



GARGI COLLEGE

UNIVERSITY OF DELHI

GREEN AUDIT REPORT

2023-2024



Prepared by
EHS ALLIANCE

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CERTIFICATE



CERTIFICATE

PRESENTED TO

GARGI COLLEGE

UNIVERSITY OF DELHI

Siri Fort Rd, Siri Fort Institutional Area, Siri Fort, New Delhi, Delhi 110049

Has been assessed by EHS Alliance Services for the comprehensive study of environmental impacts on institutional working framework to fulfill the requirement of

GREEN AUDIT

ACADEMIC YEAR 2023-24

The green initiatives carried out by the institution have been verified on the report submitted and was found to be satisfactory.

The efforts taken by the management and the faculty towards environment and sustainability are appreciated and noteworthy.



SIGNATURE



14.10.2024
DATE OF AUDIT

EHS ALLIANCE SERVICES, PLOT A-72, SURYA VIHAR, GURUGRAM, 122001
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ACKNOWLEDGEMENT

EHS Alliance Services would like to thank the management of Gargi College for assigning this important work of Green Audit. We appreciate the co-operation to the teams for completion of assessment.

First of all, we would like to thank **Prof. Sangeeta Bhatia - Principal** for giving us an opportunity to evaluate the environmental performance of the campus.

We are also thankful to **Prof. Neera Pant Professor, Psychology - Audit Coordinator**, for her continuous support and guidance, without which the completion of the project would not have been possible. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.

We are also thankful to

Dr. Mamta Tripathi
Prof. Renu Aggarwal

Coordinator, Eco Club
Convener, IQAC



DISCLAIMER

EHS Alliance Services Audit Team has prepared this report for Gargi College based on input data submitted by the representatives of college complemented with the best judgment capacity of the expert team.

While all sensible care has been taken in its preparation, details contained in this report have been compiled in good faith based on information gathered.

It is further informed that the conclusions are arrived following best estimates and no representation, warranty or undertaking, express or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

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Signature

LEAD AUDITOR

CONCEPT AND CONTEXT

The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory from the academic year 2019–20 onwards that all Higher Educational Institutions should submit an annual Green, Environment and Energy Audit Report. Green Audit is assigned to the Criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India that declares the institutions as Grade A, Grade B or Grade C according to the scores assigned at the time of accreditation. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures.

In view of the NAAC circular regarding green auditing, the College management decided to conduct an external environment assessment study by a competent external professional auditor. The green audit aims to examine environmental practices within and outside the college campus, which impact directly or indirectly on the atmosphere. Green audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of college environment. It was initiated with the intention of reviewing the efforts within the institutions whose exercises can cause risk to the health of inhabitants and the environment.

Through the green audit, a direction as how to improve the structure of environment and inclusion of several factors that can protect the environment can be commenced. This audit focuses on the Green Campus, Waste Management, Water Management, Air Pollution, Energy Management & Carbon Footprint etc. being implemented by the institution. The concepts, structure, objectives, methodology, tools of analysis, and objectives of the audit as below:



INTRODUCTION

Now a days, the educational institutions are becoming more thoughtful towards the environmental aspects and as a result new and innovative concepts are being introduced to make them sustainable and eco-friendly. To preserve the environment within the institution, a number of viewpoints are applied by the several educational institutes to solve their environmental problems such as promotion of the saving the energy, waste recycle, water consumption reduction, water harvesting and many more...

The activities carried out by the institution can also create adverse environmental impacts. Green audit is defined as an official inspection of the effects a college has on the environment. Green Audit is conducted to evaluate the actual scenario at the institution campus. Green audit can be a useful tool for a university /college to determine how and where they are using the most of the energy or water or resources; the institution can then decide how to implement changes and make savings. It can also be used to determine the nature and volume of waste, which can be used for a recycling project or to improve waste minimization plan.

Green auditing and the application of mitigation measures is a win-win situation for all the institutions, the learners and the mother earth. It can also result in health awareness and can promote the environmental awareness, values and beliefs. It provides a better understanding to staff and students about the Green impact on institution. Green auditing also upholds financial savings through reduction of resource usage. It gives an opportunity to the students and teachers for the development of ownership of the personal and social responsibility. The audit process involves primary data collection, site walk through with the team of university /college including the assessment of policies, activities, documents and records.



