

GREEN AUDIT REPORT

2024



DEMOW COLLEGE

DEMOW, SIVASAGAR, ASSAM

PIN: 785662



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FOREWORD

I, on behalf of Demow College fraternity convey my best wishes to the members of the Women Cell and Eco Club for their vision to prepare the Green Audit of the college campus and welcome our well-wishers. This Green Audit report is an important and meaningful documentation throwing light on the important parameters of the campus environment, such as water management, improvement of energy efficiency and formulation of action plan to reduce misuse of power, importance of renewable energy, air quality and pollution level etc. This is a good initiative taken by all stakeholders for the benefit of the college. This will also help educate all on eco- friendly environment and living therein.

Meanwhile, I would like to thank Dr. Inee Gogoi, Scientist (Entomology), Assam Agricultural University, Jorhat, Assam for her guidance and suggestions to bring out this Green Audit pertaining to green and clean campus issues. All the stakeholders including the Women Cell and Eco Club members who have extended all possible help and co-operation towards completion of this Green Audit Report deserve my sincere thanks.

I hope, the Green Audit Report of the College is a valuable documentation for our institution to go for regular monitoring of the campus environment.

With regards,

(Dr. Krishna Jyoti Handique)
Principal
Demow College
Demow, Sivasagar

ACKNOWLEDGEMENT

On behalf of the Green Audit Team at Demow College, I extend heartfelt gratitude to our esteemed Principal, Dr. Krishna Jyoti Handique, for his unwavering support and encouragement throughout our audit process. We are deeply grateful to Auditor Dr. Inee Gogoi for her invaluable expertise and guidance, which significantly contributed to the success of our audit endeavor.

We would also like to express our sincere appreciation to the dedicated staff of Demow College for their cooperation, assistance, and enthusiasm in implementing sustainable practices and participating in the audit activities. Their commitment to environmental stewardship has been instrumental in fostering a culture of sustainability within our institution.

Lastly, we extend our gratitude to all stakeholders who have contributed to the success of our green audit initiative. Your collective efforts have played a pivotal role in advancing our commitment to environmental responsibility and promoting a greener, more sustainable future for our college and beyond.

Thank you all for your invaluable contributions.

Warm regards,

(Dr. Wakidur Rohman)
IQAC Co-ordinator, Demow College

GREEN AUDIT TEAM


DEMOW COLLEGE

A green audit team was constituted with the purpose of data collecting and preparing the requisite data for green audit assessment. The team comprises the following members:

SL. NO.	NAME	DESIGNATION	DEPARTMENT
1	Dr. Krishna Jyoti Handique	Principal	Economics
2	Pabitra Gogoi	Vice Principal	Political Science
3	Dr. Wakidur Rohman	IQAC Coordinator	Library Science
4	Gunamoni Gogoi	Assistant Professor	Assamese
5	Dulu Rani Phukon	Assistant Professor	Political Science
6	Shabnam Richa Sonowal	Assistant Professor	English
7	Salman Hussain	Assistant Professor	Economics
8	Kiron Jyoti Das	Assistant Professor	Political Science
9	Angkrita Chetia	Assistant Professor	English
10	Partha Protim Raidongia	Student	Political Science

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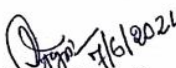
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Certificate

This is to certify that Demow College, Demow, Sivasagar, Assam-785662 has prepared a Self-Study Report on Green Audit for the year 2023-24. After going through the report and physical visit to the college campus regarding study of the various provisions as shown in the report, I have found everything visible as per the report. The College has maintained an eco-friendly campus with commendable measures like raising valuable trees, tobacco free campus, vermicompost plant, management of the waste, rain water harvest etc.

The College is also involved in awareness activities on environment and bio-diversity etc. within and outside the campus. The overall assessment of the contribution of the College towards preservation and protection of environment is satisfactory.


 (Dr. Inee Gogoi)
 Scientist-Stage-II
 (Entomology)
 Assam Agricultural University
 Jorhat, Assam

1. INTRODUCTION

2. OBJECTIVES AND METHODOLOGY

(A) OBJECTIVES

The Green Audit of the Demow College campus has been carried out by the Green Audit Committee of the college with the following objectives:

- (i) To identify the existing flora and fauna in the college campus.
- (ii) To assess the strength and weakness of the practices presently adopted in the campus and examine their impacts on the environment.
- (iii) To monitor the environmental management practices in terms of their functioning, need and importance.
- (iv) To create and arouse awareness about environment of the campus among all concerned and stakeholders.
- (v) To prepare and document a Green Audit Report of the college campus for all time reference and follow-up action.

(B) METHODOLOGY APPLIED

In order to conduct the Green Audit of Demow College, a methodology comprising the following components was applied:

- (i) Field visit:** The Green Audit (G.A.) team of the college made spot visits in the campus as and when necessary.
- (ii) Onsite interviews:** The G.A. team met all different stakeholders associated with energy consumption, water use, garden maintenance, wastes disposal, cleaning and sanitizing activities etc. and collected relevant and necessary information.
- (iii) The floral and faunal species account:** The floral and faunal species were recorded by the G.A. team during campus survey and monitoring.

