



THE ASSAM
ROYAL GLOBAL UNIVERSITY
GUWAHATI



INTERNAL GREEN AUDIT REPORT

Internal Quality Assurance Cell

The Assam Royal Global University, Guwahati



Notice

Ref. no. RGU/IQAC/002

Date: 20/01/2023

This is to inform that an Internal Green Audit of The Assam Royal Global University, Guwahati will be conducted by IQAC, RGU in March 2023. The members of the committee are listed below:

1. Prof (Dr) Nikhil K. Churungoo, Dean, Royal School of Life Sciences: Chairperson
2. Prof (Dr) Ankur Ganguly, Dean of Academics: Member
3. Prof (Dr) Anuradha Devi, Director, IQAC: Member
4. Prof (Dr) B.S. Mipun, Dean, Students Welfare: Member
5. Prof (Dr) Hari Prasad Agarwal, Dean, Royal School of Architecture: Member
6. Dr N Seema Devi, Assistant Professor, Department of Botany: Member
7. Dr Israfil Hussain, Assistant Professor, Department of Physics: Member
8. Dr Stuti Goswami, Assistant Professor, Department of English and member, IQAC: Member Secretary

The Internal Green Audit Committee will assess the biodiversity, the status of water and soil as well as waste management in the University campus.

With regards,

Anuradha Devi 20/01/2023
Prof.(Dr.) Anuradha Devi
Dean, RSAPS
Director, IQAC
The Assam Royal Global University
Betkuchi, Guwahati-781035.
Assam



Director, IQAC
The Assam Royal Global University



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Introduction to the University

The Assam Royal Global University, Guwahati was established as a State Private University with The Assam Royal Global University Act, 2013 (Assam Act No. XXIII of 2013) under Section 6 of the Assam Private Universities Act, 2007 enacted by the Assam Legislative Assembly, vide notification no. LGL. 12/2013/22 published in The Assam Gazette on 23rd August 2021. The University is recognized under Section 2(f) of the UGC Act, 1956 with the right to confer degrees as per Section 22 of UGC Act, 1956. Located at a few minutes' walk from National Highway 37 and spread across nearly 30 acres of land and about 15 lakh sq. feet with centrally air conditioned area, the University is an emerging centre of academic and co-curricular excellence in the region, providing holistic education to its students through a wide array of curricular and co-curricular choices and opportunities. A significant aspect of education in the world today, particularly in Higher Educational Institutions (HEIs) is environment and climate consciousness. As the world has turned warmer with rapid depletion of green cover and climate change is already ringing a warning bell to all concerned, HEIs can play a crucial role in generating awareness about environment as well as contribute towards sustainability and environmental preservation. In this context, The Assam Royal Global University has endeavoured to contribute towards sustainability and environmental preservation through its curricular and co-curricular aspects. The University is nestled between a mosaic of wetlands and hills all around, including the Deepor Beel, a Ramsar site and Garbhanga hill range and its forests, thus providing a unique ecosystem for the existence of different species of flora and fauna.

The Internal Quality Assurance Cell (IQAC) is an integral part of the governance of The Assam Royal Global University, Guwahati. It was established in congruence with the guidelines laid down by the University Grants Commission in 2018. The IQAC-RGU was constituted with eight members with the Hon'ble Vice Chancellor Prof (Dr) S.P. Singh as the Chairperson and Prof. (Dr) O.K. Medhi as the Director. Right from its inception the IQAC initiated the process of developing realistic and attainable quality benchmarks for the Academic and Administrative units of the University.

What is Green Audit

Green Audit is a process of systematic identification, quantification, recording, reporting, and analysis of components of environmental diversity of an academic establishment. As environmental sustainability is increasingly becoming an important concern for the world, the role of higher educational institutions (HEIs) increases manifold. In HEIs, Green Audit enables systematic assessment of the environmental diversity of the institution at the same time as it is an effective tool for the institution to determine its status in the utilization of energy, water or other resources and make necessary changes as and when necessary. Green audit also enables the institution to determine the type and volume of waste generated and steps taken towards effective waste minimization and disposal plans. It can assess and generate further awareness among student and staff members on the institution's green initiatives and contributions towards a sustainable future.

