

# NORTH KAMRUP COLLEGE, BAGHMARA

## GREEN AUDIT REPORT

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### Audited by

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## CONTENTS

Sl. No	Title
1.	INTRODUCTION
2.	OBJECTIVE & METHODOLOGY
3.	ABOUT THE COLLEGE
4.	VISION & MISSION STATEMENT
5.	GREEN AUDITING
6.	OBSERVATIONS
7.	FLORA & FAUNA DIVERSITY
8.	WATER QUALITY ASSESSMENT

## **INTRODUCTION:**

Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of institute. 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 prevalent.

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 CO<sub>2</sub> 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.

## **OBJECTIVES:**

In recent time, the Green Audit of an institution has been becoming a paramount important for self-assessment of the institution which reflects the role of the institution in mitigating the present environmental problems. The college has been putting efforts to keep our environment clean since its inception. Therefore, the purpose of the present green 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 map the Geographical Location of the college
- To document the floral and faunal diversity of the college
- To record the meteorological parameter of Baghmara where college is situated
- To document the ambient environmental condition of weather, air, water and noise of the college
- To document the waste disposal system

### **METHODOLOGY:**

The purpose of the green audit of North Kamrup College is to ensure that the practices followed in the campus are in accordance with the Green Policy of the country.

The methodology includes: collection of data, physical inspection of the campus, observation and review of the documentation and data analysis.

### **ABOUT THE COLLEGE:**

One of the premier institutes of higher education North Kamrup College, Baghmara, established on the 17<sup>th</sup> August, 1979 is situated under the traditionally enlightened district of Assam, Bajali. It is 12 Kms away from the head quarter of Bajali district. The NH 127 from Pathsala to Bhutan is running through Baghmara. Baghmara where the college is located is a place known for trade and business. The landscape surrounding the college covers 33 Bighas of land.

### **MISSION AND VISION OF THE COLLEGE:**

Initially the college was started with the noble cause of providing scope for higher education to the youth of the greater underdeveloped area. The passage of time has brought the effort in the institutional goal in its periodic review to come to terms with the global need of higher education.

### **Green auditing:**

The college has adopted the 'Green Campus' system for environmental conservation and sustainability. There are main three pillars i.e. zero environmental foot print, positive impact on occupant health and performance and 100% graduates demonstrating environmental literacy. The

goal is to reduce CO2 emission, energy and water use, while creating atmosphere where students can learn and be healthy.

### OBSERVATIONS:

#### ❖ Summary of floral diversity in North Kamrup college campus:

Sl. No	Common name	Scientific name	Family	Quantity
1.	Sisso	<i>Dalbergia sisoo</i>	Fabaceae	30
2.	Arjun	<i>Terminalia arjuna</i>	Combretaceae	5
3.	Mango	<i>Mangifera indica</i>	Anacardeaceae	6
4.	Guava	<i>Psidium guajava</i>	Myraceae	1
5.	Gamari	<i>Gmelina arborea</i>	Lamiaceae	40
6.	Acacia	<i>Acacia auriculiformis</i>	Fabaceae	3
7.	Krishnaehura	<i>Delanix regia</i>	Fabaceae	1
8.	Bokul	<i>Minusops elengi</i>	Sapotaceae	7
9.	Segun	<i>Tectona grandis</i>	Lamiaceae	70
10.	Neem	<i>Azadiracta indica</i>	Meliaceae	2
11.	Jam	<i>Syzygium cumin</i>	Myraceae	10
12.	Silikha	<i>Terminalia chebula</i>	Combretaceae	4
13.	Ratka Joha	<i>Hibiseus-rosa sinensis</i>	Malvaceae	10
14.	Hadam	<i>Anthocephalus cadamba</i>	Rubiaceae	3
15.	Nerium	<i>Nerium oleander</i>	Apocyanaceae	15
16.	Xonar	<i>Cassia fistula</i>	Fabaceae	4
17.	MomaiTamul	<i>Chrysalidocarpus lutescens</i>	Aracaceae	1
18.	Bottle brush	<i>Callistemon citrinus</i>	Myraceae	13
19.	Champa	<i>Michelia champaka</i>	Magnoliaeae	3
20.	Nahar	<i>Mesua ferrea</i>	Calophyllaceae	3
21.	Debadaru	<i>Polyalthia longifolia</i>	Annonaceae	20
22.	Thuja	<i>Thuja occidentalis</i>	Cupressaceae	3

