

MAY 18, 2023

**A REPORT
ON
GREEN AUDIT IN UPENDRA NATH BRAHMA COLLEGE**



**SUBMITTED TO
THE PRINCIPAL
UPENDRA NATH BRAHMA COLLEGE
KAJALGAON, CHIRANG, BTAD (ASSAM), 783385**


Divisional Forest Officer
Chirang Division
Kajalgaon



1 CONTENTS

1. INTRODUCTION:	1
2. OBJECTIVE:	1
3. BENEFITS OF GREEN AUDIT:	2
4. METHODOLOGY ADOPTED FOR GREEN AUDIT.....	2
5. DESCRIPTION OF THE COLLEGE CAMPUS	4
6. LAND USE ANALYSIS:.....	5
7. WEATHER DATA OF THE COLLEGE CAMPUS	6
8. WATER QUALITY OF THE COLLEGE CAMPUS.....	7
9. AIR QUALITY OF THE COLLEGE CAMPUS.....	9
10. SOIL PROPERTY OF THE COLLEGE CAMPUS.....	10
11. TREE DIVERSITY OF THE COLLEGE CAMPUS	12
12. FAUNAL DIVERSITY OF THE CAMPUS.....	14
13. WASTE DISPOSAL OF THE COLLEGE	15
12.1 SOLID WASTE MANAGEMENT:	16
12.2 LIQUID WASTE MANAGEMENT:	16
12.3 E-WASTE MANAGEMENT:.....	17
14. VEHICULAR MOVEMENTS:.....	17
15. ELECTRICAL POWER CONSUMPTION AND ENERGY CONSERVATION INITIATIVES.....	17
15.1 PRESENT ENERGY SCENARIO	18
14.1.1 Review of analysis of electricity bill of Upendra Nath Brahma College.	18
14.1.2. Energy Consumption.....	18
16. ROUTINE GREEN PRACTICES.....	20
17. EXPENDITURE ON GREEN INITIATIVE.....	22
Table 1: Monthly Temperature variation of Upendra Nath Brahma College.....	7
Table 2: Monthly Relative Humidity variation of Upendra Nath Brahma College	7
Table 3: Air Quality Detail.....	10
Table 4: Tree Diversity of College Campus	13
Table 5: Faunal Diversity of Upendra Nath Brahma College	15
Table 6: Basic building Description.....	18
Figure 1: Google Earth map of Upendra Nath Brahma College	5
Figure 2: Land Use Pattern of Upendra Nath Brahma College	6
Figure 3: Water Purifier installed in the campus	7
Figure 4: Water Testing Report.....	9
Figure 5: Soil Test Report	12

Figure 6: Waste collection bins of the College 16
Figure 7: Monthly energy consumption from April 2022 to March 2023 (kWh) 19
Figure 8: Monthly Electricity Bill (Rupees) 19

Acknowledgement:

We are sincerely thankful to the Upendra Nath Brahma College management for giving us the opportunity to conduct green audit.

We are also grateful to Dr. Nilpadmini Rabha, Principal, Upendra Nath Brahma College, whose valuable comments / feedback, during various reviews have helped us to bring the report in the present format.

We express our sincere gratitude to all other concerned officials for their support and guidance during the conduct of this exercise.



District Forest Officer
Chirang, BTAD Assam
Divisional Forest Officer
Chirang Division
Kajalgaon



STUDY TEAM:

1. Name: BRAHMA NANDA PATIRI
Designation: IFS

2. Name: PRADIP BHUYA
Designation: AFS

1. INTRODUCTION:

The faster economic development and industrialization leads to several environmental and ecological crisis. Use of fossil fuel and de-forestation are the major reason of climate change. To address this issue, it becomes very essential to adopt the green initiative by all the stakeholders of the society and the role of higher educational institutions is more prevalent.

Upendra Nath Brahma College takes initiative to contribute in sustainable development goals by reducing a significant amount of Green House Gas (GHG) from the atmosphere. As a part of this initiative, the “Green Audit” of the college campus becoming the primary important for self-assessment of the institution which reflects the role of the college in mitigating the present environmental problems.

Green Audit is an effective tool to formulate a culture of sustainability by implementing it through systematic identification, quantification, documentation, reporting and monitoring of environmentally important components. Green audit will also help in preserving the rich floral and faunal diversity in and around the campus.

2. OBJECTIVE:

The idea of the green audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in the college campus. The main objectives of Green Audit are:

- Land use analysis of Upendra Nath Brahma College.
- Tree diversity of the College campus.
- Faunal diversity of the College campus.
- Weather data of the College.
- Soil properties of the College campus
- Water analysis of the College.
- Waste disposal of College.
- Transportation of the College.
- Electrical power consumption of the College
- Expenditure on green initiative during the last five years.

