# GREENAUDIT REPORT



NILAMBAZAR COLLEGE NILAMBAZAR, KARIMGANJ 2021-2022

Report Prepared by :- Green Audit Team Nilambazar College, Nilambazar

# Acknowledgement

The green audit conducted by Nilambazar College during the session 2021-22 is an internal audit that aims to provide and foster a healthy and eco-friendly environment. The college is still in infant stage and the initiatives is still going on and numerous measures are still to be taken under implementation to ensure the environmental sustainability. Green audit team extends thanks to all the students, teaching and non-teaching staffs of the college for providing necessary information and inputs, side by side providing the active co-operation with us during this survey.

# **The Audit Team**

i) Dr Atiqur Rahman - Principal

ii) Mr. Jalal Uddin- Co-ordinator, IQAC

iii) Mr.Abdulla Hussain Laskar - Co-ordinator, NAAC

iv) Dr. A.H.Monjurul Hoque - HOD,Deptt. Of Arabic,Member

v) Dr. Altaf Hussain - Asstt. Prof., Deptt. Of Economics, Member

vi) Dr. Anirvan Datta- Asstt. Prof., Deptt. Of Bengali, Member

vii) Dr. S.N.Choudhury Asstt. Prof., Deptt. Of History, Member

# **External Members**

- 1) Mr. Matiur Rahman, AFS, Divisional Forest Officer (DFO), Social Foresty, Division Karimganj.
- 2) Dr. Partha Sarathi Das, Associate Professor, Deptt. of Botany, Karimganj College, Karimganj.



#### 1.1 A BRIEF PROFILE OF THE COLLEGE

Nilambazar College, Nilambazar was established on 14th July, 1994 by a few dedicated philanthropists to provide Higher Education towards backward students of greater southern part of Karimganj District.

The College is permanently Affiliated to Assam University and the college has got its recognition under section 2 (f) & 12 (B) of the UGC Act 1956. Vide memo no. F.No. 8-317/2012(CPP-I1C) dated. 11th January, 2013. The management of the College is committed towards taking all possible measures for the overall development of students and also to fulfill its vision and mission of the college in a committed manner and strategy.

#### 1. Name and Address of the College:

Name: Nilambazar College

Address: PO. - Nilambazar, Dist - Karimganj.

State: Assam

Website: www.nilambazar.ac.in

#### 2. For communication:

Principal : DR. ATIQUR RAHMAN

Mobile: 7002798102

Email: nilambazarcollege@gmail.com

## **IQAC COORDINATOR**

Name: Jalal Uddin

Mobile: 8638315409

Email: jalaluddinbrgm@gmail.com



3. Status of the College by management: Government.

4. Name of University to which the College is Affiliated :Assam University,Silchar

5. (i) Date of establishment

: 14th July 1994

(ii) Date of recognition by UGC : 11th Jan. 2013

# 2. Objectives of the Study:

The main objective of the green audit is to promote the Environment, Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. The main objectives of carrying out Green Audit are:

- To introduce and make students aware of real concerns of environment and its sustainability.
- To secure the environment and cut down the threats posed to human health by analyzing the pattern and extent of resource use on the campus.
- To establish a baseline data to assess future sustainability by avoiding the interruptions in environment that are more difficult to handle and their corrections require high cost.
- To bring out a status report on environmental compliance.

# 3. Methodology:

In order to perform green audit, the methodology included different tools such as preparation of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered the following areas to summaries the present status of environment management in the campus:

- Water management
- Energy conservation
- Waste management
- E-waste management
- Green area management



# 4. Auditing Water Consumption:

Water auditing is conducted for the evaluation of raw water intake and determining the facilities for water treatment and reuse. The present investigation tries to find out a way that can be adopted and implemented to balance the demand and supply of water. It is therefore essential that any environmentally responsable institution examine its water use practices. Main water uses in the College campus are in Gardening, Cleaning, Canteen, Drinking, Toilets, Bathrooms, Hostel, Washing, Construction works and Office uses.

#### **USES AND MANAGEMENT**

#### **SOURCE OF WATER**

SL No.	Resource	Quantity	
1	No. of Hand Pump	01	
2	Water Reserve Tank	03	
3.	Pond	01 (0.5 Acre approx).	

#### The overall water consumption in the college: 13 k.Ltr./Day

SI No.	Water Used For	Water Use (Litre/Day)
1	Drinking Water	4000
2	Toilets & Urinals	3000
3	Canteen	500
4	Gardening	300
5	Hand & Face Wash	3000
6	Construction work	2000
7	Leakage	20
1	Total	12820

# The water installations available in the college are -

- Drinking water filtration facility.
- Urinals and toilets.
- Bathrooms.
- Water taps in common place, canteen etc.
- Water taps in Washrooms.



