

GREEN AND ENVIRONMENT AUDIT REPORT

[2024 - 2025]

FOR



MORIGAON COLLEGE
MORIGAON, ASSAM-782105, INDIA

Conducted By



ENVIRO-TESTING-SERVICES
BIJAY NAGAR, NOONMATI, GUWAHATI-781020, ASSAM
DECEMBER-2025

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ETS, ENVIRO-TESTING-SERVICES Guwahati	A Report on Green and Environment Audit		<i>Job No. :ETS /KM /GEAR/ 01 dated 12/12/2025</i>	
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ETS-GUWAHATI

ENVIRO-TESTING-SERVICES

Accredited by SPCB Assam, ISO 9001, ISO 45001, MSME

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Date: 12th December 2025

COMPLETION CERTIFICATE

This is a Green and Environmental report compiled on the basis of field survey and field investigation of various environmental components such as Land Use Land Cover, Micro meteorological Quality, Ambient Air Quality, Drinking Water Quality, Soil Quality, Noise Quality, Carbon Footprint, Flora, Fauna along with environmental and Energy management practices.

The present work was carried out at the request of the Principal, Morigaon College, Morigaon, Assam vide order number MC /Green Audit/Invitation/2024-25 Dated 12.09.2024. The findings of the study carried out during the period of October 2024 to November 2025 are presented in this report. All the Analysis of Environmental Quality Parameters is done at the laboratories of Enviro Testing Services, Noonmati, Guwahati. The Laboratory is duly recognised by NABL, State Pollution Control Board, Assam, ISO 9001 :2015; ISO 45001:2018 and MSME.

For Enviro Testing Services



Date: 12.12.2025

(Dr. Hrishikesh Sarma)
Ex. Director, ETS, Guwahati



ETS-GUWAHATI

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Dr. Swagata Barua, Department of Chemistry

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For Enviro Testing Services



(Dr. Hrishikesh Sarma)

Ex. Director, ETS, Guwahati

Date: 12.12.2025

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1.0 Introduction of the Institute

1.1 Brief Introduction

Morigaon College was established on 1st July,1964. It is one of the oldest institutions of higher education of undivided Nagaon district of Assam. It has already completed 59 years as one of the premiere institutions engaged actively in nurturing and disseminating ray of education in the region.

The college is located in the eastern part of the Morigaon Town-the head quarter of Morigaon district of Assam. It is 70 Km away from Dispur, the state capital of Assam. The nearest railway station is Jagiroad (23km) and nearest airport is LGB airport, Borjhar, Guwahati(96Km).

Since its inception, in first two decades, the college imparted education only in Arts stream. The science stream was introduced in 1985 and set to open up a new dimension by facilitating congenial environment to pursue higher education in science and cultivating scientific temperament.

In 2002 the college introduced several vocational and job-oriented courses like Computer Application, Industrial Fish and Fisheries and Functional Hindi. In 2012 Commerce Stream in degree level has been introduced with a view to fulfilling the need of higher education in Commerce for its spirants. This fulfilled the long-felt absence of an academic centre for higher education in Commerce in the whole region. In the face of the current socio-economic background the UGC has reoriented and reshaped its policies and programme to make the Indian higher education system or e careers oriented with focus on quality and excellence. It is in keeping with the spirit of UGC that Morigaon College introduced certain career-oriented courses like Functional English, Translation and Proficiency and Entrepreneurship in Small Scale Industries from the academic session 2004-05. It is expected that the professionally qualified graduates with solid knowledge on the core disciplines and enterprises will have better chances for recruitment in service, industry and self-employment sectors. The college is about to earn the pride of owing Postgraduate Programme in the department of Geography in 2017 and Postgraduate Programme in Zoology was started in 2018.

In 2018 also the college has started another professional course on Food Processing Technology. In the U.G. level, Sociology (General Course) has been introduced and with it, the number of subjects offered by the college has gone up. Currently, there are eleven Add-on Courses running in the college. The Gauhati University has recognized that Chemistry Laboratory of the college is highly capable of facilitating advance research works. Besides, in 2020 college has introduced Bachelor of Computer Application and Bachelor of Journalism and Mass Communication. Food processing programme and the college offers 21 Add-on programme.

1.2 Location of the College Campus

Location	:	Urban
Campus Area	:	30 Bighas
Built Up Area	:	9912.38 Sq. mtrs

1.3 Physical Structure of the College Campus

Features	Quantity
Total Number of Departments	18
Auditorium	01
Hostel	03
Cafeteria	02
Health Centre	01
Stationery Corner	01
Gymnasium	01
Teachers Common Room	01
Libraries	01

1.4 Student, Teacher & Employees Strength

Total Number of Students : 3200

Total Number of Teachers : 90

Total Number. of Employees: 35 (non-teaching)

2.0 Brief Outlines of Green Audit

Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of organization. It aims to analyse environmental practices within and outside of the concerned place, which will have an impact on the eco-friendly atmosphere.

Green audit is a valuable means for a college to determine how and where they are using the most energy or water or other resources; the college can then consider how to implement changes and make savings. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of green impact on campus. If self-enquiry is a natural and necessary outgrowth of a quality education, it could also be stated that institutional self-enquiry is a natural and necessary outgrowth of a quality educational institution. Thus it is imperative that the college evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more predominant. The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises.

On this background it becomes essential to adopt the system of the Green Campus for the institutes which will lead for sustainable development and at the same time reduce a sizable amount of atmospheric CO₂ from the environment. The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through carbon footprint reduction measures.

3.0 Objective of Green Audit

- (i) Landuse & Built-up Environment
- (ii) Geographical Location with Campus Map
- (iii) Present status of Micro meteorology, Ambient air, Noise, Soil quality and Water quality
- (iv) Floral and Faunal diversity
- (v) Management Practices with respect to Water, Waste and Energy
- (vi) Carbon footprint
- (vii) Organizational Level Efforts

4.0 Methodology

Methodology includes

- (i) Physical inspection of the campus
- (ii) Collection of Primary & Secondary Data
- (iii) Observation and review of the documentation
- (iv) Data analysis

5.0 Objective wise Analysis

5.1 Landuse & Built-up Environment

It encompasses area about 30351.42 sq. mts. Total built-up area is 17199.14 sq.mts. out of the total 30351.42 sq. mts of the campus. Both Assam type and multi-storied RRC construction are found within the campus. The play ground inside the college campus covering an area of about 5058.57 sq mts. The presence of garden inside the campus augments the aesthetic value of the college.

The area coverage of different land use classes

<u>Features</u>	<u>Area(in sq.m.)</u>
Building	: 17 Bighas=17199.14 sq.m.
Statue	: ½ Bighas=505.85 sq.m.
Playground	: 5 Bighas=5058.57 sq.m.
Roads(insidecampus)	: 1Bigha=1011.71 sq.m.
Trees	: 1Bigha=1011.71 sq.m.
ParkingArea	: 1 ½Bighas=1517.56 sq.m.
Garden	: 3Bighas=3035.14 sq.m.
Open space	: 1 Bigha= 1011.71 sq.m.
TotalArea	: 30 Bighas=30351.42 sq.m.

