

STATISTICAL HANDBOOK REPORT FOR CHANDIGARH UT-2021



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STATISTICAL HANDBOOK REPORT FOR CHANDIGARH UT-2021

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OVERVIEW

The State of Environment Report for Chandigarh in 2021 has been crafted using data and information from a wide range of sources encompassing physical data from various state government departments, online data, published research papers, books, and articles in both physical and electronic formats. The report predominantly presents data in tabular forms. The report also includes a five-year trend analysis of pressures, state, impacts, and responses, based on data availability up to November 2021.

It is important to note that the report extensively cites its references. In contrast, the “Statistical Handbook on Environment: Chandigarh” primarily compiles data and figures from physical and electronic sources related to key environmental components such as land, air, water, and biodiversity. This compilation serves the purpose of providing accurate statistical insights into the state of the environment. However, it's worth mentioning that this statistical handbook does not encompass data from published papers, news articles, or book chapters.



INTRODUCTION

Historical Background: Chandigarh, a city and Union Territory serves as a joint capital of two neighboring states, Punjab and Haryana. It is bordered by the state of Punjab to the north, the west, and the south and Haryana to the east. It constitutes the bulk of Chandigarh Capital Region and other neighboring cities such as Mohali and Panchkula. Chandigarh is one of the early planned cities in post-independence India, by French architect Le Corbusier and is famously known for its urban design, architecture, and planning. Chandigarh derives its name from the Chandi-Mandir, a temple located in the vicinity of the city. The deity 'Chandi': goddess of power and a fort ('garh') laying beyond the temple gave the city its name Chandigarh—The Beautiful City.

In 1948, the Government of Punjab in consultation with Government of India accepted the foothills of Shivaliks as the site for a new capital. The foundation stone of the city was laid in 1952. In 1966, at the time of reorganization of the state into Punjab, Haryana, and Himachal Pradesh, the city attained a unique distinction of being the capital both for Punjab and Haryana, while it was declared as a Union Territory and under the direct control of Central Government.

Geology: Chandigarh is located near the foothills of Shivalik Range of the Himalayas in north west India. It covers an area of 114 sq km bordering Punjab and Haryana. The latitude and longitude coordinates are 30° 44' 14N and 76° 47' 14E, respectively. It is occupied by Kandi (Bhabar) in the north east and Sirowal (Tarai) and alluvial plains in the remaining part. The city lies in the northern plains and includes a vast area of flat and fertile land. The sub surface formation comprises of beds of boulders, gravels, pebbles, slit, and clay. The city boundaries are defined by two seasonal rivulets—the Patiala ki Rao in the west and Sukhna Choe in the east. The central part forms a surface water divide and has two minor streams. One of the streams passing through the central part is N-Choe and the other is Choe Nala.

Climate: Chandigarh falls under Koeppen's CWG category, i.e., it has cold dry winter, hot summer, and tropical monsoon. The area experiences four seasons i) Summer 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) and iv) Winter season (mid-November to mid-March). Evaporation usually exceeds precipitation and the weather is generally dry. The dry spell of the summer is long, but with occasional drizzles or thunder storms. The hottest months of the year are May and June, with mean daily maximum and minimum temperature being about 37°C and 25°C, respectively. Southwest monsoons with high intensity showers begin in late June making the weather is hot and humid. Variation in the rainfall on a year-to-year basis is between 700mm to 1200mm. The coldest month is January with mean daily maximum and minimum temperature being around 23°C and 3.6°C, respectively. Winds are generally light and blow from northwest to south east direction, with exception of easterly winds that blow on some days during the summer season.



Open spaces and landscaping of Chandigarh: Since its inception, the city has a provision of a large number of open spaces, green belts, city parks, and neighborhood parks. Leisure Valley, Rajinder Park, Bougainvillea Garden, Zakir Rose Garden, Shanti Kunj, Hibiscus Garden, Garden of Fragrance, Botanical Garden, Topiary Garden, Smriti Upavan, and Terraced Garden are some of the famous parks of Chandigarh. Besides the dedicated gardens and parks, roundabouts and green belts have been provided along the main avenues of the city, like a Mango Garden belt that acts as a buffer between the industrial area and the residential areas. Sukhna Lake, Government Museum, and Art Gallery are the major tourist attractions of Chandigarh.

One of the unique features of Chandigarh is its roads, classified in accordance with their functions. Chandigarh has a well-defined hierarchy of circulation based on Le Corbusier's V7s road-system, designed to lead traffic into the city and to distribute it right up till the dwelling unit. The horizontal roads that run northwest/southwest (Marg) refers to the important avenues (V2), while the vertical roads run northeast/southwest (Paths) were referred to less important streets (V3). This road arrangement also ensures that the residential areas are segregated from noise and pollution of traffic. Each sector of the neighborhood unit measures 800 meters by 1200 meters and covers an area of 250 acres. Each sector is surrounded by V2 or V3 roads, with no building open on to them. Typically, a sector is divided into four parts by a V4 road running from east to west and a V5 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. Each sector is meant to be self-sufficient, with the presence of shopping and community facilities. The sectors of the city are numbered beginning from the northern edge of the city, with the highest numbers located at the southern edge.

Educational, medical, and cultural facilities are spread all over the city. The industrial area covers an area of 2.35 sq km, set aside in the Master Plan for non-polluting, light industry on the extreme side of the city near the railway line, far away from the educational centers and Capitol Complex. Of this, 136 hectares were developed in the first phase. The Industrial Area is connected to the civic center by a V3 road and a wide buffer of fruit trees, planted to screen off this area from the rest of the city. In Sector 30, which is close to the Industrial Sector, suitable tenements for the workers have been developed. Industrial Housing is also provided in Sector 28 and 29.

Type of Roads	Functions/Names
V-1	Roads connecting Chandigarh with other cities like Ambala, Kharar, and Shimla have dual carriage way, good tree plantation, and distinctive central verge lighting. 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.



Type of Roads	Functions/Names
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 Punjab University and Sector 15.
V-8	Cycle tracks through green spaces. Buses were to ply along V2, V3 and V4 roads. Each sector was to have only four entry points from V3. No direct entry to house were permitted from these roads.

Source: (City Development Plan Chandigarh, Chandigarh Administration 2017)

Areas of Interest: Chandigarh is well known for its planning, landscaping, and architecture. It combines hierarchy of open spaces, landscaped areas, recreational areas and tree-lined roads, avenues and gardens spread all over the city; hence, it is also referred to as ‘the Green City’.

Sukhna Lake a major tourist attraction is located on the north eastern part of the city was created in 1958 by damming the Sukhna Choe. The area was declared a ‘Silence Zone’ in 2002. It is a major recreation zone of the city and offers water sports, pedestrian promenades, and other sports activities. The reservoir of the lake is a bean seed shape bounded by a 12.8m high fill earthen dam. The total catchment area of the lake is 42.07sq km, of which 34.42 sq km area (including the newly acquired 25.42 sq km) falls in the Union Territory of Chandigarh and 7.7 sq km falls in the state of Haryana.

Rock Garden, another tourist attraction designed by Nek Chand is a vast open-air museum showcasing a vast array of natural rock forms and stones. The layout of the garden is based on the fantasy of the lost kingdom. The garden expresses the fragility of the environment, the need for conservation of earth’s natural resources, and the importance of balancing industrial development with sound and sustainable environmental practices.

Master Plan: Le Corbusier conceived the Master Plan of Chandigarh as being analogous to the human body; in terms of head (the Capitol Complex, Sector 1), heart (the City Centre, Sector 17), lungs (the Leisure Valley and Gardens), the intellect (the cultural and educational institutions), the circulatory system (the 7Vs), and the industrial area. The concept of the city is based on major functions: i) living ii) working iii) care of the body and spirit as well as iv) circulation. The residential sectors constitute the living part, whereas the Capital Complex, City Centre, educational zones, and industrial areas are the working part. The gardens and parks are for the care of the body and spirit and circulation comprises of 7 different types of roads (7Vs). Later on, a pathway for cyclists called V8 was added in the circulation system. The head of Chandigarh, the Capitol Complex, Sector 1 constitutes of three architectural masterpieces” i) the Secretariat ii) the Legislative Assembly and iii) the High Court. The giant metallic sculpture of ‘The Open Hand’, the official emblem of Chandigarh, signifying the city’s belief of “open to give, open to receive” is in the heart of Capitol Complex. The city center (Sector 17) is the heart of Chandigarh hosting many activities, comprising the Inter-state Bus Terminus, Parade Ground, District Courts, etc., on one hand and business and shopping centers on the other.



Land-use details of Chandigarh as per Urban Complex Plan

S. No.	Land-use	Area (Sq. Kms.)	Remarks
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 sq km	

Source: (Statistical Abstract of Chandigarh 2021)

Population growth: During the last 6 decades, Chandigarh has witnessed a population increase of more than forty-four times with the absolute population increasing from 24,261 in 1951 to 10, 54,686 in 2011. The population density during the last 5 decades has increased nine-fold from 1051 to 9252 persons per sq km. As per the provisional figure of 2011, Union Territory, Chandigarh recorded a population of 10, 54,686 out of 5, 80,282 are male whereas remaining 4, 74,404 are female. Chandigarh recorded a sex ratio of 818 as compared to the national figure of 940.

Village and slum areas: According to the vide notification dated 30th November 2018, 13 villages (namely: Kaimbwal, Sarangpur, Dhanas, Raipur Khurd, Raipur Kalan, Makhanmajra, Khuda Alisher, Kishangarh, Daria, Mauli Jagran from 1051 Behlana, Khuda Lahora, and Khuda Jassu) have been merged with the municipal limits of Chandigarh Administration. Nine villages (namely: Badheri, Butrela, Burail, Attawa, Hallomajra, Kajheri, Palsora, Maloya, and Dadumajra) had already been merged in the municipals limits of Chandigarh in the year 2006. In addition, according to a biometric survey conducted by the field staff of the Estate Office, UT Chandigarh, there are 18 colonies, namely: (1) Madrasi colony, (2) Labour colony-5, (3) Labour colony-4, (4) SBS Mauli Jagran, (5) Ambedkar colony, (6) Sanjay Labour colony, (7) Kabari colony, (8) Kumhar colony, (9) Janta colony, (10) Rajiv colony, (11) Shahpur colony, (12) LBS colony, (13) Kalyan colony, (14) Nehru colony, (15) Majdoor colony, (16) Pandit colony (17) Kuldeep colony, and (18) Gursagar Bhattal colony; with 23346 families identified under this biometric survey.

Chandigarh Administration

Article 239 of the Constitution of India provides for the administration of the Union Territories by the President through an Administrator. The Administrator of the Union Territory is assisted by the Adviser, who is an IAS officer of AGMU Cadre and is appointed by the Ministry of Home Affairs. He is assisted by eight Administrative Secretaries and other officers.



The Adviser oversees the day-to-day administration and advises the Administrator on policy matters. The Ministry of Home Affairs is the nodal ministry for the Union Territory of Chandigarh. Being a Union Territory without a legislature, the entire plan and non-plan expenditure is met directly by the Consolidated Fund of India. All its income also goes directly to the Consolidated Fund of India. Therefore, a single demand covering all functions of the Administration is presented to Parliament as a part of Demand of Grants of the Ministry of Home Affairs.

The city is governed by a civic administration, or local government headed by the Municipal Commissioner. The Municipal Corporation in Chandigarh came into existence in May, 1994 under the Punjab Municipal Corporation Act, 1976 by an Amendment Act of 1994. The prime responsibilities of the Municipal Corporation of Chandigarh are to ensure cleanliness and sanitation in the city, illumination of street lights, maintenance of parks, and sewerage disposal. There are number of boards and corporations under various departments in the Union Territory. The two important corporation and board are the 'Chandigarh Industrial and Tourism Development Corporation' and 'Chandigarh Housing Board', to look after the promotion of industries, tourism, and housing respectively.



