



Chandigarh at a Glance

Chandigarh was planned by Le Corbusier, the famous French architect and founded in 1952.

- » Area : 114 sq km (+25.42 sq km of Wildlife Sanctuary)
- » Longitude/Latitude : 76° 47' 14E / 30° 44' 14N
- » Altitude : 304 – 365 meters above MSL with 1% drainage gradient
- » Annual Rainfall : 111.4 cm/year average Monsoon
- » Population : 9,00,635 (2001 census)
- » Density of Population : 7903/Sq. Kms.



Geology : The Chandigarh is located in the foothills of the Shivalik hill ranges in the north India, which form a part of the fragile Himalayan ecosystem. It is occupied by Kandi (Bhabhar) in the north east and Sirowal (Tarai) and alluvial plains in the remaining part. The area is drained by two seasonal rivulets viz. Sukhna Choe in the east and Patiala-Ki-Rao Choe in the west. The central part forms a surface water divider and has two minor streams. The stream passing through the central part is called N-Choe and the other is Choe Nala which initiates at Sector 29.

Climate : The area experiences four seasons: **(i)** Summer or hot season (mid-March to Mid-June) **(ii)** Rainy season (late-June to mid-September) **(iii)** Post monsoon autumn season (mid September to mid-November) **(iv)** Winter (mid November to mid-March). The dry spell of summer is long but with occasional drizzles or thunder storms. May and June are the hottest months of the year with mean daily maximum & minimum temperatures being about 40°C & 25°C respectively. Maximum temperatures can rise up to 46°C. Southwest monsoons with high intensity showers commence in June. The variation in annual rainfall on year to year basis is appreciable i.e. 700 mm to 1200 mm. The 20 year average rainfall for Chandigarh is 1100.7 mm. January is the coldest month with mean maximum and minimum temperatures being around 24°C and 1.8°C respectively. Winds are generally light and blow from northwest to southeast direction with exception of easterly to southeasterly winds that blow for some days during the summer season.

For Private Circulation only

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Sukhna Lake

One of attraction of Chandigarh is the Sukhna lake. One can rest in the lap of nature as the site is blessed with the natural beauty. You can feed your soul with the ultimate peace here. It was an act of a genius to impound the waters of the seasonal rivulet 'Sukhna' to create a body of water called Sukhna Lake. Sukhna Lake has been declared as National wetland in the year 1988 and Environment Department has been declared as Nodal Department for coordinating all the activities in and around lake.



Rock Garden :: Sector 17 :: Rose Garden

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

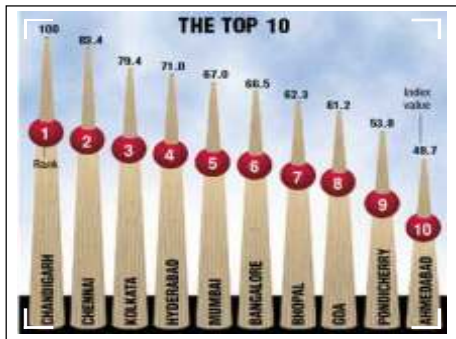
Rock Garden is an inspirational force that derives thoughts of many visitors and environment professionals to protect the nature so that it can protect us.

Rose Garden Named after India's former President, Zakir Hussain, the garden was established in 1967 under the guidance of Chandigarh's first Chief Commissioner late Dr M S Randhawa. It is spread over an area of 27 acres of land and is Asia's largest Rose Garden with 17,000 plants representing some 1,600 varieties of roses.



Forest Resources

The total area under forests is 32.41 sq km, out of which 26.10 sq km area is under hilly forest, 3.90 sq km is under Sukhna Choe Forest & Patiala-Ki-Rao Forest and 1.05 sq km of the area is under Lake forest.



Do You Know?

