

ENVIS CENTRE, CHANDIGARH

Chandigarh State of Environment

## **Chandigarh Statistics**



#### **BOTANICAL GARDEN**

Inaugration Date - 2nd January, 2007.

Gen (Retd.) S.F.Rodrigues Inaugrated by Adminstrator U.T. Chandigarh

Area 176 acres of land. Sections

15 Botanical Sections

Promote research, Education & Ex-situ conservation



#### **ROSE FESTIVAL 2007: A SPECIAL REPORT**

Chandigarh, The City Beautiful has privilege to host the country's biggest flower show, the Rose Festival. This year on 23rd-25th Feb 2007, Rose Festival, was inaugrated by UT Home Secretary, Mr. Krishan Mohan and many competitions like dance and on-the-spot painting etc were organized in the beautiful lawn of Zakir Hussain Rose Garden, Sector 16. This was an occasion of flower competitions and awareness towards better environment. The residents of Chandigarh were treated with the tunes of sufiana gayaki by folk singers and artistes from across India participated to enjoy the environment of City beautiful.



Flower Competition



Creative Salad Arrangement



Floral Arrangement

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**ENVIS CENTRE Deptt. Of Environment** Chandigarh

» Medicinal Plants Section

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Web: www.chandigarhenvis.gov.in





#### BACKGROUND: HERBAL/ BOTANICAL GARDEN



Chandigarh, the 'city beautiful' situated in the foothills of Shivaliks is blessed with a climate that is suitable to accommodate number of species of flora of different climatic regions. It was worthwhile setting up a Botanical Garden here with a purpose to conserve the flora of the region as well as those exotic and near extinct species. With this background, Chandigarh Administration established a Botanical Garden near village Sarangpur. Various sections in the Garden are:-

**Botanical Garden Site Map** 

#### » Medicinal Plants Garden:

Medicinal Plants Garden/ Herbal Garden has been developed over 40 acres of land. More than 75 species of medicinal trees and 55 species of medicinal shrubs, herbs & climbers have already been planted in this section.

#### » Bambusetum:

22 species of bamboos and 3 species of canes have been planted along two seasonal nallahs passing through the Botanical Garden. Afew fern species have, however, been included and planted In shade.

#### » Figus Grove

18 species of Ficus have been planted in this section.

#### » Arboretum:

This section consists of more than 90 species of different kinds of trees.

#### » Ornamental/Flowering Section:

More than 35 species of ornamental trees like Acacias, Lagerstroemia, Cassias and Bauhinias etc. have been planted in this section.

#### » Pinetum:

12 coniferous species including pines have been planted in this section.

#### » Palmatum

This section consists of 20 species of Palms and cycads.

#### » Sacred Grove:

This section has been developed in the form of a Cosmic tree/ 'Sarva Dharma Vriksha'. This 'tree' Comprises 11 branches and each branch represents a specific religious Vatika.

» Ram Vatika » Krishan Vatika »Guru-ke-Bagh Vatika » Kurani Vatika » Christian Vatika » Navgraha Vatika » Shiv Vatika » Vishnu Vatika » Brahma Vatika » Jain Vatika » Budh Vatika

In these Vatikas, the trees associated with various religions have been planted.



Cactus Green House



Sacred Grove



Aquatic Section :Water Body







#### » Cactus & Succulent Section:

More than 100 varieties of Cactus & Succulent plants have been collected from different sources to develop this section. A beautiful water body and water channel adds to its desthetic value. Furthermore, a poly-house, poly-carb house and a glass-house are being added.

#### »Aquatic Plants Section:

This section will have more than 30 aquatic plant species.

#### » Rare Plants Section:

An area of about 3 acres have been allocated to this section. The collection Will include rare plants from India & abroad.

#### » Tropical Rain Forest Section:

Anumber of rain-forest specific tree species are planted in the section.

#### » Bulbous Garden:

This section will be developed over 2 acres of land. It will consist of a variety of Bulbous plants suitable for this region.

#### » Japanese Garden:

This section is under development over 5 acres of land.

The garden will have various Japanese features.

#### » Nutrition garden:

This section includes fruit tree species suitable for temperate, tropical and sub tropical regions. More than 15 fruit species have already been introduced in this section.

