



Chandigarh Statistics



- » Area : 114 sq km
- » Longitude/Latitude : 76° 47' 14E / 30° 44' 14N
- » Altitude : 304 – 365 meters
- » Annual Rainfall : 111.4 cm/year
- » Population : 9,00,635 (2001 census)
- » Density of Population : 7900/Sq. Kms.
- » Total Number of Vehicles : 598987 (Feb. 2006)



ENVIS CENTRE

ENVIS CENTRE was established as ENVIS Node in year 2003 in the Department of Environment. It is upgraded to Centre in year 2005 by the Ministry of Environment & Forest, New Delhi. The prime responsibility of Environment Information System Centre (ENVIS CENTRE) is collection and dissemination of information related to Environment of Chandigarh from various sources. The SoER (State of Environment Report) of year 2004 is available at website

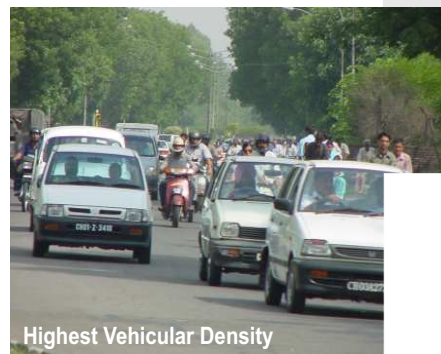
["Http://chandigarhenvis.gov.in/soereports.asp"](http://chandigarhenvis.gov.in/soereports.asp)



Capital Complex



Terrace Garden



Highest Vehicular Density



For Private Circulation only

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ECO-CLUB OF THE YEAR

In order to encourage the ECO-Clubs/Students to participate more actively in the movement of protecting our precious environment through creative and action based programmes, the Department of Environment, Chandigarh has decided to give Best ECO-Club Award each year. The reports/details of various environment conservation activities undertaken by the ECO-Clubs during the period 2005-2006 were invited and these reports were scrutinized by the Committee constituted for the purpose.

The Eco-Club of **Jawahar Navodaya Vidyalaya, Sector 25, Chandigarh** was given Best ECO-Club Award 2005-2006. The school has a huge campus with strikingly neatly planted trees and shrubs and whole campus is being maintained by the students of Eco-Club without any gardener. The ECO-CLUB also involved the slum children of nearby Jhuggis in the eco awareness activities. Following are the activities by the school during the session 2005-2006:

1. Workshop in conversation of wildlife, World Earth Day, 30th April, 2006
2. Save oil awareness rally, oil conversation week-14th February, 15th February, 2006
3. Education based camps on nature, 6th April 2006
4. Workshop on presentation of puppet show, Theme : - No polythene, World Wet Land Day, 2nd February, 2006
5. Development of herbal garden in Vidyalaya Campus, healing power of herbs
6. Inter house poster making competition, World Earth Day, 22nd April, 2006
7. Inter house essay writing competition, Water Resource Day, 30th April 2006
8. Creation of disposable pit for biodegradable waste in Vidyalaya, 26 March, 2006
9. Tree plantation, to develop a sense of responsibility towards nature in children, 2nd October, 2005
10. Cleanliness competition
11. Inter house declamation competition, 8th November, 2005

The committee also appreciated the work of other ECO-CLUBS and commendation certificates to DAV Sr. Sec. School, Sector 8, Carmel Convent School, Sector 9 B, Govt. Model Sr. Sec. School, Sector 22 A, 33 D, & Sector 46, Sacred Heart Sr. Sec. School, Sector 26, Vivek High School, Sector 38B were distributed.

LOCAL ENVIRONMENTAL NEWS

While celebrating World Environment day on 05.06.2006 with department of environment, Sh. Ishwar Singh, Deputy Conservator, Forests, envisaged, "Chandigarh will be the first city in the country to be dustbin-free by 2007. We are planning to open a Safai Kendra in every sector." He added further, "The green cover in the city has increased to 35.7% from 26%, while the green area is decreasing all around us in Punjab, Himachal and Haryana due to development and construction activity." - *Times of Chandigarh, June 6, 2006*

» POLYETHYLENE TERAPHTHALATE (PET)

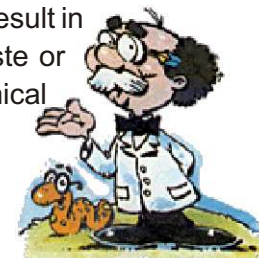
A type of plastic that is clear or colored transparent with high gloss. It is used for carbonated beverage bottles and some household cleanser containers. Often referred to as No. 1 plastic.

