Green Audit Report 2023-24

ADITI MAHAVIDYLAYA

UNIVERSITY OF DELHI

Bawana, Delhi-110039

GREEN AUDIT – 2023-24

CERTIFICATE

This certifies that

Aditi Mahavidyalaya, University of Delhi

has successfully completed Green Audit conducted by **M/s Environment Pollution Analysis Lab, Bhiwadi, Alwar (NABL, MOEF& CC, ISO 9001, ISO 14001 & OHSAS 18001 Certified Laboratory) in October 2023** to access the green initiative implemented in college campus like Waste Management, Water Conservation, Rainwater Harvesting, Carbon Footprint, Biodiversity Conservation and Energy Conservation. It is also certify that college is implementing all necessary actions desired for environmental sustainability.

Date: 20/10/2023

Dr. Sudeep Shukla

Principal Scientist & Lead Auditor

Environment Pollution Analysis Lab

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ACKNOWLEDGEMENT

Environmental Pollution Analysis Lab (EPAl), Bhiwadi, Rajasthan conveys sincere gratitude to management of ***Aditi Mahavidyalaya (Delhi University, Delhi)*** for assigning this important work of ***Green Audit (Environmental Audit)***. We appreciate the cooperation of our team for the completion of study. Our special thanks to Principal, Aditi Mahavidyalaya **Prof. (Dr.) Mamta Sharma** for her support and guidance. Team EPAL is thankful to the governing body and staff and specially the members of Eco club for their efforts. We are thankful to the faculty coordinators for the green audit exercise, without their support, this audit would not be able to be completed.

We are thankful to the other Teaching Staff of Mahavidyalaya for giving us necessary inputs to carry out this very vital exercise of Green Audit. We are also thankful to other non-teaching staff members who were actively involved while collecting the data and conducting field measurements.

For

Environment Pollution Analysis Labs

(EPAL), Bhiwadi Rajasthan

Date: 20/10/2023

Place: Delhi NCR

DISCLAIMER

Environmental Pollution Analysis Lab Green Audit Team, Bhiwadi, Rajasthan has prepared this report for Aditi Mahavidyalaya (Delhi University, Delhi) based on input data submitted by the representatives of university complemented with the best judgment capacity of the expert team. While all reasonable 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 at by best estimates and no representation, warranty or undertaking, express or implied, is made and no responsibility is accepted by the 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.

Environmental Pollution Analysis Lab Green Audit Team, Bhiwadi, Rajasthan and its staff shall keep confidential all information relating to your organization and shall not disclose any such information to any third party, except that in the public domain or required by law or relevant accreditation bodies.

For
Environment Pollution Analysis Labs
(EPAL), Bhiwadi Rajasthan

Date: 20/10/2023
Place: Delhi NCR

CONTEXT FOR GREEN AUDIT

The National Assessment and Accreditation Council, New Delhi (NAAC) has recommended that from the academic year 2016–17 onwards that all Higher Educational Institutions should submit an annual Green Audit Report. 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 Mahavidyalaya Management decided to conduct an external Green Evaluation by an independent agency having competent auditors. The audit process was started in October, 2021.

Aims and objectives of Environmental Audit in Academic Institutes:
To nurture environmentally friendly management in academic Mahavidyalaya/institutions following aims and objectives were formulated:

- To assess environmental performance and the effectiveness of the measures to achieve the defined objectives and targets.
- To identify the different pressures on organizations to improve their environmental performance.
- To recognize the initiative taken by the Organization towards the environment.
- To secure the environment and cut down the threats posed to human health.
- To provide baseline information to enable organizations to evaluate and manage environmental change, threat and risk.
- To recognize, diagnose and resolve environmental problems.
- To recognize the effects of an organization on the environment and vice versa.
- To identify and control the impact of activities of organizations on the environment.
- To suggest the best protocols for sustainable development organization and environment.
- To ensure that the natural resources are utilized properly as per national policy of environment.
- To establish the parameters for maintaining health and welfare of the community of the organization.
- To set the procedure for disposal of all types of harmful wastes.
- To reduce energy consumption.
- To give preference to the most energy efficient and environmentally sound appliances.
- To minimize the consumption of water and monitor its quality.
- To identify the risks of hazards and implement the policies for safety of stakeholders.
- To facilitate the stakeholders with different aspects of disaster management.
- To train all stakeholders of the organization and empower them to contribute and participate in the environmental protection.

- To make sure that rules and regulations are taken care of to avoid interruptions in the environment.

To achieve the mentioned objectives following stages are implemented. It includes three stages viz. pre-audit stage, audit stage and post-audit stage. Each of these stages comprises a number of clearly defined objectives, with each objective to be achieved through specific actions and these actions yielding results in the form of outputs at the end of each stage. Keeping the importance of environmental audit in view, the present study focuses on reviewing the process of environment audit and the measures to be taken by academic institutes to contribute towards the environment.

Executive Summary

Aditi Mahavidyalaya, Near Bawana, New Delhi, is a constituent college of University of Delhi with a core mission to achieve academic excellence and achievements focusing on girl's education. Their motto literally means "The real ornaments are Knowledge, Modesty and Sense of duty". They are conscious of their fundamental duties as envisaged in the constitution of India and try to incorporate best practices at institutional levels to minimize the impact on the environment and ensure resilience and sustainability. The Mahavidyalaya is committed to fulfill the legitimate requirements of the present generation without compromising the ability of future generations to meet their own needs in line with sustainable development goals (SDGs). The Mahavidyalaya strives to reconcile institutional activities with environmental conservation for a safe and secure future in the era of climate change. ***Aditi Mahavidyalaya*** is committed to practice and maintain high environmental standards in all of its activities, including teaching, research, and community involvement. The Mahavidyalaya is more ecologically conscious and has earned a reputation as a responsible institution. The biodiversity with lush green flora and fauna with equally maintained herbal and plant gardens is a testament to their credentials for maintaining high environmental standards.

The ***Environmental and Energy Policies of the Aditi Mahavidyalaya, Bawana, New Delhi*** is made to provide an overview of the Mahavidyalaya's vision to minimize the environmental impacts of its activities and operation and sustainable management of the available resources. The policy statement highlights how the Mahavidyalaya would pursue environmental best practices and inspire the sustainable use of resources at the community level within and outside Mahavidyalaya premises. It lays out the concepts; delineate priority areas, and methods for the Mahavidyalaya's environmental plans' implementation, management, and evaluation. Its goal is to reduce energy and raw materials consumption that could jeopardize the sustainability measures being taken at Mahavidyalaya level. This policy will communicate the Mahavidyalaya administration's goals and objectives to Mahavidyalaya employees, students, and staff, as well as aid in the creation of a better environment for future generations.

The policy document of the **Aditi Mahavidyalaya, Bawana, New Delhi** will aid in the integration of efficiency and environmental consciousness into daily activities, allowing them to better understand their duties and dedication to natural resource conservation and utilization. Aditi Mahavidyalaya had tried to address the issue of sustainability as a part of curricular and extracurricular activities. The Mahavidyalaya welcomes suggestions and promotes exchange of ideas to make a more risk-averse, resilient and a sustainable society. Aditi Mahavidyalaya also takes the lead in developing new frameworks for understanding the paradigm of sustainable development. They are excited to learn about new approaches that could help put the sustainability drive into action. The Mahavidyalaya will continue to be an attractive institution for study, research, sponsorship, and collaboration with the government as a result of the legislation and execution of their innovative policy, which will serve as a model for other institutions.

Aditi Mahavidyalaya is passionate about the environment and has implemented various sustainable environmental initiatives in its campus. Various committees have been constituted to carry out and oversee these tasks. On the academic front Mahavidyalaya has an independent department i.e. Department of Environmental Sciences for teaching the compulsory course of environmental sciences at graduate level. Apart from that, the Mahavidyalaya have also duly constituted important committee to assess, manage and implement the Mahavidyalaya policing in line with sustainable practices for example they have an active Eco-club, garden committee, Plant incubation center, solid waste management committee, and other clubs/committees actively working at institutional level. Following are the initiatives that have been taken at the institution levels for promoting awareness among students of all the disciplines about the problems of climate change through academic as well as non-academic outreach activities. The Mahavidyalaya involves different stake-holders for their environmental activities for a broader outreach.

Aditi Mahavidyalaya had pursued the following objectives:

1) Establish sustainable practices on campus and among stakeholders and to ensure the long-term viability and environmental protection of the organization.

2) The Mahavidyalaya will attempt to train its personnel and develop knowledge of environmental issues and the environmental effects of its activities among academic staff, students, and other users.
3) Use the semester-long course-curriculum to promote education for the multidisciplinary nature of environment and sustainable development.
4) The Mahavidyalaya's respective committees will formally monitor the work done on sustainability projects/initiatives, measure their progress, and report on their accomplishments.
5) The Mahavidyalaya/university will continue to comply with environmental legislation in order to reduce its environmental effect by pursuing a number of goals, including plantation, water management, energy conservation, solid waste management, air quality management, and carbon footprint reduction.
6) Develop and maintain an ISO: 14001 environmental management systems as well as an ISO: 50001 energy management system.
7) To make the Institute a role model in the area of energy conservation, they train teachers, non-teaching staff, students, and housekeeping staff.
8) Actively collaborate with local groups in the areas of environment, energy efficiency, and sustainable development by engaging in communication with government agencies, municipal corporations, and affiliating Mahavidyalaya.
9) Promote environmental assessment initiatives to raise awareness about keeping the campus clean and green.
10) College is taking initiatives that are friendly (clean fuel, renewable resources etc.) and reduction in resource consumption.
11) Financial savings via reducing resource use and practical experience which enriches the curriculum. Also improving/updating the institution's profile is the prime objective of the Mahavidyalaya.
12) Encourage people from all walks of life to be aware of the importance of energy conservation to review the policy at least once a year. Instilling in young people an environmental ethic and value system.

13) Encourages faculty members to become Certified Energy Auditors and Managers to establish relationships with businesses and conduct a comprehensive energy audit. Finally, Conduct audits to identify areas for improvement and make recommendations.
14) Teach sustainable development to students from all disciplines and to promote sustainable development research and knowledge dissemination,
15) Green campuses and support local sustainability efforts, and to engage and share information with worldwide networks and to implement car, bon-neutral policies to increase environmental promotional events on campus to raise awareness.
16) Establishment of an environment/green committee to oversee eco-friendly projects on campus and in the surrounding area.
17) Introduce innovative technologies to make efficient use of energy resources and use of renewable energy sources and Optimize energy usage and costs.
18) Reduce, Reuse, and Recycle are the three R's to conduct internal energy audits on a regular basis to find energy-saving options.
19) The Mahavidyalaya has carried out the institution's energy audit and management cell to manage regular monitoring and follow-up procedures to ensure effective implementation at department levels.

INTRODUCTION

Aditi Mahavidyalaya Delhi University, located at Bawana, Delhi, had a lush green campus enveloped with serene beauty and environment. The Mahavidyalaya has come a long way since its inception in 1994 and since two decades has been a pioneering institution bringing higher education to women students. Aditi Mahavidhyalaya is now seen as a destination where students can embrace their future with hope and confidence. As a constituent Mahavidyalaya of University of Delhi, Aditi Mahavidyalaya strives to cater to higher education to young women with a vision of a new, fulfilling future for all. A nourishing environment supported by a combination of competent infrastructure and a dedicated teaching faculty helps students to achieve the highest accolades in academics. Aditi Mahavidyalaya believes in bringing diversity in college education and hence recognizes and fosters the capacities and capabilities of the students coming from different socio-cultural and educational milieu. Aditi Mahavidyalaya plays a dynamic role in bringing in women empowerment to the marginalized women population of Delhi rural outskirts. Aditi Mahavidyalaya offers well designed honors and professional courses to make the students confident, skillful and self-reliant. Apart from these courses, students are motivated to participate in various co-curricular activities for their personality enhancement. The Mahavidyalaya is proud of the academic commitment of its faculty members and students, who have several achievements to their credit and have made valuable contributions to the field of academia. The campus is fully “No-Smoking zone”. Ragging is completely prohibited and punishable. All necessary measures are taken to ensure the safety of the students. Police picket with a PCR van is provided for student’s safety. In addition, sensitization workshops and self defense training is rendered to make the students empowered. Aditi Mahavidyalaya is committed to academic excellence and values humanism. We empower our students for self governance, participation and encourage overall personality development. Energy and vitality for college activities comes from a collective sense of purpose, comradeship and social solidarity. It is a matter of great satisfaction and pride that Aditi Mahavidyalaya has grown not only in size but has also catered to the needs of the society for higher education and high social values. Our students have carved a place for themselves in society.