OVERVIEW OF THE COLLEGE

Gargi College was established in the year 1967 and is a leading South Campus college of the University of Delhi. It is a college for women and offers education in Arts and Humanities, Commerce, Science and Education.

Gargi College was named after an enlightened woman named Gargi, figuring in the Brihadaranyaka Upanishada of the Vedic Age. She emerges as an intelligent and bold person embodying the spirit of inquiry juxtaposed with faith as is shown by her penetrating and challenging questions to the great sage Yajnavalkya. In the Upanishad Gargi seems to represent the intellectual potential of the race of Homo sapiens, which continues to manifest itself, in quest of ever-widening fields of knowledge.



Campus spans across 13 acres of lush greenery, featuring diverse flora and fauna. Peacocks can often be seen roaming the campus, amidst green trees, fields, and beautiful gardens that help maintain moderate temperatures despite the extreme Delhi heat. The college caters to over 5500 culturally diverse students and is one of the few colleges in the University of Delhi to offer all three streams: Humanities, Science, and Commerce across 21 Departments. The college has 21 well equipped Laboratories, 46 classrooms and 4 lecture theatres, and additional classroom spaces in the form of bamboo huts to cater to our ever-growing popularity and strength. College has infirmary and cafeteria/canteen to cater to your varied needs.

Many classrooms are overhead projector enabled and Gargi College has a new academic block coming up this year! The teaching faculty of the college has earned various grants and patents and Gargi College has an active research culture along with Research and Development Council of Gargi

college that keeps pushing the faculty and students to produce innovative research in their fields. The dedicated faculty members mentor students in academics while balancing their research pursuits.

The college has produced several distinguished achievers in academics and sports and co-curricular activities, including gold medallists. The college has state-of-the-art labs, a gorgeous green sports field, and thriving cultural and non-cultural societies that bring accolades in the annual festivals and international and national events across colleges and universities.

Gargi ensures that students have a holistic perspective towards wellbeing, and to support it, the college has several initiatives (Ananda: The Centre for Wellbeing; On-campus counselling; and Peer support initiatives like Izhaar & Saarthi) that help them thrive in a balanced state of wellbeing. Gargi college relentless endeavour is to recognise each individual's potential and harness it within the individuality they portray. When students graduate from Gargi college, you will have a diversity informed world view and develop sensitive and inclusive approach that will help you cater to the community to the best of your ability!



Vision & Mission

VISION

Gargi strives to be the epitome of academic excellence and holistic development for all the stakeholders of its cohesive community. The constant endeavour is to keep upgrading the skill and knowledge base to make impactful changes in society.

MISSION

Every graduating student, leaves the college premises with the ethos of care and nurturance and a sense of fulfilment. Every individual develops a sense of responsibility towards the larger community to share the idea of a world where inclusivity is the norm and service is the essence of learning.

Facilities in the campus

Amenities at Gargi College provide far more than academic and administrative facilities on campus. It is dedicated to providing students with an exceptional infrastructure for learning as well as facilities for simplifying the procurement of fundamental skills. To accomplish this goal, Gargi College offers the following:

LABORATORY: The Botany, Chemistry, Elementary Education, Microbiology, Physics, Psychology and Zoology laboratories are not only spacious and well-ventilated but also very well-equipped with the latest equipment and other academic resources. Working in any of these laboratories is a pleasurable experience. There are separate research laboratories for Botany and Physics Departments where research is being conducted by the faculty members.

COMPUTER LABS: Computers have become an indispensable part of the undergraduate college curricula with the introduction of a variety of revised and restructured courses. The three computer laboratories in the college consisting of 110 computers with Wi-Fi connectivity provide students with an opportunity for hands-on training and enhancing their computing skills. The computers have become an indispensable part of the undergraduate college curriculum with new revised and restructured courses. The laboratories are also available for career-intensive education after regular class hours. Labs are also available for career-intensive education after regular class hours.



AUDITORIUM: The college has its own state-of-the-art auditorium with a seating capacity of 750 spread over the main floor and the mezzanine. The airy, spacious portico endowed with natural daylight and furnished with tables and chairs serves as a quiet place for conducting tutorial classes. The auditorium block is fully air-conditioned and equipped with solar lighting installations.



SEMINAR HALL: Adjoining the auditorium is a splendiferous seminar hall with a seating capacity of 125. It is equipped with latest audio-visual equipment and is utilised for hosting various academic events.