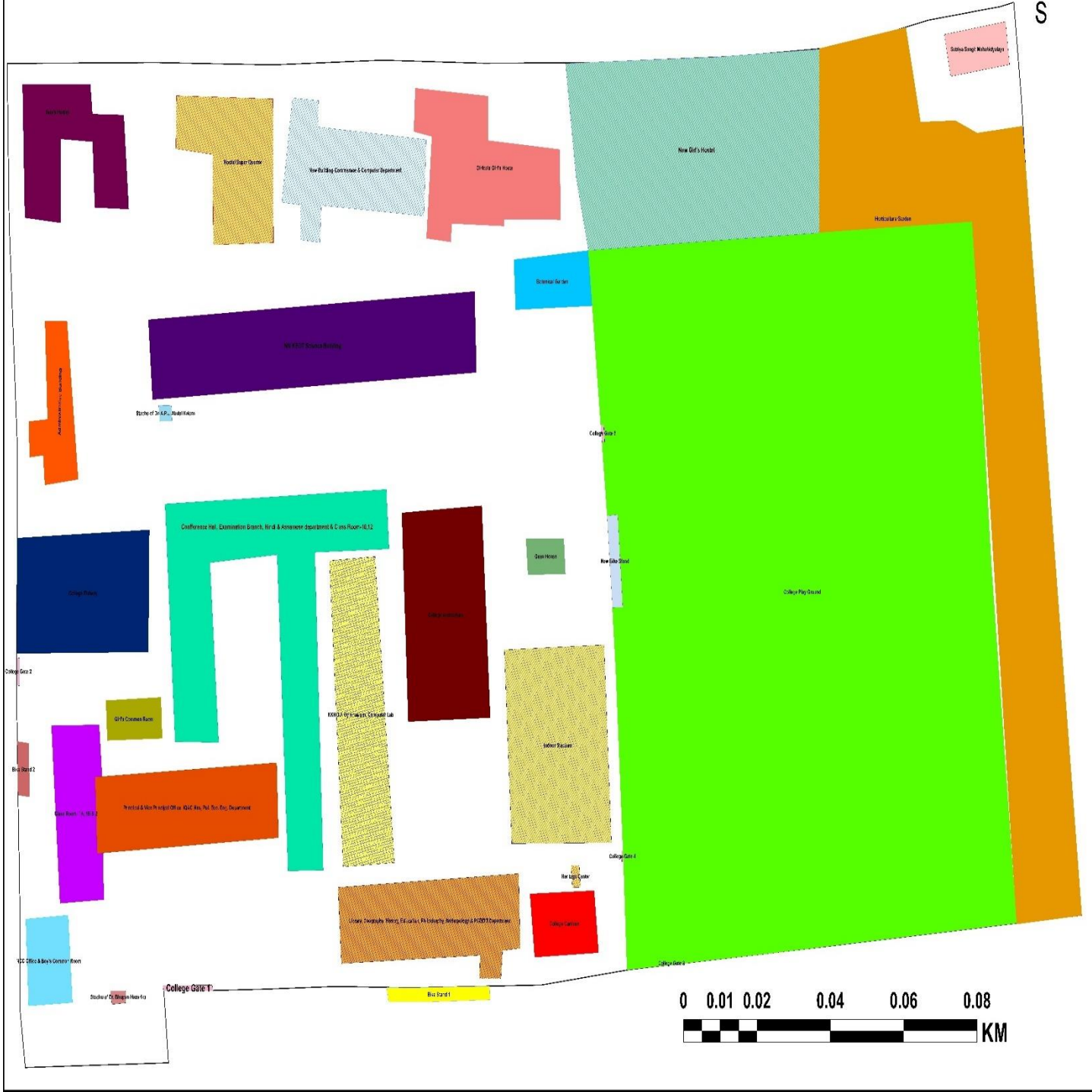
5.2 Geographical Location with Campus Map

Morigaon College is situated at Morigaon district of Assam, within the geo-position

Latitude N 26.253836⁰

Longitude E 92.357961⁰

MORIGAON COLLEGE CAMPUS





Glimpses of Morigaon College



Glimpses of Morigaon College



Glimpses of Morigaon College

5.3 Present status of Micrometeorology, Ambient air, Water quality and Soil Quality

5.3.1 Micrometeorology Status

Table 1 : Micrometeorological Study at Morigaon College

S/N	Parameters	Unit	Metrological Data at Morigaon College Date: 17.11.2025	
1	Temperature	°C	Min	28
			Max	32
2	Relative Humidity	%	10.30am	76
			16.30pm	81
3	Wind Speed	Km/hr	10.30am	4.6
			16.30pm	5.4
4	Wind Direction	-	10.30am	SE
			16.30pm	SW

5.3.2 Ambient Air Quality

The average results of Ambient Air Quality at Morigaon College are presented in Tables 2. All the results meet the National Ambient Air Quality (NAAC) standards.

Table 2: Ambient Air Quality at Morigaon College

AMBIENT AIR QUALITY						
Duration (24 Hour) Date: 17-11-25			Average			
S/N	Parameters	Unit	Concentration	Limit	Weather Condition*	Test Method
1	Particulate Matter (PM10)	$\mu\text{g}/\text{m}^3$	69.2	100	Clear	IS5182(23)
2	Particulate Matter (PM2.5)	$\mu\text{g}/\text{m}^3$	51.8	60		CPCB Guideline
3	Sulphur Dioxide (SO ₂)	$\mu\text{g}/\text{m}^3$	9.8	80		IS5182(2)
4	Nitrogen Dioxide(NO ₂)	$\mu\text{g}/\text{m}^3$	11.2	80		IS5182(vi)
5	Pb in PM 10	$\mu\text{g}/\text{m}^3$	<0.2	1.0		IS5182(vi)
6	Pb in PM2.5	$\mu\text{g}/\text{m}^3$	<0.2	1.0		IS5182(vi)
7	Ni in PM10	ng/m^3	<0.2	20		IS5182(vi)
8	Ni in PM2.5	ng/m^3	<2.0	20		IS5182(vi)
9	As in PM10	ng/m^3	BDL	06		IS5182(vi)
10	As in PM2.5	ng/m^3	BDL	06		IS5182(vi)

5.3.3 Noise Quality study

In the present study, the noise level measurements were recorded using a precision sound level meter (Envirotech SLM100) with a measuring range between 0-150 dB. The instrument is calibrated before the measurements are recorded. The microphone was placed at 1.0 m from the facades of house, away from any reflecting surface and 1.2 m above the ground. In each location, adequate number of samples was taken at 10-minute intervals. The noise levels were recorded during day time and meteorological conditions: no wind no rain. The Noise Level Monitored (Table 3) and analyzed is found to be within the CPCB Prescribed Limit

Table 3: Noise Quality at Morigaon College

S/N	Locations	GPS Co-ordinate		Daytime SPL(dB) [6 am to 10 pm]		CPCB Limit SPL(dB)
				Leq	Range	
1	College Main Gate	N26°15'13.2"	E092°21'28.6"	68.4	62 – 74	75
2	Near Certificate Branch	N26°15'16.4"	E092°21'27.6"	66.2	52 – 69	
3	Near Boys Hostel	N26°15'18.0"	E092°21'27.5"	61.8	44 – 64	
4	Near Science Block	N26°15'16.5"	E092°21'29.4"	65.2	54 – 67	
5	Near Girls Hostel	N26°15'16.5"	E092°21'29.4"	62.4	56 - 66	
6	Near Auditorium Hall	N26°15'16.3"	E092°21'30.2"	66.4	58 - 70	
7	Near Indoor Stadium	N26°15'14.8"	E092°21'30.6"	62.6	57 - 68	
8	Near Canteen	N26°15'14.0"	E092°21'31.5"	64.5	54 – 67	

5.3.4 Drinking Water Quality

Drinking Water samples were collected from various locations of Morigaon College and the sampling locations are as follows

Sr.No.	Sampling Locations	GPS Co-ordinate	
1	Boy's Hostel	N26°15'18.0"	E092°21'27.5"
2	Girls Hostel	N26°15'16.5"	E092°21'29.4"
3	Inside college drinking water facility	N26°15'16.5"	E092°21'29.4"

Results of analysis of the most relevant water quality parameters are given in Tables 4. The test method for all the parameters along with tolerance limit as suggested by IS-10500 is presented in Table 3. All the parameters with respect to drinking water quality are found to be within the tolerance limit as suggested by IS: 10500.