» EXTREMELY HAZARDOUS WASTE

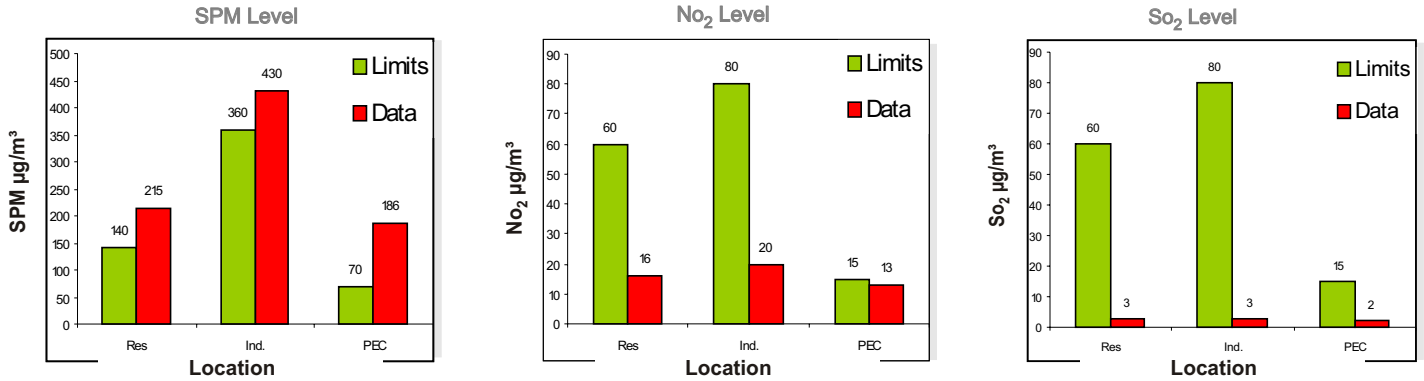
A subset of Hazardous Waste. Extremely hazardous waste is any hazardous waste or mixture of hazardous wastes which, if human exposure should occur, may likely result in death, disabling personal injury or serious illness caused by the hazardous waste or mixture of hazardous wastes because of its quantity, concentration, or chemical characteristics.

» FLY-ASH

A fine residue, left after trash is burned in an incinerator, which can be carried in the air. It can contain harmful or toxic substances such as dioxins, lead and mercury.



AIR POLLUTION GRAPH



(YEAR 2005) * Ind.=Industrial, Res.=Residential, PEC=Punjab Engineering College

The annual mean concentration of SPM exceeded the standard in all the three locations. In industrial area it is 430 µg/m³ while limit is 360 µg/m³ and in residence & sensitive area it is 215 µg/m³ and 186 µg/m³ respectively. While standards are 140 µg/m³ & 70 µg/m³ respectively. In industrial & residential area level is slightly on higher side but in sensitive area it is matter of concern as value is very high. The annual mean concentration of SO₂ & NO₂ are well within limits. - Source: CPCC

AGRICULTURE LAND USE

2004-2005

Area Not Available For Cultivation	5222.8 Ha	Fallow Land Other Than Current	
Non Agriculture Use	443 Acre	Fallow	53.01 Ha
Other Uncultivable Land Excluding Fallow Land	179.2 Ha	Current Fallow	73 Acre
Miscellaneous Trees Crops Groves	NIL	Net Sown Area	1328.5 Ha
Cultivable Wasteland	NIL	Gross Irrigated Area	1270 Ha
Barren And Uncultivable Land	NIL	Net Irrigated Area	1295 Ha
Permanent Pasture / Grazing Land	NIL	Gross Cropped Area	1993.04 Ha
Fallow Land	73 Ha	Area Sown More Than Once	1260 Ha
		Cropping Intensity %	185.75%

CLIMATE OF CHANDIGARH

Lowest Mean Max Temperature	: 20.4 °C (Jan 2005)	} year 2005
Highest Mean Max. Temperature	: 38.6 °C (May 2005)	
Highest Max. Temperature (13/06/1972)	: 46.6 °C	} overall
Highest Monthly Rainfall (08/2004)	: 718.0 mm	



Source : MAT Section, Airport, Chandigarh

DID YOU KNOW?