OPEN AIR THEATRE: A new open-air stage has been recently constructed behind the office block with sufficient seating provision for the audience in the form of adjoining steps and a lush green lawn at its centre. This would serve as an open-air platform for students for various events and especially for Street Plays and other such open-air events.

CANTEEN & CAFETERIA: The Canteen, Gargi College students' favourite hangout, is where all the gustatory desires are satiated. With lots of yummy food offered at reasonable prices, this is a place where students from all streams meet, interact and confabulate over steaming cups of tea/coffee. Cold drinks, fruit juice, spicy chaat, momos, crispy spring rolls, delicious idli, vada, dosa, mouth-watering pastries, cakes, burgers, patties, samosas and bread pakoras are among the various food items on offer. A water harvesting system has been installed in the canteen area. The canteen has been renovated and extended by constructing an additional food outlet: Happiness Corner!!! A Nescafé kiosk is also positioned in the precincts of the cafeteria.

SPORTS COMPLEX: Gargi College has its sports complex having facilities for various sports e.g. Basketball court, Net ball court, discuss throw, short put, long jump, running, aerobics, badminton court, cricket ground, judo, kurash, wrestling, tennis court, volleyball. These facilities give student sports persons to thrive in sports.

Geo Location
Geo Coordinates from
Google maps:
28.554977, 77.219073



AUDIT PARTICIPANTS

On behalf of Gargi College

Name	Designation
Prof. Sangeeta Bhatia	<i>Principal</i>
Dr. Mamta Tripathi	<i>Coordinator, Eco Club</i>
Prof. Neera Pant	<i>Professor, Psychology</i>
Prof. Renu Aggarwal	<i>Convener, IQAC</i>
Dr. Geeta Prakash	<i>Convener, Garden Committee & Member, IQAC</i>
Dr. Reema Mishra	<i>Asst. Professor, Botany</i>
Dr. Neha Sharma	<i>Member, IQAC</i>
Ms. Ruchitra Gupta	<i>Member, Garden Committee</i>
Ms. Rajani Kumari	<i>President, AVNI (Eco Club)</i>
Ms. Khushi Yadav	<i>Vice-President, AVNI (Eco Club)</i>

On behalf of EHS Alliance Services

Name	Position	Qualifications
Dr. Uday Pratap	Lead Auditor	<i>Ph.D., PDIS, QCI – WASH, Lead Auditor ISO 14001:2015</i>
Ms. Pooja Kaushik	Co-Auditor	<i>M.Sc., Field Expert, QCI – WASH, PGCCC</i>

EXECUTIVE SUMMARY

Green auditing is an essential step to identify and determine whether the institutional practices are sustainable and ecological. Traditionally, we were upright and efficient users of natural resources. But over the period, excessive usage of resources like water, electricity, petrol, etc. has become habitual for everyone especially, in urban and semi-urban areas. It is the right time to check if we (our process) are consuming more than the required resources? Whether we are using resources sensibly?

Green audit standardizes all such practices and provides an efficient way to use natural resources. In a time of climate change and resource exhaustion, it is necessary to re-check the processes and convert them in to green and sustainable. Green audit provides an approach for the same. It also increases overall awareness among the folks working in the institution towards the eco-friendly environment.

This is the first attempt to conduct a green audit of this campus for fulfilment of NAAC criteria. This audit was mainly focused on greening indicators like consumption of energy in terms of electricity and fossil fuel, quality of soil, water usage, vegetation, waste management practices and carbon footprint of the campus. Initially, a questionnaire was shared to know about the existing resources of the campus and the resource consumption patterns of the students and staff in the campus.

GREEN AUDIT - ANALYSIS

1.1 GENERAL INFORMATION

1. Does any Green Audit conducted earlier?

Yes, this is the first external audit organized by the College

2. What is the total strength (people count) of the Institute?

Students

Male: 0 Female: 5300 Total: 5300

Teachers (including guest faculty)

Male: 25 Female: 199 Total: 224

Non-Teaching Staff

Male: 100 Female: 36 Total: 136

Total Strength

Male: 125 Female: 5535 Total: 5660

3. What is the total number of working days of your campus in a year?

There are one hundred and eighty working days in a year.

