

7.1.6 QUALITY AUDIT ON ENERGY & ENVIRONMENT

- Green audit undertaken on a regular basis in Shivaji College.

Department of Environmental Studies SHIVAJI COLLEGE (University of Delhi)

3rd day of July, 2020

GREEN AUDIT REPORT

Green audit of Shivaji College for the academic session July 2019- June 2020 was carried out by the Department of Environmental Studies of the College. In this green audit, biodiversity of the College was assessed. We used trees, birds and butterfly as surrogate of biodiversity of the college. The audit was performed during July 2020 and field data was collected from the College by inspecting College Campus.

Based on our field survey following observations are made.

- The College campus has varied variety of plants. A total of 427 trees are reported from the College campus. Of which Ashok, Neem, Ficus Panda, Toot and Peepal are the dominant tree species. The main College Campus (excluding sports complex) has Ashok tree as dominant tree species.
- A total of 57 tree species are recorded from the College.
- Variety of fruit bearing trees are present in the College, that include, Mango, Jamun, Guava, Lemon, Bael and Pomegranate.
- Delhi is facing alarming level of air pollution. Trees are considered as best possible tool for mitigating air pollution. Shivaji College Campus has variety of trees that purify and moderate air pollution. Trees like Peepal, Goolar, Pilkhan, Ashok, Jamun and Neem has the ability to absorb toxic air pollutants like CO, NOx and SOx. The Ashok trees planted along the boundary of College Campus act as pollution filter and reduce dust and other gaseous pollutants thus help in improving the air quality of College as well as surrounding areas.
- Trees absorb CO₂ from atmosphere and release oxygen in return. A single tree can absorb 21.8 Kg of CO₂ per year. However, it varies from species to species. Considering the number of trees in the College approximately 8000 – 9000 Kg of CO₂ per year are being absorbed. Thus, significantly contributing in reducing carbon footprint.
- Trees are excellent sound absorber and the trees planted along the boundary walls of College Campus helps in reducing traffic noise.
- The College has fruit bearing trees like Peepal, Toot, Pilkhan, Goolar, Neem, Jamun and Mango these trees attract variety of insects like wasps, bees, ants, and beetles thus supporting variety of insects which play important role in pollination, energy and nutrient cycling.

Virat *Adi S*

Checklist of Butterfly of Shivaji College

S. No.	Common Name of Butterfly	Scientific Name
1.	Indian cabbage White	<i>Pieris cardui</i>
2.	Lime Butterfly	<i>Papilio demoleus</i>
3.	Common Jay	<i>Graphium doson</i>
4.	Common Emigrant	<i>Canoplia</i>
5.	Common Mormon	<i>Papilio polytes</i>
6.	Plain Tiger	<i>Danaus chrysippus</i>

Observations:

- Renumbering of trees of College is required.
- Bordeaux mixture need to be applied to all trees to prevent infestation by fungi.
- Keeping in view the health of trees de-concretization of one-meter radius around trees is recommended.
- Plantation data from various plantation drive need to be maintained.
- Native flowering plants need to be planted in the College to attract butterfly.
- Dead trees should be maintained in the College as they attract cavity-nesting birds like woodpeckers and parakeets.

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- Environment Audit

[Click here to open Audit Report.](#)

