

GREEN AUDIT REPORT

2023-2024



CHHAYGAON COLLEGE

CHHAYGAON, KAMRUP

ASSAM-781124



ECO CLUB: GREEN AND CLEAN INITIATIVES



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OFFICE OF THE PRINCIPAL
CHHAYGAON COLLEGE, CHHAYGAON
Estd. 1974

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NAAC Reaccredited (3rd Cycle) Grade: B

Date: 12-12-2024

PREFACE

I, the undersigned, on behalf of Chhaygaon college fraternity, would hereby like to convey the best wishes to the members in general and the convener in particular of the Eco Club of Chhaygaon College, Chhaygaon for their service in preparing the 'Green Audit' of the college campus. Here, I like to offer my heartfelt thanks to our well wisher associated with this noble venture. I think this Green Audit Report seems to be an important and very significant documentation which throws light on the significant parameters of the campus environment, like water management, healthcare, improvement of energy efficiency and formulation of action plan with a view to reducing misuse of power, importance of renewable energy, air quality and pollution level etc. This is a constructive initiative undertaken by the members of the Eco Club for the benefit of the college. Moreover, this will surely assist educate all the concerned on eco-friendly environment and living there in.

In this context, I would like to offer my thanks and gratitude towards Professor Ashok Kumar Bora, retired head of the Dept .of Geography, Guahati University, Assam for his splendid guidance and suggestions in bringing this Green Audit out pertaining to green and clean campus issues. All the stakeholders including the members of the Eco Club who extended their all possible helping hand towards its completion deserve my sincere thanks.

I believe that the Green Audit Report of higher educational institution like ours is a very important document for regular monitoring of the campus environment. Once again, I extend my best wishes to all the concerned.


12/12/24
(Dr.Naba Kumar Kalita)
Principal
Chhaygaon College, Chhaygaon
Kamrup (Assam)

ACKNOWLEDGEMENT

The Green Audit Report aids in the process of adopting an environmentally conscious mindset toward the college's sustainable growth. Sincere gratitude is extended by the Green Audit Assessment Team to the Chhaygaon College administration for giving the task. We would also want to thank the college administration for their cooperation and assistance during the entire procedure.

Our special thanks from our end will proceed towards Dr. Naba Kumar Kalita, Principal, Chhaygaon college, Dr. Ashok Kumar Bora, Professor, Department of Geography, Gauhati University, Dr. Lakhyadhar Sarma, Chhaygaon college IQAC coordinator including all the members of the Eco Club Committee of the college.

Moreover, all the stakeholders deserve special thanks due to offering us necessary inputs to this exercise of Green Audit. I, on behalf of the Eco club, express my deep sense of gratitude to Professor Ashok Kumar Bora of Gauhati University for his suggestions and guidance received at various stages of Green Audit preparation. I appreciate all my colleagues of the Eco club for their heart-felt constant and continuous supports.

I believe that the findings presented in the Green Audit Report will undoubtedly be used as a reference to inform the college community about current environmental practices and resource utilization, as well as to support creative planning and new initiatives. I hope the college administration will follow through on the suggestions. I would like to present the Green Audit Report to the Chhaygaon College authorities on behalf of the Eco Club.



(Dr. Bablu Rabha)
Convener, Eco Club
Chhaygaon College, Chhaygaon

ECO CLUB : ITS OBJECTIVES AND GREEN & CLEAN INITIATIVES

(A) Brief Profile of the College

Chhaygaon College happens to be the outcome of the visions and missions of a dedicated team of citizens comprising some noted social workers and academicians of the greater Chhaygaon area. The college was established in the year 1974. Since its inception, Chhaygaon College has been promoting and upholding the academic and environmental values in the institution in particular and society in general. The College is located on the southern bank of the mighty river Brahmaputra. The Campus and its surroundings are full of a variety of flora and fauna. It is almost 40 km away from Guwahati and can be reached by road and train routes. The College is almost 27 km away from LGB international airport, Guwahati.

(B) The Eco Club

The Eco Club of Chhaygaon College is a unit called club constituted by the faculty members and student representatives that works for promotion of environmental quality, awareness, sustainability, and eco-friendly practices within and around the college campus. The primary objective of the Eco Club is to educate the members of the Chhaygaon College family and the local community and provide a platform to all the stakeholders to actively participate in the clean and green initiatives and conservation efforts.