4. Where is the campus located?

The campus is located at Siri Fort Rd, Siri Fort Institutional Area, Siri Fort, New Delhi, Delhi 110049

5. Which of the following are available in your institute?

Garden area	Available
Playground	Available
Kitchen	Available
Toilets	Available
Garbage Or Waste Store Yard	Available
Laboratory	Available
Canteen	Available
Hostel Facility	Not Available
Guest House	Not Available

6. Which of the following are found near your institute?

Municipal dump yard	Not in the vicinity of the institute
Garbage heap	No Garbage heaps
Public convenience	Public convenience is available
Sewer line	Approximately 1.0 KM sewer line within campus
Stagnant water	No stagnant water
Open drainage	No
Industry – (Mention the type)	No
Bus / Railway Station	Metro/Bus connectivity
Market / Shopping complex	Available

1.2 WASTE MINIMIZATION AND RECYCLING

1. Does your institute generate any waste? If so, what are they?

Yes, following types of wastes are generated by the campus

- Biodegradable waste
- Non-biodegradable waste
- Biomedical waste
- Hazardous waste
- E-waste

2. What is the approximate amount of waste generated per day? (in Kg approx.)

*Biodegradable waste - 45 Kg
Non-biodegradable waste -3 Kg
BMW Waste - 2 Kg
Others < 2 Kg*

3. How is the waste managed in the institute? By Composting, Recycling, Reusing, Others (specify)

- *Food waste and horticulture waste is collected into pits for composting*
- *On campus, single-use plastic is prohibited.*
- *After collecting the BMW separately, the Municipal Corporation takes care of the solid garbage.*
- *The process of Anaerobic Composting is used to manage biodegradable trash.*
- *Grey water from college waste is recycled using the hydroponics method.*
- *4 Rainwater harvesting pits are there in campus for groundwater recharge*
- *E-waste collection and management through recycled – authorized vendor*

4. Do you use recycled paper in the institute?

- *Yes, college uses recycled paper in file covers.*
- *Paper with printing on one side is reused for internal correspondence.*

5. How would you spread the message of recycling to others in the community?

Following are the ways through which the college is spreading awareness about recycling

- *Waste plastic collection drives*
- *Installation of Dustbins for waste plastic collection, e-waste collection and recycling*
- *Tie-ups with authorized e-waste collection agency*
- *Awareness among the Students by Webinars, seminars, Sign Boards, Posters, etc.*

6. Can you achieve zero garbage in your institute? If yes, how?

Not yet achieved. Possible through waste management policy and planning.

- 1. Minimization of waste production*
- 2. Awareness workshops & training for students and faculty on Waste management*

1.3 GREENING THE CAMPUS

1. Is there a garden in your institute?

Yes, about 226512 Sq ft areas are developed as Gardens.

2. Do students spend time in the garden?

Yes, students spend around 2-4 Hours during winter.

3. Total number of Plants in Campus?

Plant type with approx. count

Full-grown Trees	126
Small Trees	43
Hedge Plants	971
Grass Cover sqm	226512 Sq ft

4. Is the College campus having a Horticulture Department? (If yes, give details)

Yes, Total 5 staff (maali) were deployed in the horticulture department

5. How many Tree Plantation Drives are organized by campus per annum?

9 Plantation Drives are Organized by the campus in the last year. A total of 150 saplings were planted during the drives. The survival rate is more than 70%. Below table shows the details of plantation drives.

S.No.	DATE	NAME	PLANT NAME	LOCATION
1	12/9/23	Chemistry	Nagkesar: <i>Mesua ferrea'</i>	sacred garden
2	12/10/23	Gandhi Study Circle	Reetha: <i>Sapindus mukorossi</i>	sacred garden
3	19/9/23	Microbiology	Jacaranda: <i>Jacaranda mimosifolia</i>	Auditorium backside
4	3/10/23	Economics	Kathal: <i>Artocarpus</i>	Backside of Principal's house
5	10/10/23	Physics	Chikko	
6	10/10/23	Mathematics	Mango	
7	17/10/23	Botany	Champak	Sacred garden
8	17/10/23	Izhaar	Red sandalwood	Sacred garden
9	31/10/23	History	Aadu	Sports ground

6. Is there any Plant Distribution Program for Students and Community?

Yes, Plantation distribution drives are conducted in nearby Villages under Unnat Bharat. Moreover, the college has a practice where all guests are given a planter as a gift rather than a bouquet of flowers.