AREA AND POPULATION

Table 1.1: Population of Chandigarh from 1961 to 2011

Year	Total	Males	Females	Decennial Rate of Growth
1961	119881	72576	47305	-
1971	257251	147080	110171	+114.59
1981	451610	255278	196332	+75.55
1991	642015	358614	283401	+42.16
2001	900635	506938	393697	+40.28
2011	1055450	580663	474787	+17.19

Source: (Statistical Abstract of Chandigarh 2021)

Table 1.2: Distribution of gender by category

Sex	Cultivator			Agricultural Laborers			Workers in Household Industry		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Persons	2578	457	2121	1687	168	1519	4799	117	4682
Males	2114	406	1708	1375	122	1253	3487	78	3409
Females	464	51	413	312	46	266	1312	39	1273

Source: (Statistical Abstract of Chandigarh 2021)



Table 1.3: Slum population of UT Chandigarh (2011 Census)

Description	Unit	Persons	Males	Females
Total slum population	Nos.	95135	53340	41795
% of slum population to total population	%	9.01	9.19	8.80
Sex ratio		784		
Population in age group (0-6 years)	Nos.	14720	7697	7023
Literates	Nos.	53376	34494	18882
Literacy rate %		66.38	75.57	54.30
Scheduled Castes population	Nos.	29230	15818	13412
% of SC population to slum population	%	36.56	54.91	13.13
Total Workers	Nos.	34777	29288	5489

Source: (Statistical Abstract of Chandigarh 2021)

Table 1.4: Total population of India, States, and Chandigarh UT by sex, sex ratio, and literacyrate (2011 Census)

India and States / Union Territories	Total Population			Sex Ratio	Literacy rate (%)
	Persons	Males	Females		
INDIA	1,21,05,69,573	62,31,21,843	58,74,47,730	943	73.0
State and Union Territories					
Jammu and Kashmir	1,25,41,302	6640662	5900640	889	67.2
Himachal Pradesh	68,64,602	3481873	3382729	972	82.8
Punjab	2,77,43,338	14639465	13103873	895	75.8
Chandigarh	10,55,450	580663	474787	818	86.0
Uttarakhand	1,00,86,292	5137773	4948519	963	78.8
Haryana	2,53,51,462	13494734	11856728	879	75.6
Delhi	1,67,87,941	8987326	7800615	868	86.2
Rajasthan	6,85,48,437	35550997	32997440	928	66.1
Uttar Pradesh	19,98,12,341	104480510	95331831	912	67.7
Bihar	10,40,99,452	54278157	49821295	918	61.8
Sikkim	6,10,577	323070	287507	890	81.4
Arunachal Pradesh	13,83,727	713912	669815	938	65.4
Nagaland	19,78,502	1024649	953853	931	79.6
Manipur	25,70,390	1290171	1280219	992	79.2



India and States / Union Territories	Total Population			Sex Ratio	Literacy rate (%)
	Persons	Males	Females		
Mizoram	10,97,206	555339	541867	976	91.3
Tripura	36,73,917	1874376	1799541	960	87.2
Meghalaya	29,66,889	1491832	1475057	989	74.4
Assam	3,12,05,576	15939443	15266133	958	72.2
West Bengal	9,12,76,115	46809027	44467088	950	76.3
Jharkhand	3,29,88,134	16930315	16057819	948	66.4
Orissa	4,19,74,218	21212136	20762082	979	72.9
Chhattisgarh	2,55,45,198	12832895	12712303	991	70.3
Madhya Pradesh	7,26,26,809	37612306	35014503	931	69.3
Gujarat	6,04,39,692	31491260	28948432	919	78.0
Daman and Diu	2,43,247	150301	92946	618	87.1
Dadra and Nagar Haveli	3,43,709	193760	149949	774	76.2
Maharashtra	11,23,74,333	58243056	54131277	929	82.3
Andhra Pradesh	8,45,80,777	42442146	42138631	993	67.0
Karnataka	6,10,95,297	30966657	30128640	973	75.4
Goa	14,58,545	739140	719405	973	88.7
Lakshadweep	64,473	33123	31350	946	91.8
Kerala	3,34,06,061	16027412	17378649	1084	94.0
Tamil Nadu	7,21,47,030	36137975	36009055	996	80.1
Pondicherry	12,47,953	612511	635442	1037	85.8
Andaman and Nicobar Islands	3,80,581	202871	177710	846	86.6

Source: (Census India 2011)



CLIMATE AND RAINFALL

Table 2.1: Temperature and humidity for the year 2020-21

Month/Year	Mean Max Temperature (degree Celsius)	Highest temperature during the month (degree Celsius)	Mean Min. Temperature (degree Celsius)	Lowest temperature during the month (degree Celsius)	% relative humidity at 0830 hours (IST)	% relative humidity at 1730 hours (IST)
2020						
January	17.90	22	08.88	04	89.10	69.23
February	22.45	26	10.11	06	82.34	57.24
March	25.73	29	13.90	10	72.19	52.68
April	32.50	38	18.74	14	53.30	36.03
May	36.64	43	23.07	20	47.84	32.81
June	36.31	40	26.36	21	65.07	48.80
July	34.45	39	26.46	22	76.60	61.67
August	33.64	37	26.96	24	78.97	70.26
September	34.81	37	25.27	21	74.23	59.73
October	29.18	35	15.01	13	52.23	35.39
November	25.50	31	10.89	08	75.80	54.93
December	21.11	28	07.86	03	89.94	65.87
2021						
January	18.51	26	08.49	04	91.32	76.03
February	25.36	33	10.65	06	83.36	55.00
March	30.77	37	15.99	11	55.74	35.03

Source: (Statistical Abstract of Chandigarh 2021)



Table 2.2: Rainfall for the year 2020-21

Month/Year	Number of Rainy Days	Total Rainfall during the month (in mm)	Highest rainfall in a day during the month (in mm)
2020			
January	07	057	023
February	00	000	000
March	10	076	025
April	04	064	040
May	07	072	031
June	11	169	050
July	16	302	077
August	17	443	134
September	02	006	004
October	00	000	000
November	02	020	015
December	02	009	005
2021			
January	04	006	003
February	02	010	007
March	03	005	002

Source: (Statistical Abstract of Chandigarh 2021)

Table 2.3: Deviation in actual annual rainfall from normal rainfall

Year	Normal Rainfall (mm)	Actual Rainfall (mm)	% Deviation from normal
2015	1078	824	-24
2016	1078	575.4	-47
2017	1078	858	-20
2018	1078	1086	1
2019	1078	940	-13
2020	1078	867	-20
2021	1078	819	-24

Source: IMD data available at IWRIS



FOREST, WILDLIFE AND BIODIVERSITY

Table 3.1: Forest cover in Chandigarh

Class	Area (in sq.km)	% of GA
Very dense forest	1.36	1.19
Medium dense forest	13.51	11.85
Open forest	8.01	7.03
Total	22.88	20.07
Scrub	0.38	0.33

Source: (India State of Forest Report 2021)

Table 3.2: Change in forest cover from 2011 to 2021 (in sq.km.)

Forest Class	Year					
	2011	2013	2015	2017	2019	2021
Very Dense Forest	1.35	1.36	1.36	1.36	1.36	1.36
Moderately Dense Forest	9.55	9.66	14.09	13.82	14.24	13.51
Open Forest	5.88	6.24	6.58	6.38	6.43	8.01
Total Forest Cover	16.78	17.26	22.03	21.56	22.03	22.88

Source: India State of Forest Report 2011, 2013, 2015, 2017, 2019, 2021

Table 3.3: Segregation of forest cover inside and outside the recorded forest area (RFA)

Forest Cover inside the RFA (Green Wash) (sq km)				Forest Cover Outside the RFA (sq km)			
VDF	MDF	OF	Total	VDF	MDF	OF	Total
1.29	5.08	2.34	8.70	0.08	8.43	5.67	14.18
14.71%	58.39%	26.90%		0.56%	59.45%	39.99%	

Note: VDF—Very Dense Forest; MDF—Moderately Dense Forest, OF—Open Forest

Source: (India State of Forest Report 2021)



Table 3.4: Growing stock of forest and trees outside forest (TOF) in Chandigarh

Growing Stock for Chandigarh	(in million m ³)
Growing Stock in RFA	0.21
Growing Stock in TOF	0.29

Source: (India State of Forest Report 2021)

Table 3.5: Percentage area under different forest types in Chandigarh

Forest Type	Percentage
5B/C2 Northern dry mixed deciduous forest	46.09
5/DS1 Dry deciduous scrub	0.23
Plantation/TOF	53.68
Total	100.0

Source: (India State of Forest Report 2021)

Table 3.6: Area of forest under control of the forest department (in sq.km)

Year	Reserved	Unclassified	Total
2015-2016	31.6314	2.7201	34.3515
2016-2017	31.6314	2.7201	34.3515
2017-2018	31.6314	2.7201	34.3515
2018-2019	31.6314	2.7201	34.3515
2019-2020	31.6314	2.7201	34.3515
2020-2021	31.6314	2.7201	34.3515

Source: (India State of Forest Report 2021)

Table 3.7: Total Forest Area in Chandigarh

Forest Area	Area (in sq.km.)
Forest Area under Manimajra Beat	2.83
Forest Area under Hallomajra Beat	1.10
Lake Forest Area	1.92
Patiala-Ki-rao Forests	1.91
City Bird Sanctuary	0.029
Forest Area of Sukhna Wildlife Sanctuary	26.10
Southern Sector Forest Area	1.17
Botanical Garden	0.71
Total	35.8

Source: Department of Forests and Wildlife, Chandigarh Administration, 2023



Table 3.8: Wetlands inside the recorded forest area in Chandigarh

Wetland Category	No. of Wetlands	Total Wetland Area (in ha)
Lake/Pond	1	12
River/Stream	3	48
Total	4	60

Source: (India State of Forest Report 2019)

Table 3.9: Forest cover change in Chandigarh from 2019 to 2021 (All areas in sq.km.)

Forest Class	ISFR 2021					ISFR 2019
	VDF	MDF	OF	Scrub	NF	
Very dense forest	1.36	0.00	0.00	0.00	0.00	1.36
Moderately dense forest	0.00	12.65	0.95	0.08	0.56	14.24
Open forest	0.00	0.29	6.11	0.00	0.03	6.43
Scrub	0.00	0.00	0.00	0.01	0.09	0.10
Non-forest	0.00	0.57	0.95	0.29	90.06	91.87
Total	1.36	13.51	8.01	0.38	90.84	114.00
Net Change	0.0	-0.73	1.58	0.28	-1.13	

*Note: VDF—Very Dense Forest; MDF—Moderately Dense Forest; OF—Open Forest;

Source: (India State of Forest Report 2021)

Table 3.10: Plants planted and supplied by the forest department

Year	Saplings planted by the Forest Department	Plants supplied to the public by the Forest Department
2015-2016	80595	64159
2016-2017	81600	54995
2017-2018	72900	56145
2018-2019	77120	59602
2019-2020	67500	68850
2020-2021	74500	66773

Source: Department of Forests and Wildlife, Chandigarh Administration

Table 3.11: Annual planting of major species

Year	Unit	Total Species (Eucalyptus, Kikar, Khair, Mulbery, Chilli, miscellaneous)
2015-2016	Nos.	80595
2016-2017	Nos.	81600
2017-2018	Nos.	72900



Year	Unit	Total Species (Eucalyptus, Kikar, Khair, Mulberry, Chilli, miscellaneous)
2018-2019	Nos.	77120
2019-2020	Nos.	67500
2020-2021	No.s	74500

*The species of plants planted are: Shisham, Khair, Kikar, Musket, Soo-babul, Mulberry, Amla, Simbal, Kachnar, Siris, Behra, Ber, Peepal, Pilkhan, Tun, Mango, Neem, etc.

Indigenous species like Bargad, Jamun, Palash, Karanj, Amaltas, Rohida, Bel, Seeta Ashok, Ritha, etc., can also be used for plantation purposes.