As per the Ministry of Environment and Forests, Government of India (EPA Notification G.S.R. 1063(E), dt. 26th Dec., 1989) ambient permissible standards has been set for the noise levels in different zones during day as well as night times. These have been set under the Environment (Protection) Act 1986 and are as permissible noise limits:

PERMISSIBLE NOISE LIMITS

6.00AM- 9.00 PM dB(A) 9.00 PM- 6.00AM dB(A)

Industrial area	75	70
Commercial zone	65	55
Residential area	55	45
Silence zone (Hospitals, educational institutes, and courts)	50	40

Source : www.puchd.ac.in

VERMICULTURE

Vermiculture is the culturing or cultivating the worms for economic or beneficial use. In this technique, earthworms multiply on providing them with adequate nutrition and favourable medium of growth.



Vermiculture Technique (Over Ground)

Requirement : Agro-waste, leaf litter etc, wheat straw / rice husk / bamboo leaves / sarkanda / wood shavings / sugarcane press-mud, cowdung, red earthworms (*Eisenia Fetida*), jute/hessian cloth, tools, water etc.

Selection of the site: A shady area away from the common ground and at an elevated place could be ideal. However, it should be shady, protected from rain and pigs, birds etc. As far as possible it should be near the place of waste generation to avoid transportation hassles and cost etc. The site should have a source of water to keep the pile wet.

Procedure : A semi-pucca floor is prepared with the help of bricks and sand filled in between the spaces. Following 3 layers are stacked one above the other:

Bottom layer : An approximately 8 inch layer of slowly bio-degradable waste like bamboo leaves or sugarcane press-mud is placed on the wheat husk "toory". It is covered with slurry of cow-dung in water (1:1 v/v).

Middle layer : Up to 4 inch thick layer of fresh cow-dung

Top layer : Red worms are inoculated. These are topped with the slurry of the cow-dung spread all over. The stack is covered with jute/hessian cloth and the surface is kept moist with water.

Many schools under eco-club scheme have implemented Vermicomposting in their premises

Vermicomposting : A technique in which red earthworms are used to convert biodegradable waste like kitchen waste, agro-waste or leaf litter, organic waste into highly nutritious, pest-attack-free manure known as Vermicompost.

Food : Worms like a vegetarian diet. They will eat any vegetable or fruit waste. Do not include any meat, egg or dairy products (slow decomposition, odor problems) or foods high in oils, fats, salts, or vinegar. Citrus rinds can be added but with equal portions of green leafy scraps in order to keep the pH level balanced in the bin.

Contact for more information :

Dr. R.K. Kohli,
 Prof. in Botany,
 Coordinator, Centre For Environment,
 Panjab University, Sector 14, Chandigarh
 Ph : 09872201516



RAIN WATER HARVESTING

Rain Water Harvesting is the technique of collection and storage of rain water at surface or in sub-surface aquifer, before it is lost as surface run off. The augmented resources can be harvested in the time of need. Artificial recharge to ground water is a process by which the ground water reservoir is augmented at a rate exceeding that under natural conditions of replenishment.

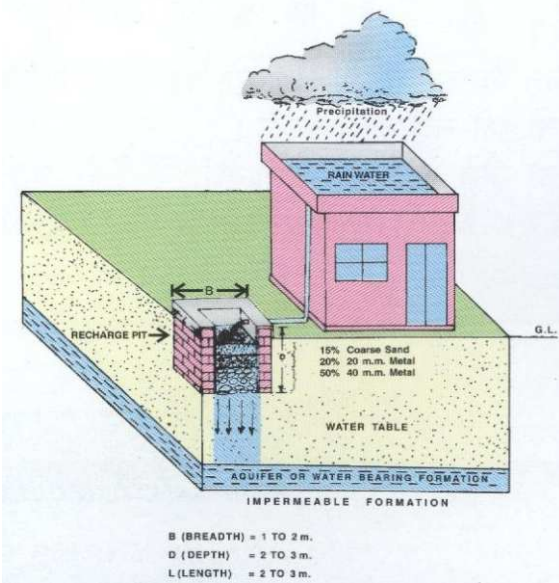
97% (1320 mill. cu kms.)
In oceans (saline water)