3. ABOUT THE COLLEGE

Demow College was established on 26th July, 1970 at the initiative of enlightened public and a few distinguished educationists and social activists of the locality. Demow College was brought under Deficit Grants-In-Aid system in the year of 1985 and was provincialized in the year of 2005. Currently, the college stands for quality and excellence in higher education.

Demow college is affiliated to Dibrugarh University. For the Higher Secondary courses, the college strictly follows the course structure designed by the Assam Higher Secondary Education Council. With strength of more than thirteen hundred students and 19 teaching faculty members, Demow College is one of the premier institutions of higher education of Sivasagar district in Upper Assam. For the last 54 years, the college has been offering yeoman's service to the cause of higher education. The healthy academic atmosphere of the college, its quality education, good results as well as the personal care and guidance by the teaching faculty attract the students from far and wide and even from remote places. The first cycle of assessment & accreditation of the college by National Assessment and Accreditation Council (NAAC) was held in 2003. The college fraternity has been striving hard to translate the dream of the institution into reality. The second cycle of assessment & accreditation by NAAC was held in 2017 and the college was awarded 'B' Grade by the same.



Demow College Gate

VISION

Demow College envisions a future where every young person has the opportunity to fulfill their potential and contribute meaningfully to society. It envisions a world where education is not just a privilege but a fundamental right, accessible to all, regardless of geographical location or socio-economic status. Central to its vision is the idea of holistic development in keeping with the objectives of the National Education Policy (NEP) 2020. Demow College aims to cultivate the values of empathy, integrity and resilience among its students. It envisions graduates who are not only well-equipped for the demands of the professional world but also committed to making a positive difference in their communities.

MISSION

The mission of Demow College is simple yet profound: to provide accessible, quality education to the youth of rural communities. Through a commitment to excellence in teaching and learning, the college aims to equip students with the knowledge, skills, and confidence they need to thrive in an ever-evolving world. By fostering a supportive and inclusive environment, Demow College strives to nurture the talents and aspirations of every student, regardless of their background or circumstances.



