrial Area). The concept of the city is based on four major functions : living, working, care of the body mind and spirit and circulation. Residential sectors constitute the living part whereas the Capitol Complex, City Centre, Educational Zone (Post Graduate Institute of Medical Education and Research, Punjab Engineering College, University of Technology & Panjab University) and the Industrial Area constitute the working arms of this living organism. The Leisure Valley, Gardens, Sector Greens and Open Courtyards etc. are for the care of body and spirit. The circulation system comprises of 7 different types of roads known as 7Vs. Later on a pathways for cyclists called V8 were added to this circulation system.

The Capitol complex comprises four architectural masterpieces: out of which the “Secretariat”, the “High Court” and the “Legislative Assembly”, are realized while the Museum of Knowledge earlier planned as Governor’s Palace is likely to be realised. In the heart of the Capitol Complex stands the giant metallic sculpture of ‘The Open Hand’, the official emblem of Chandigarh, signifying the city's credo of “open to give, open to receive”.

The city centre (Sector 17) is the central business district and is located in the heart of Chandigarh. It comprises the Inter-State Bus Terminus, Parade Ground, the Courts Complex etc., on one end, the vast Business and Shopping Center on the main pedestrian piazza in the middle and the Bank Square at the other end. The 4-storey concrete buildings have showrooms/shops at the ground level with wide pedestrian piazzas and house banks and offices at the upper floor. The Neelam piazza in the center, with fountains having light and water features, is being upgraded in the new landscape plan. To retain the cultural and civic prominence of the City Centre in changing times and lifestyle trends, a proposal for the Holistic Development and Revitalization of the City Centre has been undertaken by the Administration where in an underpass connecting Sector 17 with the Rose Garden in Sector 16 and development work on other proposals for the remaining pockets are also underway. The revitalization plan are to equally distribute the functions of Central Business District (CBD) and bring the City Centre to its intended glory.

LAND USE:

Land use details of Chandigarh (U.T.) as per Urban Complex Plan.

Sl. No.	Land Use	Area (Sq. Kms.)	Remarks
1	2	3	3
1	Residential Area	45.67	Sector Grid
2	Industrial/IT Park	3.19	Only Industrial Area
3	Institutional Area	17.61	
4	Defence	6.36	
5	Railway Land	1.27	
6	Forest	8.55	
7	Vacant Land	12.47	
8	Periphery	18.84	Including all uses except Forest, Railway, Defence & Vacant Area
	Total	113.96 114 Sq. Kms.	

In the Urban Complex Plan approx. 8 sq. kms. Area comprising of Sectors 48 to 56 and part of Sector-61 and 63 was earmarked for developing the third phase sectors. The same has now been planned and partly developed. Now, the Master Plan for the entire Union Territory of Chandigarh measuring an area of 114 sq. kms., comprising the existing sectors,

3rd Phase Sectors and area beyond Sectoral grid has been notified in the official gazette of Chandigarh Administration vide notification dated 23.4.2015.

Park Areas:

Ample areas have been provided in the master plan of the Capital for parks. Out of a total area of 20,000 acres acquired for the first phase, about 2000 acres are meant for development of parks.

Leisure Valley: Leisure Valley originates in sector I and is more than 8 km. long. Chandigarh-conceived as a Garden City full of – Sun, Space and Verdure” has blossomed, to a large extent, into such entity.