GREEN AUDIT/ENVIRONMENTAL AUDIT -QUESTIONNAIRE CONSIDERED DURING THE AUDIT TRAIL AND FOCUSSED ON THE AREAS OF ECOSYSTEM APPROACHES/ENVIRONMENTAL FEASIBILITY FOR GREEN AUDITING TO BE FOLLOWED/PRACTICED BY PARTICIPATING INSTITUTIONS AS BELOW:

I. **I- WASTE MINIMIZATION AND RECYCLING;**
II. **II- BIODIVERSITY AND GREENING THE CAMPUS;**
III. **III- ENERGY USE & ITS CONSERVATION;**
IV. **IV- WATER USE & ITS CONSERVATION;**
V. **V- CARBON FOOTPRINT;**
VI. **VI- CLEAN AIR (CAMPUS DESIRABLE AMBIENT AIR);**
VII. **VII- ENVIRONMENTAL LEGISLATION;**
VIII. **VIII- SOCIAL WELFARE & COMMUNITY OUTREACH.**

GREEN AUDIT/ENVIRONMENTAL AUDIT:

India viewed the reference to socio-economic development along with changing climate, differentiated risks and limits to adaptation as related to risk management and climate policy, and recommended clarifying the climate science-specific context in this region. Preferring not to limit the focus to climate policy, India suggested also including consideration of infrastructure (e.g. Construction), domestic waste, water, transport, energy, poverty eradication and agricultural policies. Now India focussed on CO_2 emissions by sources and removals by sinks, non-CO2 forcers, including short lived climate forcers (SLCFs). India further stressed cumulative emissions and proposed an additional bullet on the total carbon budget for precise temperature targets and the remaining carbon budget. India also supported focusing on historical emissions and the remaining carbon budget. Finally, India needs "harmonizing scientific, technological, procedural, and normative aspects that currently differ between the framework (UNFCCC) and Intergovernmental panel (IPCC)" and practically both to provide adequate climate finance and implement significant emission reductions. The following sectors or areas of Environmental-Green practices are being followed by ADITI Mahavidyalaya is as below:

I- WASTE MINIMIZATION AND RECYCLING

The following Environmental-Green practices are being followed by ADITI Mahavidyalaya is as below:

<table>
<tr><td>1.</td><td>Does your Mahavidyalaya generate any waste? If so, what are they?</td><td colspan="4">Yes, Solid waste, Canteen waste, paper, plastic, Horticulture Waste etc. However, managed through MSW Rules, 2016 with the help of Municipal Corporations.

(ANNEXURE-I of Annexure Report)</td></tr>
<tr><td rowspan="2">2.</td><td rowspan="2">What is the approximate amount of waste generated per day? (in Kilograms/month/year) (approx.)
66 kg per day</td><td>Biodegradable Per Day

(When labs are functional)</td><td>Non-Biodegradable</td><td>Hazardous</td><td>Electronics waste, Chemical discards & Others (MEDICAL WASTE)</td></tr>
<tr><td>per year (1-2 kg a day)</td><td>Not Quantified, however, managed through authorized vendors. 500 gram-1 kg a day</td><td>Not Quantified, however, managed through authorized vendors. 0.05-0.1 litre a day</td><td>Not Quantified, however, managed through authorized vendors. 500 Gram A DAY</td></tr>
<tr><td>3.</td><td>How the waste generated in the Mahavidyalaya is managed?</td><td colspan="4">1. Composting
2. Recycling
3. Reusing
4. Segregation
5. Incineration.
(ANNEXURE-I of Annexure Report)</td></tr>
<tr><td>4.</td><td>Do you use recycled paper in Mahavidyalaya?</td><td colspan="4">Yes, the Mahavidyalaya has a paper recycling machine for the recycling purpose.

(ANNEXURE-I of Annexure Report)</td></tr>
</table>

5.	Do you use reused paper in Mahavidyalaya?	Yes, recycle papers are used for various institutional activities such as notifications, Official communication, study materials etc. (ANNEXURE-I of Annexure Report)
6.	How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, please specify.	Done in locality for awareness of resource crunches. (ANNEXURE-I of the Annexure report)
7.	Can you achieve zero garbage in your institute? If yes, how?	Possible through waste management plan. (ANNEXURE-I of the Annexure report)
8.	How do you manage Hazardous and E-waste?	Possible through Authorized Vendors (ANNEXURE-I of the Annexure report)
9.	Is there any awareness programme on waste minimization being carried out by your Mahavidyalaya?	Yes, committees have been formed on each category of waste and Mahavidyalaya periodically carried out awareness programmes. (ANNEXURE-I of the Annexure report)
10.	Are your Mahavidyalaya staff and students aware about MSW, E-Waste, Hazardous Waste Rules. 2016, 2011, 1989, respectively?	Yes, the Mahavidyalaya staff and students are well aware about these Rules. (ANNEXURE-I of the Annexure report)

The total strength of students, teachers and non-teaching staff is 1787, 90 and 53 respectively and it is a women's Mahavidyalaya. Mahavidyalaya administration managed some of the waste through waste treatment systems such as composting pit and composting machines. Biology lab generate fewer toxic chemicals during biology experiments. Chemicals or stained water (as waste) which is released during practical's is not directly drained into the drain, in fact the waste water and waste is given to an agency that takes care of the same. In fact, the Mahavidyalaya is managing this kind of waste to start a waste segregation and recycling campaign. The Mahavidyalaya administration/group of people/staff by sensitizing the community to try to adopt waste hierarchy by giving emphasis for prevention, reduction, reuse, recycling, recovery and disposal, with prevention being the most preferred option and the least disposal at the landfill site. The awareness through posters for waste sensitization, lectures and orientation of students for sensitization of waste programme for minimizing the disposable utensils in the canteen/college premises through poster and practices, however, Mahavidyalaya is trying to

achieve zero garbage by following waste hierarchy of prevention, reduction, reuse, recycling, recovery and disposal.

The Mahavidyalaya is striving to limit waste creation in all possible ways, including reducing the procurement of new materials, reusing and recycling existing materials, and, if this is not possible, disposing of garbage in a manner that has the least environmental impact. The usage of plastic is prohibited on campus. The Waste containers/Dustbins are positioned where they are needed. The solid waste from canteens, classrooms, washrooms, offices, laboratory, garden are being disposed of and Hazardous and E-waste has been handled, transported, and disposed of by the authorized vendors. Further the hazardous chemicals and toxic hygienic compounds will be used as little as possible at the Mahavidyalaya as the final stage in solid waste reduction and a way to turn waste into a resource, the Mahavidyalaya had committed to a comprehensive recycling programme. The Mahavidyalaya is engaged in the 3Rs (Reduce, Reuse and Recycle) of environmental friendliness in a systematic way. Nevertheless, the Mahavidyalaya staff is collecting and recycling paper waste generated in the campus in collaboration with scrap merchants. Furthermore, the Mahavidyalaya is developing a technology-centric educational and administrative strategy to reduce solid waste.

Finally, the Mahavidyalaya is updating the library's E-books and E-Journals collection to reduce the need for printed books. Encourage students and teachers to utilize email to submit assignments. Also, take steps to raise student knowledge about food waste and strategies for reducing it. The Mahavidyalaya is minimizing the usage of packaged foods, as well as promoting the habit of reusing and recycling non-biodegradable items. The Mahavidyalaya is organizing solid waste management workshops for students. Taking into consideration E-WASTE MANAGEMENT, the Mahavidyalaya assures that its technological use and e-waste output have no negative influence on the environment. The Mahavidyalaya intends to work toward the following goals:

1) Encouraging e-waste management initiatives at the departmental and societal levels;
2) Working with e-waste recycling firms to recycle electronic waste;
3) More arrangements for the disposal of institutional e-waste;

4) Awareness among students about e-waste reduction and environmentally responsible e-waste disposal techniques;

Additional information on WASTE MINIMIZATION AND RECYCLING are attached at *Annexure-I* of Annexure report.

II BIODIVERSITY AND GREENING THE CAMPUS

The following Environmental-Green practices are being followed by ADITI Mahavidyalaya is as below:

1.	Are there any Biodiversity or Greening activities in your Mahavidyalaya?	Mahavidyalaya is actively participating in Greening and Biodiversity Conservations. (ANNEXURE-II of ANNEXURE REPORT)
2.	Is there any garden in your Mahavidyalaya?	Yes, three gardens are developed having a total area about 9173 sq. ft. (ANNEXURE-II of ANNEXURE REPORT)
3.	Do the students/college participate in the campus greening and biodiversity conservations?	Yes, the students/college practices participatory biodiversity conservation programmes and a biodiversity sign board has been placed on the front entry gate of the Mahavidyalaya. (ANNEXURE-II of ANNEXURE REPORT)
4.	Total number of Plants (Herb, Shrubs, Trees, Medicinal) in the Campus.	Trees -100 approx , Shrubs-125approx , Herb's 100-approx . Plants that can grow are Ashoka tree, Avla, Mango, Arjun tree and perennial plants plants on the campus. (ANNEXURE-II of ANNEXURE REPORT)
5.	Name of some important plant's variety exists in your Mahavidyalaya campus. (Trees, vegetables, herbs, etc.)	Ashoka, Elaerpcarcus Spp. Taro, Turmeric, Jatropha Spider plant, Ficus Religeosa, Boganvellia, Alovera, Sandalwood, Opuntia, Pittosporum, Sarita, Basil, Papaya Sadabahar Elaeocarpus ganitrus and many more as per geographical regime. (ANNEXURE-II of ANNEXURE REPORT)
6.	Is the Mahavidyalaya/University campus have any Horticulture Department/Garden committee/Eco-club?	Mahavidyalaya has a functional garden committee and participates in the Eco-club programme of Govt. of NCT Delhi. (ANNEXURE-II of ANNEXURE REPORT)
7.	Number of Tree Plantation drives organized by Mahavidyalaya per annum. (If Any)	Yes, Plantation drives are regularly organized and trees and shrubs planted in this financial year. (ANNEXURE-II of ANNEXURE REPORT)
8.	Is there any medicinal garden in your Mahavidyalaya?	Mahavidyalaya has a medicinal garden with an area of 196 sq. ft. (ANNEXURE-II of ANNEXURE REPORT)

9.	Whether Mahavidyalaya is using compost or bio-fertilizer as a part of green farming?	Yes, no pesticides are being used in the Mahavidyalaya garden. Compost is being generated by a compost machine and a vermin-compost plant is used for the gardening purpose. (ANNEXURE-II of ANNEXURE REPORT)
10.	Does Mahavidyalaya organize a community awareness programme/Outreach workshops/Online programme for biodiversity conservation?	Yes, Eco-club of **Aditi Mahavidyalaya** is engaged with the organization of tree plantation programme, Painting Competition, Rallies, Street Play, Online seminar, Lecture series, and online conferences on Biodiversity conservation. (ANNEXURE-II of ANNEXURE REPORT)

Aditi Mahavidyalaya has a garden with an approximate area of 2796 m i.e. 9173 sq. ft. It is evident that the plants in the garden, with approx. numbers of each species have been counted Trees -100 approx , Shrubs-100 approx , Herb's 100- approx. Ashoka tree, Avla, Mango, Arjun tree and perennial trees were planted by the students who have also prepared the medicinal garden with an area of 196 sq. ft. More than 100 plant species can be found on the campus with proper labeling of their botanical and common names. Many fruit trees like Jamun, mango and Mulberry are also planted in the college campus. The area under tree cover is 11616, sq feet. Total plantations on the campus cover an area of 8,712 square feet. There are also composting pits whose fertilizer is used for the college gardens.

Nature awareness programmes were conducted in the college during the year (2023-24) along with plantation drives on occasions of Independence Day, Earth Day, Ozone Day, Environment Day led by Respected Principal Madam and the invited Chief Guests for the day. ***Aditi Mahavidyalaya's*** nature club known as "Eco Club" celebrate Ozone day, Earth day, Biodiversity throughout the year to increase environmental awareness.

The campus trees are habitat for several bird species. The bird nests along with water have been placed in many locations to increase the number of bird visits.