(C) The Objectives of the Club

The objectives of the club include:

- i. To promote the College as an environment friendly institution and to make an eco-friendly society in and around the campus.
- ii. To create, care and share a green and clean environment in the campus.
- iii. To make the students, teachers, employees and the authorities aware of the importance and necessity of an eco-friendly environment in the educational institution.
- iv. To preserve and upgrade the biodiversity in the campus.
- v. To create and develop the campus as a Plastic-free zone, No-Smoking zone, Tobacco-free zone, Pollution-free zone, Waste-management zone.
- vi. To promote awareness about health, hygiene and sanitation.

- vii. To lay emphasis on the use of renewable energy resources and rational use of energy in the campus.
- viii. To undertake outreach activities and programmes for environmentally sound socio-economic development of the neighbouring societies.
- ix. To ensure and uphold the ideas of sustainable development in all sorts of activities in the campus.
- x. To assess the environmental status of the campus and prepare a green audit from time to time.

(D) The Areas of Green and Clean Initiatives

The Eco Club of Chhaygaon College carries out the green and clean initiatives in the campus from time to time in the following areas:

- (a) Awareness Campaigns, (b) Sustainable Initiatives, (c) Tree Plantation and Clean-up Drives, (d) Workshops and Seminars, (e) Eco-friendly Events, and (f) Collaboration and Advocacy works.

(E) Composition of the Eco Club Committee of Chhaygaon College (2023-24)

1. **Advisor:** Dr. Naba Kumar Kalita, Principal, Chhaygaon College.
2. **Convenor:** Dr. Bablu Rabha, Asst. Professor, Deptt. of Accountancy
3. **Teacher Members:**
 - Dr. Rajiv Deka, Asst. Professor, Deptt. of English
 - Dr. Kakali Bezbaruah, Asst. Professor, Deptt. of Philosophy
 - Mr. Debobrat Doley, Asst. Professor, Deptt. of History
 - Dr. Sristi Shawanam, Asst. Professor, Deptt. of Assamese
 - Miss Jyotshna Rahang, Asst. Professor, Deptt. of Political Science
 - Mr. Jogesh Bhattacharyya, Asst. Professor, Deptt. of English
4. **Student Member:** Mr. Bhargab Rabha
5. **Student Representatives from NSS:**
 - Mr. Dhanjit Kalita
 - Miss Priya Das



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Dr. Ashok Kumar Bora, M.Sc ; Ph.D.

Retired Professor and Head

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GREEN AUDIT (2023-2024)

CHHAYGAON COLLEGE

Certificate

It is certified that this Green Audit Report of Chhaygaon College prepared for the session 2023-2024 is based on the facts, information and data obtained from various sources. The Eco Club of the college has provided the necessary relevant data relating to the green environment of the campus. Also certified that the data used in this report have been thoroughly checked with physical verification for their reliability. The field survey data and spot visit data along with other secondary data incorporated in the report are original in nature and these are under the custody of the Chhaygaon college authorities.

Date: **14.12.2024**

(Dr. Ashok Kumar Bora)

Expert in Environmental Study and Research

Green Audit Report

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1. INTRODUCTION

Green audit is a practice on the part of any establishment for assessing the environmental and ecological conditions prevalent in a campus area. It aims to identify and assess whether the institutional practices are environmentally sound, eco-friendly and sustainable. Green auditing is a regular process to be carried out by any institution in order to identify, quantify, document, report and monitor the environmentally important aspects and components in the campus. This green audit is thus an activity of the college authorities for maintaining a healthy working environment for all the stakeholders of the college.

The Green Audit of Chhaygaon College has been prepared for the session 2023-2024 as a requirement of the assessment to be conducted by the National Assessment and Accreditation Council (NAAC). It is in fact, a good practice adopted by the College for regularly monitoring the environmental status of the college.

2. OBJECTIVES AND METHODOLOGY

(A) OBJECTIVES

In continuation of the previous Green Audit of Chhaygaon College, the following objectives have been undertaken while preparing this report for the session 2023-24.

- (a) To identify and document the green practices followed by the college.
- (b) To set up goals, vision and mission for green practices in the campus.
- (c) To identify the strengths and weaknesses in green initiatives and practices.
- (d) To implement and promote the green practices in various sectors and departments of the college.
- (e) To arouse a sense of environmental awareness throughout the campus.
- (f) To facilitate the preparation of Green Audit Report of the college, which will serve as an all-time reference in the years to come.

(B) METHODOLOGY

The methods and techniques adopted to prepare this Audit Report are as follows:

- (i) Both primary data (first-hand data) collected by the auditor through spot and field visit and investigation and the secondary data collected from the reports of the Eco-Club and IQAC etc. have been used.
- (ii) Field and spot visits.