1. **Rajendra Park, Sector I:** It is a vast stretch of land about 400 acres, adjoining Secretariat building on the eastern side. Le Corbusier designed the landscape scheme of this park. It was started in 1954. Trees and round canopies and evergreen foliage have been planted here. It is commonly used for long walks, outdoor yoga, learning to drive and horse riding.
2. **Mango Garden Sector: I:** It is situated in sector I in an area about 100 acres. Its main attraction of mango trees.
3. **Botanical Garden, Sector I :** It is situated between the Rock Garden and Sukhna lake and is spread over 88 acres. Its rockeries, lily-pools and rare species covered in green houses draw garden lovers and botanists.
4. **Smriti Upavan, Sector I :** This space has been set aside to allow the people to plant trees in memory of the departed ones. The resultant forest is intended to be a place of silence and remembrance. It was formally inaugurated in November 14, 1988 when the then Adviser, Sh. Ashok Pradhan, Planted a banyan tree in the memory of the first Prime Minister of India Pt. Jawahar Lal Nehru.
5. **Bougainvillea Park, Sector 3 :** It is situated in sector 3 in an area of about 20 acres. The natural choe starts from here. About 65 different varieties of bougainvillea shrubs are planted here. It was started in 1976. A few flowering trees have also been planted here.
6. **Jawaher Park, Sector 9 :** It is situated in sector 9-B in an area of about 5.18 acres. The main attraction of the garden is lily plants.
7. **Fitness Trails and the Flower Garden, Sector 10 :** Situated in sector 10 Physical Fitness Trails have been developed with a view to enjoying physical exercises. It was started in 1965 and then redeveloped in 1985. On the southern side is located the Flower Garden. Out of an area of 90 acres, 50 acres are under seasonal flowers and rest of the area is punctuated with sculpture by renowned artists. Cultural activities and exhibitions are also organised here.
8. **Poinsettia & Lxora Garden, Sector II:** it is situated in sector: II on an over 6.11 acres land in Sector: II. The main attraction of the garden is Poinsettia and Lxora flowers.
9. **Botanical Garden Panjab University, Sector 14 :** This Garden has about 225 types of trees and shrubs. It is spread over an area of about 16 acres and was started in

1961. One corner of this Garden is devoted to cacti and succulent plants, in another corner of the garden are grown evergreen and exotic plants. There is also a lotus corner in the garden.

10. **Floral Garden, Sector 15:** It is situated in centre of Sector:15-A & B. It is spread over an area of about 5.02 acres land. The main attraction of the garden is different type of plants & one no. multi play system for enjoyment of children.
11. **Cycas Palm Garden, Sector:15:** It is situated in corner of Sector:15-C on about 2.68 acres area. It is inaugurated in November, 2010 and main attraction of this garden is Cycas Palm Plants. It is surrounded by V-3 and V-4 on two sides and slope has been maintained for landscaping and also known as L-shape park.
12. **Joggers Park, Sector:15:** It is situated in sector 15 in an area of about 1.44 acres.
13. **Zakir Rose Garden, Sector 16:** Spread over 42.07 acres, Rose Garden in sector 16 is said to be the largest in Area acclaimed for 45000 plants representing 582 varieties of roses as well as several fountains. It is truly magnificent during Rose Festival (Now Festival of Gardens) hosted each year to mark the arrival of spring. Emphasis was also given on the trees of medicinal value.
14. **Shanti Kunj, Sector 16:** It is situated between the Rose Garden and the Cricket Stadium in sector 16 stretch of the Leisure Valley in an area of about 15.25 acres. The natural stream running through the garden divides the park into five areas, each part depicts different kinds of threes such as medicinal plants, vertical shaped threes, flowering trees, trees for shade and environmentally friendly trees.
15. **Tiranga Park:** Football stadium Now Trianga park on approximate are 3.34 acres area.
16. **Parrot Garden, Sector:21:** It is situated in Sector:21 A & B on approximate 4.75 acres area. Naturally it is the favorite place for morning and evening walk and as the name given, the old trees of this garden are home place for thousand of parrots.
17. **Nehru Park, Sector 22:** It is situated between the Sector:22 A & B on an area of about 2.37 acres. The park is beautified by landscaping and multi play system for enjoyment of children.
18. **Moonlit Park, Sector 22:** It is situated between the Sector:22 A & B on an area of about 3.24 acres. The main attraction is chandni plants for its beauty & one no. new type multi play system for enjoyment of children.
19. **Dream Park, Sector 23:** It is situated in sector 23-D in an area of about 3.60. Its main attraction is different type of plants.
20. **Bulbous Garden, Sector 23:** It is situated in sector 23 in an area of about 3.65 acres and was opened in 2000. Its main attraction is shaded trees, bulbous plants, footpaths, lights, distribution & sprinkler system.
21. **Bamboo Valley, Sector 23:** Spread over 27.7 acres of land along the N-Choe passing through Sector:23-A between Children Traffic Park & Government High School and was opened in February, 2007. This land has 15 species of trees

besides bamboo groves along the seasonal names as Bamboo Valley. The main attraction of Bamboo Valley has a variety of rare trees, Flower beds, various types of trees for shade, shrubs, Garden/Bamboo huts, fountains, lights, footpaths & sprinkler system.