23.	Ajar	<i>Lagerstoemia speciosa</i>	Lythraceae	100
24.	Sanna	<i>Sanna slama</i>	Fabaceae	60
25.	Amlokhi	<i>Phyllanthus emblica</i>	Phyllanthaceae	5
26.	Bogori	<i>Zizipus lotus</i>	Rhamnaceae	5
27.	Tokou	<i>Borassus flabellifer</i>	arecaceae	1
28.	Siris	<i>Samane saman</i>	fabaceae	3
29.	Ixora	<i>Ixora coccinea</i>	Rubiaceae	4
30.	Boga Gulap	<i>Rosa alba</i>	Rosaceae	8
31.	Tagor	<i>Gardenia florida</i>	Rubiaceae	3
32.	Xendur goch	<i>Bixa Orellana</i>	Bixaceae	1
33.	Kathanda	<i>Tabernaemontana divaricata</i>	Apocyanaceae	5
34.	Marigold	<i>Tagetes erecta</i>	Asteraceae	15
35.	Nayantara	<i>Vinca rosea</i>	Apocyanaceae	7
36.	Christmast tree	<i>Araucaria columnaris</i>	Araucariaceae	1
37.	Henna	<i>Lawsonia inermis</i>	Lythraceae	1
38.	Chirata	<i>Andrographis paniculata</i>	Acanthaceae	5
39.	ashok	<i>Saraca asoca</i>	Fabaceae	2
40.	Dimoru	<i>Ficus racemose</i>	Moraceae	8

❖ Summary of faunal diversity in North Kamrup college campus:

Sl. No.	Type of fauna	Name of species	Number of species
1.	Bird	<i>Bubulcus ibis</i> <i>Ardeola grayii</i> <i>Eudynamys scolapacea</i> <i>Cuculus micropterus</i> <i>Upupa epops</i> <i>Dicrurus fiacfacefcus</i> <i>Acridotheres tristis</i>	09

		<i>Coruus splendens</i> <i>Passer domesticus</i>	
2.	Snake	<i>Bungarus fasciatus</i> <i>Enhydris anhydris</i> <i>Ptyas fasciatus</i> <i>Ahaetula nasutus</i> <i>Naja kaouthia</i>	05
3.	Amphibian	<i>Bufo malanostictus</i> <i>Rana tyleri</i> <i>Euphyctis cyanophlyctis</i>	03
4.	Butterfly	<i>Hasora badra</i> <i>Badamia exclamationis</i> <i>Matapa aria</i> <i>Gatopsila pomona</i> <i>Eurema hecaba</i>	05
5.	Fish	<i>Catla catla</i> <i>Amphipnous cuchia</i> <i>Anabus testudineus</i> <i>Channa punctata</i> <i>Cirrhina mrigala</i> <i>Glassogobius giuris</i> <i>Heteropneustes fossilis</i> <i>Mystus vittatus</i> <i>Mystus eavasius</i> <i>Labeo rohita</i> <i>Colisa lalius</i> <i>Channa striatus</i> <i>Danio raring</i> <i>Rasbora bonensis</i>	14

6.	Mammal	<i>Macaca mulatta</i> <i>Herpestes javanicus</i> <i>Rattus sp.</i> <i>Pteropus giganteus</i> <i>Funambulus palmurum</i> <i>Pipistrellus coromandra</i>	06
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**Water Quality assessment:**

Water samples from four different locations were collected and analyzed for its quality parameters. The samples includes two well water which are the main water source of the college campus and two tap water samples which is used for canteen and drinking water. The samples were collected, preserved and transported to school of Environmental Sciences and analyzed for various physio-chemical parameters. The major parameters analyzed include dissolved oxygen, acidity, alkalinity, chloride, hardness, pH, conductivity, total dissolved solids and salinity. The results are presented in the Table:1 The results are comparable with the values of drinking water standards prescribed by different agencies.

**Table 1: Results of water quality**

Parameters	Water sample 1	Water sample 2	Water sample 3	Water sample 4	Slendered value
Dissolved oxygen (mg/l)	6.92	6.05	7.90	7.2	6-8
Acidity (mg/l)	48	28	20	10	200
Alkaline (mg/l)	15	25	17	18	200
Chloride (mg/l)	27	21.44	29.85	14.72	250
Hardness (Total)	Nil	Nil	Nil	Nil	200
pH	6.5	6.9	7	7.60	6.5-8.5
Total dissolved solids (ppm)	102	67	132	65	500



Salinity(ppt)	0.097	0.069	0.121	0.065	
Total coliform	Nil	Nil	Nil	Nil	0
Fecal coliform	Nil	Nil	Nil	Nil	0



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