- (iii) Spot interviews held with all the stakeholders
- (iv) Water sample collection and water quality analysis in laboratory using standard methods.
- (v) Applications of sophisticated surveying and mapping technologies like GPS (Global Positioning System) and GIS (Geographical Information System) for land use and land cover mapping of the college campus using ArcGIS software.
- (vi) Monitoring of air quality and pollution level.
- (vii) Measurement of noise level pattern in the campus with the help of standard equipments.
- (viii) Surveying and listing of floral and faunal species of the campus.

3. LAND USE LAND COVER IN THE CAMPUS

Being situated in Kamrup district, Assam the Chhaygaon College campus has an extension of 26°2'41" N to 26°2'41" N latitude and 91°22'21" E to 91°22'26" E longitude. It is situated at an elevation of 49 m from the mean sea level. The campus has a closed boundary bordered by agricultural fields and human settlements on the north, the national highway on the south, road and human settlements on the east and human settlements on the west. The campus map presented in **figure 1** has been prepared with the help of GPS survey and GIS mapping techniques using Arc GIS software to map the various land use and land cover patches and their corresponding areas.

The area of the college campus is 16161.48 m². The entire campus is found to have mosaics of 11 LULC types such as (1) Open Space, (2) Grassland and Vegetative Area, (3) Garden Area, (4) Buildings & Establishments Area (All), (5) Medicinal Plants Area, (6) Parking Space, (7) Area under Internal roads (Paths), (8) Kitchen Garden Area, (9) Play Ground, (10) Waste Management Site Area, and (11) Drinking Water Facility Shed which are presented in **table (A)**.