#### Water audit observations

The reasons of water wastage are -

- Leaving the water taps open after use.
- Leakages from taps
- · Over use of water.

#### Recommendations

- All leaking tapes to be repaired.
- Establishment rain water harvesting system
- Involve students by giving them real time projects on water conservation and rewardgood ideas after implementing them
- Use of tap water can be controlled by regulating discharge per hour.
   Provide pushbutton taps limiting the time for 30 secs
- Canteen can reduce the use of trays to a certain extent.
- · Installation of water treatment system.

#### 4.2. Auditing Energy management

This indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliances, and vehicles. Energy use is clearly an important aspect of campus sustainability and thus requires no explanation for its inclusion in the assessment. Energy auditing deals with the conservation and methods to reduce its consumption related to environmental degradation. It is therefore essential that any environmentally responsible institution examine its energy use practices.

# Following are the electrical installations in the college -

## **Ground Floor**

SI. No.	Items Name	
1.	Tube lights	08
2.	LED Lights	59
3.	Celling Fans	47
4.	Table Fans	04
5.	Inverter	03
6.	Printer	05
7.	Xerox Machine	03



8.	CC Camera	02 set (42 Nos)
9.	Punching Machine	01
10.	LED TV	03
11.	Computer/Laptop	52
12.	Aqua Guard Water Filter	02
13.	Water Pump	01
14.	Projector	01
15.	Sound System	02
16.	Power Generator 30 Kilowatt	01

# 1st Floor

SI. No.	Items Name	Quantity
1.	LED Lights	14
2.	Celling Fans	12
3.	Table Fans	02
4.	LED TV	01
5.	Computer/Laptop	01
6.	Projector	01
7.	Sound System	01



# 2<sup>nd</sup> Floor

SI. No.	Items Name	Quantity
1.	LED Lights	06
2.	Celling Fans	12
3.	Sound System	01

#### Electricity saving methods adopted in the college

- · Turn off electrical equipments when not in use
- Use energy efficient Light-Emitting Diode (LED) bulbs instead of incandescent and CFL bulbs.
- Maintain fault free appliances and replace old appliances.
- Use computers and electronic equipments in power saving mode.

#### **Energy Audit Observations**

- The college has assessed the electrical load calculation.
- Looking at the range of college activities and working hours, monthly use of electricity in the college is very high.
- There are fans of older generation and non energy efficient which can be phase out by replacing with new energy efficient fans.
- Regular monitoring of equipments and immediate rectification of any problems.
- Awareness on conservation of energy, water and fuel consumption needs to becommunicated among the stakeholders.

The total energy utilization of the college for different purposes is approximately 300 units/p.m and electricity charges per month are Rs.4000/-p.m

#### Recommendations

- Installation of solar panel to tape the non conventional sources of energy.
- Energy saving through the replacement of tube lights to LED lights.
- Energy efficient electrical equipments especially fans and pump sets can be replaced against old ones.
- Awareness programs for the stakeholders to save energy may also increasesustainability in the utilization of various energy sources.



#### 4.3. Waste Generation

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, biodegradable waste, glass, dust etc. and recycling. Furthermore, solid waste often includes wasted material resources that could otherwise be channeled into better service through recycling, repair and reuse. Solid waste generation and management is a burning issue. Unscientific handling of solid waste can create threats to everyone. The survey focused on volume, type and current management practice of solid waste generated in the campus. The different solid wastes collected are as mentioned above.

#### (a) Observations:

The total solid was be collected in the campus is 10kg/day. Waste generated from dead organic matter is a major solid waste in the campus. The waste is segregated at source by providing separate dustbins for Biodegradable and Non Bio-degradable waste. Segregation of chemical waste generated in laboratories is also practiced. Single sided used papers are reused for writing and printing in all departments. Important and confidential reports/ papers are sent for recycling after completion of their preservation period. Very less plastic waste (0.3kg/day) is generated by some departments, office, garden etc. but it is neither categorized at point source nor sent for recycling. Metal waste and wooden waste is stored and given to authorized scrap agents for further processing. The tree droppings are sent for composting plant

# (b) Recommendations

Reduce the absolute amount of Organic waste that is produced from college.

- Make full use of all recycling facilities provided by Local bodies.
- Corporation and private suppliers including glass, cans, white coloured and brown paper, plastic bottles, batteries, print cartridges, cardboard and furniture. Provide sufficient, accessible and well-publicized collection points for
- recyclable waste, with responsibility for recycling clearly allocated. The main purpose of vermi-composting to reduce solid organic disposable
- waste in the college campus. After complete process of composting, it is used as manure in the garden and lawns.