3. BENEFITS OF GREEN AUDIT:

- Better environmental practices of the institute.
- More efficient resource management.
- Benchmarking for environmental conservation initiatives.
- To create a green campus.
- Better waste management through reduction of waste generation and recycling.
- To create plastic free campus and create health consciousness among all the stakeholders of the college.
- Enhance the awareness for environmental conservation guidelines and duties.
- Cost saving methods through better resource management.
- Developing an environmental ethics and value systems among the students and other stakeholders.
- Develop a valuable tool to monitor the environmental and sustainable development of the college.
- Improvement of overall college profile.

4. METHODOLOGY ADOPTED FOR GREEN AUDIT

The methodology adopted to perform the entire Green Audit exercise includes: collection of data, physical inspection of the campus, observation and review of the documentation, data analysis and reporting.

Step 1 – Data Collection

Data collection was performed by using different tools such as observation, measurements and communicating with responsible persons of the college.

Following steps were taken for data collection:

- The audit team visited each building and department, library, canteen, open space, gardens of the campus and information was collected by interviewing with the responsible person.
- Land use data of the college has been collected.
- The energy data such as monthly electricity consumption and fuel consumption was collected from the officials and analyzed.

- Waste management facility such as waste bins, vermi compost unit etc. has been visited, other waste disposal process adopted by the college has been discussed and noted.
- All flora and fauna found in the college campus has been identified and listed out.
- Water quality, soil property of the campus has been measured.

Step 2 – Campus tour and physical inspection

The audit team conducted campus tour on 12th May 2023 to collect the data.

Step 3 - Document review and verification

Available facility documentation are reviewed with facility representatives. This documentation review includes data related to-

- Land use pattern of the college.
- Geographical location with campus.
- Flora and faunal diversity of the College campus.
- Water analysis of the College.
- Waste management of college.
- Transportation of the College.
- Energy consumption and conservation measures taken by the College.
- Expenditure on green initiative during the last five years.

Step 4 – Key parameter measurement and testing

- Water test of the College
- Soil property test of the College

Step 5 - Data Analysis

- Analysis of land use land cover data.
- Weather data analysis (Average ambient temperature and humidity analysis)
- Energy consumption data analysis (Electricity and fuel consumption data)
- Water test report analysis.

Step 6 - Prepare a Report Summarizing Audit Findings

The results of our findings are summarized in this report. The report includes a description of the college campus including different facilities. The energy and

environmental conservation initiatives already taken by the college authority has been mentioned in the report.

Also, the necessary observation and requirements to fulfill the green campus. Discussion of all major energy consuming systems and their operation. The report incorporates a summary of all the activities and effort performed in past few years to conserve environment and energy within the campus or outside. The report also includes the activities performed by the college authorities along with the local communities for awareness generation and community participation towards better environmental practices to address the present environmental challenges.

5. DESCRIPTION OF THE COLLEGE CAMPUS

The Upendra Nath Brahma College was established in 2001 pertaining an eco-friendly environment. The campus is located in the Chirang District Assam.

At present the College has 13 Departments distributed in different floors of the buildings which includes classrooms, computer centre etc. The college also has canteen and the playground, open greenery space with vegetation and trees.



Figure 1: Google Earth map of Upendra Nath Brahma College

6. LAND USE ANALYSIS:

Geographical location:

Upendra Nath Brahma College is situated in Chirang district of Assam. The geographical location of the college is 26.516687° N, 90.503699° E. The total area of the college is (40 Bigha,) or 53,512 sq mtr comprising 1733.60 sq mtr total buildup area, 12040 sq mtr playground area, 14715 sq mtr is green plantation area, 9364 sq mtr is grass land 6689 sq mtr is roads and adjacent garden area and remaining areas are considered as future construction area. The college campus area consists of multi-story RCC building and single-story Assam type building along with the green vegetation area and trees.

The detail land use land cover data has been shown in figure no 2.