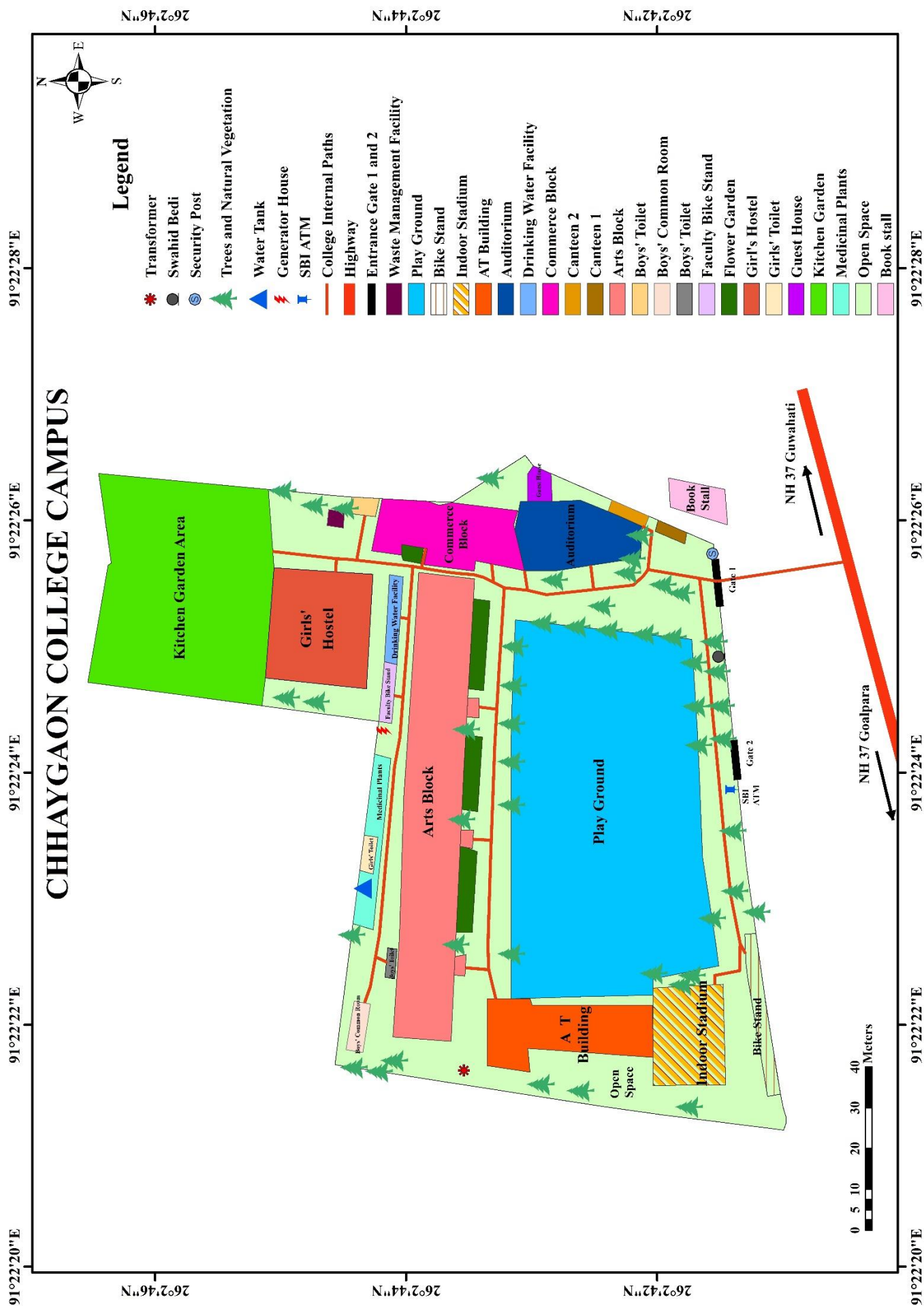


Figure 1: Land Use Land Cover (LULC) Map of Chhaygaon College Campus

Table (A): Land Use Land Cover Categories and Their Areal Extents in the Campus

Sl. No.	LULC Categories	Area Covered (m ²)	Percentage of Areas out of the Total Campus Area
1	Open Space	2709.13	16.76%
2	Grassland and Vegetative Area	2274.2	14.07%
3	Garden Area	236.26	1.46%
4	Buildings & Establishments Area (All)	4390.69	27.17%
5	Medicinal Plants Area	173.56	1.07%
6	Parking Space	184.3	1.14%
7	Area under Internal roads (Paths)	467.30	2.89%
8	Kitchen Garden Area	1945.7	12.04%
9	Play Ground	3697.95	22.88
10	Waste Management Site Area	19.7	0.13%
11	Drinking Water Facility Shed	62.69	0.39%
Total Area		16161.48	100 %

Source : Based on GPS survey carried out in the campus

4. WASTE MANAGEMENT SCENARIO

Both natural and human factors are involved in generation of wastes. But, human activities are more responsible for various kinds of wastes generation. Wastes are the real threats to the eco-environmental landscape of any region or place. In the Chhaygaon College campus also, the various types of wastes are likely to affect the campus environment at different degrees.

Generally, there are three types of wastes, viz. biodegradable, non- biodegradable and hazardous wastes. Wastes may be either solid wastes or liquid wastes. The biodegradable

wastes get easily degraded, hence these wastes can be easily managed. But, the wastes like glass, tins, plastic substances etc. are of non-degradable type which need different approach and methods for their management. On the other hand, the hazardous wastes usually generated from industries and chemical laboratories comprise the toxic and chemical substances which are directly harmful to human health and other plants and animal organisms. The solid wastes, however can be managed through the process of reduction, reuse, recycle and recovery. Again, there are wastes called e-wastes which are nothing but electronic wastes.

Solid Waste Management

Chhaygaon College adopts a solid waste management system controlled by the Eco Club of the College. The biodegradable and non-biodegradable solid wastes are separately collected at two collection points. The college besides making efforts to reduce and eliminate the adverse impact of waste materials on human health declares its campus as a plastic free campus. The eco-friendly bamboo-made dustbins are used for solid wastes collection.

It is a good practice that the bamboo-made dustbins are placed near all the classrooms and departments on every floor to collect different types of waste separately such as plastics, e-waste, paper wastes, food wastes, organic wastes products, etc. Biodegradable wastes collected from all the floors are emptied into a compost pit and set burnt every evening and transformed into manure which is later utilized as biofertilizer in the botanical and kitchen garden as well as in other areas of the college campus, wherever required. No chemical fertilizers are used in the campus. As regards the harmful chemical and toxic substances, there is no any production of these wastes as the college has no science laboratories.

Considering all the sources of wastes generation in the college campus, it has been estimated that about 14.4 kg of solid wastes on the average per week are produced which comprise paper wastes, plastic wastes, organic wastes and e-wastes.

E-waste Management

E-wastes include the damaged parts of computers, batteries, computer accessories, spare parts and other electronic goods and materials produced and accumulated in the campus. Such e-wastes are properly collected in separate places under the label 'scrap' and disposed of by an outsourcing agent called Ali Hussain, Chhaygaon, Kamrup.

Liquid Waste Management

An important type of waste is the liquid waste. Liquid wastes management requires different methods. It is difficult to deal with the liquid wastes as these cannot be easily picked up and removed from the site and the environment. Usually, liquid wastes get spread out and easily pollute the land, water and others which come into their contact. Chhaygaon college is found to maintain a drainage system for liquid waste disposal. There is a good drainage system in the campus which drains out the liquid wastes as well as rainwater thereby causing no waterlogging problems in the campus.