In 2006, the Government of India declared the National Environment Policy 2006 and thereafter the process of environmental audit was formalized by the Supreme Audit Institution (SAI) as per the guidelines in Manual of Standard orders (MSO) issued by the Authority of the Controller and Auditor General of India 2002. From the academic year 2016-17 the National Assessment and Accreditation Council (NAAC), Bengaluru made it mandatory for all Higher Educational Institutions to submit an annual green audit report. It is also a good practice of any HEI to ensure that the audit process contributes towards sustainable development.

The terms Environmental Audit or Green Audit have different meanings. Although there is no universal definition of Green Audit, many leading organizations follow the basic philosophy and approach summarized by the broad definition adopted by the International Chambers of Commerce (ICC) in its publication of Environmental Auditing (1989). The ICC defines Environmental Auditing as a management tool comprising a systematic, documented, periodic and objective evaluation of how well an organisation is performing with the aim of safeguarding the environment and natural resources. The European Commission, in its proposed regulation on environmental auditing, has also adopted the ICC definition of



Environmental Audit. However, the outcome of Green Audit needs to be established with concrete evidence and the measures undertaken and facilities in the Institution. Green audit can be defined as the process whereby an HEIs environmental performance is tested against its environmental policies and objectives.

Although it is mandatory for any institution attempting accreditation of NAA to have External Green Audit conducted by certified agency (listed in NABCB website and with ISO 21001 certification, The Assam Royal Global University, upon the advice of the Hon'ble Vice Chancellor and Chairperson, IQAC conducted an Internal Green Audit in the academic session 2022-2023. This was done under the supervision of an Internal Green Audit Committee, in association with a few departments (and schools) of the University. This report brings forth the findings of the same.

Objectives of the Green Audit

The objectives of the Internal Green Audit could be summarized as below:

- To review on a basic level, the activities and operations of the University and identify main sources of resource utilization, and their environmental impact.
- To understand the sustainability related initiatives undertaken in the University.
- To identify the green campus initiatives undertaken by the University.
- To share audit observations and findings along with suggestions and recommendations for the future.

In view of the NAAC circular, an Internal Green Audit was conducted in the University in March 2023. The work of the audit report was supervised and coordinated by the Internal Green Audit Committee that comprised the following members:

Prof (Dr) Nikhil K. Churungoo, Dean, Royal School of Life Sciences	Chairperson
Prof (Dr) Ankur Ganguly, Dean of Academics	Member
Prof (Dr) Anuradha Devi, Director, IQAC	Member
Prof (Dr) B.S. Mipun, Dean, Students Welfare	Member
Prof (Dr) K.K. Baruah, Dean, Royal School of Environmental and Earth Sciences	Member
Prof (Dr) Hari Prasad Agarwal, Dean, Royal School of Architecture	Member
Dr Israfil Hussain, Assistant Professor, Department of Physics	Member
Dr Stuti Goswami, Assistant Professor, Department of English and member, IQAC.	Member Secretary



Soil and Water Parameters of RGU Campus

Soil and water are indispensable for the existence of any system or organization. Assessing the soil and water parameters of a university campus is essential to assess and determine how and to what extent the University is maintaining an eco-friendly environment. The Internal Green Audit Committee coordinated and supervised in conjunction with Royal School of Environmental and Earth Sciences (RSEES), the assessment of the soil and water parameters of The Assam Royal Global University campus.

Below is a description of the practical experiments and their respective results.

3.1 WATER

1. Ph of water

Water Source	Method Used	pH Value
Tap Water	pH Paper	8
	pH Meter	8.55
Drinking Water	pH Paper	7 to 8
	pH Meter	8.37

2. Determination of WATER

The analysis of water parameters provides a comprehensive examination of key water quality indicators, including pH, chloride concentration, hardness as CaCO₃ (mg/L), alkalinity, acidity, total solids, total dissolved solids, and total suspended solids. The significance of these analyses an important role in ensuring the safety and sustainability of our water resources. It enables informed decisions regarding water treatment, distribution, and conservation. Moreover, these analyses contribute to the protection of ecosystems and public health, emphasizing their crucial role in the field of environmental science and water management.

