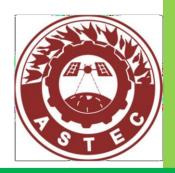
# GREEN AUDIT REPORT OF DIET, JORHAT



2024-2025





Prepared by Assam Science Technology and Environment Council Bigyan Bhawan, G.S. Road, Bhangagarh, Guwahati -05 **DECLARATION** 

It is hereby declared that Assam Science Technology and Environment Council (ASTEC) have conducted

a "Green Audit" for District Institute of Education and Training (DIET), Jorhat on 26th march

2025 for the academic year 2024-2025. The green audit was conducted in accordance with the applicable

standards prescribed by the Central Pollution Control Board, New Delhi, and the Ministry of

Environment, Forest and Climate Change, New Delhi. The audit involved the following target area:

Biodiversity (Green campus) Audit and the audit report provides the college with recommendations

that can be used to develop an 'Environmental Management Plan', which the institution can follow to

minimize the impact on the institutional working framework. In an opinion and to the best of our

information and according to the information given to us, said green and environment audit gives a true

and fair view in conformity with environmental auditing principles' accepted in India.

Date:14/07/25

Place: Guwahati

Director

ASTE Council

TO WHOM IT MAY CONCERN

Assam Science Technology and Environment Council (ASTEC) conducted a "Green Audit"

for District Institute of Education and Training (DIET), Jorhat on 26th March, 2025 for the

academic year 2024-2025 and have developed the report accordingly, where ASTEC has

provided a few suggestions and recommendation on "Green Campus Development." In that

connection, it is hereby declared that ASTEC has no objection on the implementation of the

suggestions and recommendations given by the council in the green audit report by District

Institute of Education and Training (DIET), Jorhat.

Date: 14/07/25

Place: Guwahati

Director

**ASTE Council** 

#### **ACKNOWLEDGEMENT**

The green audit team of Assam Science Technology and Environment Council (ASTEC) express our sincere gratitude to District Institute of Education and Training (DIET), Jorhat, for choosing the organization to conduct a Green Audit for their institution and giving us the opportunity to be a part of their mission towards environmental sustainability.

We are thankful to Ananta Gogoi, Principal, Krishna Deka Dutta, Senior Lecturer, Dr. Bishnupriya Saikia, Senior Lecturer, Sumit Kr. Thapa, Lecturer, Bikash Pegu, Lecturer, Dhruba Jyoti Bora, Lecturer, Sailendra Barman, Work Experience Teacher, and other associate staff of DIET, Jorhat with whom we have interacted during the audit for their valuable support and cooperation through sharing of information sought during the assessment and providing the needed inputs to carry out this green audit. Their willingness to participate in this programme is truly commendable and is duly acknowledged.

Green Audit Team

**ASTE Council** 

# EXTERNAL GREEN AUDIT TEAM (Assam Science Technology and Environment Council)

Sl. No	Name	Designation	Audit Role	Signature
1		Project Scientist, ABRC, Environment Division, ASTEC	Green campus (Biodiversity) Audit Officer	12/02/25



**Authorised Seal** 

**ASTE Council** 

Dr.Jaideep Baruah Director ASTE Council

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#### **EXECUTIVE SUMMARY**

Environmental development is viewed as an essential component in educational institutions, which serve as the foundation for a country's development. Today's educational institutions are more environmentally sensitive, and more eco-friendly practices are being implemented. Many educational institutions adopt a variety of techniques to address their environmental challenges in order to preserve the environment on campus. It is critical, particularly at educational institutions where young minds congregate, to provide an eco-friendly and sustainable environment with long-lasting characteristics. As a result, conducting a green audit is a critical first step in creating an eco-friendly atmosphere in educational institutions.

The process of determining and analysing whether an institution's practices are sustainable and environmentally friendly is known as "green auditing." The primary purpose of performing a green audit at **District Institute of Education and Training, Jorhat**, is to investigate the institution's green practices and create an in-depth audit report to establish where they stand on the environmental coherence spectrum. DIET, Jorhat's initiative to conduct a Green Audit of its campus is a noteworthy sustainable objective.

One target area was identified and audited for the green audit, viz. **Green Campus** (**Biodiversity**), where the overall biodiversity of the institution as well as green practices relevant to green campus were observed and assessed. The strategies followed were conduction of pre-audit meetings, preparation of questionnaires on the specified target areas, on-site physical assessment and questionnaire survey, providing recommendations and development of an action plan, and audit report preparation. Questionnaires were prepared based on the guidelines, rules, acts, and formats set by the Government of India, Ministry of Environment and Forest, New Delhi, and Central Pollution Control Board, New Delhi. The findings of the Green Audit are only indicators on where and why additional efforts are required, and not in any way a criticism or commendation on its present performance.

### 1. INTRODUCTION

A nation's educational institutions serve as its foundation for progress, with environmental development playing a critical part. Environmental issues are becoming increasingly evident in today's educational institutions, and new approaches are being developed to make them more eco-friendly. Numerous educational institutions employ a range of strategies to address environmental challenges on campus, including energy efficiency, waste recycling, wastewater reduction, and water harvesting. Educational institutions' operations can have a wide range of negative impacts on the environment. Environmental sustainability is becoming of paramount importance across the nation. It is critical to foster a long-term environment, particularly at educational institutions where young brains congregate. To ensure the optimum environment for learning and a balanced ecosystem for everyone associated to the institutions, the green influence on the campus is essential.

Beginning with the academic year 2016-17, all higher education institutions are obliged by the National Assessment and Accreditation Council (NAAC), New Delhi, to submit an annual Environmental or Green Audit Report. The corporate social responsibility of higher education institutions stipulates that they contribute to the reduction of global warming through carbon footprint reduction strategies. Environmental auditing, sometimes known as "green" auditing, compares an organization's environmental performance to its environmental goals and standards. A "green audit" is an official inquiry into an organization's environmental effect. As part of this activity, a green audit is performed to evaluate the present circumstances on campus.

#### 1.1. CONCEPT OF GREEN AUDIT

It refers to a wide range of evaluations intended to identify implementation flaws, compliance problems with environmental management systems, and associated remedial actions. The method involves comparing an organization's environmental performance to its environmental goals and policies. Examining environmental activities both on and off the topic areas that impact the environmentally friendly atmosphere is its goal. The "Green Audit" looks at environmental practices both inside and outside of the organisation with the goal of making it more environmentally friendly. Green auditing's primary goal is to examine the work done by an organisation whose operations may endanger the environment's and people's health. Green Audit provides guidance on how to further enhance the state of the

environment while also identifying and addressing the many factors that influence environmental growth.

The process of a green audit involves collecting and analysing data on various environmental aspects of the institution's operations. This data includes energy and water usage, biodiversity, waste generation, and compliance with environmental laws and standards. By analysing the data, a green audit assesses the status of green practices in an institution, which are actions and strategies designed to reduce environmental impact and promote sustainability by minimising waste, reducing pollution, and protecting natural ecosystems. It aims to pinpoint inefficiencies and areas where improvements can be made to reduce the organisation's environmental footprint.

#### 1.2. NEED FOR GREEN AUDIT IN EDUCATIONAL INSTITUTIONS

Increased urbanisation and economic advancement have caused a slew of ecological and environmental issues at the local, regional, and global levels. The usage of resources such as water, electricity, and others has historically resulted in environmental damage. It is vital that our lifestyle and resource management do not have a negative impact on the environment. Educational institutions regularly utilise large amounts of water, power, and other resources, resulting in the production of CO<sub>2</sub>, waste, and energy and water loss, all of which can contribute to the worsening of local environmental sustainability. As environmental sustainability becomes a more pressing concern for the country, the role of educational institutions in addressing it grows in importance. As a result, educational institutions need to develop a "Green Campus" plan that encourages long-term growth while effectively lowering atmospheric CO<sub>2</sub> levels.