22. **Children's Traffic Park, Sector 23:** It is situated in sector:23 in an area of 6.50 acres. This place is useful for children to learn cycling and to teach them rules of road safety. There is Bal Bhawan concrete pathways interlocked with undulating greens.
23. **Mini Rose Garden, Sector 24:** It is situated in Sector:24 on V-4 Road near Police Station and spread over 3.50 acres land. Rare varieties of roses are the main attraction of the garden. These varieties are not available in the Rose Garden Sector:16, Chandigarh.
24. **Sensory Park, Sector:26 :** It is situated in Sector 26 on an approximate area of 0.41 acres.
25. **Gulmohar Garden, Sector 27:** It is situated in Sector:27 on area of 7.50 acres. The main attraction of this garden is Gulmohar Plants for its beauty and one fountain system for the enjoyment of the children.
26. **Jasmine Garden, Sector 28:** It is situated in Sector:28 on area of 5.90 acres. The main attraction of this garden is Jasmine Plants for its beauty and one fountain system for the enjoyment of the children.
27. **Pink Cassia Garden, Sector 29:** It is situated in Sector:29 on over 4.75 acres land and was developed in September, 2006. A larger numbers of Pink Cassia (Flowering trees) alongwith different type of shrubs adds to the park's charm. Campus lights has been provided, fountain will be provided in near future.
28. **Japanese Garden, Sector:31 A & B:** It is situated on up and down area about 6.00 acres land and was developed in 2015-16. Trees, flowering plants, shrubs are planted here. Main attraction of the garden is Japanese type like Pigoda's.
29. **Japanese Garden, Sector:31 C & D:** It is situated on 5.5 acres land and developed in 2016-17. Trees flowering plants, shrubs etc are planted here with other landscaping works. The Main attraction of the garden is National Flag (India) having 150' height and the area around it beautified for public.
30. **Terraced Garden, Sector 33:** Situated in sector 33, it is spread over 6 acres and was started in 1979. Its main attraction is an illuminated musical fountains. This garden is the venue for the annual chrysanthemum show.
31. **Topiary Garden, Sector 35 :** It is situated in Sector 35 on an area of 6 acres and was started in 1987. Many animal shapes created out of creepers and bushes attract children to this park. A large variety of ornamental plants add to the park's charm.
32. **Topiary Garden 2nd Part, Sector 35 :** It is situated in Sector 35 C and D on an area of 3.73 acres and was inaugurated/dedicated to senior citizen on October, 2009. In this garden/park topiary art is also used by clipping or training shrubs and

climbers into different animals and ornamental shaped. Active simmering volcano type fountain is also provided in this park/garden.

33. **Leisure Valley, Sector:36** : It is situated in Sector 36 on an approximate area of 6.42 acres.
34. **Hibiscus Garden, Sector 36**: It is situated in sector:36 on an area of 6.10 acres and adjoins Dakshin Marg. It was opened in 1974. About 40 different types of Hibiscus shrubs are planted here which provide colour throughout the year. The choe banks are also planted with bottle brush and bamboo groves.
35. **Garden of Fragrance, Sector:36**: It is situated on Sector:36 on an area of 14.30 acres. This is the most recent addition to the city's theme gardens. Flowering plants like raat ki rani, motia, varieties of jasmine, damask rose, mehndi, champa, harshingar and many others cast of pervading aroma in this part of the Leisure Valley.
36. **Dahlia Garden, Sector 36**: It is situated in Sector 36 having area 8.39 acres. It is well equipped with Hut, benches, open air gym and play equipment. This garden is used by residents of nearly area for this mental and physical recreation.
37. **Palm Park, Dadu Majra**: It is situated in Dadumajra, on an area of 2.75 acres. Its main attraction of this garden is Cycas Palm Plants.

OTHER GARDENS: Besides the above mentioned parks/gardens of the Leisure Valley, there are other gardens in Chandigarh. They are:

38. **Garden of Annuals, Sector 44** : It is situated on an over 5.50 acres land in Sector:44. The main attraction of the garden is plantation of winter and summer annuals during the year.
39. **Garden of Shrubs, Sector 46**: it is situated on an over 6.61 acres land in Sector:46. The main attraction of the garden is 50 varieties of ornamental shrubs, which blooms all the year round.
40. **Shivalik Garden**: It is situated in Pocket No. 7 Manimajra near Police Station. The Garden is developed on 18 Acres land. Ornamental Shrubs, trees, water features, artificial lake has been created in the garden. The garden has also with campus lights. Beautifully landscaped, by providing earth mounds which has been planted with ground covers in different patterns.