Chloride

Drinking Water	1.98mg/L
Distilled water	0 mg/L

3. Hardness test

Source	Hardness as mg CaCO ₃ /L	
Distilled water	56	
Drinking Water	84	
Tap Water	150	Argentometric method



4. Alkalinity test of water

phenolphthalein indicator alkalinity	28 mg/L	
methyl orange indicator alkalinity	188 mg/L	Titration

5. Acidity test of water

phenolphthalein indicator alkalinity	74mg/L	
methyl orange indicator alkalinity	432mg/L	Titration

6. Total solids, total dissolved solids and total suspended solids

TS	TDS	TSS
20000 mg/L	200 mg/L	68800 mg/L

3.2 SOIL

This report provides an overview of the practical exercises conducted specifically focusing on the analysis of soil parameters. The practical experiments and sessions, conducted by faculty members of RSEES were designed to familiarize students with various techniques used in soil analysis, including the determination of texture, porosity, particle size, bulk density, specific gravity, and soil moisture content. These are fundamental in understanding the physical and chemical properties of soil behaviour and characteristics, that are in turn important for sustainable land use planning, agriculture, and construction practices. Accurate data on bulk density, specific gravity, and soil moisture content enable informed decision-making, ensuring optimal resource utilization and environmental protection.

Below is a description of the practical experiments and their respective results.

1. Soil moisture content by different method

Method Used	oven dry	infrared moisture meter
result	30.77%	27.88

2. Field density by core cutter method

	1.72gcm ³
result	2.044gcm ³

3. Specific gravity determination by pycnometer and density bottle

Method Used	pycnometer	density bottle
	2.88	0.44
results	2.754	2.6

4. ph of the given soil sample

ph meter	7.3
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Biodiversity Survey

The objective of biodiversity audit is to assess the overall maintenance of the ecological environment on the campus. By the term biodiversity we understand all the different kinds of life forms available in the particular area all the flora and fauna available on the campus. All these species work together in an ecosystem.

Biodiversity audit was conducted in The Assam Royal Global University, Guwahati by Royal School of Life Sciences (RSLSC) in March 2023 and the following are the observations:

- The nearly 30 acres of the RGU campus has rich flora and faunabiodiversity
- The documentation as part of the biodiversity audit was conducted by the Departments of Botany and Zoology, engaging students under the supervision of the faculty members of the department.
- A total of 22 birds, 27 butterflies and 7 herpetofauna species were recorded.
- Birds were represented by 19 families and butterflies were represented by 6 families. Common Mynah (*Acridotheres tristis*) and Spotted Dove (*Spilopelia chinensis*) were the most dominant bird species due to their adaptation to urban setup and ability to breed in high-rise buildings.
- *Zizina otis* were the most prominently seen butterfly species. This low flying species is often seen in lawns and sidewalks.
- Three species of butterflies under Indian Wildlife (Protection Act), 1972 viz. *Elymnias peali* (WPA I), *Discophora sondaica* (WPA I) and *Mycalesis gotama* (WPA II) were found. Herpetofauna is represented by 6 families.



The findings of the biodiversity survey are mentioned below:

4.1 TREE DIVERSITY DETAILS

Table 4.1 Tree diversity details

SL. NO.	SCIENTIFIC NAME	FAMILY	COMMON NAME
1.	<i>Roystonea regia</i> (H. B. K.) O.F. Cook.	Arecaceae	Royal palm, Bottle palm
2.	<i>Cryptomeria japonica</i> (Thunb. Ex Linn.f.) D. Don	Cupressaceae	Japanese cedar
3.	<i>Plumeria rubra</i> Linn.	Apocynaceae	Temple tree, Pagoda tree
4.	<i>Codium variegatum</i> (Linn.) A. Juss.	Euphorbiaceae	Variegated croton
5.	<i>Ixora taiwansis</i> Roxb.	Rubiaceae	Dwarf Ixora
6.	<i>Phoenix roebelenii</i> O' Brien.	Arecaceae	Pygmy date palm
7.	<i>Pandanus facicularis</i> Lamk.	Pandanaceae	Screw pine
8.	<i>Melastoma malabathricum</i> Linn.	Melastomaceae	Malabar melastome
9.	<i>Murraya paniculata</i> (Linn.) Jack	Rutaceae	Orange jasmine
10.	<i>Thuja occidentalis</i> Linn.	Cupressaceae	White cedar
11.	<i>Duranta erecta</i> Linn.	Verbenaceae	Golden dewdrop
12.	<i>Cocos nucifera</i> Linn.	Arecaceae	Coconut
13.	<i>Ocimum sanctum</i> Linn.	Lamiaceae	Holy basil
14.	<i>Psidium guajava</i> Linn.	Myrtaceae	Guava
15.	<i>Heliconia rostrata</i> Ruiz & Pavon	Heliconiaceae	Hanging lobster claw
16.	<i>Hibiscus rosasinensis</i> Linn.	Malvaceae	China rose
17.	<i>Tabernamontana divaricata</i> R. Br. ex Roem. & Schult.	Apocyanaceae	Pinwheel flower
18.	<i>Yucca filamentosa</i> Linn.	Asperagaceae	Adam's needle
19.	<i>Ixora coccinia</i> Linn.	Rubiaceae	Jungle flame
20.	<i>Artocarpous heterophyllus</i> Lamk.	Moraceae	Jack fruit
21.	<i>Tecoma stans</i> (Linn.) Juss. ex kunth	Begoniaceae	Yellow bells, Yellow trumpet bush
22.	<i>Cycas revoluta</i> Thunb.	Cycadaceae	Sago cycad
23.	<i>Borassus flabellifer</i> Linn.	Arecaceae	Palmyra palm
24.	<i>Mussaenda philippica</i> A. Rich	Rubiaceae	Queen of Philippines
25.	<i>Ficus benjamina</i> Linn.	Moraceae	Weeping fig
26.	<i>Callistemon lanceolatus</i> (Sm.) Sweet	Myrtaceae	Red bottle brush
27.	<i>Alternanthera brasiliana</i> (Linn.) Kuntz	Amaranthaceae	Metal weed/ Brazilian joy weed
28.	<i>Taxus baccata</i> Linn.	Taxaceae	Common yew



29.	<i>Ficus lyrata</i> Warb.	Moraceae	Fiddle leaf fig
30.	<i>Borassus flabellifer</i> Linn.	Arecaceae	Palmyra palm
31.	<i>Nerium oleander</i> Linn.	Apocynaceae	Oleander
32.	<i>Streblus asper</i> Lour.	Moraceae	Toothbrush tree
33.	<i>Bambusa ventricosa</i> Mc clure	Poaceae	Buddha bamboo
34.	<i>Elaeis guineensis</i> Jacq.	Arecaceae	African oil palm
35.	<i>Ficus hispida</i> Linn. f.	Moraceae	Devil fig, Hairy fig
36.	<i>Grevillea robusta</i> A. Cunn. ex R. Br.	Proteaceae	Silver oak, Silky oak
37.	<i>Saraca asoca</i> (Roxb.) De Wilde	Caesalpiniaceae	Ashoka tree
38.	<i>Euphorbia continifolia</i> Linn.	Euphorbiaceae	Caribbean copper plant
39.	<i>Pinanga dicksonii</i> (Roxb.) Blume	Arecaceae	Dickson palm
40.	<i>Bambusa vulgaris</i> Schrad. ex J. C. Wendl.	Poaceae	Golden bamboo
41.	<i>Ziziphus jujube</i> Mill.	Rhamnaceae	Jujube, Chinese date
42.	<i>Fargesia nitida</i> (Milford ex Stapf) Keng.f.	Poaceae	Hedge bamboo
43.	<i>Codiaeum variegatum</i> (Linn.) A. Juss.	Euphorbiaceae	Garden croton, Variegated croton
44.	<i>Chamaedorea elegans</i> Mart.	Arecaceae	Parlour palm
45.	<i>Licuala peltata</i> Roxb. ex Buch.-Ham.	Arecaceae	Swamp fan palm
46.	<i>Syzygium australe</i> (H. L. Wendl. ex Link) B. Hyland	Myrtaceae	Brush cherry, Watergum