5. WATER USE SCENARIO

In order to sustain life, it is a must to have access to clean and safe water. It is more so in an educational institution where human resources are created and developed. With this objective and need, the water resources available for use in the Chhaygaon College campus need to be regularly monitored and wisely utilized and managed.

Sources of Water in the Campus

For various purposes, the water is used and consumed in the campus of Chhaygaon College. The sources of water obtained are identified as (i) Hand Tube Wells (ii) Deep Boring (iii) Water Reservoir (storage tanks) and (iv) Rain Water Harvesting Unit. These sources and their status are presented in **table (B)**.

Table (B): Water Sources and their Status in the Campus

Sl. No.	Water sources	Units/ Numbers in use	Water use status
1	Hand-operated tube well	01	Necessary quantities acquired.
2	Motor-driven Deep Boring	03	Necessary quantities acquired.
3	Water Storage Tanks (Reservoirs)	03	Adequate water is reserved with a total capacity of 6500 liters.
4	Rain water harvesting unit	01	Season-wise collection of rain water to be used, especially for gardening purposes with a total capacity of 500 liters.

Purposes of Water Use in the Campus

As already mentioned, the water in the college campus is used and utilized for different purposes. To summarize the purposes of water use in the campus by the stakeholders are as follows:

- i. For drinking purpose
- ii. For use in the toilets and washrooms meant respectively for the students, teachers, principal, guests, office staff, library staff, hostel boarders, canteen staff, and other employees.
- iii. For gardening and landscaping.
- iv. For cleaning and washing of room floors etc.
- v. For use in cooking purpose in the hostel and canteen and
- vi. For use in all types of construction works.

The facilities/utilities available in the campus for use of water include:

- Toilets and urinals available in the college: Total 50 nos.
- Water filters available: Total 03 nos.

- Small water tanks/ water storage: Total 03 nos.
- Water taps/ water use points: Total 115 nos.

Maintenance of Water Quality

Actually, there is no scarcity of water in the college. Besides the availability of water for using in various purposes, it is also important to maintain the quality of the water. All the four sources collectively provide water for an average daily use of 3,000 liters of water in the campus. For drinking purposes, a number of water purifiers are installed in the campus (**Photo 1**). In the 03 water tanks, about 6,500 liters of water are stored. The quality of water is also monitored from time to time. For this purpose, water samples from the four sources are collected and tested in laboratories of Geography Dept., Gauhati University. The water quality parameters are presented in the **table (C)**. The water quality is found to be within permissible limit.



Photo 1: Water Purifiers Installed in the Campus



Photo 2: Water Reservoirs

Table (C): Water Quality Parameters of Water Samples Collected from Four Sources

Sl. No.	Water Parameters	Parametric values in respect of the water sources			
		Hand Operated Tube well	Deep Boring	Water storage tanks	Rain Water Harvesting storage
1	Temperature (⁰ C)	22.3	22.5	23.8	23.00
2	Total Dissolved Solids (mg/l)	19	23	27	28
3	pH	6.4	6.3	6.56	6.48
4	Turbidity (N.T.U)	0	0	0	0
5	Alkalinity (mg/l)	76	79	101	118
6	Total Hardness (mg/l)	67	66	88	100
7	Iron (mg/l)	0.13	0.14	0.25	0.19
8	Manganese (mg/l)	0.18	0.24	0.26	0.21
9	Magnesium (mg/l)	10	12	11	13
10	Arsenic (mg/l)	nil	nil	nil	nil
11	Fluoride (mg/l)	0.14	0.22	0.26	0.24
12	Chloride (mg/l)	3	4	4	5
13	Calcium Hardness (mg/l)	11	13	14	12

6. HEALTH SCENARIO

Human resource development is primarily based on human health. In an educational institution like Chhaygaon College, health of the students and other stakeholder are, therefore of serious concern. Keeping this view in mind, the Chhaygaon College authorities attempts to achieve a healthy atmosphere among the students, faculty members, staff members, and other stakeholders. The general objectives of the health audit are as follows:

- (i) To conduct a general health check-up of the students, faculty members, and staff members of the college.
- (ii) To make health-centric awareness about hygienic environment and good health among the students.
- (iii) To provide healthcare facilities for the students in the campus and
- (iv) To create a healthy and happy environment in the college.