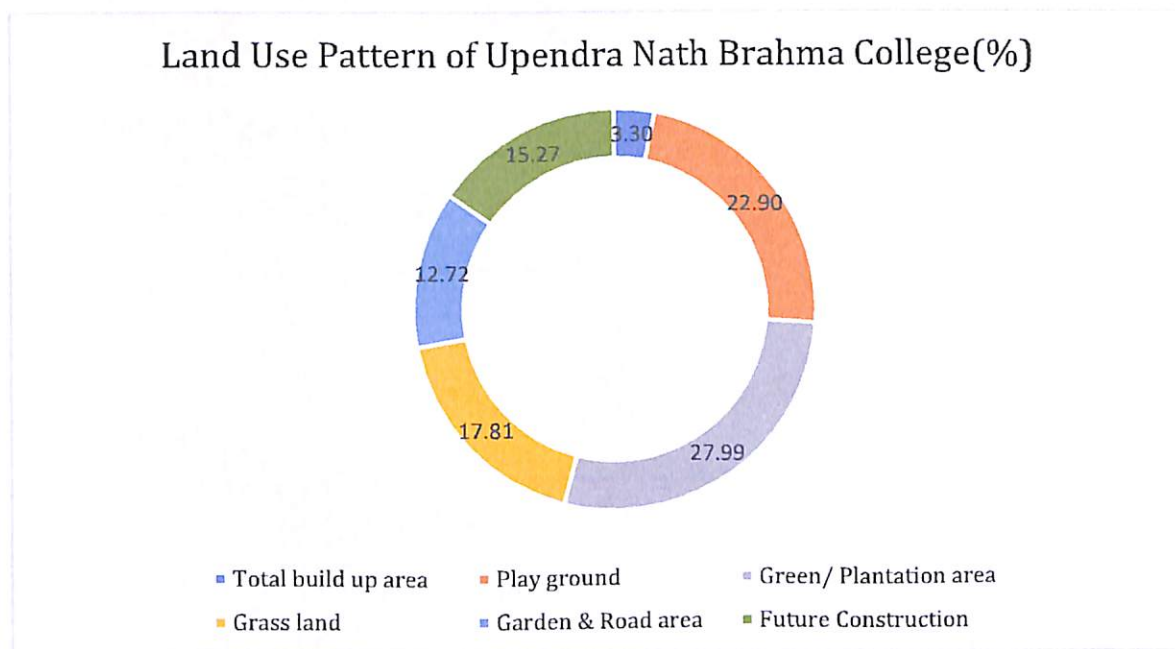


Figure 2: Land Use Pattern of Upendra Nath Brahma College

7. WEATHER DATA OF THE COLLEGE CAMPUS

The ambient air temperature and relative humidity data were obtained from the NASA website (<https://power.larc.nasa.gov/data-access-viewer/>)

The NASA data are satellite-retrieved; its parameters are computed on a daily average basis using NASA/GEWEX surface radiation Budget model. The model considers the effect of cloud cover and local atmospheric conditions. Compared to BSRN (Baseline Surface Radiation Network) sites the NASA data showed high accuracy with Bias (less than 0.12) and RMSE (Root Mean Square Error) (less than 18%). BSRN sites are the most accurate approved ground sites.

The below table shows the monthly average air temperature and relative humidity of Upendra Nath Brahma College campus for the year of 2022 (January to December). It has been observed that the average air temperature of the campus is ranging between 13.68 °C to 31.87 °C whereas the average relative humidity of the campus varies from to 55.81 % to 93.67%.

Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max Air Temp (°C)	18.71	19.83	26.3	26.9	29.19	29.15	31.87	31.04	29.36	29.59	22.87	21.4
Min Air Temp (°C)	13.68	13.86	19.4	24.02	24.57	26.55	27.16	27.8	26.65	21.92	18.81	15.58
Avg Air temp (°C)	16.47	16.44	23.65	25.54	27.59	27.91	28.89	29.04	27.59	25.12	20.74	19.29

Table 1: Monthly Temperature variation of Upendra Nath Brahma College

Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max RH (%)	87.31	84.31	83.31	86.06	89.31	93.5	92.56	90.5	93.19	93.69	84.5	79.75
Min RH (%)	67.69	62.56	55.81	68.69	67.12	78.88	77.19	78.81	77.75	65.69	72.06	63.88
Average RH (%)	78.93	75.76	65.02	78.41	80.66	87.9	86.29	85.12	87.31	84.74	79.56	73.8

Table 2: Monthly Relative Humidity variation of Upendra Nath Brahma College

8. WATER QUALITY OF THE COLLEGE CAMPUS

Water quality testing is an important task of green audit as it identifies contaminants and avoids water borne diseases. Upendra Nath Brahma College uses ground water for their daily needs. Water is being used in the campus as drinking water, used in washrooms of academic buildings and for gardening and other purposes. Therefore, it is very important to test the water to ensure the quality to use for all purposes. Water used for drinking is filtered by using water purifier system in different location of academic buildings. Cleaning of the water filter is carried out on regular basis to ensure the better quality of drinking water.



Figure 3: Water Purifier installed in the campus

Drinking water indicators:

The following is a list of indicators often measured to identify the quality.