4.2 AVIAN DIVERSITY IN RGU CAMPUS

Table 4.2 Diversity Details of Birds

SI No.	Scientific Name	Family	Common Name
1.	<i>Spilopelia chinensis</i>	Columbidae	Spotted dove
2.	<i>Passer domesticus</i>	Passeridae	House Sparrow
3.	<i>Corvus corax</i>	Corvidae	Common Raven
4.	<i>Corvus splendens</i>	Corvidae	House Crow
5.	<i>Acridotheres tristis</i>	Sturnidae	Common Mynah
6.	<i>Gracupica contra</i>	Sturnidae	Asian Pied Starling
7.	<i>Porphyrio porphyrio</i>	Rallidae	Purple Swamphen
8.	<i>Amaurornis phoenicurus</i>	Rallidae	White Breasted Waterhen



9.	<i>Eudynamis scolopaceus</i>	Cuculidae	Koel
10.	<i>Pycnonotus jocosus</i>	Pycnonotidae	Red-Whiskered Bulbul
11.	<i>Spilornis cheela</i>	Accipitridae	Crested Serpent Eagle
12.	<i>Bubo bengalensis</i>	Strigidae	Indian Eagle-Owl
13.	<i>Bubulcus ibis</i>	Ardeidae	Cattle Egret
14.	<i>Megalurus palustris</i>	Locustellidae	Striated Grassbird
15.	<i>Saxicola maurus</i>	Muscicapidae	Siberian Stonechat
16.	<i>Mirafra assamica</i>	Alaudidae	Bengal Bushlark
17.	<i>Metopidius indicus</i>	Jacanidae	Bronzed Winged Jacana
18.	<i>Microcarbo niger</i>	Phalacrocoracidae	Little Cormorant
19.	<i>Cinnyris asiaticus</i>	Nectariniidae	Purple Sunbird
20.	<i>Copsychus saularis</i>	Turdidae	Oriental Magpie-Robin
21.	<i>Dicrurus macrocercus</i>	Dicruridae	Black Drongo
22.	<i>Anastomus oscitans</i>	Ciconiidae	Asian openbill