Green Audit concluded that the Aditi Mahavidyalaya Delhi University has taken all the eco-friendly measures for making the campus green and environmentally sound. All the students, staff, faculty and administration are working to achieve environmental sustainability. The Mahavidyalaya has an Eco Club. ***Eco Club of Aditi Mahavidyalaya, University of Delhi*** which is a multidimensional, highly active society, dedicated to making the college campus less

wasteful, raising awareness for eco-friendly causes and promoting environmentally friendly habits like reducing, reusing and recycling. It runs in coordination with the department of environment, Govt. of NCT of Delhi. The Eco Club plays an important role in creating environmental awareness amongst the future generation. Eco club is a group of teachers and students dedicated to making their campus less wasteful, raising awareness for eco-friendly causes and promoting environmentally friendly habits like reducing, reusing and recycling. The main objectives of eco club includes:

1) Motivate the students to keep their surroundings green and clean by undertaking plantation of trees.
2) Sensitize the students to minimize the use of plastic bags, not to throw them in public places as they choke drains and sewers, cause water logging and provide breeding ground for mosquitoes. Eco Club is also organizing tree plantation programmes, awareness programmes such as quiz, essay, painting competition, rallies etc. regarding various environmental issues.
3) Build an attitude to help individuals and social groups acquire a set of values and feelings of concern for the environment and the motivation for actively participating in environmental implementation and protection.
4) Teach skills to students to help individuals to identify and solve environmental problems.

Additional information on BIODIVERSITY AND GREENING THE CAMPUS are attached at *Annexure-II* of Annexure report.

III ENERGY USE & ITS CONSERVATION

The following Environmental-Green practices* are being followed by ADITI Mahavidyalaya is as below:

1.	How much energy is used by the Mahavidyalaya in KW per month	Energy used by the Mahavidyalaya was **10460 KW** per month. (ANNEXURE-III of ANNEXURE REPORT)
2.	List ten ways that you use energy in your Mahavidyalaya. (Electricity, LPG pipeline, firewood, others).	Electricity saves by use of CFL/LED bulbs for illumination, LPG saves by use of Pressure cookers for cooking food. Alternate source of energy i.e. Solar Heater Installed. (ANNEXURE-III of ANNEXURE REPORT)
3.	Are there any energy saving methods employed in your Mahavidyalaya? If yes, please specify. If no, suggest some methods.	Yes,Messages are displayed at various locations to inform students and staff about energy savings. Use of natural lights and natural ventilation are promoted. (ANNEXURE-III of ANNEXURE REPORT)
4.	How many CFL/LED bulbs has your Mahavidyalaya installed? Mention energy used by LED bulbs as the Mahavidyalaya resumes after lockdown?	Total Conventional bulbs are replaced by LED/CFL Lights. (ANNEXURE-III of ANNEXURE REPORT)
5.	Are any alternative energy sources employed / installed in your Mahavidyalaya? (Photovoltaic cells for solar energy, windmill, energy efficient stoves, etc.,) Please Specify.	Yes, photovoltaic cells for solar energy are being used as a renewable source of energy through a solar plant (**9853.75KW/per month**) already commissioned by Mahavidyalaya. (ANNEXURE-III of ANNEXURE REPORT)
6.	Do you run "switch off" mock-drills at Mahavidyalaya?	Yes, the Mahavidyalaya regularly organizes mock drills for the switch off campaign. (ANNEXURE-III of ANNEXURE REPORT)
7.	How much energy (per month) is being saved by the use of efficient light source replacement by the Aditi Mahavidyalaya?	Yes, 20 **KWH** (ANNEXURE-III of ANNEXURE REPORT)

8.	Does the classroom have sufficient solar light illumination? Provide details.	Yes, National Standard for interior illumination for educational institute is 200/300/500 for lecture theatre, the Aditi Mahavidyalaya complying as per the International / Indian standard IS-3646 (Part-I), 1992 (Range of illumination in lux should be 300/500/750 lux).
9.	Does the Mahavidyalaya organize any workshops/ seminars/ campaigns to educate students and staff?	Yes, the Mahavidyalaya is involved in these activities. (ANNEXURE-III of ANNEXURE REPORT)
10.	Does your machinery (TV, AC, Computer, printers, etc.) run on standby modes most of the time?	Yes, in practice. (ANNEXURE-III of ANNEXURE REPORT)

*as per previous report

The ***Aditi Mahavidyalaya*** uses energy for electricity (Lights, Fans, ACs, Computers, Security Camera, Microwave, Refrigerators), LPG Cylinder (in laboratory), Petrol (Generator) and electric stove, kettle, microwave, LPG, firewood, Petrol, diesel and others. The energy saving methods employed in the Mahavidyalaya such as energy saving drives using posters for saving energies displayed, Students are instructed to switch off lights and fans before leaving the classrooms, use of solar panels are installed in Mahavidyalaya. The energy generated from panels is 9853.75 KW/Month. All the air conditioners installed are of energy stars with power savings. The refrigerators and most of the equipment in the laboratories also have star ratings with less energy consumption. The campus has been following the GRIHA norms with its eco-friendly and energy efficient measures. The ***Aditi Mahavidyalaya*** has given much importance to the use of renewable energy sources. The solar photovoltaic units supplying energy for street lights and solar water heaters have been installed in the campus. The awareness on energy conservation was regularly conveyed to staff and students to make them more responsible. Small activities like switching off lights, fans and computers not in use were completely practiced by all the members of Mahavidyalaya. The temperature of the air conditioners in the campus was set at 24°C during peak summer to reduce energy consumption without affecting the comfort. The day scholar students and staff are mostly relying on the public transport services i.e. Metro and buses for their transportation which saves the fuel consumption and also reduces the carbon emissions from private vehicles. This indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliances, and vehicles. Energy use is clearly an important aspect

of campus sustainability and thus requires no explanation for its inclusion in the assessment. An old incandescent bulb uses approximately 60W to 100W while an energy efficient light emitting diode (LED) uses only less than 10 W. Energy auditing deals with the conservation and methods to reduce its consumption related to environmental degradation. It is therefore essential that any environmentally responsible Mahavidyalaya examine its energy use practices.

Additional information with evidential proof on ENERGY USE & ITS CONSERVATION are attached at Annexure-III of Annexure report.

IV WATER USE & ITS CONSERVATION

The following Environmental-Green practices are being followed by ADITI Mahavidyalaya is as below:

1.	What are the sources of water in the Aditi Mahavidyalaya?	1) Supply from Delhi Jal Board; 2) Groundwater; 3) Rainwater Harvest. (ANNEXURE-IV of ANNEXURE REPORT)
2	List uses of water in your Mahavidyalaya?	1. Drinking 2. Gardening 3. Kitchen and Toilets 4. Washroom and Construction. (ANNEXURE-III of ANNEXURE REPORT)
3	Daily quantity of water use per day?	In working days= 3936 litres per day (ANNEXURE-IV of ANNEXURE REPORT)
4	How does your Mahavidyalaya store water? Are there any water saving techniques followed in your Mahavidyalaya?	Overhead water tanks and underground water tanks installed for storage of water. (ANNEXURE-IV of ANNEXURE REPORT)
5	Are there signs reminding students/staff to turn off water taps?	Yes

6	Write down ways that could reduce the amount of water used in your Mahavidyalaya and is being practiced.	Basic Four ways: 1. Close the taps after usage; 2. Maintenance and monitoring of valves in supply system to avoid overflow, 3. Maintain leakage and spillage; 4. Water Conservation awareness for students. (ANNEXURE-IV of ANNEXURE REPORT)
7	Water use from the Mahavidyalaya water meter for one year? And annual water charges paid for water uses?	984 units (Approx.), per annum. Rs. 161318 per year (ANNEXURE-IV of ANNEXURE REPORT)
8	Does your Mahavidyalaya harvest rainwater?	Yes, modern rainwater harvesting systems are available. One rain water harvesting unit of about 20,000 lit water capacity has been installed in Mahavidyalaya premises. (ANNEXURE-IV of ANNEXURE REPORT)
9	Is there any water recycling system or treatment of water?	No

10	Does Mahavidyalaya organize workshops/ conferences/training/seminars for the students and Mahavidyalaya staff for water management and conservation?	Yes, Mahavidyalaya administration and eco-club organizes various conferences and seminars for water conservation and management. (ANNEXURE-IV of ANNEXURE REPORT)

The Aditi Mahavidyalaya of Delhi University, uses the water in various ways such as drinking, gardening, kitchen and Toilets, washroom and construction purposes. The Aditi Mahavidyalaya uses 18,000 lit. per day water as basic use. However, total use of water on working days is 4000 to 5000 litres per day. The Mahavidyalaya is practicing reduction and minimization of water use. Furthermore, the Mahavidyalaya is also practicing in prevention and leakages of water. There are four basic ways adopted by the Mahavidyalaya to prevent and minimize water wastage in the Mahavidyalaya: 1. Close the taps after usage; 2. Maintenance and monitoring of valves in supply system to avoid overflow, 3. Maintain leakage and spillage; 4. Water Conservation awareness for students. It is revealed that record water use from the Mahavidyalaya water meter for one year is being practiced. It is also revealed that Aditi Mahavidyalaya is recording 1574 units daily working days (Approx.) as running water bill per month and annual water charges paid for water uses is Rs. 366513 per annum. The Aditi Mahavidyalaya is also practicing a modern rainwater harvesting system and there are two rain water harvesting units of about 50, 000 liter water capacity which was installed in Mahavidyalaya premises. Besides that, Mahavidyalaya administration and eco-club organizes various conferences and seminars for water conservation and management.

Water is a natural resource; all living matters depend on water. While freely available in many natural environments, in human settlements potable (drinkable) water is less readily available. We need to use water wisely to ensure that drinkable water is available for all, now and in the future. A small drip from a leaky tap can waste more than 180 liters of water in a day; that is a lot of water towaste - enough to flush the toilet eight times! Aquifer depletion and water contamination are taking place at unprecedented rates. It is therefore essential that any

environmentally responsible institution should examine its water use practices. Water auditing is conducted for the evaluation of facilities of raw water intake and determining the facilities for water treatment and reuse. The concerned auditor investigates the relevant method that can be adopted and implemented to balance the demand and supply of water. It is therefore essential that any environmentally responsible university/ Mahavidyalaya/ institution examine its water use practices.

Additional information on Water use and its Conservation is attached at Annexure-IV of Annexure report.

V CARBON FOOTPRINT

The following Environmental-Green practices are being followed by ADITI Mahavidyalaya is as below:

1.	Total Number of vehicles used by the stakeholders of the Mahavidyalaya (per day). Number of visitors with vehicles per day?	During normal days ~ 80 persons used cars/scooters/ motorcycles/cab/taxi/auto/metro everyday No. of visitors per day ~10 to 12 visitors per day during normal days (ANNEXURE-V of ANNEXURE REPORT)
2.	No. of two wheelers used by the staff members and students? (Annual average of fuel used).	~ 25 staff members uses average fuel ~ 160 to 180 litres per day ~ 12 -15 students (ANNEXURE-V of ANNEXURE REPORT)
3.	No. of cars used per day by the staff and students of the Mahavidyalaya? (Annual average of fuel used)	~ 50 staff members uses average fuel ~ 600 to 800 litres annually No students uses car (ANNEXURE-V of ANNEXURE REPORT)
4.	No. of cycles used by the staff members and students and no. of persons using common (public) transportation?	~ 5 faculty member uses cycle No other staff members and students use cycle ~ 1300 staff members (teaching + non-teaching) and students uses Common public transport (Bus/Metro/Auto/Taxi) (ANNEXURE-V of ANNEXURE REPORT)
5.	Number of generators used every day (hours). Give the amount of fuel used per day? (monthly average of fuel used)	01 generator Rarely used 45 liters per month
6.	Number of LPG cylinders used in the canteen (Give the amount of fuel used per month and amount spent).	Canteen is not been functional since last year. (ANNEXURE-V of ANNEXURE REPORT)
7.	Quantity of kerosene/diesel/petrol used in the canteen/labs (Give the amount of fuel used per month and amount spent).	Canteen and labs don't use kerosene/diesel/petrol

8.	Amount of taxi/auto charges paid and the amount of fuel used per month for the transportation of vegetables and other materials to the canteen? (Please state the distance traveled in kilometers).	Canteen is not been functional since last year. (ANNEXURE-V of ANNEXURE REPORT)
9.	Amount of taxi/auto charges paid per month for the transportation of office goods to the Mahavidyalaya? (Please state the distance traveled in kilometers).	Due to COVID conditions, limited procurement has been done.
10.	Use of any other fossil fuels (Coal, wood etc.) in the Mahavidyalaya (Give the amount of fuel used per day and amount spent).	Fossil fuels are prohibited in the Mahavidyalaya **(ANNEXURE-V of ANNEXURE REPORT)**
11	No. of air conditioners used in Classroom, Staff room, faculty room?	25 air conditioners