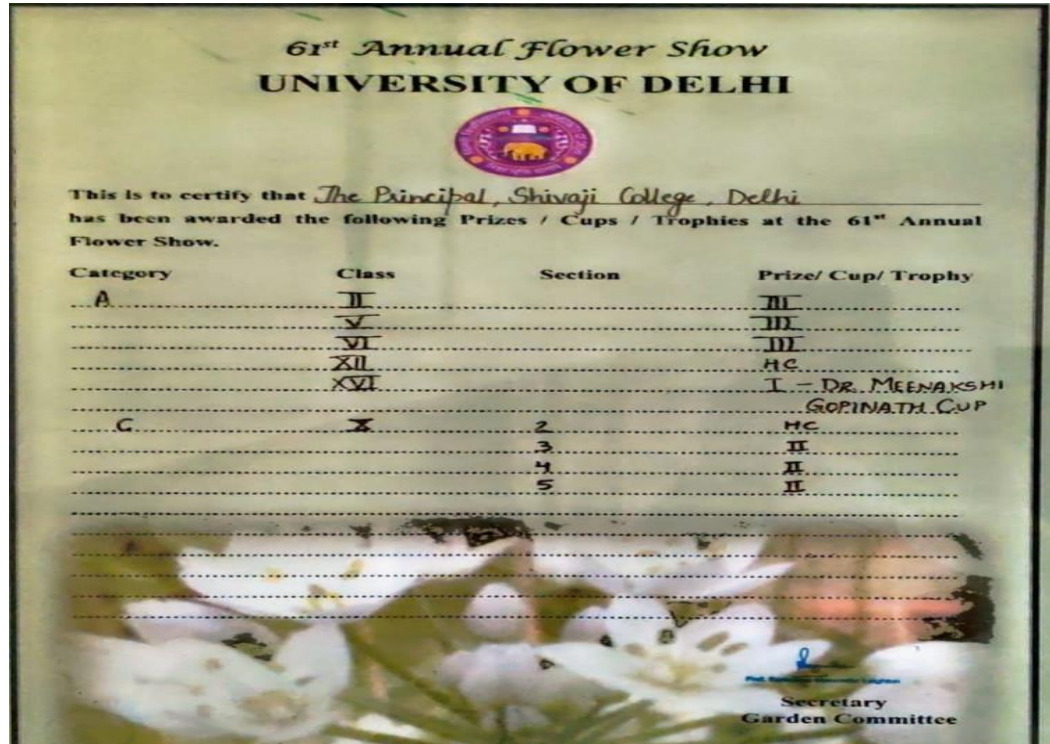
Audit Report has been uploaded on college website.

- Clean and Green Campus Recognition Awards

- The College was awarded the “Plastic Free College of the Year Award” on National Environmental convention 2018 organised by Indian Institute of Ecology and Environment, New Delhi and National Institute of Cleanliness Education and Research.



- During the 61st Flower Show of University of Delhi held on March 1, 2019 in the Mughal Garden, Vice Chancellor's Lawn, University of Delhi, Shivaji College was awarded Dr. Meenakshi Gopinath Cup for the 'Best Herbal Garden of University'.



- The College was awarded the Dr. Meenakshi Gopinath Cup for the "Best Herbal Garden of University". Apart from this, it was also awarded the third prize in Category A during the 62nd Flower Show of the University of Delhi held on February 29, 2020.



- In the honour of the Founder of Shivaji College, Eco-Club has instituted **Dr. Punjabrao Deshmukh Memorial Trophy for Innovative Green Model: A Solution for Environmental Issues** in 2019.

**ECO CLUB
SHIVAJI COLLEGE**
presents
**Annual Fest
PEEPAL 2019**

**Dr. Punjabrao Deshmukh
Memorial Trophy**
for
**INNOVATIVE GREEN
MODEL**

**March 29,
2019** **11:00 am-
12:00pm**

Cash prize of Rs. 21,000/-

Registration link:-
<https://goo.gl/forms/yo2lZXFOVduEQ0JW2>

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Dr. Vijay Kumar
(CONVENOR, ECO CLUB)

Dr. Shashi Nijhawan
(PATRON)

**DR. PANJABRAO DESHMUKH
MEMORIAL TROPHY**

AWARDED FOR EXCELLENCE IN RESEARCH AND
DEVELOPMENT OF AN INNOVATIVE GREEN MODEL TO SOLVE
AN ENVIRONMENTAL ISSUE

Instituted On March 29, 2019
Eco-Club, Shivaji College
(University of Delhi), New Delhi-110027

Dr. Punjabrao Deshmukh
(27.12.1898 - 10.04.1965)