Teaching Staff



Library Staff

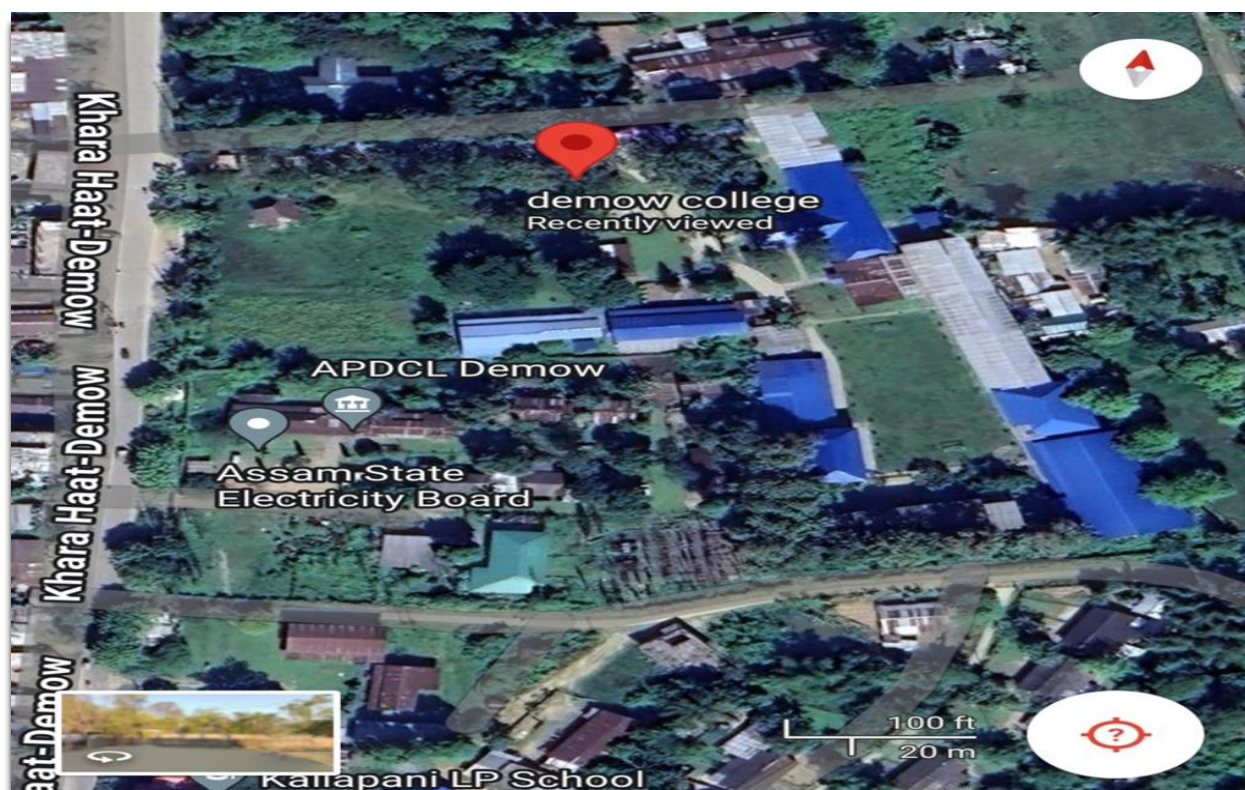


Non- Teaching Staff

4. OBSERVATION

4.1. LAND USE DATA OF DEMOW COLLEGE, SIVASAGAR, ASSAM

SL NO.	CATEGORIES OF LAND USE	AREA IN BIGHA
1	OPEN SPACE AND PLANTATION	09 Bigha
2	BUILT UP AREA	13 Bigha
3	TOTAL AREA	22 Bigha (Comprises of 03 campus)



Satellite view of Demow College

4.2. GREEN CAMPUS & BIO-DIVERSITY, DEMOW COLLEGE

The college campus is an example of co-existence of human and environment as it is rich in flora and faunal diversity. The campus area is vastly diverse with a variety of tree species having significant environmental role. These tree species are the integral part of the college. Most of these tree species are planted by the college authority through various tree plantation programs conducted in different periods of time. These trees have increased the quality of life by providing oxygen, improving air quality, climate amelioration, and conservation of water, preserving soil, and supporting wildlife. The impact of these trees is seen not only within the college site but also on the surroundings of the college. They contribute to the environment by moderating the effects of the sun, rain and wind and by absorbing and filtering the sun's radiant energy and keeping the campus cool in summer.

Demow College is committed to fostering a green campus environment and promoting biodiversity within its premises and surrounding areas. The college recognizes the importance of maintaining a harmonious relationship with nature and strives to create awareness among its students and the community about environmental conservation.

Demow College boasts a rich variety of flora and fauna, with approximately 55 species identified within its vicinity. This diverse ecosystem includes indigenous plant species, trees, birds, insects, and other wildlife, contributing to the overall ecological balance of the region.



Bird's Eye view of Demow College

4.2.i. LIST OF TREES/PLANTS IN DEMOW COLLEGE

SL. No.	COMMON NAME	SCIENTIFIC NAME	FAMILY	NO. OF PLANTS
1	Areca palm	<i>Dyopsis lutescens</i>	Arecaceae	15
2	Arjun	<i>Terminalia arjuna</i>	Combretaceae	02
3	Bakul	<i>Mimusops elengi</i>	Sapotaceae	46
4	Neem	<i>Azadirachta indica</i>	Meliaceae	26
5	Segun	<i>Tectona grandis</i>	Verbenaceae	22
6	Tulsi	<i>Ocimum tenuiflorum</i>	Lamiaceae	02
7	Indian Jujube (Bogori)	<i>Ziziphus mauritiana</i>	Rhamnaceae	02
8	Sacred fig/Peepul	<i>Ficus religiosa</i>	Moraceae	02
9	Curry plant (Norosingha)	<i>Murraya koenigii</i>	Rutaceae	05
10	Kaji Nemu	<i>Citrus limon</i>	Rutaceae	73
11	Java Plum (Kola Jamu)	<i>Syzygium cumini</i>	Myrtaceae	02
12	Black Myrobalan (Hilikha)	<i>Terminalia chebula</i>	Combretaceae	05
13	Brinjal/Aubergine	<i>Solanum melongena</i>	Solanaceae	Garden
14	Papaya (Omita)	<i>Carica papaya</i>	Caricaceae	02
15	Tabasco pepper (Jolokia)	<i>Capsicum frutescens</i>	Solanaceae	Garden
16	Indian Gooseberry (Aamlokhi)	<i>Phyllanthus emblica</i>	Phyllanthaceae	05
17	North Indian Rosewood (Sishu)	<i>Dalbergia sissoo</i>	Fabaceae	01
18	Bottle palm	<i>Hyophorbe lagenicaulis</i>	Arecaceae	02
19	White Champaca (Tita Sopa)	<i>Magnolia champaca</i>	Magnoliaceae	06
20	Gmelina (Gomari)	<i>Gmelina arborea</i>	Lamiaceae	03
21	Eucalyptus	<i>Eucalyptus teriticornis</i>	Myrtaceae	04