8. Is there any Plant Ownership Program?

No

1.4 WATER AND WASTEWATER MANAGEMENT

1. List uses of water in your institute

Basic use of water in campus:

Drinking – 90.66 KL/month

Gardening – 189.39 Kl/month

Kitchen and Toilets – 1049.93 KL/month

Others – 67.08 KL/month

Hostel – 0.00 KL/Month

Total = 1397.06 KL/Month

2. How does your institute store water? Are there any water-saving techniques followed in your institute?

Total available water storage of the college is Terrace 231650 liters

	A	B	C	D
1	Detail of the Under Ground Water Tank			
2	S.No.	Location	Capacity in Ltr.	Qty.
3	1	New Building (Fire Use)	75000	2
4	2	New Building (Building Use)	50000	2
5	3	Teaching & Non-Teaching Staff	25000	1
6	Total			5

Detail of the Overhead Water Tank				
S.No.	Location	Capacity	Nos.	
1	Arts Block	1000	4	
		200	2	
2	Commerce Block	2000	2	
		1000	2	
		500	4	
		(Library Toilet)	500	1
		(PH Toilet)	200	1
3	Science Block	2000	1	
		1500	1	
		1000	5	
		500	1	
		(Caretaker room back side)	500	1
4	Nes Café	300	1	
		Physics Resurch.Lab.	500	1
		Physics Lab. Back side	500	1
		Sports Toilet	2000	1
			1000	3
			750	1
		Botany Garden	1000	2
5	New Building (Fire Use)	40000	1	
		New Building (Building Use)	10000	1
Total			37	

Saving Techniques

- Avoid overflow of water-controlled valves are provided in water supply system.
- Close supervision for water supply system.
- Push taps are installed for water conservation
- Water Conservation awareness for new students

3. Locate the point of entry of water and point of exit of wastewater in your institute.

Entry - Water comes from Municipal corporation (Delhi Jal Board) & Borewell
Exit- From Canteen, Toilets, bathrooms and Labs through covered drainage which is connected to municipal sewage

4. Write down ways that could reduce the amount of water used in your institute

Basic ways:

- Close the taps after usage
- Water Conservation awareness for new students
- Maintenance and monitoring of valves in supply system to avoid overflow, leakage and spillage
- Push taps are installed to save water
- Water recycling with small STP plants and then use recycled water for gardening.

1.5 ANIMAL WELFARE

1. List the animals (wild and domestic) found on the campus (dogs, cats, squirrels, birds, insects, etc.)

3-4 dogs, 2 Cats, 20 rabbits, 20+ butterfly species, 100+ Squirrels and 100+ Birds and dragonflies are found in campus

2. Does your institute have a Biodiversity Program or a KARUNA CLUB?

The Eco Club of Gargi College organized an educational trip for its members to the Aravalli Biodiversity Park, Delhi on 20th Jan 2024. In continuation with Gargi college's tradition of giving a first-hand experience to our volunteers of the majestic flora and fauna, the trip was organized and the members witnessed a plethora of the same.

1.6 CARBON FOOTPRINT - EMISSION & ABSORPTION

1. Electricity used per year - CO2 emission from electricity

(electricity used per year in kWh/1,000) x 0.84
= 6,17,425 /1,000x0.84
= 518.64 tons

2. LPG/PNG used per year - CO2 emission from LPG/PNG

(LPG/PNG used per year in KG) x 2.68
=10,733 x 2.68
=28.76 tons

3. Diesel used per year CO2 emission from HDS (Diesel)

(Diesel used per year in liters) x 2.98
= 909 x 2.98
=2.71 tons

4. Transportation per year (car) CO₂ emission from transportation (Bus and Car)

There is one car, college-owned vehicles
 $= 1 * 2 * 4 * 180 / 100 * 0.02$
 $= 0.29 \text{ Ton}$

Total CO₂ emission per year is 550.40 tons

After considering the carbon absorption capacity of the campus and solar energy export, the total carbon emission is 538.87 tons

CARBON ABSORPTION BY FLORA IN THE INSTITUTION

There are 126 full-grown trees and 43 semi-grown trees of different species, on the campus spread over 226512 sq ft.

Carbon absorption capacity of one full-grown tree 22 kg CO₂ Therefore Carbon absorption capacity of 126 full-grown trees $126 \times 22 \text{ kg CO}_2 = 2.77 \text{ tons of CO}_2$.