- Alkalinity
- Color of water
- PH Value
- Taste and odor
- Dissolved metals and salts (sodium, chloride, potassium, calcium, manganese, magnesium)
- Microorganisms such as fecal coliform bacteria (*Escherichia coli*), *Cryptosporidium*, and *Giardia lamblia*; see Bacteriological water analysis
- Dissolved metals and metalloids (lead, mercury, arsenic, etc.)
- Dissolved organics: colored dissolved organic matter (CDOM), dissolved organic carbon (DOC)
- Heavy metals

Water quality test has been conducted by District Level laboratory, Public Health Department (PHE), Basugaon and the report of the same has been furnished as figure 4. The values of the various parameters of the water sample tested are within WHO Permissible limit. So, the water sample may be considered as good quality drinking water on the basis of these parameters. Still, it is suggested that the water should be consumed after simple processing like filtration and boiling to avoid any health-related issues.

particles in the air. Particulate Matter (PM) is mainly produced by various natural and anthropogenic activities. However, the significant sources of this pollutant are factories, thermal power plants, motor vehicles, construction activities, forest fires, and natural windblown dust. Particulate Matter (PM) specifically PM₁₀ and PM_{2.5} significantly causes a wide variety of respiratory, cardiovascular, and pulmonary diseases.

The test was conducted with the help of air quality meter Temtop-M 2000. This instrument is sensitive to the size of particles of aerodynamic diameter of 2.5 µm and 10 µm. These range is assumed as the most important for affecting the health of people. All the pollutant concentrations were recorded for 60 seconds in the memory of the instrument, which further downloaded and analyzed. Indoor and outdoor readings of PM_{2.5}, PM₁₀, CO₂ and HCHO were recorded.

Below table shows the measured parameters as mentioned above.

Sl. No	Building/Block	Measurement duration	PM _{2.5} (µm/m ³)	PM ₁₀ (µm/m ³)	CO ₂ (ppm)	HCHO (mg/m ³)
1	Administrative building (Indoor)	60 Sec	37.3	53.6	429	0.063
2	In front of administrative building (Outdoor)	60 Sec	32.2	47	432	0.066

Table 3: Air Quality Detail

10. SOIL PROPERTY OF THE COLLEGE CAMPUS

The soil quality inside the campus of Upendra Nath Brahma College was tested by the office of the Assistant Soil Chemist, Soil Testing Laboratory, Kokrajhar BTC, Assam. Parameters like pH, TSS, organic carbon, potassium, nitrate and phosphate etc. were tested. The detailed test result is given in figure below-

Govt Of Assam
Office Of The Asstt. Soil Chemist-----Soil Testing Laboratory

Kokrajhar:::B.T.C.

No.DK/Agri/STL-2/2023-24 |H|

Date 15/05/2023

To,

Principal,
U.N. Brahma College,
Kajalgaon, Chirang.

Subject: Soil Sample Test Report

Ref No: UNB/CHI/Admin/01A/05/2023/1649


Sir,

With reference to your letter No. UNB/CHI/Admin/01A/05/2023/1649 dated 08/05/2023 I am here by submitting the results of the different parameters of the soil sample submitted from your end after required analysis at Soil Testing Laboratory, Kokrajhar.

This is for your kind information.

Enclosed as stated
above

Thanking you,
Yours sincerely,


S.D.A.O (SBI)
Soil Testing Laboratory,
Kokrajhar, Assam

অসম চৰকাৰ ৰ কৃষি বিভাগ
সহকাৰী মাটি ৰসায়নবিদ বিষয়াৰ কাৰ্যালয়
কোবলাবাৰ, বি.টি.টি., অসম

STL/K-2 220/01/2023-24

পৰীক্ষাগাৰ নং নমুনা নং দাগ নং মাটিৰ পৰিমাণ

খেতিয়কৰ নাম আৰু ঠিকনা U. N. Brahma College, Kajalgaon গাওঁ Kajalgaon

পোঃ অঃ Kajalgaon উন্নয়ন বণ্ড idilli কৃষি উন্নয়ন বিষয়াৰ কেন্দ্ৰ Rangtol কৃষি মহকুমা/জিলা Kajalgaon Chirang

নমুনা পঠাওঁতাৰ নাম আৰু ঠিকনা

মাটি পৰীক্ষাৰ ফলাফল	
পৰীক্ষাৰ বিষয়	পৰীক্ষাৰ ফলাফল
(১) অম্লতা (pH)	4.74
(২) মুঠ স্নায়িত লো (T.S.S.) mmhos/cm.	—
(৩) জৈৱিক এন্ধাৰ % (Organic-Carbon)	4.12
(৪) পৰ্ব্বজনন ক্ষমতা (P ₂ O ₅) কিলো / একৰ	.952
(৫) পৰ্ব্বজনন পটাচ (K ₂ O) কিলো / একৰ	4.53
(৬) মাটিৰ ধৰণ (Texture)	Sandy Loam