Source: (Department of Forests and Wildlife, Chandigarh Administration 2021)

Table 3.12: Sector-wise area under the green belt

Area	Unit	Period					
		2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Green Belts							
Sector: 2, near house no. 1 to 5	(in Acres)	1.26	1.26	1.26	1.26	1.26	1.26
Sector: 7, near Ayra Samaj Mandir	(in Acres)	3.50	3.50	3.50	3.50	3.50	3.50
Sector: 7-A and B	(in Acres)	2.62	2.62	2.62	2.62	2.62	2.62
Sector: 7-C and D	(in Acres)	3.14	3.14	3.14	3.14	3.14	3.14
Sector: 8, near H No. 139	(in Acres)	4.75	4.75	4.75	4.75	4.75	4.75
Sector: 8, near DAV school	(in Acres)	2.26	2.26	2.26	2.26	2.26	2.26
Sector: 9-A and B	(in Acres)	7.17	7.17	7.17	7.17	7.17	7.17
Sector: 10- C, near house no. 571	(in Acres)	2.15	2.15	2.15	2.15	2.15	2.15
Green belt on Vigyan Path, Sector: 10	(in Acres)	2.87	2.87	2.87	2.87	2.87	2.87
Sector: 15- A and B	(in Acres)	1.10	1.10	1.10	1.10	1.10	1.10
Sector: 15- C and D	(in Acres)	5.00	5.00	5.00	5.00	5.00	5.00
Football stadium, Sector: 17	(in Acres)	3.34	3.34	3.34	3.34	3.34	3.34
Sector: 17, near GPO	(in Acres)	2.00	2.00	2.00	2.00	2.00	2.00
Sector: 18- A and B	(in Acres)	3.88	3.88	3.88	3.88	3.88	3.88
Sector: 18- C and D	(in Acres)	2.96	2.96	2.96	2.96	2.96	2.96
Sector: 19-A and B	(in Acres)	5.11	5.11	5.11	5.11	5.11	5.11
Sector: 20- A and B	(in Acres)	10.44	10.44	10.44	10.44	10.44	10.44



Area	Unit	Period					
Sector: 20- C and D	(in Acres)	2.14	2.14	2.14	2.14	2.14	2.14
Sector: 21-C and D	(in Acres)	5.25	5.25	5.25	5.25	5.25	5.25
Sector: 24- C and D	(in Acres)	5.26	5.26	5.26	5.26	5.26	5.26
Sector: 26 (Bapu Dham)	(in Acres)	3.10	3.10	3.10	3.10	3.10	3.10
Sector: 26-E	(in Acres)	-	-	-	1.08	1.08	1.08
Sector: 26, near police station	(in Acres)	-	-	-	-	3.00	3.00
Sector: 27- A and B	(in Acres)	5.76	5.76	5.76	5.76	5.76	5.76
Sector: 28- C and D	(in Acres)	2.75	2.75	2.75	2.75	2.75	2.75
Sector: 29- A and B	(in Acres)	2.00	2.00	2.00	2.00	2.00	2.00
Sector: 29- C and D	(in Acres)	6.00	6.00	6.00	6.00	6.00	6.00
Sector 30	(in Acres)	7.5	7.5	7.5	7.5	7.5	7.5
Sector: 32 A, B, C,and D	(in Acres)	8.50	8.50	8.50	8.50	8.50	8.50
Sector: 33- C and D	(in Acres)	6.44	6.44	6.44	6.44	6.44	6.44
Sector: 34- C and D	(in Acres)	2.82	2.82	2.82	2.82	2.82	2.82
Sector: 35- C and D	(in Acres)	5.33	5.33	5.33	5.33	5.33	5.33
Sector: 36- C and D	(in Acres)	10.24	10.24	10.24	10.24	10.24	10.24
Sector: 37-A	(in Acres)	0.92	0.92	0.92	0.92	0.92	0.92
Sector: 37- A and B	(in Acres)	4.75	4.75	4.75	4.75	4.75	4.75
Sector: 37- C and D	(in Acres)	3.15	3.15	3.15	3.15	3.15	3.15
Sector: 38- A and B	(in Acres)	5.37	5.37	5.37	5.37	5.37	5.37
Sector: 38-B	(in Acres)	1.25	1.25	1.25	1.25	1.25	1.25
Sector: 38- C and D	(in Acres)	4.50	4.50	4.50	4.50	4.50	4.50
Sector: 38-D	(in Acres)	0.87	0.87	0.87	0.87	0.87	0.87
Sector: 38 (West)	(in Acres)	3.40	3.40	3.40	3.40	3.40	3.40
Sector: 38 (West) Near EWSColony	(in Acres)	-	-	-	3.02	3.02	3.02
Sector: 39- A and B	(in Acres)	3.75	3.75	3.75	3.75	3.75	3.75
Sector: 39- C and D	(in Acres)	4.57	4.57	4.57	4.57	4.57	4.57
Sector: 39-D (touching Vikas Marg)	(in Acres)	-	-	-	1.15	1.15	1.15
Sector: 40- A and B	(in Acres)	5.00	5.00	5.00	5.00	5.00	5.00



Area	Unit	Period					
Sector: 40- C and D	(in Acres)	5.00	5.00	5.00	5.00	5.00	5.00
Sector: 40-D (touching Vikas Marg)	(in Acres)	-	-	-	0.52	0.52	0.52
Sector: 41- A and B	(in Acres)	7.50	7.50	7.50	7.50	7.50	7.50
Sector: 41- C and D	(in Acres)	4.75	4.75	4.75	4.75	4.75	4.75
Sector: 42- A and B	(in Acres)	3.00	3.00	3.00	3.00	3.00	3.00
Sector: 42- C and D	(in Acres)	3.15	3.15	3.15	3.15	3.15	3.15
Sector: 43- A and B	(in Acres)	4.00	4.00	4.00	4.00	4.00	4.00
Sector: 44- C and D	(in Acres)	2.24	2.24	2.24	2.24	2.24	2.24
Sector: 45- A, facing H.No. 105-13	(in Acres)	2.30	2.30	2.30	2.30	2.30	2.30
Sector: 45-D	(in Acres)	0.85	0.85	0.85	0.85	0.85	0.85
Sector: 45- C and D	(in Acres)	2.22	2.22	2.22	2.22	2.22	2.22
Sector: 46- A and B	(in Acres)	6.19	6.19	6.19	6.19	6.19	6.19
Sector: 46-D	(in Acres)	4.09	4.09	4.09	4.09	4.09	4.09
Sector: 47- A and B	(in Acres)	1.78	1.78	1.78	1.78	1.78	1.78
Sector: 47- C and D	(in Acres)	6.37	6.37	6.37	6.37	6.37	6.37
Sector: 47-D	(in Acres)	0.87	0.87	0.87	0.87	0.87	0.87
Ram Mandir Park, Sector: 47-D	(in Acres)	1.13	1.13	1.13	1.13	1.13	1.13
Sector: 48- A and B	(in Acres)	7.53	7.53	7.53	7.53	7.53	7.53
Sector: 48- C and D	(in Acres)	3.48	3.48	3.48	3.48	3.48	3.48
Sector: 48- D	(in Acres)				2.45	2.45	2.45
Radio Station Society, Sector: 48	(in Acres)			1.75	1.75	1.75	1.75
Sector: 49- A and B	(in Acres)	6.58	6.58	6.58	6.58	6.58	6.58
Sector 49 C and D	(in Acres)	-	-	-	-	-	1.75
Sector: 50- A and B (touching Vikas Marg)	(in Acres)	-	-	-	2.05	2.05	2.05
Sector: 50- C and D	(in Acres)	9.50	9.50	9.50	9.50	9.50	9.50
Sector: 51- A and B	(in Acres)	5.50	5.50	5.50	5.50	5.50	5.50
Sector: 51- D	(in Acres)	3.17	3.17	3.17	3.17	3.17	3.17



Area	Unit	Period					
Sector: 56	(in Acres)	4.87	4.87	4.87	4.87	4.87	4.87
Village Kajheri	(in Acres)	-	-	-	-	-	1.50
Village Maloya (now urban area)	(in Acres)	-	-	-	-	7.91	7.91
Mauli Jagran	(in Acres)	3.10	3.10	3.10	3.10	3.10	3.10
Vikas Nagar, Mauli Jagran	(in Acres)	1.25	1.25	1.25	1.25	1.25	1.25
Hallomajra	(in Acres)	0.95	0.95	0.95	0.95	0.95	0.95
Indira Colony (Manimajra)	(in Acres)	1.75	1.75	-	-	6.00	6.00
Total Area	(in Acres)	277.29	277.29	277.29	287.56	304.47	307.72

Source: (Statistical Abstract of Chandigarh 2021)

Table 3.13: Green status of City Beautiful, Year 2020-21

Department/Organization	No. of Saplings	
	Targets	Achievement
Forest Department, Chandigarh Administration	70,000	74,500
Municipal Corporation, Chandigarh	50,000	92,763
Horticulture Division, Engineering Dept. Chandigarh.	30,000	31,450
Free distribution of saplings by Forest Department to Educational Institutions, Religious Institutions, NGO's, Resident Welfare Associations and other etc.	65,000	55,588
Selling saplings by Horticulture Wing of Municipal Corporation	15,000	-
Selling of saplings by Engineering Department	25,000	18,134
Total	2,55,000	2,83,435

Source: (Greening Chandigarh Action Plan 2021)

Table 3.14: Forest Area Categories Year 2021-22

Name of Forest	Area in Hectares
Sukhna Wildlife Sanctuary	2598.48
City Bird Sanctuary	2.90
Lake Forests	153.90
Sukhna Choe Forests	395.92
Patiala-ki-Rao Forests	136.47
Forest area at Brick Kiln Manimajra	5.00

Source: Deputy Conservator of Forests, Department of Forests & Wildlife, Chandigarh Administration



AIR AND NOISE POLLUTION

Table 4.1: Hearing aid cases due to noise pollution

Year	No. of Cases
2017	5
2018	8
2019	27
2020	7
2021	28

Source: Medical Hearing loss due to noise pollution year 2017,2018,2019, 2020 and 2021 by Programme Officer, NPCCHH,U.T., Chandigarh

Table 4.2: Day and night noise limit under different land use category

Category of Zone	Limits in Leq dB(A)	
	Day Time	Night Time
Industrial area	75	70
Commercial area	65	55
Residential area	55	45
Silence zone	50	40

Source: Chandigarh Pollution Control Committee



Table 4.3: Measured ambient noise levels during normal and Diwali day in Chandigarh, during the period 2017 to 2021

Location / Year	Category of Area	2017		2018		2019		2020		2021		
		Normal Day	Diwali Day	Normal Day	Diwali Day	Normal Day	Diwali Day	Normal Day	Diwali Day	Normal Day	Diwali Day	
Sector 22	Residential	6 PM-7 PM	55.6	63.8	57.7	59.8	63.4	64.1	54.1	53.5	53.5	55
		7 PM-8 PM	53.3	71.9	56.3	71.1	60.9	66.5	51.9	56	53.6	60.2
		8 PM-9 PM	52.8	80.8	53.8	80.3	54.8	79.7	54.7	63.7	52.4	68.4
		9 PM-10 PM	51.6	84.8	50.6	87.6	52.5	79.8	57.7	66.6	52.1	67.9
		10 PM - 11 PM	48.5	75.5	47.5	81	50.9	80	48.1	64.5	57.1	67.2
		11 PM - 12 AM	46.8	76	46.1	63.1	48	60.8	47.4	58.9	49.8	52.7
IMTECH, Sector 39	Institutional	6 PM-7 PM	59.4	62.2	54.6	54.6	52.2	50.5	56.1	56.2	64.2	65.5
		7 PM-8 PM	63.9	67.5	53.3	61.6	51.2	61.6	55	60.2	64.4	67.6
		8 PM-9 PM	64.4	75.3	55.2	68.8	50.6	68.6	55.5	65.5	62.8	73.8
		9 PM-10 PM	58.2	72.7	55.1	74.4	52.4	63.1	51.9	61.5	61.8	78.2
		10 PM - 11 PM	57	62	53.1	69.5	51.6	61.8	56.4	59.7	61.6	69.4
		11 PM - 12 AM	54.8	56.1	52.4	58.7	62.4	55.9	47.1	56.7	59.7	64.8
Sector 17	Commercial	6 PM-7 PM	52.6	56.9	53.7	58.1	59.6	59.8	51.2	49.9	53.5	57.2
		7 PM-8 PM	51.8	59.2	53.5	60.3	53.1	62	52.3	54.5	52.6	53.2
		8 PM-9 PM	50.9	63.5	52.5	66.9	53.1	64.8	50.9	55.3	52.9	57.4
		9 PM-10 PM	49.3	62.3	51.1	69.7	53.2	66.7	51	55.8	52.8	59.6
		10 PM - 11 PM	48	54.9	50.9	59.5	51.6	62.2	50.1	54.1	50	58.4
		11 PM - 12 AM	46.7	48.6	51	55.4	49	56.5	49.1	51.2	48.9	49.9



Location / Year	Category of Area	2017	2018	2019	2020	2021
PEC-12	Silence		52.6	66.6	63.7	53.3
	6 PM-7 PM		73.1	66.8	52.1	56.1
	7 PM-8 PM		50	67.5	63.6	59.9
	8 PM-9 PM		53.9	60.4	57.5	60.8
	9 PM - 10 PM		54	68.2	59.6	52.7
	10 PM - 11 PM		83.1	65.9	58.3	59.1
	11 PM - 12 AM		52.7	55.4	60.8	51.7
			49.8	52.8	54.6	55.6

Standard value: Day time (6 to 10 PM) = 55 dB (A) and Night time (10 to 6 AM) = 45 dB (A)

Source: Chandigarh Pollution Control Committee



Annexure 1:

Revised ambient air quality standards published in 2009 by CPCB

Pollutants	Concentration in Ambient air			Measurement Method
	Time Weighted Average	Industrial, Residential, Rural, and other Areas	Ecologically Sensitive Area (Notified by Central Government)	
Sulphur Dioxide (SO ₂) µg/m ³	Annual *	50	20	<ul style="list-style-type: none"> Improved West and Gaeke Method Ultraviolet Fluorescence
	24 Hours**	80	80	
Nitrogen Dioxide, (NO ₂), µg/m ³	Annual *	40	30	<ul style="list-style-type: none"> Jacob & Hochheiser modified (NaOH-NaASO₂) Method Gas Phase Chemiluminescence
	24 Hours**	80	80	
Particulate Matter (size less than 10µm) or PM ₁₀ , µg/m ³	Annual *	60	60	<ul style="list-style-type: none"> Gravimetric TEOM Beta attenuation
	24 Hours**	100	100	
Particulate Matter (size less than 2.5µm) or PM _{2.5} , µg/m ³	Annual *	40	40	<ul style="list-style-type: none"> Gravimetric TEOM Beta attenuation
	24 Hours**	60	60	
Ozone (O ₃) µg/m ³	8 Hours**	100	100	<ul style="list-style-type: none"> UV Photometric Chemiluminescence Chemical Method
	1 Hour**	180	180	
Lead (Pb) µg/m ³	Annual *	0.5	0.5	<ul style="list-style-type: none"> AAS/ICP Method after sampling on EPM 2000 or equivalent filter paper ED-XRF using Teflon filter
	24 Hours**	1	1	
Carbon Monoxide (CO), mg/m ³	8 Hours **	2	2	<ul style="list-style-type: none"> Non dispersive Infrared (NDIR) Spectroscopy
	1 Hour **	4	4	
Ammonia (NH ₃), µg/m ³	Annual *	100	100	<ul style="list-style-type: none"> Chemiluminescence Indophenol blue method
	24 Hours**	400	400	



	Concentration in Ambient air			
Benzene (C ₆ H ₆), µg/m ³	Annual *	5	5	<ul style="list-style-type: none"> Gas Chromatography (GC) based continuous analyzer Adsorption and desorption followed by GC analysis
Benzo(a)Pyrene (BaP) Particulate phase only, ng/m ³	Annual *	1	1	Solvent extraction followed by HPLC/GC analysis
Arsenic (As), ng/m ³	Annual *	6	6	AAS/ICP Method after sampling on EPM 2000 or equivalent filter paper
Nickel (Ni), ng/m ³	Annual *	20	20	AAS/ICP Method after sampling on EPM 2000 or equivalent filter paper

Source: (CPCB, 2009)

*Annual Arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

**24 hourly or 8 hourly or 1 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

NOTE: Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigations.



Annexure 2:

Breakpoints for AQI scale 0-500 (units: $\mu\text{g m}^{-3}$, unless mentioned otherwise)

AQI Category (Range)	PM ₁₀ 24 Hr	PM _{2.5} 24 Hr	NO ₂ 24 Hr	O ₃ 24 Hr	CO 24 Hr (mg m ⁻³)	SO ₂ 24 Hr	NH ₃ 24 Hr	Pb 24 Hr
Good (0-50)	0-50	0-30	0-40	0-50	0-1.0	0-40	0-200	0-0.5
Satisfactory (51-100)	51-100	31-60	41-80	51-100	1.1-2.0	41-80	201-400	0.6-1.0
Moderate (101-200)	101-250	61-90	81-180	101-168	2.1-10	81-380	401-800	1.1-2.0
Poor (201-300)	251-350	91-120	181-280	169-208	10.1-17	381-800	801-1200	2.1-3.0
Very Poor (301-400)	351-430	121-250	281-400	209-748*	17.1-34	801-1600	1201-1800	3.1-3.5
Severe (401-500)	430+	250+	400+	748+*	34+	1600+	1800+	3.5+

*Hourly monitoring, Source: CPCB, 2015

Annexure 3:

Status of AQI, Chandigarh

AQI Category (Range)	2020	2021
Good (0-50)	121	81
Satisfactory (51-100)	149	128
Moderate (101-200)	92	151
Poor (201-300)	3	5
Very Poor (301-400)	0	0
Severe (401-500)	0	0
Total no. of days	365	365

Source: CPCB, 2021; Prominent parameter PM_{2.5}



Annexure 4:

Prescribed number of air quality monitoring stations according to the population of the region

Pollutant	Population of Evaluation Area	Minimum no. of AAQ Monitoring Stations
	<1,00,000	4
SPM	1,00,000–10,00,000	4+0.6 per 1,00,000 population
	10,00,000–50,00,000	7.5 + 0.25 per 1,00,000 population
	>50,00,000	12 + 0.16 per 1,00,000 population
SO ₂	<1,00,000	3
	1,00,000–10,00,000	2.5+0.5 per 1,00,000 population
	10,00,000–1,00,00,000	6+0.15 per 1,00,000 population
NO ₂	>1,00,00,000	20
	<1,00,000	4
	1,00,000–10,00,000	4+0.6 per 1,00,000 population
CO	>10,00,000	10
	<1,00,000	1
	1,00,000–50,00,000	1+0.15 per 1,00,000 population
	>50,00,000	6+0.05 per 1,00,000 population

Source: (Bureau of Indian Standards 2000)



WATER RESOURCES AND WATER POLLUTION

Table 5.1: Details of water supply across Chandigarh

Zone No.	Location of Waterworks	Sectors Covered
1	Water works 12	12, 14, 15, 16, 17, 18-22 (A & B), 21-A, PGI, Punjab University, 25
2	Water works 26 (Kirloskar side)	1 to 11 and Secretariat, High Court, Rock Garden
3	Water works sector 26 (Jyoti Side)	19, 26, 27, 28, 29, Industrial Area Phase-I (Part), 20-A & B, 21-B, 30-A & B, Bapu Dham colony, colony No.4, Sanjay Colony
4	Water works sector 32	31, 32, 33, 34, 43, 44, 45, 46, Industrial area phase-I (Part), Industrial Area Phase-II, 20-C & D, 21-C & D, Burail
5	Water works sector 37	22-C & D, 23, 24, 25, 35, 36, 37, 38, 39, 40, 41, 42, and 43, Attawa, Butrela, Badheri
6	Water works-52	48-61, Kajheri
7	Water work-I Manimajra (Mansa Devi Road, Chandigarh)	Water is distributed to the old abadi of Manimajra Town
8	Water works-2 Modern Complex Manimajra	Feeding to modern housing complex Manimajra

Source: (Municipal Corporation Chandigarh 2017)

Table 5.2: Consumption of water

Item	Unit	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
No. of water works	(Nos.)	8	8	8	8	8
No. of metered connections	(Nos.)	141431	160861	152500	168815	171850
No. of unmetered connections	(Nos.)	4029	4625	3822	4532	4770
Water consumption						



Item	Unit	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Urban						
Domestic	Kilolitre	73305208	75506421	67222288	72901335	74975010
Commercial/ Industrial	Kilolitre	20926566	19826945	15674988	15806659	15361403
Rural						
Domestic	Kilolitre	8935000	9235000	9221000	-	-
Total Domestic	Kilolitre	82240208	84741421	76443288	72901335	74975010
Per capita consumption	(Per Annum) Kilolitre	71.98	73.00	64.82	61.81	62.57

Source: (Statistical Abstract Chandigarh 2021)

Table 5.3: Tube wells and boosters

Item	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Deep borewells for drinking water	313	325	326	359	359
Booster	109	111	116	125	125

Source: (Statistical Abstract Chandigarh 2021)

Table 5.4: Scope for Artificial Recharge (AR) of groundwater in the UT of Chandigarh

Area (Sq.km)	Area identified for AR (sq.km)	Volume of unsaturated zone (MCM)	Available sub- surface space for AR (MCM)	Water required for recharge (MCM)
114	114	455	55	73

Source: (Central Ground Water Board 2020)

Table 5.5: Status of service-level indicators for the water supply sector

Indicator (Unit)	Standard Benchmark	Existing as of 2020-21
Coverage of water supply (%)	100	100
Per capita supply of water (lpcd)	150	245
Extent of metering of water connections (HSC), %	100	100
Extent of non-revenue water (%)	15	32-38
Continuity of water supply (hours per day)	24	4-5 hours in morning and 4-5 hours in evening
Quality of water supplied (%)	100	100
Cost recovery in water supply services (%)	100	52



Indicator (Unit)	Standard Benchmark	Existing as of 2020-21
Efficiency in collection of water supply related charges (%)	90	92.25
Efficiency in addressing customer complaints (%)	80	78

Source: (Smart City Office, Municipal Corporation Chandigarh)

Table 5.6: Status of service-level indicators for sewerage services

Indicators	Existing Service Level (%)	Benchmark (%)
Coverage of toilets (individual/community)	100	100
Coverage of sewerage network services	100	100
Efficiency of collection of sewerage	100	100
Efficiency in treatment: Adequacy of sewerage treatment capacity	99.7	100

Source: (Municipal Corporation of Chandigarh 2020)

Table 5.7: Details of sewage treatment plants

S. No.	Location of STP	Capacity (MLD)	Capacity (MGD)
1	Diggian	136	30
2	Raipur Kalan	22.5	5
3	3 BRD	50	11
4	Dhanas	7.5	1.65
5	Maloya	22.5	5
6	Raipur Khurd	5.6	1.25

Source: (Municipal Corporation Chandigarh 2021)

Table 5.8: Groundwater quality monitored in 2019-2020

Location	Parameter					
	pH	EC in $\mu\text{S/cm}$	CO_3 , mg/l	HCO_3 , mg/l	Cl, mg/l	SO_4 , mg/l
Sector 46	8.12	260	0	112	21	4
Sector 37	8.23	310	0	140	21	15
IMD Sector 39	8.23	310	0	126	36	8
Sector 39D	7.92	395	0	168	36	30



Location	Parameter					
	pH	EC in $\mu\text{S/cm}$	CO_3 , mg/l	HCO_3 , mg/l	Cl, mg/l	SO_4 , mg/l
Maloya	8.26	735	0	210	71	17
Sector 38	7.87	560	0	210	43	51
Sector 10C	8.21	350	0	126	28	24
Leisure Valley	8.24	285	0	98	14	43
Sector 31D	8.66	550	14	279	21	2
Burail	7.99	235	0	122	21	5

Source: (Central Ground Water Board, 2020)

Table 5.9: Water related diseases reported during 2015–2018

Vector Borne Diseases			
Period	Dengue	Malaria	Chikungunya
2015–16	968	151	1
2016–17	1247	158	309
2017–18	1953	113	19
Water Borne Diseases			
Period	Diarrhoea	Cholera	Hepatitis (A and E)
2015–16	-	66	222
2016–17	-	57	389
2017–18	-	12	634

Source: Anti Malaria Officer-Cum-Nodal Officer (IDSP) NVBDCP, U.T. Chandigarh



Table 5.10: Water quality analysis of Drains/STP:

Parameters	Standard Limit*	STP Diggian	STP 3BRD	STP Raipur Khurd	STP Raipur Kalan	STP Dhanaas	STP Maloya	Sukhna Choe / Drain	Attawa Drain / Choe	Sukhna Lake
Temp (°C)	Shall not exceed 5°C above the receiving water temperature	24.89091	24.76	24.82727	25.13636	26.06364	26.24545	25.2	24.93636	25.2
pH	5.5-9.0	7.26	7.3	7.5	7.11	7.4	7.22	7.32	7.22	7.83
DO (mg/l)	-	4.354	5.73	1.8111	3.4075	4.254	3.0336	0.8	0.75	8.1909
COD (mg/l)	250	75.36	21.1	180.09	145.818	81.63	15.90	163.54	307.81	14.363
BOD (mg/l)	30	30.27	14.88	79.909	76.909	27.27	3.232	84.272	161.09	2.2909
TSS (mg/l)	100	26.909	17.90	80.8	50.909	32.54	8.181	56.27	176	32.909
NH ₃ -N (mg/l)	50	21.54	1.26	20.09	12.518	13.17	1.597	14.972	35.181	1.0190
PO ₄ -P (mg/l)	5	2.709	1.49	2.737	2.9718	2.059	0.777	-	-	-
NO ₃ -N (mg/l)	-	-	-	-	-	-	-	2.3909	3.166	1.972

Source: Chandigarh Pollution Control Committee (CPCC)