Table 4: Various Test Methods of Water Quality Monitoring at Morigaon College

S/N	Parameters	Test Methods	IS-10500
1	Odour	APHA 20 th Edition, 2150 B	Unobjectionable
2	Temperature (°C)	Thermometry Method	50
3	Turbidity (NTU)	APHA 20 th Edition, 2130B	5
4	pH	APHA 20 th Edition, 4500-H+B	6.5 – 8.5
5	Conductance (mS/cm)	APHA 20 th Edition, 2510B	-
6	Total Dissolved Solid (mg/L)	APHA 20 th Edition, 2540 B	500
7	Total Suspended Solid (mg/L)	APHA 20 th Edition, 2540 B	-
8	Chloride (mg/L)	APHA 20 th Edition, 4500-Cl-B/D	250
9	Residual Chlorine (mg/L)	APHA 20 th Edition, 4500-Cl-B	0.2
10	Sulphates as SO ₄ (mg/L)	APHA 20 th Edition, 4500-SO ₄ ²⁻ E	250
11	Nitrate (mg/L)	APHA 20 th Edition, 4500-NO ₃ -B	45
12	Fluoride (mg/L)	APHA 20 th Edition, 4500-F D	1
13	Calcium (mg/L)	APHA 20 th Edition, 3500 B	75
14	Magnesium (mg/L)	APHA 20 th Edition, 3500 B	-
15	Iron (mg/L)	APHA 20 th Edition, 3111 B	0.3
16	Manganese	APHA 20 th Edition, 3111 B	0.1
17	Zinc	APHA 20 th Edition, 3111 B	5
18	Arsenic	APHA 20 th Edition, 3112 B	0.01
19	Total Coliform (MPN/100 mL)	APHA 20 th Edition, 3111 B	0
20	Faecal Coliform (MPN/100 mL)	APHA 20 th Edition, 9221 E	0

Table 5 : Results of Drinking Water Quality at Morigaon College

S/N	Parameters	Unit	DW1	DW2	DW3
1	Odour	--	NS	NS	NS
2	Temperature (°C)	°C	28	28	28
3	Turbidity (NTU)	NTU	0.3	0.3	0.2
4	pH	-	7.1	7.2	7.1
5	Conductance (mS/cm)	mS/cm	0.46	0.51	0.38
6	Total Dissolved Solid (mg/L)	mg/L	68.0	66.0	58.0
7	Total Suspended Solid (mg/L)	mg/L	31.0	26.0	21.0
8	Chloride (mg/L)	mg/L	26.1	27.4	24.1
9	Residual Chlorine (mg/L)	mg/L	<0.01	<0.01	<0.01
10	Sulphates as SO ₄ (mg/L))	mg/L	8.8	9.2	6.8
11	Nitrate (mg/L)	mg/L	8.4	9.6	5.8
12	Fluoride (mg/L)	mg/L	0.32	0.34	0.18
13	Calcium (mg/L)	mg/L	22.2	24.4	19.6
14	Magnesium (mg/L)	mg/L	24.8	26.1	21.8
15	Iron (mg/L)	mg/L	0.16	0.14	0.06
16	Manganese	mg/L	0.004	0.003	0.002
17	Zinc	mg/L	0.06	0.04	0.002
18	Arsenic	mg/L	<0.001	<0.001	<0.001
19	Total Coliform (MPN/100 mL)	mg/L	03	03	03
20	Faecal Coliform (MPN/100 mL)	mg /L	NIL	NIL	NIL

5.3.5 Quality of Soil in the Study Area

Soil samples were collected from 3 different locations of the study area such as follows.

Sr.No.	Sampling Locations	GPS Co-ordinate	
1	Herbal Garden	N26°15'17.3"	E092°21'31.4"
2	Near Boy's Hostel	N26°15'18.0"	E092°21'27.5"
3	Near Girls Hostel	N26°15'16.5"	E092°21'29.4"

It was analyzed for the most relevant physical and chemical parameters. It may be noted from the results of analysis that many of the soil samples have acidic pH . The presence of N, P, K and organic matter content is considerable for all the locations.

Table 6: Results of Soil Quality Monitoring at Morigaon College

S/N	Parameters	[S1]	[S2]	[S3]
1	PH (1: 2)	8.1	8.1	7.8
2	Conductance (ms)	0.46	0.44	0.38
3	Sand (%)	88.0	86.4	84.2
	Silt (%)	1.04	3.03	0.06
	Clay (%)	10.8	11.4	16.1
4	Water Holding Capacity (%)	38.6	42.1	44.2
5	Bulk Density (gcm ⁻³)	1.2	1.1	1.3
6	Cation Exchange capacity (meq/kg)	0.33	0.26	0.28
7	Nitrogen (%)	0.08	0.06	0.07
8	Potassium (mg/kg)	18.2	16.8	17.2
9	Sodium (mg/kg)	24.8	26.1	23.2
10	Calcium (g/kg)	18.6	16.4	17.6
11	Magnesium (mg/kg)	38.4	36.2	34.2
12	Phosphorous (mg/kg)	14.2	12.4	9.6
13	Organic matter (%)	0.68	0.64	0.72
14	Sodium Absorption Ratio (SAR)	1.6	1.4	2.3
15	Zinc (mg/kg)	22.1	21.2	18.6
16	Copper (mg/kg)	6.8	8.6	7.8



Ambient Air and Noise Monitoring at M C College



Soil Sample Collection at College Premises



Drinking water Sampling at different locations of Morigaon College

Photographic view of Environmental Monitoring at Morigaon College

5.4 Floral and Faunal diversity

5.4.1 Floral Biodiversity

The survey was conducted in the campus of Morigaon College following the Quadrat sampling procedure. In the study area the vegetation is a complex of plant communities with considerable diversities. Since the plants showed normal and very good growth, there appears to be no adverse environmental factors prevailing in the area.

Plants of all types, in general, showed healthy and luxuriant growth in terrestrial, aquatic and aerial habitats in the study areas. Leaf diseases (leaf spot and shot-holes) on the aerial parts of the plants were very infrequently observed and did not show any adverse effect on the growth of the plants.

In this present study, different types of flora along with the total of species of the respective flora identified in the college campus are as follows.

<u>Different types of flora</u>		<u>Total number of species</u>
Tree	:	35
Shrubs	:	46
Herbs	:	28

List of trees are presented in Table- 7 - 10

Table 7 : List of Trees recorded at Morigaon College

Sl no.	Common name	Botanical name & Family	No. of species
1.	Coconut tree	<i>Cocos nucifera</i> (Arecaceae)	30
2.	Neem tree	<i>Azadirachta indica</i> (Meliaceae)	17
3.	Banana tree	<i>Musa sp.</i> (Musaceae)	21
4.	Indian gooseberry	<i>Phyllanthus emblica</i> (Phyllanthaceae)	10
5.	Betel-nut tree	<i>Areca catechu</i> (Arecaceae)	5
6.	Mango tree	<i>Mangifera indica</i> (Anacardiaceae)	11
7.	Arjun tree	<i>Terminalia arjuna</i> (Combretaceae)	7
8.	Ashoka tree	<i>Saraca asoca</i> (Fabaceae)	7
9.	Bedda- nut tree	<i>Terminalia bellirica</i> (Combretacea)	1
10.	Java plum	<i>Syzygium cumini</i> (Myrtaceae)	8
11.	Malay gooseberry	<i>Phyllanthus acidus</i> (Phyllanthaceae)	2
12.	Pomegranate	<i>Punica granatum</i> (Lythraceae)	1
13.	Fig	<i>Ficus sp.</i> (Moraceae)	5
14.	Royal palm	<i>Roystonea regia</i> (Arecaceae)	1
15.	Orchid tree	<i>Bauhinia variegata</i> (Fabaceae)	2
16.	Deodar cedar	<i>Cedrus deodara</i> (Pinaceae)	59
17.	Spanish cherry	<i>Mimosa elengi</i> (Sapotaceae)	14
18.	Indian bael	<i>Aegle marmelos</i> (Rutaceae)	1
19.	Pine	<i>Pinus sp.</i> (Pinaceae)	5
20.	Royal poinciana	<i>Delonix regia</i> (Fabaceae)	9
21.	Guava tree	<i>Psidium guajava</i> (Myrtaceae)	5
22.	Red frangipani	<i>Pulmeria rubra</i> (Apocynaceae)	7
23.	Myrobalan tree	<i>Terminalia chebula</i> (Combretaceae)	1
24.	Date palm	<i>Phoenix dactylifera</i> (Arecaceae)	2
25.	lychee	<i>Litchi chinensis</i> (Sapindaceae)	4
26.	Weeping fig	<i>Ficus benjamina</i> (Moraceae)	1
27.	Papaya tree	<i>Carica papaya</i> (Caricaceae)	3
28.	Siris tree	<i>Albizia sp.</i> (Fabaceae)	4