ক্রমিক নং শস্যৰ নাম আৰু জাত	প্ৰতি বিঘাত কিলোগ্ৰাম হিচাবে অনুমোদিত সাৰৰ পৰিমাণ		
	নাইট্ৰজেন যুক্ত সাৰ	ফচফৰাচ যুক্ত সাৰ	পটাচ যুক্ত সাৰ
	ইউৰীয়া	একক চুপাৰ ফচফেট	মিউৰিয়েট অৱ পটাচ
১। শালি ধানঃ বন্ধুৰা / উচ্চ উৎপাদনশীল	Not Required.		
২।			
৩।			
৪।			
৫।			
৬।			

ইয়াৰ উপৰিও বিচাই প্ৰতি (ক) পচন সাৰঃ..... কুইন্টল। (খ) চূণৰ শুবিঃ..... কুইন্টল দিব।
 বিঃ দ্ৰঃ (১) ইয়াৰ বাহিৰে অন্য সাৰ বিকলগীয়া হলে কৃষি উন্নয়ন বিষয়া বা কৃষি সম্প্ৰসাৰণ কৰ্মীৰ পৰামৰ্শ ল'ব।
 (২) আপোনাৰ মাটিৰ বিষয়ে আৰু কিবা তথ্য জানিব খুজিলে উপযুক্ত পৰীক্ষাগাৰ নং উল্লেখ কৰি পত্ৰ
 পোতাৰ এমাহৰ ভিতৰতে নিম্ন স্বাক্ষৰকাৰীলৈ লিখিব।

(Signature)
Asst Soil Chemist
সহকাৰী মাটি ৰসায়নবিদ
কোবলাবাৰ, বি.টি.টি., অসম।

Figure 5: Soil Test Report

11. TREE DIVERSITY OF THE COLLEGE CAMPUS

The College campus area is vastly diverse with a variety of tree species. These tree species are the integral part of the college. Most of these tree species are planted by the college authority through various tree plantation programs conducted in different periods of time. These trees have increased the quality of life by providing oxygen, improving air quality, climate amelioration, conservation of water, preserving soil, and supporting wildlife. The impact of these trees has not only with in the college

fraternity but also the people surrounding the college. They contribute the environment by moderating the effects of the sun, rain and wind and by absorbing and filtering the sun's radiant energy, keeping the campus cool in summer. Many species of birds are dependent on these trees mainly for food and shelter. Thus, the college campus has been playing a significant role in maintaining the environment of the entire area.

The study was carried out in the entire college campus to identify the various tree species and reveals that a total 19 numbers of tree species belonging to different families are found in the campus. The following are the tree species found in the college campus.

Sl. No	Botanical Name	Family	Local Name	Qty
1	<i>Shorea robusta</i>	Dipterocarpaceae	Sal	90
2	<i>Tectona Grandis</i>	Lamiaceae	Segun/ Teak	17
3	<i>Aquilaria Agallocha</i>	Thymelaeaceae	Agaru/ Eagle wood	1
4	<i>Gmelina arborea</i>	Verbenaceae	Gamari	2
5	<i>Mimusops elengi</i>	Sapotaceae	Bakul	9
6	<i>Delonix regia</i>	Fabaceae	Krishna Chura	2
7	<i>Calliandra tergemina</i>	Elaeocarpaceae	Powder puff/ Shami	1
8	<i>Cassia fistula</i>	Fabaceae	Sonaru	3
9	<i>Syzygium cumini</i>	Myrtaceae	Zamun	25
10	<i>Azadirachta indica</i>	Meliaceae	Neem	3
11	<i>Cocos nucifera</i>	Aracaceae	Coconut/ Narikol Jia Poma/ Indian ash	5
12	<i>Lannea coromandelica</i>	Anacardiaceae	tree	4
13	<i>Zizyphus jujuba</i>	Rhamnaceae	Bogori	5
14	<i>Pinus kesiya</i>	Pinaceae	Pine tree	1
15	<i>Areca catacheau</i>	Areaceae	Beetlenut Local Orchid/ Kopou	4
16	<i>Rhynchostylis retusa</i>	Orchidaceae	Phul	50
17	<i>Mesua ferrea</i>	Catophyllaceae	Nahor	5
18	<i>Terminalia arjuna</i>	Combretaceae	Arjun	8
19	<i>Elaeocarpus floribundus</i>	Elaeocarpaceae	Ceylon Olive/ Jolpai	7