During the year 2023-2024, the college has carried out some programmes which are listed below:

- (a) Flag and Sapling donation programme organised by Commerce Dept., Chhaygaon College in association with Eco Club in collaboration with IQAC Chhaygaon College on 12th August 2023 at Ou-Phula Village, Bamunigaon.
- (b) Flag and Sapling donation Programme organised by Eco Club in collaboration with IQAC on 12th August, 2023 at Ratanpur Village, Chhaygaon.
- (c) Awareness Programme on “Female Health Issues in Ratanpur Village” (Adopted Village of Chhaygaon College) organised by Women Cell, Chhaygaon College in collaboration with IQAC, Chhaygaon College on 21st September 2023. In this programme women cell of Chhaygaon College with the help of resource person, Dr. Jyotirupa Sarma, Medical Officer, Chhaygaon Primary Health Centre, spoke on various issues on female.
- (d) Govt of Assam Initiative “Amrit Brikha Andolan Growing the Tree Economy of Assam” programmes has been organized by secretary of Social Service, CCSU in Association with NSS and Eco Club of Chhaygaon College in Collaboration IQAC, Chhaygaon College, Chhaygaon on 17th Sept 2023.

Some photographs are appended below showing the activities during the year 2023-2024:



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9

Hygiene and Fitness Aspect

In the working environment of the college campus, cleanliness is important for health and safe stay. Therefore, keeping the hygiene aspect in mind, the following provisions are made available in the college campus: (i) Staff washroom with sanitary facilities, (ii) Students' washrooms and sanitary toilets separately for boys and girls, (iii) Canteens with hygienic food, (iv) Boys' and Girls' common rooms with sanitary facilities, (v) Teachers' common room with sanitary toilets and washrooms. The college authority is found to regularly monitor the hygiene and cleanliness aspects of all the facilities as well as the working environment of the college.

As regards the fitness aspect practiced in the college campus, it has been found that the college has a well-equipped gymnasium center that provides facilities of physical exercise primarily for students. The gymnasium remains open daily from 7 am to 8:30 am and there is an experienced instructor-cum-trainer in the centre who assists the students and looks after the smooth functioning of the fitness programmes in the centre. The facilities available in the gymnasium centre are mentioned in **table (D)**.

Table (D): Facilities Available in the Gymnasium Centre

Sl. No.	Equipments	Operational mode	Quantity (Nos.)
1	Iron bars	Manual	3 pc
2	Weight Plate	Manual	1 Pound 2 pc 1 Kg 2 pc 2.5 Kg 2 pc 3 Kg 2 pc 5 Kg 2 pc 10 Kg 2 pc 12 Kg 2 pc
3	16 Station Gym	Manual	1 pc
4	Dumbell Bar	Manual	2 pc
5	Fold Bench	Manual	1 pc
6	Skipping Rope	Manual	2 pc
7	Power Spring	Manual	2 pc
8	Sit Up Bench	Manual	1 pc

In addition to the gymnasium centre, there is also one Indoor Stadium in the college campus which provides facilities to play indoor games like badminton, table tennis, etc. The

campus has also an open playground for football, kabaddi, and volleyball playing for the students.

7. ENVIRONMENTAL QUALITY

Air quality along with pollution and noise level are essentially important in any working environment. In order to know the status of air quality, the internet source and related data are taken into account during the summer season for greater Chhaygaon area. The Air Quality Index (AQI) for summer season is found to be 102 which means that the air of the campus is slightly satisfactory as per the norms prescribed by the Central Pollution Control Board, Govt. of India (AQI value range of 51-100 indicates satisfactory air quality). As the college is located in a rural landscape and there are no industries etc. in the vicinity, the air quality of the college campus is, however satisfactory.

In an educational institution, noise level is important to maintain the normal academic environment. Thus, an attempt has been made to examine the noise level prevailing in the Chhaygaon College campus. For this purpose, a survey was conducted by Professor Kushal Kalita and his assistant from the Department of Physics, Gauhati University at different locations in the campus with a Sound Level Meter (Model: Envirotech SLM 100, Type II db A). The five locations selected for measuring noise level in the campus are at the (i) Main college gate, (ii) Northern boundary, (iii) Southern boundary, (iv) Eastern boundary and (v) Middle position of the campus. Time of measuring the noise level is the day-time during college working hours. The results of noise level status are presented in **table (E)**.

Table (E): Noise Levels at Different Points in the College Campus

Selected locations	Noise Level in dB Leq		Permissible (daytime) noise limit as per Central Pollution Control Board (CPCB)
	10 am – 12 noon	2 pm – 4 pm	
(i) Main College Gate	56.1	54.5	For silence zone - 50 For residential zone - 55
(ii) Near Northern Boundary	50.7	52.6	
(iii) Near Southern Boundary	45.10	44.20	
(iv) Near Eastern Boundary	50.30	48.90	
(v) At Mid-Campus position	50.00	47.40	

The results presented in the above table (E) suggest that the college campus is not affected by noise pollution indicating prevalence of calm academic environment.

