



CHAPTER-I

INTRODUCTION

Chandigarh is a well planned city known all over the world for its architectural planning and landscape. The Master plan of the 'City beautiful' Chandigarh was prepared by Swiss-French architect Le Corbusier. It is a Union Territory (UT) of India and serves as capital of the States of Haryana & Punjab. The city was named after the mother goddess of power, Chandi, whose temple Chandi Mandir is located in the vicinity of the site selected for the city. The Chandigarh city is situated in a picturesque setting under the foot of Shivalik Hills at a height of 365 meters above the mean sea level. The city boundaries are defined by two seasonal rivulets – the Patiali ki Rao and Sukhna choe, with the beautiful backdrop of the Shiwalik hills.

The greening is an integral part of Urban Planning in UT Chandigarh. Tree plantation along avenues, open spaces, green belts around building complexes are the enthralling features of the city. A number of beautiful avenues with conspicuous tree species, well wooded forests along the periphery of city, 'Sukhna Lake' against the backdrop of Lake Reserve Forests, green belts running across the length and breadth of the city and a beautiful 'Sukhna Wildlife Sanctuary' on its periphery, further enhance the ecological, environmental and aesthetic richness of the city.

Saving forests is our duty

GREEN CHANDIGARH TASK GROUP

The legacy of well planned landscape are maintained by Greening agencies i.e. Forest Department, Horticulture wing of Engineering Department, Municipal Corporation, Chandigarh & its caring Citizens. These agencies play a crucial role in making city more beautiful by implementing new ideas on spreading greenery & execute them from time to time. To fulfill its commitment to maintain and improve the greenery of the city and to have a better co-ordination among these stakeholders & to chalk out the planning of plantation works, its implementation & to look into all aspects of Silvicultural/Horticultural operations, Chandigarh Administration formed a Greening Chandigarh Task Group in the year 2001.

GREENING CHANDIGARH ACTION PLAN

The responsibility entrusted upon the Greening Chandigarh Task Group is a challenge. The population of the city is approx. 12 lakhs as per 2015 population estimates and the number of vehicles including the floating vehicles is about 10.9 lakhs in the year 2016. The rapid increase in population and vehicles have led to increase in pollution levels & thus pose a challenge before the Greening Agencies. To



counter the problem of pollution & to make this city more green, the Greening Task Group first came out with a Greening Chandigarh Action Plan in 2001. It was the guiding tool for all greening agencies to live up to the expectations of its citizens. Since then this Action Plan is being published and implemented annually.

GREEN AND FOREST COVER OF U.T. CHANDIGARH

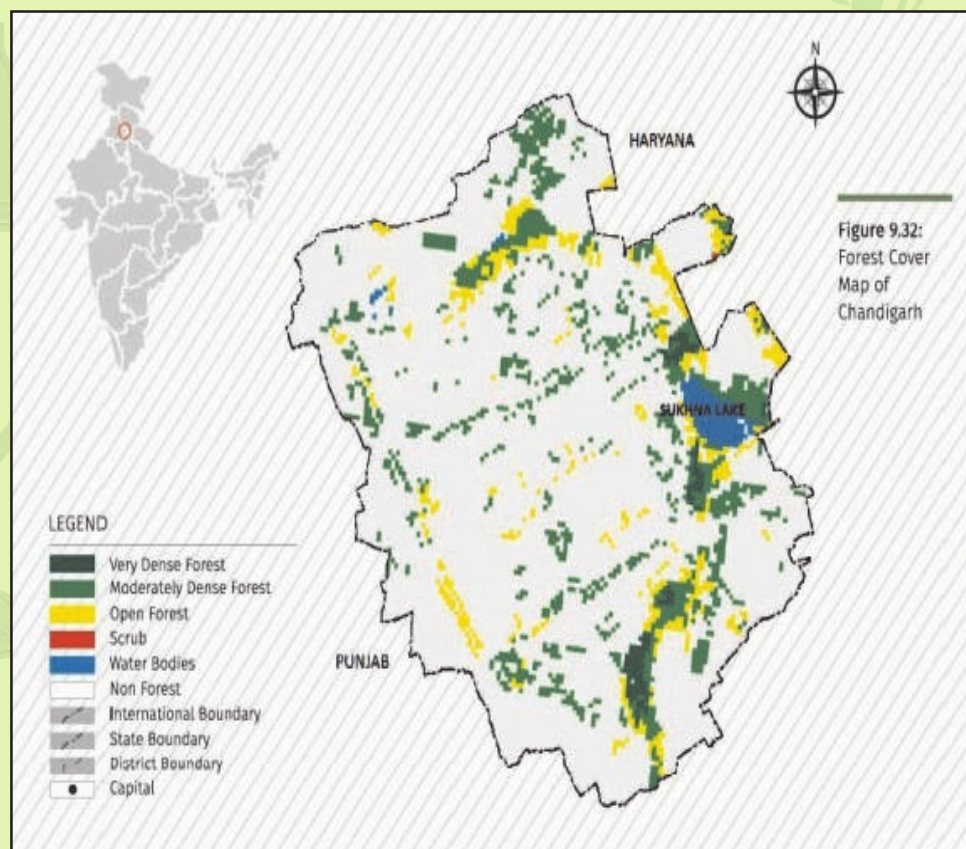
Geographical area of U.T. of Chandigarh is 114 sq. Kms. and another 25.98 sq. km. of

hilly area which has been declared as 'Sukhna Wildlife sanctuary' on 06th March, 1998 earlier acquired for soil conservation works.

UT Chandigarh has 47.56 sq.km area under Forest cover and another 10 sq.km. area is under tree cover.