Aditi Mahavidyalaya, Delhi University is a Mahavidyalaya that has taken a first-time initiative to compute its carbon footprint and set a benchmark for other Mahavidyalayas/Universities. The Mahavidyalaya has adopted a carbon reduction strategy to undertake this task. Carbon Footprint refers to the potential climatic impact (Global Warming) of the Greenhouse Gases (GHG) emitted directly or indirectly due to an organization's activities. A Carbon Footprint Disclosure of any educational institution is very important to understand such that its key emission sources can be identified and necessary mitigation measures can be adopted for carbon reduction. In today's date, very few Mahavidyalayas disclose their carbon emissions. Planning, collection of data and estimation of CO_2 following with suggestive measures for reduction. This task was initiated with understanding the intent of management, and the core team was formulated composed of teachers and students from different departments. Several site visits and face to face interactions were done with the departments to collect the required data. The study included extensive research on latest emission factors for computing the footprint. Both qualitative and quantitative data was collected from the Mahavidyalaya and presented in ***Annexure V*****.** An online survey was conducted for capturing data on commuting. The survey was carried out for a month and was rolled out to the teachers, non-teaching staff and students. The following outcomes

revealed from Carbon Footprint task/work carried out by the Aditi Mahavidyalaya, University of Delhi:

1) **GHG Information Management System:** A carbon management team can be established consisting of representatives from teaching staff, students and other non-teaching staff of various departments. The team will enable the Mahavidyalaya to collect necessary data for computation, measure its carbon performance, to identify and implement improvements, to monitor progress, and internally verify results. The team will also encourage participation and consultation of students, teachers & non-teaching staff throughout the year. The team may also report progress on the performance periodically;
2) **Environmental Policy Formulation:** An environmental policy should be formulated by the Management to commit to adopt sustainable practices at the campus. The policy should be well communicated & displayed across the campus;
3) **Setting of reduction targets:** Based on the baseline and available resources, the Mahavidyalaya may develop its short / medium / long term reduction targets and plans to achieve the targets;
4) **Green events**: The activities carried out at the campus should be performed in light of low carbon emissions. The team may ensure low carbon products and strategies are adopted for various events;
5) **Carbon Footprint Disclosure (CFD):** With GHG accounting and management systems well in place, the Mahavidyalaya can demonstrate its best practices at public platforms. Besides recognition, this will be a step towards generating awareness to other universities and Mahavidyalayas to undertake similar disclosures for comparison. Through disclosures there can be an exchange platform developed for institutes to share eco-friendly and energy efficient techniques & equipment to be installed in Maha Vidyalaya;
6) **Awarding and labelling Departments**: Eco-club and other department with minimum carbon emissions should be rewarded with eco-friendly labels/batches/medals/trophies/certificates to motivate other departments to work towards the same;
7) **Eco suggestion box:** A suggestion box can be placed at the campus inviting innovative ideas from students/teachers/other staff members for carbon reduction.

Additional information on CARBON FOOTPRINT is attached at Annexure-V of Annexure report.

VI CLEAN AIR (CAMPUS DESIRABLE AMBIENT AIR)

The following Environmental-Green practices are being followed by ADITI Mahavidyalaya is as below:

1.	Are the Rooms in Campus being well ventilated?	Yes				
2.	Window floor ratio of the Rooms	Very Good				
3.	What is the ownership of the vehicles used by your Mahavidyalaya? (Please Tick only one)		Yes			
		✔	Operator-owned vehicles			
			college -owned vehicles			
			A combination of campus-owned and operator-owned vehicles			
4.	Provide details of school-owned motorised vehicles?	**Buses**	**Cars/ Vans**	**Two Wheelers (Scooter/Motor Bikes) etc.**	**Other**	**Total**
	No. of vehicles					
	No. of vehicles more than five years old	--	--	--	--	--
	No. of Air-conditioned vehicles	--	--	--	--	--
	PUC done	--	--	--	--	--
5.	Specify the type of fuel used by your school's vehicles:	Buses	Cars/ Vans	Two Wheelers (Scooter/Motor Bikes) etc.	Other	Total
	Diesel	--	--	--	--	
	Petrol	--	--	--	--	
	CNG	--	--	--	--	
	LPG	--	--	--	--	
	Electric	--	--	--	--	
6.	Air Quality Monitoring Program (If Any)	Yes, Monitoring is being done by Government Laboratory				

7.	Students suffer from respiratory ailments? (If Any)	No, however, Mahavidyalaya has created a good green buffer to provide clean air/good air for their health.
8.	Details of Genset	Yes, one silent DG Set The capacities of DG's are 125 KVA (Compliance of EPA, 1986)
9.	Does the Mahavidyalaya ban on biomass (Horticulture or Solid waste) burning?	Yes
10.	Does the Mahavidyalaya follow Construction and Demolition Rules, 2016?	Yes. However, construction activities have stopped. However, preventive measures to control dust are being taken when the activities are on.

The real time monitoring is being carried out by Central Pollution Control Board (CPCB)/Delhi Pollution Control Committee (DPCC) in nearby area and coco-ordinates with CPCB to ensure the consistency of air quality of the area and provides technical and financial support to them for operating the monitoring station. The National Air Quality Monitoring network is being operated through various monitoring agencies and a large number of personnel and equipment are involved in the sampling, chemical analyses, data reporting etc. It increases the probability of variation and personal biases reflecting in the data; hence it is pertinent to mention that these data be treated as indicative rather than absolute. Air pollutants viz Sulphur Dioxide (SO2), Nitrogen oxides (NO2) and Respirable Suspended Particulate Matter (RSPM/PM10 and PM2.5) Ozone, Ammonia etc. have been identified for regular monitoring at all the locations. The monitoring of meteorological parameters such as wind speed and direction, relative humidity and temperature was also integrated with the monitoring of air quality. The monitoring of pollutants is carried out for 24 hours (Real time sampling for gaseous and particulate pollutants) with a frequency of 1 minute to 1 hour) to comply with the national standard. **The Air Quality Index of nearby area i.e. Bawana road is between 150-450 due to prominent industrial activities at Bawana Industrial Area which is near Aditi Mahavidyalaya (ANNEXURE-VI of ANNEXURE REPORT).**

Government of NCT-Delhi has created an **Ambience Air Fund** under section 31 A read with Section 17 A of the Air (Prevention & Control of Pollution) Act, which is being operated by Department of Environment to encourage the use of **indigenously manufactured battery-operated vehicles** i.e. four wheelers (cars), three wheelers and two wheelers (mobikes/scooters). From 7th March 2008, Rs 0.25 per

litre on sale of diesel in Delhi was deposited by the Oil Marketing Companies into the Air **Ambience Fund.** The collected Air Ambience Fund, **29.5 %** of concession in form of subsidy (15%) on base price of vehicle, road tax & registration expense (2%) and Value Added Tax (VAT) refund (12.5%) is being provided by Delhi Government on purchase of battery-operated vehicles. Massive public awareness has been and is being carried out through print media, workshops, seminars, exhibitions etc. An amount of Rs. 38.47 Crores has been collected as Air Ambience Fund in the FY 2008-09 and Rs. 30.90 crores in the FY 2009-10. About Rs. 4.12 crores (in the FY 2008-09) and Rs. 13.99 crores in the FY 2009-10 have been spent on providing 29.5 % subsidy, VAT refund and Road Tax refund for battery operated vehicles. Till date, more than 24138 mobikes and 142 Reva cars have been provided subsidy through 20 manufacturers and 110 dealers.

Besides one CAAQM station in the DCE area near Bawana run by CPCB, MoEF&CC, twenty-four (24) continuous ambient air-monitoring stations are being installed in Delhi NCT and they are fully functional before and after lockdown.

Additional information on CLEAN AIR is attached at Annexure-VI of Annexure report.

VII ENVIRONMENTAL LEGISLATIVE COMPLIANCE

The following of Environmental-Green practices are being followed by ADITI Mahavidyalaya is as below:

1.	Are you aware of any environmental laws pertaining to different aspects of environmental management?	Yes
2.	Does your Mahavidyalaya have any rules to protect the environment? List possible rules you could include.	No
3.	Environmental Ambient Air Quality Monitoring conducted by the Mahavidyalaya?	No, but Mahavidyalaya is regularly keeping track of Continuous Air Quality Monitoring Stations run by DPCC/CPCB in nearby areas of the Mahavidyalaya.
4.	Does Environmental Water and Wastewater Quality monitoring conduct by the Institute?	Yes
5.	Does stack monitoring of DG sets conducted by the Institute/or through Accredited laboratory?	Yes
6.	Is any warning notice, letter issued by state government bodies?	No
7.	Is there any Hazardous waste generated by the Mahavidyalaya? If yes, explain its category and disposal method.	No
8.	Does any Bio medical waste/Electronic waste generated by the Mahavidyalaya? If yes explain its category and disposal method	Yes, it is being disposed of through the authorized external agency/vendors.

The Aditi Mahavidyalaya is well aware about India's efforts on Protection of environment. Nevertheless, India is the first country, which has made provisions for the protection and improvement of the environment in its Constitution. In the 42nd amendment to the Constitution in 1976, provisions to this effect were incorporated in the Constitution of India with effect from 3rd Jan, 1977. In the Directive Principles of State Policy in Chapter IV of the Constitution, Article 48-A was inserted which enjoins the State to make endeavors for protection and improvement of the environment and for safeguarding the forest and wildlife of the country. Another landmark provision in respect of environment was also inserted, by the same amendment, as one of the Fundamental Duties of every citizen of India. *This is the provision in Article 51-A (g) of the Constitution. It stipulates that it shall be the duty of every citizen of India 'to protect and improve*

the natural environment including forests, lakes, rivers and wild life and to have compassion for living creatures. There were provisions already existing in various enactments to tackle environmental pollution. The Indian Penal Code, The Criminal Procedure Code, The Factories Act, The Indian Forest Act, The Merchant Shipping Act, etc. have provisions for regulation and legal action for some specific environmental issues. However, with our country's emerging environmental scenario with industrialization in the post-independence era, these were found either inadequate or being not effectively applicable to check the degradation of our environment. After the Stockholm Conference on Human Environment in June,1972, it was considered appropriate to have uniform laws all over the country for broad environmental problems endangering the health and safety of our people as well as of our flora and fauna. The Water (Prevention and Control of Pollution) Act, 1974, is the first enactment by the Parliament in this direction. This is also the first specific and comprehensive legislation institutionalizing simultaneously the regulatory agencies for controlling water pollution. The Pollution Control Boards at the Centre and in the States came into being in terms of this Act. Another related legislation enacted was the Water (Prevention and Control of Pollution) Cess Act, 1977 in order to conserve this vital natural resource and to augment the finance of these regulatory agencies. Thereafter, The Air (Prevention and Control of Pollution) Act was likewise enacted in the year 1981 and the task of implementation of this legislation was also entrusted to the same regulatory agencies created under the Water (Prevention and Control of Pollution) Act, 1974. As the Water (Prevention and Control of Pollution) Act and the Air (Prevention and Control of Pollution) Act were designed to deal with only water and air pollution problems, it was in 1986 that the Parliament enacted a comprehensive or umbrella legislation for the environment in its entirety. This is the Environment (Protection) Act, 1986. The responsibility for implementation of provisions of the Environment (Protection) Act has to a large extent been entrusted to the same regulatory agencies created under the Water (Prevention and Control of Pollution) Act, 1974. Other agencies besides the Central and State governments are also entrusted with the responsibility of implementing specific provisions of this Act and the Rules made there under depending on their operational requirements.

Over the years, several amendments have also been made in the various existing statutes to meet the requirements of the unfolding environmental issues. The Indian Forests Act, The Forests

(Conservation) Act, The Factories Act, The Wild Life Protection Act, The Mines and Mineral (Regulation and Development) Act, The Industrial Development and Regulation Act and the Atomic Energy Act among others, have undergone such amendments. These Acts, being the responsibility of agencies other than Pollution Control Boards for implementation are not of day-to-day concern for the Boards and, therefore, have not been covered in the present volume designed for ready reference by the functionaries of the Boards and others concerned with them. ***(Annexure-VII of Annexure report).***

Additional information on Environmental Legislation is attached at Annexure-VII of Annexure report.