Table 8 : List of Medicinal Plants recorded at Morigaon College

Sl no.	Common name	Botanical name & Family	No. of species
1.	Brahmi	<i>Bacopa monnieri</i> (Plantaginaceae)	02
2.	Bitterweed	<i>Andrographis paniculate</i> (Acanthaceae)	12
3.	Life plant	<i>Bryophyllum sp.</i> (Crassulaceae)	07
4.	Thumbai	<i>Leucas aspera</i> (Lamiaceae)	25
5.	Heart leaf	<i>Houttuynia cordata</i> (Saururaceae)	05
6.	Curry Leaf	<i>Murraya koenigii</i> (Rutaceae)	05
7.	False daisy	<i>Eclipta alba</i> (Asteraceae)	12
8.	Aloe vera	<i>Aloe vera</i> (Asphodelaceae)	08
9.	Turmeric	<i>Curcuma longa</i> (Zingiberaceae)	04
10.	Spearmint	<i>Mentha sp.</i> (Lamiaceae)	05
11.	Common Basil	<i>Ocimum basilicum</i> (Lamiaceae)	01
12.	Ginger	<i>Zingiber officinale</i> (Zingiberaceae)	04
13.	Gotu kola	<i>Centella asiatica</i> (Apiaceae)	35
14.	Spiral Flag	<i>Cheilocostus speciosus</i> (Costaceae)	03
15.	Silver shield	<i>Homolomena</i> (Araceae)	04
16.	Neem	<i>Azadirachta indica</i> (Meliaceae)	09

Table 9 : List of Horticultural Plants Recorded at Morigaon College

Sl no.	Common name	Botanical name & Family	No. of species
1.	Mango	<i>Mangifera indica</i> (Anacardiaceae)	86
2.	Lemon	<i>Citrus limon</i> (Rutaceae)	140
3.	Banana	<i>Musa</i> sp. (Musaceae)	40
4.	Litchi	<i>Litchi chinesis</i> (Sapindaceae)	30
5.	Orange	<i>Citrus sinensis</i> (Rutaceae)	4
6.	Brinjal	<i>Solanum melangena</i> (Solanaceae)	15
7.	Guava	<i>Psidium guajava</i> (Myrtaceae)	12
8.	Drumstrick	<i>Moringa oleifera</i> (Moringaceae)	1
9.	Chilli	<i>Capsicum frutescens</i> (Solanaceae)	15
10.	Indian Jujube	<i>Ziziphus mauritiana</i> (Rhamnaceae)	55
11.	Pineapple	<i>Ananas comosus</i> (Bromeliaceae)	30
12.	Pumpkin	<i>Cucurbita pepo</i> (Cucurbitaceae)	7
13.	Plum	<i>Prunus domestica</i> (Rosaceae)	8
14.	Tomato	<i>Solanum lycopersicum</i> (Solanaceae)	6

Table 10 : List of Herbs and Shrubs recorded at Morigaon College

Sl no.	Common name	Botanical name & Family	No. of species
1.	Stripped dracaena	<i>Dracaena fragrans</i> (Asparagaceae)	05
2.	Dumb cane	<i>Diffenbachia seguim</i> (Araceae)	09
3.	Crane flower	<i>Strelitzia reginae</i> (Strelitziaceae)	02
4.	Chacruna	<i>Psychotria viridis</i> (Rubiaceae)	03
5.	Loropetalum	<i>Loropetalum</i> sp. (Hamamelidaceae)	10
6.	Rose	<i>Rosa</i> sp.(Rosaceae)	03
7.	Garden croton	<i>Codiaeum variegatum</i> (Euphorbiaceae)	06
8.	Durun	<i>Leucas aspera</i> (Lamiaceae)	26
9.	Silver torch	<i>Cleistocactus</i> sp. (Cactiaceaea)	01
10.	Wondering trad	<i>Tradescantia</i> sp. (Commelinaceae)	Countless
11.	Echium	<i>Echium pininana</i> (Boraginaceae)	01
12.	Fishbone cactus	<i>Selenicereus anthonyanus</i> (Cactaceae)	02
13.	Devil's backbone	<i>Pedilanthus</i> sp.(Euphorbiaceae)	01
14.	Life plant	<i>Bryophyllum pinnata</i> (Crassulaceae)	17
15.	Ti plant	<i>Cordyline fruticose</i> (Asparagaceae)	02
16.	Hungarian thorn	<i>Crataegus nigra</i> (Rosaceae)	08
17.	Showboat	<i>Philodendron xanadu</i> (Araceae)	01
18.	Aloe vera	<i>Aloe</i> sp. (Asphodelaceae)	05
19.	Foxtail orchid	<i>Rhynchosstylis retusa</i> (Orchidaceae)	01
20.	False heather	<i>Cuphea hyssopifolia</i> (Lythraceae)	03
21.	Chinese lantern	<i>Physalis minima</i> (Solanaceae)	02
22.	Four o'clock	<i>Mirabilis jalapa</i> (Nyctaginaceae)	05
23.	Snake plant	<i>Dracaena trifasciata</i> (Asparagaceae)	02
24.	Bhringaraj	<i>Eclipta prostrata</i> (Asteraceae)	Countless
25.	Heart of Jesus plant	<i>Caladium bicolor</i> (Araceae)	41
26.	Periwinkle	<i>Catharanthus rosens</i> (Apocynaceae)	27
27.	Creeping primrose	<i>Ludwigia repens</i> (Onagraceae)	23
28.	Penniwort	<i>Centella asiatica</i> (Apiaceae)	Countless
29.	Creeping wood	<i>Oxalis corniculate</i> (Oxalidaceae)	Countless
30.	Corsican mint	<i>Mentha requienii</i> (Lamiaceae)	Countless
31.	Bermuda grass	<i>Cynodon dactylon</i> (Poaceae)	Countless
32.	Shame plant	<i>Mimosa pudica</i> (Fabaceae)	Countless
33.	Vegetable fern	<i>Diplazium esculentum</i> (Athyriaceae)	45
34.	Areca plam	<i>Dypsis onilahensis</i> (Arecaceae)	03
35.	Chinese ixora	<i>Ixora chinesis</i> (Rubiaceae)	02
36.	Asthma plant	<i>Euphorbia hitra</i> (Euphorbiaceae)	Countless
37.	Duranta kanta	<i>Duranta repens</i> (Verbenaceae)	Countless
38.	Datura	<i>Datura stramonium</i> (Solanaceae)	03
39.	Ginger	<i>Zingiber officinale</i> (Zingiberceae)	01
40.	Taro	<i>Colocasia esculent</i> (Araceae)	Countless



Cocos nucifera



Phyllanthus emblica



Roystonea regia



Azadirachta indica



Mangifera indica



Terminalia arjuna



Terminalia bellirica



Phyllanthus acidus

Few Photographs of Tree in the Morigaon College Campus



Bryophyllum sp.



Aloe vera



Acorus calamus



Curcuma longa



Paederia foetida



Ocimum basilicum



Zingiber officinale



Murray koenigii

Few Photographs of Medicinal Plants in the Morigaon College Campus



Citrus limon



Psidium guajava



Ananas comosus



Bacopa monnieri



Cheilocostus speciosus



Aralia sp.



Datura stramonium sp.



Colocasia esculenta sp.

Few Photographs of Horticultural Plants in the Morigaon College Campus



Tradescantia sp.



Eclipta prostrata



Caladium bicolorsp



Catharanthus roseus sp



Cycas revolute sp.



Centella asiatica sp.



Mentha requieniisp.



Cynodonn dactylon sp.

Few Photographs of Herbs & Shrubs in the Morigaon College Campus

5.4.2 Faunal Biodiversity

In view of the need to determine the faunal characteristics of the study areas within the constraints of time, a checklist survey method was followed. Checklist surveys are employed primarily to confirm the presence of species, and sometimes the number of individuals of species in a surveyed area.

Either invertebrates or vertebrates, the variety of animals enriched the region with its ecological significance and balancing the ecosystem. Morigaon college campus has variety of faunal species including different kinds of aquatic organisms (Phytoplankton and zooplanktons), insects, molluscs, annelids, reptiles, birds and mammals.

A large number of different species were recorded in the Morigaon College Campus. Species belonging to *Chrysolina coeruleans* were found in highest number. The faunal biodiversity recorded in the college campus is presented in the Table 11.