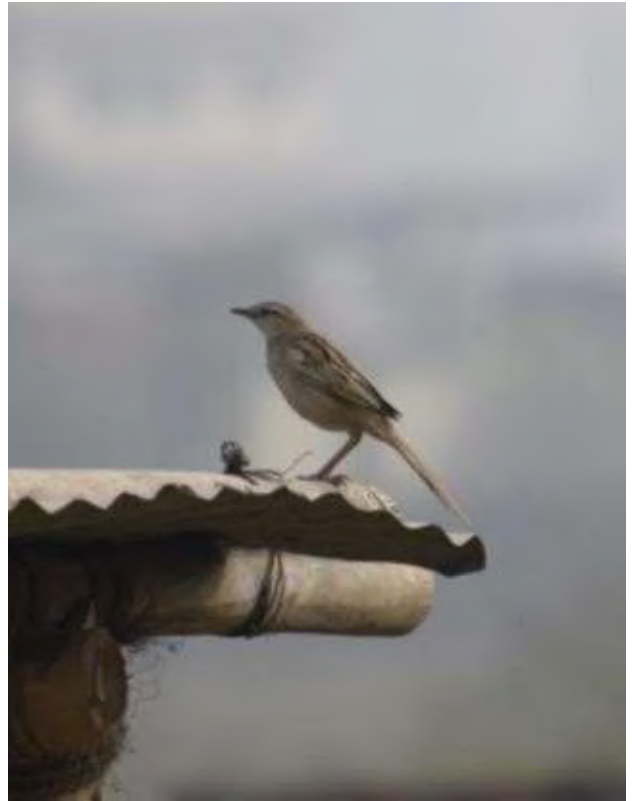


Bronze Winged Jacana





Siberian Stonechat



Striated Grassbird



Siberian Stonechat



Little Cormorant



4.3 BUTTERFLY DIVERSITY IN RGU CAMPUS

Table 4.3 Butterfly Diversity details

SI No.	Scientific Name	Family	Common Name
1.	<i>Graphium agamemnon</i>	Papilionidae	Tailed Jay
2.	<i>Papilio demoleus</i>	Papilionidae	Lime Swallowtail
3.	<i>Pieris rapae</i>	Pieridae	Small Cabbage White
4.	<i>Leptosia nina</i>	Pieridae	Psyche
5.	<i>Eurema hecabe</i>	Pieridae	Common Grass Yellow
6.	<i>Catopsilia pomona</i>	Pieridae	Common Emigrant
7.	<i>Zizina otis</i>	Lycaenidae	Lesser Grass blue
8.	<i>Zizeeria karsandra</i>	Lycaenidae	Dark Grass Blue
9.	<i>Pseudozizeeria maha</i>	Lycaenidae	Pale Grass Blue
10.	<i>Chilades pandava</i>	Lycaenidae	Plains Cupid
11.	<i>Zemeros flegyas</i>	Riodinidae	Punchinello
12.	<i>Junonia almanac</i>	Nymphalidae	Peacock Pansy
13.	<i>Danaus chrysippus</i>	Nymphalidae	Plain Tiger
14.	<i>Junonia lemonias</i>	Nymphalidae	Lemon Pansy
15.	<i>Ypthima baldus</i>	Nymphalidae	Common Five Ring
16.	<i>Elymnias peali</i>	Nymphalidae	Peal's Palmfly
17.	<i>Mycalesis perseus</i>	Nymphalidae	Common Bushbrown
18.	<i>Symbrenthia lilaea</i>	Nymphalidae	Common Jester
19.	<i>Melanitis leda</i>	Nymphalidae	Common Evening Brown
20.	<i>Junonia atlites</i>	Nymphalidae	Grey Pansy
21.	<i>Neptis hylas</i>	Nymphalidae	Common sailor
22.	<i>Danaus genutia</i>	Nymphalidae	Striped Tiger
23.	<i>Parantica aglea</i>	Nymphalidae	Glassy Tiger
24.	<i>Discophora sondaica</i>	Nymphalidae	Common Duffer
25.	<i>Mycalesis gotama</i>	Nymphalidae	Chinese Bushbrown
26.	<i>Potanthus omaha</i>	Hesperiidae	Lesser Dart
27.	<i>Lambrix salsala</i>	Hesperiidae	Chestnut Bob





Peal's Palmfly



Lesser Grass Blue



Plain Tiger



Psyche



Small Cabbage White



Peacock Pansy



Lime Swallowtail



4.4 HERPETOFAUNA DIVERSITY IN RGU CAMPUS

Table 4.4 Herpetofauna diversity in RGU campus

Sl No	Scientific Name	Family	Common Name
1.	<i>Hemidactylus frenatus</i>	Gebkkonidae	Common House Gecko
2.	<i>Duttaphrynus melanostictus</i>	Bufonidae	Common Toad
3.	<i>Calotes versicolor</i>	Agamidae	Oriental garden lizard
4.	<i>Fowlea piscator</i>	Colubridae	Checkered keelback
5.	<i>Enhydris enhydris</i>	Homalopsidae	Rainbow water snake
6.	<i>Bungarus niger</i>	Elapidae	Greater black krait
7.	<i>Lepidodactylus lugubris</i>	Gekkonidae	Mourning gecko

Energy Efficient Measures and Alternative Sources of Energy

The Assam Royal Global University engages in various alternate sources of energy and energy conservation. Some of the measures taken in this context include:

- Use of energy efficient means LEDs and sensor-based lighting to minimize the usage of electrical power.
- CRT monitors are used instead of LCD/LED Monitors. Air conditioners, computers, and ceiling fans installed on the campus are all Energy Star certified.
- Solar energy is generated on campus. A 165 kbh solar power plant is established on campus to reduce dependence on non-renewable forms of energy. This solar power plant is fabricated with polycrystalline.
- panels are located on the terraces of several blocks of the University. Through this, the University annually contributes towards reducing CO2 emissions.
- Power outputs of solar panels are connected to the power grid so that excess power produced by the solar panels are supplied to the grid.
- The production of biogas, another renewable source of energy on campus through a biogas plant offers another means of production of renewable source of energy. The production of manure compost for the biogas plant takes place on campus under the initiative of IIC-RGU.