22	Indian Rose chestnut (Nahor)	<i>Mesua ferrea</i>	Calophyllaceae	04
23	Norfolk Island pine	<i>Araucaria heterophylla</i>	Araucariaceae	07
24	Mango (Aam)	<i>Mangifera indica</i>	Anacardiaceae	01
25	Olive (Jolfai)	<i>Olea europaea</i>	Oleaceae	11
26	Pomegranate (Dalim)	<i>Punica granatum</i>	Punicaceae	04
27	Star Fruit (Kordoi)	<i>Averrhoa carambola</i>	Oxalidaceae	01
28	Agarwood (Sasi)	<i>Aquilaria malaccensis</i>	Thymelaeaceae	05
29	Southern Silky Oak	<i>Grevillea robusta</i>	Proteaceae	04
30	Kanchanara (Kanchan)	<i>Bauhinia variegata</i>	Caesalpinioideae	04
31	Giant Crepe-myrtle (Azar)	<i>Lagerstroemia speciosa</i>	Lythraceae	01
32	Bottlebrushes	<i>Callistemon</i>	Myrtaceae	01
33	Drumstick (Sojina)	<i>Moringa oleifera</i>	Moringaceae	01
34	Parijata (Hewali)	<i>Nyctanthes arbortristis</i>	Oleaceae	01
35	“Bhatou Phool”	<i>Papilionanthe teres</i>	Orchidaceae	02
36	Hooded orchid	<i>Dendrobium aphyllum</i>	Orchidaceae	02
37	Mahogany	<i>Swietenia mahagoni</i>	Meliaceae	02
38	Common Guava	<i>Psidium guajava</i>	Myrtaceae	03
39	Aralia	<i>Polyscias fruticosa</i>	Araliaceae	05
40	Euohorbia	<i>Euphorbia serrata</i>	Euphorbiaceae	05
41	Ribon Grass	<i>Phalaris arundinacea</i>	Poaceae	01
42	Bougainvillea	<i>Bougainvillea galbra</i>	Nyctaginaceae	04
43	Chinese Palm Plant	<i>Livistona chinensis</i>	Arecaceae	03
44	Arelia Green Plant	<i>Polyscias fruticosa</i>	Araliaceae	04
45	Spider Plant	<i>Chlorophytum comosum</i>	Asparagus	01
46	Green croton Plant	<i>Coliseum variegatum</i>	Euphorbiaceae	05

47	Cycas	<i>Cycas revoluta</i>	Cycadaceae	04
48	Syzygium Plant	<i>Syzygium myrtifolium</i>	Myrtaceae	03
49	Furcraea	<i>Furcraea foetida</i>	Asparagaceae	04
50	Rubber Plant	<i>Ficus elastica</i>	Moraceae	02
51	Kothona	<i>Tabernaemontana divaricate</i>	Apocynaceae	01
52	Goethe plant (Dupor Tenga)	<i>Bryophyllum pinnatum</i>	Crassulaceae	08
53	Northern White cedar (Thuja)	<i>Thuja occidentalis</i>	Cupressaceae	02
54	Rose	<i>Rosa rubiginosa</i>	Rosaceae	02
55	Hibiscus	<i>Hibiscus rosa-sinensis</i>	Malvaceae	01

Medicinal Plants:

- Tulsi- *Ocimum tenuiflorum*
- Neem- *Azadirachta indica*
- Narasingha/ Curry Plant- *Murraya koenigii*
- Papaya- *Carica papaya*
- Indian Gooseberry/Aamlokhi- *Phyllanthus emblica*
- Hilikha- Black myrobalan- *Terminalia chebula* Retz



Curry Plant



Neem



Hilikha/ Black myrobalan

Fruit bearing Plants:

- i. Guava- *Psidium guajava*
- ii. Mango- *Mangifera indica*
- iii. Java Plum/ Kola jamu- *Syzygium cumini*
- iv. Starfruit- *Aquilaria malaccensis* Lamk.
- v. Pomegranate- *Punica granatum*
- vi. Papaya- *Carica papaya*
- vii. Aamlokhi- *Phyllanthus emblica*
- viii. Hilikha- *Terminalia chebula* Retz
- ix. Indian jujube- *Ziziphus mauritiana*



Java Plum/ Kola jamu



Papaya



Indian Jujube/ Bogori

Timber Yielding Plants:

- i. Segun- *Tectona grandis*
- ii. Tita sopa- *Magnolia insignis*
- iii. Mahogany- *Swietenia mahagoni*



Segun



Tita Sopa

Flowering/ Ornamental Plants:

- i. Rose- *Rosa indica*
- ii. Bokul- *Mimusops elengi*
- iii. Kanchan- *Bauhinia variegata*
- iv. Kothona- *Tabernaemontana divaricata*
- vi. Sewali- *Nyctanthes arbor-tristis*



Kothona



Bougainvillea



Kamini Kanson



Furcaria

1. Is there a garden in your institute?

Yes, there are three mini vegetable gardens.

2. Do students spend time in the garden?

Yes, students actively take part in planting and harvesting the garden produce.

3. Total number of Plants in Campus?

Total number of trees/plants in the college campus: 334 approx.

- Full grown Trees: 78
- Plants: 248
- Herbs: 05
- Orchids: 04
- Grass Cover: 7 bigha

Note: Grasses could not be taken under consideration for their innumerability.

Total number of plant species identified as 55 and total number of plants in the campus is recorded as 334.