AGRICULTURE AND ALLIED SECTOR

Table 6.1: Land use pattern – Agriculture (in hectares)

Year	Total area according to village papers	Forests	Not available for cultivation	Other uncultivated land excluding fallow land	Current fallow land	Fallow land other than current fallow	Net sown area	Total cropped area	Area sown more than once
2017	7026	212	5356	172	53	50	1182	1843	662
2018	7026	212	5374	172	53	50	1164	1820	656
2019	7026	212	5374	172	53	50	1164	1820	656
2020	7026	212	5382	173	54	49	1155	1797	642
2021	7025.65	212.46	5475.73	146.49	28.33	49.78	1112.87	1727.17	614.30

Source: (Directorate of Economics and Statistics, Chandigarh Administration, 2020)

Table 6.2: Category wise distribution of land-use/land cover in Chandigarh

Land use classification	Area in 2015-16 (in thousand hectares)	Area in 2018-19 (in thousand hectares)
Forests	0	0
Area under non-agricultural uses	5	5
Barren and un-culturable land	-	-
Permanent pastures & other grazing lands	0	-
Land under misc. tree crops & groves (not incl. in net area sown)	0	0
Culturable waste land	-	-
Fallow lands other than current fallows	0	0
Current fallows	0	0
Net area sown	1	1

Source: (Directorate of Economics & Statistics, Department of Agriculture & Farmers Welfare, Ministry of Agriculture and Farmers Welfare, Govt., 2021)



Table 6.3: Number of operational land holdings by size group

Size Class of Land Holding	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Less than 1 Hectare	563	656	651	653	656	648	648
1 to 2.5 Hectare	221	239	238	237	236	235	235
2.5 to 5 Hectare	27	28	27	28	28	28	28
5 to 10 Hectare	-	-	-	-	-	-	-
10 to more Hectare	-	-	-	-	-	-	-
Total	811	923	916	918	920	911	911

Source: (Directorate of Economics and Statistics, Chandigarh Administration 2020)

Table 6.4: Area (ha) and production (tons) under different principal crops

Crop	2017-2018		2018-2019		2019-2020		2020-21	
	Area	Production	Area	Production	Area	Production	Area	Production
Kharif Cereals								
Paddy	-	-	80	440	80	440	301	1655
Maize	-	-	-	-	8	24	17	51
Rabi Cereals								
Wheat	546	2585	546	2730	546	2730	725	3262
Total Cereals	550	2625	626	3170	634	3194	1043	4968

Source: (Directorate of Economics and Statistics, Chandigarh Administration 2020)

Table 6.5: Area (ha) and production (tons) under different vegetables

Crop	2015-2016		2016-2017		2017-2018		2018-2019		2019-2020		2020-2021	
	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
Potato	10	155	12	188	12	188	10	160	10	160	9	135
Onion	3	60	4	84	4	84	3	63	3	63	2	40
Other vegetables	20	525	20	528	20	528	15	390	15	390	14	364
Total Vegetables	33	740	36	800	36	800	28	613	28	613	25	539

Source: (Directorate of Economics and Statistics, Chandigarh Administration 2020)



Table 6.6: Area (ha) and production (tons) under different fruits

Crop (Fruits)	2015-2016		2016-2017		2017-2018		2018-2019		2019-2020		2020-2021	
	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
Kinnow	1	8	1	8	1	8	1	8	1	8	24	168
Mango	5	130	5	135	5	135	5	135	5	135	27	675
Litchi	-	-	-	-	-	-	-	-	-	-	-	-
Guava	4	70	4	75	4	75	4	75	4	75	28	504
Bair	1	10	1	8	1	8	1	8	1	8	16	112
Peach	1	13	1	12	1	12	1	12	1	12	15	165
Others	-	-	-	-	-	-	-	-	-	-	5	-
Total	12	231	12	238	12	238	12	238	12	238	115	1624

Source: (Directorate of Economics and Statistics, Chandigarh Administration 2020)

Table 6.7: Livestock population (in numbers)

Livestock category	2007	2012	2019
Cattle	6505	8962	13378
Buffaloes	19568	14034	12177
Total bovines	26073	22996	25555
Sheep	54	66	-
Goat	655	805	998
Horses and ponies	440	189	237
Mules	98	6	-
Donkey	-	-	-
Camels	5	-	-
Pigs	271	135	138

Source: (Directorate of Economics and Statistics UT Chandigarh, 2020; Department of Animal Husbandry and Dairying, 2019)

Table 6.8: Total area under fish culture, fish seed production, and fish production

Item	Unit	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Total area under fish culture	Hectare	275	275	275	275	275
Fish Seed production	Lakh	8.00	8.00	8.00	8.00	8.00
Fish Production (Accural)	Tonnes	128.00	124.00	136.00	139.00	132.00

Source: (Animal Husbandry and Fisheries Department, UT Chandigarh, 2020)



Table 6.9: Consumption of chemical fertilizers

Year	Nitrogen (N)	Phosphatic (P ₂ O ₅)	Potassic (KO)	Total (NPK)
2015-16	About 40 to 45 MT fertilizer (in terms of material) is being brought by the farmers from neighboring villages of Punjab and Haryana.			
2016-17	About 30 to 35 MT fertilizer (in terms of material) is being brought by the farmers from neighboring villages of Punjab and Haryana.			
2017-18	About 30 to 35 MT fertilizer (in terms of material) is being brought by the farmers from neighboring villages of Punjab and Haryana.			
2018-19	About 30 to 35 MT fertilizer (in terms of material) is being brought by the farmers from neighboring villages of Punjab and Haryana.			
2019-20	About 25 to 35 MT fertilizer (in terms of material) is being brought by the farmers from neighboring villages of Punjab and Haryana.			
2020-21	About 25 to 35 MT fertilizer (in terms of material) is being brought by the farmers from neighboring villages of Punjab and Haryana.			

Source: (Directorate of Economics and Statistics, Chandigarh Administration 2020)

Table 6.10: Consumption of pesticides

Year	Quantity (MT in Technical Grade)	Area covered in hectares
2015-2016	0.18	240
2016-2017	0.17	230
2017-2018	0.17	330
2018-2019	0.17	330
2019-2020	0.15	225
2020-2021	0.15	225

Source: (Directorate of Economics and Statistics, Chandigarh Administration 2020)

Table 6.11: Tube wells

Year	Diesel Operated	Electric Operated	Irrigation in Total (No. Cum.)
2015-2016	8	50	58
2016-2017	8	50	58
2017-2018	8	50	58
2018-2019	8	50	58
2019-2020	8	50	58
2020-2021	8	50	58

Source: (Directorate of Economics and Statistics, Chandigarh Administration 2020)



ENERGY

Table 7.1: Power transformers electricity infrastructure of Chandigarh for 2020-21

Voltage Class	Total No. of sub-station	Different voltage ratio in use	Different Capacities in use (KVA)	No. in each capacity size	Total No. of Power Transformers	Aggregate capacity (KVA)
220 KV	1	220/66	100000	3	3	300000
		66/33	16000	1	1	16000
			20000	5	5	100000
66 KV	14		12500	20	20	250000
		66/11	20000	15	15	300000
			30000	2	2	60000
			6000	6	6	36000
33 KV	4	33/11	12500	4	4	50000
			10000	1	1	10000
			20000	1	1	20000
Total				58	58	1142000

Source: Electricity Wing of Engineering Department, Chandigarh Administration

Table 7.2: Distribution transformers electricity infrastructure for 2020-21

Voltage class	Voltage ratio	Total No. of Distribution Transformers	Different capacities in use (KVA)	No. in each capacity Size	Aggregate Capacity (KVA)
11	11/.440	0	50	0	0
11	11/.440	36	63	36	2268
11	11/.440	240	100	240	24000
11	11/.440	571	200	571	114200
11	11/.440	6	250	6	1500
11	11/.440	647	300	647	194100



Voltage class	Voltage ratio	Total No. of Distribution Transformers	Different capacities in use (KVA)	No. in each capacity Size	Aggregate Capacity (KVA)
11	11/.440	394	315	394	124110
11	11/.440	12	400	12	4800
11	11/.440	175	500	175	87500
11	11/.440	29	630	29	18270
11	11/.440	62	750	62	46500
11	11/.440	98	800	98	78400
11	11/.440	75	1000	75	75000
	Total	2345		2345	770648

Source: Electricity Wing of Engineering Department, Chandigarh Administration

Table 7.3: Transmission and distribution lines of Chandigarh for 2020-21

Nominal Voltage	Total Length of line in Ckt km at the end of the year				
	Single Ckt	Double Ckt	Multi Ckt*	Total	Grand Total
220kV	54.00	0.00	0.00	54.00	
66 kV (O.H)	32.9	87.77	0	120.67	132.96
66 KV (U.G)	12.288	0.00	0.00	12.29	
33 kV (O.H)	14	0.00	0.00	14.00	23.00
33 kV (U.G)	9	0.00	0.00	9.00	
11 kV (O.H)	552.784	0.00	0.00	552.78	913.54
11 kV (U.G)	360.754	0.00	0.00	360.75	
440/230 V, 3 phase, single phase if available (O.H)	1014.97	0.00	0.00	1014.97	1647.20
440/230 V, 3 phase, single phase if available (U.G)	632.232	0.00	0.00	632.232	

Source: Electricity Wing of Engineering Department, Chandigarh Administration

Table 7.4: Yearly transmission and distribution losses in Chandigarh

Financial Year	T&D Loss
2011-12	20.20%
2012-13	18.42%
2013-14	15.10%



Financial Year	T&D Loss
2014-15	15.17%
2015-16	15.24%
2016-17	13.65%
2017-18	9.51%
2018-19	13.50%
2019-20	11.91%

Source: Electricity Wing of Engineering Department, Chandigarh Administration

Table 7.5: Power allocation from various central generating station plants (CGP) in Chandigarh for 2020- 21

Source Type	Allocation in MW	% of unallocated Power
HYDRO NTPC	6.32	1.82
HYDRO NHPC	39.99	11.54
THDC	47.44	13.69
SJVNL	7.95	2.29
HYDRO BBMB	139.40	40.24
THERMAL NTPC	39.24	11.33
MUNPL	3.04	0.88
GAS NTPC	15.02	4.34
NUCLEAR NPCIL	8.01	2.31
Wind Power	40.00	11.55
Total	346.41	100.00

Source: Electricity Wing of Engineering Department, Chandigarh Administration

Table 7.6: Energy sale (Mus) and connected load (kW) of Chandigarh from FY 16 to FY 19

Consumer Category	FY 16	FY 17	FY 18	FY 19	FY 16	FY 17	FY 18	FY 19
	Energy Sale				Connected Load (kw)			
Domestic	659	722	732	705	8,18,172	8,50,347	9,09,069	8,96,688
Commercial	463	499	494	473	4,00,437	4,24,746	4,46,005	4,54,578
Large industrial supply	132	126	120	125	71,904	70,044	69,431	69,231
Medium industrial supply	111	115	119	116	70,162	71,457	72,362	76,548



Consumer Category	FY 16	FY 17	FY 18	FY 19	FY 16	FY 17	FY 18	FY 19
	Energy Sale				Connected Load (kw)			
Small industrial supply	19	20	20	19	19,364	19,565	19,717	22,321
Agriculture	1	1	1	1	737	748	843	834
Public lighting	23	22	18	15	6,243	6,660	6,756	4,911
Bulk supply	77	81	81	77	41,916	42,454	42,253	42,053
Temporary supply	7	5	4	4	3,250	2,480	2,191	32,529
Total	1492	1591	1589	1536	14,32,185	14,88,501	15,68,627	15,99,693

Source: Electricity Wing of Engineering Department, Chandigarh Administration

Table 7.7: Growth in consumption and percentage of electricity under different classes of consumers, between 2018 and 2021

Consumption & Percentage of Electric-Power by Uses						
Category	2018-19		2019-20		2020-21	
	Consumption in M. Kwh	Percentage to total	Consumption in M. Kwh	Percentage to total	Consumption in M. Kwh	Percentage to total
Domestic	704.67	45.88	759.21	47.58	738.37	50.92
Commercial	472.98	30.80	484.49	30.37	374.44	25.82
Industrial	260.42	16.19	248.57	15.58	235.30	16.23
Public Lighting	15.09	0.98	14.78	0.93	15.49	1.07
Bulk Supply	77.31	5.03	82.88	5.19	81.22	5.60
Agricultural	1.36	0.09	1.41	0.09	1.28	0.09
Others	3.93	0.26	4.20	0.26	3.87	0.27
Total	1535.76	100.00	1595.54	100.00	1449.97	100.00