VIII SOCIAL WELFARE & COMMUNITY OUTREACH

The following Environmental-Green practices are being followed by ADITI Mahavidyalaya is as below:

1.	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
2.	Does your Mahavidyalaya have any rules to protect the environment? List possible rules you could include.	No, only following Govt. Rules and Notification issued from time to time by Govt. agencies.
3.	Does housekeeping schedule on your campus?	Yes, Swachh Bharat movement
4.	Are students and faculties aware of environmental cleanliness ways? If Yes explain	Yes, periodically pollution reduction, plantation, energy conservation awareness campaigns carried out by Mahavidyalaya.
5.	Do Important Days Like World Environment Day, Earth Day, and Ozone Day etc. eminent in Campus?	Yes
6.	Does Mahavidyalaya participate in National and Local Environmental Protection Movement?	Yes, Swachh Bharat Abhiyan by students at campus.
7.	Does Mahavidyalaya have any Recognition/Certification for environment friendliness?	No, however, Mahavidyalaya is participating in Eco-club programmes organized by Govt. of NCT, Delhi.
8.	Does Mahavidyalaya use renewable energy?	Yes
9.	Does Mahavidyalaya conduct a green/ environmental audit of its campus?	No, this is the first environmental audit done by Mahavidyalaya.
10.	Has the Mahavidyalaya been audited / accredited by any other agency such as NABL, NABET, TQPM, NAAC etc.?	Only by NAAC.

Additional information on SOCIAL WELFARE & COMMUNITY OUTREACH are attached at Annexure-VIII of Annexure report.

BEST PRACTICES:

BEST PRACTICES ADOPTED IN ADITI MAHAVIDYALAYA

BEST PRACTICES ADOPTED IN ADITI MAHAVIDYALAYA, INITIATIVES FOR PROTECTION OF LOCAL/REGIONAL ENVIRONMENT

A **Renewable Energy**

- **I.** Adoption of Cycling practices for **Carbon Footprint**.
- **II.** Annual Sports activity improves the **health of students and staff**.
- **III.** Solar water Heater at **Aditi Mahavidyalaya campus**.
- **IV.** A clean source of **energy is utilized at campus**.
- **V.** Efforts towards **Carbon Neutrality.**
- **VI.** The Solar plant on building roofs is commissioned and operational and will supply approx. 30% of total power on campus.

B	**Biodiversity Conservation** Flora and fauna conservation	It is in schedule plan of Campus Environment committee
C	**Tree Plantation Drives** Two Drives Annually as well as every guest is honored by Tree Plantation at Campus.	Yes
d	**Groundwater Recharge** Through Rain Water Harvesting System.	Yes

E	**Pollution Reduction** Promoting battery operated vehicles (Students) and using public transport by students and staff at campus	Reduction in Air Pollution through vehicular emissions and preventing Biomass burning.
F	**E-Waste Management** Old Computers donated to Government School	Authorized recycler
G	**Solid Waste Management** Lifting of garbage from Aditi Mahavidyalaya campus on alternate days by Municipal Corporation.	Yes
H	**Water Conservation**	Yes, the water used for gardening on campus.

AREA OF IMPROVEMENTS

- The environmental policy for Aditi Mahavidhyalaya should be developed and adopted for environmental sustainability.
- Campus Biodiversity of Aditi Mahavidhyalaya should be maintained and recorded properly.
- Water Metering of bore wells and other sources in different uses are not available. However, water meters should be installed and maintained for inventory of water uses.
- Water conservation practices should be implemented properly including recycling of wastewater systems.
- Storage of chemicals like; paints, gum resins, oils, lubricants, acids etc. should be placed at designated area and safety/warning signs should be displayed.
- A Waste Management plan should be prepared for the campus.
- Laboratory waste management policy should be developed and implemented properly.
- Plastic usage can be reduced in Mahavidyalaya campus.
- The monthly inventory of e-waste is required to be maintained in formats on a regular basis.
- Environmental monitoring and quality assessment should be ensured on a regular basis.
- College activity including transport, fuel uses and electricity should be maintained effectively aiming for overall reduction in carbon footprint.
- The Community Environmental Awareness programme should be regularly organised by the Mahavidyalaya.

RECOMMENDATIONS

- Set up a water recycling unit where the recycled water can be used for gardening in Mahavidyalaya.
- Increase capacity of Solar panels to generate more electricity as renewable energy.
- Rainwater pits should be maintained in the campus wherever possible.
- Promotion of Student startups focussing on environment and sustainability.
- Training and awareness of environmental legislation should be organized for faculty staff and students.
- Collaborate with a waste management agency for medical, hazardous and e-waste management.
- Replace tube lights and bulbs with energy efficient LEDs.
- More energy efficient air conditioners and coolers should be used in the Mahavidyalaya campus.
- Finally, Aditi Mahavidhyalaya needs to develop more and more nature based solutions (NBS) to keep the clean environment of the campus area.

1. Title of the Practice

Sustainability Redefined with Action: Building a Green and Responsible Future

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2. Objectives of the Practice

The institution aims to:

- Enhance environmental awareness and promote sustainable practices among students and staff.
- Develop and implement innovative resource conservation measures, such as solar energy, rainwater harvesting, and waste management.
- Create a green campus through biodiversity enrichment, herb gardening, and eco-friendly initiatives.
- Foster hands-on learning and skill development in sustainable practices through workshops and projects.
- Engage the academic community in celebrating key environmental milestones to build a sense of responsibility and collaboration.

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3. The Context

The college is located in an area with high groundwater levels, which presented an opportunity to implement effective rainwater harvesting systems. With growing concerns about environmental degradation and climate change, the institution sought to lead by example by integrating sustainability into its educational framework and operations. This practice aligned with the vision to not only create a green campus but also to empower students to become environmentally conscious citizens.

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4. The Practice

Infrastructure Initiatives:

1. **Solar Panel Installation**: Solar panels were installed to reduce reliance on conventional energy sources and promote renewable energy use.
2. **Rainwater Harvesting**: Broad pipes were strategically placed to collect and recharge groundwater, ensuring the sustainable use of water resources.
3. **Herb Garden Development**: Medicinal plants were cultivated in a dedicated herb garden to enhance biodiversity and support environmental education.
4. **Composting System**: Organic waste was processed using composting enzymes, producing manure that enriched campus greenery.

Educational and Awareness Programs:

1. **Workshops and Competitions**: Events such as "Best Out of Waste" and craft-making workshops were organized to encourage creative reuse of materials.
2. **Environmental Surveys**: Students conducted surveys on energy usage, water management, and waste practices, providing data for targeted improvements.
3. **Lectures and Webinars**: Expert-led sessions covered topics like green energy, climate action, and sustainable lifestyles.
4. **Skill Development Programs**: Hands-on training was provided in areas such as eco-friendly product design, waste management, and environmental auditing.

Celebrations and Campaigns:

1. **Earth Day**: Celebrations focused on "Plastic vs. Planet," featuring guest lectures and interactive activities.
2. **Tree Plantation Drives**: Regular drives involved students and staff in expanding the green cover on campus.
3. **Eco-friendly Celebrations**: Events like Lohri, Pongal, and Makar Sankranti were observed using sustainable and biodegradable materials.

Following is a list of key events and activities aimed at promoting environmental awareness and sustainability:

1. **Earth Day Celebration (April 22, 2024)**: Themed "Plastic vs. Planet," featuring a lecture by Mr. Aditya Patel, Assistant Director, DRDO.
2. **Workshop on Air Quality (January 11, 2023)**: Organized in collaboration with the Lung Care Foundation, focusing on air pollution and health.
3. **International Day of Women and Girls in Science (February 11, 2023)**: Webinar addressing women's role in STEM and climate action.
4. **Eco-friendly Festival Celebrations (January 13, 2023)**: Lohri, Pongal, and Makar Sankranti celebrated with sustainable crafts and practices.
5. **Field Trip to Yamuna Biodiversity Park (February 2, 2023)**: B.El.Ed. students explored local biodiversity and wetlands conservation.
6. **Participation in Delhi University's Annual Flower Show (March 2, 2023)**: Promoted Sustainable Development Goals through innovative eco-friendly planters.
7. **Tree Plantation Drives**: Regularly conducted to improve green cover and encourage student participation in ecological restoration.

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5. Evidence of Success

- **Resource Savings**: Solar panel installation reduced electricity costs significantly, demonstrating the viability of renewable energy solutions.
- **Water Management**: Rainwater harvesting systems enhanced groundwater recharge, addressing local water scarcity issues.
- **Increased Biodiversity**: The herb garden flourished, becoming a learning space and habitat for various species.
- **Student Involvement**: High participation in events and workshops indicated growing environmental consciousness among students.
- **Recognition and Outreach**: Initiatives were highlighted in forums, establishing the institution as a sustainability leader in higher education.

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6. Problems Encountered, If Any

1. **Initial Resistance**: Convincing stakeholders to adopt green practices required persistent awareness campaigns.
2. **Financial Challenges**: Budget constraints limited the scale and speed of some projects, such as expanding solar energy systems.
3. **Maintenance Issues**: Composting units and rainwater harvesting systems required regular upkeep, necessitating dedicated personnel and resources.
4. **Behavioral Change**: Sustaining long-term commitment to eco-friendly habits among students and staff proved to be an ongoing challenge.

ANNEXURE REPORT

OF GREEN AUDIT

For

ADITI MAHAVIDYALAYA, BAWANA

UNIVERSITY OF DELHI

ANNEXURE-I

Operational Structure of Waste Management in Aditi Mahavidyalaya:

Aditi Mahavidhyalaya total strength of students, teachers and Non-teaching staff in the College are:

No. of Students : 1984
No. of Teachers : 90
No. Non-teaching staff : 53
Male: No male students (Women College)
Female: 1787

The existing Waste generation sites at Aditi Mahavidyalaya are:

(a) Garden area - 33.27 X18.00 meter
(b) Garbage dump (number) - 01
(c) Playground area- 45.78X 43.41 meter
(d) Laboratory - 13
(e)Kitchen Canteen - 01
(f) Toilets (number) - 04
(g)Car/scooter shed area - Nil
(h)Number of classrooms - 26
(i)Office rooms others (specify) - 04

The details of waste generated in campus:

- E-waste Hazardous waste (toxic) - No waste declared till now. In processing.
- Solid waste – about 66 kg per day (40 kg DISPOSED OFF , 25 kg RECYCLED) when classers were offline; about 1.5 kg per day (1 kg dry waste, 0.5 kg wet waste) when classers were online
- Dry leaves – depending upon season
- Canteen waste – about 4-5 kg per day (as written in the table in point 4)
- Liquid waste – 0.2-0.5 LITRE / DAILY toilets waste in pits as per the system. NHE, FT Labs' liquid waste in their own pits. Chemistry and biology labs under construction (liquid in drain when these 2 were working). RO waste water in drains.
- Glass – No regular waste. very small amount , very occasionally
- Unused equipment - No
- Medical waste – 1-1.5 KG A DAY very small amount , very occasionally
    - ➔ Napkins Others (Specify) - No
    - ➔ Sanitary napkins - yes

waste treatment system in the college: -

a) one composting pit
b) one composting machine.
c) sanitary napkin incinerator

Waste segregation strategies with 5 separate colour bins (in college at different required places)

- Green (for biodegradable waste excluding non-soiled paper)
- Light blue (paper waste)
- Dark blue (for plastic, cans, wrappers, and other non-biodegradable wastes)
- Black bin for e-waste, glass or domestic hazardous like toilet cleaner, floor cleaner empty boxes.
- yellow bin in girls toilet for sanitary pad disposal

Quantitative assessment of waste (amount of waste generated per day/ weekly/monthly (in grams/Kilograms) (approx.)