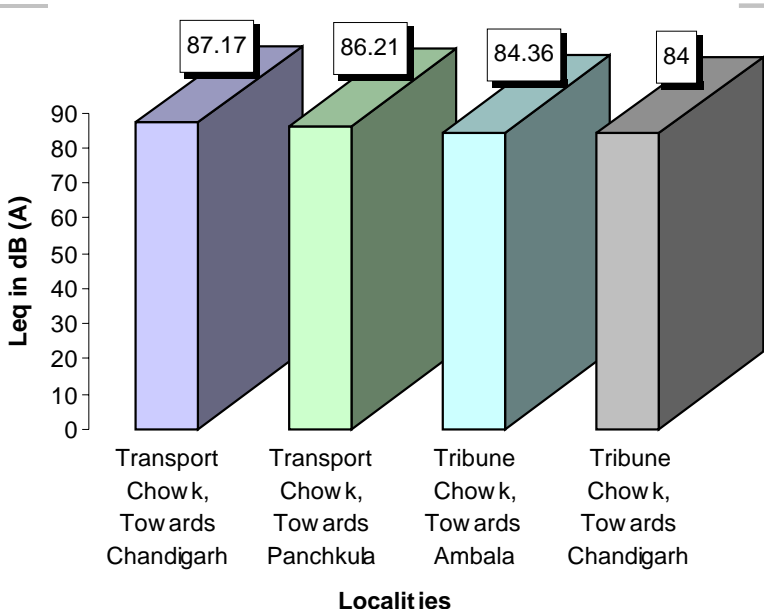
Chandigarh, the elegantly designed city, has been rated the 'Best City to Live In' by Outlook Money-Indicus Analytics study in 2003. This study takes into account 12 parameters (jobs & income, education, health, safety, prices, transport, housing, pollution, finance network, entertainment, consumption, weather), 50 sets of indices & 60 variables and is based on 3,600 direct responses and 9,974 statistical nuggets. - **SoER, Chandigarh 2004**





Pollution Graph in Chandigarh

Noise Pollution Graph



Noise level data along Heavy Traffic Zones, Chandigarh (April - May, 2002)

In spite of the fact that care was taken to exclude nuisance from noise in Chandigarh during its planning through a series of measures such as, ban on movement of heavy vehicles on internal roads, a separate industrial area, a dense vegetational cover, etc., The most prominent sources of noise in the city are:

- Traffic,
- Commercial activities,
- Community Noise,
- Industries,
- Festive celebrations,
- Diesel Generators,
- Architectural design of Buildings.

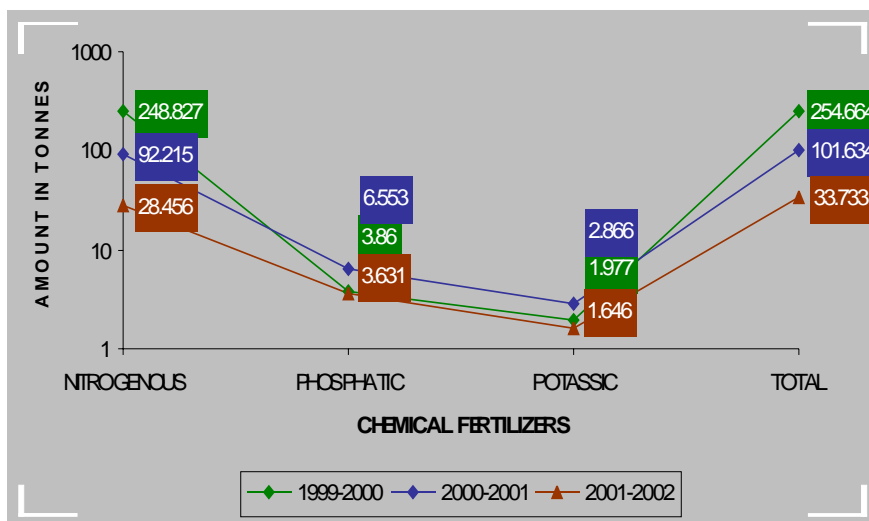


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Agro-Chemical Production

The area under cultivation (including double cropping) in the Union Territory was 54.42 sq km in 1966 . This has been reduced to less than 14 sq km in 2001-2002. As per remote sensing data this is only 8.6% of the total geographic area.