As per F.S.I. report I.S.F.R. 2017, total forest cover of UT Chandigarh has decreased by 0.1 Sq. km., which may be due to developmental activities.

Green cover map of Chandigarh:



(Source: FSI, ISFR-2017)

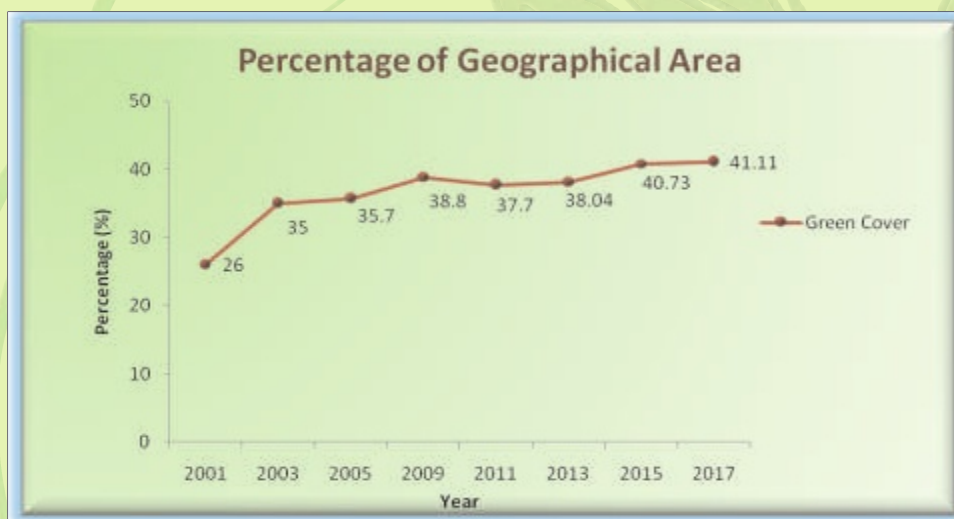
Plant for the planet



Green Cover of Chandigarh, India State of Forest Report by FSI, Dehradun

On the path of Achievement

- Chandigarh bestowed with Indira Priyadarshini Vriksha Mitra Award-2010.
- Forests of Chandigarh has been assigned the Rank 1 on Planning Commission's Environmental performance index.
- The forest cover in U.T. Chandigarh is 47.56 sq km and another 10 sq km area is under tree cover.
- The Green cover of UT Chandigarh has decreased by 0.1 Sq.Km. in last two years as per ISFR-2017.



(Source: FSI, ISFR-2017)

Showing the percentage of Green Forest Cover in UT Chandigarh

Save Trees, Save Environment.



The galloping increase in population and rapid increase in the number of vehicles have led to a rising trend in pollution levels in U.T. Chandigarh. The sharp increase in number of vehicles from 2,58,843 in 1991 to about 10.9 lakhs in 2016 is a matter of concern and is responsible for the rising trend in air pollution. As compared to neighbouring cities/towns of Punjab and Haryana, the quality of 'ambient air' today in Chandigarh is better. SO₂ and NO_x levels are well within

permissible limits. However, PM 10 and PM 2.5 levels at times cross the permissible limits.

As per monitoring data of Chandigarh Pollution Control Committee, SO₂ and NO_x levels in Chandigarh are very low, though; PM 10 and PM 2.5 levels are matter of concern. One of the main reasons for Check on air pollution is the increasing green cover of the city during the last decade.

AMBIENT AIR QUALITY DATA IN CHANDIGARH (ANNUAL AVERAGE)

(* ALL VALUES ARE IN MICROGRAM PER CUBIC METER)

Zone	Sector 17				Industrial area				Punjab Engineering College				Govt. College IMTECH, Sector 39				Kaimbwala Village			
Parameter	RSPM	PM 2.5	SO ₂	NO _x	RSPM	PM 2.5	SO ₂	NO _x	RSPM	PM 2.5	SO ₂	NO _x	RSPM	PM 2.5	SO ₂	NO _x	RSPM	PM 2.5	SO ₂	NO _x
Permissible Limits	60	40	50	40	60	40	50	40	60	40	50	40	60	40	50	40	60	40	50	40
2017	101	58	2	16	118	68	2	20	99	57	2	10	113	65	2	16	106	61	2	14

(Source : Chandigarh Pollution Control Committee)

ROLE OF THE FORESTS IN AMELIORATION OF THE ENVIRONMENT

Trees play a key role in creating healthy urban environments. Rising pollution level and degrading environment of the city particularly by vehicular pollution highlights the need for remedial steps to combat pollution. Though the best way to reduce pollution at source is by adoption of

clean technology and clean fuel, proper maintenance of roads & vehicles, maximum use of bicycles, strict enforcement of Air (Prevention and Control of Pollution) Act, 1981, Water (Prevention and Control of Pollution) Act, 1974 and the Environment (Protection) Act, 1986 etc., yet another

Plant a tree to make this world Pollution- Free.



effective way to reduce air and noise pollution is through a well planned and realistic afforestation strategy. Trees bring benefits to communities, wildlife & environment. In cities, they can well-designed green belts prove to be very effective wind break and help in soothing the microclimate of the surroundings.

1. Improve air quality and counteract greenhouse effects by absorbing pollutants and intercepting harmful particular.

2. Trees provide aesthetic beauty to the city.

3. Support environmental education.

4. Enrich habitats & biodiversity.

5. Reduce noise pollution.

6. Help in soil & moisture conservation.

7. Enhance health & well being.

8. Mitigate heat island effect.



"Our forest" Needs us and we need our forest