



Nutan Shikshan Prasarak Mandal's

**ADARSH ARTS and COMMERCE COLLEGE,
DESAIGANJ (Wadsa) DIST- GADCHIROLI**



GREEN AUDIT REPORT



Adarsh Arts and Commerce College,

Desaiganj (Wadsa), Dist- Gadchiroli

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Introduction:

21st century has inspired all-round development in human life. Rapid urbanization and industrial revolution fueled by economic growth on a local, regional, and global scale have resulted in various environmental and ecological issues. India is a developing country that is utilising science and technology for its vivid advancements. On the one hand, there is an improvement in lifestyle, but on the other hand, it is leading to environmental exploitation. Luxurious living is posing an environmental threat, making it unsuitable for future generations.

Gadchiroli district is rich in indigenous herbal and medicinal plants as well as dense forest. Greenery and pollution-free environment define the district. However, with the passing time, the forest area is reduced and trees are cut resulting in increase in the temperature in the district. Auditing for Green Campus Management Trees play an important ecological role within the local environment, as well as support improved public health and provide aesthetic benefits to citizens. The amount of oxygen released by the trees of the campus is good for the people in the campus. So, while the students and teachers are busy studying and working on earning those good grades, all the trees in campus are also working hard to make the air cleaner for them.

The green audit is beneficial for detecting and monitoring sources of pollution in the environment, and it focuses on waste management of all types, energy consumption monitoring, water quality, stakeholder safety, and even disaster management. The objectives in the present report involved evaluation of biodiversity, water management practices and indoor air quality in the campus. The findings from this audit are expected to have an impact

on student/faculty health, productivity, operational costs, and the ecological systems in the campus. This audit is conducted by the experts:

1. Shri Manoj Namdeo Chavan, Sub Divisional Forest Officer,
Desaiganj (External Expert)
2. Prof. Yogiraj Tupat, Dept. of Botany
3. Prof. Shivani Misar, Dept. of Botany
4. Prof. Dyanesh Mohurle, Dept. of Zoology
5. Prof. Shital Donadkar, Dept. of Zoology
6. Prof. Aditi Nagpurkar, Dept. of Chemistry
7. Prof. Shrikant Parate, Dept. of Geography

AUDIT STAGE

Green auditing in Adarsh Arts and Commerce College, Desaiganj (Wadsa), Dist- Gadchiroli began with the assessment of the status of the green cover of the Institution followed by waste management practices and energy conservation strategies etc. The team monitored different facilities at the college, determined different types of appliances and utilities (lights, taps, toilets, fridges, other electronic equipments, etc.) as well as measuring the usage per item (Watts indicated on the appliance or measuring water from a tap) and identifying the relevant consumption patterns (such as how often an appliance is used) and their impacts. The staff and learners were interviewed to get details of usage, frequency or general characteristics of certain appliances. Data collection was done in the sectors such as Energy, Waste, Greening, Carbon footprint and Water use. College records and documents were verified to clarify the data received through discussions.

Green Campus

Total number of plant species identified- 38

Total number of plants in the campus - 648

Floral Diversity :

A total of 38 species of flora have been identified and documented from the campus. The floral diversity of the campus is classified into trees, shrubs and herbal plants belonging to various families.

The department of National Service Scheme (NSS), Nature Club, Campus Beautification Cell and Premises Cleanliness Committee strive together to increase the number of trees in the

Campus every year. They together with the active participation of the student volunteers and staff, plant new varieties in the campus and take care of them.

The details of these varieties are as follow-

Herbs

Sr. No.	Common Name	Botanical Name	No. Of Plants
1.	Texas sage	<i>Leucophyllum frutescens</i>	02
2.	Coleus	<i>Solenostemon</i>	06
3.	Bonsai	<i>Polyscius fruticosa</i>	03
4.	Cleistocalyx operculatus	<i>Syzygium nervosum</i>	03
5.	Veitch's screwpine	<i>Pandanus veitchii</i>	25
6.	Santa maria feverfew	<i>Parthenium hysterophorus</i>	30
7.	Tulas	<i>Ocimum Sanctum</i>	20
8.	Shevanti	<i>Chrysanthe xgrandiflorum</i>	35
9.	Excoecaria	<i>Excoecaria cochinchinensis</i>	10
10.	Rhapis	<i>Rhapis excelsa</i>	05
Total			<u>139</u>