It is observed that the soils of the college campus are of alluvial type. Thus, the soil quality is apparently good and rich in fertility with humans level. High proportions of clays and silts comprise the alluvial type of soils. Soils are not found to be degraded as organic manures are used for plants and flower gardening.

8. BIODIVERSITY STATUS

A variety of plants and faunas are found in the campus. As regards the plants, the scattered plant species in the campus have been identified and recorded and these are presented in **table (F)**.

Table (F): List of Trees and Plants Identified in the Campus

Sl. No.	Local Name (Assamese)	Common name (English)	Scientific/ Botanical Name	Quantity in number
1	Devodaru	Deodar tree (these trees in the campus are 12 years old)	Cedrus deodara	17
2	Siris	Rain tree (these trees in the campus are 37 years old)	Albizia Saman	10
3	Pat gos	Ti Plant	Cordyline fruticosa	6
4	Arjun tree	Arjuna Tree	Terminalia Arjuna	3
5	Bakul	Bullet-wood Tree	Mimusops elengi	4
6	Lucky Bamboo	Lucky Bamboo	Dracaena Sanderian	7
7	Pat gos	Balfour Aralia plant	Polyscias pinnata	3
8	Khejur	Date Palm Tree	Phoenix Dactylifera	1
9	Mumai Tamul	Palm Nut	Pinanga gracilis	1
10	Karabi	Yellow Oleander	Cascabila Thevetia	1
11	Kopou ful	Foxtail Orchid	Rhynchostylis	1

12	Haz gos	Purple Haze plant	Prostanthera ovalifolia	25
13	Nahor	Ceylon ironwood	Mesua ferrea	10
14	Aam	Mango tree	Mangifera Indica	1
15	Payn Gos	Pine tree	Genus Pinus	14
16	Konibihh	Croton plant	Codiaeum variegatum	11
17	Parijat	Cleopatra plant	Canna generalis	2
18	Tagar	Pinwheel plant	Tabernaemontana divaricata	1
19	Kathal	Jackfruit tree	Artocarpus hetero phyllus	1
20	Tamul	Betelnut tree	Areca catechu	11
21	Shishu	Indian Rosewood	Dalbergia Sissoo	4
22	Kol	Banana tree	Musa	3
23	Joba	Shoeblack plant	Hibiscus rosa Sinensis	3
24	Krishnashura	Flamboyant	Delonix regia	2
25	Mosonda	Tropical Dogwood	Mussaenda Erythrophylla	1
26	Khorikajai	Jasmine	Jasminum	7
27	Bidyar pat gos	Thuja	Thuja occidentalis	8
28	Dalim	Pomegranate tree	Punica granatum	1
39	Jolokia	Chilli plant	Capsicum frutescens	4
30	Bengena	Brinjal plant	Solanum melongena	2

The campus is also endowed with a number of medicinal plant species which are also identified and listed in the **table (G)**.

Table (G): Medicinal Plants in the College Campus

Local Name	English Name	Botanical Name	Medicinal value
Sal Konwari	Aloe vera	Aloe barbadensis miller	Aloevera is a medicinal plant with antioxidant and antibacterial properties. It is useful for reducing dental plaque, accelerating wound healing, preventing wrinkles and managing blood sugar.
Tulshi	Holy Basil	Ocimumtenuiflorum	Holy Basil is a natural immunity booster which reduces fever, cold, cough, respiratory disorders, reduces stress and blood pressure. It has anti-cancer properties and is good for heart health and diabetes patients.
Neem	Neem	Azadirachta indica	Neem treats acne, wounds, fungal infections, helps in nourishing skin, increases immunity, useful in detoxification.
Narasingha	Curry leaf	Murrayakoenigii	Curry leaves are popularly known for its aroma and it has antioxidant, antidiabetic, anticancer, antibacterial, antiviral properties.
Pasatia	five-leaved chaste tree	Vitex negundo	It has analgesic, anti-bacterial and anti-inflammatory properties. It is useful in the treatment of fever, arthritis, headaches, swelling, digestion problems, mouth related problems.
Nayantora	Periwinkle	Catharanthus roseus	It is used for treating a host of health anomalies including diabetes, sore throat, lung congestion, skin infections, eye irritation and even reduces the risk of cancer.
Moha neem	Neem	Azadirachta indica	Branch, leaf and bark of Moha neem are used as medicine to relieve tooth and gum pain. It is also useful for ear and eye diseases, reduces face spots, cures leprosy, kills worm in human body, increases immunity.
Bhedailota	skunkvine	Paederiafoetida	It is helpful in increasing appetite and is used to treat stomach ailments, gastric problems, nerve related problems, rheumatic pain.