3% (37.5 mill. cu kms.)
Freshwater

Artificial Recharge Scheme in Chandigarh

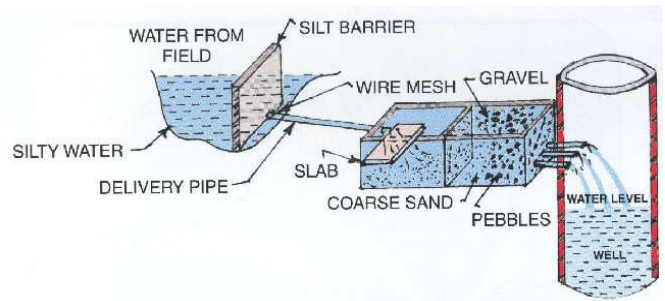
1. Scheme of rooftop rainwater harvesting at CSIO complex, Sector 30, Chandigarh (1998-1999).
2. Artificial recharge to ground water in Panjab University, Sector 14, Chandigarh (2000-2001)
3. Artificial recharge to ground water in Leisure Valley, Sector 10, Chandigarh (2000-2001)
4. Scheme for roof top rainwater harvesting at Bhujal Bhawan, Sector 27, Chandigarh (2000-2001)
5. Artificial recharge to ground water at Chandigarh Housing Board, Sector 9, Chandigarh (2000-2001)
6. Scheme for rain water harvesting at D.A.V. School in Sector 8, Chandigarh (2000-2001)
7. Artificial recharge to ground water at Technical Teachers Training Institute, Sector 26, Chd. (2000-2001)
8. Scheme for utilizing surplus water monsoon runoff for Sector 27, 19, 30, 20, Chandigarh



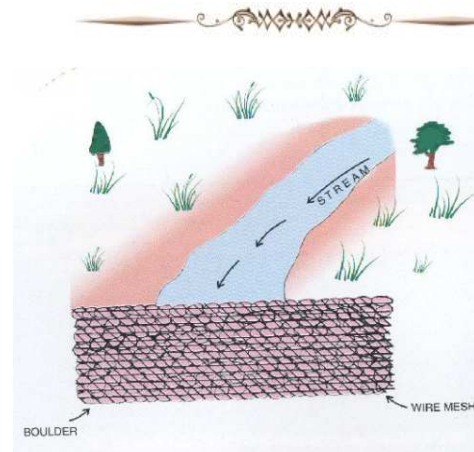
Rain Water Harvesting Through Recharge Pit

FOR ASSISTANCE ON ABOVE TOPIC :

Mr. R.N. Singh
Regional Director,
Central Ground Water Board,
Sector 27, Chandigarh
Phone : 0172-2638214, 0172-2640143
Fax : 0172-2638217



Rain Water Harvesting Through Dugwell Recharge



Rain Water Harvesting Through Gabion Structure

e-mail : ch@envvis.nic.in • Web : www.chandigarhenvvis.gov.in

ENVIRONMENT THROUGH OUR EYES

"Forest Department of Chandigarh Administration has created five new water bodies which will act as rain water harvesting structures. The water spread area of these five water bodies will be 44 acres. These will help in recharging underground water aquifers and will act as waterholes for the wildlife. It will also promote eco-tourism in the city and surroundings. Educational institutions like schools and colleges have been encouraged through ECO-Club to Harvest rain water to the maximum extent for the stabilization of underground water."