Data indicates that the production of food grains increased from 3340 Metric Tons (M.T.) in 1980-81 to 4075 M.T. in 2001-2002. This has been possible by the use of high yielding varieties and increasing application of fertilizers and pesticides.



Technical Terms

ENVIRONMENT is the sum of all external conditions and influences affecting organisms. The environment may be divided into abiotic (non-living) & biotic (living) components. The environmental components act as a whole.

ENVIRONMENTAL SCIENCE is the study of environmental systems. It includes the study of physical & biological environments of organism, social and cultural factors, and human impact on the environment.

OZONE LAYER is a protective layer in the atmosphere about 15 miles above the ground that absorbs some of the sun's ultraviolet rays therefore reducing the amount of potentially harmful radiations that reaches the earth surface.

CFC is a family of inert, nontoxic, and easily liquefied chemicals used in refrigeration, air conditioning, packaging, insulation or as solvent and aerosol propellants. Because CFC's are not destroyed in the lower atmosphere, they drift into the upper atmosphere where their chlorine components destroy the ozone layer.

CNG is compressed natural gas. It is an alternative fuel for motor vehicles, considered one of the cleanest because of low hydrocarbon emission and its vapours are relatively non-ozone producing. However, vehicles fuelled with CNG do emit a significant quantity of nitrogen oxides.



The Parent Department

The parent Deptt. of ENVIS CENTRE Chandigarh is **Department of Environment, Additional Town Hall Building, Sector 17C, Chandigarh.** The Department of Environment is responsible to coordinate effectively the activities of various departments/agencies and to plan a comprehensive integrated programme for environment protection and improvement, and also responsible for exercising the administrative control on the Chandigarh Pollution Control Committee, Chandigarh for proper implementation of provisions of various Environment & Pollution Control Acts.

As per the instructions/guidelines of the Ministry of Environment & Forests, New Delhi, Department of Environment has been declared as Nodal Agency to coordinate with the Govt. of India for bringing out the Environment Report of the Union Territory of Chandigarh.

The State of Environment Report (SoER) of Chandigarh is prepared. The SoER is available at website of the ENVIS CENTRE with the following web address

“[Http://chandigarhenviis.nic.in/soereports.html](http://chandigarhenviis.nic.in/soereports.html)”

Local Environmental News

In Chandigarh Eco-Friendly systems are being promoted. Department of Science & Technology is promoting the use of apparatus & appliances like **Solar lanter , Solar lantern, Domestic Solar Water Heater, Solar Street Lighting System, Solar Cooker etc** that uses solar energy and no electricity or other form of fuel.

COMPLETE BAN ON POLYTHENE

According to an earlier notification, the Department of Environment has directed that the minimum weight of 50 carry bags of 30 microns of size 8"x12" made of virgin or recycled plastic should be 150 gm (plus or minus 5% variation) and carry bags of larger size shall have proportionately higher weight. Now, in order to further improve the health & Environment of the people of Chandigarh, the Administration intends to put complete ban on polythene carrybags.

ECO-CLUB

The U.T. Administration has set-up more than 100 Eco-Clubs in schools and about 20 Environment Societies in Colleges. One teacher from each school with keen interest in environment protection and nature conservation is selected as Teacher Incharge in addition to 50 students (both boys and girls) from class V to XII. The Eco-Club has following objective :

- » To make children understand environment and environmental problems.
- » To provide environmental education opportunities for school children.
- » To facilitate children's participation in decision making in areas related to environment and development.
- » To involve children in action based programmes related to environment in their surrounding

The Department of Environment provides financial assistance to Eco-Clubs/Environment Societies for carrying out environment awareness activities/programmes to spread the message of green and clean.