Waste Management

Sustainable waste management practices are employed by the University for minimization of waste produced on the campus. Solid waste is collected by garbage collecting vehicles on a daily basis. Special treatment measures are applied for chemical and such other potentially hazardous waste. E-waste disposal is as per government guidelines.



Solid waste management

There are separate dustbins for degradable and non-biodegradable waste at all strategic positions on the campus.

- For solid waste collection there is a designated dumping ground beyond the boy's hostel.
- Grass and fallen leaves are collected by housekeeping staff members and are put in vermicomposting pit for generation of manure. This is used on campus and is also available for purchase.
- Single use plastic has been banned on the university campus since 2018.
- Liquid waste management
- Surface drainage systems and Subsurface Drainage Systems remove excess water from the land's surface through channels or ditches.
- Slope drainage systems are built to allow water to flow from a structure in a downward direction.
- Downspouts and gutter systems are installed to protect against over-saturation from stormwater. They are often drained into an aluminium extension, buried drainpipe, rain barrel, or other solution.
- The purpose is to move water away and route water to other drainage systems on the street or sidewalk. Some are connected to underground sewer lines using gutter drains or underground drains.
- Rainwater harvesting utilizes the rainwater collected on the roofs of Blocks D, E and F.
- The Sewage Treatment Plant (STP) installed between Samaya hostel and Harsha House for wastewater recycling has a capacity of 150KLD. The degree of treatment is as per the regulations stipulated by Indian standard codes. The treated wastewater is reused for gardening, toilets, and cleaning vehicles.

E-waste management

Electronic waste products are given to recycling agencies. Unused electronic items or items that no longer work such as circuits, printer, computers, batteries, monitors, charging cables, wi-fi devices, cartridges, display units etc. are separated and disposed as scrap through authorised vendors.

All electronic devices are put to optimum utilization.

Both minor and major repairs of electronic goods are carried out by professional technicians to ensure their reuse.

Bio-medical waste management

The University has an MoU with FreshAir Waste Management Services Pvt. Ltd. for safe and effective disposal of bio-medical waste generated from the laboratories of the University.

Green Campus Initiatives

The Assam Royal Global University contributes towards its obligations towards the natural environment through various environment-friendly and sustainable initiatives on-campus and off-campus. Some of these green campus initiatives include the following:

Rainwater harvesting: Rainwater harvesting is environment-friendly and economically viable in the hydro-geological setting of the University.

The campus strictly follows “**No Smoking Zone**” principle and there is a restraint on the use of single-use plastic.

There is **restricted entry and use of automobiles** on the campus.



Electric vehicles designed by the students of the university under IIC-RGU and **battery powered vehicles** are used within the campus for transportation of goods and other services.

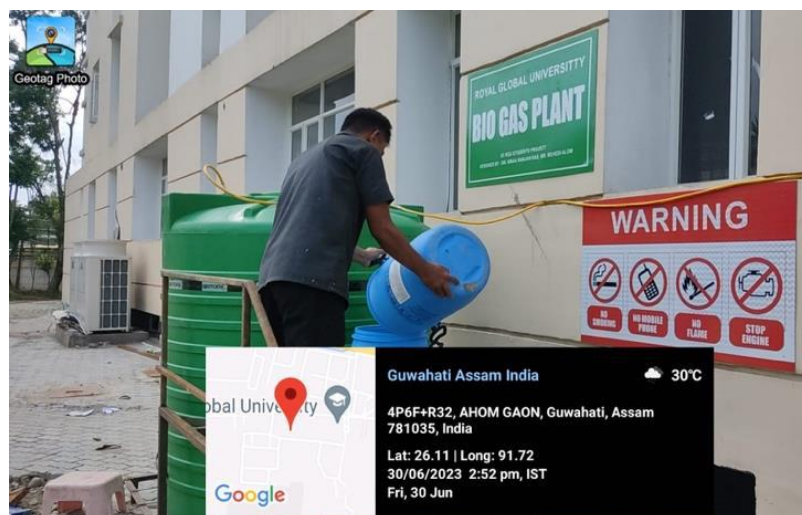
The plants and grass cover of the campus are watered with treated wastewater from the University's Sewage Treatment Plant.