Table 4: Tree Diversity of College Campus

12. FAUNAL DIVERSITY OF THE CAMPUS

The faunal diversity of the college has been studied and listed as below-

Animal Group: Aves

Local Name:	Common Myna
Scientific Name:	<i>Acridotheres Tristis</i>
Local Name:	House Crow
Scientific Name:	<i>Corvus Splendens</i>
Local Name:	House Sparrow
Scientific Name:	<i>Passer Domesticus</i>
Local Name:	Red-Vented Bulbul
Scientific Name:	<i>Pycnonotus Cafer</i>
Local Name:	Common tailor bird
Scientific Name:	<i>Orthotomus sutorius</i>
Local Name:	Spotted dove
Scientific Name:	<i>Streptopelia chinensis</i>
Local Name:	Koel
Scientific Name:	<i>Eudynamys scolopaceus</i>
Local Name:	Jungle babbler
Scientific Name:	<i>Argya striata</i>
Local Name:	Black Crowned Night Heron
Scientific Name:	<i>Nocticorax nycticorax</i>
Local Name:	Small Blue Kingfisher
Scientific Name:	<i>Alcedo atthis</i>
Local Name:	Great Egret
Scientific Name:	<i>Ardea alba</i>

Animal Group: Reptilia

Local Name:	Tejpie
Scientific Name:	Chamaeleo sp.
Local Name:	Common house gecko
Scientific Name:	<i>Hemidactylus frenatus</i>

Animal Group: Amphibia

Local Name:	Asian Common Toad
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Scientific Name: *Duttaphrynus melanostictus*

Local Name: Snail

Scientific Name: *Achatina fulica.*

Animal Group: Anthropoda

Local Name: Dragonfly

Scientific Name: *Anax indicus*

Local Name: Grasshopper

Scientific Name: *Tettigonia viridissima*

Local Name: Honey Bee

Scientific Name: *Apis florea*

Local Name: Indian Cabbage White

Scientific Name: *Pieris canidia*

Local Name: Mottled Emigrant

Scientific Name: *Catopsilia pyranthe*

Local Name: Oriental Striped Tiger butterfly

Scientific Name: *Danaus Genutia*

Table 5: Faunal Diversity of Upendra Nath Brahma College

13. WASTE DISPOSAL OF THE COLLEGE

The activity and actions required to manage the waste from beginning to the final disposal is called as waste disposal process. The activities include the collection of waste, transportation, treatment and disposal of waste considering waste management process. At present the biodegradable waste are decomposed within the college campus, non-biodegradable waste such as single used plastics are burned out periodically. E-waste is generally kept in the store room. On the other hand, the wet waste such as vegetable, excess food is taken by the local vendor.



Figure 6: Waste collection bins of the College

12.1 SOLID WASTE MANAGEMENT:

The college administration kept waste bins in suitable location of the building from where housekeeping staffs take the wastes. From these waste bins, wastes are dumped in a designated place to decompose by the housekeeping staffs regularly. There are different types of waste generated within the campus. Out of these the some of the major wastes are as paper waste, organic waste, e-waste etc.

Separation of bio degradable waste and non-biodegradable waste is one of the major tasks of solid waste management. Upendra Nath Brahma College practices the separation of these two types of waste by keeping different waste bins for different waste. Biodegradable waste is taken to generate organic fertilizer which are to be used in the gardens as organic manure.

12.2 LIQUID WASTE MANAGEMENT:

Liquid waste is generated from hostels and canteen.

Liquid wastes generated by the College are of two types:

1. Sewage waste
2. Canteen effluent.

The liquid wastes are mainly drained. The College does not have any sewage treatment plant yet.

12.3 E-WASTE MANAGEMENT:

Upendra Nath Brahma College follows suitable mechanism to dispose E-wastes generated from various sources. E-wastes are generated from computer laboratories, Academic and Administrative Offices. The e-waste includes out of order equipment's or obsolete items like laboratory instruments, electronic circuits, computer desktops or different computer components, laptops and accessories, printer and cartridges, charging cables, Wi-fi devices and cables, CCTV components, sound systems, display units, UPS and battery, biometric machine, scientific instruments etc. All these wastes which cannot be reused or recycled is being disposed through authorized vendors.

14. VEHICULAR MOVEMENTS:

It was estimated that on an average around 10 nos. of two wheelers and 20 nos. of four-wheeler vehicles has a regular movement in the campus. The College has a designated parking place for faculty and student separately.