Madhurium	Guava	Psidium guajava	Guava, the richest sources of dietary fiber is immunity booster and can do wonder to skin, promotes fertility and helps in regulating metabolism which leads to weight loss.
Haldhi	Turmeric	Curcuma longa	Turmeric has anti-inflammatory properties. It helps in preventing arthritis, diabetes, cancer and helps in wound healing, improving skin health, digestion, promotes weight loss.
Bor Manimuni	Indian Pennywort	Centella asiatica	A blessing for skin care and used to treat stomach and urinary tract infections due to its antibacterial characteristics.
Aparajita	Asian pigeonwings	Clitoriaternatea	It is popularly used as a memory booster and brain tonic. It is useful in cold, cough, headaches, helps in getting good sleep, relieves anxiety, depression.
Durun	Thumbai	Leucas aspera	This medicinal herb cures cough, cold, fever, headache, stomachache, dysentery, sinusitis, toothache, ulcers, rashes, ringworm, boils, asthma.
Kola Kosu	Taro leaves	Colocasia esculenta	Taro, an excellent source of dietary fiber is rich in several important micronutrients such as Vitamin C, Vitamin A, Folate, calcium, as well as disease fighting antioxidants.
Musondori	Fish Mint	Houttuynia cordata	Heart leaves used as a herbal medicine to cure stomach related problems. It is good for diuresis and detoxification.
Dubori Bon	Bahama grass	Cynodondactylon	It is effective in menstrual problems, at curing acidity, stomach ulcers, colitis and stomach infections. It is helpful in controlling blood sugar levels and reduces fatigue.
Brahmi Saak	Bacopa monnieri	Bacopa monnieri	It is an incredible rejuvenating herb for improving cognitive function.
Sewali fool	Night flowering Jasmine Tree	Nyctanthesarbor-tristis	The plant has antioxidant, anti-inflammatory and anti-bacterial properties. It is used to cure sciatica, arthritis, dry cough, sinus, intestinal worms, fever, anxiety, pain and swelling.

Amlokhi	Indian gooseberry	Emblica officinalis Gaertn	Indian gooseberry also has multiple medicinal uses. It helps to treat gout, respiratory problems, migraine, diarrhoea, skin problems etc. It also helps in growth of hair.
Xilikha	Black Myrobalan	Terminalia chebula	Popularly known as king of medicines, it is recommended for reducing inflammation, stomach ailments and dental diseases.
Matikothal	Pineapple	Ananas comosus	It has anti-inflammatory, pain-relieving properties and helps in curing sinusitis, joint pains and other injuries like sprain or burn.
Tengesitenga	Indian sorrel	Oxalis cornicallata	Indian Sorrel is a traditional remedy for treating a wide range of gastrointestinal disorders like indigestion, constipation, flatulence, esophagitis, heartburn, diarrhea, ulcer and stomach pain.

In addition to plants, there are also some faunal species (animals) in the campus. As the campus has no such bushes and waterbodies, the habitat for the animal species is limited. The animals and creatures found in the campus include various local birds, owls, different reptiles, grasshoppers, spiders, various kinds of ants etc.

9. RECOMMENDATIONS

The Eco Club of the college and the survey team after visiting the green practice sites and spots, and verifying the facts and information gathered from the stakeholders have placed their observations and recommendations before the college authorities for taking up due importance, necessary implementation and action.

- (a)** Constant and regular efforts must be carried out to maintain the green cover and clean environment of the college campus.
- (b)** Care should be taken to use the water in the campus at optimum level. All points of water loss and leakage are to be stopped.
- (c)** Pollution of water at the sources and different situations needs to be checked.
- (d)** Use of any plastic materials in the campus should be strictly prohibited.

- (e)** The wastes, especially the non-biodegradable wastes generation should be reduced as far as possible. Waste disposal mechanism should be efficient and regular.
- (f)** Rainwater harvesting unit needs be strengthened with provision of more capacity for water conservation.
- (g)** More emphasis has to be laid on the use and utilization of non-conventional energy, i.e solar energy by making provision for setting-up more solar panels.
- (h)** There should be regular and continuous efforts on the part of the concerned club/cells/committees etc. to hold environment awareness programmes among the stakeholders of the college and also among the neighbouring communities.
- (i)** Green auditing and environmental monitoring should be carried out regularly following the guidelines of NAAC assessment.