Various NGOs/Societies Related to Environment

1. The Environment Society of India
 Karuna Sadan, Sector 11-B, Chandigarh
Phone : 0172-2746832

2. Morning Star Fellow Ship Society,
 1738, Mauli Jagran Complex, Chandigarh

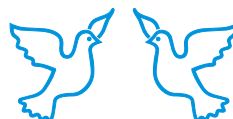
3. Indian Council for Env. Education
 DAV Sr. Sec. School Building, Sector, 8-C Chandigarh
Phone : 0172 – 2780322 **Email** : icee@glide.net.in

4. WWF-India, Chandigarh office
 Room No. 4, 1st Floor, Karuna Sadan, Sector 11-B, Chandigarh
Email : wwfchd@rediffmail.com

5. YUVSATTA
 Srijan Peace Education Center R.N. 12, 1st Floor, Karuna Sadan, Sector 11, Chandigarh **Phone** : 0172-3298551
Email : .yuvsatta@yahoo.com

6. Greenpeace
 150, Sector 38A, Chandigarh
Phone : 0172-2694895
Email : .yuvsatta@yahoo.com

Email : ch@envis.nic.in | Web : www.chandigarhenviis.nic.in





 **Global Environmental News**

“RECHARGABLES NOW ELIGIBLE FOR ENERGYSTAR”

Energy efficient battery chargers will use 35 percent less energy than conventional models, with the potential to save Americans more than \$100 million annually and prevent the release of over a million tons of greenhouse gas emissions”- (www.epa.gov)

Earning the ENERGY STAR means products must meet strict energy-efficiency guidelines set by the US Environmental Protection Agency (EPA) and the US Department of Energy (DOE).

Conventional battery chargers — even when not actively charging a product — can draw as much as 5 to 20 times more energy than is actually stored in the battery! Advanced energy-saving designs are now available that, on average, use 35 percent less energy. **Remember ! “Saving energy prevents pollution”**. By choosing ENERGY STAR, you are helping prevent global warming and promote cleaner air without sacrificing the product quality and performance you expect. In addition, EPA and DOE have developed energy-efficiency guidelines for external power adapters used to power electronic products, such as mobile phones, notebook computers, and monitors

“INDIA TURNS TO SPY TECHNOLOGY TO SAVE TIGERS”

Before independence, India had some 40,000 tigers. Today there are approximately 3,700.

Even as the controversy rages over ID cards and Big Brother-style surveillance in Britain, an even more comprehensive system will go into operation this week in India. The local version has hidden cameras in the depths of the jungle and radio collars that will allow satellites to track every move of those wearing them.

The whole set-up is part of a major new effort by India to protect its dwindling population of wild tigers from poachers. Under the scheme, every wild tiger in India will be issued its own photo-ID card - which will be kept by the Wildlife Institute of India (WII) so it can identify the tigers from sightings and verify that they are still alive.

- (<http://news.independent.co.uk/environment/article338639.ece>)

“DON'T MAKE INDIA A WASTE DUMP”

New Delhi, India — Greenpeace activists took the campaign against the illegal import of the Clemenceau to the doorstep of the Ministry of Environment and Forests (MoEF), holding up a banner stating 'Don't make India a waste dump' and lining up barrels painted with the letters C L E M E N C E A U. The ship was full of asbestos, PCBs, and other toxic substances which Indian workers have to dismantle and dispose of by hand, in lethally unsafe and environmentally unsound conditions. (<http://www.greenpeace.org/india/press/releases/clemenceau-waste-dump>)

“BP & TERI UNDERTAKE INDIA'S BIGGEST BIOFUELS PRODUCTION PROJECT” (2 FEBRUARY 2006)

\$9.4 million project funded by BP, expected to take 10 years, aims to cultivate around 8,000 hectares of land. BP and TERI announced that they are to undertake a \$9.4 million project by The Energy and Resources Institute (TERI) in the Indian state of Andhra Pradesh to demonstrate the feasibility of producing biodiesel from Jatropha Curcas, a non-edible oil bearing crop. The project, which is expected to take 10 years, will cultivate around 8,000 hectares of land currently designated as wasteland with Jatropha and install all the equipment necessary - seed crushing, oil extraction and processing - to produce 9 million litres of biodiesel per annum. A full Environmental and Social Impact Assessment of all elements of the supply chain and life cycle analysis of greenhouse gas emissions will be completed as part of the project.