Table 11 : Faunal Biodiversity Recorded in the Morigaon College Campus

Sl. No.	Common Name	Scientific Name	No. of species
1	Blue mint beetle	<i>Chrysolina coeruleans</i>	35
2	Butterfly (false tiger moth)	<i>Dysphania militaris</i>	15
3	Dragonfly	<i>Anisoptera</i>	10
4	Burrowing cricket	<i>Velarifictorus micado</i>	5
5	Dark fishing spider	<i>Dolomedus tenebrosus</i>	15
6	Millipede	<i>Trigoniulus corallines</i>	4
7	Damsel fly	<i>Ceragrion coromandelianum</i>	10
8	Carpenter ant	<i>Camponotus japonicas</i>	Colony
9	Millet skipper	<i>Pelopidus mathias</i>	7
10	Goat	<i>Capra aegagrus hircus</i>	5
11	Dog	<i>Canis lupus familiaris</i>	3
12	Common house gecko	<i>Hemidactylus frenatus</i>	5
13	House millipede	<i>Oxidus gracilis</i>	10
14	Arboreal ant	<i>Oecophylla smaragdina</i>	Colony
15	Cattle egret	<i>Bubulcus ibis</i>	2
16	Cuban slug	<i>Veronicella cubensis</i>	4
17	Snail	<i>Lissachatina fulica</i>	7
18	Neon skimmer (Dragonfly)	<i>Libellula croceipennis</i>	10
19	Leech	<i>Hirudinaria granulosa</i>	3
20	Common maina	<i>Aricdotheres tristis</i>	6
21	Common crow	<i>Corvus brachyrhynchos</i>	4
22	Lemon butterfly	<i>Papilio demoleus</i>	5



Drug store beetle (*Stegobium paniceum*)



House millipede (*Oxidus gracilis*)



Goat (*Capra aegagrus hircus*)



Buff-striped Keelback (*Amphiesma stolatum*)



Aedes Mosquito (*Aedes sp.*)



Burrowing cricket (*Velarifictorus micado*)

Few Photographs of Faunal diversity in the Morigaon College Campus



Millet skipper (*Pelopidus mathias*)



Arboreal ant(*Oecophylla smaragdina*)



Dragonfly (*Anisoptera*)



Cattle egret (*Bubulcus ibis*)



Fire Ant (*Solenopsis* sp.)



Dark fishing spider (*Dolomedus tenebrosus*)

Few Photographs of Faunal diversity in the Morigaon College Campus



False tiger moth (*Dysphania militaris*)



Damsel fly (*Ceriagrion coromandelianum*)



Millipede (*Trigoniulus corallines*)



Blue mint beetle (*Chrysolina coerulans*)



Cuban slug (*Veronicella cubensis*)



Dark fishing spider (*Dolomedus tenebrosus*)

Few Photographs of Faunal diversity in the Morigaon College Campus

5.5 Management Practices with respect to Water, Energy and Waste

5.5.1 Water Management Practices

- Water Storage per day= 10250. Lt
- Water Tank Cleaning=Twice per Annum
- Daily Consumption of water= 10,000 Lt

Department	Wise use of water	Water Leakage Repair	Use of push Tap	Use of Water purification	Rain Water Harvest	Water Use Per Day	Water Management Practices
Assamese	✓	-	x	-	x	-	✓
Botany	✓	✓	x	✓	x	500	✓
Bengali	✓	-	x	-	x	-	✓
Chemistry	✓	-	x	✓	✓	1500	✓
Commerce	✓	-	x	-	x	-	✓
English	✓	-	x	-	x	-	✓
Economics	✓	-	x	-	x	-	✓
Education	✓	-	x	-	x	-	✓
Geography	✓	-	x	✓	x	500	✓
History	✓	-	x	-	x	-	✓
Hindi	✓	-	x	-	x	-	✓
Library	✓	-	x	-	x	-	✓
Mathematics	✓	-	x	x	x	-	✓
Office	✓	-	x	-	x	-	✓
Physics	✓	-	x	-	x	-	✓
Political Science	✓	-	x	-	x	-	✓
Philosophy	✓	-	x	-	x	-	✓
Sanskrit	✓	-	x	-	x	-	✓
Statistics	✓	-	x	-	x	-	✓
Zoology	✓	-	x	✓	✓	500	✓
Teacher Common Room	✓	-	x	-	x	500	✓
Boys Common Room	✓	-	x	-	x	500	✓
Girls Common Room	✓	-	x	-	x	500	✓
Auditorium	✓	-	x	-	x	-	✓
Student Toilet	✓	-	x	-	x	500	✓
Canteen	✓	✓	x	-	x	2000	✓
Hostel	✓	-	x	-	x	1000	✓
Gardening	✓	-	x	-	x	2000	✓

Observations

- (i) No leaking taps, pipes, valves were identified in the college premise.
- (ii) There are no any push button taps
- (iii) The college has set-up the three rain water harvesting unit having 1000 Lt. capacity within the college campus. The stored water is mainly used in lavatory, gardening and many other purposes.
- (iv) The college has optimized its irrigation system at night or early morning hours to minimize evaporation for gardening.
- (v) Water escaping from overflows either inside or outside building was not identified during onsite audit.

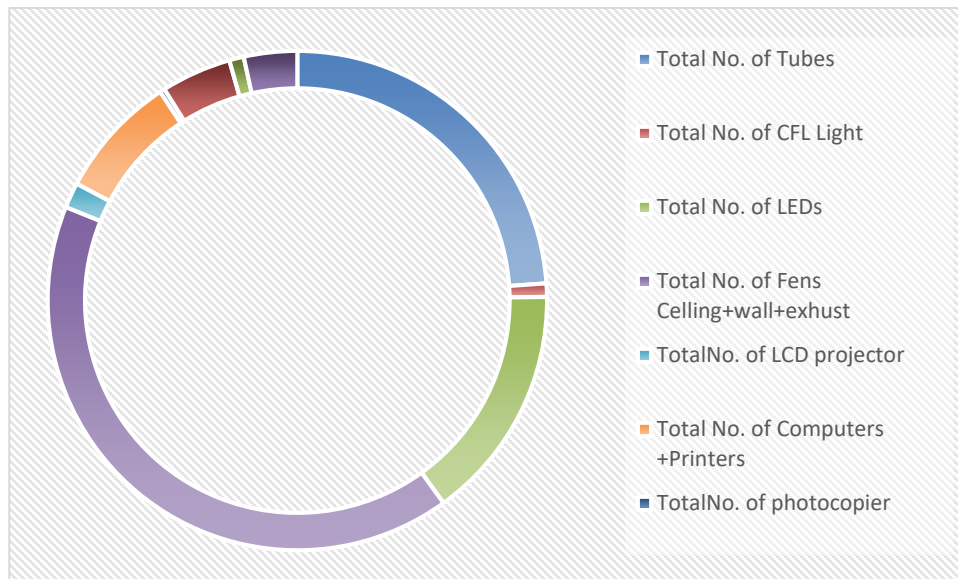
5.5.2 Energy Management Practices

- Electric Load =65 KW
- Daily Consumption=unit 106.11 kwh
- Electric Bill paid for the period of 2020-21(Bill Attached)=Rs. 3,40,066(2020)+ Rs. 2,55,995(2021)

	No. of Tubes	No. of CFL Light	No. of LEDs	No. of Fens Ceiling+wall+exhaust	No. of LCD projector	No. of Computers +Printers	No. of photocopier	Common /sophisticated analytical equipments	No. of Ac
Assamese	02	00	02	15	00	01+01	00	00	00
Botany	07	00	00	15	01	03+01	00	01	00
Chemistry	30	00	00	25	03	01+01	00	22	01
Commerce	14	00	00	21	01	01+01	00	00	00
Conference Room	00	00	08	00	01	00	00	00	02
Examination Branch	03	00	01	04	00	01+01	00	00	00
English	06	00	00	12	00	01+01	00	00	00
Economics	06	00	00	14	00	01+01	00	00	00
Education	06	00	01	09	00	02+01	00	00	00
Geography	07	03	00	20	03	14+01	00	01	01
General Class Room	25	00	24	55	05	01+01	00	00	00
History	06	00	01	04	00	01+01	00	00	00
Hindi	05	00	00	07	00	01+01	00	00	00
Library	30	00	01	20	00	11+03	01	02	00
Lecturer Gallery	20	00	00	12	01	01	00	00	04
Office	15	02	00	17	00	07+08	02	00	02
Physics	20	00	00	12	01	01+01	00	25	00
PoliticalScience	11	00	00	14	00	01+01	00	00	00
Philosophy	10	00	00	10	00	01+01	00	00	00
Zoology	25	00	04	25	02	01	01	05	00
Teacher Common Room	07	00	00	05	00	00	00	01	00
Boys Common Room	02	00	00	04	00	00	00	00	00
Girls Common Room	04	00	00	08	00	00	00	00	00
Auditorium	00	00	36	43	00	00	00	00	00
Student Toilet	00	06	02	00	00	00	00	00	00
Canteen	03	00	03	08	00	00	00	00	01
Hostel (Boys)	11	00	29	24	00	00	00	00	00
Hostel (Girls)	05	00	80	80	00	00	00	00	00
Anthropology	10	00	01	14	01	02+01	00	01	01
Mathematics	11	00	00	15	01	01+01	00	00	00
BCA	04	00	02	12	01	20	00	00	00
Total	305	11	195	524	21	74+28	04	58	12
Total No. of CCTV					41				