4.2.ii. FAUNAL DIVERSITY IN DEMOW COLLEGE

The following are spotted within the college campus:

MAMMALS

SL NO.	NAME	SCIENTIFIC NAME
1	Rhesus macaque (Monkey)	<i>Macaca mulatta</i>
2	Five stripped palm Squirrel	<i>Funambulus pennantii</i>

AMPHIBIANS

SL NO.	COMMON NAME	SCIENTIFIC NAME
1	Asian Common Toad	<i>Duttaphrynus melanostictus</i>
2	Common toad	<i>Bufo bufo</i>

REPTILES

SL NO.	COMMON NAME	SCIENTIFIC NAME
1	Oriental Garden Lizard	<i>Calotes versicolor</i>
2	Common House Gecko	<i>Hemidactylus frenatus</i>
3	Oriental Rat Snake	<i>Ptyas mucosa</i>
4	Indian Cobra	<i>Najana naja</i>

BIRDS

SL NO.	NAME	SCIENTIFIC NAME
1	Parrot	<i>Psittaciformes</i>
2	Common Myna	<i>Acridotheres tristis</i>
3	House Sparrow	<i>Passer domesticus</i>
4	Pigeon	<i>Columba livia</i>

4.2.iii. INITIATIVES FOR BIODIVERSITY PRESERVATION:

Tree Plantation Programs: The college actively organizes tree plantation drives in collaboration with its National Service Scheme (NSS) unit and Women Cell. These programs aim to increase the green cover within the campus and surrounding areas, thereby enhancing biodiversity and mitigating environmental degradation.

Awareness Campaigns: Demow College conducts awareness campaigns and workshops on biodiversity conservation, emphasizing the importance of preserving native species and habitats. These initiatives engage students, faculty, and local residents in efforts to protect and nurture the environment.

Eco-Friendly Practices: The college promotes eco-friendly practices such as waste reduction, recycling, and sustainable resource management. By adopting green technologies and practices, Demow College minimizes its ecological footprint and sets an example for environmental stewardship.

4.2.iv. PRESERVATIVE MEASURES FOR GREEN COVER:

Regular Maintenance: The college ensures regular maintenance of green spaces, including watering, weeding, pruning, and fertilization, to ensure the health and vitality of plant life on campus.

Community Involvement: The college encourages active participation from students, faculty, and the local community in preserving the green cover. By fostering a sense of ownership and responsibility, Demow College ensures sustained efforts towards maintaining a green campus environment.



Cleanliness drive, World Environment Day, 2022

4.3. WASTE DISPOSAL SYSTEM OF THE COLLEGE

Waste management system comprises of various waste disposal activities including waste collection, transportation, treatment and disposal. At present solid wastes in the form of wastepaper and fallen tree leaves are the major waste generated in the college. The bathroom liquid waste is fed to soak pits. The canteen produces a mix of organic and inorganic waste. The biodegradable solid waste of the college primarily containing the fallen leaves and papers are recycled by composting in the vermicomposting unit of the college. Compost thus produced is also utilized by the college as organic manure for saplings. Some of the non-biodegradable wastes are being sold as scrap for recycling. There are nearly 15 waste collection bins across the entire college campus. Waste management is a crucial aspect of maintaining a clean and sustainable environment at Demow College. The college recognizes the importance of responsible waste disposal practices in minimizing environmental impact and promoting a healthy campus community.

4.3.i. WASTE GENERATION PROFILE:

Demow College generates various types of waste, including organic, recyclable, and non-recyclable materials. The primary sources of waste include classrooms, laboratories, administrative offices, and cafeteria facilities. Understanding the composition and sources of waste is essential for implementing effective waste management strategies.

SL NO.	TYPES OF WASTE	PARTICULARS	DISPOSAL METHOD
1	E-Waste	Computers, electrical appliances and electronic devices.	Recycle or Direct selling
2	Plastic Waste	Pen, Refill, Plastic water bottles and other plastic containers, wrappers.	Direct Selling
3	Solid Waste	Damaged furniture, paper waste, paper plates, food wastes.	Reuse after maintenance or Collected by Demow Municipality
4	Waste Water	Washing, Urinals, Bathrooms.	Soak Pits

4.3.ii. WASTE MANAGEMENT PRACTICES

1. **Segregation at Source:** Demow College emphasizes the segregation of waste at the source to facilitate proper disposal and recycling. Separate bins are provided for different types of waste, including paper, plastic, glass, and organic waste, encouraging students and staff to sort their waste responsibly.



Solid Waste



Biodegradable Waste



Non-Biodegradable Waste

2. **Recycling Initiatives:** The college promotes recycling through designated recycling bins and awareness campaigns. Recyclable materials such as paper, cardboard, plastic bottles, and aluminum cans are collected and sent for recycling to minimize landfill waste and conserve resources.



3. **Waste Reduction Measures:** Demow College implements waste reduction measures such as promoting the use of reusable water bottles, encouraging electronic communication to reduce paper waste, and avoiding single-use plastics on campus.

4. **Collaboration with Municipality Authorities:** The college collaborates with local waste

management authorities to ensure proper collection, transportation, and disposal of non-recyclable waste. Regular waste collection schedules are established to maintain cleanliness and hygiene on campus.