Source: Electricity Wing of Engineering Department, Chandigarh Administration

Table 7.8: Number of consumers in Chandigarh, between FY 18 to FY 20

Consumer Category	FY 18	FY 19	FY20
Domestic	1,94558	1,97503	199690
Commercial	24603	25288	26584
Industrial	2939	2939	2691
Agriculture	122	122	123



Consumer Category	FY 18	FY 19	FY20
Public lighting	1217	1268	1393
Bulk supply	587	587	560
Public Water Works	Covered under Industrial		
Others	357	357	405
Total	224383	228064	231446

Source: (Statistical Abstract of Chandigarh 2021)

Table 7.9: Sale of electricity per consumer (in kWh)

Category of Consumer	2018-2019	2019-2020	2020-2021
Domestic	3622	3844	3698
Commercial	19224	19159	14085
Industrial	88608	84576	87440
Agricultural	11148	11557	10407
Bulk	131704	141193	145036
Public lighting	12399	11656	111120
Others	11008	11765	9556
Average	6844	6996	6265

Source: (Statistical Abstract of Chandigarh 2021)

Table 7.10: Number of energized tube wells

Items	2018-2019	2019-2020	2020-2021
Tube wells (Agricultural and public water works)	313	467	479

Source (Statistical Abstract of Chandigarh 2021)

Table 7.11: Annual per capita consumption of electricity

Year	Annual Per Capita Consumption of Electricity (kWh)
2018-2019	1456
2019-2020	1481
2020-2021	1375

Source: (Statistical Abstract of Chandigarh 2021)



Table 7.12: Consumption of petroleum products in Chandigarh

Products	Units	2018-2019	2019-2020	2020-2021
Petrol incl. ULP	(Kilolitres)	173056	178911	128909
High speed diesel	(Kilolitres)	232825	239200	153150
Kerosene	(Kilolitres)	271	71	141
Light diesel oil	(Kilolitres)	558	459	414
Furnace oil	Metric Ton	-	2021	1286
Low Sulphur heavy stock	Metric Ton	5064	-	28
LPG connections	Nos. (Cum.)	2,99,000	2,78,565	2,81,659

Source: (Statistical Abstract of Chandigarh 2021)

Table 7.13: Cumulative numbers and capacity of the off-grid solar applications

Agency	Solar Street Light (Nos.)	Solar Home Light (Nos.)	Solar Lamps (Nos.)	Solar Pump (Nos.)	Solar Power Plant (kw)
Chandigarh	935	275	1675	12	730
India	813132	1723479	8402449	334886	216862.67

Source: (Ministry of New and Renewable Energy 2020)

Table 7.14: Number of SPV installed and their capacity from 2015-16 to 2019-20

Year	Number of SPV Installed	Capacity of SPV (kWp)
2015-16	68	2173
2016-17	24	2978
2017-18	98	11281
2018-19	1171	7332
2019-20	923	5458

Source: (CREST, Chandigarh)

Table 7.15: Details of LED street lights and LED flood lights under electrical division

S No.	Wattage of LED Lights	Quantity
1.	200 WFL	2443
2.	120 WSL & FL	3302
3.	80 WSL	19140
4.	35 WSL	3642
5.	18 WSL	13576
6.	18 WSL	13576
Total		42103



S No.	Wattage of LED Lights	Quantity
	Reduction in load after installation (in kW)	3241.90
	% Reduction in load	54
	Energy saving in kwh (@11 hrs and 365 days)	13016212
	Energy saving in Mega Unit (MU) (@11 hrs and 365 days)	13.02
	Reduction in CO2 Emission in tonne CO2 (1kwh=0.81 kg CO2)	10543.13

Source: (Municipal Corporation Chandigarh 2022)

Table 7.16: Energy savings from state-specific DSM measures in Chandigarh

Sector	DSM measure	Energy saving potential as % of total consumption	Investment/ MU of savings (in crore)
Domestic	Replacement of ICLs with LED bulbs	23%	0.8
Commercial	Retrofitting of energy efficient equipment's	15%	1.5
Street lighting	Replacement of existing street light with LEDs	51%	2.0

Source: (Ministry of Power 2016)

Table 7.17: Status of Selling Energy Efficient items up to May 2022

Name of Item	Units	Quantity
LED bulbs	Nos.	604071
LED tube lights	Nos.	58750
5-Star rated energy efficient fans	Nos.	17149

Source: Electricity Wing of Engineering Department, Chandigarh Administration

Table 7.18: Energy saving, cost saving and carbon reduction per year due to sale of energysaving items (2020-21)

Name of Item	Energy Saving (MW hour)	Cost Saving (in Crore)	Carbone Reduction (t CO ₂)
LED bulbs	71983	29.00	58306
LED tube lights	2511.58	0.85	2060
5-Star rated energy efficient fans	1437.22	0.49	1179
Total	75931.80	30.34	61545

Source: Electricity Wing of Engineering Department, Chandigarh Administration

Table 7.19: Status of percentage share of RE power in Chandigarh for FY 2021-22



Type		Energy in MU	% Share	Total RE/ Non-RE (in %)
Renewable Energy Sources	Hydro	1313.537	66.03	
	Solar	45.220	2.27	73.30
	Wind	99.302	4.99	
Non-Renewable Energy Sources	Gas	9.746	0.49	0.49
	Thermal	330.313	16.61	16.61
	Nuclear	191.086	9.61	9.61
Total		1989.204	100.00	100.00

Source: Electricity Wing of Engineering Department, Chandigarh Administration



WASTE AND WASTE MANAGEMENT

Table 8.1: Details about hazardous waste management system and its management:

Year/Fraction	Landfillable (MT)	Incinerable (MT)	Recyclable waste(used oil, acid residue/spent acid, zinc waste) (MT)	Total (MT)
2020-2021	224.29	22.79	1032.011	1279.098
2019-2020	208.03	48.462	2470.565	2727.057

Source: Member Secretary CPCC, Chandigarh

Table 8.2: Year-wise quantity of hazardous waste generated

Year	Quantity of Hazardous Waste generated (MT)
2015	3577.517
2016	1054.492
2017	1179.173
2018	1008.018
2019	2124.624
2020	1279.098
2021	2088.8

Source: Member Secretary CPCC, Chandigarh

Table 8.3: Annual municipal solid waste generation

Year	MSW Generated (Metric Ton)	Material Collected (TPD)	Material Treated (TPD)	Material Landfilled (TPD)
2018-2019	470	458	150	361
2019-2020	450	450	179.61	270
2020-2021	513	513	69	444

Source: (CPCB 2021)



Table 8.4: Year-wise annual bio-medical waste (BMW) generation

Year	BMW generated (kg per day)	BMW treated (kg per day)
2019	3869	3869
2020	4752	4752
2021	5374	5374

Source: Member Secretary CPCC, Chandigarh

Table 8.5: Covid-19 waste generation

Month	Red	Blue	Yellow	White	Total Waste (tonnes)
Apr-20	0	0	14207	0	14207
May-20	54	0	39656	0	39710
Jun-20	2592	82	26819	0	29493
Jul-20	5251	118	40365	0	45734
Aug-20	9699	143	60948	3	70790
Sep-20	21554	697	51465	30	73716
Oct-20	14539	814	35969	0	51322
Nov-20	811	419	42579	0	43809
Dec-20	14482	265	36473	0	51220

Source: Chandigarh Pollution Control Committee

Table 8.6: Annual Plastic waste generation

Plastic Waste Generation (tonnes TPA)	
2017	12775.00
2018	11715.40
2019	11497.50
2020	13107.15

Source: (Central Pollution Control Board 2021)

Table 8.7: Annual C&D waste handled in Chandigarh

Year	Material Received (ton)	Material Processed (ton)
2018 (July-December)	1317.23	278.95
2019*	11247.41	12027.19
2020	25121.66	18620.86

Source: Municipal Corporation of Chandigarh

* Material processed exceeds the material recovered in 2019 due to the backlog being processed as well



ENVIRONMENT AND HEALTH

Table 9.1: Birth rate (rural, urban, and combined) of Chandigarh (Thousand per annum)

Birth Rate			
Year	Rural	Urban	Combined
2016	1.46	12.29	11.99
2017	0.59	11.74	11.43
2018	0.74	11.44	11.15
2019	0.00	11.00	11.38
2020	0.00	10.75	10.75
2021	0.00	10.21	10.21
Death Rate			
2016	5.59	2.72	2.80
2017	4.00	5.27	5.23
2018	4.65	5.43	5.40
2019	0.00	5.54	5.38
2020	0.00	5.62	5.62
2021	0.00	6.06	6.06

Source: (Statistical Abstract of Chandigarh 2021)

Table 9.2: Infant mortality rate or IMR (rural, urban, and combined) of Chandigarh (Thousandperannum)

Year	Rural	Urban	Combined
2016	-	7.96	7.93
2017	-	19.49	19.46
2018	-	25.68	25.64
2019	-	20.64	20.64
2020	-	18.01	18.01
2021	-	16.71	16.71

Source: (Statistical Abstract of Chandigarh 2021)



Table 9.3: Medical institutions classified by hospitals and dispensaries

Items	Unit	2018- 19	2019- 20	2020-21
Allopathic hospitals	Nos. (Cum.)	7	7	7
Beds	"	3382	3313	3712
Allopathic dispensaries				
Rural	"	-	-	
Urban	"	43	42	37
Ayurvedic dispensaries				
Rural	"	5	5	-
Urban	"	10	11	15
Homoeopathic dispensaries				
Rural	"	5	8	-
Urban	"	11	11	17
Unani dispensaries				
Rural		1	1	-
Urban		1	1	2

Source: (Statistical Abstract of Chandigarh 2021)

Table 9.4: Health index

Indicator		2018- 19 (BY)	2019- 20 (RY)	Increment
Overall Index Inference Year (2019-2020)				
Score: 62.53; Rank 2				
Score: -10.85; Rank 7				
Incremental Index Base Year (2018-19) to Reference Year (2019-20)				
HEALTH OUTCOMES DOMAIN				
1.1.1	NMR (per 1000 live births)	-	-	-
1.1.2	U5MR (per 1000 live births) @	-	-	-
1.1.3	Sex ratio at birth	920	950	-
1.2.2	Full immunization coverage (%)	93.83	77.58	-16.24
1.2.3.b	Proportion of pregnant women received 4 or more ANC's (HMIS)	-	100	9.17
1.2.5	Total case notification of TB (%)	100	100	0
1.2.6	TB treatment success rate (%)	88.2	87.77	-0.43



Indicator		2018- 19 (BY)	2019- 20 (RY)	Increment
1.2.7	PLHIV on ART (%)	-	-	-
GOVERNANCE AND INFORMATION DOMAIN				
2.2.2	Average occupancy: CMOs (in months)	11.95	9.01	-2.94
KEY INPUTS AND PROCESSES				
3.1.1	Shortfall: ANMs at SCs (%)	0	N/A	N/A
3.1.6.a.	Level of registration of births (%)	100	100	0
3.1.6.b	Level of death registration (%)	100	100	0
3.1.7	IDSP reporting of P form (%)	95	91	-4
3.1.7	IDSP reporting of L form (%)	95	89	-6
3.1.8.a	Proportion of DH-SDHs with accreditation certificates (State Report)	0	0	0
3.1.8.a	Proportion of CHCs with accreditation certificates (State Report)	N/A	N/A	
3.1.8.a	Proportion of PHCs with accreditation certificates (State report)	0	0	
3.1.8.a	Proportion of UPHCs with accreditation certificates (State report)	N/A	N/A	
3.1.8.b	Proportion of DHs certified under LaQshya - Labour Room (MoHFW)	100	100	

@Negative indicator where higher number means lower performance [Source: NITI Aayog's State Health Index Round IV 2019-20] *Source: Registrar Birth and Death, UT Chandigarh; (NITI Aayog 2020)

Table 9.5: Number of total reported cases of common air-borne diseases in Chandigarh (U.T.)

