

CONTENTS

01



Introduction

02



Review of
Greening Chandigarh
Action Plan 2018-19

03



Greening Chandigarh
Action Plan-2019-20

04



Strategy to improve
the Forest and
Green Cover

05



Strategies for
implementing the
GCAP 2019-20

06



Urban Forestry
in Chandigarh

07



Species
recommended
for Plantation

08



Useful Tips
for Public

09

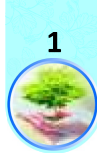


Common
Medicinal
Plants

Annexures



Plantation Target
2019-20



1



Greening Chandigarh Action Plan 2019-20

Introduction

- Chandigarh
- Green Chandigarh Task Group
- Greening Chandigarh Action Plan
- Green Cover & Forest Cover
- Air Quality
- Role of Forests



Migratory birds of Sukhna Lake



CHAPTER 1

INTRODUCTION



CHANDIGARH AND ITS ENVIRONMENT

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 belt s 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.

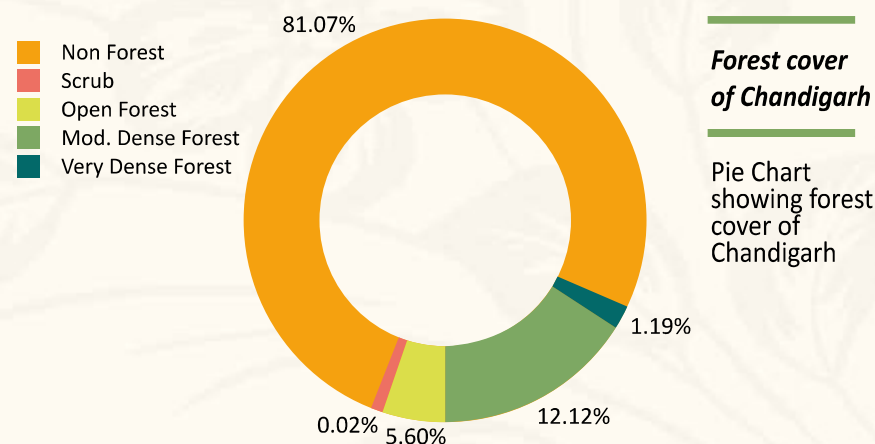
GREEN CHANDIGARH TASK GROUP

The legacy of well planned landscape are maintained by Greening agencies i.e. Forest Department, Horticulture wings 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 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 and presently functioning under the chairmanship of Chief Conservator of Forests, Chandigarh

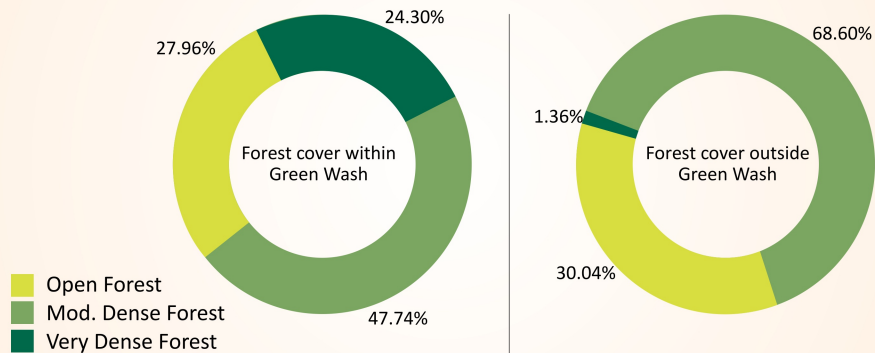
GREEN COVER AND FOREST COVER

Geographical area of U.T. of Chandigarh is 114 sq. Kms. and another 25.98 sq. km. of hilly area which was earlier acquired for soil conservation works has been declared as 'Sukhna Wildlife Sanctuary' on 06th March, 1998.