Furthermore, the National Assessment and Accreditation Council (NAAC), New Delhi has mandated that all Higher Educational Institutions submit an annual Green Audit Report. Moreover, it is part of the Higher Educational Institutions' Corporate Social Responsibility to guarantee that they contribute to the curbing of global warming through Carbon Footprint reduction efforts. As a result, green auditing has become a fundamental need for all educational institutions.

#### 1.3. BENEFITS OF GREEN AUDIT FOR EDUCATIONAL INSTITUTIONS

A green audit can assist an educational institution understand how and where it is using and utilising the most energy, water, or other resources. The institution might next consider how to make improvements and generate savings. It may also be used to estimate waste quantity and type, which is important for recycling operations or improving waste minimization programmes. Green auditing has the potential to foster environmental knowledge, morality, ethical values, and health awareness among students and teachers. It helps staff and students realise the benefits of being environmentally conscious on campus. Green auditing encourages cost savings by making use of fewer resources. It offers students and teachers an opportunity to foster a sense of personal ownership and social responsibility. Therefore, it is critical that educational institutions review their own contributions, duties, and commitments to a sustainable future. Some of the benefits of green audit in educational institutions are given below.

- More efficient resource management
- Provide basis for improved sustainability
- Provide a basis for development of green campus
- Enable waste management through reduction of waste generation, solid waste and water recycling
- Enable to create plastic free campus and evolve health consciousness among the stakeholders
- Enable determining cost saving methods through waste minimizing and managing
- Authenticate conformity with the implemented laws
- Empower the organizations to frame a better environmental performance
- Impart environmental education through systematic environmental management approach and improving environmental standards
- Assists in setting benchmarks for environmental protection initiatives
- Enable financial savings through a reduction in resource use
- Enhances the profiles of educational institutions
- Develops environmental ethic and value systems in students and staff
- Provides a valuable tool in the management and monitoring of environmental and sustainable development programs of educational institutions.

#### 1.4. ABOUT CRITERIA 7 OF NAAC

Educational institutions are critical to the development of human resources around the world. Campuses of higher education institutions participate in a variety of activities to promote knowledge and its practical application across society. Higher education institutions also give a wide range of modern environmental solutions. Numerous evolutionary techniques are utilised to investigate environmental challenges. It covers areas such as Environmental Impact Assessments (EIA), Social Impact Assessments (SIA), Carbon Footprint Mapping, and Green Audits.

The National Assessment and Accreditation Council (NAAC) is a self-governing organisation that grades institutions based on the assessments provided throughout the institution's accreditation process. Green Audit is now a mandatory exercise for educational institutions under NAAC Criterion VII. The goal of green audit is to enhance the internal and external environmental conditions of the institution. Environment-related factors such as waste management, energy saving, air and noise monitoring, and water and wastewater accounting are used to make the institution more ecologically friendly.

#### 2. OBJECTIVES, GOALS AND SCOPE OF GREEN AUDIT

#### 2.1. OBJECTIVES OF GREEN AUDIT

- To conduct a baseline survey to know the real status of green practices in the educational institution.
- To identify the problems faced while practising green practices in the educational institution campus.
- To examine current practises that has impact on the environment.
- To spread awareness for environmental consciousness amongst the students, teaching and non-teaching staff members.
- To identify and access environmental risk if any inside the institution campus.

#### 2.2. GOALS OF GREEN AUDIT

- Establishing a baseline of existing environmental conditions with focus on natural and physical environment.
- Understanding the current practices of sustainability with regard to green campus.
- Awareness generation among students concerning real issues of environment and its sustainability through participatory auditing process.
- Development of strategies and action plans towards improving environmental quality for future.

#### 2.3. SCOPE OF GREEN AUDIT

A clean and healthy atmosphere promotes and facilitates learning. There are various programs worldwide that address environmental education concerns. A green audit is the most effective and ecologically responsible approach of addressing environmental challenges. This form of professional care is the obligation of every individual involved in an economic, financial, social, or environmental component. Green audits should be undertaken on educational institution campuses since they help students understand the importance of environmental preservation and develop into responsible citizens. It also stipulates what responsibilities educational institutions have to fulfil in order to become a green campus. Therefore, green audit is essential at the institutional level of education.

#### 3. ABOUT THE EDUCATIONAL INSTITUTION

#### 3.1. A BRIEF HISTORY

#### **BY TEAM DIET, JORHAT:**

The Jorhat DIET is located in Titabar, a sub division Jorhat district, Assam. At this DIET, we have approximately 200 students enrolled in a two-year B. Ed and D. El. Ed course of study that prepares them to become school teachers at Preparatory, Middle and Secondary stage. The Institute has 25 teacher educators, who lead the teacher education program and arranges for our students to undergo field experiences of 1 year duration in local schools. In our effort to strengthen teacher development package, we have already engaged ourselves in developing NCF compliant schools and an effective teaching learning approach. This knowledge has informed our teacher empowerment exercise Our reform strategies are spread over three mutually dependent and bounded operational areas----Community ownership, Learning ownership, learner friendly school and teacher empowerment. However, this is the ripe time to reconsider our existing strategies and incorporate fresh inputs as emphasized by NEP 2020 and NCF-SE 2023 into our strategic framework to strengthen the process that ensures growth of a professional learning community putting teacher educators in the kin-pin.



Photo 1: Location of DIET, Jorhat (Source: Google Earth)

#### 3.2. GEOGRAPHY

DIET Jorhat, the *District Institute of Education and Training*, is located in Purana Titabor (Titabar), within the Jorhat district of Assam, India. The institute lies approximately 20 kilometers from Jorhat city, making it both accessible and surrounded by a quiet, semi-rural environment. The coordinates for Titabor are 26.589° N latitude and 94.167° E longitude, with an average elevation of 172 meters above sea level. This setting places DIET Jorhat within a region known for its rich natural beauty and agricultural productivity, particularly tea cultivation.

Jorhat district spans an area of about 2,851 square kilometers and is situated in the central part of the Brahmaputra Valley. It is bounded by Majuli—the world's largest river island—to the north, the state of Nagaland to the south, Sivasagar district to the east, and Golaghat district to the west. This central location within Assam offers Jorhat a diverse topography, ranging from fertile floodplains to slightly elevated terrains that support both urban growth and rural livelihoods.

The region is notable for its fertile alluvial soil, which supports an agriculture-based economy. Jorhat is particularly famous for its tea estates and is often referred to as the "Tea Capital of the World". The presence of over 135 tea gardens, along with rice and vegetable cultivation, underscores the importance of agriculture in the district. This agricultural richness contributes to a serene and green environment around DIET Jorhat.

Climatically, the area experiences a humid subtropical climate, with hot summers, mild winters, and heavy monsoonal rainfall. These conditions influence the local flora and fauna, as well as the lifestyle and economic activities in the region. Nearby ecological landmarks include the Gibbon Wildlife Sanctuary and Majuli Island, adding ecological diversity and learning opportunities for the community and students of DIET Jorhat.

Connectivity to DIET Jorhat is well-established. Jorhat is connected by road, rail, and air. The Rowriah Airport (Jorhat Airport) provides direct air access to major cities, while National Highway 37 (NH-37) and the Jorhat railway station link the district to other parts of Assam and northeastern India. These transport links make DIET Jorhat both regionally significant and conveniently accessible for teacher trainees and faculty alike.