5. Vermicomposting Project: With the growing importance of sustainable practices in waste management, Demow College also established a vermicomposting project which aims to not only reduce our campus's carbon footprint but also educate and engage our community in environmentally friendly practices. This project also helps us to get organic fertilizer. Organic waste generated from cafeteria food scraps and garden waste is composted to produce nutrient-rich compost for landscaping and gardening purposes. Composting not only diverts organic waste from landfills but also promotes soil health and reduces the need for chemical fertilizers.



Vermicomposting Pit

6. Awareness and Education:

Demow College conducts awareness campaigns, workshops, and seminars to educate students, faculty, and staff about the importance of waste management and sustainable practices. These initiatives aim to foster a culture of environmental responsibility and empower individuals to make informed choices regarding waste disposal.

Demow College's waste management initiatives reflect its commitment to environmental sustainability and responsible citizenship. By promoting waste reduction, recycling, composting, and awareness, the college strives to create a clean, healthy, and eco-friendly campus environment for all its stakeholders. Continued collaboration, innovation, and community engagement are essential for achieving long-term

success in waste management efforts.

4.4. HEALTH AND WELLNESS

At Demow College, the well-being of students and staff is paramount, with a range of health services and emergency support available on campus.

1. Health Room:

Equipped to address medical needs, Demow College features a dedicated health room serving as the primary point of contact for minor ailments and emergencies.

2. Blood Donation Camps:

In a show of community solidarity, the college has hosted blood donation camps, allowing students and staff to contribute to lifesaving efforts and assist those in need of transfusions.

3. Health Camps Collaboration:

Through joint efforts, the Department of Political Science and the NSS Unit once organized a health camp, aiming to raise health awareness and offer free check-ups to students, staff, and local residents. Also, Dental checkups were organized in the adopted villages.

4. First Aid and Accessibility:

Ensuring safety and accessibility, Demow College maintains well-equipped first aid kits and provides training in first aid procedures. Additionally, ramps are strategically placed across campus for easy mobility. The College is also equipped with a wheelchair to facilitate movements.



Health Care Unit



Ramp



Wheel chair

5. Emergency Preparedness:

With trained personnel and established protocols, Demow College stands ready to handle emergencies promptly and effectively, be it medical crises, accidents, or unforeseen incidents.

Demow College's commitment to health and safety shines through its comprehensive services, including blood donation initiatives, collaborative health camps, accessibility measures, and efficient emergency response protocols. By prioritizing well-being, the college fosters an environment conducive to learning and personal growth.

4.5. ENERGY USAGE AND MANAGEMENT

Demow College recognizes the importance of energy conservation in reducing environmental impact and promoting sustainability. As part of its commitment to responsible stewardship, the college has implemented various measures to optimize energy use and promote conservation on campus.

4.5.i. ENERGY USAGE PROFILE:

Demow College consumes energy for various purposes, including lighting, heating, cooling, ventilation, equipment operation, and administrative functions. Understanding the energy usage profile is essential for identifying opportunities for conservation and efficiency improvement.

SL NO.	NAME OF APPLIANCE	QUANTITY
1	Fan	141
2	Air Conditioner	09
3	Inverter	01
4	Big Light	07
5	LED Bulb	80

4.5.ii. ENERGY CONSERVATION MESASURES:

i. Energy-Efficient Lighting:

The college has transitioned to energy-efficient lighting systems, including LED bulbs and fixtures, which consume less electricity and have a longer lifespan compared to traditional incandescent and fluorescent lighting. Lighting retrofit projects have been implemented across campus buildings to reduce energy consumption and maintenance costs.

ii. Energy Awareness and Education:

The college conducts energy conservation awareness campaigns, workshops, and seminars to educate students, faculty, and staff about the importance of energy efficiency and sustainable practices. These initiatives raise awareness about energy conservation techniques, promote behavior change, and empower individuals to take proactive steps to reduce energy consumption.



Measure taken for Energy conservation

Demow College's energy use and conservation measures reflect its commitment to environmental sustainability and responsible resource management. By implementing energy-efficient technologies, promoting awareness, and fostering collaboration, the college aims to reduce its carbon footprint, lower operating costs, and create a more resilient and sustainable campus community. Continued efforts in energy conservation are essential for achieving long-term environmental stewardship and ensuring a sustainable future for generations to come.

The college administration has initiated several green practices to bolster its commitment to environmental sustainability, with a significant focus on the planned installation of solar street lights across the campus. Embracing solar technology, the college aims to reduce its carbon footprint by harnessing renewable energy sources and decreasing dependency on conventional electricity. This endeavor exemplifies the institution's dedication to adopting environmentally friendly solutions and fostering a more sustainable campus environment.

4.6. AIR POLLUTION MANAGEMENT

4.6.i. MEASURES ADOPTED

1. **Vehicle Emission Control:** The college encourages the use of sustainable transportation options such as cycling and walking to reduce vehicular emissions on campus. Parking regulations, designated drop-off zones, and incentives for eco-friendly commuting further support efforts to mitigate air pollution from vehicles.