15. ELECTRICAL POWER CONSUMPTION AND ENERGY CONSERVATION INITIATIVES

Energy consumption in different forms has been continuously rising almost in all the sectors- agriculture, industry, transport, commercial, residential (domestic) and educational institutions. This has increased the dependency on fossil fuels and electricity. Therefore, energy efficiency improvement and possible energy conservation became a necessary objective for energy consumers. The Government of India enacted the Energy Conservation Act, 2001 in October 2001. The Energy Conservation Act, 2001 became effective from 1st March, 2002. The Act provides for institutionalizing and strengthening delivery mechanism for energy efficiency programs in the country and provides a framework for the much-needed coordination between various Government entities. Upendra Nath Brahma College, an educational institute in Chirang district of Assam taking initiative for reducing energy intensity in the College Campus.

The following Tables show the basic information about the building and the utilities.

Sl. No	Basic Building Data	Value
1	Connected Load/Contract Demand (For Academic & Administrative Building) Consumer Number: 035000024464	5 kW
2	Diesel Generator set availability	Not available
3	Electricity consumption (April' 2022 to March' 2023)	5,552.00 kWh
4	Cost of electricity consumption (April' 2022 to March' 2023) @ 7.6/unit	Rs. 53,451.19
4.1	Cost of electricity consumption through DG set.	N/A
4.2	Total cost of electricity (Utility + DG set)	Rs.53,451.19
5	Total Numbers of building covered	2 Nos
5.1	Working hours (Academic and Administration building)	8 Hrs (9 AM to 5PM)
5.2	Working hours (Hostel building)	24 Hr x7 days
5.3	Working Days/week	6 Days
6	Whether sub-metering of electricity consumption for each building	No

Table 6: Basic building Description

15.1 PRESENT ENERGY SCENARIO

14.1.1 Review of analysis of electricity bill of Upendra Nath Brahma College.

At present the overall energy consumption is catered by the electricity supply from Assam Power Distribution Company Limited. The college has electrical connection having consumer number (035000024464) with connected load/Contract demand as 5kW.

14.1.2. Energy Consumption.

The total electricity consumption from April' 2022 to March' 2023 was 5,552.00 kWh and the total bill paid to distribution companies was Rs. 53,451.19

Monthly electricity consumption(kWh) and electricity bill (Rs.) paid from April' 2022 to March' 2023 has shown in figures below.

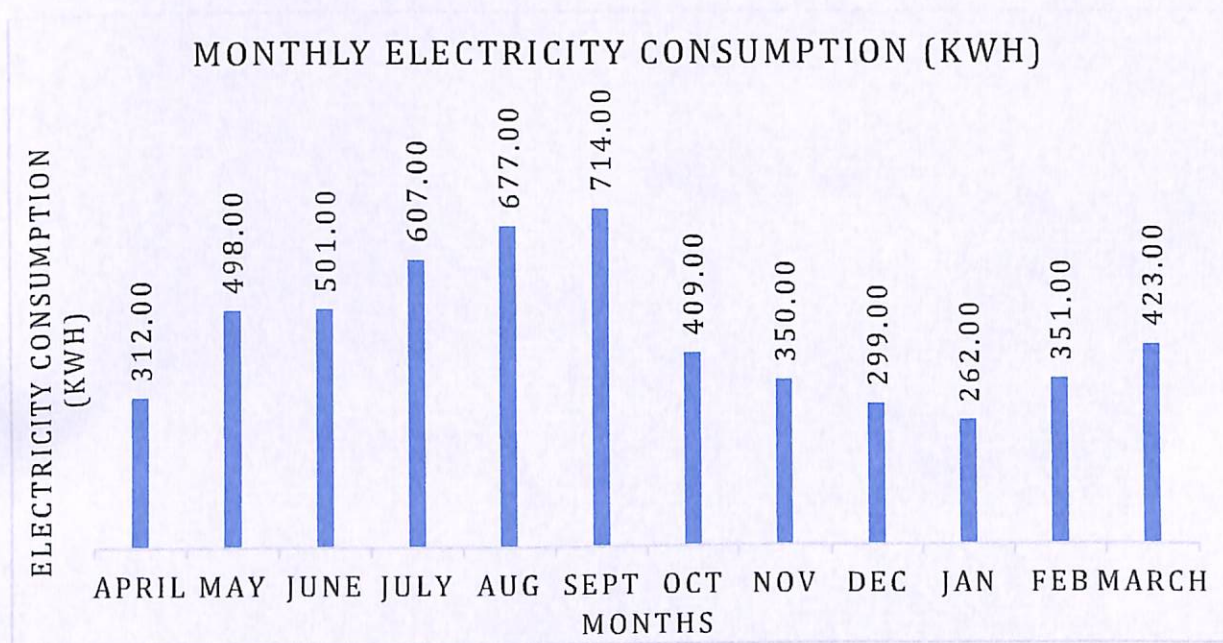


Figure 7: Monthly energy consumption from April 2022 to March 2023 (kWh)