(http://www.teriin.org/press_inside.php_id_17110)

TERI gets oil companies together to evolve LPG and kerosene subsidy solution: BPCL, BP, Reliance, IOCL and HPCL endorse promotion of solar lighting and introduction of 'smart cards' in rural areas. (9 January 2006)

([Http://www.teriin.org/press_inside.php_id_16981](http://www.teriin.org/press_inside.php_id_16981))

 **Useful Environmental Web Links**

- » <http://www.unep.org>
- » <http://www.epa.gov>
- » <http://www.cleanproduction.org>
- » <http://www.sustainability.com>
- » <http://www.environment-agency.gov.uk>
- » <http://www.earthprint.com/show.htm>
- » www.vedamsbooks.com/ecology.htm
- » www.greenpeace.org.au
- » www.greentire.info
- » www.wffindia.org
- » www.green-links.co.uk
- » www.ngdc.noaa.gov

 **Environment Production Starts With me...**

What we can do?

“I will put biodegradable & non-degradable garbage in two different dustbins. Through this I am helping myself, my family, community around, and ‘city beautiful’ Chandigarh. This waste is used for preparation of manure & recycling.” - **Yuvsatta**

 **Greentire Concept**

Greentire has been promoted by Srijan Peace Education Center, YUVSATTA (an NGO) the basic aim is to motivate “More and more people riding bicycle more often in Chandigarh”. To promote safe and healthy cycling Greentire organizes guided bicycle tour for students, professionals, employees & tourist. It also organizes bicycle festival/races to promote bicycle.- **Yuvsatta**





🌿 Suggestion to protect Environment

- » Vehicles should be serviced regularly and the motor should be adjusted to help keep down pollution levels.
- » Lead-free petrol should be wherever possible.
- » Public transport and walk should be utilized whenever possible instead of using own vehicles.
- » Everyone should stick to their speed limits while driving. The faster we go, the more petrol we use and the more pollution we create.
- » Noise pollution can have a detrimental effect on our hearing and nervous system
We should think of others before reviving up our motorbike or turning up our stereo or television.
- » Garbage should be sorted to separate items that can be recycled, such as glass and paper
- » We should encourage our Local Pollution Control Authority to check regularly air and water pollution levels and to provide information on any eventual discrepancies
- » Non-fossil fuels such as gas should be used for cooking and heating. This helps to prevent smog, a common occurrence in many large industrial cities.
- » We should choose environment-friendly products such as sprays that are free from Chloro FluoroCarbons (CFC) or detergents with low levels of phosphate.
- » We should not throw potentially harmful chemicals into the drainage system. If in doubt, we should ask our local pharmacy or health authority to advise on disposal.
- » We should save energy, switch off unnecessary lights & put on an extra sweater instead of turning up the heating. The less energy we use, the less carbon dioxide is released into the atmosphere.
- » Smoking tobacco in confined spaces should be avoided. Remember that passive smoking can be harmful for the whole family & smoking is bad for health anyway!
- » If someone cook on an open fire inside our home, be sure that there is proper ventilation.
This way we will avoid exposure to harmful smoke and gases.
- » We should keep household refuse in close bins which cannot be opened by children or animals.
- » We shouldn't keep poisonous substances in containers which would normally hold food or drink such as empty wine bottles or soft drink bottles.
- » We should use Non-Conventional energy resources like solar system & Bio-Gas.



🌿 Environment Through Our Eyes

» “As per State of Forest Report 2001(SFR-2001), the total green cover of U.T. Chandigarh was 36 sq.k.m. As per latest report i.e S.F.R.-2003, the green cover of Chandigarh has reached upto 49.42 sq. km. Thus there is net increase of 13.42 sq. km. in the green cover of Chandigarh. Thus green cover forms 35.3% of the total geographical area of Chandigarh. I appreciate the efforts made by all greening Departments/Organisations, Eco-Clubs of Schools, Environmental Societies of Colleges, Environmental N.G.O.'s, Resident Welfare Associations and all citizens of Chandigarh in augmenting green cover of the city. I appeal to all citizens of Chandigarh to plant more trees in the coming monsoon to further improve the environment of the city by making it greener and cleaner.” - **Mr. Ishwar Singh, D.C.F. & Director (Environment)**