## WASTE DISPOSAL OF NILAMBAZAR COLLEGE

With smart initiatives like our Think Green Campus Model, Waste Management is helping colleges and universities achieve a higher level of environmental performance. By reusing or recycling we are: Contributing to the conservation of natural resources, Saving energy, Helping to protect the environment, Reducing landfill. We will also reduce our impact on the environment by minimizing the carbon emissions associated with both disposing of old products and obtaining new ones. Nilambazar College adopts environment friendly practices and takes necessary actions such as – energy conservation, waste recycling, carbon neutral etc. The biological reusable waste generated are processed as organic manure for the plants available in the college campus and the other solid waste generated in the college campus is taken to the nearby village for recycling and disposal.

#### 4.6 Environnemental Monitoring:

Environmental studies (EVS): This is compulsory subject introduced by Assam University, Silchar for second semester students (all stream). Under this course students learn how to be an environmental friendly. They are made aware of:

- 1) Renewable and Non-renewable energy sources
- 2) Energy conservation.
- 3) E-waste management.
- 4) Green Campus Management.

# 4.6.1 Air Monitoring:

Air quality in the academic institute is very important for health of the students, faculty and staff of the institute. The air pollution sources in the college campus are wind storm, pollen grains, natural dust, vehicular emissions, generators, fires and laboratory fumes etc.

#### 4.6.2. Noise Environment:

To aware the students of the college about noise pollution the college authority various bill-boards/ display boards in the Library and other areas of the college. The college authority announcet the library campus as a silence zone and accordingly place a display board. Other initiatives to make the college campus noise free campaigns and awareness about noise pollution are organized frequently.

#### Recommendations:

 Students and Staff are encouraged to reduce noise pollution the boundaries college through uses of bicycles instead of Motor – cycles.

Esto-199

- According to the guidelines of the "Noise Pollution (Regulation and Control) Rules 2000," noise level monitoring must be done.
- As required by the Central Motor Vehicle Act of 1988, college parking lots must frequently inspect vehicle exhausts.

#### 5. Green Campus Management

The green campus concept offers an institution the opportunity to take the lead in redefining its environmental culture and developing new paradigms by creating sustainable solutions to environmental, social and economic needs of the mankind. The green campus practice is a boon to promote mental and physical health of the students and staff. The following are the details of trees available in the campus:

#### **Names of Various Plants**

#### **Fruit Trees**

SL. No.	Common/Local Name	Scientific Name	No. of trees
1.	Mango	Mangifera indica	20
2.	Guava	Psidium guajava	15
3.	Papaya	Carica papaya	03
4.	Coconut	Cocos lucifera	05
5.	Plum Fruit	Zizi phus	20
6.	Black Berry	Syzygium eumini	20
7.	Banana Tree	Musa	15
8.	Jackfruit	Reticulate	06
9.	Custard Apple	Annonh reticulate	20
10.	Jolpai Tree	Elacocarpus serratus	10
11.	Betelnut Tree (small)	Areca catechu	15

Total Trees - 147

#### Medicinal Tree

1.	Neem tree	Azadirachta indica	11
2.	Arjun tree	Terminalia arjuna	30
3.	Horitaki	Termenalia chebula	20
4.	Bohera Tree	Termenila bellrica	13

		Total Trees -	84
5.	Amloki	Phyllanthus emblica	10

## Ornamental Tree

Debdaru	Polyalhbia longifelia	08
Krishnachura	Delonix rejia	10
Forish	Mesus ferrea	20
Agar Tree	Aquialaria malaccensis	30
Kadam	Burflower	20
	Krishnachura Forish Agar Tree	Krishnachura Delonix rejia Forish Mesus ferrea Agar Tree Aquialaria malaccensis

Total Trees -

88

#### Common resident birds

Common Name	Family	Scientific Name
1. Common myna	Sturnidae	Acridotheres tristis
2. House sparrow	Passeridae	Passer domesticus
3. Jungle Myna	Sturnidae	Acridotheres fuscus
4. Tailor bird	Cisticolidae	Orthotomus sutorius
5. Tree sparrow	Passeridae	Passer montanus
6. Pigeon	Columbidae	Columba livia
7. Pond Heron	Ardeidae	Ardeola grayii
8. White throated Kingfisher	Alcedinidae	Halcyon smyrnensis

To generate interest on the nature conservation and also to inculcate social responsibility towards a green and clean environment, the college undertakes several eco-friendly initiatives within and outside the campus. Some of these activities are –

- > Plantation and caring of plants in the campus and outside the campus.
- > Timely disposal of wastes from the campus.
- Celebration of important days like World Environment Day, Biodiversity day with great importance to generate awareness among the students.
- Plastic free (single use) campus.
- Plant Saplings & Distribution flower plants to the to various local public & governmental places like Hospital, Circle Office & Police

Station.