#### 3.3. VISION, MISSIONS AND GOALS OF THE INSTITUTION

#### 3.3.1. VISION OF THE INSTITUTION

As a "Centre of Excellence" we envision to act as catalyst in shaping a learning classroom by grooming learning teachers, partnering with a learning community and creating a quality education system through continuous professional development programmes, innovative and transforming practices.

#### 3.3.2. MISSIONS AND GOALS OF THE INSTITUTION

- > Implement Teacher Education Reforms.
- > Train teachers for Equity and Excellence.
- > Research and Implement Transforming Practices.

MISSION (Operationa I Plan of the vision)	Goal(s)	Target	Strategies	<b>Expected Timeline</b>
M 1 Implement Teacher Education Reforms as per NEP 2020.	G 1:  Incorporation of VE  Collaboration between institutions for practical training, Research and professional development	T1:  Set up Vocational and Skill Lab with equipment and machinery	Collaborate with national, state and district level technical institutes, university and organization to Plan design and execute programmes and trainings as per need.	2024- 2025.
	G 2: Integration of ICT	T1: Setting up ICT lab	Collaborate with national and state level institutions to plan, design programmes for teachers and teacher educators	2024-2026
	G3: Inclusive Education	T1 Training to teachers on integrated classroom	Formation of a committee to plan, design and execute training Programme for in service and pre service teachers	2024-2026

M2 Train Teachers For Equity and	G 1:  Professional Development of Teacher and Teacher	T1 Teacher Need Analysis  T2 Develop	Conduct teachers and teacher educators self appraisal/assessment to identify training need.  Collaborate with	2024-2025
Excellence	Educators	inclusive teaching practice (ICT, Sports, Art, Etc)	national/state/district institutes/organization to provide academic. Resource support.	
		Advocate ECCE and FLN	Organize training programme/workshop to sensitize all stakeholders	2024-2026
M3 Research and Implement Transformi ng Practices	G1 District Academic Research Centre.	T1  Develop a District Academic Research Centre	Formation of a Research hub in collaboration with Research Institutes, SCERT, NCERT, NIEPA	Continuous
	G 2:  Disseminate findings and showcase different innovative approaches and case stories of transforming practices.	Conduct Action Research, Applied Research, Case Study	In service teachers, student teacher and teacher educators to carry out classroom research	Continuous

• To become a premier institute for fostering skilled educators, advancing vocational excellence and driving ground-breaking research for empowering teachers through innovative practices.

#### 3.4. GENERAL INFORMATION

#### 3.4.1. INSTITUTION CAMPUS

The institution campus extends over 18,066 sq. mtr. of land. It comprises two Assam-type blocks and two RCC blocks housing the Principal's office, teachers' common rooms, various departments, classrooms, the library, laboratories, a conference hall, a seminar hall, and a students common room. The campus also includes a girls hostel, a boys hostel, in the RCC buildings.

The canteen is located in one of the RCC buildings within the campus. In addition, a separate cafeteria is also situated inside the campus.

The total built-up area of the campus is 4,186.54 sq. mtr.



Photo 2: Campus of DIET, Jorhat.

#### 3.4.2. FACILITIES

#### Classrooms

The institution is equipped with six well-maintained classrooms for the conduction of regular academic sessions. Each classroom is adequately ventilated and furnished to provide a conducive learning environment.





Photo 3: Classrooms of DIET, Jorhat

#### Laboratories

There are a total of five laboratories in the institution, namely the Science Laboratory, Psychology Laboratory, ICT Laboratory, Health and Physical Education Laboratory, and a Vocational Skill Laboratory. These labs are well-equipped and support practical learning experiences for the students.

#### Library

Jorhat Institution has a well-resourced library that includes a well-furnished reading room with a seating capacity of 20. The library is stocked with more than 3,000 books, 1 regular journal, 2 daily newspapers, and 1 magazine. In addition, the library houses multiple copies of encyclopaedias and other reference materials to support students' academic needs.

#### Games and sports

The institution offers both indoor and outdoor sports facilities. It features a cricket-cum-football ground, a badminton court, a table tennis court, a volleyball court, and a dedicated Physical Education and Yoga Hall. The institution actively encourages student participation in sports and games at inter-house, inter-college, and district levels.

#### **Conference Room and Auditorium**

The institution has one well-equipped conference room used for meetings, workshops, and academic discussions. Additionally, there is an auditorium-cum-multipurpose hall that serves as a venue for cultural events, seminars, and large gatherings.





Photo 4: Laboratories of DIET, Jorhat





**Photo 5: Library of DIET, Jornat** 









Photo 6: Outdoor, Indoor sports facilities, Yoga Hall of DIET, Jorhat

#### Hostel

The **Girls' Hostel** and **Boys' Hostel** are housed within the main RCC building on the Jorhat campus. Both hostels are designed to provide a safe, comfortable, and disciplined residential environment for students, with basic amenities such as clean rooms, common areas, and security arrangements.





Photo 7: Girl's and Boy's hostel of DIET, Jorhat

#### **Canteen Facility**

The canteen is located in one of the RCC (Reinforced Cement Concrete) buildings within the campus, providing hygienic and affordable food to students and staff. In addition, a separate cafeteria is also situated inside the campus, offering light snacks and beverages in a relaxed setting.









Photo 8: Conference hall, Auditorium, Canteen facilities

#### 3.4.3. COURSES AND DEPARTMENTS

The Institution offers the following programmes:

#### **Under-Graduate Programme**

Programme	Subjects
Bachelor of Education (B.Ed)	Papers of Teacher Education
Diploma in Elementary Education (D.El.Ed.)	Papers of Teacher Education

#### **Departments**

Curriculum material development and Evaluation	Pre service teacher education
District resource unit	In field interaction and coordination
Planning and management	Work education
Foundation of education	Educational technology

#### 3.5. PREVIOUS GREEN AUDIT

No previous green audit has been conducted in this institution. This is the first time DIET, Jorhat, is going to be Green Audited for the academic year 2024-2025.

#### 4. METHODOLOGY

A green audit has three phases - pre-audit stage, audit stage and post-audit stage, accordingly the audit was conducted.

#### 4.1. PRE AUDIT STAGE

A pre-audit meeting provided an opportunity to reinforce the scope and objectives of the audit and pre-audit discussions were held to determine the targets of the auditing. This meeting was a necessary precursor for the green audit since it provided the first chance to comprehend the issues. It was held with the concerned persons of the institution where target areas were identified and the audit protocol and audit plan were handed over and discussed in advance of the audit itself. The pre-audit meeting was conducted successfully and necessary documents were collected directly from the institution before the initiation of the audit processes. Accordingly, as per the request of the institution authority the following target area was identified for the audit:

#### • Green Campus (Biodiversity)

#### 4.2. AUDIT STAGE

The following processes were involved during the audit stage:

#### 4.2.1. DATA COLLECTION

In the data collection phase, exhaustive data collection is performed using different tools such as observation, questionnaire survey, physical inspection of the campus, review of the documentation, and interviewing key persons. A mixture of open ended and closed ended questionnaires were developed and used for data collection. Meetings with specific stakeholders identified in the pre-audit stage were conducted for getting the desired information. Detailed discussions on some specific topics were also held.

#### Survey by Questionnaire

By using a questionnaire survey method, baseline data for the creation of the green audit report were gathered. On the basis of the guidelines, regulations, laws, and formats prepared by the Central Pollution Control Board, the Ministry of Environment, Forests, and Climate Change, New Delhi, and other statutory institutions, questionnaires have been developed to conduct the green audit on the institution campus. The questionnaire contained the general

information of the institution as well as information pertaining to institution biodiversity and maintenance of green campus.