Section	Biodegradable (Kg)	Non-biodegradable (Kg)	Biomedical (Kg)	Hazardous (Kg)	
Office	Used Papers are exchanged with an agency for getting register (recycled paper) etc. So no paper gets wasted. Other regular waste is put in college dustbins.				
Canteen	About 2.5 kg/day	About 1 to 1.5 kg/day	--	--	--
Laboratory (lab) waste					
FT lab	About 1 to 1.5 kg daily (when the lab is functional)	About 500 gram per week (when the lab is functional)	--N0-	No	No
NHE lab	About 2 kg daily (when the lab is functional)	About 1 kg per week (when the lab is functional)	--N0-	No	No
FCW lab	About 500 gram weekly (when the lab is functional)	No	--N0-	No	No

BEled lab	**No waste is generated. Practicals are field based. Students submit their files and after assessment take those back**				
Computer/ commerce lab	**No smoking, drinking or eating is allowed in the commerce computer lab. ... All open and unopened food, beverages and tobacco products are prohibited from entering the computer lab. NO WASTE is generated in the lab .Only regular maintenance of the system is required.**				
Omsp lab	**There is no special kind of waste in the computer lab. It can be some hard electronic waste like wires or switches which are produced only when repair work is needed from time to time.**				
Biology lab	**Biology labs generate less toxic chemicals during biology experiments. Chemicals or stained water (as waste) which is released during practicals is not directly drained into the drain, infact the waste water and waste is given to an agency that take care of the same.**				
Chemistry lab	**Biodegradable waste include used filter-paper from chemistry practical and other simple paper used. Amount vary 0.01 - 0.03 Kg/weekly when lab practical is conducted.**	**Non-biodegradable waste include the used/waste chemicals (mostly in liquid form) from lab experiments. Amount vary 0.20 – 0.40 Lt/daily when lab is functional**	**No biomedical waste**	**Hazardous waste is used for acid and base solutions from lab experiments. It is same as Non-biodegradable waste. Amount vary 0.20 – 0.40 Lt/daily when lab is functional.**	**No**
Psychology lab	**Paper-50-100 gms/day when lab is fully functional.**	**Nil**	**Nil**	**Nil**	**Nil**

Geography lab	**Approximately 500 gms/week when the lab is fully functional.**	**Nil**	**Nil**	**Nil**	**Nil**

ANNEXURE-II

1) Area of Green space/Garden area in Aditi Mahavidyalaya
It is approximately in an area of 2796m i.e 9173 sq. ft

2) List the plants in the garden, with approx. numbers of each species.
Numbers of plants:
Trees -100 approx , Shrubs-100 approx , Herb's 100- approx .

Sr. No.	Plant Name	No. of Plants
1.	*Cassia simca (□□□□)*	**12**
2.	*Pongamnia pinnata, (□□□ □□ □□□)*	**26**
3.	*Clerodendrum sp (□□□□□□□□□)*	**50**
4.	*Caryota vrens (□□□ □□□ □□□)*	**16**
5.	*Azadirachta indica (□□□ □□ □□□□)*	**16**
6.	*Campris sp (□□□□□□□)*	**10**
7.	*Ficus virens (□□□□□ □□ □□□)*	**50**
8.	*Terminalia arjuna (□□□□□□ □□ □□□□)*	**20**
9.	*Accasia auriculiformis(□□□□ □□ □□□□)*	**5**
10.	*Syzygium cumini (□□□□□)*	**10**
11.	*Eucalyptus sp (□□□□□□)*	**15**
12.	*Tecoma stans (□□□□□□)*	**10**
13.	*Hibiscus rosa(□□□□□ □□□ □□□□□)*	**50**
14.	*Alstonia schotaris (□□□□□ □□ □□□□)*	**12**
15.	*Callistemon sp (□□□□ □□□□)*	**10**
16.	*Dalbergia sisso* □□□□ □□ □□□□	**5**
17.	*Ficus sivens* (□□□□□ □□ □□□□)	**10**

18.	*Clirodendron sp* (□□□□□□□□□)	**15**
19.	*Helianthus*(□□□□□□□□)	**15**
20.	*Christmas Tree* (□□□□□□□ □□ □□□□)	**5**
21.	*Tamarindus indica* (□□□□ □□ □□□□)	**5**
22.	*Tinospora sp*(□□□□□)	**10**
23.	*Cieba pentardra*(□□□□□ □□□□ □□□□)	**10**
24.	*Polyathia sp*(□□□□ □□ □□□□)	**30**
25.	*Psidium guajava*(□□□□□ □□ □□□)	**80**
26.	*Cassia fistula* (□□□□□□ □□ □□□□)	**10**
27.	*Tabernaemontana divaricata* (□□□□□□□□□ □□□)	**10**
28.	*Phoenix dactylifera* (□□□□ □□ □□□)	**10**
29.	*Ficus panda* (□□□□□ □□□□□)	**25**
30.	*Minusops elengi* (□□□□□□□)	**10**
31.	*Euphorbia* (□□□□□□□□□)	**10**
32.	*Tacnospora (*□□□□□ □□ □□□)	**15**
33.	*Aegel marmelos,*(□□□□□□□)	**6**
34.	*Bauhinia virgata*(□□□□□)	**10**
35.	*Polyathia longifolia (*□□□□ □□ □□□□)	**2**
36.	*Pongamia pinnata* (□□□□)	**10**
37.	*Clerodendrum inermis* (□□□□□□□□□)	**10**
38.	*Bombax ceiba* (□□□□)	**15**
39.	*Combretum indicum* (□□□ □□□□□□)	**10**
40.	*Ficus virens*(□□□□□)	**10**
41.	*Hibiscus rosasinensis* (□□□□□□)	**15**
42.	*Tinospora cordifolia* (□□□□□)	**15**

ANNEXURE-III

Energy Management :

1. Energy usage in college:
   Energy for electricity (lights, fans, ACs, Computers, Security Camera, Microwave, Refrigerators), LPG Cylinder (in laboratory), Petrol (Generator) Electricity, electric stove, kettle, microwave, LPG, firewood, Petrol, diesel and others.
2. Mention the amount spent for petrol for generators? –
   In the year 21 July 2023 – 28 May 2024 - Rs 18,270/- (210 lit)

3. Any energy saving methods employed in college:
   a) Students are instructed to switch off lights and fans before leaving the classrooms.
   b) Posters for saving energies are also displayed.
   c) Solar panels are installed in college. The energy generated from panels is 100.9 KW
4. Aditi Mahavidyalaya –JMR

Aditi Mahavidyalaya -JMR					
Plant Capacity	9-Apr-00			100.98	
From	**To**	**Duration**	**Month**	**Units Generated (kWh)**	**Yield**
6-Jan-23	25-Jan-23	19	Jan-23	4057.00	2.11
25-Jan-23	25-Feb-23	31	Feb-23	8857.00	2.83
25-Feb-23	23-Mar-23	26	Mar-23	9731.00	3.71
23-Mar-23	29-Apr-23	37	Apr-23	15562.00	4.17
29-Apr-23	28-May-23	29	May-23	11748.00	4.01
28-May-23	29-Jun-23	32	Jun-23	12615.00	3.90
29-Jun-23	27-Jul-23	28	Jul-23	8434.00	2.98
27-Jul-23	31-Aug-23	35	Aug-23	13310.00	3.77
31-Aug-23	4-Oct-23	34	Sep-23	13336	3.88
4-Oct-23	3-Nov-23	30	Oct-23	10296	3.40
3-Nov-23	28-Nov-23	25	Nov-23	5243	2.08
29-Nov-23	29-Dec-23	30	Dec-23	6534	2.16
29-Dec-23	2-Feb-24	35	Jan-24	5133	1.45


EE&REM
Energy Efficiency & Renewable Energy Management Centre
Department of Power, Govt of NCT Delhi
HFM
ROOF - TOP
Ministry of New and Renewable Energy
Government of India
HFM ROOF TOP SOLAR PRIVATE LIMITED
100.98 kW DC GRID CONNECTED ROOF TOP SOLAR PV SYSTEM
INSTALLED AT
ADITI MAHAVIDYALAYA
DELHI AUCHANDI ROAD, BAWANA, NEW DELHI - 110039
A PROJECT ASSISTED BY
INDRAPRASTHA POWER GENERATION COMPANY LIMITED
(GOVT. OF NCT DELHI UNDERTAKING)
PLANT OWNER HFM ROOF TOP SOLAR PRIVATE LIMITED
DATE OF COMMISSIONING 04/12/2019
CFA SUPPORT FROM MNRE 30%
THIS SOLAR POWER PLANT IS HYPOTHECATED TO
Indian Renewable Energy Development Agency Ltd.
(A Govt. of India Enterprise)
ISO 9001:2015, 27001:2013 Certified

Electricity Expenditure(Record monthly for the year 2023-24)

S.No.	**2022**	Previous Reading	Current Reading	Draw from TPDDL (a)	Previous Reading	Current Reading	Inject to TPDDL (b)	Cumulative Consumption	Unit Brought Forward	Unit carried forward	Bill Amount (RS.)
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
1	January	0	1574	1574	0	3811	3811	-2278	-25526	-25526	61668.28
2	February	1574	2515	941	3811	6527	2716	-1775	-27804	-27804	8473.31
3	March	2515	5536	3021	6527	13927	7400	-4379	-4379		23728.00
4	April	5536	9735	4199	13927	17769	3842	357	-4379	-4022	23807.05
5	May	9735	14363	4628	17769	21326	3557	1071	-4022	-2951	24423.70
6	June	14363	20282	5919	21326	23512	2186	3733	-2951	-2951	30248.53
7	July	20282	26939	6657	23512	25672	2160	4497	0	0	71527.35
8	August	26939	33496	6557	25672	28479	2807	3750	0	3750	63223.46
9	September	33496	38910	5414	28479	30783	2304	3110	0	3110	56024.10
10	October	38910	42788	3878	30783	36765	5982	-2104	0	-2104	24836.25
11	November	42788	46441	3653	36765	41501	4736	-1083	-2104	-2104	24836.25
12	December	46441	50249	3808	41501	46097	4596	-788	-3187	-3975	25366.16
	2023		PREV.	A=Draw from TPDDL (a)			B= Injection to TPDDL (B)	A-B=C			Bill Amount (RS.)
1	January	50249	54334	4085	46097	49164	3067	1018	-3975	-3975	26252.79
2	February	54334	57294	2960	49164	55098	5934	-2974	-2974	-2974	26388.4
3	March & April	57294	64167	6873	55098	69326	14228	-7355	0	-7355	52776.8
4	May & June	64167	74528	10361	69326	76036	6710	3651	-7355	-7355	52997.32
5	July	74528	80683	6155	76036	78386	2350	3805	-3704	101	27121.53
6	August	80683	85944	5261	78386	81632	3246	2015	0	0	46926.44
7	September	85944	90849	4905	81632	85797	4165	740	0	740	32265.66
8	October	90849	95185	4336	85797	90323	4526	-190	0	-190	26664.05
9	November	95185	101048	5863	90323	92888	2565	3298	0	-190	60242.53
10	December	101048	107751	6703	92888	95266	2378	4325	0	0	75558.64

5. Efficient energy devices used CFL/LED/ high star rating air conditioning system used in the college campus

8. Air conditioner installed and energy used (Hours used/day for how many days in a month).

26 Split AC

6 Window AC

About 20 ACs in use

Energy usage 20 ACs X 6 hours X 1.6 units X 22 days = 4224 kWh

9. Number of Computers installed in the campus with energy usage (Hours used/day for how many days in a month).

Labs + Library 40 + 37 = 77

Office = 15

About 20 in use

*A complete desktop uses an average of 200 Watt hour

6. 200 X 10 computers X 6 hrs X 22 days = 264 KWh


GPS Map Camera
Delhi, Delhi, India
Q2WP+5RJ, Vijay Colony, Shahbad Daulatpur Village, Rohini, Delhi, 110042, India
Lat 28.795643°
Long 77.037268°
24/02/23 02:44 PM
Google


SOLAR SYSTEM EARTH PIT
EARTH PIT NAME -
EARTH PIT No. -
TEST DATE -
DUE DATE -
EARTH VALUE -


GPS Map Camera
Delhi, Delhi, India
Q2WP+5RJ, Vijay Colony, Shahbad Daulatpur Village, Rohini, Delhi, 110042, India
Lat 28.795675°
Long 77.037229°
24/02/23 02:10 PM
Google

ANNEXURE-IV

STOP CORONA:
Wear Mask.
Follow Physical Distancing.
Maintain Hand Hygiene.