41. **Central Park Modern Housing Complex Manimajra:** It is situated in centre of Modern Housing Complex on above 1.20 acres area and inaugurated in the year 2011. Different type of children play equipments are fixed for the fun and enjoy of children. The park is well maintained by grassing and plants. Mostly the park is used by senior citizens and children.
42. **Cactus Park:** It is situated in Ram Darbar, Industrial Area, Phase-2, Chandigarh on an area of 6.87 acres. Its main attraction is different type of Cactus plants.
43. **Children Park Ram Darbar:** It is situated 0.50 acres area in Ram Darbar. As by name different type of play equipments for the enjoyment of the children are fixed here. The park is beautified by landscaping and different type of decorative plants. This park is special for the children.
44. **Valley of Animals Sector:49 C & D:** It is situated on 6.50 acres area in Sector:49 C & D. The main attraction of this garden is giant topiary figures of animals at the entrance, landscaping, children playing equipment benches for enjoyment of the children and adults.
45. **Green Park Dadumajra:** It is situated in Dadumajra on an area of 2.10 acres and inaugurated in the year 2016. The park is beautified by multi play system for enjoyment of children.
46. **Valley Park-I, Dhanas:** It is situated on 1.83 acres area in Dhanas and inaugurated in the year 2015.
47. **Lake View Park:** It is situated in Dhanas on an area of 1.90 acres and inaugurated in the year 2016. . Its main attraction is different type of plants
48. **Central Park, Dhanas:** It is situated in Dhanas having area 1.00 acre inaugurated in the year 2013. It is well equipped with Hut, benches, open air gym, play equipment and fountains. The park is used by residents of nearly area for this mental and physical recreation.
49. **Triveni Park:** It is situated in Dhanas on an area of 1.87 acres and inaugurated in the year 2016.
50. **Valley Park-II, Dhanas:** It is situated in Dadumajra on an area of 2.62 acres and inaugurated in the year 2018.
51. **Children Park, Morigate, Manimajra, Sector:13:** It is situated in Manimajra, Sector13 inaugurated in the year 2020-21.

52. **Indira Colony, Part-II. Manimajra:** It is situated in Manimajra having are 5.00 acres inaugurated in the year 2020-21. It is developed by grassing, providing and planting of ornamental plants, Hut, benches, open air gym equipments and walking track.

One unique feature in the layout of Chandigarh is its roads, classified in accordance with their functions. An integrated system of seven roads was designed to ensure efficient traffic circulation. Corbusier referred to these as the 7'Vs. The city's vertical roads run northeast/southwest. The horizontal roads run northwest/southeast. They intersect at right angles, forming a grid or network for movement of fast moving traffic.

This arrangement of road-use leads to a remarkable hierarchy of movement, which also ensures that the residential areas are segregated from the noise and pollution of traffic.

Type of Roads	Functions/Names
V-1	Roads connecting Chandigarh with other cities like Ambala, Kharar and Shimla. They have dual carriage way, good tree plantation and distinctive central verge lighting. The Madhya Marg and Dakshin Marg are two roads which merge into V-1s leading to Kalka and Ambala, respectively.
V-2	They are the major avenues of Chandigarh, with important institutional and commercial functions running alongside. In Chandigarh they are identifiable as 'Margs'. Madhya Marg, Dakshin Marg, Jan Marg, Himalaya Marg, Uttar Marg and Purv Marg are important examples.
V-3	They are the corridor-streets for fast moving vehicular traffic. All Sectors are surrounded either by V-2 or V-3 roads.
V-4	Roads bisecting the Sectors with shopping complexes located along their southern edge.
V-5	Roads meandering through the Sector giving access to its inner lands.
V-6	Roads coming of the V-5s and leading to the residential houses.
V-7	They are intended for pedestrian movement and run through the middle of the sectors in the green areas. A few examples are along the Jan Marg, in the Punjab University & Sector 15.
V-8	They are intended to run parallel with <u>V-7s for the bicycles</u> . Not properly developed, as yet.