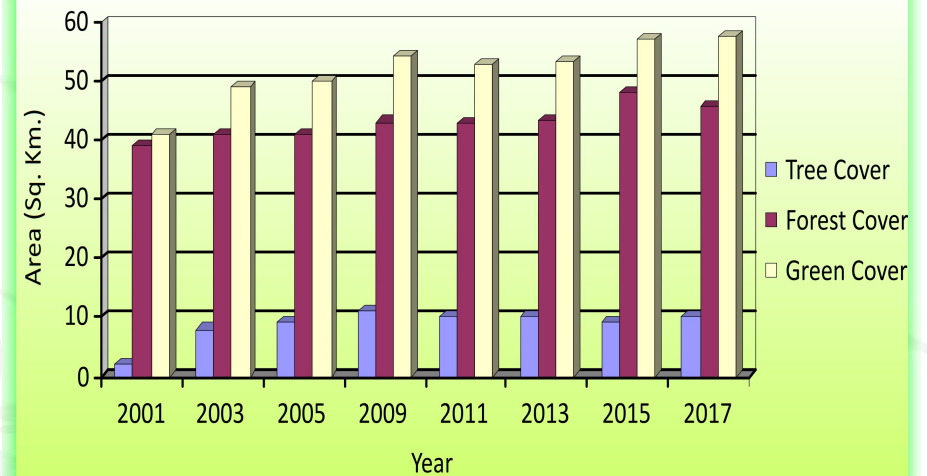
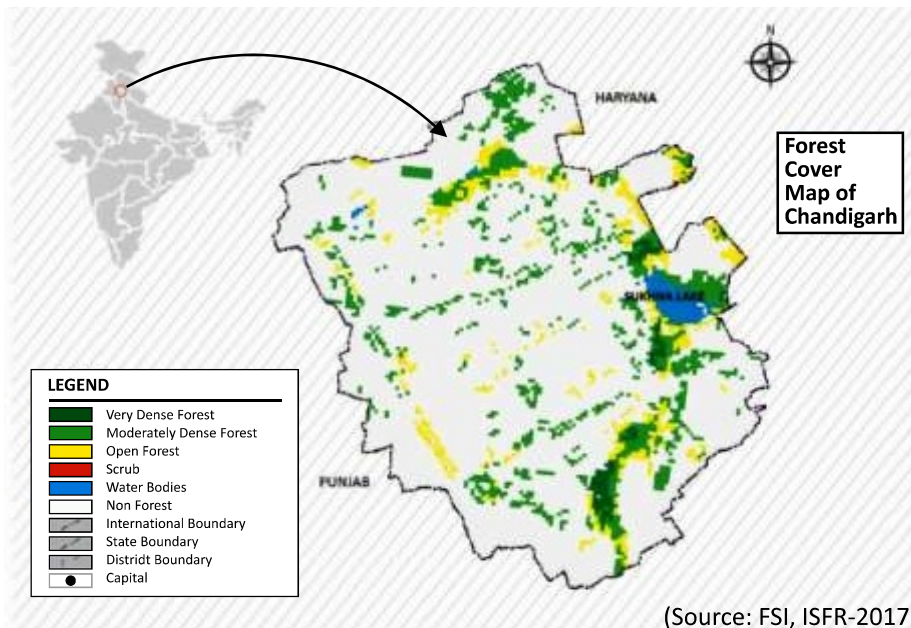




Pie charts showing forest cover within and outside Green wash area



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 of Chandigarh, India State of Forest Report FSI, Dehradun

GREENING CHANDIGARH ACTION PLAN

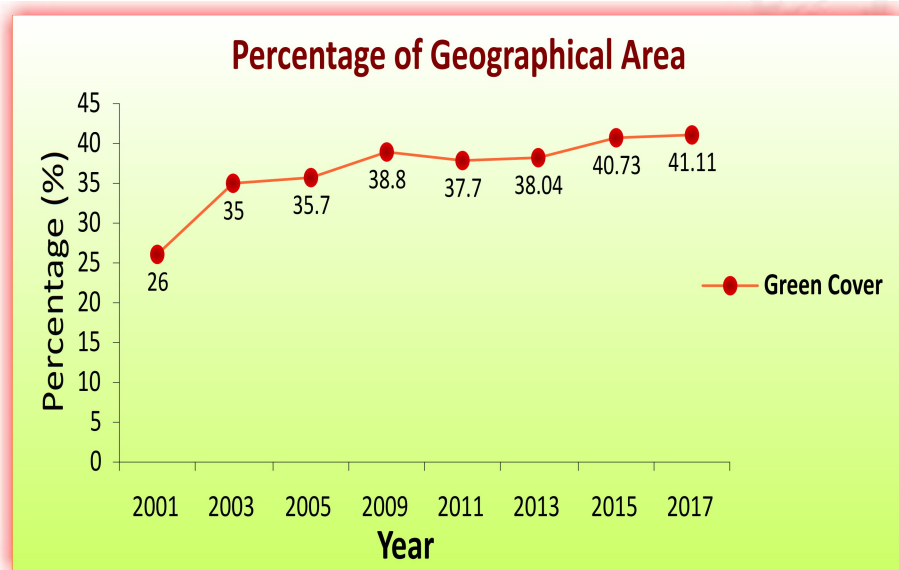
The responsibility entrusted upon the Greening Chandigarh Task Group is a challenge. The population of the city is approx. 12 lakhs as per 2015 population estimates and the number of vehicles including the floating vehicles is about 10.9 lakhs in the year 2016. The rapid increase in population and vehicles 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.



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)



Percentage of Green Cover in UT Chandigarh

AMBIENT AIR QUALITY DATA IN CHANDIGARH (ANNUAL AVERAGE)

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 11.82 lakhs vehicles in 2018 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	NOX	RSPM	PM 2.5	SO ₂	NOX	RSPM	PM 2.5	SO ₂	NOX	RSPM	PM 2.5	SO ₂	NOX	RSPM	PM 2.5	SO ₂	NOX
Revised Permissible Limits	60	40	50	40	60	40	50	40	60	40	50	40	60	40	50	40	60	40	50	40
2018	95	46	2	19	125	58	2	25	100	46	2	16	106	52	2	18	103	50	2	14

(Source : Chandigarh Pollution Control Committee)

Note : Permissible limit of Ambient Air Quality

RSPM (Respirable Suspended Particulate Matter)	: 60 Micro Gram/m ³
SO ₂ (Sulphur Dioxide)	: 50-80 Micro Gram/m ³
NO _x (Oxides of Nitrogen)	: 40-80 Micro Gram/m ³

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 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, the well-designed green belts prove to be very effective wind break and help in soothing the microclimate of the surroundings by way of :-

- Improving air quality and counteracting greenhouse effects by absorbing pollutants and intercepting harmful particulate.
- Trees provide aesthetic beauty to the city.
- Support environmental education.
- Enrich habitats & biodiversity.
- Reduce noise pollution.
- Help in soil & moisture conservation.
- Enhance health & well being.