Year	No. of people infected (Avian influenza)	No. of deaths (Avian influenza)	No. of people infected (Seasonal influenza)	No. of Deaths (Seasonal influenza)	Communicable / Non-communicable
2011	0	0	-	-	Communicable
2012	1	0	-	-	Communicable
2013	37	5	-	-	Communicable
2014	1	0	-	-	Communicable
2015	22	7			Communicable
2016	0	0	0	0	Communicable
2017	0	0	63	6	Communicable



Year	No. of people infected (Avian influenza)	No. of deaths (Avian influenza)	No. of people infected (Seasonal influenza)	No. of Deaths (Seasonal influenza)	Communicable / Non-communicable
2018	0	0	4	2	Communicable
2019	0	0	54	3	Communicable
2020	0	0	28	2	Communicable

Source: Assistant Director Malaria-cum-SSO, IDSP, NVBDCP, U.T. Chandigarh

Table 9.6: Year-wise Covid data for Chandigarh

Year	Sample	Positive Cases	Death
2020	181186	19748	373
2021	686697	46147	706
Total	867883	65895	1079

Source: Assistant Director Malaria-cum-SSO, IDSP, NVBDCP, U.T. Chandigarh

Table 9.7: Number of total reported cases of common air pollution linked diseases in Chandigarh (U.T.)

Air Pollution Linked Diseases	2017	2018	2019	2020
Acute Respiratory Infection (ARI)* (As per P form of IDSP)	-	-	1186913	107149
Pneumonia (As per P form)	-	-	4900	2996
COPD	-	3297	-	-
Asthma	-	31036	-	-

Source: Assistant Director Malaria-cum-SSO, IDSP, NVBDCP, U.T. Chandigarh; (State Action Plan for Climate Change and Human Health, 2021)

Table 9.8: Number of total reported cases of common water-borne diseases in Chandigarh(U.T.)

Diseases	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021* (As per IHIP-IDSP Portal)
People infected with cholera (As per IDSP L form)	16	24	1	12	67	-	-	-	-	-	-
Number of Deaths (cholera)	0	0	0	0	0	-	-	-	-	-	-



Diseases	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021* (As per IHIP- IDSP Portal)
People infected with typhoid (As per IDSP L form)	-	-	-	-	-	341	389	371	415	168	68
Number of deaths (typhoid)	-	-	-	-	-	0	0	0	0	0	0
People infected with hepatitis A	31	80	48	79	148	154	197	141	180	81	77
Number of deaths (hepatitis A)	0	0	0	0	0	0	0	0	0	0	0
People infected with hepatitis E	28	23	37	32	30	149	457	325	101	51	11
Number of deaths (hepatitis E)	0	0	0	0	0	0	0	0	0	0	0
People infected with acute diarrheal disease (IDSP as per P form)	-	-	-	-	-	-	-	-	48254	23799	1819

Source: Assistant Director Malaria-cum-SSO, IDSP,NVBDCP,U.T. Chandigarh



TRANSPORT AND COMMUNICATION

Table 10.1: Performance of Chandigarh Transport Undertaking

Item	Unit	2018-2019	2019-2020	2020-21
Fleet strength	Nos.	565	602	573
Effective kms	Lakh kms	440.78	416.75	222.33
Fleet utilization	% age	84.00	78.74	79.52
Daily vehicle utilization	kms	221.1	219.2	576.71
Break-down	Per ten thousand kms	0.75	0.90	3.01
Daily passenger carried	Lakhs	1.56	1.50	0.25

Source: (Divisional Manager, Chandigarh Transport Undertaking 2021)

Table 10.2: Road length maintained by public works department (B and R) and municipal corporation

Year	National highways	City roads		Rural roads	Total
		PWD	MC		
2018-2019	128.79	643.22	2476.32	214.56*	3462.89
2019-2020	128.79	790.02	2476.32	234.31**	3629.44
2020-21	128.79	936.10	2476.32	301.38	3842.59

Source: (S.E. Planning Circle (R&H) & Roads Division-2, M.C. UT Chandigarh 2021)



HOUSING

Table 11.1: Working of the various Housing schemes in Chandigarh

Name of the Scheme	2018-2019	2019-2020	2020-21
Middle Income Group Housing Scheme.	1727.56	1698.67	744.43
Low Income Group Housing Scheme.	-	5.52	-
Working of the various Housing Schemes in Chandigarh by Housing Board (House Completed). (In No.)			
Middle Income Group & High Group Income Housing Scheme.	-	-	-
High Income Group Housing Scheme.	-	-	-
Economically Weaker Section Housing Scheme	86.43	-	-
Small Flat	106.07	83.32	40.65
Common Expenses of Services to 2108 flats in Sector:63, e.g. street lights	100.39	31.78	22.31
Development work in small flats of 8448 Dhanas and 1696 Mauli Jagran	1155.54	149.04	65.45
Constructing Middle Income Group, High Income Group and LIG Housing Scheme , Sector: 63	-	0.97	177.91

Source: (Statistical Abstract of Chandigarh 2021)



STATE DOMESTIC PRODUCT

Table 12.1: Movement of GSDP/NSDP and per capita income at market prices and their indices in Chandigarh (Base year 2011-12)

Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Gross State Domestic Product (GSDP)										
At Current Price (in INR, Lakh)	1876816	2160856	2482173	2654857	2927508	3242666	3634435	4013887	4310079	3971409
At 2011-12 Prices (INR Lakh)	1876816	2028513	2210470	2287013	2493224	2691721	2847968	2986579	3108303	2787025
Index Number Of GSDP										
At Current Price (INR Lakh)	100.00	115.13	132.25	141.46	155.91	172.77	193.65	213.87	229.65	211.60
At 2011-12 Prices (INR Lakh)	100.00	108.08	117.78	121.86	132.84	143.42	151.74	159.73	165.62	148.50
Net State Domestic Product (NSDP)										
At Current Price (INR Lakh)	1692997	1950739	2230818	2366174	2599100	2888105	3251136	3610631	3893384	3521587
At 2011-12 Prices (INR Lakh)	1692997	1830519	1981345	2035309	2205816	2384240	2528946	266515	2781732	2442219
Index Number Of NSDP										
At Current Price (INR Lakh)	100.00	115.22	131.77	139.76	153.52	170.59	192.03	213.27	229.97	208.01



Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
At 2011-12 Prices (INR Lakh)	100.00	108.12	117.03	120.22	130.29	140.83	149.38	155.44	164.31	144.25
Per Capita Income (INR)										
At Current Price (INR Lakh)	158967	180457	203356	212594	230009	252236	280512	307812	328002	292977
At 2011-12 Prices (INR Lakh)	158967	169336	180615	182867	195205	208231	218201	227731	234350	203180
Index Of Per Capita Income										
At Current Price (INR Lakh)	100.00	113.52	127.92	133.73	144.69	158.67	176.46	193.63	206.33	184.30
At 2011-12 Prices (INR Lakh)	100.00	106.52	113.62	115.80	122.80	130.99	137.26	141.94	147.42	127.81
Population (Lakh)	10.65	10.81	10.97	11.13	11.30	11.45	11.59	11.73	11.87	12.02

Source: (Statistical Abstract of Chandigarh 2021)



Table 12.2: Gross state value added (GVSA) and GSDP by economic activity at current prices and constant prices (Base Year 2011-12)

Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Agriculture, forestry and fishing	Current	12811	14026	15386	17350	14985	17146	18877	22515	25405
	Constant	12115	11944	11883	12670	1133	11702	12250	13020	13881
Crops	Current	1381	1553	1600	1706	1719	1637	1537	1726	2139
	Constant	1231	1167	1119	1115	1107	1114	1107	1132	1455
Livestock	Current	11430	12473	13786	15644	14266	15509	17340	20789	23265
	Constant	10884	10777	10765	11555	10230	10588	11143	11888	12426
Forestry and logging	Current	336	370	619	649	1248	1140	2364	3897	4051
	Constant	291	337	362	379	1081	952	1885	3000	3007
Fishing and aquaculture	Current	58	174	194	222	241	274	250	250	261
	Constant	48	108	114	122	122	129	124	124	129
Mining and Quarrying	Current	215	182	179	193	223	316	0	79	0
	Constant	200	160	154	170	193	264	0	62	0
Primary	Current	13420	14752	16378	18414	17697	18876	21491	26741	29716
	Constant	12871	12549	12513	13341	12733	13047	14259	16206	17017
Manufacturing	Current	113846	13424	102657	101242	120992	11275	142969	139449	140180
	Constant	101724	108087	124029	92697	11498	102134	12431	121548	12253



Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	
Electricity, Gas, water supply and other utility services	Current	23897	25678	29657	31990	81023	60878	67824	73526	77213	72125
	Constant	23897	24448	26555	27301	68682	48192	54435	56529	51135	45514
Construction	Current	113825	114129	129238	134214	135860	145740	15952	182412	180960	170678
	Constant	113825	10508	113053	113662	118228	122998	126835	138018	136360	124698
Secondary	Current	239446	253653	293099	268861	318125	327610	340031	398907	397622	382983
	Constant	239446	237544	263637	233660	282425	286098	283404	318848	309043	292715
Trade, repair, hotel, and restaurants	Current	614134	734772	843576	878471	920911	1038679	1172585	1308466	1395310	1053141
	Constant	614134	682915	738835	754142	812027	897600	977879	1053525	1084108	788561
Trade & Repair services	Current	558189	673113	776665	808461	844589	954894	1079321	1202178	1277726	1001101
	Constant	558189	625601	680313	694136	744789	825287	900164	967967	992745	749614
Hotel & Restaurants	Current	55945	61659	66911	70010	76322	83785	93264	106288	117584	52040
	Constant	55945	57314	58521	60006	67238	72312	77715	85558	91363	38947



Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	
Transport, Storage Communications & Services related to broadcasting	Current	93714	108281	121466	140191	157578	155273	154613	152855	170124	153263
	Constant	93714	101885	108880	116547	120211	128810	129596	128095	138483	133983
Railways	Current	838	974	1271	1144	1187	1509	1169	3703	4979	1632
	Constant	838	929	1180	999	1010	1161	881	2737	3025	801
Road Transport	Current	34945	43030	45231	53772	54647	56148	56343	57580	62476	52093
	Constant	34945	40318	40518	43291	42817	45042	47324	49732	52322	53726
Water transport	Current	0	0	0	0	0	0	0	0	0	0
	Constant	0	0	0	0	0	0	0	0	0	0
Air transport	Current	2195	4585	4176	7228	12938	15322	15653	7748	16141	12381
	Constant	2195	4341	3737	6339	12183	12987	12909	6166	12635	8722
Service incidental to transport	Current	20460	23608	27357	33227	38268	30076	31344	30987	26843	18618
	Constant	20460	22147	24617	26668	31486	25826	27524	27967	24592	23242
Storage	Current	711	762	872	763	783	540	258	625	1210	5151
	Constant	711	698	737	613	604	404	192	467	803	3264



Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Communication and services related to broadcasting	Current	34565	35322	42559	44057	51678	49846	52212	58475	63388
	Constant	34565	33452	38091	38636	43390	40766	41026	45106	44228
Financial Services	Current	285574	324887	354003	365634	391610	379525	486695	526290	538220
	Constant	285574	320614	341806	346752	363308	326814	391810	401968	407902
Real ownership of dwelling and professional services of dwelling, estate,	Current	392976	443136	524870	606294	797022	848626	846841	915004	963014
	Constant	392976	412297	461469	514174	627212	637055	593271	645616	651840
Public administration	Current	127626	154695	166048	190563	244508	263963	267849	299535	314114
	Constant	127626	141766	140374	153816	183262	190642	185955	198512	198781
Other Services	Current	106810	123219	143522	169751	207115	230198	250353	290028	290740
	Constant	106810	114930	125649	140497	155101	165500	166282	179394	170785



Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	
Tertiary	Current	1620834	1888990	2153485	2350905	2530284	2834206	3049510	3313059	3596291	3312492
	Constant	1620834	1774407	1917031	2025928	2156999	2355292	2427286	2517938	2648081	2351852
Total state value added at basic price	Current	1873151	2156063	2461336	2636144	2866823	3179513	3408417	3733457	4086654	3725191
	Constant	1873151	2024310	2193198	2272102	2452765	2654124	2723937	2852045	2973330	2661584
Product taxes	Current	27002	34002	45366	40403	70854	70514	232602	286123	296813	254756
	Constant	27002	31309	38738	33130	46783	42308	128542	139426	140278	130851
Product subsidies	Current	23337	29209	24529	21690	10169	7361	6584	5693	7388	8358
	Constant	23337	27105	21466	18219	6304	4711	4511	4892	5305	5410
Gross state domestic product	Current	1876816	2160856	2482173	2654857	2927508	3242666	3634435	4013887	431079	3971409
	Constant	1876816	2028513	2210470	2287013	2493224	2691721	2847968	2986579	3108303	2787025
Population(lakh)	Current	10.65	10.81	10.97	11.13	11.3	11.45	11.59	11.73	11.87	12.02
	Constant	10.65	10.81	10.97	11.13	11.3	11.45	11.59	11.73	11.87	12.02
Per capita GSDP(Rs.)	Current	176227	199894	226269	238532	259071	283202	313584	342190	363107	330400
	Constant	176227	187652	201501	205482	220639	235085	245726	254610	261862	231866