#### Review of documents, records and policies

This was carried out in order to understand the various initiatives taken by the university towards sustainable environmental conservation and amelioration. Documents such as activity reports, plantation lists, biodiversity register, photographs, etc. were examined and data was collected.

#### **Site Inspection**

The audit team also visited the various sections in its premises in order to have an idea of campus flora and fauna as well as various activities carried out in the campus pertaining to biodiversity and development of green campus. The present condition of the site is also checked with the help of the questionnaires. Campus greenery and gaps were identified. Personal observations were made during the onsite visit.

#### 4.2.2. DATA ANALYSIS

A proper analysis is a vital element of the green audit. The data required for the analysis is taken from the data collection and is tabulated for the convenience of data availability. Detailed analysis of the data collected include: documentation of biodiversity in the campus as well as the green initiatives taken by the institution.

#### 4.3. POST AUDIT STAGE

The post-audit stage ensures formulation of draft findings and placing it before the authority for final response. Since the audit is done, it was important to ensure institution authority's approval for the draft. After getting draft approval, the audit team went for final report formulation. The post audit phase involved the following components:

- ✓ Identification of the best practices followed by the institution
- ✓ Compiling a report of the data collected
- ✓ Distributing the report and certificate to the institution
- ✓ Preparing an action plan to overcome the flaws
- ✓ Providing suggestions to implement the action plan
- ✓ Setting up the future environmental aims and objectives

#### 5. GREEN CAMPUS (BIODIVERSITY) AUDIT

#### 5.1. OPEN AREA

The institution campus covers a total area of 18,066 square meters. Out of this, the built-up area is 4,186.54 square meters, accounting for approximately 23.17% of the total campus area.

Around 10,000 square meters (approximately 55.37%) is utilized as open areas and playground, which the institution has made efforts to preserve in as natural a state as possible. These green, grass-covered spaces support natural water percolation, an essential ecological process for groundwater recharge.

The remaining 3,879.46 square meters (about 21.46%) of the land is used for other activities, contributing to the overall functionality of the campus while still maintaining a balanced environmental approach.





Photo 9: Open-area, playground of DIET, Jorhat

#### **5.2.** CAMPUS FLORA

The institution has undertaken extensive plantation drives, transforming the campus of DIET, Jorhat into a vibrant green sanctuary rich in floral biodiversity. A total of 158 plant species, representing 128 genera and 63 families, have been documented on the campus.

Among these, the Poaceae family exhibited the highest species diversity with 9 species, followed closely by Orchidaceae and Solanaceae, each with 8 species. The Asteraceae and Fabaceae families contributed 7 species each, while Euphorbiaceae accounted for 6 species. Families such as Amaranthaceae, Araceae, Arecaceae, Asparagaceae, Cyperaceae, and Lamiaceae were each represented by 5 species. Additionally, Apiaceae and Rutaceae included 4 species each.

To further promote awareness and conservation of plant biodiversity, the institution has established an Orchidarium and plans to develop both a Botanical Garden and a Medicinal and Herbal Plant Garden. These initiatives aim to foster scientific curiosity among students and highlight the importance of conserving medicinal and orchid plant species.

**Table 1:** Floral species enumerated in the institution campus along with their family, common and vernacular name, and IUCN status.

Sl.No.	SCIENTIFIC NAME (Species)	FAMILY	LOCAL NAME	IUCN Status
1.	Acalypha wilkesiana Müll.Arg.	Euphorbiaceae	কপাৰ প্লান্ট	Not Evaluated
2.	Acorus calamus L.	Acoraceae	বচ	Least concern
3.	Aegle marmelos (L.) Corrêa	Rutaceae	বেল	Near Threatened
4.	Aerides odorata Lour.	Orchidaceae		Endangered
5.	Aerides rosea Lodd. ex Lindl. & Paxton	Orchidaceae	জেঠুৱা কপাৌ	Endangered
6.	Agave americana L.	Asparagaceae	Century plant	Least Concern
7.	Alangium chinense (Lour.) Harms	Coranaceae		Not Evaluated
8.	Albizia lebbeck (L.) Benth.	Fabaceae	শিশৰষ	Least Concern
9.	Albizia procera (Roxb.) Benth.	Fabaceae	মজ	Least Concern
10.	Alocasia macrorrhizos (L.) G.Don	Araceae	কচু	Least Concern
11.	Aloe vera (L.) Burm.f.	Liliaceae	চালকুৱঁৰী	Least Concern
12.	Alternanthera sessilis (L.) DC.	Amaranthaceae	মাটিকাদুৰী	Least Concern
13.	Amaranthus retroflexus L.	Amaranthaceae	পুৰৰ	Not Evaluated
14.	Amaranthus viridis L.	Amaranthaceae	খুিৰা	Least Concern
15.	Anacardium occidentale L.	Anacardiaceae	কাজু	Least Concern
16.	Ananas comosus (L.) Merr.	Bromeliaceae	মাটিকঁঠাল	Not Evaluated
17.	Anthoxanthum nitens (Weber) Y.Schouten & Veldkamp	Poaceae	Sweet Grass	Not Evaluated
18.	Anthurium harleyi T.A.Pontes & Mayo	Araceae	Anthurium	Least Concern
19.	Aquilaria malaccensis Lam.	Thymelaeaceae	সাঁশচ	Critically Endangered
20.	Araucaria araucana (Molina) K.Koch	Araucariaceae	Monkey Puzzle tree	Endangered
21.	Areca catechu L.	Arecaceae	তামমাল	Least Concern
22.	Artocarpus heterophyllus Lam.	Moraceae	কঁঠাল	Not Evaluated
23.	Azadirachta indica A.Juss.	Meliaceae	শিম	Least Concern
24.	Bacopa monnieri (L.) Wettst.	Plantaginaceae	্রা <u>দ্</u> মী	Least Concern
25.				Not Evaluated
	Bambusa balcooa Roxb.	Poaceae	ভলুকা বাহাঁ	
26.	Bambusa bambos (L.) Voss	Poaceae	কটা বাাঁহ	Not Evaluated
27.	Bambusa pseudopallida R.B.Majumdar	Poaceae	ববেুলী বাহাঁ	Not Evaluated