Shrubs

Sr. No.	Common Name	Botanical Name	No.of Plants
1.	Water canna	<i>Canna glauca jatropa</i>	04
2.	Picea abies	<i>Norway spruce</i>	04
3.	Pigeon berry	<i>Duranta erecta</i>	25
4.	Hibiscus	<i>Hibiscus rosa sinensis</i>	10
5.	Banana	<i>Musa acuminata</i>	02
6.	Rui	<i>Calatropis Procera</i>	15
7.	True indigo	<i>Indigofera tinctoria</i>	08
8.	Cuatard apple	<i>Annona reticulata</i>	10
9.	Pinwheelflower	<i>Tabernaemopntana divaricata</i>	01
10.	Mehandi	<i>Duranta erecta</i>	250
11.	Rose	<i>Rosa rubiginosa</i>	15
12.	Indian Olender	<i>Nerium indicum</i>	03
13.	coatbuttons	<i>Tridax procumbens</i>	45
Total			<u>382</u>

Trees

Sr. No.	Common Name	Botanical Name	No. Of Plants
1	Yellow bells	<i>Tecoma stans</i>	01
2	Neem	<i>Azadirachta indica A. Juss</i>	16
3	Ber	<i>Zizipus mauritiana</i>	10
4	Guava	<i>Psidium guajava</i>	02
5	Ashoka Tree	<i>Polyaiithia longifolia</i>	16
6	Cassia trees	<i>Senna Siamea</i>	15
7	Jamun	<i>Syzygium cumini</i>	02
8	Mango	<i>Mangifera indica</i>	02
9	Peepal	<i>Ficus religiosa</i>	05
10	Chafa Plant	<i>Magnolia Champaka</i>	06
11	Gulmohar	<i>Royal poinciana</i>	10
12	Jackfruit	<i>Artocarpus heterophyllus</i> <i>Lam</i>	01
13	Almond Tree	<i>Prunus dulcis</i>	06
14	Laurel	<i>Cocculus laurifolius</i>	07
15	Karanji	<i>SynonymPongamia Pinnata</i>	28
Total			127

Routine Green Practices :

Every year college celebrates World Environment Day, World Water Day and Ozone Day in the campus. The main focus of these programems is to provide awareness to the students about the importance of the environment, its conservation and sustainable use of environmental resources. The programmes are conducted through seminars, poster presentation, quiz competition, debates etc.

Water management :

The water resources in the campus mainly include one dug well, one bore well and water connection of Municipal Corporation. The influx of water to these systems comes from both the rainwater runoff and also from the ground below. The low-lying area on the campus was selected as the site for these systems as it would enable storm water to flow into it without the help of any artificial means like pipes.

Indoor Air Quality :

Humans spend more than 80% of their lifetime in indoor environments. On the college campus, students often spend a considerable amount of time in various indoor spaces such as

classrooms, laboratories, libraries etc. In indoor environments, inhabitants are exposed to various hazardous compounds due to lower degradation rates. Indoor dust is an important matrix that exposes humans to a broad spectrum of chemicals. Further, with new chemicals being introduced into various consumer products and materials every day, there is an urgent requirement to detect the migration of these compounds into the dust and their effect on human health. Some of these pollutants are reported to be endocrine disruptors, mutagenic and carcinogenic. In this context, we found the environment in the classrooms, laboratories, washrooms, gymnasium and library clean, well-ventilated. The large windows help air move smoothly. The campus has lot of space for fresh air to blow.

Waste Management:

Garbage bins have been placed at various crucial spots at all floors in the building. Use of plastic has been banned in the premises.

Recommendations for Green Campus :

In order to increase the carbon credit and greenery of the campus, it is recommended to plant more indigenous and evergreen / fruit trees inside the campus. It is recommended to promote planting of native species that enhance our natural environment and ecology, rooftop rainwater harvesting as a better option for effective water management and continuous monitoring of hazardous substances in indoor air and dust.



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