## SALIENT FEATURES :

#### » Office-cum-Nature Interpretation Centre:

There is a small Library with books on medicinal plants, forestry, wildlife, environment and set of magazines related to ecology and environment. The visitors/ tourists will have free access to the library.

#### » Roads and Pathways:

To go round the garden, a five km. cycle track has been laid. The department will provide 'bicycle' on a nominal rent to the visitors.

#### » Lake:

A lake has been developed along Patiala-ki-Rao in Botanical Garden covering more than 8 acres of land. It has been so designed as to harvest rain water from Botanical Garden and adjoining agriculture fields.

#### » Water bodies:

In addition to the lake, 5 more water bodies have been developed inside the garden.

#### » Meditation Huts-cum-Rain Shelters:

Two Meditation Huts have already been erected and 4 more will be added in Due course.

#### » Nursery-cum-Research Block:

A permanent forest nursery fully dedicated to the Botanical Garden has already been developed over 2 acres of land.

#### » Public Utility services.

#### » Cafeteria.

The Nature Reserve i.e. Patiala-ki-Rao forest which is connected with the Botanical Garden by a causeway has 3 km. of nature trail. Alake (water hole) spreading over 15 acres of land has been developed in Patiala-ki-Rao forests. This lake will act as a water hole for the wildlife present in the Patiala-ki-Rao forests and will also promote eco-tourism in the city.



Meditation Hut



Bamboo along channel



Palmatum



Medicinal Plant Section



Traveller's Palm





#### MEDICINAL PLANTS IN BOTANICAL GARDEN

Common name Ghrit kumari **Botanical** name Aloe vera

> Dry Powder 1-2g; extract 500 mg-1g; juice/gel 30-60 ml Dose

Part used Leaf- juice and leaf- pulp

Uses useful in fevers. Nowadays leaves are one of the main

ingredient of all types of cosmetic and antiseptic creams.

Common name Nimba, Arishtaka Azadirachta indica Botanical name

> Bark powder 2-4 g, fresh juice 10-20 ml, seed oil 5-10 drops Dose

Root, stem bark, leaves, fruits, seeds & seed-oil Part used

Useful in allergy, skin diseases, fevers, worm infestations. Uses

Kalmegh Common name

> Andrographis paniculata Botanical name

Dose 2-3 gm of powder & 30-60 ml decoction

Whole plant Part used

Febrifuge, bitter tonic, alternative, anthelmintic etc. Uses

leaves are also very good remedy in liver complaints.

Punarnava, Rakta Punarnava Common name

> Boerhavia diffusa **Botanical** name

Fresh Juice 5-10 ml, Powder 1-3 gm Dose

Part used

Diuretic, laxative, expectorant, asthma. Roots are also Uses

very good remedy in anaemia, jaundice and kidney

stone.

Brahmi, Nila-brahami Common name Bacopa monnieri **Botanical** name

Fresh Juice 10-20 ml Dose

Whole plant Part used

Nervine tonic, used in asthma, epilepsy, tonic & Uses

diuretic.

Common name Holybasil, Tulsi Ocimum sanctum **Botanical** name

Fresh Juice 10-20 ml, Seed Powder 3-6 gm, Dose

Root decoction 50-100 ml

Part used Leaves, whole plant

Uses Cough, bronchitis, Expectorant, diaphoretic etc.

Guduchi, Amrita, Giloe Common name Tinospora cordifolia Botanical name

Stem Powder 3-6 gm, Decoction 50-100 ml, Dose

Infusion 30-60 ml, Fresh Juice of leaves 10-20ml,

Giloe Sattva 1-2 gm

Part used Stem and starch from stem

Bitter, stomachic, antiperiodic, tonic, and cooling. Used Uses

in chronic diarrhoea & dysentry.

















#### **MEDICINAL PLANTS**

Sarpagandha Common name

> Botanical name Rauwolfia serpentina

Dose Powder 3-6 gm in insomnia, 1-2 gm in hypertension

Part used

Hypnotic, Sedative and used in cases of Epilepsy Uses

and Schizophrenia.