- **Dy. Conservator of Forest-cum-Director (Environment), Chandigarh Administration**

ट्रैफिक को कंट्रोल करने के लिए प्रशासन के कई प्रोजेक्ट हैं। फेक्टोरियों और अस्पतालों का धुआं एंटी पॉल्यूशन डिवाइसेज लगाकर कंट्रोल करवाया जा रहा है। ग्रीनिंग सिटी एक्शन प्लान के तहत इस साल गवर्नमेंट और प्राइवेट जमीन

पर 72 हजार 939 पौधे और 47 हजार 709 झाड़ियां लगाई जाएंगी।
-पी.जे.एस इक्वाल, मेंबर सेक्रेटरी
पॉल्यूशन कंट्रोल कमेटी एवं एडिशनल डायरेक्टर एन्वायर्नमेंट

Source : Dainik Bhaskar, Monday, 5th June 2006

INDUSTRIAL POLLUTION

In the "City beautiful", as designed by "Le Corbusier" earmarked a specific location for industrial area which is of the city towards the lee ward side. Majority of industries are Small Scale Industries, especially cottage industries like fabrication shops etc, electroplating, casting etc. Chandigarh is the 3rd biggest hub of electroplating industry in India and the majority of industries are small scale industries. Still using anti diluvian practices for plating and waste water treatment. Chandigarh Pollution Control Committee is taking steps to demonstrate waste minimization & zero discharge schemes. - **Er. Sandeep Madan, A.E.E., Chandigarh Pollution Control Committee**

MUNICIPAL SOLID WASTE MANAGEMENT IN CHANDIGARH

To promote sustainable urban development and strengthen the capabilities of responsible government institutions, the Central Pollution Control Board (CPCB) has taken initiative to develop model cities in the country to be called "Ecocity". The Central Pollution Control Board has sanctioned a "Demonstration Project" for the Management of Municipal Solid Waste in Chandigarh in two phases. 50% of the cost of the Project is being contributed by the 'Board' as grant in aid.

With a view to prevent the unpalatable and unwary looks at the sites of Dust Bins, the Corporation has introduced a new and novel concept of Garbage Bin Free Sector Scheme. In this practice, all Garbage Containers removed from the area and "Sehaj Safai Kendras" is the place where all garbage from the Sector is collected for onward transmission to Dumping Ground. About 350 tones of garbage including horticulture waste is being collected through road sweeping, house-to-house collection in cycle carts and disposal by the individuals in the "Garbage-Bin" at **Sehaj Safai Kendras**. The Corporation is disposing of the city garbage at the existing landfill site situated in the West of Sector 38 near Dadu Majra Colony through the process of 'Land Filling'. All efforts are being made by the Corporation to maintain the landfill site in proper sanitary and hygienic condition. The Corporation has also started treating garbage at the site with E.M. Solution - a proprietary product to eliminate bad odour, stabilize the garbage and minimize the effect of gases.

Jaiprakash Associates Limited in association with Municipal Corporation, Chandigarh is in the process of setting up of Municipal Solid Waste processing plant at Dadu Majra adjacent to dumping site. In this waste processing plant pellets are prepared, which are small cubes or cylindrical pieces made out of solid wastes and includes fuel pellets which are also referred as refuse derived fuel, which are to be used as fuel in J P Cement plant at Himachal Pradesh. - **Mr. Vivek Pandey, Scientist 'B', Chandigarh Pollution Control Committee**

ATTENTION PLEASE

Please note that the domain of ENVIS CENTRE's WEBSITE www.chandigarhenvis.nic.in has been changed from .nic to .gov Now the URL of website is **www.chandigarhenvis.gov.in**. Please note down for future reference. Previous editions of newsletters are also available on the website.



Dear Information Seeker,

ENVIS CENTRE, Chandigarh provides you with the services to collect and disseminate information related to environment of Chandigarh. To share information with us you are requested to fill up the form given below.