Cleanliness drives and tree plantation activities are regularly conducted by different departments and schools as well through club activities in RGU campus and elsewhere.

Various subjects are introduced at the UG and PG levels impart education to students about the environment. Apart from UG and PG programmes under the Royal School of Environment and Earth Sciences (RSEES), there is Environmental Studies (EVS) as a compulsory subject in all UG programmes (in 2nd semester) under CBCS curriculum. Other environment-related subjects include Organic Farming (VAC992V2019), Wildlife Conservation (VAC992V2020), Climate Change (VAC992V2024), Pest Management (ZOO142S321), Botany in Rural Communities (BOT142G101), Environmental Biotechnology (BTC152G202), and Aquatic Biology (ZOO142G202), etc.

Sustainability is promoted through biogas plants and production of organic manure (vermicompost and manure compost).

The University encourages **digital initiatives** through implementation of e-governance in student admission, examinations, teaching-learning, and finance and accounts through ERP software.



Audit Recommendations

Some of the key recommendations of the Internal Green Audit committee includes the following:

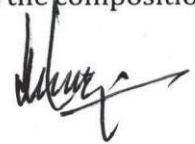
- The University should develop a biodiversity database by mapping biodiversity using Geospatial Technology.
- Quick Response (QR) codes to be installed for each tree on the campus, as a step towards generating greater awareness through accessibility about biodiversity awareness among students, staff members as well as visitors to the University.
- There should be a thrust on greater use of indigenous systems of gardening and in the use of organic fertilizer in the University campus.
- As the University is located quite close to the National Highway, there is scope for increasing the greenery of the University campus through various innovative measures, including terrace gardening and hydroponics.
- All Departments and Schools should be encouraged to have potted plants inside faculty rooms and corridors, as feasible.
- Students should be encouraged to not only plant trees but also learn how to take care of trees and plants on the campus.
- Waste management is to be made more effective through greater emphasis on segregation of solid waste into biodegradable and degradable categories.



Internal Green Audit Committee

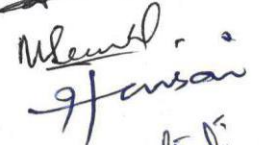
With the approval of the competent authority an Internal Green Audit Committee of The Assam Royal Global University, Guwahati has been constituted in 2023. The following is the composition of the committee:

1. Prof. (Dr.) Nikhil K. Chrungoo, Dean, Royal School of Life Sciences: Chairperson
2. Prof. (Dr.) Ankur Ganguly, Dean of Academics: Member
3. Prof. (Dr.) Anuradha Devi, Director, IQAC: Member
4. Prof. (Dr.) Bijoy Singh Mipun, Dean, Students Affairs: Member
5. Prof. (Dr.) Hari Prasad Agarwal, Dean, Royal School of Architecture: Member
6. Dr. N. Seema Devi, Assistant Professor, Department of Botany: Member
7. Dr. Israfil Hussain, Assistant Professor, Department of Physics: Member
8. Dr. Stuti Goswami, Assistant Professor, Department of English and member, IQAC: Member Secretary



Anuradha Devi









Anuradha Devi

Director, IQAC
The Assam Royal Global University





THE ASSAM
ROYAL GLOBAL UNIVERSITY
GUWAHATI

Address: Royal Global University, Betkuchi, NH-37, Ghy-781035, Assam, India.

Mobile: 9707683013

Email: registraroffice@rgu.ac