Asgand, Ashwagandha Common name Withania somnifera **Botanical** name

> Dose Root Powder 3-6 gm twice/daily

Part used Root

Tonic, alterative, diuretic, aphrodisiac. Roots are also Uses

used in cases of rheumatism and arthritis.

Arjuna Common name

> **Botanical** name Terminalia arjuna

Dose Powder 3-6 g, decoction 50-100 ml.

Part used Leaves and roots.

In cough, chronic bronchitis, asthma, expectorant. Leaves are Uses

one of the main ingredients of all ayurvedic/herbal cough syrups

Bhangra, Kesharaj & Bhringaraj. Common name

Botanical name Eclipta alba

Fresh Juice 5-10 ml twice/daily Dose Part used Leaves and whole plant

Uses Used as hair tonic and also in cases of jaundice, liver

> complaints and in spleen enlargements. Leaves are used in all famous ayurvedic/herbal hair oil named

as Bhringaraj or Maha-bhringaraj hair oil.

Common name Piplamul, Pippali, long pepper

Piper longum Botanical name

Fruit powder ½ -1 gm, root powder 1-2 gm Dose

Part used Fruit and roots.

Uses Fruit- Tonic, Carminative, Chronic bronchitis, cough

> and cold. Dried spikes are one of the main ingredient of famous ayurvedic preparation called "Trikatu Churna".

Common name Sadabahar Botanical name Vinca rosea

Flower powder 1-2 gm, leaf powder 2-4 g/day Dose

Part used Leaves and flowers

Uses Leaves- Chewed to lower blood sugar.

Flowers- Anticancerous

Chitrak, chita Common name

**Botanical name** Plumbago zevlanica Root powder 1-2 gm/day Dose

Part used Root

Appetizer, skin diseases, dyspepsia etc. Used in general conditions of indigestion. Uses

















#### **ENVIRONMENT THROUGH OUR EYES**

U.T. Medicinal Plants Board, Chandigarh has developed 27 herbal gardens in schools & colleges to impart education and create awareness among students and teachers about our rich medicinal plants heritage. Students and teachers are using different parts of these plants not only to prevent and cure various diseases but also as a dietary supplement. Department of Forests & Wildlife is supplying quality saplings of medicinal plants from its Botanical Garden Nursery to individuals, institutions, organizations etc. free of cost. I appeal each & everyone to take advantage of this scheme and help promoting ex-situ cultivation of medicinal plants in Chandigarh. Source: Ishwar Singh DCF, Deptt. Of Forests & Wildlife Chandigarh

#### CHANDIGARH EXCELS AMONG BEST PERFORMING STATES: SUCCESS STORY

Revised National Tuberculosis control programme launched in Chandigarh in January, 2002. Infrastructure was raised and made functional with establishment of two Treatment Units. Under these two treatment units 14 Microscopy Centres are functioning to provide excellent diagnostic services to patients free of cost. There are 118 DOT Centres which have been linked with Microscopy Centres to cover the entire population of Chandigarh which is 10.13 lacs. In the past five years Chandigarh has made rapid strides in the control of Tuberculosis. It has excelled states like Delhi, Gujarat, Rajasthan and Himachal Pradesh etc where RNTCP was launched much earlier. The salient features with regards to the performance of Chandigarh are:-

Nearly 55000 chest symptomatics have been screened for sputum examination in the last Five years which suggests that more than 1 person among 20 in public have been subjected for sputum examination. 1555 Chest Symptomatics per lac population were examined for AFB in sputum in the year 2006 (Up to 3rd Qtr.) Which exceeds the performance of any other State.



- The number of NSP patients put on treatment in the last five years is 3236. This can be Compared with the prevalence of the country with regards to estimated NSP patients (38 Lacs). Chandigarh has a population of 1 million as against the countries population of approximately 110 million.
- 9604 patients have been put on DOTS during this period with the Annual Cases Detection Rate of above 225 per lac (average of last 4 Years).
- The cure rate is consistently achieved @ 85 % for the last three years.
- The low default rate (about 3 % of the total cases) has also been achieved for the last 3 years.
- The slum area interventions in Chandigarh is a special feature of the programme among the Urban slums Models existing in the various States of the country.