> Grow potted indoor plants in every department wherever it is possible.

#### Plantation program

The institute has organized various Plantation program in and outside the college campus and adopted villages, parks etc through Eco Club and Plantation and Beautification Cell of the college. The plantation

program includes plantation of various types of ornamental, fruit bearing and medicinal plant species. This activity is done during the month of May and June i.e. onset of the monsoon season. This program helps to maintain eco-friendly environment within and outside the campus as well.

#### **Routine Green Practices**

The college celebrates days like World Environment Day, Biodiversity day with great importance to generate awareness among the students, faculties as well as staff members. Popular talks on environmental problems are organized. Besides, distribution of saplings, poster competition etc. are some activities carried out to celebrate the day.

#### **Vermi Composting:**

The institute is has started vermi composting within the college and hostel campus since 2021-22 -

The main purpose of this is to reduce disposable waste in the college campus and manure thus produced is used in the floricultural activities within the campus. The main benefit of the process is to reduce the waste in the environment and also to generate awareness among students

# Biodiversity available in the Campus:

Although Nilambazar College is located near by NH-08 covering 7 Bhigas land approx. The college capmus has big fishary in the southwestern side. The various spiecies of fishes are cultivated. The side bams of the fishary are also full of various kinds of vegitables and banana, battlenut trees etc. which lavishly increases the eco friendly atomosphere. Other plants available in the college campus includes fruit bearing trees, timber yielding trees, medicinal plants, ornamental plants etc. Among the species of birds, 08 bird species are sighted in the college campus belonging to 08 families which include some residential birds, common birds and winter migratory bird also.

#### 5. Conclusions

#### Observation:-

The college premises has a rich collection of trees and plants. There is a beautiful garden in front of the college with proper fancing with some important display boards containing the important quotes and meaningful varses from prominent scholars which one is very attractive.

#### **Recommendations:**

To maintain the college campus green and eco-friendly, more trees need to be planted, Proper irrigation facilities need to be implemented. A gardener at daily basis should be appointed to maintain and take-care of the plants and garden of the college.

Mr. Matiur Rahman, AFS
Divisional Forest Officers (DFO)

Social Foresty, Mylsion Karimgani

Dr. Parthandar & Biotechnology

Associate Prof. Dept. of Botany Karimganj College



# **GREEN AUDIT: NILAMBAZAR COLLEGE** CERTIFICATE



This is to certify that the Green Audit Report of Nilambazar College is based on the original data collected during the period of study. Further, it is certified that the baseline data was prepared by the Internal Green Audit team of Nilambazar College, Nilambazar and submitted to us. The content of the baseline data of the study has been personally verified by the Green Audit team for validity and reliability. The data used in the study are original in nature and have not been presented or published elsewhere.

# **Green Audit Team (External)**

1) Mr. Matiur Rahman, AFS, Divisional Forest Officer (DFO), Social Foresty, Division Karimganj.

Partha Garathi Dos. The 20/12/2021

1) Dr. Partha Sarathi Das, Associate Profession Deptt. of Botany,

Karimganj College, Karimganj.



# NILAMBAZAR COLLEGE

(PERMANENT AFFILIATED TO ASSAM UNIVERSITY HAVING GOVT.CONCURRENCE)
(RECOGNISED UNDER SECTION 2(f) & 12 (b) OF UGC ACT 1956)
P.O. - Nilambazar, Dist: - Karimganj, Assam - 788722.

Estd: 1994

Email Id. nilambazarcollege@gmail.com

Website: -https://www.nilambazarcollege.ac.in Mob.9435596311/8753842188.Ph.& Fax No.03843-258484

Memo No. NBC/IQAC/22/12

Date. 05.12.2022

To,

Mr. Matiur Rahman, AFS, Divisional Forest Officer (DFO), Social Foresty, Division Karimganj.

Sub:

Intimation Letter.

Sir,

I have the honour to inform you that our college is on the process of NAAC assessment and in this regard you have been selected by the Governing Body of this college as an Expert for Green Audit for the session 2021-22.

So, you are cordially requested to kindly perform the duty as an auditor of Green Campus initiative and co-operate us in our noble mission for the greater interest of the college.

Thanking You.

Principal Nilambazar College

P.O. Minishazar, Dist. Karimgayiyi



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