The carbon absorption capacity of 43 semi-grown trees is 30% of that of full-grown trees. Hence the carbon absorption $43 \times 6.8 \text{ kg of CO}_2 = 0.29 \text{ tons of CO}_2$

There are approximately Hedge Plants 971 of various species being raised in the gardens and grown in the areas where no buildings are built Carbon absorption of bush plants varies widely with their species. Certain bushes absorb very high level of CO₂ whereas some others absorb very low levels of CO₂ In the absence of a detailed scientific study, 200g of CO₂, absorption is taken per bush (in consultation with Environmental Science specialists). Based on this, the total carbon absorption of bushes is $971 \times 200 \text{ g} = 0.19 \text{ tons of CO}_2$

The lawns on the campus have buffalo grass, Mexican grass, and indigenous grass species and cover a total area of 226512 sq. ft. Carbon absorption capacity of a 10 sq. ft. area of lawn is 1 g per day Therefore, carbon absorption by lawn area $226512 \times 365 \times 0.1 \text{ g CO}_2 = 8.27 \text{ tons CO}_2 \text{ per year}$.

The total of carbon absorption capacity of the campus is 11.53 tons.

GREEN INITIATIVES BY CAMPUS

➤ Solid Waste Management

- Collect paper waste produced on campus and recycle in paper plant
- College does compost for horticulture waste
- Reduce the use of paper by supporting the digitization of attendance and internal assessment records.
- Reduce the requirement of printed books by updating the e-books and e-journals collection of the college library.
- Take initiatives to spread awareness amongst students about food wastage and ways of minimizing it
- The habit of reusing and recycling non-biodegradable products
- Organizing workshops for students on solid waste management.
- There is a ban on single-use plastic and plastic crockery in the campus.

➤ Liquid Waste Management

- Maintain leakproof water fixtures.
- Minimize the use of water by constructing more Indian-style toilets instead of Western-style toilets.
- Continued employment of a caretaker to take immediate steps to stop any water leakage through taps, pipes, tanks, toilet flush etc.
- Reuse of wastewater generated by the Reverse Osmosis (RO) system in washrooms.

➤ E-waste Management

- The college has a separate storeroom for the safe storage of electronic waste. After a certain interval of time college disposes of the E-waste to concerned agencies through the auction process.

➤ Rainwater harvesting

- College has 4 rainwater harvesting pits (6M³ capacity) for better groundwater recharge. The stored water in this tank can be used for gardening purposes

➤ Renewable Energy

- The college has installed solar PV (0.7 KW) on the rooftop of building.
- The College is using solar lights for street lights.

➤ Air Pollution Reduction

- Personal Vehicles (Students) are not allowed in the campus

➤ Green Committee Initiatives

- College celebrated World Environment Day on 5th June by organizing cooking competition, WWF workshop, bird feeders and growing saplings.
- WWF Tide Turners Plastic Challenge workshop was organized on 16th June 2023 to create awareness on plastic pollution and management of marine litter. It was an insightful workshop as it focused on plastic pollution via the adoption of various

- healthy practices such as conservation, disposal, segregation
- AVNI: The Eco Club of Gargi College came up with an innovative and insightful online session “Serpents Unveiled: Understanding the World of Snakes” on 23rd Aug 2023 to make everyone aware of them and enhance knowledge regarding these extraordinary creatures. The session was open to every college across India.
 - Books donation drive was organized on 12-13 Sept 2023. The event basically dealt with two things. Firstly, one could donate any number of stationery and books they wanted and on the other hand, if they needed any of the books which were donated, they could take that as well.
 - E-waste collection drive was organised on 30th Sept 2023.
 - The club organized a workshop on management of plastic waste in collaboration with CGAPP: Centre for Global Affairs and Public Policy, and IYCN: Indian Youth Climate Network on 27th Oct 2023. It was a workshop wherein the participants were also introduced to different kinds of plastics and their different impacts. They were given proper knowledge about the management of different kinds of plastics as well.
 - The activity, named as Eco Bricking: Pack Your Plastic, encouraged students to make eco bricks using non-recyclable plastics was organized on 21st Nov 2023.
 - In order to tackle the stress building among students during the exam season, The Club organized a Nature-Walk Challenge:10,000 steps in 90 minutes on 12th Dec 2023. The participants were firstly asked to install Google Fit Apps on their phones in order to record their steps. After completion, they had to submit a screenshot of the steps completed.
 - Reverie - Recycling and upcycling and used posters, newspapers, leftover stationery was organized on 13-15 Feb 2024.
 - The club organized a Tree-Hugging activity, where the volunteers were asked to give heartwarming hugs to these beautiful green species on 14th Feb 2024. Second activity was a Love letter writing, where the members were urged to express their love for nature in words through a Padlet post.
 - AVNI participated in the plastic waste management project under the Physics Department, Gargi College and IPCA. The members of the club actively submitted their plastic waste every week on Tuesdays (5, 12, 19 March 2024)
 - Workshop on ‘Know the Bee’ in association with The golden Hive Foundation at Sunder Nursery Delhi on 7th Mar 2024.
 - NCC carried out a cleanliness drive: ‘Swatchhta Hi Sewa’ on 20th Feb 2024.