Source: (Statistical Abstract of Chandigarh 2021)



Table 12.3: Net state value added (NVSA) and NSDP by economic activity at current prices and constant prices (Base Year 2011-12)

Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	
Agriculture, forestry and fishing	Current	11489	12099	13188	14441	16347	14925	15993	17629	21167	23925
	Constant	11489	11137	11219	11101	11864	10514	10832	11340	12068	12872
Crops	Current	749	822	886	843	883	822	670	487	578	875
	Constant	749	698	594	499	469	427	397	351	333	609
Livestock	Current	10739	11276	12302	13598	15465	14103	15323	17142	20590	23050
	Constant	10739	10438	10625	10603	11395	10087	10435	10990	11735	12263
Forestry and logging	Current	288	332	366	613	643	1238	1131	2342	3863	4015
	Constant	288	310	333	358	374	1073	945	1868	2974	2980
Fishing and aquaculture	Current	207	50	156	175	202	221	254	232	232	241
	Constant	207	42	92	98	105	105	111	109	109	113
Mining and quarrying	Current	202	184	156	151	162	187	267	0	65	0
	Constant	202	171	136	129	144	164	225	0	51	0
Primary	Current	12185	12664	13866	15380	17354	16571	17645	20203	25328	28181
	Constant	12185	11659	11780	11686	12487	11856	12113	13318	15202	15965



Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Manufacturing	Current	91508	106058	125394	92652	89929	101836	131985	126058	126113
	Constant	91508	100609	115812	83713	85360	92628	115051	110427	111107
Electricity, gas, water supply and other utility services	Current	17701	19184	20332	22107	54554	39190	49076	73792	69367
	Constant	17701	18189	17817	18226	44635	29346	35719	48859	43799
Construction	Current	108498	108123	121396	126320	127789	149073	170347	167334	155803
	Constant	108498	99278	105674	106365	110702	116933	126885	123802	111080
Secondary	Current	217707	233365	267122	241079	272272	29099	351408	367187	351283
	Constant	217707	218077	239303	208304	240697	238907	277655	283088	265886
Trade, Repair, Hotel, Restaurants	Current	605975	725209	832798	866571	894913	1155549	1272100	1356002	1011731
	Constant	605975	673906	729026	743607	788773	872290	963425	1052644	756191
Trade and repair services	Current	550773	664352	766742	797509	822529	1063222	1170597	1243721	965221
	Constant	55073	617348	671281	684439	725053	803637	886502	965504	721556
Hotel and Restaurants	Current	55202	60856	66056	69062	72384	79644	101503	112281	46510
	Constant	55202	56558	57744	59168	63720	76923	81710	87140	34635



Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	
Transport, Communication, storage and services related to broadcasting	Current	83096	96866	10152	119029	135616	131768	129063	122880	13121	109231
	Constant	83096	90874	89846	97677	111080	108675	107751	103212	107005	99027
Railways	Current	554	655	780	748	709	576	543	2888	1600	604
	Constant	554	630	731	645	594	711	361	2088	395	20
Road transport	Current	31045	38763	42207	49863	51502	52878	53581	53969	58225	46694
	Constant	31045	36231	37719	39651	39883	42043	44852	46554	48761	49475
Water transport	Current	0	0	0	0	0	0	0	0	0	0
	Constant	0	0	0	0	0	0	0	0	0	0
Air transport	Current	1950	4130	2040	4828	11486	12910	13147	5474	9839	1344
	Constant	1950	3901	1753	4098	9917	10794	10689	4195	7369	41
Service incidental to transport	Current	18177	21267	23666	29291	33495	26144	27022	26157	22299	14751
	Constant	18177	19902	21142	23189	27293	22398	23851	24015	20946	20194
Storage	Current	606	660	737	641	658	453	217	521	1097	4626
	Constant	609	596	615	506	493	327	158	385	714	2860



Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Communication and services related to broadcasting	Current	30761	31392	32112	33658	37766	38808	33871	38261	41194
	Constant	30761	29614	27886	29587	32900	32402	25975	28820	26437
Financial services	Current	281065	319132	348133	358902	363592	383777	476231	514302	525201
	Constant	281065	315035	336221	340785	337250	355732	382919	392306	397530
Real estate, ownership of dwelling, and professional services	Current	291542	323341	381927	435111	521371	604235	628080	684433	712050
	Constant	291542	300928	333827	368106	42086	465001	460705	471833	467158
Public administration	Current	98296	120031	129921	150721	157564	198127	221154	249093	261663
	Constant	98296	108456	106678	117782	117351	141127	148579	156340	155848
Other services	Current	99467	115338	134673	160668	175733	197007	238145	276296	276047
	Constant	99467	107381	117393	132450	137333	146153	15476	168341	159173
Tertiary	Current	1459441	1699917	1928994	2091002	2248789	2525021	2717374	3211447	2895905
	Constant	1459441	1596580	1712991	1800407	1912173	2088977	2153895	2348469	2034927
Total state value added at basic price	Current	1689332	1945946	2209981	2347461	2538415	2824952	3025118	3603959	3275369
	Constant	1689332	1826316	1964073	2020398	2165357	2346643	2404915	2646759	2316778



Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Product taxes	Current	27002	34002	45366	40403	70514	232602	286123	296813	254756
	Constant	27002	31309	38738	33130	42308	128542	139426	140278	130851
Product subsidies	Current	23337	29209	24529	21690	7361	6584	5693	7388	8538
	Constant	23337	27105	21466	18219	6304	4511	4892	5305	5410
Net state domestic product	Current	1692997	1950739	2230818	2366174	2599100	3251136	3610631	3893384	3521587
	Constant	1692997	1830519	1981345	2035309	2205816	2384240	2528946	2781732	2442219
Population(lakh)	Current	10.65	10.81	10.97	11.13	11.30	11.59	11.73	11.87	12.02
	Constant	10.65	10.81	10.97	11.13	11.30	11.45	11.59	11.87	12.02
Per capita GSDP(Rs.)	Current	158967	180457	203356	212594	230009	280512	307812	328002	292977
	Constant	158967	169336	180615	182817	195205	208231	218201	234350	203180

Source: (Statistical Abstract of Chandigarh, 2021)



INDUSTRIES

Table 13.1: Production and Employment of Manufacturing (Micro Small/Medium Enterprises) in Chandigarh

A: Production in INR, Lakh

B: Workers in numbers

Items	2018-19		2019-20		2020-21	
	A	B	A	B	A	B
20-21 Food products	15504	3690	17906	3990	17995.53	4010
22 Beverages, tobacco, and tobacco products	0	0	0	0	0	0
23 Cotton textiles	0	0	0	0	0	0
24-26 Woolen textiles, silk, synthetics: including art silk and hosiery	0	0	0	0	0	0
27 Wooden/wood products, furniture, and fixtures	15376.3	4470	16385.6	5420	16467.528	5447
28 Paper and paper products; printing	34974	5342	38854	5684	39048.27	5712
29 Leather/fur products (except repair)	1967.76	2288	2085.41	2520	2095.83	2533
30 Rubber, plastic, petroleum and coal products	19753.28	2902	20573.58	3536	20676.448	3554



Items	2018-19		2019-20		2020-21	
	A	B	A	B	A	B
31 Chemicals and chemical products(except petroleum products)	21934.5	4246	22434.2	4665	22546.371	4688
32 Non-metallic mineral products	0	0	0	0	0	0
33 Basic metal and alloy industry	19242.14	4599	19854.14	4924	19953.411	4949

Source: (Statistical Abstract of Chandigarh 2021)



ENVIRONMENT INFORMATION AND AWARENESS AND EDUCATION

Table 14.1: Top performing environmental societies (in colleges) for 2020-21 in Chandigarh

	Primary/Middle Schools	Higher/Sr Sec Schools	Colleges
1 st	Bharatiya Vidya Bhavans, Bhavan Vidyalaya (Junior) Sec.33, Chandigarh	Govt. Model Sr. Sec. School, Dhanas, UT, Chandigarh	Post Graduate Govt. College for Girls, Sector- 42, Chandigarh.
2 nd	Kids 'R' Kids School, Sector-42, Chandigarh	Carmel Convent School, Sector 9-B, Chandigarh	Sri Guru Gobind Singh College, Sector 26, Chandigarh
3 rd	Govt. Middle School, Sector 33-B, Chandigarh	DAV Model School, Sector 15-A, Chandigarh	Mehr Chand Mahajan D.A.V. for Women, Sector-36A Chandigarh
4 th		Govt. Model High School, Sector 22-C, Chandigarh	
5 th		Sacred Heart Senior Secondary School, Sector 26, Chandigarh	

Source: Department of Environment, Chandigarh Administration 2021

Table 14.2: Budget expenditure (2020-21) as allocate by Department of Environment, Chandigarh

	Head/Item of the budget	Budget Expenditure in Lakhs
1	Direction and administration	95.27
2	Protection and conservation of resources	10.00
3	Institutional support and public participation	3.00
4	Environment education	6.00
5	Research and development	Nil
6	Assistance to Chandigarh Pollution Control Committee	60.00
7	Total ecology and environment	174.27

Source: Department of Environment, Chandigarh Administration 2021



SUSTAINABLE DEVELOPMENT GOALS

Table 15.1: Goal-wise performance of Chandigarh on Sustainable Development Goals

Category	SDG Goals		Score	Ranking of Chandigarh in 2020-21
Achiever (100)	Goal 7	Affordable and Clean Energy	100	1
	Goal 10	Reduced Inequality	100	1
Front Runner (65-99)	Goal 1	No Poverty	75	3
	Goal 2	Zero Hunger	97	1
	Goal 3	Good Health and Well being	74	4
	Goal 4	Quality Education	79	1
	Goal 6	Clean Water and Sanitation	99	2
	Goal 8	Decent Work and Economic Growth	70	1
	Goal 11	Sustainable Cities and Communities	98	1
	Goal 12	Sustainable Consumption and Production	78	3
	Goal 15	Life on Land	85	1
Performer (50-64)	Goal 5	Gender Equality	58	3
	Goal 13	Climate Action	61	5
Aspirant (0-49)	Goal 9	Industry, Innovation, and Infrastructure	45	5

Source: (NITI Aayog 2020-21)



Table 15.2: Progress of Chandigarh under Goal 6

Indicators	Progress (%)
Rural population getting safe and adequate drinking water within premises through pipe water supply, or PWS	Null
Rural population having improved source of drinking water	Null
Individual household toilets constructed against target (SBM(G))	100
Districts verified to be ODF (SBM(G))	100
Schools with separate toilet facility for girls	100
Industries complying with waste water treatment as per CPCB norms	98.45
Ground water withdrawal against availability	75.00
Over-exploited Blocks/Mandals/taluka	0

Source: (NITI Aayog 2021)

Table 15.3: Progress of Chandigarh under Goal 12

Indicators	Progress
Per capita fossil fuel consumption (in kg)	412.6
Use of nitrogenous fertilizer out of total N, P, and K (Nitrogen, Phosphorous, and Potassium) (%)	0
Hazardous waste generated per 1,000 population (Metric tonnes/Annum)	1.54
Hazardous waste generated per 1,000 population (Metric tonnes/Annum)	43.94
Plastic waste generated per 1,000 population (Tonnes/Annum)	10.01
BMW treated to total quantity of BMW generated (%)	100
Installed capacity of grid interactive bio power per 10 lakh population (MW)	Null

Source: (NITI Aayog 2021)

Table 15.4: Progress of Chandigarh under Goal 13

Indicators	Progress
Number of human lives lost per 1 crore population due to extreme weather events	Null
Disaster prepared-ness score as per Disaster Resilience Index	24.5
Renewable energy out of total installed generating capacity; including allocated shares (%)	69.40
CO2 saved from LED bulbs per 1,000 population (Tonnes)	48.11
Disability adjusted life years (DALY) rate attributable to air pollution (per 1,00,000 population)	Null

Source: (NITI Aayog 2021)



Table 15.5: Progress of Chandigarh under Goal 15

Indicators	Progress
Forest cover as a percentage of total geographical area (%)	19.32
Tree cover as a percentage of total geographical area (%)	22.34
Area covered under afforestation schemes to the total geographical area (%)	1.54
Degraded land over total land area (%)	0.50
Increase in area of desertification (%)	Null
Number of cases under Wildlife Protection Act (1972) per million hectares of protected area	Null

Source: (NITI Aayog 2021)







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