Each 'Sector', or the neighbourhood unit, is quite similar to the traditional Indian 'mohalla'. Typically, each sector measures 800 metres by 1200 metres, covering 250 acres of area. Each Sector is surrounded by V-2 or V-3 roads, with no buildings opening on to them. Access from

the surrounding roads is available only at 4 controlled points which roughly mark the middle of each side. Typically a sector is divided in four parts by a V-4 road running from east to west and a V-5 road running from north to south. These four parts are easily identifiable as A, B, C and D corresponding to North, East, South and West sides. However, sectors 1,2,3,4,5 and 6 have no Sub Sectors and sectors 7 and 8 have only three parts A, B and C (This is because they are developed according to the concept proposed by the first planner of the City, Albert Mayer to give his concept some recognition). In case of Quardipartite Sectors, the houses from 1 to 1000, 1001 to 2000 to 2001 to 3000 and 3001 to 4000 are located in Sub Sectors A, B, C and D in clockwise direction. Though all the sectors are structured more or less similarly, but they have their own characteristics and individuality. Each Sector is meant to be self-sufficient, with shopping and community facilities within reasonable walking distance. The sectors of the city are numbered commencing from the northern most edge of the city with the highest numbers located at the southern edge. As per records, Phase-I of the Master Plan was upto Sector 25; however, later on the city was extended in the space available on the east of Sector 7, 19 and 20 and numbered as Sector 26, 27, 28, 29 and 30. It believed that Sector 13 was left out due to superstition but records indicate that initially Sector 12 and 13 were demarcated in the lower halves of Sector 10 and 11 as a cultural zone but removed later to avoid confusion. However, the addition of the number of any two consecutive of Phase I sectors vertically amounts to 13 or its multiple (e.g. Sec. 2 + Sec. 11 = 13, Sec. 11 + Sec. 15 = 26, etc.) Recently, Manimajra was renamed as Sector 13 and a few other peripheral areas were also allocated Sector numbers i.e. 12W, 14W, 39W, 56W, Industrial & Business park I, II & III in the remaining Peri-Urban areas for a controlled growth.

Though educational, cultural and medical facilities are spread all over the city, however, major institutions are located in Sectors 10, 11, 12, 14, 26 and 32.

The industrial area comprises 2.35 sq kms, set-aside in the Master Plan for non-polluting, light industry on the extreme southeastern side of the city near the railway line, as far away from the Educational Sectors and Capitol Complex as possible. Of this, 136 hectares was developed in the first phase. In the event of expansion, creation of an additional industrial area in the southern part of the city was envisaged. While the Industrial area is directly connected to the civic centre by a V-3 road, a wide buffer of fruit trees was planted to screen off this area from the rest of the city. Architectural controls have been established regarding site coverage and materials of construction, ultimately requiring all plans to be formed in consultation with the Capital Project Office. In Sector 30, which is sufficiently close to the Industrial Sector,

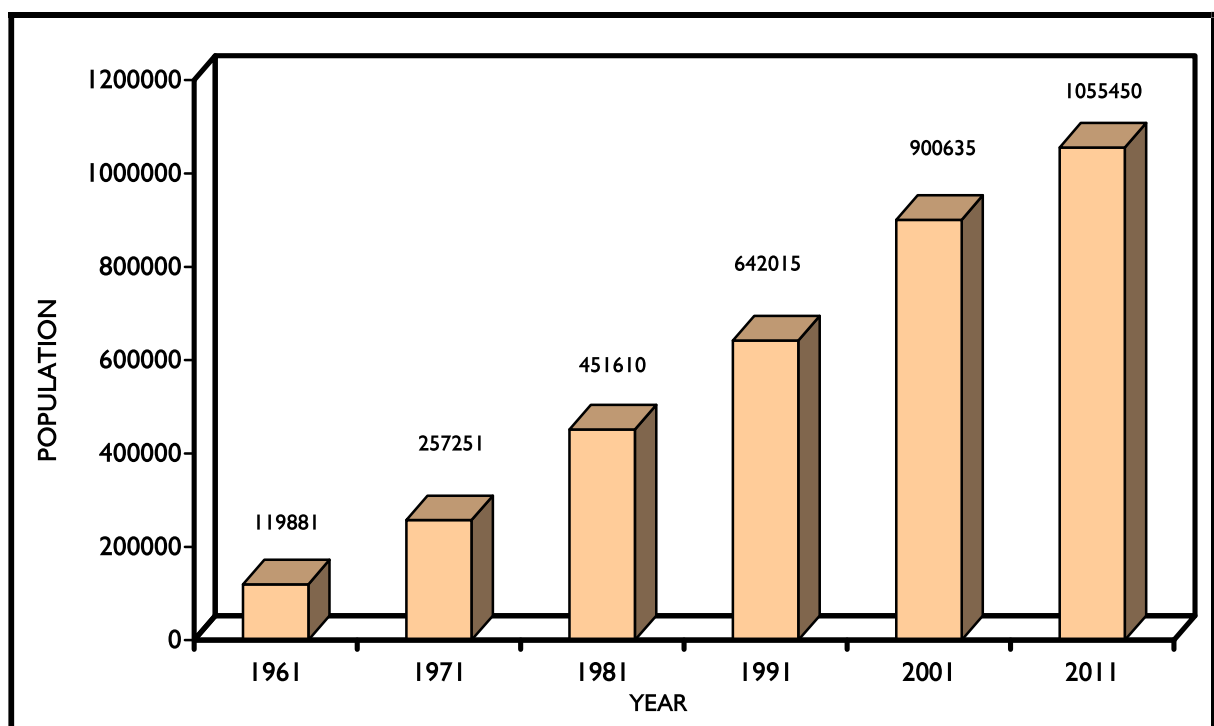
suitable tenements for the workers have been developed. Besides Industrial housing is also provided in sectors 28 and 29.