RECOMMENDATIONS

- Environmental parameters shall be included in the purchase policy to achieve a cradle-to-grave approach for sustainability.
- College should start drip irrigation to save water in campus
- The flow rate of taps should be checked, it should not be more than 2.5 liters/minute. Arrange training programs on environmental management systems and nature conservation for schools and local people.
- More Messages should be displayed at various locations to Aware People of Energy Savings
- Water Meters should be installed at every building of the institute for monitoring of water consumption per capita.
- Borewell permission should be taken from an authorized government department
- Car-pooling practices can be adopted by the campus to minimize air pollution. Increase in the display of environment-conscious posters/paintings/slogans for spreading awareness amongst students.
- Green building guidelines for future expansion projects of the campus.

CONCLUSION

This audit involves considerable team discussions and meetings with key staff members on a variety of environmental-related topics. The eco club of Gargi College promotes conservation of resources.

Overall, 75% of Gargi College is for landscaping. The college makes a significant effort to act in an environmentally responsible manner and takes into account the environmental effects of the majority of its activities. The recommendations in this report suggest some more ways in which the college can work to improve its practices and develop into a more sustainable institution.

It's important to begin a few things, such as initiating drip irrigation, and increasing plantation drives. Additionally, we strongly advise signing an MOU with third-party authorized vendors for waste management such as plastic, paper, metal, C&D, etc.

REFERENCE

- The Environment [Protection] Act – 1986 (Amended 1991) & Rules-1986 (Amended 2010)
- The Petroleum Act: 1934 – The Petroleum Rules: 2002
- The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle Rules:1989 (Amended in 2005)
- Energy Conservation Act 2010.
- The Water [Prevention & Control Of Pollution] Act – 1974 (Amended 1988) & the Water (Prevention & Control of Pollution) Rules – 1975
- The Air [Prevention & Control Of Pollution] Act – 1981 (Amended 1987) The Air (Prevention & Control of Pollution) Rules – 1982
- The Gas Cylinders Rules – 2016 (Replaces the Gas Cylinder Rules – 1981)
- E-waste management rules 2016
- Electrical Act 2003 (Amended 2001) / Rules 1956 (Amended 2006)
- The Hazardous Waste (Management and Handling and Trans-boundary Movement) Rules, 2008 (Amended 2016)
- The Noise Pollution Regulation & Control rules, 2000 (Amended 2010)
- The Batteries (Management and Handling) rules, 2001 (Amended 2010)
- Relevant Indian Standard Code practices



ANNEXURE – PHOTOGRAPHS OF ENVIRONMENT CONSCIOUSNESS



Well Maintained Campus



Well Ventilated Building



Lush Green Campus



Sports Ground



Paving Stone Installed in Campus



Color Coded Dustbins



Ornamental Plants in Campus



Navagraha Vatika



Classrooms as per NBC Guidelines with more Than 40% Window Ratio



Spacious and Well Equiped Labs



Computer Lab



Spacious Auditorium



**World Environment Day
 Celebration**



**Bird Feeder - Bio Diversity
 Initiative**



**WWF Tide Turners
 Plastic Challenge
 Workshop**



Books Donation Drive



Eco Club Activity



Nature walk- Bio Diversity Initiative



Plastic Waste Collection drive



Valentine's With Nature - Awareness Drive



Composting



College Nursery



E-waste Management Workshop Certificate



E-Waste Collection Drive

***** END OF THE REPORT *****