Observations:

- i) There is minimum or practically negligible use of lights during day time as the building structure has possibility of daylight usage
- ii) The lighting arrangements are well balanced with arrangements to switch ON and OFF
- iii) The policy of college is switch off the lights and other electrical equipment when they are not in use.
- iv) Cleanliness is well maintained. In- house light fittings are cleaned time to time.
- v) Lights are negligibly operated during day time. The lights are operated manually. There is no any sensor-based lighting system
- vi) The college is utilising natural lighting as first preference
- vii) Computers, printers, photocopiers and other equipment are switched off at the end of the day.
- viii) The all the electrical equipment is well operated. The overall electrification system is regularly monitored by a duly qualified electrician.
- ix) Regarding the use of renewable energy college has not installed any solar panels yet.
- x) College Management is evaluating the feasibility of introduction of the solar PV generation.



5.5.3 Waste Management Practices

Waste can be solid as well as liquid. Solid waste can be further divided into

- (i) Biodegradable- Like food waste, waste from toilets etc.
- (ii) Non-biodegradable-Like Plastics, tins, glassware etc.

Along with these, there are some hazardous wastes generated from laboratories, and E-waste (Computers, electric and electronic parts). Besides this, liquid waste is also there. The institute has over 2600 stakeholders which includes students, teaching staff and non-teaching staffs, thus a huge amount of waste is generated on a daily basis.

Sl/No.	Source	Type of waste	Approximate amount of waste generated per day
1.	Classroom, staff room, Library	Paper, pen, wrappers, plastic bottles etc	Biodegradable waste = 8.5 kg Non-biodegradable waste = 2.5 kg. Liquid waste= 9.5 kL E waste per annum = 90 kg
2.	Laboratories	Chemicals, glassware, waste water and solvents	
3.	Toilets	Sanitary napkins, waste water etc.	
4.	Canteen	Disposable plates, leftover food and water, wrappers, plastic bottles etc.	
5.	Office and computer centre	Papers, wrappers, plastics, paper pins, E-waste etc.	

Waste management practices adopted by the College

1. Solid waste generated in the campus

- dry and wet waste are collected in dustbins with two chambers which are placed in the library, teachers' common room, canteen, lecture hall, near classroom etc.
- Segregation of solid waste into dry and wet waste in different bins.
- Specific waste management plans are adopted to manage solid waste in the campus.
- E-waste includes malfunctioning computer monitors, printers, scanners, calculators, keyboards, mouse, cables, circuit boards, bulbs etc. generated from campus is subjected to handover E-waste authorised agency

2. Toilet waste

- Soak pits are available in toilets
- Toilet waste is connected to large tanks. These tanks are cleaned periodically.

3. Other waste

- Sanitary napkins are subjected to burn in the incinerator.
- Leaf litters are used for vermicomposting.
- Waste like broken bulbs, tubes etc. which cannot be repaired are dumped temporarily at the dumping bin and later on disposed of to the municipality collection van.



Clean Campus and waste collection dustbin



Vermicompost Production Unit



Laboratory Waste Treatment Plant



6.0 Carbon footprint due to Transport System

Emission of CO₂ through transport system – both public and private – is very high in India as India is credited with the third rank in carbon emission in this regard. It is estimated that in India, 9% of the total carbon is emitted by the transport system.

In Morigaon College during survey it was observed that on an average, there are 32 number of four wheelers are used by faculty while 309 number of two wheelers are used by students and staff. Further student uses bicycles 160 numbers. It is appropriate to calculate the petrol consumption separately for four wheelers and two wheelers.

The fuel consumption by vehicles is determined by the type of vehicle, year of manufacturing, maintenance status, traffic system of the particular area, etc. High-end and medium-range bikes consume different quantities of petrol.

Conversion table to calculate carbon emission by vehicles per litre is very complicated in view of the local variables to be taken for calculation. Instead, a simple but universally accepted calculation calendar for various types of fuels and their CO₂ conversion rate was adopted.

6.1 Emissions of CO₂ by transport system at Morigaon College

It is estimated that the average mileage covered by each vehicle is about	10 km.
The total mileage covered by the 309 number of two wheelers per year	$(309 \times 10 \times 200) = 618000$ km
The average mileage covered by four wheelers is also the same	8 km per day
The total mileage covered by 32 four wheelers per year	$(32 \times 8 \times 200) = 51200$ km
The total mileage covered by two and four wheelers per year	$(618000 + 51200) = 669200$ km
The standard fuel consumption for two wheelers is taken	35 km / 1L of Fuel
The standard fuel consumption for Four wheelers is taken	15 km / 1L of Fuel
The total quantity of petrol consumed by 23 number Two Wheelers	$(618000 / 35) = 17657$ L
The total quantity of fuel consumed by 40 number four wheelers per year	$(51200 / 15) = 3413$ L
The total fuel consumption per year (Two+ Four) Wheelers	$(17657 + 3413) = 21070$ L
Combustion of 1 litre of diesel/petrol leads to the emission of CO ₂	2.68 kg
The total quantity of CO₂ emitted by 2708.6 litres of fuel per year	$(21070 \times 2.68) = 56468$ kg

6.2 Flora and Carbon Footprint Reduction

Carbon Absorption Capacity of Flora at Morigaon College

The carbon footprint calculation is based on the following standard accepted assumptions

- Carbon absorption capacity of one full grown tree = 6.8 kg CO₂
- Carbon absorption capacity of one semi grown tree = 3.4 kg CO₂
- Carbon absorption capacity of one Shrubby vegetation = 0.2 kg CO₂

Total CO₂ absorption Capacity of Flora

Type of Tree	Total No. of Tree	Amount of CO ₂ absorption/ tree (kg)	Total CO ₂ absorption (kg)
Full Grown	248	6.8	248 x 6.8 = 1686
Semi Grown	435	3.4	435x3.4 = 1479
Shrubby Vegetation	391	0.2	391x0.2 = 78
Total amount of carbon absorption by Flora			3243

6.3 Oxygen Emission Capacity of Flora at Morigaon College

The carbon footprint calculation is based on the following standard accepted assumptions

- Oxygen Emission capacity of one full grown tree = 117.6 kg O₂
- Oxygen Emission capacity of one semi grown tree = 58.8 kg O₂
- Oxygen Emission Capacity of 400 number of Shrubby vegetation = 550 kg O₂

Type of Tree	Total No. of Tree	Amount of O ₂ Emission / tree (kg)	Total O ₂ Emission (kg)
Full Grown	248	117.6	248 x 117.6 = 29165
Semi Grown	435	58.8	435x58.8 = 25578
Shrubby Vegetation	391	550	391 x 550/400 = 538
Total amount of Oxygen Emission by Flora			55281

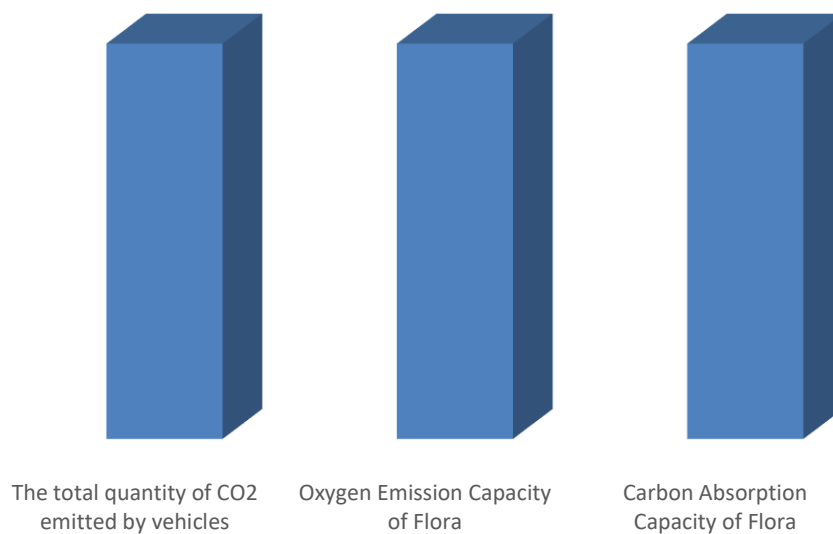
6.4 Summary of Carbon Footprint Reduction at Morigaon College