Promotion Bicycle use



Smoke free Zone

2. **Green Initiatives:** Demow College maintains green spaces and plantations throughout the campus to improve air quality and provide natural filtration of pollutants. Trees and plants absorb carbon dioxide, release oxygen, and filter airborne pollutants, contributing to a healthier campus environment. Air purifying plants like neem surround the campus. Also, 22 neem plants were planted by the Alumni association of Demow College on the occasion of World Environmental Day i.e. 5th June, 2024
3. **Indoor Air Quality Management:** The college implements measures to enhance indoor air quality in classrooms and other facilities. Proper ventilation, filtration systems are essential for minimizing indoor air pollutants and ensuring a conducive learning and working environment.
4. **Awareness and Education:** Demow College conducts awareness programs, workshops, and seminars on water conservation, air pollution control, and sustainable practices. These initiatives aim to educate students, faculty, and staff about the importance of preserving water resources, reducing air pollution, and mitigating the impacts of environmental degradation.



Tobacco Prevention



Plantation of Neem Trees

4.7. NOISE POLLUTION MANAGEMENT

Demow College recognizes the adverse effects of noise pollution on the health and well-being of its campus community. In line with its commitment to providing a conducive learning and working environment, the college has implemented various measures to manage and mitigate noise pollution effectively.

4.7.i. ASSESSMENT OF NOISE SOURCES:

Demow College conducts regular assessments to identify sources of noise pollution on campus. Common sources include vehicular traffic, construction activities, equipment operation, events, and recreational activities. Understanding the sources and intensity of noise pollution is essential for implementing targeted mitigation strategies.

4.7.ii. NOISE MANAGEMENT STRATEGIES:

1. **Noise Barriers:** The college employs physical barriers such as soundproof walls and vegetative buffers to mitigate noise propagation from external sources into campus buildings and facilities. These barriers help reduce the transmission of noise and create quieter indoor environments for learning and working.
2. **Traffic Management:** Demow College implements traffic management measures to minimize noise from vehicular traffic on campus and parking areas. Designated parking zones, and traffic flow optimization help reduce vehicle noise and improve overall campus tranquility.



Designated area for Parking Vehicles

3. Quiet Zones: Designation of quiet zones in libraries, study areas, and academic buildings ensures minimal disturbance from noise-generating activities. Signage, policies, and enforcement mechanisms help maintain the integrity of quiet zones and promote a conducive learning environment.



Quiet Zones



Noise Pollution Management

4.8. WATER RESOURCES AND WATER MANAGEMENT SCENARIO



Water Purifier



Water tank and Hand washing facility

1. Source of water: Ground water, Rain water
2. Number of water tanks: 02
3. Capacity of tank: 1500 litre and 1000 litre.
4. Water users on the campus: Students, Teachers, Administrative staff
5. Any water wastage/why? NIL
6. Wastewater sources: Canteen, R.O (Reverse Osmosis) etc.
7. Use of wastewater: Reuse of wastewater generated by the Reverse Osmosis System in garden or washroom
8. No of units and amount of water harvested: 1000 litre
9. Amount of water lost per day: NIL
10. Any leaky taps? NIL
11. Any water management plan used? Yes, Rain Water harvesting.
12. Any water-saving techniques followed?

Yes, conventional methods are followed. For example:

- There are signs near the basins to remind students to turn off taps as soon as they wash their hands.
- Leaks are detected and repaired so that wastage of water will get reduced.
- Unnecessary flushing of the toilet is avoided.
- Tissues, insects and other similar waste are disposed in the dustbins rather than the toilet.

16. Are there any signs reminding people to turn off the water? Yes.

4.8.i. Rain Water Harvesting Project:

Demow College has implemented comprehensive rainwater harvesting systems to harness natural resources effectively. These systems consist of guttering and downpipes directing rainwater from

rooftops and surfaces into storage tanks or underground reservoirs. The harvested rainwater serves multiple purposes on campus, primarily irrigation for landscaping and agriculture. Additionally, it is used for non-potable applications like toilet flushing, cleaning, and groundwater recharge, reducing reliance on municipal water sources and promoting water conservation.



Tank for Rain Water Harvesting

Demow College is committed to maintaining and enhancing its rainwater harvesting infrastructure. This includes regular maintenance, exploring innovative technologies for improved efficiency, and conducting educational campaigns to raise awareness about water conservation practices among students and staff. Through these initiatives, Demow College demonstrates its dedication to sustainability and environmental stewardship while setting a positive example for the community.

Note: This is an ongoing project.

5. ON GOING PROJECTS:

i. GREEN HOUSE

Greenhouses serve as controlled environments for plant cultivation, ensuring optimal conditions for growth and protection against weather and pests. Currently, Demow College is in the process of setting up a greenhouse facility to enrich agricultural and horticultural education. The focus lies on infrastructure and equipment installation. Looking ahead, the college intends to broaden the project's scope by introducing more plant species, integrating advanced technology, fostering partnerships, and organizing educational outreach initiatives.