28.			T	Not Evaluated
28.	D 1 11 D 1	TO.	োবি বাহা <u>ঁ</u>	
29.	Bambusa tulda Roxb.	Poaceae	_	Not Evaluated
29.	Bambusa vulgaris var. striata Schrad. ex J.C.Wendl.	Poaceae	হালধীয়া োঁহ	Not Evaluated
30.	Bambusa vulgaris var. wamin Schrad.	Poaceae		Least concern
30.	ex J.C.Wendl.	roaceae	কলবচ বাহাঁ	Least concern
31.	Bauhinia variegata L.	Fabaceae	কাঞ্চি	Least Concern
32.	Bergera koenigii L.	Rutaceae	িৰ <b>শ</b> সিংহ	Data Deficient
33.	Blumea bifoliata (L.) DC.	Asteraceae	জামামী	Not Evaluated
			<b>ে</b> ি	
34.	Bombax ceiba L.	Malvaceae	শিমলু	Least Concern
35.	Brassica juncea (L.) Czern.	Brassicaceae	লাই	Not Evaluated
36.	Brassica oleracea L.	Brassicaceae	েন্ধাকশে	Not Evaluated
37.	Caladium bicolor (Aiton) Vent.	Araceae	Heart of	Not Evaluated
	, , ,		Jesus	
38.	Capsicum annuum L.	Solanaceae	জলকীয়া	Least Concern
39.	Caropodium platycarpum (Boiss. &	Apiaceae	ধশিয়া	Not Evaluated
40.	Hausskn.) Schischk.  Cascabela thevetia (L.) Lippold	Anagymagas	কৰৌ	Least Concern
	` ′ **	Apocynaceae		
41.	Cassia fistula L.	Caesalpiniaceae	বসািাৰু	Least Concern
42.	Catharanthus roseus (L.) G.Don	Apocynaceae	িয়িতৰা	Not Evaluated
43.	Centella asiatica (L.) Urb.	Apiaceae	েৰ	Least Concern
			মাশিমুশি	
44.	Ceriscoides campanulata (Roxb.)	Rubiaceae	িগৰ	Least Concern
	Tirveng.			
45.	Cestrum parqui (Lam.) L'Hér.	Solanaceae	Chilean	Least Concern
			jessamine	
46.	Chenopodium album L.	Amaranthaceae	জজলশমল	Not Evaluated
47.	Chlorophytum comosum (Thunb.) Jacques	Asparagaceae	Spider plant	Not Evaluated
48.	Chrysanthemum indicum L.	Asteraceae	ইন্দ্ৰ মালতী	Not Evaluated
49.	Citrus limon (L.) Osbeck	Rutaceae	বিমু	Not Evaluated
50.	Citrus maxima (Burm.) Merr.	Rutaceae	ৰোে বিঙা	Least Concern
	, ,			
51.	Clerodendrum infortunatum L.	Lamiaceae		Least concern
52.	Clitoria ternatea L.	Fabaceae	অপৰাজজতা	Not Evaluated
53.	Coccinia grandis (L.) Voigt	Cucurbitaceae	কুন্দুলী	Not Evaluated
5.4		<u> </u>	£ ~~~	NI AE 1 4 1
54.	Cocos nucifera L.	Arecaceae	িাশৰকল	Not Evaluated
		D 1 1:		T
55.	Codiaeum variegatum (L.) Rumph. ex A. Juss.	Euphorbiaceae	পাতোহাৰ	Least Concern
56.	Combretum indicum (L.) DeFilipps	Combretaceae	মধুমালতী	Not Evaluated
	()		12-11 101	20   D

57.	Cordyline fruticosa (L.) A.Chev.	Asparagaceae		Least concern
58.	Crinum amoenum Roxb. ex Ker Gawl.	Amaryllidaceae		Least concern
59.	Crinum lorifolium Roxb. ex Ker Gawi.	1 III of financial		Least concern
	Gawl.	Amaryllidaceae	Bon- Naharu	
60.	Cucurbita pepo L.	Cucurbitaceae	ৰঙা লাও	Least Concern.
61.	Curcuma aeruginosa Roxb.	Zingiberoideae	সুকশত	Not Evaluated
(2)				E 1 1
62.		0.111		Endangered
63.	Cymbidium aloifolium (L.) Sw. Cyanthillium cinereum (L.) H.Rob.	Orchidaceae Asteraceae		Least Concern
	` '		F-7 <del>3</del> 1	
64.	Cynodon dactylon (L.) Pers.	Poaceae	দুেৰী <b>ে</b> ি	Least Concern
65.	Cyperus diffusus Vahl.	Cyperaceae		Least Concern
66.	Cyperus digitatus Roxb.	Cyperaceae		Least Concern
67.	Cyperus distans L.f.	Cyperaceae		Least Concern
68.	Cyperus flavidus Retz.	Cyperaceae		Least Concern
69.	Cyperus natuns Vahl.	Cyperaceae		Least Concern
70.	Daucus carota L.	Apiaceae	গাজৰ	Least Concern
71.	Delonix regia (Bojer ex Hook.) Raf.	Fabaceae	কৃষ্ণচূড়া	Least Concern
72.	Dendrobium aphyllum (Roxb.) C.E.C.Fisch.	Orchidaceae		Endangered
73.	Dendrobium formosum Roxb. ex Lindl.	Orchidaceae		Endangered
74.	Dendrobium hybride sp.	Orchidaceae		Endangered
75.	Dillenia indica L.	Dilleniaceae	<b>ঔ</b> মিঙা	Least Concern
76.	Diplazium esculentum (Retz.) Sw.	Athyriaceae	বেকীয়া	Least Concern
77.	Dracaena trifasciata (Prain) Mabb.	Asparagaceae	Snake Plant	Not Evaluated
78.	Dracaena sanderiana Mast.	Asparagaceae	লাকীমেম্ব'	Not Evaluated
79.	Eclipta prostrata (L.) L.	Asteraceae	<b>ভূ</b> িংগৰাজ	Least Concern
80.	Eleusine indica (L.) Gaertn.	Poaceae	েচো	Least Concern
			<b>ে</b> ি	
81.	Epiphyllum oxypetalum (DC.) Haw.	Cactaceae	পাশৰজাত	Least Concern
82.	Epipremnum aureum (Linden & André) G.S.Bunting	Araceae	মাশিপ্লান্ট	Not Evaluated
83.	Eryngium foetidum L.	Apiaceae	মািধশিয়া	Not Evaluated
84.	Erythrina variegata L.	Fabaceae	মদাৰ	Least Concern
85.	Eulophia obtusa (Lindl.) Hook.f.	Orchidaceae		Critically Endangered
86.	Euphorbia milii Des Moul.	Euphorbiaceae	Crown of Thorns	Least Concern
87.	Euphorbia tithymaloides L.	Euphorbiaceae	Devils backbone	Least Concern
88.	Ficus religiosa L.	Moraceae	আঁহত	Least Concern
89.	Ficus lamponga Miq.	Moraceae	শিমৰু	Not Evaluated

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90.	Filicium decipiens (Wight & Arn.) Thwaites	Sapindaceae	Fern leaf tree	Least Concern
91.	Hibiscus mutabilis L.	Malvaceae	স্থল/দ্ম	Least concern