Carbon Absorption Capacity of Flora	3243 kg
Oxygen Emission Capacity of Flora	55281 kg
The total quantity of CO ₂ emitted by vehicles	56468 kg

6.5 Summary of Carbon Footprint per person at Morigaon College

Total Carbon Footprint in Tonnes	:	56.4
Total Carbon Footprint in kg	:	56468
Total Average number of persons in the College	:	2500
Carbon emission per person in kg	:	$56468/2600 = 22,5$
Carbon emission per person in kg	:	21.7 kg

Carbon Footprint



7.0. Organizational effort

S/N	Items	Responses
Organizational effort		
1	Is the college having campus green team?	Yes. Copy Attached
2	Have you established an environmental mission/vision for your campus	Yes. College has established Environment to make the students and teachers aware about the environmental issues and challenges. The college has organized several programmes addressing environmental awareness among students and community as well (e.g. World Wetland Day, 2 nd February; World Environment Day, 5 th June; World Wildlife Conservation Day, 4 th December; World Soil Day 5 th December).
3	College initiates any tree plantation programme	Yes. programme organized within and outside the college campus particularly on College Foundation Day and World Environment Day (5 th June)
4	How may numbers of existing tree, shrubs and herbs species	Tree- 35, Shrubs- 46, Herbs- 28
5	How may numbers of existing full-grown tree, semi grown trees	Full Grown - 248 Semi Grown – 435
6	Is there any lawn in the college campus? If yes what is area	Yes

7	Is the college encouraging sustainable behaviour via: Education campaigns? Such as Posters, placards, Messages, incentives? Contests? awards?	Yes, College organized various programme encouraging sustainable behaviour such as World Environment day (5 th June), World Wetlands day (2 nd February), National Science day (28 th February), International Yoga Day (21 st June), World AIDS Day(1 st December), No Tobacco Day (31 st May), Ekta Divas (31 st October) ; Wildlife Conservation Day (4 th December); World Soil Day (5 th December) and many more.
8	Is the college staff modelling sustainable behaviour for students, peers, and community?	College has adopted a 5 number of different villages namely Bhoiraguri, Mayanguri, Borigaon, Solmari and Ouzari almost 5 to 6 kilometers from the college. Various community development work in terms of education, health & hygiene, environmental education etc. has been initiated.
9	Is the college having solar, wind, or other forms of renewable energy?	No. Planning to initiate very soon
10	What are the good practices pertaining to Transport?	Encourage the use of public transport, Bicycle and Zero vehicle movement in the college campus atleast one day in a week.
11	What is the average number of vehicle movements in terms of two & Four wheelers	Two Wheelers: 295 - 309 Four Wheelers: 25 – 32
12	Has the college initiated to reduce its carbon footprint	Yes, College has taken several initiatives to reduce total carbon footprint amount within the college campus.
13	Has the college adopted any specific measures to reduce pollution	To motivate students, social service competitions are being held on special occasion such as college week, environment day, Science Day, Azadi ka Amrit Mahotsav etc., where they are awarded for their active participation.



Plantation Drive in World Environment Day by Morigaon College



Clean Drive in near by area by Morigaon College



Clean Drive by NCC unit of Morigaon College



Plantation Drive in World Environment Day by NSS unit ,Morigaon College



Campus Clean Drive in Morigaon College



Toilet Facility for differently abled students



Open Well Recharge



Maintenance of water bodies and distribution system

8.0 Recommendations

Water Management

- (i) The college Management needs to consider the low - flow faucets, as the replacement for the existing conventional taps.
- (ii) The toilet and wash room should be equipped with push button
- (iii) Sprinkler and drip irrigation should use for gardening
- (iv) The college should install rain water harvesting unit more organized way
- (v) More advanced water purification treatment facilities may be installed within the campus in order to ensure safe drinking water.

Energy Management

- The public lights within the campus may be run with solar panels and the replacement of existing lights should be done with LED lamps.
- Energy auditing should be done with the help of Energy Management Centre (EMC)

Waste Management

- Specific waste management plans should be adopted to manage solid waste in the campus, use of plastic carry bags, plastic glass/ cups/plates and flex boards should be banned inside the College to create a plastic free zone.
- For managing organic wastes organised vermicompost plant may be installed in the campus
- There should be a proper system for the management of hazardous wastes.
- ETP and STP should install in the campus properly

Green Management

- Green habitat concept should be adopted for all building construction activities of the college in future, which may help a long way in reducing energy usage, increasing the aesthetic appeal of the buildings and class rooms, besides reducing carbon footprint.
- Further, more green spaces should be established all around the campus around larger trees and shades for the benefit of the students. The Green Campus Committee should monitor all these aspects.
- Air quality and drinking water quality should be monitored annually.

- Annexure 1 : Scanned copy of NABL Certificate*
Annexure 3 : Scanned copy of PCB Certificate
Annexure 4 : Scanned copy of MSME Certificate



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TESTING

Certificate Number: TC-13637

Issue Date: 08/05/2024

Valid Until:

07/05/2026

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Entity: ENVIRO-TESTING SERVICES

Signed for and on behalf of NABL



N. Venkateswaran
Chief Executive Officer



Pollution Control Board, Assam

(Department of Environment & Forests : : Government of Assam)

অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ
(অসম চৰকাৰৰ বন আৰু পৰিবেশ বিভাগ)



No.WB/GUW/T-2445/13-14/213

Dated Guwahati the 26th June, 2026

OFFICE ORDER

In exercise of the powers conferred under section 17(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 17(2) of the Air (Prevention & Control of Pollution) Act, 1981, the Pollution Control Board, Assam is pleased to recognize of M/s. **Enviro Testing Services, Bijoy Nagar, House No. 35, Noonmati, Guwahati-22, Kamrup (M), Assam** as an Environmental Laboratory. This recognition is awarded for the purpose of analyzing following parameters and shall be valid till **07.05.2026**.

A. Water & Waste Water quality parameters:

Sl. No.	Parameters	Sl. No.	Parameters
1	pH	31	Lead
2	Temperature	32	Copper
3	TSS	33	Nickel
4	Zinc	34	Cr (Total & Hexa)
5	BOD	35	Cadmium
6	COD	36	Aluminium
7	Total Dissolved Solids	37	Manganese
8	Chloride	38	Arsenic
9	Sulphate	39	Pesticides
10	Oil & Grease	40	Total Acidity
11	Sodium	41	DO
12	Phenol	42	Cobalt
13	Odour	43	Vanadium
14	Turbidity	44	Molybdenum
15	Alkalinity	45	Silver
16	Conductivity	46	Hydrazine
17	Total Hardness	47	Silica
18	Calcium	48	Colour
19	Magnesium	49	Anionic Detergent
20	Nitrate	50	Corrosivity
21	Sulphide	51	Ignitibility
22	Fluoride	52	Reactivity
23	Residual Free Chlorine	53	Cyanide
24	Total Residual Chlorine	54	Polychlorinated Biphenyls
25	Boron	55	Polynuclear Aromatic Hydrocarbon
26	Free Ammonia	56	DDT
27	Ammonical Nitrogen	57	Trihalomethanes
28	TKN	58	Selenium
29	Phosphate (Dissolved)	59	Mercury (Hg)
30	Iron		

B. Bacteriology & Bio-assay:

1	Total Coliform
2	Fecal Coliform
3	Bio-Assay (Toxicity)

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C. Noise Quality Parameters:

Noise Level Monitoring – Noise in dB(A)

D. Ambient Air Quality Parameters:

Sl. No.	PARAMETER	Sl. No.	PARAMETER
1	Oxides of Sulphur	11	Arsenic
2	Oxides of Nitrogen	12	Nickel
3	PM 10	13	Mercury
4	PM 2.5	14	Hydrogen Sulphide
5	Ozone	15	Toluene
6	Lead	16	Carbon Dioxide
7	Carbon Monoxide	17	Total Hydrocarbon
8	Ammonia	18	VOC
9	Benzene	19	Chromium
10	Benzo (a) Pyrene		