Delhi Jal Board (दिल्ली जल बोर्ड)

(Government of NCT of Delhi)
www.djb.gov.in
Regular Water Bill

e(नाम): THE PRINCIPAL
ress(पता): ADITI
AVIDYALAYA, UNIVERSITY OF
HI, BAWANA, Delhi, 110039
bile No. . (मोबाइल): 9911609113
e/Loc (क्षेत्र / स्थान): / Narela
a Code (एरिया कोड): A-11
Code (एमआर कोड): 382/METERED

NO(केएनओ): 5303570000

Consumer Category(उपभोक्ता श्रेणी): CAT II
Premise Detail (परिसर विवरण): (No of floors-1)
Meter No. (मीटर संख्या): NA
Meter Type (मीटर का प्रकार) (DJB/Pvt): PVT
Bill No. (बिल संख्या): 530507244762
Bill Cycle(बिल चक्र): ZALL(2024-01)
Bill Basis(बिल आधार): Average : Assessed Average

Bill Date(बिल की तिथि)
29-APR-2024

Bill Amount (Rs.) (बिल राशि (रु))
35956

Bill Amount Payable (Rs.)(देय बिल राशि (रु)))
(Nearest up to Rs. 10) (लगभग 10 रु. तक)
35960

Bill Due Date(बिल देय तिथि)
16-MAY-2024

Amount Payable After Due Date(Rs.)
(देय तिथि के बाद देय राशि (रु))
37754

Meter No (मीटर संख्या)	UoM	Current Meter Read (मीटर की वर्तमान रीडिंग)		Previous Meter Read (मीटर की पिछली रीडिंग)		Consumption (खपत)	
		Meter Reading Date (मीटर रीडिंग की तारीख)	Reading / Meter Status (रीडिंग / मीटर स्थिति)	Meter Reading Date (मीटर रीडिंग की तारीख)	Reading / Meter Status (रीडिंग / मीटर स्थिति)	Days (दिन)	Units (यूनिट)
NA	KL	29-APR-2024	/ UNMT	29-FEB-2024	/ UNMT	60	200

Bill Details: Current Period Charges (बिल विवरण: वर्तमान अवधि शुल्क) (29-FEB-2024 to 29-APR-2024)

Applicable Rate Period	Description	Amount(Rs.)
01-MAR-2024 to 29-APR-2024	Total Consumption Charges	19836.44
01-MAR-2024 to 29-APR-2024	Sewerage Charge (60 % of Water Consumption Charge)	11901.86
01-MAR-2024 to 29-APR-2024	Service Charge - Consumption between 50-100 KL	2342.56
01-MAR-2024 to 29-APR-2024	Sub Total Bill Amount without Meter Rent	34080.86
01-MAR-2024 to 29-APR-2024	Subtotal Bill Amount	34080.86
	Adjustment Details Are Listed Below	1871.29
	Late payment charge	-0.39
	Late payment charge	3.93

* Bills verified for Rs. 35960/-
and entered the Bill in the Register
register at Page No. 06/-

Arrear, If any (Rs.) (बकाया, यदि कोई (रु))	35956
Total Consolidated Bill Amount Payable (Rs.) (कुल समेकित बिल राशि देय (रु))	37754
Late Payment Surcharge (Rs.)(देर से भुगतान पर अधिभार) (5% surcharge will be applicable after due date)(देय तिथि के बाद 5% अधिभार लागू होगा)	1797.78
Amount with LPSC after due date (Rs.) (देय तिथि के बाद अधिभार के साथ राशि (रु)	

PAYABLE AMOUNT TO AVAIL REBATE SCHEME (Rs.) (छूट योजना के लिए देय राशि (रु).))

Bill History (पिछला बिल)

Bill from Date	Bill to Date	Days	Reading	Status	Units	Amount(Rs
29-DEC-2023	29-FEB-2024	62		UNMT	207	37418
30-OCT-2023	29-DEC-2023	60		UNMT	200	36118
26-AUG-2023	30-OCT-2023	65		UNMT	217	40740
07-JUL-2023	26-AUG-2023	50		UNMT	167	28738
13-MAY-2023	07-JUL-2023	55		UNMT	183	31169

Payment History (पिछला भुगतान)

Receipt Id	Amount(Rs)	Date
530869008753	37414.90	21-MAR-2024
530202393837	36118.90	06-FEB-2024
530384694405	40740.90	15-DEC-2023
530773719672	28738.90	16-SEP-2023
530110799489	31169.90	18-JUL-2023

Important Message

If bill is not paid till Bill Due Date- connection may be disconnected (यदि बिल देय तिथि तक बिल का भुगतान नहीं किया जाता है- कनेक्शन काट दिया जा सकता है)
For any assistance / query : Please call 1916 or www.djb.gov.in (किसी भी सहायता / जानकारी के लिए: 1916 पर कॉल करें या www.djb.gov.in पर जाएं)

Delhi Jal Board
Bill Payment Counter Foil

KNO(केएनओ)	5303570000	Name(नाम)	THE PRINCIPAL
Bill Date(बिल की तिथि)	29-APR-2024	Bill Due Date (बिल देय तिथि)	16-MAY-2024
Bill Amount with LPSC (Rs.): (LPSC के साथ बिल राशि (रु.)):	37754	Payment Date/ (भुगतान की तारीख)	
		Amount Paid(Rs.) (राशि का भुगतान (रु.)	
		Name of Bank / Branch (बैंक / शाखा का नाम)	

Cheque / DD should be drawn in favour of DJB in the following format
(चेक / डिमांड ड्राफ्ट द्वारा भुगतान करने के लिए निम्न फार्मेट का उपयोग करें) DJB KNO

Bill No. (बिल संख्या)	530507244762
Bill Amount (Rs.) (बिल राशि (रु.)	35956
Cash/Cheque No./DD No.: (कैश / चेक नंबर / डीडी नं .:)	

IV. WATER USE & ITS CONSERVATION:

Plate No. 7: Rainwater harvesting unit

ANNEXURE-V

1) Carbon Footprint

1. Total Number of vehicles used by the stakeholders of the college (per day) – 80 (approx.)
2. No. of cycles used by the staff members and students – 5 (approx.)
3. No. of two wheelers used (average distance traveled and quantity of fuel and amount used per day). – 25 (approx.) (18 km – 1.5 L – Rs 165/ litre)
4. No. of cars used (average distance traveled and quantity of fuel and amount used per day). – 50 (approx.) (30 km – 2.5 L – Rs 275)
5. No. persons using common (public) transportation (average distance traveled and quantity of fuel and amount used per day). 1300 approx (most of them are students) – (20 km approx.)
6. Number of visitors with vehicles per day? – 11 (approx)
7. Number of generators used every day (hours). Give the amount of fuel used per day. – 01 (not everyday but only when electricity is not available); 17 litres per month
8. Number of LPG cylinders used in the canteen earlier. Now Canteen is functioning on gas pipe mode.
9. Quantity of kerosene/diesel/petrol used in the canteen/labs (Give the amount of fuel used per day and amount spent).
10. Amount of taxi/auto charges paid and the amount of fuel used per month for the transportation of vegetables and other materials to the canteen.
11. Amount of taxi/auto charges paid per month for the transportation of office goods to the college.
12. Use of any other fossil fuels in the college (Give the amount of fuel used per day and amount spent).

ANNEXURE-VI

Environmental Legislation

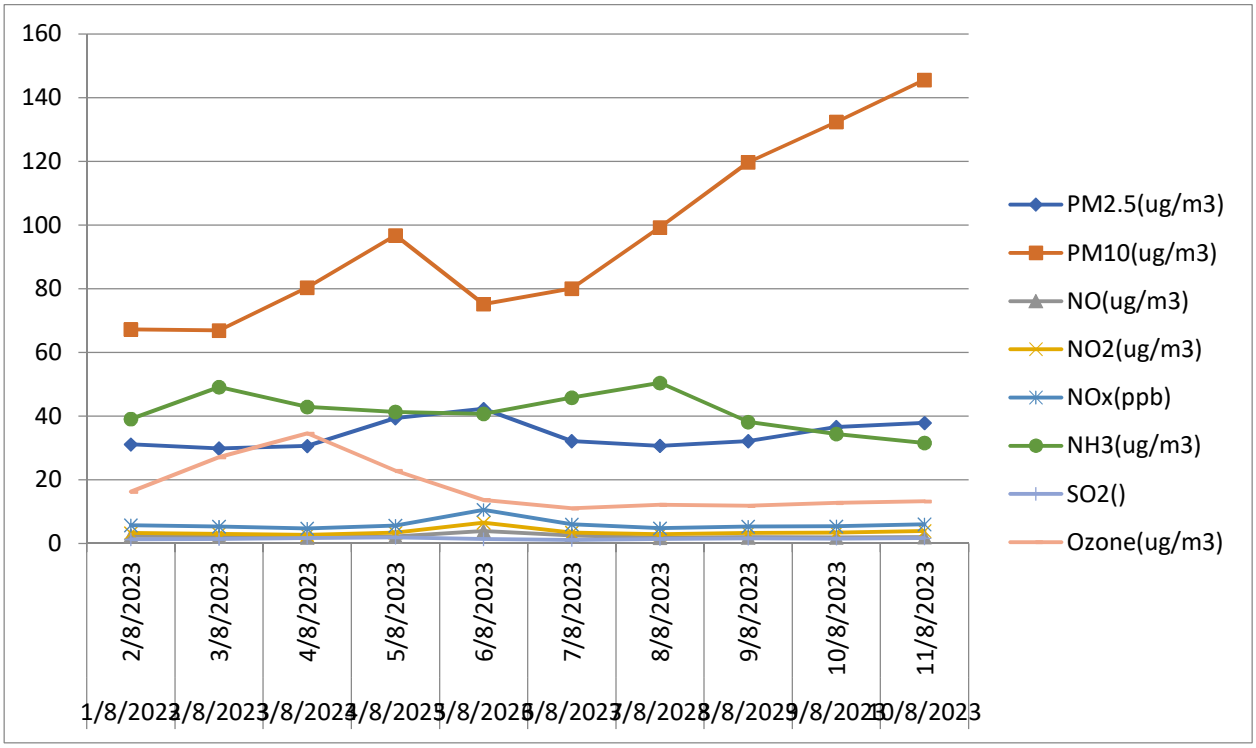
The Central Pollution Control Board's has released publication on *"Pollution Control Acts, Rules and Notifications issued thereunder"*. The fourth Edition of this series was published in September, 2001. In the fifth edition of the Pollution Control Law Series, several Notifications, recently amended Rules and Notifications have been incorporated. In Schedule VI of the Environment (Protection) Rules, 1986 the following new standards have been incorporated:

1. Noise Limit for Generator Sets run with Diesel;
2. Emission Limits for new Diesel Engines (upto 800 KW) for Generator Sets (Gensets) Applications;
3. Emission Standards for Diesel Engines (Engine rating more than 0.8 MW (800 KW) for Power Plant, Generator Set) Applications and other Requirements;
4. Boilers Using Agriculture Waste as Fuel; and
5. Guidelines for Pollution Control in Ginning Mills.

The amendments with respect to the Hazardous Waste (Management and Handling) Rules, 1989, the Noise Pollution (Regulation and Control) Rules, 2000 and Recycled Plastics Manufacturer, Sale and Usage Rules, 1999 have been incorporated in the respective Rules. Several other amendmentNotifications issued on Environment Impact Assessment (EIA), Coastal Regulation Zone (CRZ), Committees constituted pursuant to the Hon'ble Supreme Court orders, utilization of flyash have also been incorporated. In this edition, more than 650 pages containing the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Water (Prevention and Control of Pollution) Cess Act, 1977, the Environment (Protection) Act, 1986 and their Rules and Notifications were retyped to ensure better quality of printing. The content pages have also been rearranged so that all the Acts, Rules and Notifications could be seen at a glance.

ANNEXURE-VII

Baseline Environmental Condition:



S.No	From Date	To Date	Bawana, Delhi - DPCC							
S.No	From Date	To Date	PM2.5(ug/m3)	PM10(ug/m3)	NO(ug/m3)	NO2(ug/m3)	NOx(ppb)	NH3(ug/m3)	SO2()	Ozone(ug/m3)
1	1/8/2023	2/8/2023	31.15	67.26	2.43	3.31	5.74	39.13	1.35	16.29
2	2/8/2023	3/8/2023	29.85	66.92	2.3	3.07	5.37	49.15	1.46	27.13
3	3/8/2023	4/8/2023	30.65	80.37	2.03	2.72	4.76	42.92	1.77	34.57
4	4/8/2023	5/8/2023	39.44	96.72	2.26	3.42	5.67	41.35	1.91	22.83
5	5/8/2023	6/8/2023	42.28	75.19	3.97	6.6	10.58	40.75	1.41	13.69
6	6/8/2023	7/8/2023	32.2	80.09	2.55	3.48	6.03	45.83	1.16	11.07
7	7/8/2023	8/8/2023	30.72	99.23	1.89	2.96	4.82	50.43	1.46	12.18
8	8/8/2023	9/8/2023	32.17	119.71	2.02	3.35	5.37	38.17	1.63	11.84
9	9/8/2023	10/8/2023	36.58	132.36	1.95	3.49	5.43	34.43	1.59	12.79
10	10/8/2023	11/8/2023	37.88	145.58	2.07	3.94	6.06	31.62	1.71	13.28

ANNEXURE-VIII

SOCIAL, ENVIRONMENT WELFARE & COMMUNITY OUTREACH:

Eco-Club of Aditi Mahavidyalaya has successfully organized Environment Awareness Programmes in the outgoing Academic Session, 2022-2023. The Eco-club made sincere efforts to sensitize the students and staff towards environmental issues through different types of awareness activities. Our initiatives and sincere response from students and experts of environmental studies throughout the year has given us immense satisfaction and encouragement to work more towards the conservation of our bio-diverse environment.