92.	Hibiscus rosa-sinensis L.	Euphorbiaceae	জৱাফুল	Not Evaluated
93.	Houttuynia cordata Thunb.	Saururaceae	মচন্দ্ৰী	Not Evaluated
94.	Hydrocotyle sibthorpioides Lam.	Araliaceae	সৰু মাশিমুশি	Least Concern
95.	Jasminum sambac (L.) Aiton	Oleaceae	গুটট মালী	Least Concern
96.	Kalanchoe pinnata (Lam.) Pers.	Crassulaceae	বদাপৰ বিঙা	Not Evaluated
97.	Lagenaria siceraria (Molina) Standl.	Cucurbitaceae	नाँ ७	Not Evaluated
98.	Lantana camara L.	Verbenaceae	<b>ଞ-</b> େି	Invasive Species
99.	Lawsonia inermis L.	Lythraceae	বজতুকা	Least Concern
100.	Leucas aspera (Willd.) Link	Lamiaceae	বদামৰাণ <b>ে</b> ি	Not Evaluated
101.	Litchi chinensis Sonn.	Sapindaceae	শলচু	Not evaluated
102.	Mangifera indica L.	Anacardiaceae	আম	Not Evaluated
103.	Melastoma malabathricum L.	Melastomataceae		Least concern
104.	Mentha piperita L.	Lamiaceae	পশদাি	Not Evaluated
105.	Mikania micrantha Kunth	Asteraceae		Least concern
106.	Mimosa pudica L.	Fabaceae	শিলাজী <b>ে</b> ি	Least Concern
107.	Mimusops elengi L.	Sapotaceae	েকুল	Least Concern
108.	Morinda citrifolia L.	Rubiaceae	<b>्रिट</b> ि	Not Evaluated
109.	Moringa oleifera L.	Rubiaceae	চজজা	Least Concern
110.	Musa paradisiaca	Musaceae	কাচ কল	Not Evaluated
111.	Nephrolepis cordifolia (L.) C.Presl	Nephrolepidaceae	শেহ লগণী	Least Concern
112.	Nyctanthes arbor-tristis L.	Oleaceae	বিৱালী	Least Concern
113.	Obetia radula (Baker) Baker ex B.D.Jacks.	Caricaceae	অশমতা	Not Evaluated
114.	Ocimum tenuiflorum L.	Lamiaceae	তুলসী	Least Concern
115.	Oroxylum indicum (L.) Kurz	Bignoniaceae	ভাতশিলা	Least Concern
116.	Oxalis corniculata L.	Oxalidaceae	বিমঙশচ	Not Evaluated
117.	Oxalis debilis L.	Oxalidaceae	বৰ বিমঙশচ	Not Evaluated
118.	Peperomia sirindhorniana Suwanph. & Chantar.	Piperaceae	পমৌিৱা	Not Evaluated
119.	Petunia axillaris (Lam.) Britton,	Solanaceae	Petunia	Least concerned
120.	Phoenix dactylifera L.	Arecaceae	বখজুৰ	Not Evaluated
121.	Phragmanthera capitata (Spreng.) Balle	Loranthaceae		Not Evaluated
122.	Phragmanthera leonensis (Sprague) Balle	Loranthaceae		Least concern
123.	Phyllanthus emblica L.	Phyllanthaceae	আমলশখ	Least Concern
124.	Physalis lagascae Roem. & Schult.	Solanaceae	পকমমৌ	Least Concern

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125.	Pinus kesiya Royle ex Gordon	Pinaceae	Pine	Critically Endangered
126.	Piper betle L.	Piperaceae	পাণ	Not Evaluated

107	D:	D:		N. 4 E1 4 1
127.	Piper nigrum L.	Piperaceae	জালুক	Not Evaluated
128.	Plantago major L.	Plantaginaceae		Threatened
129.	Pouzolzia zeylanica (L.) Benn.	Urticaceae		Not Evaluated
130.	Prunus domestica L.	Rosaceae	পাল্ম	Not Evaluated
131.	Punica granatum L.	Punicaceae	িাশলম	Least Concern
132.	Putranjiva roxburghii Wall.	Putranjivaceae	Putranjiva	Not Evaluated
133.	Raphanus raphanistrum subsp. sativus (L.) Schmalh.	Brassicaceae	মূলা	Not Evaluated
134.	Rhynchostylis retusa (L.) Blume	Orchidaceae	কমপৌ ফুল	Endangered
135.	Ricinus communis L.	Euphorbiaceae	এড়া	Not Evaluated
136.	Rosa multiflora	Rosaceae	বগালাপ	Not Evaluated
137.	Roystonea regia (Kunth) O.F.Cook	Arecaceae	Royal palm	Least Concern
138.	Saribus rotundifolius (Lam.) Blume	Araceae	Footstool palm	Least Concern
139.	Solanum melongena L.	Solanaceae	বেমঙাি	Not Evaluated
140.	Solanum pimpinellifolium L.	Solanaceae	কণ শেলাহী	Least Concern
141.	Solanum nigrum L.	Solanaceae	Black nightshade	Least Concern
142.	Solanum torvum Sw.	Solanaceae	েৰমভকুৰী	Not Evaluated
143.	Sphagneticola trilobata (L.) Pruski	Asteraceae		invasive species
144.	Spinacia oleracea	Amaranthaceae	পামলিং	Not Evaluated
145.	Syzygium cumini (L.) Skeels	Myrtaceae	জামু	
146.	Tabernaemontana divaricata (L.) R.Br. ex Roem. & Schult.	Apocynaceae	কথাি	Least Concern
147.	Tagetes erecta L.	Asteraceae	িাজী	Not Evaluated
148.	Talinum paniculatum (Jacq.) Gaertn.	Talinaceae		Least concern
149.	Tectona grandis L.f.	Lamiaceae	জচগুন	Least Concern
150.	Terminalia chebula Retz.	Combretaceae	শিশলখা	Least Concern
151.	Terminalia arjuna (Roxb. ex DC.) Wight & Arn.	Combretaceae	অজুমি	Not Evaluated
152.	Thuja occidentalis L.	Cupressaceae	Thuja	Least Concerned
153.	Tradescantia zebrina Bosse	Commelinaceae	Inchplant	Not Evaluated
154.	Tradescantia pallida (Rose) D.R.Hunt	Commelinaceae	Purple Heart	Not Evaluated
155.	Washingtonia filifera (T.Moore & Mast.) H.Wendl. ex de Bary	Arecaceae	Mexican fan palm	Least Concern
156.	Zingiber officinale Roscoe	Zingiberaceae	আদা	Data Deficient
157.	Ziziphus jujuba Mill.	Rhamnaceae	েগৰী	Least Concern
158.	Ziziphus mauritiana Lam.	Rhamnaceae	েগৰী	Least Concern

Photo 10: A few of the plant species enumerated in the institution campus during the audit.













Syzygium cumini

Aegle marmelos

Aquilaria malaccensis







Bambusa vulgaris var. striata

Bambusa vulgaris var. wamin

Bambusa tulda







Bauhinia variegata

Bergera koenigii

Bombax ceiba



Rhynchostylis retusa

Dendrobium hybride

Cymbidium aloifolium

#### 1.1. CAMPUS FAUNA

Numerous faunal species are frequently observed in the campus, including mammals, birds, amphibians, reptiles, etc. The vegetation in the campus acts as the adobe for the faunal species present in the institution campus. A list of faunal species in the campus is given as follows.

**Table 2:** Faunal species in the institution campus along with their class, order, family, and common or vernacular name.

Sl.	Scientific name	Family	Common name	IUCN status
<b>No.</b> 1.	4 . 7 . 7	G. 11	MIT AND THE STATE OF THE STATE	T
	Acridotheres tristis	Sturnidae	শাবলকা	Least concern
2.	Aethopyga siparaja	Nectariniidae	জমৌবংযা	Least concern
3.	Agama agama	Lacertidae	জিেবংযা	Least concern
4.	Alcedo atthis	Alcedinidae	মাছৰুকা	Least concern
5.	Amaurornis phoenicurus	Rallidae	ডাওক	Least concern
6.	Anas crecca	Anatidae	হৰালী হাহাঁ	Least concern
7.	Anas poecilorhyncha	Anatidae	≀াবিহাহ	Least concern
8.	Anastomus oscitans	Ciconiidae	শামুক ভঙা	Least concern
9.	Ardeola grayii	Ardeidae	কনামুচুবৰ	Least concern
10.			Brush footed	
	Athyma inara	Nymphalidae	butterfly	Least concern
11.	Bos taurus	Bovidae	গৰু (Cow)	Not evaluated
12.	Bubalus bubalis	Bovinae	মহ (Buffello)	Endangered
13.	Bubo bengalensis	Strigidae	জাগাঁচা	Critically endangered
14.	Canis lupus familiaris	Canidae	কুকুৰ	Not evaluated
15.	Capra aegagrus hircus	Bovidae	ছাগলী	Least concern
<i>16</i> .	Cathosia cyane cyane	Nymphalidae	Leopard lacewing	Least concern
<i>17</i> .	Chalcides ocellatus	Scincidae	নাইব/যা	Least concern
18.	Chalcophaps indica	Columbidae	কপাৌ (Dove)	Least concern
19.	Coelognathus radiatus	Viperidae	ধুন্দুবল জা\াঁ টী	Least concern
20.	Columba livia	Columbidae	ৈৰি (Piagon)	Least concern
21.	Corvus splendens	Corvidae	কাউৰী	Least concern
22.	Cuculus micropterus	Cuculidae	জকপিকী	Least concern
<i>23</i> .	Cygnus olor	Anatidae	ৰা <b>ে</b> হাহ	Least concern
24.	Duttaphrynus melanostictus	Bufonidae	জভকুলী	Least concern
25.	Egretta garzetta	Ardeidae	বগবল	Least concern
26.	Equus ferus caballus	Equidae	জ াাঁৰা	Endangered
27.	Eudynamys scolopaceus	Cuculidae	কুবল	Least concern
28.	Felis catus	Felidae	জমকুৰী	Least concern
29.	Felis silvestris	Felidae	েহা মাল	Least concern
30.	Fowlea piscator	Colubridae	ধুৰা	Least concern
31.	Funambulus palmarum	Sciuridae	জকপকেটুৱা	Least concern
32.	Gallus Gallus domesticus	Phasianidae	কুকুৰা	Not listed
	L	· ·	·	l .