E. Stack Emission Parameters:

Sl. No.	PARAMETER
1	Oxides of Sulphur
2	Oxides of Nitrogen
3	Particulate Matter
4	Oxygen
5	Carbon Monoxide
6	Total Hydrocarbon
7	Hydrogen Sulphide
8	Carbon Dioxide
9	Furan
10	Dioxin
11	VOC

Terms & Conditions:

1. The recognition may be revoked or withdrawn subject to the violation of the following conditions :-
 - i. The laboratory shall carry out analysis only for the parameters authorized by the Board as mentioned in the certificate of approval.
 - ii. The laboratory shall carry out analysis of samples as per IS, APHA code of Federal Regulation and should specify the method in the analysis report.
 - iii. The laboratory will keep a proper record of receipt of samples, the analysis report of all the parameters analyzed.
 - iv. The laboratory will collect samples, which will be divided in two parts. One part will be analyzed, while the other part will be preserved for thirty days. For air samples, the used thimbles and filter papers will be preserved for six (6) months so that the Board can check randomly and verify the credibility.
 - v. The Board officials may visit laboratory for verification of preserved samples.
 - vi. Records pertaining to inventory of the chemicals/ reagents shall be kept properly on a permanent register and will be subject to inspection by the Board.

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- vii. The Laboratory shall submit information on whether ETPs/APCDs installed by the respective unit was running or not along with test report. The analysis report shall reflect site conditions and capacity at which the industry was running at the time of sampling.
 - viii. Laboratory will submit details of staffs involved in sampling and testing and the person coming for collection of sample should have authority letter of Laboratory.
 - ix. Prior information is to be given to the concerned Regional Officers and Head Office for collection of sample.
 - x. **The approval shall be suspended or cancelled if the Board has reason to believe that the data reported by the Laboratory is repeatedly erroneous. Further the Laboratory and its key personnel shall be liable to be proceeded against for imposition of penalty in case the Board has reason to believe that the data reported by the Laboratory is intentionally manipulated.**
 - xi. If the laboratory fails to achieve the satisfactory performance regarding testing of the coded samples supplied by the Pollution Control Board, Assam will result in withdrawal of recognition.
 - xii. The instruments/equipment should be always kept in working and perfectly calibrated condition.
 - xiii. The Laboratory has to submit a brief plan on safety measures undertaken for risk management pertaining to the work environment.
 - xiv. Board will have every right to accept or reject the analytical and other reports submitted by the aforesaid laboratory without assigning any reason thereof.
2. This order will remain valid upto **07.05.2026 with effect from the date of issue of this order** subject to the outcome of Hon'ble Gauhati High Court Order in WP(C) - 8468/2018. But the said recognition may also be withdrawn at any time in case of violation of any of the aforementioned conditions or for any other unlawful activities, which are not proper under the law of the land.
 3. The Laboratories should maintain certified Reference Materials/Standard reference materials along with valid Certificate of Analysis (CoA) related to the parameters for which recognition is granted.
 4. The Laboratories should properly prepare standard curves periodically as per their used method depending on analyse concentration range and shall perform standard checks during testing.
 5. The Laboratories should calibrate all utility equipment, volumetric glassware and sampling instruments through NABL accredited Calibration Laboratory periodically and shall maintain records with traceability. The Laboratories should also perform internal calibration checks during validity of calibration period.
 6. The Laboratories should maintain documents on Method Validation, Detection Limits (LOD, LOQ) Measurement Uncertainty etc.
 7. The Laboratories should perform Internal Quality Control programme like repeat testing, remnant testing, participation in Inter Laboratory Comparison (ILC)/Proficiency Testing (PT) Programme, Intra- Laboratory Comparison etc.
 8. The Laboratories should maintain the system of coding of samples to ensure impartiality and confidentially in test procedure.
 9. The Laboratories should maintain dedicated Log Books for Instruments and Analysis Registers of each parameter.
 10. The Laboratories should maintain Stock Registers for chemicals, glassware, thimbles, Filter Papers to verify stock position, consumption pattern, reordering level etc.

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11. Standard method documents (e.g APHA methods, IS methods, USEPA methods etc.) should be made accessible to the laboratory personnel and the Standard Operating Procedures/ Work instructions of analytical processes should be made available at working areas.
12. The Laboratories to which recognition for PM2.5 parameter in Ambient Air has been granted, should possess Electronic Balance of having readability minimum upto 5th place of decimal.
13. The Laboratories should train their personnel on regular intervals for capacity building on sampling methodology and analytical procedure to ensure quality analysis.
14. The Laboratories should upgrade instrumental analysis (handling, operation and practice) for successful implementation of standards to improve data quality.
15. If any Laboratory is not equipped with proper facilities and infrastructure to execute the test/analysis, the same should be informed to the State Board with fifteen (15) days of the discontinuation of test.
16. The Laboratories should not change the location without prior intimation to the State Board and in case of any change of address, the concerned Laboratory should inform the State Board with fifteen (15) days of closure of activity in the address.
17. Information of any Kinship and any relation of any Laboratory owner with any State Board employee must be disclosed to the State Board.
18. The Laboratories shall obtain NABL accreditation as per ISO/IEC 17025:2017 for the parameters for which recognition has been recommended.

This order has been passed as per the approval of Competent Authority.

(Shantanu Kr. Dutta)
Member Secretary

Memo No.WB/GUW/T-2445/13-14/213-A

Dated Guwahati the 26th June, 2024

Copy to: —

- ✓ M/s. Enviro Testing Services, Bijoy Nagar, House No.35, Noonmati, Guwahati-22, Kamrup (M) for information and necessary action.


Member Secretary

UDYAM REGISTRATION CERTIFICATE

UDYAM REGISTRATION NUMBER

UDYAM-AS-16-0015132

NAME OF ENTERPRISE

ENVIRO TESTING SERVICES

TYPE OF ENTERPRISE *

SNo.	Classification Year	Enterprise Type	Classification Date
1	2025-26	Micro	01/04/2025
2	2024-25	Micro	27/04/2024
3	2023-24	Micro	29/04/2023

MAJOR ACTIVITY

SERVICES

SOCIAL CATEGORY OF ENTREPRENEUR

GENERAL

NAME OF UNIT(S)

S.No.	Name of Unit(s)
1	ENVIRO TESTING SERVICES

OFFICAL ADDRESS OF ENTERPRISE

Flat/Door/Block No.	-	Name of Premises/ Building	BIJOY NAGAR,
Village/Town	Kamrup,	Block	-
Road/Street/Lane	NOONMATI,	City	Assam,
State	ASSAM	District	KAMRUP , Pin 781020
Mobile	9435732705	Email:	envirotesting2011@gmail.com

DATE OF INCORPORATION / REGISTRATION OF ENTERPRISE

15/12/2001

DATE OF COMMENCEMENT OF PRODUCTION/BUSINESS

15/12/2001

**NATIONAL INDUSTRY
CLASSIFICATION CODE(S)**

SNo.	NIC 2 Digit	NIC 4 Digit	NIC 5 Digit	Activity
1	70 - Activities of head offices; management consultancy activities	7010 - Activities of head offices	70100 - Activities of head offices	Services
2	70 - Activities of head offices; management consultancy activities	7020 - Management consultancy activities	70200 - Management consultancy activities	Services
3	71 - Architecture and engineering activities; technical testing and analysis	7110 - Architectural and engineering activities and related technical consultancy	71100 - Architectural and engineering activities and related technical consultancy	Services
4	71 - Architecture and engineering activities; technical testing and analysis	7120 - Technical testing and analysis	71200 - Technical testing and analysis	Services
5	74 - Other professional, scientific and technical activities	7490 - Other professional, scientific and technical activities n.e.c.	74904 - Security consulting	Services

DATE OF UDYAM REGISTRATION

29/04/2023

* In case of graduation (upward/reverse) of status of an enterprise, the benefit of the Government Schemes will be availed as per the provisions of Notification No. S.O. 2119(E) dated 26.06.2020 issued by the M/o MSME.

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For any assistance, you may contact:

1. District Industries Centre: DIC KAMRUP (ASSAM)

2. MSME-DFO: GUWAHATI (ASSAM)

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