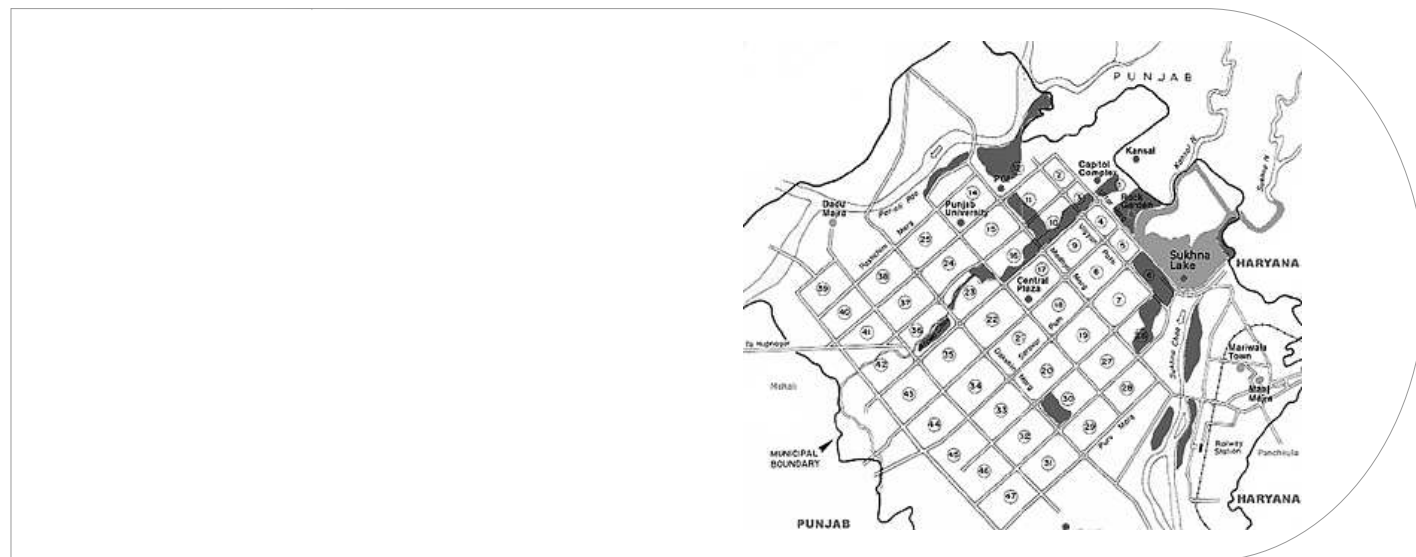
Your feedback is valuable to us and will be highly appreciated

- 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 :





ENVIS CENTRE TEAM

Mr. P.J.S. Dadhwal
(Project Coordinator)

Er. Arun Bansal
(Information Officer)

Mr. Anil Kumar
(Web Assistant)

Mr. Surinder Kumar
(Data Entry Operator)

SUGGESTION TO PROTECT ENVIRONMENT

- » A dripping faucet waste 2,700 gallons per year and add to the cost of water and sewer utilities, or strain your septic system
- » Garbage disposals can add 50% to the volume of solids in a septic tank, which can lead to malfunctions and maintenance problems.
- » Use a broom instead of a hose to clean your driveway and sidewalk and save up to 360 litres of water every time.
- » Plant during the spring or fall when the watering requirements are lower and always water during the early morning hours, when temperatures are cooler, to minimize evaporation. - Source : <http://www.delhijalboard.nic.in/djbdocs/consumer/tips.htm>

QUOTES

- “Earth provides enough to satisfy every man's need, but not every man's greed.” - *Mohandas K. Gandhi*
- “One Touch of nature makes the whole world kin.” - *William Shakespeare (1564-1616), Troilus and Cressida.*
- “Our Environmental problems originate in the hubris of imagining ourselves as the central nervous system or the brain of nature. We're not the brain, we are a cancer on nature.” - *Dave Foreman quotes*
- “It is horrifying that we have to fight our own government to save the environment.” - *Ansel Adams*
- “Waste is a tax on the whole people.” - *Albert W. Atwood*
- “Our modern industrial economy takes a mountain covered with trees, lakes, running streams and transforms it into a mountain of junk, garbage, slime pits, and debris.” - *Edward Abbey*
- “Nature provides a free lunch, but only if we control our appetites.” - *William Ruckelshaus*
- “We never know the worth of water till the well is dry.” - *Thomas Fuller*

USEFUL ENVIRONMENTAL WEB LINKS

www.elib.cs.berkeley.edu

www.cnie.org/nle

<http://www.environmentlanka.com>

<http://www.environment.gov.pk>

http://www.cpcb.nic.in/standard_welcome.htm

<http://www.eia.doe.gov/emeu/cabs/pakenv.html>

<http://www.msnbc.msn.com/id/6903014>

<http://www.fueleconomy.gov>

http://agri.and.nic.in/vermi_culture.htm

<http://www.deh.gov.au/events/index.html>

FROM :

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To,

Book Post