The proposal to establish the Industrial Area, Phase-III was initiated in 1977 as a part of Chandigarh Urban Complex Plan which was prepared by the interstate working group as per the direction of the Coordination Committee constituted by Government of India. Initially proposed on 114 acres, later on the area was increased to 153 acre. Industrial Area Phase III is located near village Raipur Kalan and Mauli Jagran. The Industrial Area for Panchkula was also proposed simultaneously and in close vicinity.

Population Growth in the City

Chandigarh was planned for a finite population of half-a-million. In Phase I, 36 sq km of land was acquired by the city administration for construction of 30 sectors. Land for seventeen additional sectors (Sector 31 to 47) was acquired and developed during the second phase to cater for a population of 350,000. The predominance of 3/4 storey apartments in the second phase provide for higher population dimension. However, Chandigarh has now grown beyond its planned capacity. Hence, development in the third phase has started in sectors 48 and beyond. Demographic data indicate that between 1961 and 1971, the population increased by 114.59 percent, one of the highest for urban areas in India. According to 1981 census, it grew by another 75.55 percent, followed by 42.16 percent in 1991, 40.28 per cent in 2001 and by 17.2 percent in 2011 Census.

Population trend in Chandigarh from 1961 to 2011.



Villages

At present as per Chandigarh Administration notification dated 30th November, 2018, 13 villages namely Kaimbwala, Sarangpur, Dhanas, Raipur Khurd, Raipur Kalan, Makhanmajra, Khuda Alisher, Kishangarh, Daria, Mauli Jagran, Behlana, Khuda Lahora and Khuda Jassu have been merged with Municipal limits and Nine villages Badheri, Butrela, Burail, Attawa, Hallomajra, Kajheri, Palsora, Maloya and Dadumajra had already been merged in Municipals limits of Chandigarh (in the year 2006) and presently under the control of the Municipal Corporation, Chandigarh.

Areas of Interest

Chandigarh is famous for its architecture and landscaping world over. It combines elegant architectural forms with wide tree-lined avenues, green belts and gardens and is hence referred to as the 'City Beautiful'. Green open space comprise about 8 sq kms. out of 114 square kilometers of the capital project area. Major open areas include the Leisure Valley, Sukhna Lake, Rock Garden and many theme gardens like, Rose Garden, Botanical Garden, Terrace Garden, Fragrance Garden, etc. In addition, the sectors are vertically integrated by a green belt oriented in the direction of the mountains. Various structures such as the Government Museum and Art Gallery, Museum of Evolution of Life and Fine Arts College have come up in the leisure valley forming the cultural zone of the city.

Sukhna Lake, a major tourist attraction, was constructed in 1958 across Sukna choe and was planned as an integral part of master plan of the city. The lake spreads on the foothills of the Shivalik mountain range. The reservoir of the lake is in the shape of a bean seed bounded by a 12.8 m high rock fill earthen dam. The total catchment area of the lake is 42.07 sq kms, of which 34.42 sq kms. falls in the Union Territory of Chandigarh (including 25.42 sq km newly acquired area) and 7.7 sq km which falls in the state of Haryana. This additional area is prone to erosion.

Rock Garden, another tourist attraction, is the creation of Nek Chand and is built with municipal waste. It expresses the fragility of the environment, the need for conservation of the earth's natural resources, the importance of balancing industrial development and sound environmental practices.