35. Halcyon smyrnensis     Alcedinidae     Al	y endangered ncern ncern ncern
35. Halcyon smyrnensis 36. Hemidactylus frenatus 37. Herpestes edwardsii 38. Hierococcyx varius 39. Hoplobatrachus tigerinus Dicroglossinae Carnivora Dicroglossinae Chest con Dicroglossinae Chest	ncern ncern ncern
36. Hemidactylus frenatus Gekkonidae house geckos Least con 37. Herpestes edwardsii Carnivora জনউল Least con 38. Hierococcyx varius Cuculidae জহপটালুকা Least con 39. Hoplobatrachus tigerinus Dicroglossinae Indian Bull frog Least con	ncern ncern ncern
37. Herpestes edwardsii Carnivora ডান্টল Least con 38. Hierococcyx varius Cuculidae জহপটালুকা Least con 39. Hoplobatrachus tigerinus Dicroglossinae Indian Bull frog Least con	ncern
38. Hierococcyx varius Cuculidae জহপটালুকা Least con 39. Hoplobatrachus tigerinus Dicroglossinae Indian Bull frog Least con	ncern
39. Hoplobatrachus tigerinus  Dicroglossinae Indian Bull frog Least con	
Dicroglossinae Indian Bull frog Least con	
· ·	
10 7 11 1 7 1 7 1 7 1 7 1	ncern
40. Lampides boeticus Lycaenidae The pea blue Least con	ncern
41. Leptoptilos javanicus Ciconiidae বৰপটাপকালা Vulnerab	ole
42. Colubridae	
Lycodon anamallensis কুলামুসুৰা Least con	ncern
Cercopithecida	
Macaca mulatta e বান্দৰ Least con	ncern
44. Milvus migrans Accipitridae বিচলাবন Threaten	ied
45. Naja kaouthia Elapidae চকবৰ জাNাঁ টী Least con	ncern
46. Oriolus xanthornus Orioledae সবিযবি Least con	ncern
47. Libellulidae	
Orthetrum sabina Green marsh hawk Least con	ncern
48. Oryctolagus cuniculus Leporidae শহা Near three	eatened
49. Passer domesticus Passeridae বিচবৰকা Least con	ncern
50. Ploceus philippinus Ploceidae টুকুৰা চৰাই Least con	ncern
51. Psittacula krameri Strigopidae ভাপটা (Parrot) Threaten	ıed
52. Pteropus giganteus Pteropodidae বাদুবল (Bat) Least con	ncern
53. Pycnonotus cafer Pycnonotidae বুলবুবল Near thre	eatened
54. Libellulidae Common picture	
Rhyothemis variagata wing Least con	ncern
55. Sus scrofa domesticus Suidae গাহবৰ Least con	ncern
56. Varanus bengalensis Varanidae 영국 Least con	ncern
57. Vulpes vulpes Canidae বশ্বাল Least con	ncern

#### 1.1 BEST PRACTICES PERTAINING TO GREEN CAMPUS

As part of its ongoing commitment to environmental sustainability and ecological consciousness, the institution has undertaken a variety of green initiatives aimed at maintaining a healthy and eco-friendly campus. These efforts are inclusive, with active participation from students, faculty, and staff, and align with both local and global environmental objectives.

#### 1.1.1. PLANTATIONS

One of the key green practices is the regular organization of **tree plantation programs**, particularly on World Environment Day and other notable occasions. These drives engage students and faculty members in planting and nurturing various plant species across the campus. The presence of diverse flora not only beautifies the campus but also contributes to improved air and water quality, provides habitat for local wildlife including birds, and fosters ecological balance.

# 1.1.2. DEVELOPMENT OF BOTANICAL, MEDICINAL PLANT AND ORNAMENTAL PLANT GARDEN

To further promote biodiversity, the institution has initiated the **development of multiple specialized gardens** including a botanical garden, a medicinal plant garden, and an ornamental plant garden. These projects are being implemented with the help of financial support received from Government of Assam under its "Green Campus Initiative Funds." These gardens are being designed not only as aesthetic spaces but also as educational tools that support environmental awareness and academic learning.

#### 1.1.3. DEVELOPMENT OF ORCHIDARIUM

The campus is also home to a **dedicated orchidarium**, established to conserve and propagate locally available orchid species. This initiative contributes to preserving rare and native flora, while also providing students with practical exposure to plant conservation methods.

#### 1.1.4. SET UP OF SOLAR LIGHTS

The DIET campus in Jorhat has installed solar lights across key areas of the premises to promote sustainable energy use. These solar-powered lights enhance visibility and safety during nighttime while reducing dependency on conventional electricity. This initiative reflects the institution's commitment to eco-friendly infrastructure.

#### 1.1.5 EARTHERN WATER FEEDERS AND WAITING SHED

Additionally, in a creative approach to sustainability, a **waiting shed** on the campus has been constructed using **eco-bricks** and **single-use plastic bottles**, showcasing innovative reuse of waste materials in construction. To support local bird species, **earthen water feeders** have been placed around the campus, especially during dry seasons, ensuring birds have access to clean drinking water.



**Photo 11:** Orchidarium, Solar panels, Water feeders for birds and waiting shed respectively DIET, Jorhat

#### 1.1.6 CAMPUS CLEANLINESS: VERMICOMPOSTING, PLASTIC COLLECTION BANK

Maintaining **cleanliness** on the campus is a top priority. The institution ensures regular cleaning of the entire campus, including hostels and academic buildings. Waste is systematically segregated into three categories: organic, plastic, and other waste. To facilitate this, multiple dustbins, including a set of **five-color-coded bins**, are strategically placed throughout the campus to ensure proper waste disposal and promote recycling practices. Furthermore, the institution has set up **one vermicomposting units** where collected organic waste is converted into compost, which is then used as manure for the campus gardens.

A notable addition to waste management is the establishment of a **Plastic Collection Bank**, which encourages the proper disposal and recycling of single-use plastics. This system reduces plastic pollution and promotes responsible waste handling among the campus population.



Photo 12: Vermicomposting units, Colored dustbins established in the campus

#### 1.1.7 TAGGING OF FLORA IN THE CAMPUS

The Institution has properly tagged the plant species present within the campus stating their scientific name, English name and the vernacular name.