» “There are clear global environmental challenges. Among them, tackling climate change, halting the loss of biodiversity, protecting natural resources, minimizing waste, and improving chemicals management are just what you might call the edited highlights. To counter these hurdles we need self motivators and get goers. Winners don't do anything different but they do it differently. To keep environment green and healthy, we should start from home. Keep your home, street, and town green and this way your city will automatically turn green.”- **Mr. P.J.S. Dadhwal, Additional Director, Deptt. Of Environment**

» “Environment is the buzz word today. Go to schools, colleges, listen to politicians, senior govt. functionaries. Everybody is talking about conservation of the environment. One thing common in their approach is that they want the first step to be taken by somebody else. We have to understand that conservation, environmental pollution, sustainable diversion, are not the buzz words for nothing. We have to understand that charity begins at home so to conserve the most important step is to get started & that too at ones end”.- **Er. Sandeep Madan, Scientist 'B', CPCC**

» “An MoU has been signed between CPCB, MCC & CPCC for setting up of model facilities for demonstration of safe disposal of MSW and to make the city beautiful dustbin free. In this waste management project the household solid waste is collected from the houses and taken to the SSK's established at various locations in the sectors. This project includes setting up of waste collection, storage & transportation mechanism, setting up of waste processing plant, improvement in existing waste dump size & preparation of new sites for disposal. The project is of vital importance in the management of waste in Chandigarh and would contribute towards our aim of making Chandigarh a clean green city.” - **Mr. Vivek Pandey, Scientist 'B'- CPCC**



Dear Information Seeker,

We at envis center Chandigarh to provide you with the best services regarding environment information at chandigarh.

We request you to provide us your current contact details in the form given below. Please spare a few mintues to fill in the information, sign and drop in our address..

We look forward to a rewarding relationship and more opportunities to be of service.

■ Name _____
 ■ Designation _____
 ■ Department _____
 ■ Address _____
 _____ City _____
 ■ State _____ Country _____ Pin | | | | | | | | | |
 ■ Phone _____ Fax _____
 ■ Email _____

Your views on scope of improvement :

■ Interest Area _____

I would like to have information on following :

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ENVIS CENTRE

The ENVIS CENTRE is Environment Information System Center. The prime responsibility of ENVIS CENTRE is collection and dissemination of information related to U.T. Environment from various sources. Initially, ENVIS CENTRE was established as ENVIS Node in year 2003. It is upgraded to center in year 2005 by the Ministry of Environment & Forest in Deptt. Of Environment, U.T., Chandigarh. The SoER (State of Environment Report) of year 2004 is available at our website in an easy downloadable format.

Your feedback/sugesstions are welcome at :
Phone : 0172-3295436, 0172-2721159
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Quotes

» “The environment should be put in the category of our national security. Defense of our resources is just as important as defense abroad. Otherwise what is there to defend?” -**Robert Redford** quotes (American Actor. b.1937, Santa Monica, California, USA)

» “It is our collective and individual responsibility to protect and nurture the global family, to support its weaker members and to preserve and tend to the environment in which we all live.” -**Dalai Lama**

» “There must be a reason why some people can afford to live well. They must have worked for it. I only feel angry when I see waste. When I see people throwing away things we could use.” -**Mother Teresa**

» “Create a vision and never let the environment, other people's beliefs, or the limits of what has been done in the past shape your decisions. Ignore conventional wisdom.” -**Anthony Robbins** quotes (American advisor to leaders)

» “Education must be aimed at children being integrated with the environment; students must develop strong pupil-teacher relationships. Children should be educated about their surrounding environment & taught to be self-reliant” -**Mahatma Gandhi**

References

- » Chandigarh Pollution Control Committee, Chandigarh
- » Department of Environment, Chandigarh, U.T.
- » Department of Science & Technology, Chandigarh, U.T.
- » State of Environment Report, 2004, Chandigarh, U.T.
- » Various NGO/Societies working in the field of environment
- » Chandigarh Industrial & Tourism Development Corp. Ltd.

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Chandigarh



In Cooperation With :



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