Construction of Green House

ii. SOLAR POWER

Demow College is considering installing a solar power system and has applied to ONGC for support. We believe this transition is vital for sustainable development and environmental responsibility, especially in a region with significant oil mining activities. The solar panels will benefit our diverse student population, improve energy access, and reduce costs. Additionally, transitioning to solar energy will demonstrate our commitment to environmental stewardship and promote cleaner energy alternatives in the community.

6. ROUTINE GREEN PRACTICES AND FUTURE STRATEGY

The college has taken up many green practices to augment its contribution towards environmental sustainability. Some salient points highlighting the routine green practices of the college are summarized below.

1. **Solar Lights:** Installation of Solar Lights process is under process.
2. **Rain water harvesting facilities:** Installation of Rain water harvesting facilities in our college campus is under process.
3. **Pedestrian friendly roads:** The roads are pedestrian friendly to make inter-building movement smooth for people and thus avoiding the unnecessary use of vehicles.



Pedestrian friendly Roads

4. **Plastic free campus:** The use of plastic is restricted and discouraged in the college campus. The use of paper in daily functioning of the college office is limited by gradually moving towards a paperless mode.



5. **Green landscaping with trees and plants:** The College has been taking plantation drives in all major occasions not only in different parts the college but in different locations of Demow town. Plantation drives are conducted on major occasions such as World Environment Day, College annual sports, NCC Day, NSS Day etc. The college has also signed a MoU with Assam Science Society for establishing good community participation.



Green Initiatives

The college strictly follows and monitors a criterion of the State Government for free admission in which the student has to plant a tree sampling in any suitable area and follow up its growth for becoming eligible for free admissions in the subsequent classes. In pursuit of environmental sustainability, Demow College has implemented various preservation initiatives, contributing to the conservation and enhancement of

green spaces on campus.

- i. Programmes related to environment awareness: Seminars/workshops are regularly organized by the college for various stakeholders to create awareness regarding environmental sustainability.



Plantation Programme



World Environment Day, 2024

- ii. Extension Activities conducted on Environment Awareness: Various outreach activities relating to environment promotional are carried out by the college in our adopted village.
- iii. Women's Cell Ornamental Plant Initiative: The Women's Cell at Demow College has proactively contributed to the preservation of biodiversity by introducing 54 ornamental plants on campus. This initiative not only enhances the aesthetic appeal of the college but also promotes the growth of local flora.



- iv. Eco Club Plantation Drive: Under the auspices of the Eco Club, Demow College has organized plantation drives to augment greenery on campus. These efforts involve students and faculty members actively participating in tree planting activities, contributing to carbon sequestration and ecosystem restoration.



Plantation activities by Eco Club

- v. Orchid Plantation: The faculty members planted two varieties of orchids- “Bhatou Phool” (*Papilionanthe teres*) and Hooded orchid (*Dendrobium aphyllum*). These new additions will help increase the beauty of the college campus.



Orchid Plantation

- vi. NSS Cleanliness and Plantation Drives: The National Service Scheme (NSS) at

Demow College has extended its preservation efforts beyond campus borders by organizing plantation drives in adopted villages and neighboring schools. These initiatives aim to expand green cover, combat deforestation, and promote environmental awareness in local communities.



NSS Plantation and Cleanliness Drives



vii. IQAC Plantation and Cleanliness Drive: The Internal Quality Assurance Cell

(IQAC) of Demow College has spearheaded plantation and cleanliness drives, reinforcing the college's commitment to environmental stewardship. These activities focus on fostering a clean and green environment conducive to learning and well-being.



Cleanliness Drive



Plantation of Sasi plant

- viii. Tree plantation in memory of Birendranath Chetia: A plantation drive of Bokul trees was carried out by the Birendranath Chetia Trust on 3rd march, 2024. This was done with a motive to celebrative the life and works of the renowned poet of Assam, Birendranath Chetia.



Bokul tree plantation in memory of Birendranath Chetia

- ix. National Workshop on Vermicomposting: A workshop on Vermicomposting was hosted on 22 May, 2024 under the joint collaboration of Eco Club and NSS Unit of Demow College. The workshop aimed to raise awareness about benefits of vermicomposting and promote sustainable waste management practices among students, faculty and the community.



National Workshop on Vermicomposting

- x. National workshop on Solid Waste Management: A workshop on Solid Waste Management was hosted on 24 May, 2024 under the joint collaboration of Eco Club and NSS Unit of Demow College.



National workshop on Solid Waste Management

- xi. Alumni Association Plantation Drive: The Alumni Association of Demow College has generously contributed to preservation efforts by organizing a Neem plantation drive on June 5, 2024. Neem trees play a vital role in environmental conservation, offering multiple ecological benefits such as air purification and soil enhancement.



Plantation Drive by Alumni association

By undertaking these preservation practices, Demow College demonstrates its dedication to environmental sustainability, fostering a greener and healthier campus environment for the benefit of present and future generations.