#### 1.1.8 CONSERVATION OF WATER AQUATIC FLORA AND FAUNA

The institution has also undertaken **conservation of a campus pond** to protect its aquatic life and maintain its ecological balance. Regular monitoring and cleanliness drives ensure the pond remains a healthy ecosystem.



Photo 13: Tagging of plants and conservation of waterbodies in the campus

#### 1.1.9 AWARENESS ON GREEN CAMPUS (BIODIVERSITY) AND RELEVANT ISSUES

**DIET Jorhat** has undertaken several initiatives to raise awareness about the importance of biodiversity and its conservation among students and the local community. These initiatives include hands-on training sessions on orchid cultivation and organic farming. Such programs aim to promote sustainable agricultural practices and preserve the region's rich biological diversity. A few photographs from these training sessions are provided below.



Photo 14: Orchid conservation and organic farming.



Photo 14: Cleanliness Programme and a Plantation Drive

#### 1. RECOMMENDATIONS

Based on the on-site visit and detailed interactions with the administrative officials of **Jorhat DIET**, the audit team concluded that the institution has significant potential to adopt a cleaner, greener, and more sustainable operational model. However, to realize this potential and exhibit greater environmental consciousness, a structured roadmap is essential. Continuation of regular green and environmental audits is highly recommended, as it will enhance awareness and foster greater participation among faculty, non-teaching staff, and students. The audit team has outlined the following specific recommendations:

#### 1. Establish an Environmental Management System (EMS)

It is recommended that Jorhat DIET establish an **Environmental Management System (EMS)** comprising faculty members, staff, and student volunteers. This internal committee would oversee all environmental initiatives and act as the liaison for future audits. EMS will ensure coordination of all green initiatives and help institutionalize environmental practices.

#### 2. Constitute Eco-Clubs and Climate Cells

Formation of dedicated **Eco-Clubs** or an **Environment and Climate Change Cell** is suggested. These bodies, potentially working under the EMS, can organize awareness drives, workshops, and competitions. These clubs should engage trainee teachers and encourage eco-pedagogical practices that future educators can implement in their schools.

#### 3. Plantation Drives Using Indigenous Species

To enhance biodiversity, it is recommended to prioritize the plantation of **local fruit-bearing trees** like *Baccaurea ramiflora*, *Averrhoa carambola*, *Artocarpus chama* and others that attract fauna. These can support local wildlife, especially birds and pollinators.

#### 4. Develop a Butterfly and Pollinator Garden

Establishing a **butterfly garden** using local flowering species will help conserve pollinator species and can also serve as a **living classroom** for science and environmental education for student-teachers.

#### 5. Utilize Open Spaces for Green Cover

All available empty spaces in the DIET campus should be utilized for afforestation or floral landscaping using economically beneficial native species. A **plantation registry** should be maintained that records plant species, numbers, and the names of individuals responsible for planting.

#### 6. Boundary Plantations with Fruit Trees

Planting **fruit-bearing trees along campus boundaries** will not only attract avian fauna but also provide shaded areas for students and help in temperature regulation.

#### 7. Maintenance of Botanical and Orchid Gardens

The institution should carry out regular **weeding and cleaning of the botanical garden**, ensuring plant health. It is also advised to expand the **orchidarium** with local and select exotic species to enrich diversity and support conservation.

#### 8. Development of a Medicinal and Herbal Garden

Plans to develop a medicinal and herbal garden are appreciated. The focus should be on locally known medicinal plants to align with traditional knowledge and support community outreach.

#### 9. "QR Code for Plants" Initiative

To enhance scientific literacy and curiosity among students, a **QR-code based plant information system** can be implemented. Each plant would have a QR code linking to a digital database that includes its taxonomy, uses, ecological role, and cultural significance.

#### 10. Rainwater Harvesting Expansion

Currently, Jorhat DIET does not have any rainwater harvesting facility in place. To promote sustainable water management and serve as a model for environmental responsibility, it is proposed that rooftop rainwater harvesting systems be established across campus buildings. This initiative should begin with the construction of basic collection and storage infrastructure, followed by phased expansion to cover the entire campus. Additionally, a monitoring system should be implemented to track water collection, usage, and overall benefits, helping to assess the system's effectiveness and promote its long-term sustainability.

#### 11. Adopt the Miyawaki Plantation Method

For rapid green cover and biodiversity restoration, the **Miyawaki Method** should be considered. This method can be piloted in designated areas such as the proposed **Biodiversity Park**, involving trainees and local schools.

#### 12. Introduce a "No Motor Vehicle Day"

The institute can consider implementing a "No Motor Vehicle Day" once a week or once a month. This initiative will not only reduce the carbon footprint but also promote sustainable commuting habits among staff and students.

#### 13. Responsible Debris Management During Construction

As infrastructural development is underway at the campus, proper **disposal and management of construction debris** is crucial. Waste must be sorted and recycled or reused wherever possible to reduce environmental impact.

#### 14. Waste Segregation and Comprehensive Management Plan

A strong focus must be given to **waste segregation at source**, composting of organic waste, and proper disposal of **e-waste**. Awareness campaigns and clear signage can support behavior change across the institution.

#### 15. Drafting of a Comprehensive Environmental Policy

The institution should formulate a **formal Environmental Policy Document** that incorporates:

- Vision, mission, goals, and objectives.
- Current practices and baseline data.
- Time-bound action plans based on the recommendations.
- A review mechanism to revise the policy post each audit cycle.

This policy should be made public and guide the institution toward long-term environmental sustainability.

#### 16. Environmental Pedagogy Integration

Being a teacher training institution, Jorhat DIET should integrate **environmental education** into its pedagogy modules, ensuring that future educators are equipped to carry forward green values to schools.

#### 17. Community Outreach and Extension Programs

Jorhat DIET can collaborate with local schools, NGOs, and the Forest Department to organize **community plantation drives**, **clean-up campaigns**, and **biodiversity surveys**, strengthening its societal role.

By implementing these recommendations, Jorhat DIET can emerge as a **regional model for green campuses**, while also instilling a strong sense of environmental responsibility in its teacher trainees and wider community.

#### 2. CONCLUSION

The green audit serves as a vital tool in ensuring the responsible and balanced management of natural resources. It plays a crucial role in evaluating whether institutional practices align with principles of sustainability and environmental responsibility. This comprehensive process involves identifying, measuring, documenting, reporting, and monitoring various biological and environmental components within a designated area.

The primary objectives of a green audit are twofold:

- 1. To evaluate the institution's current environmental practices.
- 2. To assess whether it is progressing on a sustainable path for long-term development.

During the audit, the team observed a strong sense of environmental awareness among faculty, support staff, and students. The campus environment is generally well-maintained, and institutional authorities appear to be committed to cleanliness and the overall aesthetic of the campus. Additionally, unstructured or undeveloped areas within the campus have contributed positively to groundwater recharge. However, the audit team recommends that future infrastructure development be carefully planned to ensure an appropriate balance between built-up areas and open green spaces to maintain this benefit.

Based on site inspections and discussions with institutional authorities, the audit team concluded that while the institution is taking commendable steps toward environmental sustainability, there is a need for a more structured roadmap. Such a plan would help guide future initiatives that support a greener, cleaner campus, and demonstrate a stronger commitment to biodiversity and ecological balance.

The audit team recommends that the institution continue conducting green audits on a regular basis. This practice not only enhances awareness but also promotes active participation from all stakeholders—including faculty, staff, and students. With consistent effort and commitment, the institution can foster a culture of sustainability and ensure continued environmental progress in the years to come.