Source: Dr. P.K. Shridhar, State TB Officer, Chest Clinic, Sector-22, Chandigarh

### **GARBAGE MANAGEMENT IN CHANDIGARH**

The garbage produced in the cities, depending on the city's size, amounts to hundreds and thousands of tons every day. In Chandigarh, about 350 metric tons of garbage is produced every day. So the reduction should be made to achieve best results. With the Garbage Processing Plant already under way in Dadu Majra, near Sector 38, the problem shall be eased out to a great extent. The reduction of garbage disposal in the city shall result from three factors:

- 1. The material that flows in and out of one's home.
- 2. Reuse what you can.
- 3. Recycle what you can.

"Recycling" means the process of transforming segregated non-biodegradable solid waste into raw materials for producing new products, which may or may not be similar to the original products. Recycling material includes newspapers, paper, books, magazines, glass, metal objects, wire, plastics, leather, rubber, wood, furniture and cartons. If Chandigarh residents and its administration manage proper recycling, sorting & reuse of garbage, such a necessity can be curbed and lot of money can saved. The landfill sites can be converted into beautiful landscapes to camouflage the ugliness and to add to the beauty of the City Beautiful.

Source: Dr. Archana Chaudhary, Architect, Housing Board Haryana





# Response Centre Feedback Form





#### Dear Information Seeker,

ENVIS CENTRE, Chandigarh furnishes 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		
<ul><li>Designation</li></ul>		
■ Department		
■ Address		
	City	
■ State	Country	Pin L
■ Phone	Fax	
■ Email		
Your views on scope of ir	nprovement :	
■ Interest Area		
I would like to have info	rmation on following:	
		ASA
		F 1
		Peedback Culture
		Culture
		EX .
		Pod 2

## At the End of...



#### **ENVIS CENTRE TEAM**

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

Er. Arun Bansal (Sr. Programme Officer)

Mr. Shiven Chaudhary (Web Assistant)

Mr. Surinder Kumar (Data Entry Operator)

#### SUGGESTION TO PROTECT ENVIRONMENT

- 1. You can lower overall energy demand by concentrating bright light where you need it rather than evenly lighting the entire room this is called 'task lighting' 2. For any light that must be on all night (e.g. stairways), replace the bulbs with the lowest wattage bulbs that you're comfortable with or consider a compact fluorescent or a nightlight.
- 3. Decorate your home with illumination in mind lighter colours reflect light, so use them in areas you want to be bright.
- 4. Keep light fixtures clean a cleaner bulb is a brighter bulb.
- 5. Opening your curtains/ blinds is a free way to brighten up a room.
- 6.Be sure to at least shut off the computer screen, as 60% of the power used by a computer is used by the monitor!

#### Quotes

Change has a considerable psychological impact on the human mind. To the fearful it is threatening because it means that things may get worse. To the hopeful it is encouraging because things may get better. To the confident it is inspiring because the challenge exists to make things better. King Whitney Jr.

I would feel more optimistic about a bright future for man if he spent less time proving that he can outwit **Nature** and more time tasting her sweetness and respecting her seniority. **E. B. White** (1899 - 1985)

We must accept that this creative pulse within us is God's creative pulse itself. Joseph Chilton Pearce

Sometimes it seems like **God** is difficult to find and impossibly far away. We get so caught up in our small daily duties and irritations that they become the only things that we can focus on. What we forget is that **God's** love and beauty are all around us, every day, if only we would take the time to look up and see them.

Matthias, Correction Weblog, 11-01-03

http://www.quotationspage.com

#### **USEFUL ENVIRONMENTAL WEB LINKS**

www.energy.gov.on.cawww.environmentaldefense.orgwww.quotationspage.comwww.stwater.co.ukwww.fueleconomy.govwww.earthshare.orgwww.helium.com/tpc/12662Www.energysavers.govwww.cseindia.orgwww.sanctuaryasia.com/greentips/index.php

#### FROM:

**ENVIS-CENTRE** 

**Department of Environment** 

IInd Floor, Additional Town Hall Building,

Sector: 17-C, Chandigarh U.T. Phone: 0172-3295436, 2700065 web: www.chandigarhenvis.gov.in

e-mail: ch@envis.nic.in

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