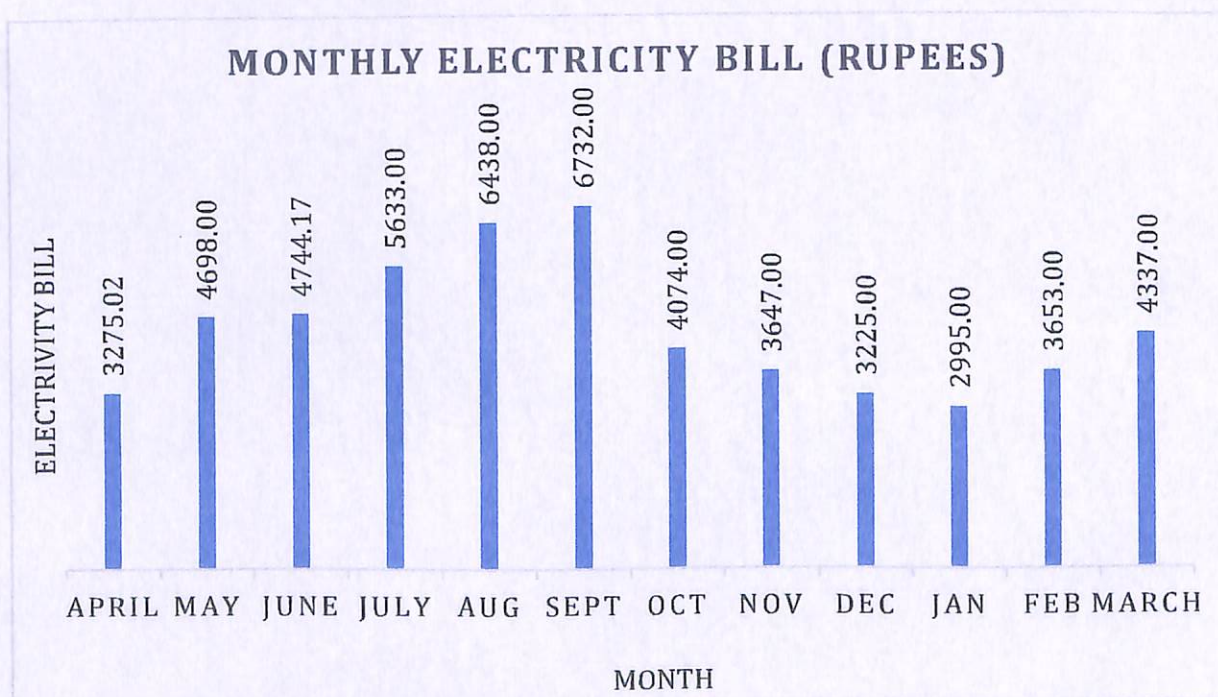


Figure 8: Monthly Electricity Bill (Rupees)

16. ROUTINE GREEN PRACTICES

- World Environment Day Celebration:

The Upendra Nath Brahma College celebrates world environment day every year through a participatory event not only within the barrier of college campus but also along with the local community. Awareness campaign were organized on various environmental issues along with tree plantation within and outside the campus were carried out during the day.

- Reducing the use of Paper:

The college administration adopts the concept of utilization of paper as less as possible. Practices like, re-use of one-sided paper for notes, sketches, rough work, rough printouts, etc.; cashless transactions, and utilizing multi user printer at central administrative locations of the Institute office also aims at reducing the use of papers.

- Usage of bicycles and public transport:

The college administration always promotes the use of bicycles among the staff and students. Hostellers are discouraged from having two wheelers/cars. Three-wheeler E-Rikshaw are one of the sustainable transports adopted by the students and other staff.

Cleanliness Program on 30th October 2022 on account of “Chirang District Foundation Day)



Village Road Cleanliness Drive and Plantation Programme



Mass Tree Plantation Drive in association with IOCL, BGR



Clean Campus Drive



Awareness and Cleanliness Drive



17. EXPENDITURE ON GREEN INITIATIVE

The expenditure of last five years on green initiative by the college authority is shown below-

Financial Year	Tree Plantation (Rs)	Gardening & Lawn work (Rs)	Waste disposal (Rs)	Water treatment (Rs)	Rain water harvesting (Rs)	LED light purchase (Rs)	Solar initiative (Rs)	TOTAL
2017-18	10350							10350
2018-19		132533		11415		67653		211601
2019-20	11500					16745		28245
2020-21		36900						36900
2021-22	22869							22869