Solid Waste Management :

Solid and Liquid Waste Management in Campus: Solid waste is the unwanted or useless solid materials generated from human activities in residential, industrial or commercial areas. It may be categorized in three ways. According to its: origin (domestic, industrial, commercial, construction or institutional) Solid waste in the college is collected by Indraprastha Municipal Solid Waste Solution Private Limited (IPMSWSPL). It comes under Narela Zone. The dumping van visit college daily for collection of solid waste.

Waste generated in the college is managed by Methods of Composting, Recycling, Reusing. College is trying to achieve zero garbage by following waste hierarchy of prevention, reduction, reuse, recycling, recovery and disposal.

Composting is the natural process of decomposition and recycling of organic material into a humus rich soil amendment known as compost. For any business or institution producing food waste, this organic material can be easily decomposed into high quality compost.

College successfully collaborated with Chintan Environmental Organization for successfully motivating our students to safely dispose E Waste in future. College collaborated with Green O Tech which is involved with Waste Paper Recycling. It included collection of waste from college site, recycle the same and deliver special recycle stationery products. This initiative will help in development and enhancement of understanding amongst stakeholders of college about process to conserve natural recourses, save energy and reducing green house gas emissions. With the intent of environmental conservation NSS collaborated with voluntary, eco-friendly and non-profit efforts of Green-O-Tech through MoU about installing a waste paper recycling machine in our college site. The team collaborated with our college and collected 750 kg of paper waste and gave it to the Green-o tech team. Green –o-tech collected 2100 Kg of Solid Waste from college.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Note : Captured by GPS Map Camera


GPS Map Camera
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Village, Rohini, Delhi, 110042, India
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06/12/2023 10:03 AM GMT +05:30
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PAPER WASTE-

National Service Scheme organized "Green-o tech paper recycling initiative" on 4 July 2022. College collaborated with Green O Tech which is involved with Waste Paper Recycling. It included collection of waste from college site, recycle the same and deliver special recycle stationery products. This initiative will help in development and enhancement of understanding amongst stakeholders of college about process to conserve natural recourses, save energy and reducing green house gas emissions. With the intent of environmental conservation NSS collaborated with voluntary, eco-friendly and non-profit efforts of Green-O-Tech through MoU about installing a waste paper recycling machine in our college site. The team collaborated with our college and collected 980 kg of paper waste in 2023 and gave it to the Green-o tech team. Green –o-tech converted it in to jute bag, jute folder, seed notebook, seed pen etc.

E-WASTE- E-waste is a popular, informal name for electronic products nearing the end of their "useful life." Computers, televisions, VCRs, stereos, copiers, and fax machines are common electronic products. Many of these products can be reused, refurbished, or recycled.

College successfully collaborated with Chintan Environmental Organization for successfully motivating our students to safely dispose E Waste in future.

MEDICAL WASTE-

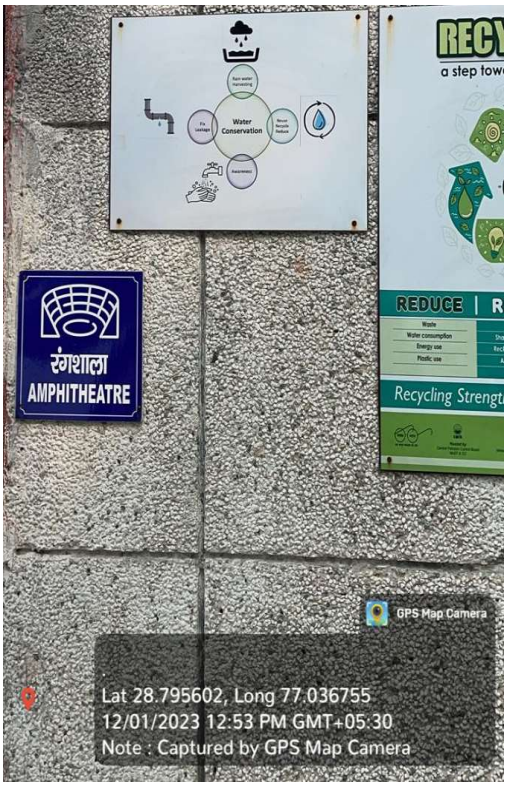
Sanitary napkin vending machine is set up in medical room. Incinerator treating system for sanitary napkin waste is set up in girls toilet.

Water Management and Conservation

Rainwater Harvesting: The institute constitutes three water harvesting plants. Rainwater harvesting is done by collecting rainwater on the surface through the broad pipelines. This not only recharges but arrest groundwater depletion and helps raising the declining water table and can help augment water supply.

Recycling of Water: The waste water of Two industrial Ro system is collected in water tank through pipes and it is further used. However, the RO waste water is used in various ways to avoid the overall wastage of water in the institution. For instance, flowering plants, cleaning and flushing toilets, washing floors and mopping etc.

Water Management and Rainwater Harvesting


Water Conservation
रंगशाला
AMPHITHEATRE
REDUCE
Recycling
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Aditi Mahavidyalaya and NSS

SOCIAL, ENVIRONMENT WELFARE & COMMUNITY OUTREACH:

1. Panel Discussion: The Department of Geography organized a Panel Discussion on "G20: BHARATIYA JNANA PADDHATI: GLOBAL MESSAGE" under the G-20 presidency on 5th October 2023.
2. B.El.Ed. Second Year Field Trip: B.El.Ed. second-year students conducted a field survey at Kamla Nehru Ridge, University of Delhi, to study soils and biodiversity.
3. Earth Day Celebration: The Department of Geography, in collaboration with Eco Club and Department of History, organized Earth Day on 22nd April 2024 with a focus on "plastic v/s planet."
4. Social Work Response to Environmental Sustainability: The Department of Social Work organized an online session on 'Social Work Response to Environmental Sustainability' on 20th August 2023.
5. Meri Maati Mera Desh Campaign: The “Patriotic Palette: Expression of Independence” campaign was held on 18th August 2023 in collaboration with NSS, focusing on independence and environmental sustainability.
6. Y20 MUN: The Y20 MUN was held, allowing students to simulate diplomatic negotiations on climate change and sustainable development.
7. Garden Committee: The Garden Committee organized a series of events including Shatabdi Vriksharopan 2023, a "Best out of Waste" workshop, and the Pushpotsava 2023 flower show.
8. Green Audit Committee: The Green Audit Committee of AMV focused on sustainability through plantation drives, environmental surveys, solar panel installation, and water harvesting.
9. Eco-friendly Diwali: AMV NCC with NSS initiated an Eco-friendly Diwali campaign by creating handmade handicrafts for donation to old age homes.
10. 44th Foundation Day of India Institute of Ecology and Environment: Two NSS volunteers attended the 44th Foundation Day celebration on 5th June 2023.
11. Best out of Waste Workshop: A two-day workshop was organized on “Best out of Waste” for students, focusing on creating garden-related accessories from biodegradable waste.
12. Pushpotsava 2023: The Garden Committee exhibited creativity and held a small sale counter at the 65th Annual Flower show “Pushpotsava 2023” at Gautam Buddha Centenary Garden.
13. Compost Making Unit: The Garden Committee restarted a compost-making unit using composting enzymes and dry leaves to manage natural waste and produce manure for the garden.
14. Retirement Day Saplings: Employees retiring during this session planted saplings on their retirement day.
15. Herb Garden: The Green Audit Committee established a small herb garden with medicinal plants and organized plantation drives.
16. Environmental Awareness Survey: The Green Audit Committee conducted a survey to assess environmental consciousness on energy, water, and waste management in the college.

17. Solar Panel Installation: Solar panels were installed at the college campus to promote clean and sustainable energy use.
18. Water Harvesting: Water harvesting systems were implemented by installing pipes to collect rainwater and replenish the groundwater table at the campus.


BAN CHINESE MANJHA
SAY NO TO
Chinese Manjha
SAVE LIFE
SAVE BIRDS
ADITI MAHAVIDYALAYA
[UNIVERSITY OF DELHI]
NATIONAL SERVICE SCHEME
"Not Me, But You" (2022)
VOLUNTEER INCHARGE : NIKITA VERMA, RASHMI MISHRA, BUSHRA TABASSUM, MISHA MANGLA,
YASHIKA PAWAR, PRERNA, DURGESH SAROHA, RIDHIMA KAPOOR, DEEPA TIWARI, BHAVNA PATHAK
Ms. PRERNA GUPTA
Dr. MALI DEVI SAWARIYA
Prof. MAMTA SHARMA
G20
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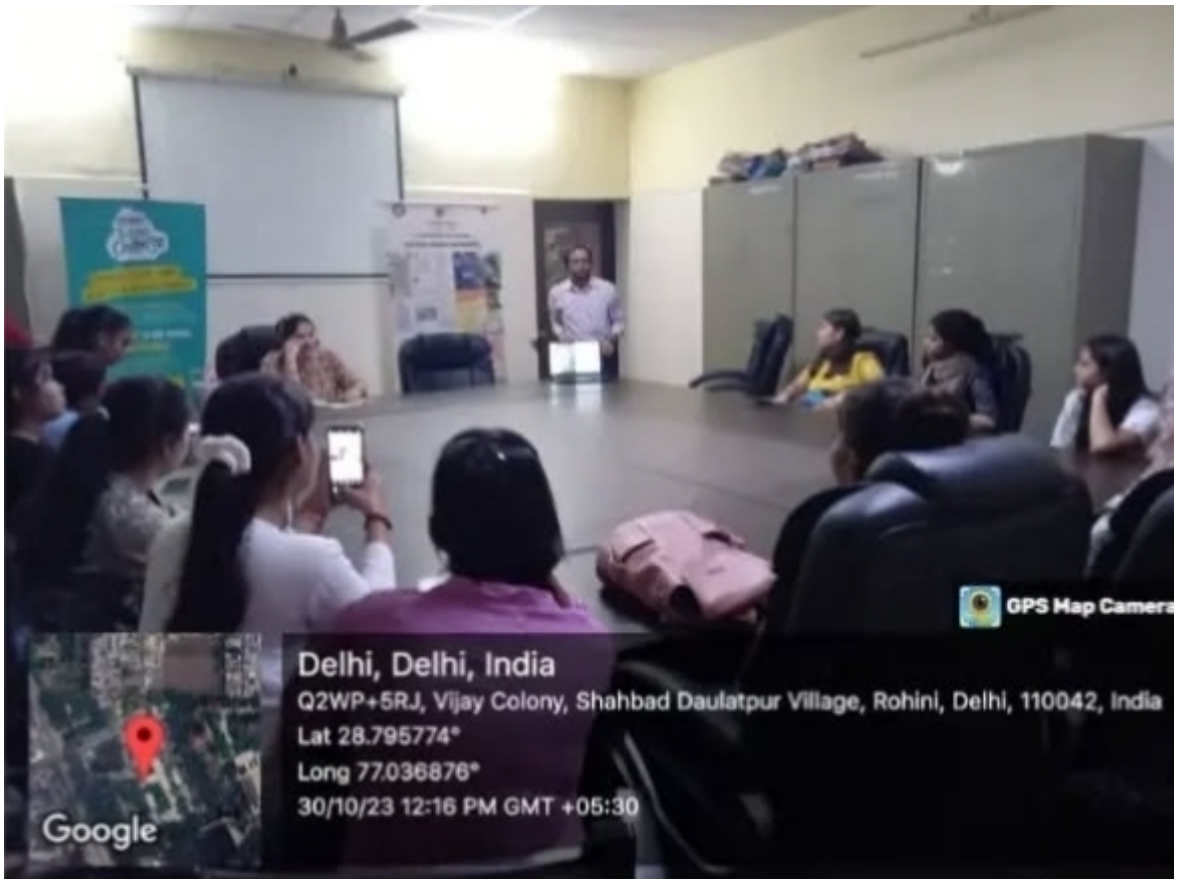
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GPS Map Camera
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